

United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Alternative Water Source Study Technical Memorandum Update

File Name:
A.4a_Alternative Water Source Study Technical Memorandum Update

Description:
Technical Memorandum outlining the options for alternative water sources available to the United City of Yorkville

August 2024

VIA EMAIL

To: Bart Olson – Village Administrator
Eric Dhuse – Director of Public Works

From: Jeffrey W. Freeman, P.E., CFM, LEED AP
Christopher R. Walton, P.E.
Ali Ghassemi, Ph.D., E.I.

Date: March 7, 2022

Re: Alternative Water Source Study (AWSS) Update – 2021

EEI Project #: YO2117-P

AWSS Update Overview

The United City of Yorkville currently relies on groundwater for its water source. More specifically, the City utilizes a network of wells which withdraw water from the Cambrian-Ordovician deep aquifer system. Various groundwater modeling studies completed by the Illinois State Water Survey (ISWS) of the deep aquifers in Northeastern Illinois from 2015-2020 have projected that the deep aquifer system in the region, including the municipal wells utilized by the United City of Yorkville, are not a long-term sustainable supply source. Therefore, the City embarked on an alternative water source study.

The United City of Yorkville together with Engineering Enterprises, Inc. (EEI) completed a Water Works System Master Plan between 2015-2016 which included preliminary evaluation of potential alternative water supply sources. After additional studies and coordination occurred in the years that followed, the City and their sub-regional neighbors, the Villages of Montgomery and Oswego, determined an Alternative Water Source Study (AWSS) Update was needed to evaluate all of the options in an apples-to-apples comparison. The Update process was completed at the end of 2021. This technical memorandum summarizes the 2021 AWSS Update study, including an overview of the City's existing water works system (WWS) and previous water supply alternative studies, a discussion of the alternatives evaluated, and a summary of the key considerations, anticipated implementation schedule, and cost estimates and financial analysis completed for each alternative. Appendix A of this memo contains a copy of the summary AWSS Update presentation that was given to the City Council at the September 28, 2021 Council Meeting. The presentation includes exhibits and maps which are referenced in different sections throughout this memo.

1. Existing Water Works System (WWS) Overview

The United City of Yorkville is a growing community located in northern Kendall County, Illinois. The City is approximately 45 miles southwest of Chicago and shares municipal borders with the Villages of Montgomery and Oswego and City of Plano. The Fox River runs through the heart of the City. The City has experienced steady growth for the past several decades. The current total estimated population of the City that the water utility serves is 21,211.

The City's existing WWS is comprised of various supply, treatment, storage, distribution, and control components. The existing supply consists of four total deep wells including Wells No. 4, 7, 8, and 9. Well No. 4 is open to both the St. Peter (Ancell) and Ironton-Galesville deep sandstone formations, while the other wells are cased through the St. Peter and open only to the Ironton-Galesville formation. All of the deep sandstone wells exceed the water quality standard for combined radium.

Water from all of the wells is treated at cation exchange water treatment plants (CEWTP) and discharged directly to the distribution system. Well No. 4 is located in the central part of town and is treated at its own CEWTP. Well No. 7 is located on the south side of the City and is also treated at its own CEWTP. Wells No. 8 and 9, located in the northeastern area of the City, are tributary to the same CEWTP that provides treatment for both wells.

The City's WWS contains five Elevated Water Storage Tanks (EWSTs) that provide a total combined water storage of 4.55 million gallons (MG). The City's current water main distribution network consists of approximately 152 miles of pipe ranging in size from 4" to 16" in diameter. The WWS is split into different pressure zones including the North, North Central, South Central, and South Pressure Zones, plus the future Southeast Pressure Zone. The City has three Booster Pump/Pressure Reducing Valve (PRV) Stations and two PRV Vaults for the transfer of water between zones. The City utilizes a Supervisory Control and Data Acquisition (SCADA) system to monitor all components of the WWS. With a continual focus on system maintenance by City Staff, the WWS components are currently in good condition.

2. Water Source Sustainability and Alternatives

A 2015 study completed by ISWS of the deep sandstone aquifers in Northeastern Illinois identified decreasing groundwater levels which could lead to the partial desaturation of the aquifers within 15 to 30 years. Additional groundwater modeling completed by ISWS between 2018-2020 using the most current data provided additional evidence that the deep aquifer system is being pumped beyond its sustainable yield. The most recent ISWS study projected that some wells in Yorkville, Montgomery, and Oswego will be at "severe risk" of being unable to meet demands and may be inoperable by 2050.

One supply alternative considered as part of this AWSS Update was the Fox River, which as noted runs through the City. The Fox River is currently utilized as a water source by both the Cities of Elgin and Aurora, and the river base flow is projected to increase in the future. ISWS conducted modeling of the river historic and projected flows, which identified the Fox River as the most sustainable supply source currently within the Yorkville/Montgomery/Oswego Sub-Region. However, on low-flow river days, water withdrawals may be restricted by the Illinois Department of Natural Resources (IDNR) requiring the need for a backup source of supply when withdrawals from the river are restricted or even not allowed.

The other main supply alternative considered in the study was Lake Michigan. Lake Michigan water is supplied by various entities such as water commissions and joint action water agencies (JAWA) to various

communities throughout Northeastern Illinois, and there are additional communities investigating connecting to Lake Michigan supply systems. The total Illinois Lake Michigan diversion limit is set at 3,200 cubic feet per second (cfs), or 2,068 million gallons per day (MGD) by Supreme Court decree. IDNR manages the Lake Michigan allocation process, and it is believed there is sufficient allocation capacity remaining to serve the City and the sub-region. Due to the fact that there could be a service disruption for a Lake Michigan supplied system, many communities will maintain wells as an emergency backup source of supply.

3. Summary of Previous Studies

The United City of Yorkville has evaluated alternative water sources through multiple studies in recent years. In 2015 and 2016, as noted previously, a WWS Master Plan was completed that included population and water demand projections, regulatory review, and an analysis of the sustainability of the Village's wells. Alternative supply scenarios evaluated included continued use of the wells, utilizing the Fox River as an independent supply source, and utilizing the Fox River together with the Villages of Montgomery and Oswego. In 2017 and 2018, AECOM developed capital cost estimates for a DuPage Water Commission (DWC) Connection to the Villages of Oswego and Montgomery and United City of Yorkville that included preliminary routing of and cost estimates for the transmission main from DWC to several connection/supply points in the three communities.

In 2020, the Village of Oswego initiated an Alternative Water Source Project where they evaluated a number of water source options for the region, and for which Oswego requested and Yorkville and Montgomery agreed to cost-share components of the study applicable to all three communities. EEI and the United City of Yorkville reviewed the information from the Oswego Water Study including review of the updated analysis of the deep sandstone aquifer system, and cost analysis. Additionally, the current AWSS Update included performing modeling scenarios analysis for each alternative in the Village's existing water model including review of pressures, available fire flows, pipe velocities, and distribution system improvements necessary for implementation of the alternatives.

4. Yorkville and Waterlink Background Information

The total population served by the United City of Yorkville's Water Works System in 2020 was estimated to be 21,211. The City has many opportunities and much available planning area for further growth. The Chicago Metropolitan Agency for Planning (CMAP) 2050 projected population for Yorkville is 47,796, and the ultimate future buildout population for the City has been estimated as high as 95,727 by the year 2100. Slide 17 of the City Council presentation in Appendix A shows the Yorkville historical and projected population, including comparing the 2016 Master Plan projections and recently updated CMAP 2050 projections, as well as the historical and projected average and max day water demands.

An updated needs assessment was completed using the historical and projected water demands to evaluate the City's projected supply and storage needs to 2050. Based on the needs assessment, assuming all existing wells and storage remain online and available, the City is projected to require additional supply as early as 2025 to be able to meet the reliable source capacity needs. The City currently has excess storage capacity that is projected to meet its needs for several more decades, although a deficit is projected in approximately 2046. Slide 18 in Appendix A includes detailed graphs depicting the estimated reliable source and peak hour storage capacity projections to 2050.

As noted, a subregional approach to future water sources, referred to as Waterlink, was evaluated including coordinating jointly between the United City of Yorkville, Village of Montgomery, and Village of Oswego. The

population and water use projections for all three communities were evaluated to be utilized for considering subregional supply alternatives and required transmission main capacities for the applicable alternatives. Slide 19 in Appendix A illustrates the historical and projected population and water demands for all three communities in the Waterlink subregion.

5. Supply Alternatives Overview

Because the sustainable source water assessment determined that the deep aquifer system is not sustainable long-term, the Fox River and Lake Michigan source alternatives were considered. Five total water supply alternatives were evaluated as part of the AWSS Update, including two utilizing the Fox River and three utilizing Lake Michigan. The Fox River options include the Fox River – Yorkville Alone alternative and the Fox River – Waterlink Sub-Regional System with Montgomery and Oswego alternative. The Lake Michigan alternatives the City further evaluated included the following: purchasing treated water from the DuPage Water Commission (DWC), connecting to the Joliet Regional Water Commission, and purchasing water from the Illinois Lake Water/Plainfield System. The September 2021 City Council presentation in Appendix A includes additional information, and Appendix B includes cost estimates associated with each alternative. Additional information on the cost estimates, financial analysis, and considerations for each alternative is included later in this memo.

5.1. Fox River – Yorkville Alone

This alternative assumes that Yorkville would construct an intake on the Fox River and pump raw river water through a transmission main to a new lime softening water treatment plant (LSWTP). Also, a new backup well (Well No. 6), and new backup wells transmission main to the LSWTP would be required. For this alternative, significant internal distribution system improvements would be required to be able to transfer adequate supply from the northern zone, where the new LSWTP would be located, to the southern portions of the system including constructing new water transmission mains and a new booster pump/pressure reducing valve station. Additionally, a new altitude/control valve station would be required for the Northeast EWST, in addition to SCADA modifications. Slides 31-33 in Appendix A include a map of the proposed improvements and additional details. The total capital cost estimate of this alternative is $92,240,000.

5.2. Fox River – Waterlink

This alternative assumes that Yorkville, Montgomery, and Oswego will work together to switch to a Fox River water source. Slides 34-36 in Appendix A include maps of the proposed improvements and additional details. For this sub-regional alternative, a central Fox River intake, pump station, and raw water transmission main would be required for a new subregional LSWTP. In addition to constructing a new shared backup supply well, a network of backup well raw water transmission mains would be constructed utilizing existing wells in all three communities. Lastly, treated water transmission mains would be constructed to distribute treated water from the subregional LSWTP to each community.

The internal distribution system improvements for this alternative include two Waterlink receiving stations: one in the North Pressure Zone south of US-34 (near the Fox River), and one in the South Pressure Zone near the existing Well No. 7 site on Tremont Avenue. Because this alternative includes two supply connection points, less significant internal distribution system improvements are required and include a new altitude/control valve station for the Northeast EWST, water main improvements in select locations to facilitate improved delivery of supply water from the receiving stations across the City, and SCADA modifications. The total capital cost for this alternative is estimated to be $98,520,000, which includes Yorkville's portion of the total shared sub-

regional costs including the new treatment plant and transmission mains. If this alternative was implemented, the City would purchase water from the Waterlink treatment and transmission system. The purchased water costs will be factored into the financial analysis later on in the memorandum.

5.3. Lake Michigan Water – DuPage Water Commission

The DuPage Water Commission (DWC) currently has 23 charter communities and 6 subsequent communities that have connected to the commission. The commission has a 40-year water supply contract with the City of Chicago. For this alternative, it was assumed that Yorkville, Montgomery, and Oswego would construct a transmission main network from the nearest DWC connection point to deliver treated water to the communities. Slides 38-41 in Appendix A include maps of the proposed transmission main from DWC to Yorkville and the other communities, the internal Yorkville distribution system improvements, and additional details regarding the DWC alternative. Two supply connection points were identified for Yorkville. The north receiving station would be located at the existing Well No. 8 site at Lehman Crossing, and the south receiving station would be located at the existing Well No. 7 site on Tremont Ave. Each site will include a DWC-owned delivery station and a Yorkville-owned receiving, metering, and booster pump station.

For each of the Lake Michigan alternatives, Yorkville would be required to maintain sufficient water storage capacity in the water distribution system (not including water stored in transmission mains), equivalent to twice the annual daily average IDNR Lake Michigan Allocation. This storage capacity will allow the United City of Yorkville to maintain water service while the City of Chicago performs routine maintenance or in an emergency that would result in short-term interruptions in water supply delivery. In order to meet this requirement, additional storage is needed in the short-term prior to the future needs assessment-projected deficit. It was assumed the City will construct a ground storage tank at each receiving station site that would be filled off the DWC transmission main and pumped to the system.

Additional internal distribution system improvements would be required including water main improvements for system hydraulics and a new altitude valve/control station for the Northeast EWST. Lastly, various improvements and water main replacement would be required to reduce the City's non-revenue water (NRW) to 10% or less, which is a requirement for all Lake Michigan supplied water systems. The City's current NRW loss is marginally above the 10% threshold, and therefore relatively minimal capital investment is required provided the City updates and maintains proper water accounting and continues its water main replacement program. Additional information and the total capital cost estimate for the NRW reduction is included on slides 50-51 in Appendix A. The total capital cost estimate for the Lake Michigan-DWC alternative is $98,230,000, which includes the NRW reduction program costs. There will be additional purchased water and buy-in costs for this alternative, as well as for all other Lake Michigan supplied systems. These costs will be factored into the cost analysis later in the memorandum.

5.4. Lake Michigan Water – Joliet Area Water Commission

The City of Joliet plans to switch to a Lake Michigan supply beginning in 2030. The City of Joliet is currently pursuing formation of a regional water commission, and twelve communities are considering joining the new commission. Under this alternative, purchased water from the City of Chicago will be distributed to commission members. The same supply points for the United City of Yorkville are assumed as were utilized for the DWC alternative, and many of the same improvements required for the DWC alternative are also required for the Joliet alternative, including additional storage capacity at each receiving station, purchased water and buy-in costs, and required NRW water reduction. The costs for new transmission mains from Joliet are higher than the DWC alternative due to the longer route. The total capital cost for the Lake Michigan-Joliet alternative is estimated to be $111,010,000. Slides 42-45 in Appendix A include additional details including a

map of the proposed transmission main and internal system improvements for the City. Purchased water costs will be factored in later in the memorandum.

5.5. Lake Michigan Water – Illinois Lake Water/Plainfield

The third Lake Michigan water alternative evaluated was receiving water via Illinois Lake Water/Plainfield, a private utility, from Bedford Park who receives water from the City of Chicago. Illinois Lake Water currently serves the communities of Bolingbrook, Homer Glen, Plainfield & small portions of Romeoville and Lemont. Slides 46-49 in Appendix A include additional information regarding this alternative. Although discussions were held with Illinois Lake Water about connecting to the system, information including financial details to connect to the system were never provided to Yorkville. Therefore, a capital cost estimate and financial analysis was not able to be completed for this alternative.

6. Cost Estimates Summary and Financial Analysis

As part of the AWSS Update, a preliminary analysis was completed of potential funding alternatives available to the City to finance the improvements. Table 1 below summarizes the funding options and estimated associated costs for each alternative, the breakdown of costs between each funding source, and the estimated loan period and interest rates. All costs were inflated to the estimated year of construction, based on the anticipated timeline for implementing the improvements for each alternative, for comparison.

Figure 1 illustrates the estimated 2030 average monthly residential water bill for the different alternatives including an estimated breakdown of each component of the bill. The Existing System 2030 bill is based on the current water system needs. It was projected to 2030 and is included for comparison, and assumes a 3% annual increase in water rate per year. The capital costs for all of the alternatives assumed 3% inflation, as well. Additionally, the DWC rate is shown based on the current service rate structure proposed and also assuming a 1% annual increase for comparison.

7. Alternatives Implementation Schedule

Figure 2 below illustrates the estimated implementation schedule for each alternative, and represents the estimated minimum time to complete planning, design, and construction of all required improvements. For the YO-Only and Waterlink Fox River alternatives, additional time is assumed related to water quality testing and permitting, and formation of the intergovernmental agreement between the three communities for the Waterlink subregional alternative. The deadline for communities to join the Joliet area regional water commission is early 2022 and the commission members will receive Lake Michigan water beginning in 2030. When considering the alternatives implementation, as noted previously, the updated needs assessment project that the United City of Yorkville is at risk of a supply deficit within approximately the next 5 years (e.g. by the end of 2025, which is represented by the black vertical line in Figure 2).

Table 1: Funding Summary for Each Alternative

Alternative(s)	Estimated Construction Year	2021 Estimated Costs				Total Costs Inflated To Construction Year
		IEPA SRF	EPA WIFIA	Bonds/Other	DWC - Buy In	
Loan Period (Years):		20	35	20	20	
Annual Interest Rate:		2.0%	2.0%	3.5%	0.0%	
Fox River: YO-Only	2027	$62,500,000	$53,602,698	$0	$0	**$116,102,698**
Fox River: Waterlink Sub-Regional System	2027	$62,500,000	$55,130,176	$0	$0	**$117,630,176**
Lake Michigan: DuPage Water Commission	2024	$62,500,000	$37,771,372	$0	$7,062,000	**$107,333,372**
Lake Michigan: Joliet Regional Water Commission	2027	$62,500,000	$70,048,450	$0	$0	**$132,548,450**
Lake Michigan: Illinois Lake Water/Plainfield System	2024	TBD				

Figure 1: Estimated 2030 Residential Water Bill Comparison

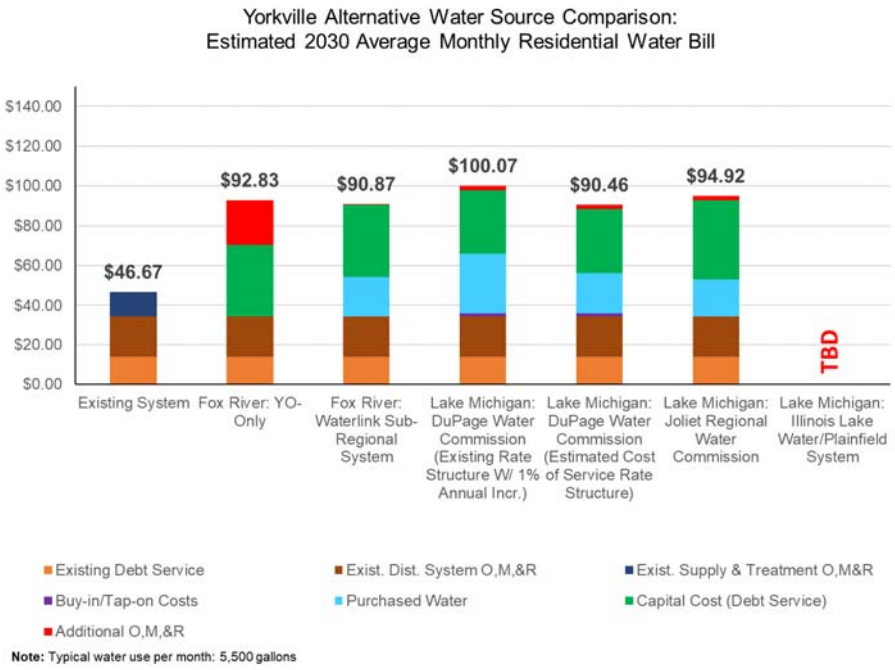


Figure 2: AWSS Alternatives Estimated Implementation Schedule Comparison

ALTERNATIVE	YEAR										
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Fox River: YO Only											
Fox River: Waterlink											
Lake Michigan: Dupage Water Commission Option											
Lake Michigan: Joliet Water Commission Option											
Lake Michigan: Illinois American Water Option											

8. Key Considerations Summary

The key considerations that must be weighed for each alternative include cost, water quality, risk, control and governance, sustainability/quantity, and management/staffing. The following section provides a summary of the different considerations that are applicable to each alternative.

8.1. Fox River – Yorkville Alone

Cost: While the treated water transmission main and purchased water costs incurred under the other alternatives are not applicable, there is added cost in order to construct a new lime softening treatment facility and significant internal distribution system improvements required, that would be borne solely by the City.
Water Quality: Potential seasonal raw river water quality needs to be considered as there may be periods when use of the river may be limited, although advanced water treatment processes (e.g. UV Advanced Oxidation Process) were assumed that would help minimize the impacts. The intake would be downstream of the Fox Metro Water Reclamation discharge into the Fox River and the City of Aurora combined sewer overflows that discharge into the river.
Risk: The City will be 100% responsible for the implementation of all of the improvements and long-term operation of the system.
Control/Governance: The City will maintain 100% control of the system.
Sustainability/Quantity: The Fox River was determined to be a long-term sustainable source of supply, although backup wells will be needed for water quantity and quality purposes at times.
Management/Staffing: City Staff will own, operate, and maintain the entire system. Multiple Class A operators would be needed to operate the system. In today's labor market, there is great concern over whether the City will be able to properly staff this type of facility at all times.

8.2. Fox River – Waterlink Sub-Regional System

Cost: This alternative has a slightly higher cost than the Fox River – Yorkville Alone alternative, and is comparable to the other alternatives.
Water Quality: Potential seasonal raw water quality considerations, although advanced water treatment processes were assumed that would help minimize the impacts. The intake would be downstream of the Fox Metro Water Reclamation discharge into the Fox River and the City of Aurora combined sewer overflows that discharge into the river.
Risk: The City, along with the Villages of Montgomery and Oswego, will be responsible for implementation of all of the improvements and long-term operation of the system.
Control/Governance: The system will be governed through an IGA or a new unit of local government (e.g. Commission or JAWA).
Sustainability/Quantity: The Fox River is a sustainable source of supply, although backup wells will be needed

for water quantity and quality purposes at times.
Management/Staffing: The Waterlink communities, or the new joint unit of local government, will own, operate, and maintain the entire system. Multiple Class A operators would be needed to operate the system. In today's labor market, there is great concern that the three communities will be able to properly staff this type of facility.

8.3. Lake Michigan – DuPage Water Commission

Cost: Costs will be dependent on the DWC rate, although costs are likely comparable to the other alternatives.
Water Quality: The City of Chicago treated water is consistently of high quality.
Risk: DWC to construct the transmission main to the City; The City would construct the internal distribution system improvements.
Control/Governance: The United City of Yorkville would become a member of the DWC; Potentially a new District for the Waterlink Communities could be formed for Board representation.
Sustainability/Quantity: An allocation for Lake Michigan water would be needed. Several of the City's existing wells will be kept online for emergencies.
Management/Staffing: The DWC would own, operate, and maintain the transmission main through the delivery structure. The City would own, operate, and maintain its internal distribution system.

8.4. Lake Michigan – Joliet Regional Water Commission

Cost: Costs are comparable to the other Lake Michigan alternatives, although the transmission main cost is higher due to the longer route required.
Water Quality: The City of Chicago treated water is consistently of high quality.
Risk: Commission to construct the transmission main to the City; the City would construct the internal distribution system improvements.
Control/Governance: The United City of Yorkville would become a voting member of the new Commission.
Sustainability/Quantity: An allocation for Lake Michigan water would be needed. Several of the City's existing wells will be kept on-line for emergencies.
Management/Staffing: The Commission would own, operate, and maintain the transmission main through the delivery structure. The City would own, operate, and maintain its internal distribution system.

8.5. Lake Michigan – Illinois Lake Water System

Cost: As mentioned previously, costs necessary to complete the detailed analysis were not provided by the private utility for this alternative.
Water Quality: The City of Chicago treated water is consistently of high quality.
Risk: Illinois Lake Water to construct the transmission main to the City; the City would construct the internal distribution system improvements.
Control/Governance: The United City of Yorkville would purchase water from the Illinois Lake Water System, which is operated by a private water utility.
Sustainability/Quantity: An allocation for Lake Michigan water would be needed. The City's existing wells will be kept on-line for emergencies.
Management/Staffing: Illinois Lake Water would own, operate, and maintain the transmission main through the delivery structure; The City would own, operate, and maintain the distribution system.

9. Conclusions

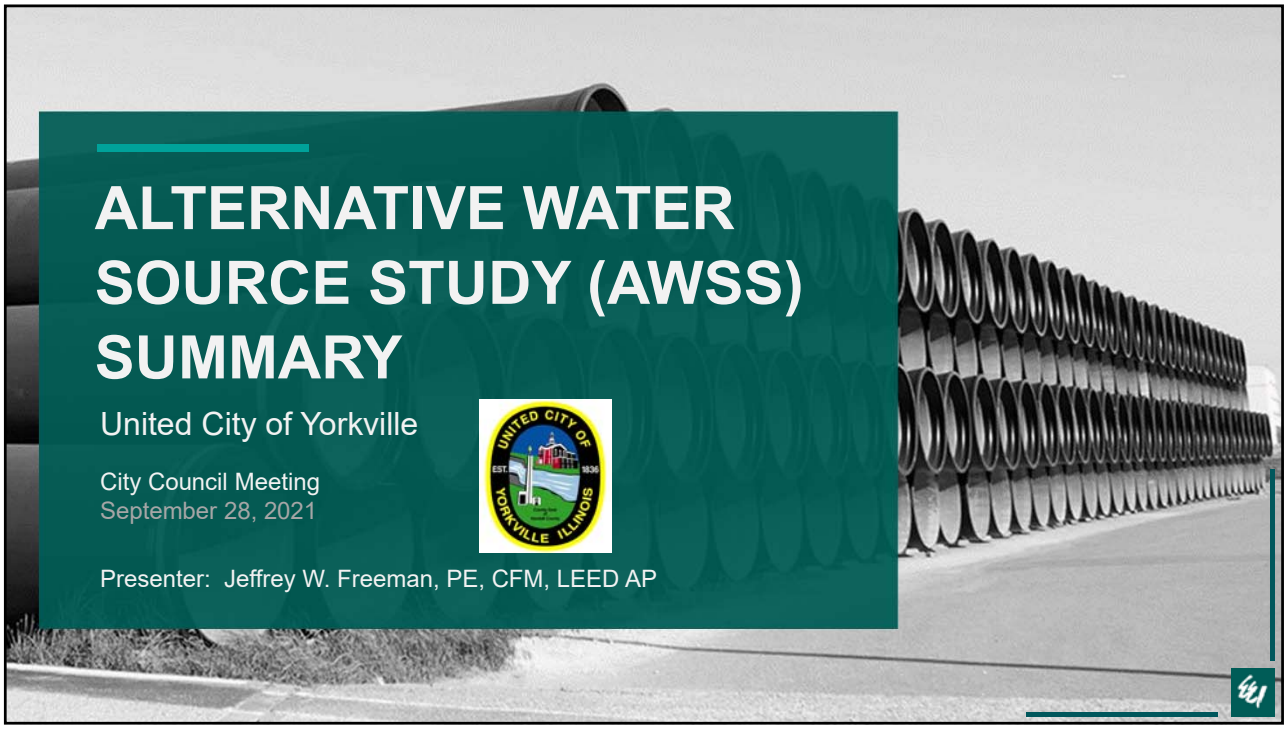
The AWSS Update summarized in this memo and in the attached exhibits and appendices has provided an

overview of five different water source alternatives identified for the United City of Yorkville from either the Fox River or Lake Michigan. The Fox River alternatives include Yorkville-Only and the Waterlink Subregion. The Lake Michigan alternatives include the DuPage Water Commission, Joliet Regional Water Commission, and Illinois Lake Water/Plainfield System. In reviewing each of the alternatives, City Council members and Staff, working together with EEI, developed a weighted decision matrix for the City to evaluate all of the key considerations including cost, water quality, risk, control/governance, sustainability/quantity, and management/staffing. After the City Council factored in all of the considerations, they determined connecting to the DuPage Water Commission along with the Villages of Montgomery and Oswego was the best long-term choice for the City.

pc: Jon Bauer – Water Department Foreman
BPS – EEI

Appendix A

AWSS Update Summary Presentation
Yorkville City Council Meeting
September 28, 2021


ALTERNATIVE WATER SOURCE STUDY (AWSS) SUMMARY
United City of Yorkville
City Council Meeting
September 28, 2021
Presenter: Jeffrey W. Freeman, PE, CFM, LEED AP

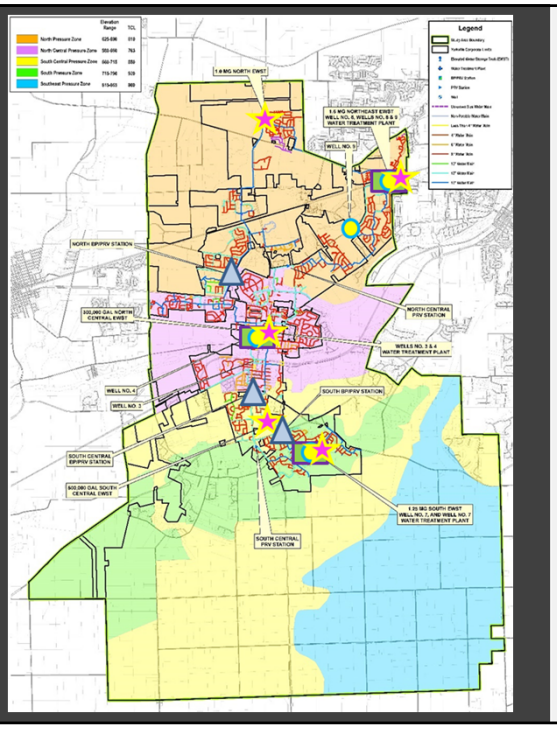
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Agenda
1. Existing Water Works System Overview
2. Water Source Sustainability and Alternatives
3. Summary of Previous Studies
4. Yorkville and Waterlink Background Information
5. Key Considerations Introduction
6. Supply Alternatives Overview
7. Cost Estimates Summary & Financial Analysis
8. Alternatives Implementation Schedule
9. Key Considerations Summary
10. Next Steps
11. Q&A

2

EXISTING WATER WORKS SYSTEM (WWS) OVERVIEW

3

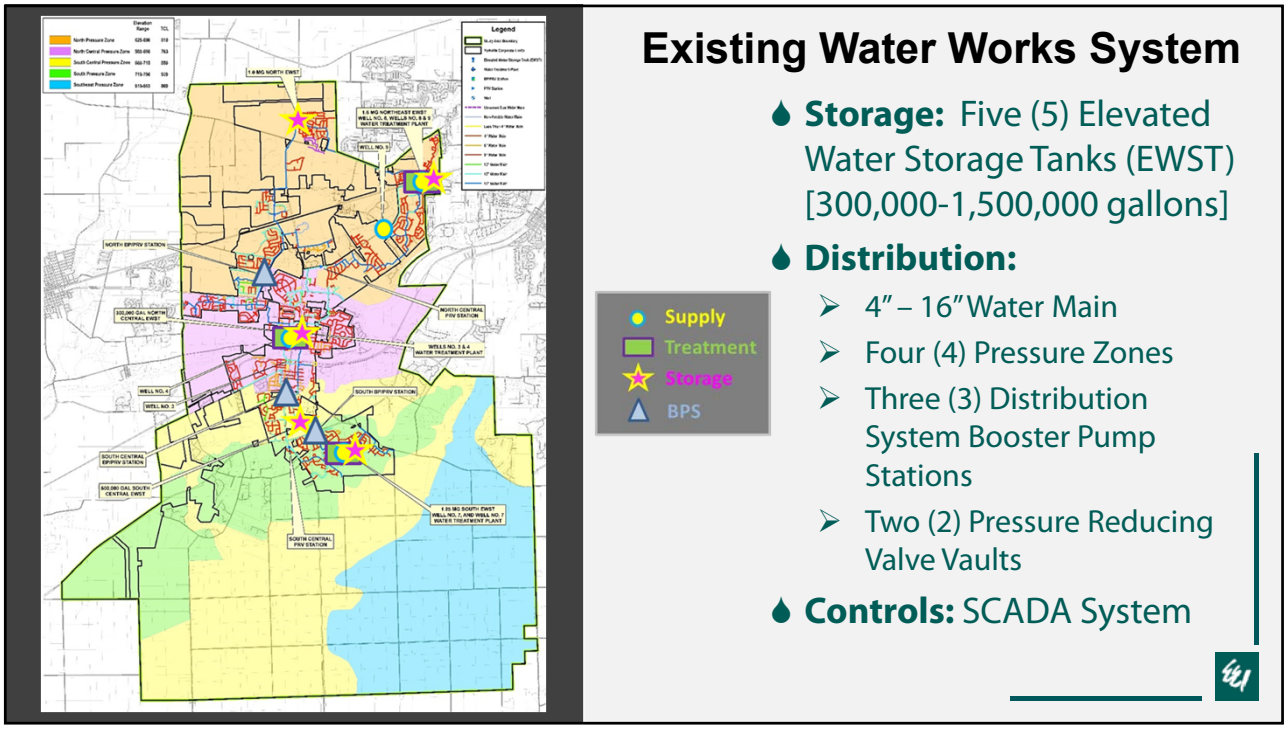


Existing Water Works System

- **Supply:** Four (4) Active Deep Sandstone Water Wells [Nos. 4, 7, 8 & 9]
  - Three (3) Ironton-Galesville & One (1) St. Peter (Ancell) & Ironton Galesville
  - Flow Rate: 1,000-1,200 gpm
  - Exceed Radium Standard
- **Treatment:** Three (3) WTPs
  - All Plants Institute Cation Exchange Treatment

Supply
Treatment
Storage
BPS

4



Existing Water Works System

- **Storage:** Five (5) Elevated Water Storage Tanks (EWST) [300,000-1,500,000 gallons]
- **Distribution:**
  - 4" – 16" Water Main
  - Four (4) Pressure Zones
  - Three (3) Distribution System Booster Pump Stations
  - Two (2) Pressure Reducing Valve Vaults
- **Controls:** SCADA System

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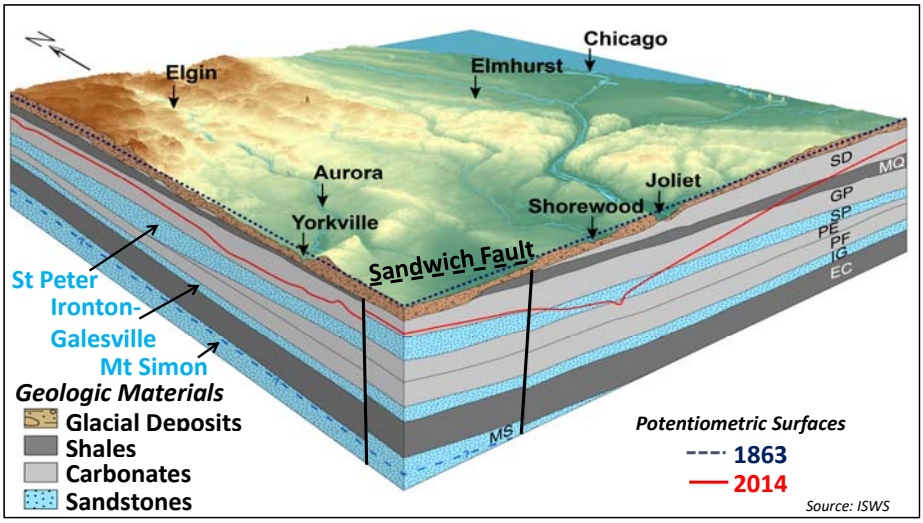
WATER SOURCE SUSTAINABILITY AND ALTERNATIVES

6



- Naturally Occurring Radium 226 & 228
- Illinois State Water Survey (ISWS) projects the Aquifer is pumped beyond its sustainable yield and water levels are declining
- A number of communities within the region are planning to move to an alternative water source

Deep Aquifer System Overview in Northeastern IL



7



EXISTING DEEP WELLS GROUNDWATER MODELING

Illinois State Water Survey projects that Yorkville, Montgomery, and Oswego will be at "severe risk" of being able to meet demands and of well inoperability by 2050.

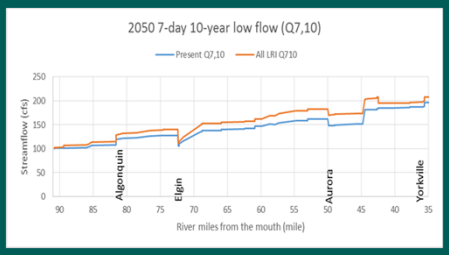
Risk Zones

- Risk of declining well performance
- Risk of well inoperability
- Village of Montgomery
- Village of Oswego
- United City of Yorkville

8

FOX RIVER

- Water Source for Cities of Elgin and Aurora
- Modeling Conducted by the ISWS: River Baseflow Projected To Increase In the Future
- Most Sustainable Supply Source Currently Within Sub-Region
- Water Withdrawal May be Restricted by IDNR Due to Low Flows – Communities Required to Maintain Some Back-Up Wells
- Withdrawal Permitting Sooner Rather Than Later Likely Better



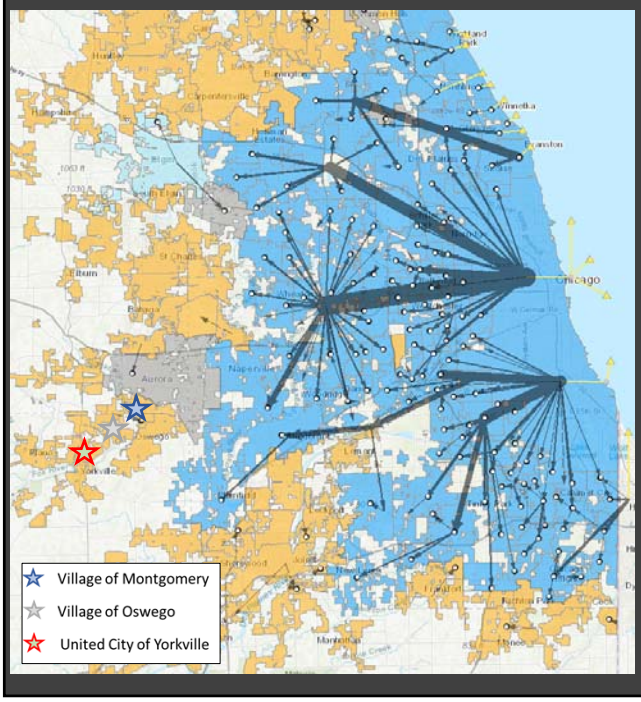
Projected Change In Monthly Risk Of River Flow Being Below Current Q7,10 Flow

Month	Current Conditions (%)	2050 Projected Conditions (%)
May	0.4	<0.1
June	0.3	<0.1
July	1.7	<0.1
August	3.6	0.5
September	4.7	0.9
October	2.4	0.7
November	0.4	0.2

Historical & Projected Q7,10 Deficit Days In Four Worst Drought Years

Year	Total # Of Actual Deficit Days	2050 Projected # Of Deficit Days
1934	98	1
2005	50	22
1956	43	24
1946	38	15

9



LAKE MICHIGAN

- Total Illinois Diversion Limit Set at 3,200 cfs (2,068 MGD) by Supreme Court Decree
- Illinois Department of Natural Resources (IDNR) Manages Lake Michigan Allocation Process
- IDNR Has Recently Stated They Believe There is Sufficient Allocation to Serve Joliet and the Communities Currently Considering Connection
- Not required to maintain backup wells but can keep for emergency

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SUMMARY OF PREVIOUS STUDIES

11

Population & Water Demand Projections

Regulatory Review

Sustainable Source Water Assessment

Wells

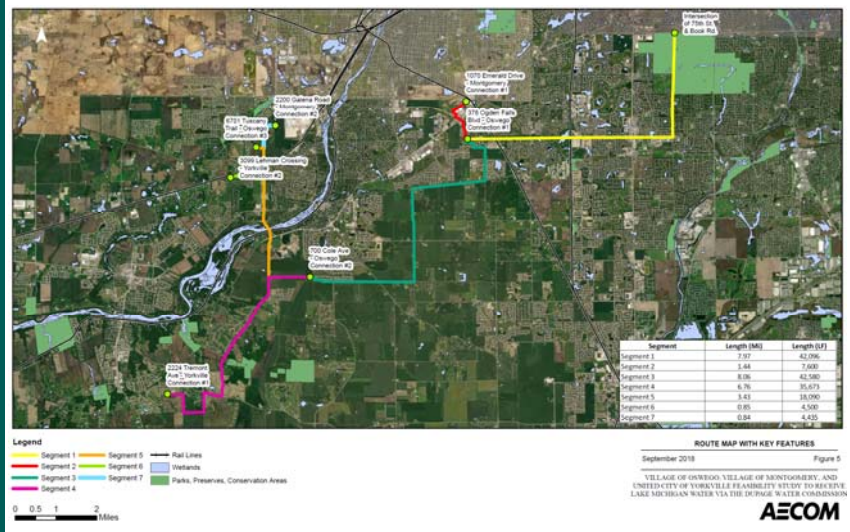
Fox River Alone

Fox River With Oswego & Yorkville

2016 United City of Yorkville Water Works System Master Plan

In 2016, the City analyzed the sustainability of the City's wells, continued use of the wells, and utilizing the Fox River either as an independent supply source or with the Village of Oswego and Village of Montgomery.

12



2017 & 2018 DuPage Water Commission Connection Analysis

In 2017 & 2018, AECOM developed capital cost estimates for a DuPage Water Commission Connection to the Villages of Oswego and Montgomery and United City of Yorkville.

13

2020/2021 Alternative Water Source Project

The Village of Oswego initiated an Alternative Water Source Project where they are evaluating a number of water source options for the region. They have asked Montgomery and Yorkville to provide cost-sharing for the elements of the study that apply to the three communities.

Requested Inputs From VOM & COY

- DEMAND PROJECTIONS
- DECISION MATRIX

Outputs To Be Utilized In COY AWSS

- DEEP SANDSTONE AQUIFER ANALYSIS
- UPDATED COST ESTIMATES
- PUBLIC ENGAGEMENT CAMPAIGN

14

2020-2021 AWSS Update (Current Study)

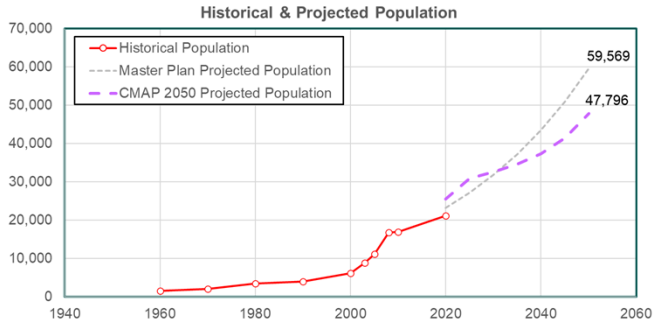
- Review/Obtain Information from Oswego Water Study
  - Summarize Cost Analysis for Waterlink Sub-Regional Fox River System and Lake Michigan Alternatives (DWC, Joliet, and Illinois American)
- Water Distribution System Modeling and Analysis
  - Modeling Scenarios Analysis for Each Alternative, Including Review of Pressures, Available Fire Flows, Pipe Velocities, and Distribution System Improvements Necessary for Implementation
- Supply, Treatment, Storage, and Distribution Improvements Updated Cost Estimates and Analysis for Fox River: Yorkville Alone Option and Cost Analysis Summary of All Alternatives

15

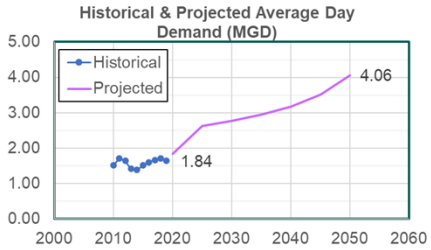
YORKVILLE AND WATERLINK BACKGROUND INFORMATION

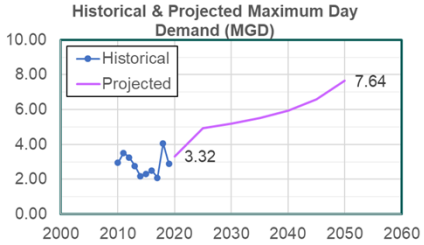
16

Yorkville Historical and Projected Population and Water Demands



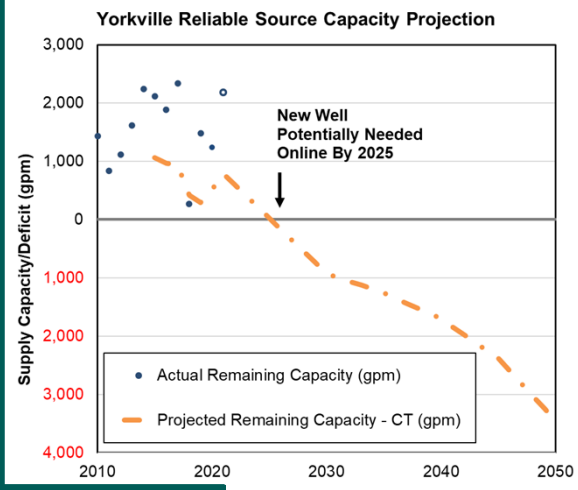
Estimated Future Yorkville Buildout Population (Circa 2100): 95,727

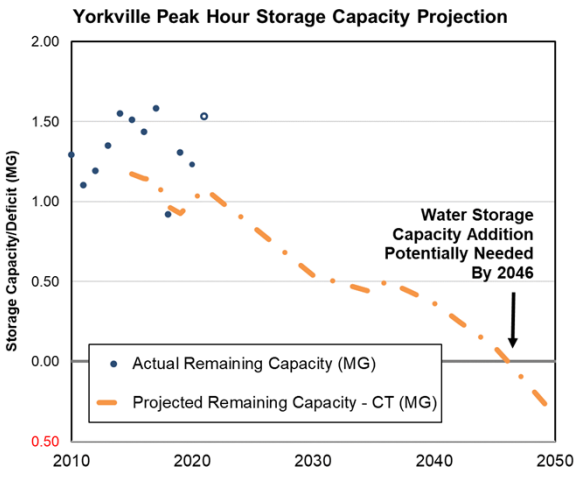




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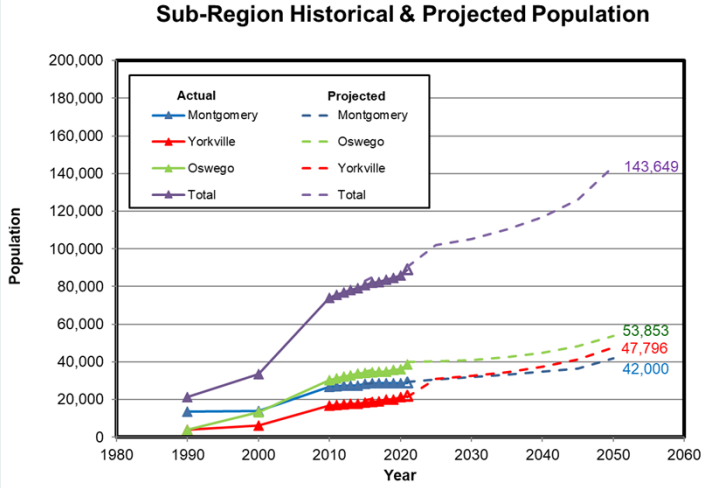
Yorkville Water Supply, Treatment, and Storage Capacity Status

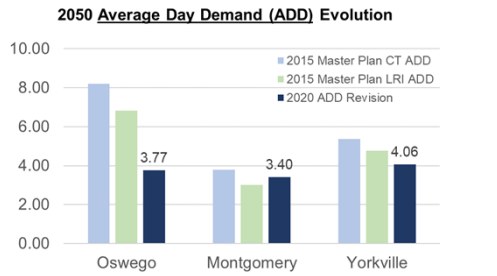


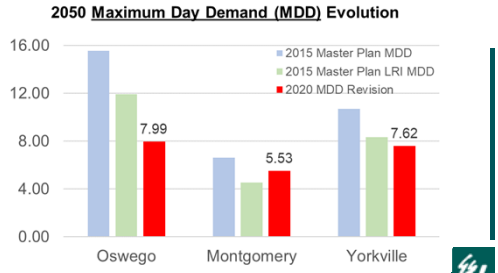


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Waterlink Population and Demand Projections



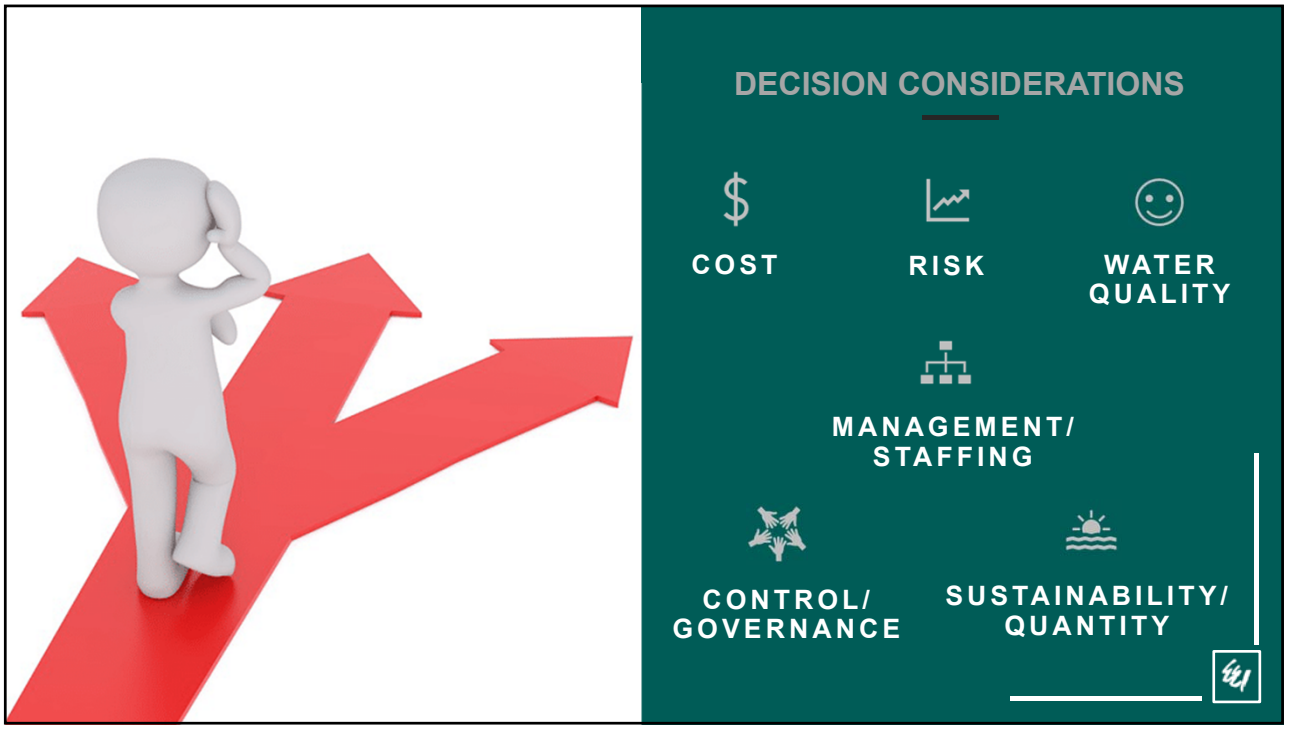




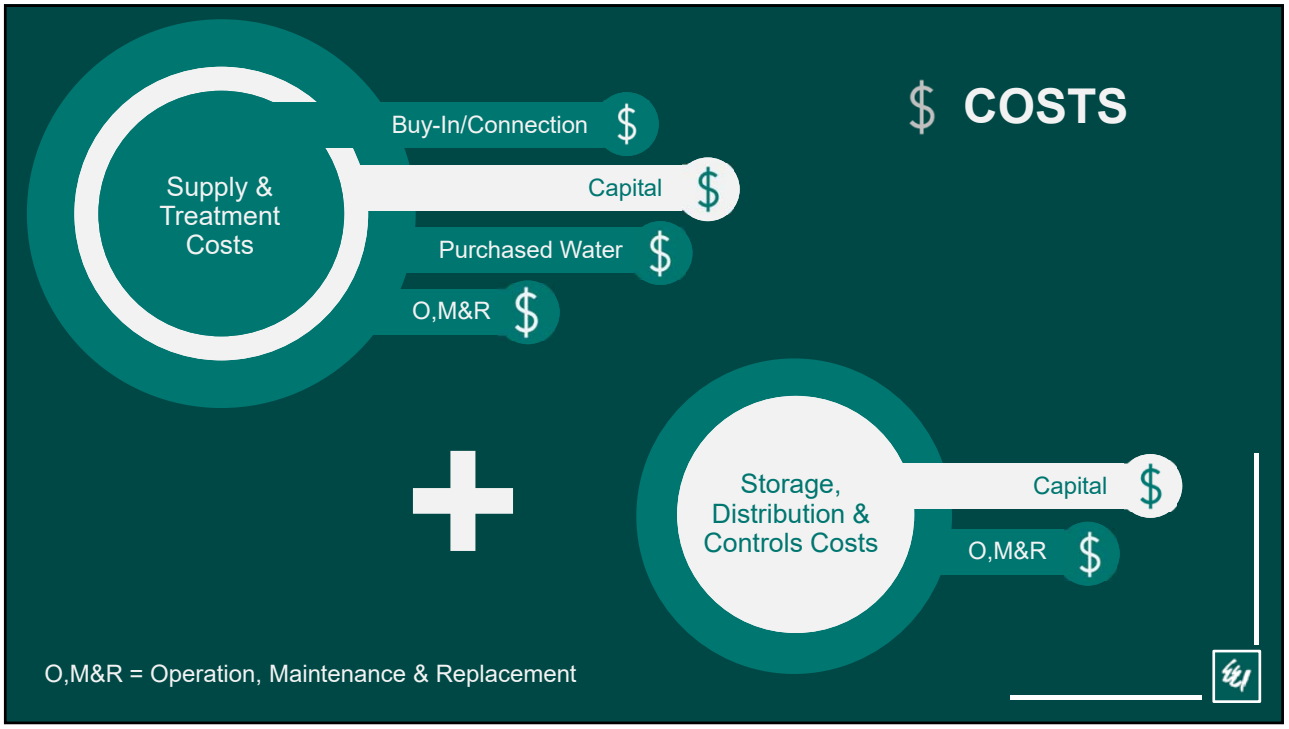
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KEY CONSIDERATIONS INTRODUCTION

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DECISION CONSIDERATIONS
COST
RISK
WATER QUALITY
MANAGEMENT/ STAFFING
CONTROL/ GOVERNANCE
SUSTAINABILITY/ QUANTITY

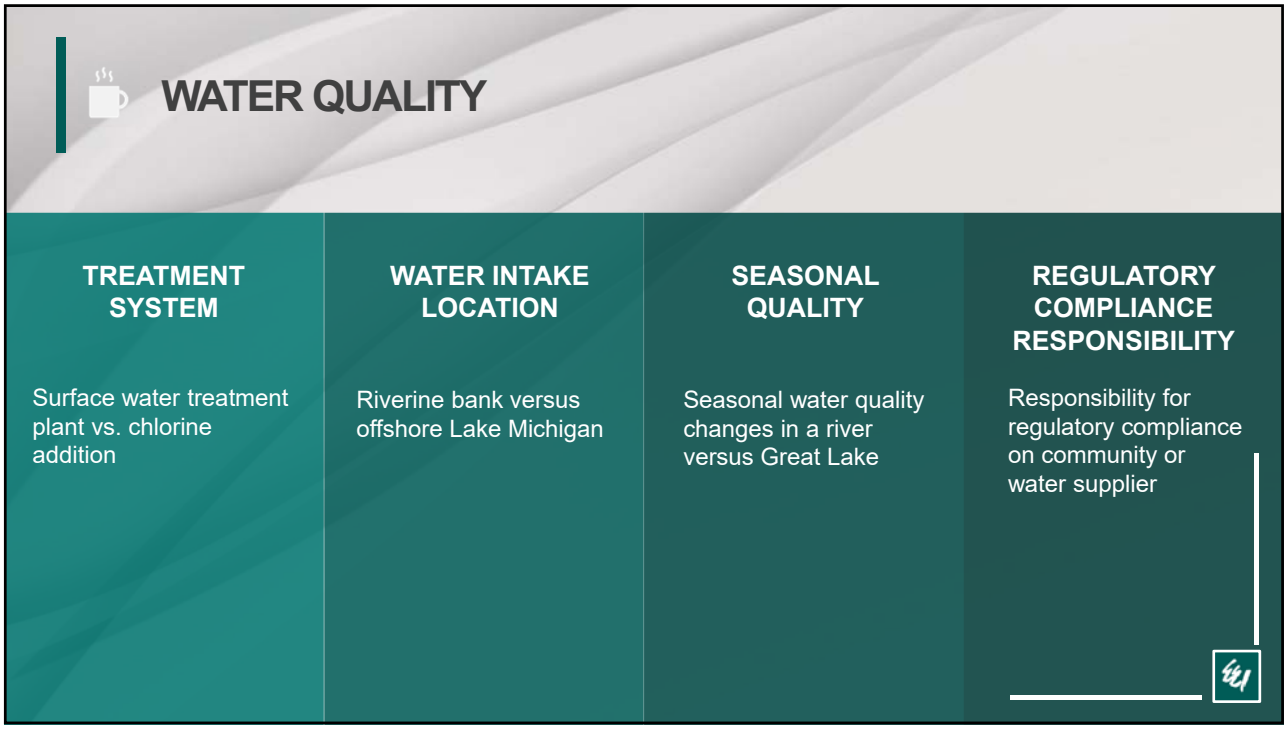
21


$ COSTS
Supply & Treatment Costs
Buy-In/Connection
Capital
Purchased Water
O,M&R
Storage, Distribution & Controls Costs
Capital
O,M&R
O,M&R = Operation, Maintenance & Replacement

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RISK
DESIGN/ PERMITTING
CONSTRUCTION
CAPACITY EXPANSION
FINANCIAL

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WATER QUALITY
TREATMENT SYSTEM
Surface water treatment plant vs. chlorine addition
WATER INTAKE LOCATION
Riverine bank versus offshore Lake Michigan
SEASONAL QUALITY
Seasonal water quality changes in a river versus Great Lake
REGULATORY COMPLIANCE RESPONSIBILITY
Responsibility for regulatory compliance on community or water supplier

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MANAGEMENT / STAFFING

- Individual community hires/manages all staff for supply, treatment, transmission, storage and distribution facilities
- Water supplier and water commission hires/manages supply, treatment and transmission staff; Community hires/manages storage and distribution facility staff

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CONTROL / GOVERNANCE



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SUPPLY ALTERNATIVES OVERVIEW

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APPLES TO APPLES COST COMPARISON

UNIT PRICES

- Updated All Costs to 2021 $$
- Utilized Same Unit Prices Across Alternatives

CONTINGENCY

- Class 5 Cost Estimates = 30% Contingency

LEGAL & ENGINEERING

- 20% Legal & Engineering For All Alternatives

29

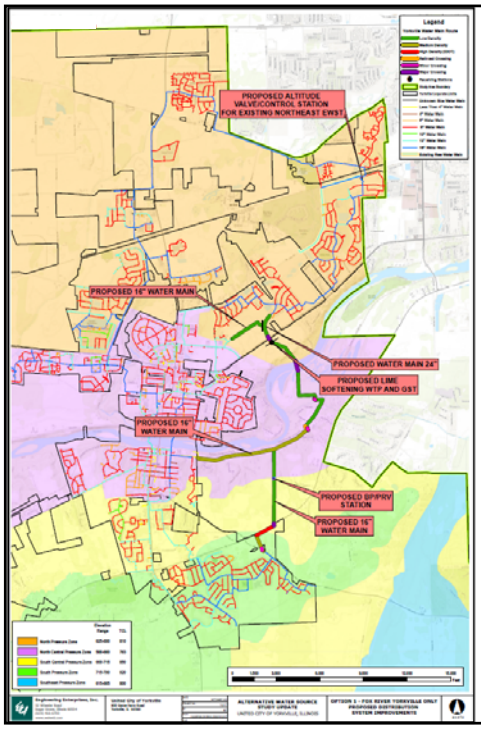


FOX RIVER SUPPLY OPTIONS

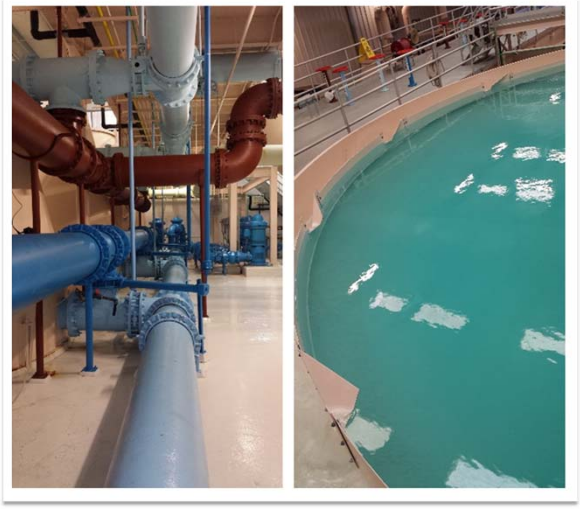
UNITED CITY OF YORKVILLE

WATERLINK SUB-REGIONAL SYSTEM WITH OSWEGO & MONTGOMERY

30



Fox River: Yorkville Alone



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Fox River: Yorkville Alone – Summary of Improvements

**Note: No Storage Improvements Required for this Alternative*

Supply & Treatment

- Fox River Intake & Pump Station
- Fox River Transmission Main
- Lime Softening Water Treatment Plant
- New Backup Well (Well No. 6)
- Backup Wells Transmission Main (2.7 mi)

Distribution*

- New Altitude/Control Valve Station for Northeast EWST
- New Booster Pump/Pressure Reducing Valve Station (for New Water Transmission Main from North Central to South Central Pressure Zone)
- Water Main Improvements: Hydraulics (5.5 mi)

32

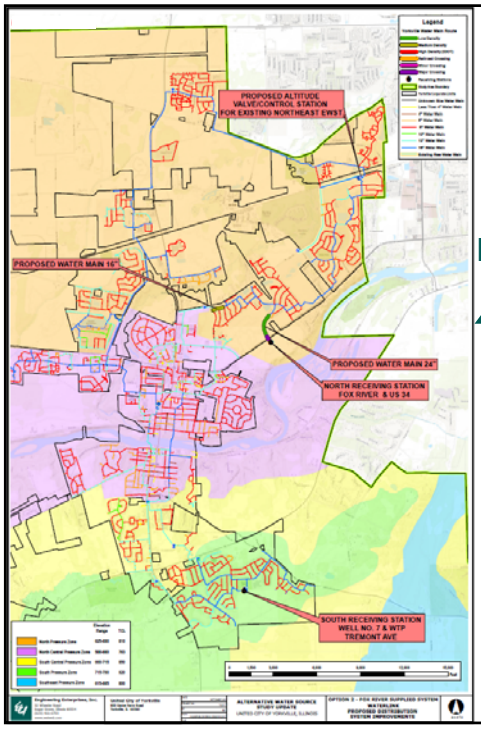
Fox River: Yorkville Alone

Total Capital Cost Estimate: $97,240,000

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - Low Flow/Seasonal Water Quality Restrictions
  - Several Miles Downstream of Fox Metro Water Reclamation Facility
  - Backup Well Network Required
- Governance, Management/Operational Responsibility, and Risk:
  - Sole Ownership/Control & Sole Assumption of Risk
- Internal System Improvements:
  - Significant Internal Improvements Required Due to Single Supply Source
- Estimated Timeline: 5-7 years

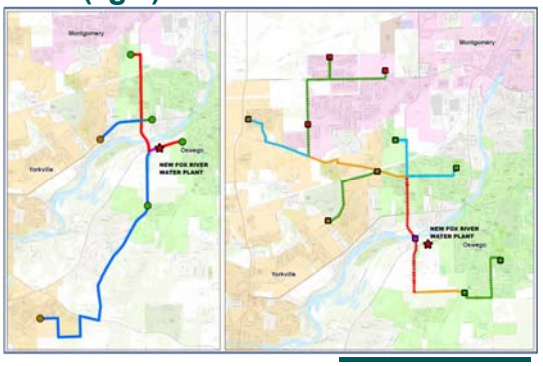
33



Fox River: Waterlink Sub-Regional System

Internal Distribution System Improvements

Treated Water (left) & Back-Up Well Raw Water (right) Transmission Main Networks



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Fox River: Waterlink – Summary of Improvements

**Note: No Storage Improvements Required for this Alternative*

Sub-Regional Supply & Treatment

- Fox River Intake & Pump Station
- Fox River Raw Water Transmission Main
- Backup Well Raw Water Transmission Main (Total Length = 13.5 mi; Yorkville Share = 36.2%)
- Lime Softening Water Treatment Plant
- New Backup Well (Well No. SR-1)
- Treated Water Transmission Mains (Total Length = 18.0 mi; Yorkville Share = 45.4%)

Internal Distribution System*

- North and South Receiving Stations
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

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Fox River: Waterlink Sub-Regional System

Total Capital Cost Estimate*: $98,520,000

**Includes Yorkville's portion of total shared sub-regional costs*

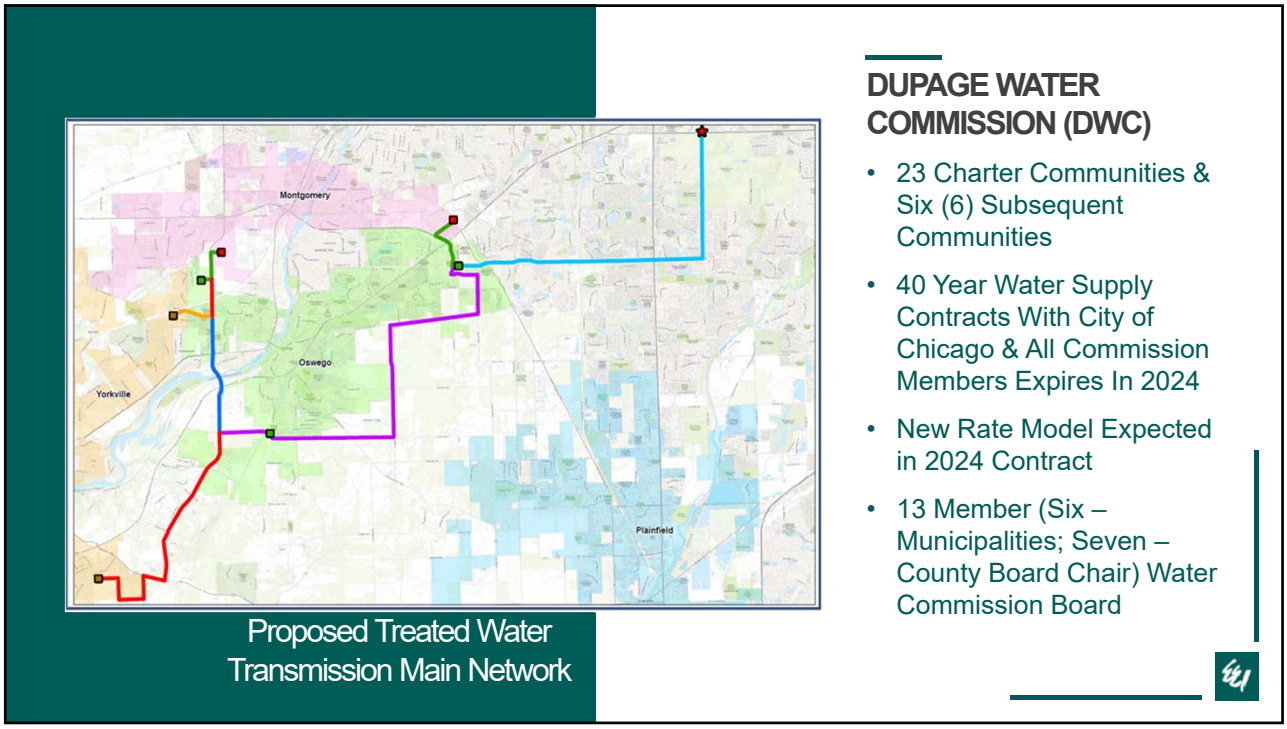
Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - Low Flow/Seasonal Water Quality Restrictions
  - Several Miles Downstream of Fox Metro Water Reclamation Facility
  - Backup Well Network Required
- Governance, Management/Operational Responsibility, and Risk:
  - Intergovernmental Agreement/New Governmental Unit Required
  - Shared Ownership/Control & Diversification of Risk, Staffing
- Internal System Improvements:
  - Reduction in Internal Improvements Due to Dual Supply Sources
- Estimated Timeline: 9-11 years

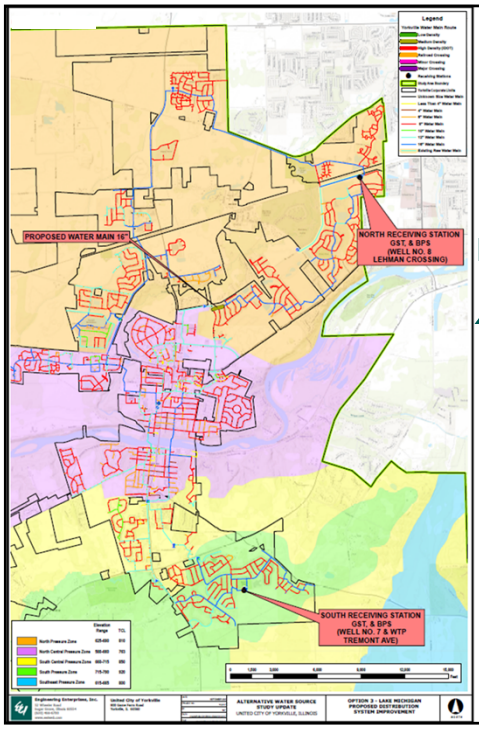
36


LAKE MICHIGAN SUPPLY OPTIONS
JOLIET AREA WATER COMMISSION
DuPAGE WATER COMMISSION
ILLINOIS LAKE WATER COMPANY/ PLAINFIELD

37


Montgomery
Oswego
Yorkville
Plainfield
Proposed Treated Water Transmission Main Network
DUPAGE WATER COMMISSION (DWC)
• 23 Charter Communities & Six (6) Subsequent Communities
• 40 Year Water Supply Contracts With City of Chicago & All Commission Members Expires In 2024
• New Rate Model Expected in 2024 Contract
• 13 Member (Six – Municipalities; Seven – County Board Chair) Water Commission Board

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Lake Michigan: DuPage Water Commission

Internal Distribution System Improvements

Connection Points (Receiving Stations)



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DuPage Water Commission – Summary of Improvements

Supply

- Treated Water Transmission Mains (Total Length = 29.1 mi; Yorkville Share = 46.0%)

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

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Lake Michigan: DuPage Water Commission

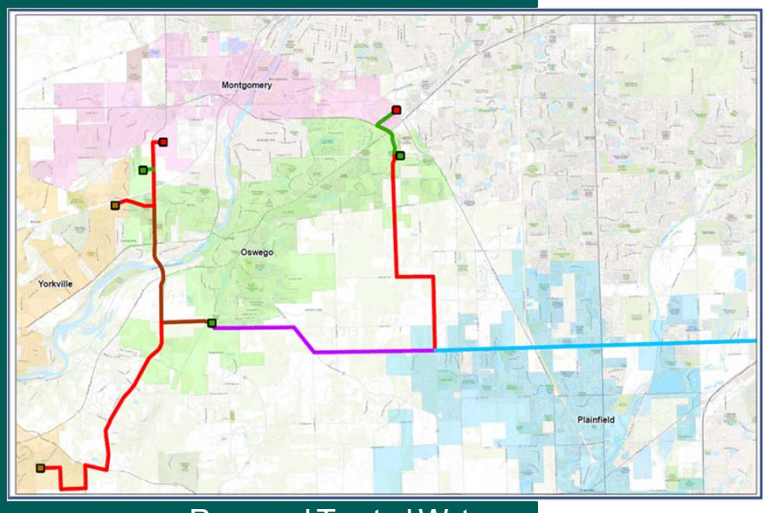
Total Capital Cost Estimate*: **$94,180,000**

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Buy-In Costs
- Estimated Timeline: 4-5 years

41

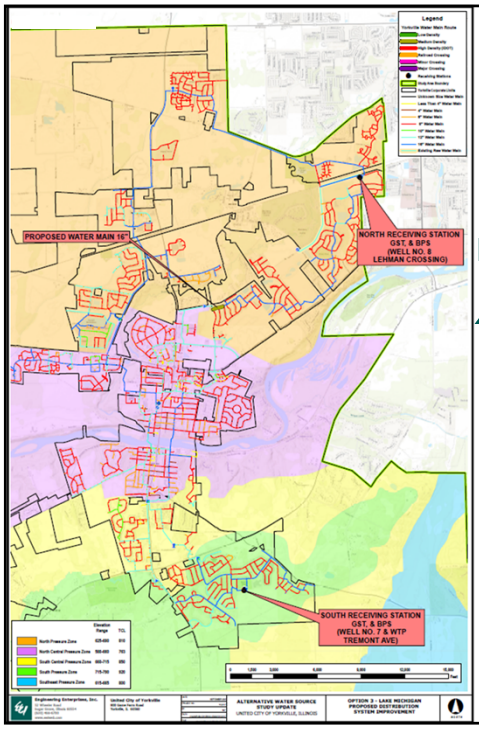


Proposed Treated Water Transmission Main Network

JOLIET AREA WATER COMMISSION

- New System With Twelve (12) Communities Currently Considering Joining
- Purchase Water From City of Chicago (100 Year Term With Post 50 Year Opt Out Option) Through New Rate Model
- Opportunity To Be Charter Member

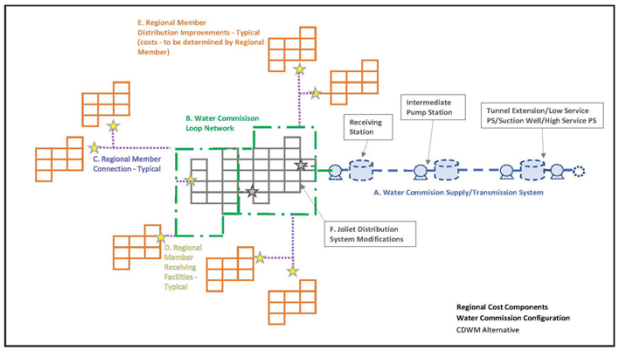
42



Lake Michigan: Joliet Water Commission

Internal Distribution System Improvements

Joliet Water Commission Schematic



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Joliet Water Commission – Summary of Improvements

Supply

- Treated Water Transmission Mains

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

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Lake Michigan: Joliet Water Commission

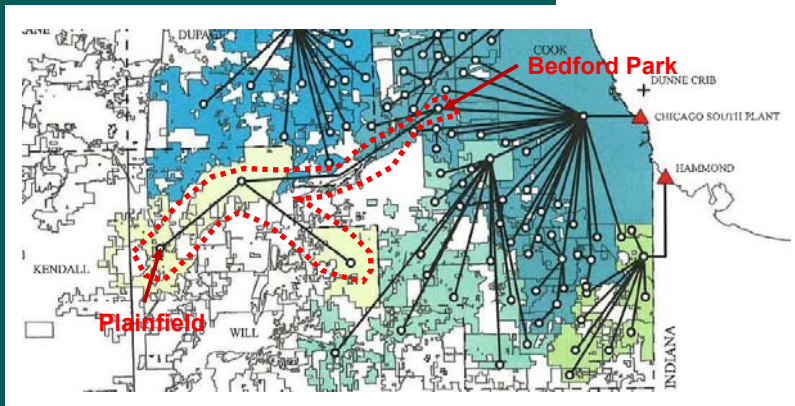
Total Capital Cost Estimate*: $106,640,000

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - Joliet Water Commission Still Being Formed
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Estimated Timeline: 9 Years (No Earlier Than 2030)

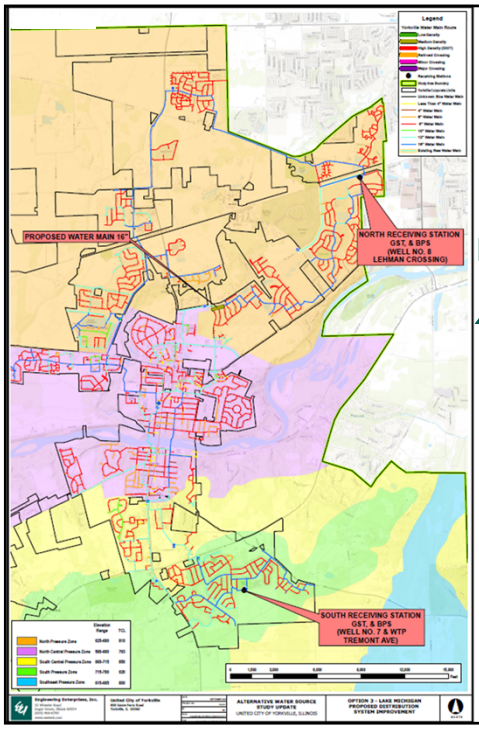
45



ILLINOIS LAKE WATER/ PLAINFIELD

- Private Utility
- Receive Water From Bedford Park Who Receives Water From Chicago
- Currently Serving Bolingbrook, Homer Glen, Plainfield & Small Portions of Romeoville and Lemont

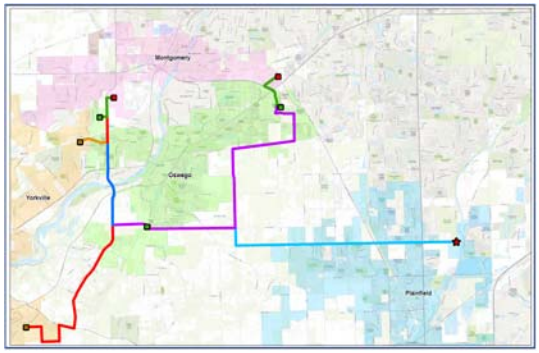
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Lake Michigan: Illinois Lake Water Option

Internal Distribution System Improvements

Treated Water Transmission Main Network



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Illinois Lake Water – Summary of Improvements

Supply

- Treated Water Transmission Mains

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

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Lake Michigan: Illinois Lake Water

Total Capital Cost Estimate*: TBD

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - Illinois American Water is a Private Utility
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Estimated Timeline: 4-5 Years

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Non-Revenue Water Reduction Plan

Non-Revenue Water (NRW) is the difference between system input volume (water produced or purchased) and billed authorized consumption[1]. NRW includes the following:

Unbilled Authorized Consumption

- Examples: Fire hydrant flushing, water treatment plant process water, municipal buildings whose water is not metered, etc.

Apparent Losses

- Non-physical losses such as unauthorized consumption (water theft), meter inaccuracies, systematic data handling errors, etc.

Real Losses

- Physical losses from the distribution system and storage tanks up to the point of connection to the customer meter

[1]From AWWA Manual M36: Water Audits and Loss Control, 4th Edition (2016)

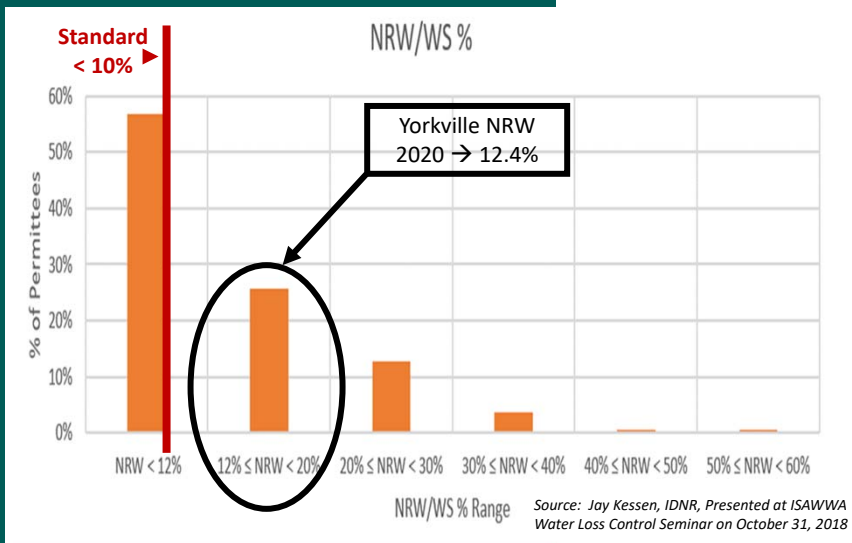
50

Non-Revenue Water Reduction Plan

- Water Audits can be used to identify, manage, and minimize sources of water loss. A Water Audit was completed for the 2020 Water Year (October 1, 2019 – September 30, 2020).
- Maximum NRW (water loss) required for Lake Michigan-supplied systems is 10%.
  - Current NRW in Yorkville is approximately 12.4%.
- NRW Reduction Plan for Yorkville includes:
  - Completion of Annual Water Loss Audit
  - Leak Detection
  - Water Main Replacement
  - Water Meter Replacement

Total NRW Reduction Plan Cost Estimate*: **$4,050,000**

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Lake Michigan Supplied System 2017 Non-Revenue Water Percentiles

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COST ESTIMATES SUMMARY & FINANCIAL ANALYSIS

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AWSS Alternatives Capital Cost Summary

Fox River: YO Alone…….....	$97,240,000
Fox River: Waterlink Sub-Regional System.....	$98,520,000
Lake Michigan: DuPage Water Commission.....	$98,230,000*
Lake Michigan: Joliet Area Water Commission...	$111,010,000*
Lake Michigan: Illinois American Water……	TBD*

**Includes NRW Reduction Capital Costs Over Next 10 Years*

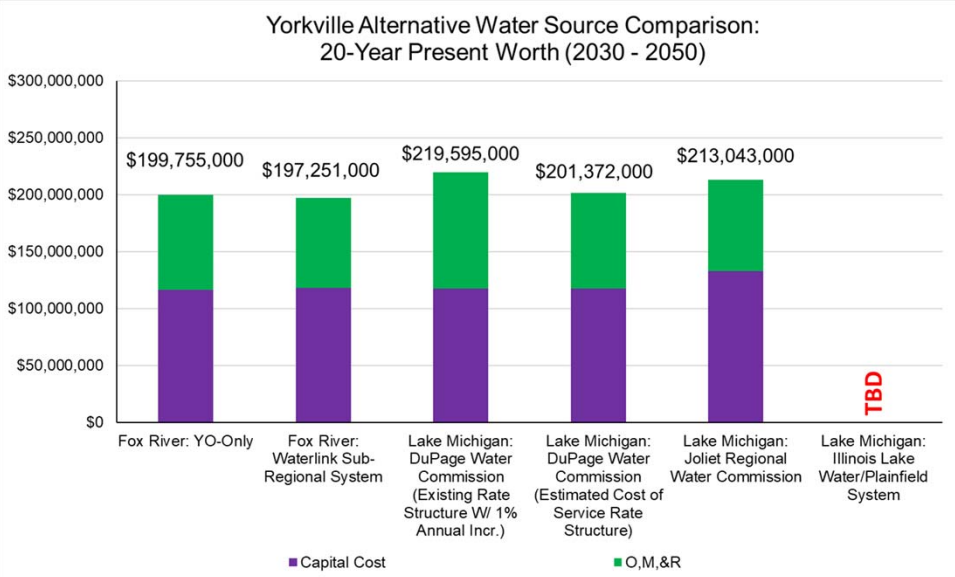
54

Funding Summary for Each Alternative

Alternative(s)	Estimated Construction Year	2021 Estimated Costs				Total Costs Inflated To Construction Year
		IEPA SRF	EPA WIFIA	Bonds/Other	DWC - Buy In	
Loan Period (Years):		20	35	20	20	
Annual Interest Rate:		2.0%	2.0%	3.5%	0.0%	
Fox River: YO-Only	2027	$62,500,000	$53,602,698	$0	$0	**$116,102,698**
Fox River: Waterlink Sub-Regional System	2027	$62,500,000	$55,130,176	$0	$0	**$117,630,176**
Lake Michigan: DuPage Water Commission	2024	$62,500,000	$37,771,372	$0	$7,062,000	**$107,333,372**
Lake Michigan: Joliet Regional Water Commission	2027	$62,500,000	$70,048,450	$0	$0	**$132,548,450**
Lake Michigan: Illinois Lake Water/Plainfield System	2024	TBD				

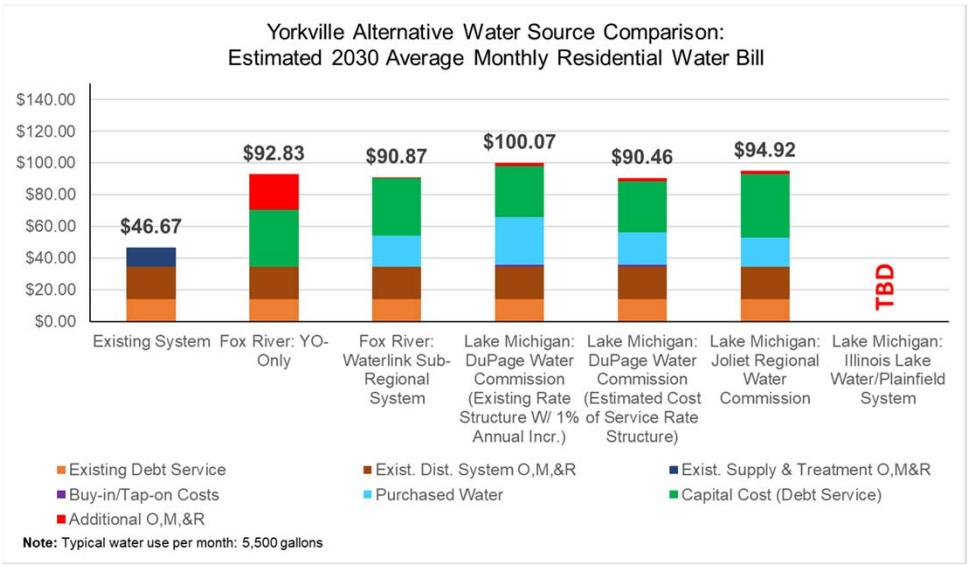
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AWSS Alternatives Net Present Value Summary



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Estimated 2030 Residential Water Bill Comparison

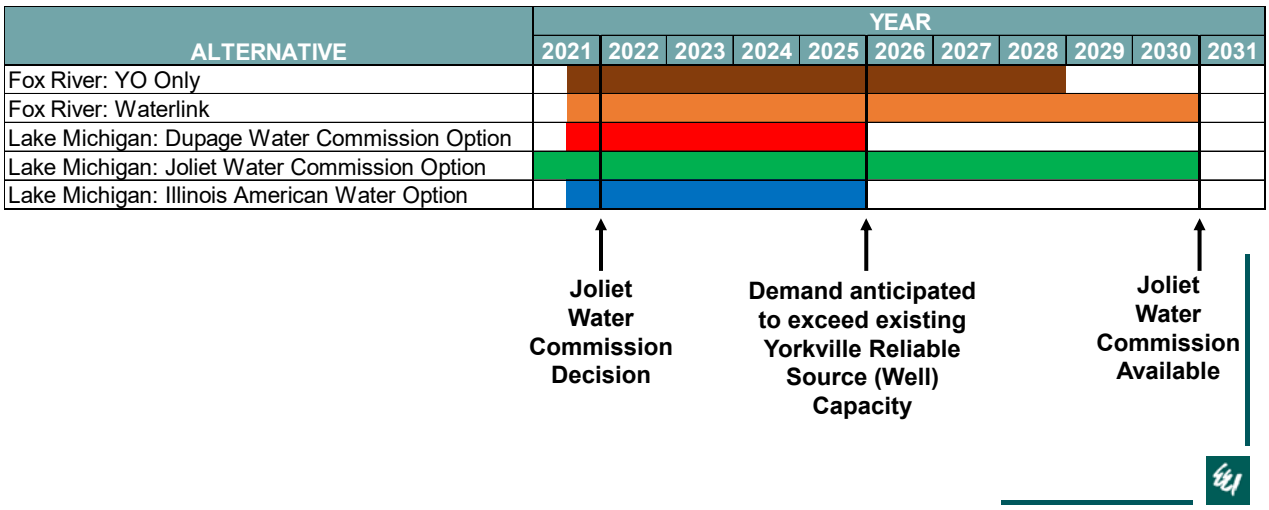


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ALTERNATIVES IMPLEMENTATION SCHEDULE

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AWSS Alternatives Estimated Implementation Schedule Comparison



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Cost Savings for Delay

- Projected 2030 Cost To Run Existing System $5,167,000
- Projected 2030 Cost For Least Cost Alt. Water Source System $12,570,000

Savings Per Year: $7,403,000

- Estimated Cost For a New Well & Cation Exchange WTP $8M - $9M

Therefore, the cost of a new well and WTP is saved in a little over one year in delay in implementation of the Alternative Water Source Program

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KEY CONSIDERATIONS SUMMARY

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Alternatives Summary

Fox River

- United City of Yorkville
- Waterlink Sub-Regional System with Oswego & Montgomery

Lake Michigan

- DuPage Water Commission
- Joliet Area Water Commission
- Illinois Lake Water Company/Plainfield

DECISION CONSIDERATIONS REVIEW



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Fox River – Yorkville Alone

Cost
Highest cost alternative, although comparable to the other alternatives

Water Quality
Potential seasonal raw water quality considerations, although advanced water treatment process assumed for the alternative

Risk
The City will be 100% responsible for the implementation of all of the improvements and long-term operation of the system



Control/Governance
The City will maintain 100% control of the system

Sustainability/Quantity
The Fox River is a sustainable source of supply, although backup wells will be needed for water quantity and quality purposes at times

Management/Staffing
City Staff will own, operate and maintain the entire system

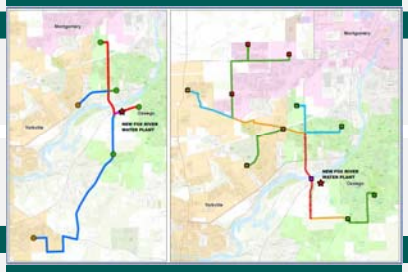
63

Fox River – Waterlink Sub-Regional System

Cost
Lower cost than Fox River – Yorkville Alone alternative, although comparable to the other alternatives

Water Quality
Potential seasonal raw water quality considerations, although advanced water treatment process assumed for the alternative

Risk
The City, along with the Villages of Oswego and Montgomery, will be responsible for the implementation of all of the improvements and long-term operation of the system



Control/Governance
The system will be governed through an IGA or a new unit of local government (Commission or JAWA)

Sustainability/Quantity
The Fox River is a sustainable source of supply, although backup wells will be needed for water quantity and quality purposes at times

Management/Staffing
The Waterlink communities, or the new unit of local government will own, operate and maintain the entire system

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Alternative Water Source Study (AWSS) Summary

September 28, 2021

Lake Michigan – DuPage Water Commission

Cost

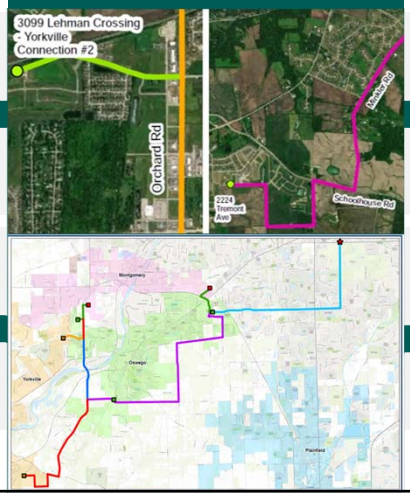
Costs will be dependent on the DWC rate, although costs likely comparable to the other alternatives

Water Quality

City of Chicago treated water that is consistently of high quality

Risk

DWC to construct the transmission main to the City; The City would construct the internal distribution system improvements



Control/Governance

The City of Yorkville would become a member of the DWC; Potentially a new District for the Waterlink Communities could be formed

Sustainability/Quantity

An allocation for Lake Michigan water would be needed; The City's existing wells will be kept on-line for emergencies

Management/Staffing

The DWC would own, operate and maintain the transmission main through the delivery structure; The City would own, operate and maintain the distribution system

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Lake Michigan – Joliet Regional Water Commission

Cost

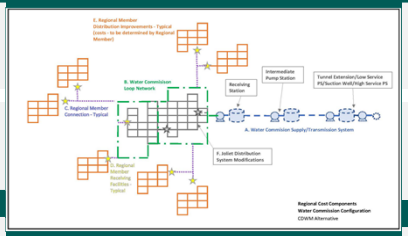
Costs comparable to the other alternatives

Water Quality

City of Chicago treated water that is consistently of high quality

Risk

Commission to construct the transmission main to the City; The City would construct the internal distribution system improvements



Control/Governance

The City of Yorkville would become a voting member of the new Commission

Sustainability/Quantity

An allocation for Lake Michigan water would be needed; The City's existing wells will be kept on-line for emergencies

Management/Staffing

The Commission would own, operate and maintain the transmission main through the delivery structure; The City would own, operate and maintain the distribution system

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Weighted Decision Matrix

Ranking Criteria	Cost		Water Quality		Risk		Control / Governance		Sustainability/Quantity		Management/Staffing		
	Capital (implementation) Costs?		What is quality and variability of the finished water for this alternative?		Does the alternative provide for the most reliable, long term solution.		For this alternative, does the Village maintain complete control of their water source?		Does the alternative provide a long-term sustainable solution?		Will the City, or another entity, be responsible for managing and staffing the system?		
Highest	1 - Highest Cost		1 - Finished water quality is variable and/or reduced from present standard.		1 - This alternative is only a short term solution with potential long term risk and consequences.		1 - The City does not retain significant control of the water supply system.		1 - This alternative has long term sustainability concerns.		1 - The City will need to manage and staff the entire system.		
Lowest	5 - Lowest Cost		5 - Finished water quality is more consistent and/higher than present standard.		5 - This alternative provides for a long term (exceeding 50 year) solution with manageable long term risks.		5 - The City maintains complete control of the water supply system.		5 - This alternative provides for a long term (exceeding 50 year) sustainable solution.		5 - Another entity is contractually responsible to manage and staff the water supply system.		
	Weight	0%	Weight	0%	Weight	0%	Weight	0%	Weight	0%	Weight	0%	
Alternative	Value	Weighted Value	Value	Weighted Value	Value	Weighted Value	Value	Weighted Value	Value	Weighted Value	Value	Weighted Value	Weighted Total Value
Fox River - Yorkville Alone	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Fox River - Waterlink Sub-Regional System	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - DuPage Water Commission	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - Joliet Regional Water Commission	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - Illinois Lake Water System	0	0	0	0	0	0	0	0	0	0	0	0	#REF!

Blue Columns To Be Completed By Project Team

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NEXT STEPS

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NEXT STEPS

- Public Meeting / Open House on Tuesday, October 19th
- Further Council Discussion and Joliet Decision in November / December

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Questions or Comments?
Jeffrey W. Freeman, PE, CFM, LEED AP
Chief Executive Officer
jfreeman@eeiweb.com
(630) 466-6718

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Appendix B: Yorkville AWSS Update: Alternatives Capital Cost Summary

Alternative(s)	Improvement	Capital Cost
Fox River: YO-Only	Backup Well (Well 6)	$3,332,000
	Backup Wells Transmission Main	$12,220,000
	Fox River Intake & Pump Station	$7,264,000
	Fox River Transmission Main	$10,032,000
	Lime Softening WTP	$49,133,000
	Distribution System Improvements (BPS, PRVs & Control Valves)	$1,479,000
	Internal Water Main Improvements (Hydraulics)	$13,780,000
	TOTAL:	**$97,240,000**
Fox River: Waterlink Sub-Regional System	Sub-Regional Well SR-1	$919,000
	Raw Water Transmission Mains	$19,861,000
	Intake Pump Station	$3,090,000
	Lime Softening WTP	$43,930,000
	Treated Water Transmission Mains	$26,207,000
	Receiving Stations	$2,220,000
	Distribution System Improvements (BPS, PRVs & Control Valves)	$453,000
	Internal Water Main Improvements (Hydraulics)	$1,840,000
	TOTAL:	**$98,520,000**
Lake Michigan: DuPage Water Commission	Treated Water Transmission Mains	$74,410,000
	Buy-In Costs	$7,062,000
	North Delivery Station	$1,440,000
	North Receiving Station & BPS	$1,540,000
	North Receiving Station Ground Storage Tank (2 MG)	$3,245,000
	South Delivery Station	$1,440,000
	South Receiving Station & BPS	$1,282,000
	South Receiving Station Ground Storage Tank (1.6 MG)	$2,993,000
	Distribution System Improvements (BPS, PRVs & Control Valves)	$453,000
	Internal Water Main Improvements (Hydraulics)	$315,000
	Internal Water Main Improvements (NRW Reduction)	$4,050,000
	TOTAL:	**$98,230,000**
Lake Michigan: Joliet Regional Water Commission	Treated Water Transmission Mains	$5,152,000
	Buy-In Costs	$89,100,000
	North Delivery Station	$1,440,000
	North Receiving Station & BPS	$1,540,000
	North Receiving Station Ground Storage Tank (2 MG)	$3,245,000
	South Delivery Station	$1,440,000
	South Receiving Station & BPS	$1,282,000
	South Receiving Station Ground Storage Tank (1.6 MG)	$2,993,000
	Distribution System Improvements (BPS, PRVs & Control Valves)	$453,000
	Internal Water Main Improvements (Hydraulics)	$315,000
	Internal Water Main Improvements (NRW Reduction)	$4,050,000
	TOTAL:	**$111,010,000**
Lake Michigan: Illinois Lake Water/Plainfield System	Treated Water Transmission Mains	TBD
	North Delivery Station	$1,440,000
	North Receiving Station & BPS	$1,538,000
	North Receiving Station Ground Storage Tank (2 MG)	$3,245,000
	South Delivery Station	$1,440,000
	South Receiving Station & BPS	$1,282,000
	South Receiving Station Ground Storage Tank (1.6 MG)	$2,991,000
	Distribution System Improvements (BPS, PRVs & Control Valves)	$453,000
	Internal Water Main Improvements (Hydraulics)	$315,000
	Internal Water Main Improvements (NRW Reduction)	$4,050,000
	TOTAL:	**TBD**

Note: Where applicable, costs shown represent Yorkville's share of the sub-regional improvements with Montgomery and Oswego.



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Alternative Water Source Study Technical Memorandum Addendum

File Name:
A.4b_Alternative Water Source Study Technical Memorandum Addendum

Description:
Addendum to the Technical Memorandum outlining the options for alternative water sources available to the United City of Yorkville.

August 2024

TECHNICAL MEMORANDUM ADDENDUM TO ALTERNATIVE WATER SOURCE EVALUATION – 2022
United City of Yorkville, IL

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Appendices

Appendix A – January 10, 2023 City Council Presentation (Non-Revenue Water Reduction and Lake Michigan Allocation Permit Application Update)
Appendix B – Fox Metro Reclamation District Letter
Appendix C – DuPage Water Commission Letter

1. Introduction

In 2021, the United City of Yorkville ("Yorkville") completed a detailed review of its alternative water source options, which were summarized in the Alternative Water Source Study Update Technical Memo (Appendix B in the Report in Support (Revised)). The alternatives included the City integrating an alternative water source on their own, as well as alternatives where the Village of Montgomery, Village of Oswego and United City of Yorkville ("WaterLink communities") jointly evaluated alternative water source options as a regional solution.

On October 21, 2022, IDNR held its Pre-Hearing Conference regarding Yorkville's March 2022 Application for a Lake Michigan Water Allocation and supporting documents including its Non-Revenue Water ("NRW") Reduction Plan[1]. At the Pre-Hearing Conference, IDNR offered its suggestions for revisions to Yorkville's application and supporting documents, granted Yorkville until February 14, 2023 to submit an amended application and supporting documents, and set April 5, 2023 for the next Pre-Hearing Conference. This Technical Memorandum Addendum ('Addendum") is submitted in support of Yorkville's amended application.

On December 20, 2022, Yorkville's revised NRW reduction plan was reviewed with the Yorkville City Council Public Works Committee held a hearing on additional information regarding the Fox River and Lake Michigan alternatives and with plans to increase Yorkville's water main replacement program to reduce NRW. Further, on January 10, 2023, Yorkville City Council met, was presented with the information that was presented at the Public Works Committee meeting including additional information regarding the Fox River and Lake Michigan alternatives and with a revised NRW Reduction Plan. See, Appendix A, January 10, 2023 City Council Presentation (Non-Revenue Water Reduction and Lake Michigan Allocation Permit Application Update). The Council unanimously approved a Resolution reaffirming Lake Michigan as its choice for its alternative water source. This package of documents including a revised M-36 Water Audit, a Revised Application, and supporting testimonies of E. Dhuse, J. Freeman and D. Abrams are submitted to the IDNR in support of Yorkville's Lake Michigan Application for a Water Allocation.

This Addendum provides a summary of the reevaluation process, as well as the City's reaffirmation that the most sustainable water supply option to meet the full water needs of the City is the Lake Michigan water option purchased from the DuPage Water Commission.

2. NRW Reduction Revised Plan

The updated strategies are included within the revised Water System Improvement Plan. In short, the City is increasing its water main replacement investment to further reduce real losses. The City will replace all pre-1970 water main as well as other water mains experiencing frequent main breaks, approximately 7.7 miles, by the end of WY2027. The City's goal is to achieve NRW below 10% by WY2026, the year before the City connects to the DuPage Water Commission and receive

[1] Note: The documents interchange NRW Reduction Improvement Plan and Water System Improvement Plan to refer to Yorkville's plan to reduce its NRW to below the regulatory 10% limit.

Lake Michigan water. The costs to connect to an alternative water source increased due to this commitment. The City anticipates investing over $17 million in water main replacement along with other NRW reduction strategies. Given the change in costs, it was appropriate to reevaluate the cost impacts on the remaining viable water supply alternatives.

3. Additional Water Source Considerations

There is one Fox River alternative and one Lake Michigan alternative that the City further considered since IDNR's October 21, 2022 Pre-Hearing Conference. In addition to the costs of the alternatives, there are a number of other factors that were considered, as outlined in the original technical memorandum. In addition to the key considerations, which will be summarized later in this memo, some additional considerations have been identified over time.

3.1. Additional Fox River Water Quality and Permitting Considerations

The Report in Support of Application (Revised) provides details of the September 2020 communications between the WaterLink consultant team representatives with the IDNR and IEPA about the requirements of permitting a new Fox River water intake and water treatment plant.

The discussion with IDNR on the requirements for a Public Water Supply Permit highlighted the importance of the backup well network to meet demands when the Fox River's flow falls below the 7Q10. The 7Q10 flow is the annual minimum 7-day average flow with a 10-year recurrence interval and is modeled and updated by the Illinois State Water Survey ("ISWS"). The 7Q10 plays a critical role in estimating the frequency at which the Fox River would not be able to meet the demands of the WaterLink Communities.

One result of climate change is more frequent droughts. This poses significant concern to the WaterLink Communities. Although the 6-month average flow, 50-year recurrence interval Drought Flows for the Fox River has been modeled to be 317 cubic feet per second (205 MGD) by the ISWS, the Fox River incurred a significant low flow period from late June through mid-October in 2012 and reached a minimum level of 107 cubic feet per second (69 MGD). This period lasted more than 100 days with the Fox River intermittently rebounding during this time. The backup well network would be relied on during drought conditions like those that occurred in 2012 if the Fox River option were chosen by the WaterLink Communities.

In addition, the backup well network would be required to supplement the Fox River withdrawal during periods of poor water quality. Discussions with other Fox River communities highlighted concerns of taste and odor problems related to algae blooms. Recently, in conversations with the Village of Bartlett, the WaterLink Communities learned that Bartlett evaluated and dismissed the Fox River as an alternative water source option due to uncertainties including water quality and taste and odor events.

The WaterLink Communities' representatives also contacted the IEPA permitting staff regarding the necessary construction permit requirements for a Fox River water treatment plant. The conversation with the IEPA highlighted the uncertainty of the permitting process for a new surface

water treatment plant. According to the IEPA, only one new surface water treatment plant has been permitted in the last two decades and there are no exact rules and/or procedures that govern the permitting, sampling, and general process of a new water treatment plant. Therefore, based upon these uncertainties, the Fox River option would be a costly and time-consuming process that could potentially impact the timeline and cost of the surface water treatment plant.

The WaterLink Communities continued discussions with the Fox Metro Water Reclamation District ("Fox Metro") on the location and impact of the proposed Fox River intake for the WaterLink Fox River option. A letter from Fox Metro Assistant District Manager Karen Clementi to the Village of Oswego Public Works Director is included as Appendix B to this Technical Memorandum. The letter summarizes details of Fox Metro's operations and National Pollutant Discharge Elimination System (NPDES) permit program requirements.

Fox Metro discharges into the Fox River a mixture of untreated wastewater, partially treated wastewater, and stormwater during heavy rainfall events to prevent basement sewage backups throughout the collection system. Compliance with the NPDES permit requires that the CSO does not discharge into a "sensitive area" under the USEPA's 1994 CSO Control Policy as currently permitted. According to Section II.C.3 of the CSO Control Policy, a receiving stream that is utilized for a public drinking water intake is considered a sensitive area. If Fox Metro's CSO would be determined by IEPA or USEPA to be located in a sensitive area due to the potable water intake required for the WaterLink Fox River option, Fox Metro would be required to "eliminate or relocate the CSO where physically possible and economically feasible". According to Fox Metro, the CSO must be located on the main campus to allow discharge when influent flows exceed 151 MGD. While exact costs are not known, relocating the CSO would be financially burdensome to Fox Metro ratepayers, including those outside of the WaterLink Communities. For these reasons, a WaterLink Fox River intake downstream of the Fox Metro facility would have cost implications to the region, and therefore it was determined it is not a viable option.

An independent United City of Yorkville Fox River intake would be downstream of the Fox Metro Water Reclamation District wastewater treatment plant, as well. Therefore, an independent United City of Yorkville Fox River supplied system would create the same regulatory and financial burdens on the Fox Metro system.

3.2. Additional Lake Michigan Water Quality and Permitting Considerations

The City recognizes that IDNR manages the Lake Michigan water allocation program beyond the issuance of an allocation permit. The IDNR is responsible for the oversight and enforcement of the diversion of water from Lake Michigan to ensure that diversion does not exceed a 40-year running average of 3,200 cubic feet per second. 17 IL Adm. Code Ch. 1, Section 3730.101(b). Further, the City acknowledges that the requirements of a permittee that is governed by the Illinois Water Act and Title 17 Illinois Adm. Code, Ch. 1, Section 3730, may be subjected to changes in the regulations at any time. For example, in November 2014 that portion of the Illinois Administrative Code Title governing Lake Michigan Allocation went through a series of amendments, including the reduction of the percentage allowed for non-revenue water.

In preparing the City's application and supporting documentation, the City has been continually mindful of the requirements of IDNR in issuing a permit and the considerations that determine the anticipated water needs of an applicant. Pursuant to Title 17 Illinois Adm. Code, Ch. 1, Section 3730.304, the IDNR states:

> Will take into consideration in making that determination the population of the area to be served, projected population growth, current and projected per capita consumption within the area, the nature and extent of industrial uses (including a consideration of typical requirements for similar industries), municipal and hydrant uses (public facilities, park upkeep, fire protection), implementation of conservation practices, and the reduction of non-revenue water as required by this section.

Further, IDNR Lake Michigan allocation permittees are 1) required to comply with conservation practices 2) maintain non-revenue water to less than 10%, 3) adopt conservation ordinances and practices, 4) submittal of a program and implementation plan to end the use of obtaining well water other than for emergency or standby use within five years after the receipt of Lake Michigan water, 5) limit unmetered hydrant uses to 1% or less of net annual pumpage in each annual accounting period, and 6) adopt a rate structure based on metered water use and that the water rate structure be developed to discourage excessive water use and it is recommended that rates reflect full cost of water, including the long term cost to properly maintain and operate the water supply distribution system in such a manner as to keep system losses to a minimum. Title 17 Ill. Adm. Code Ch. 1, Section 3730.307.

The City acknowledges that changing from its groundwater water source to Lake Michigan water results in a certain loss of autonomy and the City must commit to the IDNR Lake Michigan regulatory authority. Further, as the City's current NRW is above 10%, a water system improvement plan was submitted with the original Lake Michigan Allocation Permit Application in March 2022. And, as a result of the October 21, 2022 Pre-hearing Conference with IDNR, the City has amended its Water System Improvement Plan. See, Testimony of Jeffrey W. Freeman. The City recognizes its role as a partner to the IDNR to reduce the Lake Michigan diversion.

As of WY2021, the City's non-revenue water percentage was 12.7%. The revisions to the City's WY2021 M36 water audit are discussed later in this addendum. The City acknowledges that while their NRW is above the IDNR's current 10% requirement, the requirement may change in the future. As described above, permittees that have excessive NRW are required to develop and implement NRW reduction strategies, including but not limited to water conservation and replacing aging infrastructure.

The City is committed to its revised Water System Improvement Plan that takes a holistic approach to address its aging infrastructure. The City is dedicated to reducing its NRW as described in the Water System Improvement Plan.

In addition, the City is committed to the requirements of the IDNR to provide annually within 60 days of the end of the accounting period (water year - October 1 through September 30) the following information:

1. Total water use from all sources for the accounting year and the percentage of water distributed through metered services;

2. Average daily water use by month from all sources for the accounting year;

3. Maximum and minimum daily pumpage from all sources for the accounting year and the dates of these events;

4. Total pumpage from Lake Michigan, shallow aquifer wells, and deep aquifer wells, including the number and location of each well, and the percentage of total water use for the accounting year from each source;

5. Individual well production rates for the accounting year, including well numbers, average pumping rates, and average number of hours pumped per day;

6. For each well, a list of all parameters that exceed the standards in 35 Ill. Adm. Code 620;

7. A list of which wells, if any, interfere with each other during simultaneous pumping;

8. A description of any problems anticipated from any well supply during the next accounting period;

9. The amount and percentage of water from all sources for the accounting period used for each of the following purposes: A) Residential, B) Industrial and commercial, C) Municipal, D) Firefighting and training, E) Water main flushing, F) Sewer flushing, G) Street cleaning, H) Public and private construction, I) Leakage, J) Lockage, K) Storm water runoff, L) Navigational makeup, M) Discretionary diversion, N) Unmetered services, O) Non-revenue water, and P) Other identified uses;

10. Summaries of the results and recommendations of any leak surveys conducted in the accounting period;

11. Amounts transferred and sources of all water sold or otherwise provided to any other named distribution system during the accounting period;

12. A copy of the current water rates for all consumers, including an indication whether each water rate structure is declining, flat, or increasing; and

13. The name, address, and telephone number of the person the Department should contact if further information is needed. See, Title 17 Ill. Adm. Code Ch. 1 Sec. 3730.309

These annual water reports or water audits will be performed based on the American Water Works Association (“AWWA”) methodology found in AWWA Manual M36, or any other methodology that the IDNR may require. The M36 Water Audit is used to calculate NRW. The United City of Yorkville recognizes the added requirements to managing its water use, conservation, and system

maintenance and operations. The City acknowledges that the IDNR will be its partner in ensuring the City is efficiently and effectively receiving Lake Michigan water via DWC in a manner that is respectful of the 1967 Consent Decree and obligations as a good water steward of Lake Michigan. Yorkville recognizes and is prepared to accept that IDNR's requirements by statute and regulations result in less autonomy for the City when it comes to its Lake Michigan water use. The City also recognizes the laws, rules, and regulations may change at any time. The City is ready, willing, and looking forward to ensuring continued compliance with its obligations upon issuance of a Lake Michigan water allocation permit.

3.3. Sustainability of Water Source

The 2021 Alternate Water Source Study (AWSS) evaluated each alternative for the ability of the water supply option to have sufficient water quantity to meet demand projections in 2050 and beyond. The Fox River was identified as a potentially sustainable water source to supply water to the WaterLink Communities during normal flow conditions. However, the network of backup deep wells would be required to supplement the withdrawals from the Fox River. Further, Daniel Abrams from the ISWS studied and conducted ground water modeling and concluded:

1) The sandstone aquifer is not a viable long-term water supply source;

2) The current regional withdrawal amount is not sustainable;

3) Lack of infiltration due to underlying aquitards and the Sandwich Fault limits west to east groundwater flow transfer across the region;

4) The communities are at severe risk of some of their wells be inoperable as early as 2039. Therefore, while the deep aquifer could be a back-up supply source when Fox River withdrawal needs to be reduced or shut off completely in the near term, it would appear the deep aquifer would not be a viable backup supply at some point in the future. At that point in time, the United City of Yorkville would need to find an alternative source of water yet again.

Lake Michigan is an essential water source providing water to more than 6.6 million Illinois residents. The DuPage Water Commission (DWC) is the largest wholesale water distributor and has been delivering water since 1992.

After the completion of the Alternative Water Source Study, the approval of the Village Boards and City Council, the WaterLink Communities started working with DWC on the next stages, including legislative amendments, analysis, engineering, and contract negotiations for the proposed connection to DWC's system. See, Paul D. May and James Zay letter attached as Appendix C. The letter summarizes DWCs supply, infrastructure, historical consumption, operations, and support for the WaterLink Communities. The letter highlights DWC's ability to provide water to the WaterLink Communities through 2050 due to the more than 100 MGD in excess pumping capacity available in the system. The letter points out that despite a growing population and increased service area, total consumption in the DWC system has declined in recent years.

4. Remaining Water Source Alternatives Evaluation

As part of the 2021 AWSS Update, five total water supply alternatives were evaluated, including two utilizing the Fox River and three utilizing Lake Michigan. The AWSS did not evaluate the City of Aurora as a water supply alternative for the United City of Yorkville. Initial discussions between the WaterLink Communities' representatives and Aurora indicated that Aurora's existing plant did not have sufficient excess water production capacity available in order to serve the projected population of Yorkville. The City of Aurora blends Fox River water (approximately 60%) with well water (approximately 40%). During times of poor water quality (e.g. algae blooms or high chlorides), Aurora reduces its intake of Fox River water and relies on its deep wells for most of its demand. With the City's concern about the longevity of supply from the deep wells, the City decided not to pursue the City of Aurora as a long-term option.

The Fox River alternatives included the following: Fox River – Yorkville Alone, and Fox River – WaterLink Sub-Regional System with Montgomery and Oswego. The Lake Michigan alternatives included the following: purchasing treated water from the DuPage Water Commission (DWC), connecting to the Joliet Regional Water Commission, and purchasing water from Illinois Lake Water/Plainfield System. These alternatives were described in the original Technical Memorandum. Given the additional considerations described above, as well as timeline considerations, the following alternatives have been eliminated: Fox River – Water link Sub-Regional System with Montgomery and Oswego, connection to the Joliet Regional Water Commission, and IL Lake Water/Plainfield System. This Addendum includes a discussion of the remaining alternatives and the key considerations evaluated.

5. Cost Estimate and Summary Financial Analysis

Cost estimates were developed for each alternative in accordance with the guidelines of the Association for the Advancement of Cost Engineering (AACE). AACE is an international organization that develops technical guidance to promote successful project and program delivery. AACE recognizes five classes of estimates, ranging from a Class 5 estimate used to provide costs for strategic or master planning based on limited information to a Class 1 estimate that reflects a detailed analysis of costs associated with individual parts of a project. The AACE guidelines apply principles of estimates specifically to project estimates for engineering, procurement, and construction and reflect generally accepted cost engineering practices. The cost estimates developed for the alternative water source studies are Class 5 estimates, reflective of the early stage of development and limited information. According to AACE, Class 5 estimates are prepared for strategic planning purposes, including assessment of initial viability, evaluation of alternatives, project location studies, and long-range capital planning. Class 5 estimates have typical accuracy ranges from -20% to -50% on the low side and to +30% to +100% on the high side for projects that have very little definition. Due to the level of detail of the alternative water source studies, all cost estimates include a contingency of 30%.

Following the October 21, 2022 Pre-hearing Conference with IDNR for a Lake Michigan Allocation Permit Application, the City revised its Water System Improvement Plan. In the first submittal, the City's plan was to replace less than 1% of the water main annually, at a cost estimated to be

approximately $3 to $4 million per year. Since then, the City staff, consultant team (EEI), and City Council have held several meetings and discussed increasing the rate of water main replacement. As outlined in the Water System Improvement Plan (Revised), The City will replace all pre-1970 water main as well as other water mains experiencing frequent main breaks, approximately 7.7 miles, by the end of WY2027, which equates to an average of over 1% per year of its 151.6 miles of water main (excluding fire hydrant leads). The total capital cost of replacing the 7.7 miles of water mains is estimated to be approximately $17.2 million.

Table 1 summarizes the capital cost for each alternative using the revised NRW reduction capital costs. Figures 1 and 2 illustrate the estimated 2030 average monthly residential water bill for each alternative including an estimated breakdown of every component of the bill. The existing system 2030 bill is based on the current water system needs. It was projected to 2030 and included for comparison. The projected existing system 2030 bill assumes a 3% annual increase in water rate per year. The capital costs for all of the alternatives assumed 3% inflation, as well. Additionally, the DWC rate is shown based on the proposed cost of service rate structure and assumes a 1% annual increase for comparison.

Table 1: Water Source Alternatives Capital Cost Summary

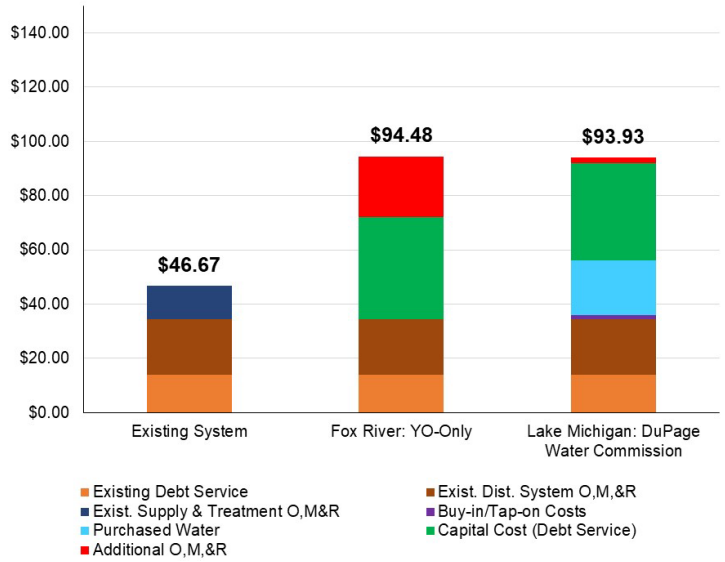
Alternative	Capital Cost
Fox River - YO Only	$102,970,000*
Lake Michigan - DuPage Water Commission	$111,380,000**

Notes:

* Includes 1/3 of NRW Reduction Costs

** Includes 100% of NRW Reduction Costs

Figure 1: Estimated 2030 Residential Water Bill Comparison



Notes:

Fox River - YO Only Option includes 1/3 of NRW Reduction Costs.
The other alternatives include 100% of NRW Reduction Costs.
Typical water use per month: 5,500 gallons.

6. Key Considerations Summary

The key considerations that must be weighed for each alternative include cost, water quality, risk, control and governance, sustainability/quantity, and management/staffing. The following section provides a summary of the different considerations that are applicable to each alternative.

Cost: Assuming 1/3 of NRW Reduction Capital Cost for the Fox River – Yorkville Alone alternative and 100% of NRW Reduction Capital Cost for Lake Michigan – DWC alternative, the total capital cost for Fox River – YO Only option is lower. However, when factoring in the O&M costs for the Fox River system, the costs for the Fox River system are more expensive to build and operate than the DWC system as demonstrated with the 2030 typical residential water bill.

Risk: The DWC system has been in service for approximately 30 years and the sustainability of the Lake is without question. The Fox River has a higher level of risk relative to raw water quality, permitting, and low flow challenges. While there is a path to implementation, permitting, and constructing a new Fox River system has a higher amount of risk. There is a higher amount of risk staffing a Fox River WTP than a Lake Michigan supplied system, too.

Water Quality: The finished water quality for both sources would not be demonstrably different, although Lake Michigan raw water quality would be less variable than the Fox River.

Management/Staffing: The City of Chicago and the DuPage Water Commission would be responsible for hiring and managing all supply and treatment staff for the DWC alternative. The City would be responsible for hiring and managing all staff if the Fox River Alone alternative is implemented. Due to the challenges of hiring a sufficient number of Class A water operators to staff the facility 24/7/365, there is a high level of concern that there will be ongoing staffing challenges at the WTP.

Control/Governance: The City would have 100% control if the Fox River alone alternative was implemented. The City would elect a WaterLink Communities representative to be a DWC District representative.

Sustainability/Quantity: Once an allocation is received there is virtually no concern that Lake Michigan will be able to meet the City's long term source water needs. Under the Fox River Alone alternative, back-up wells will be needed when the Fox River is below the low flow restriction level. The long-term sustainability of the back-up well network is a significant concern.

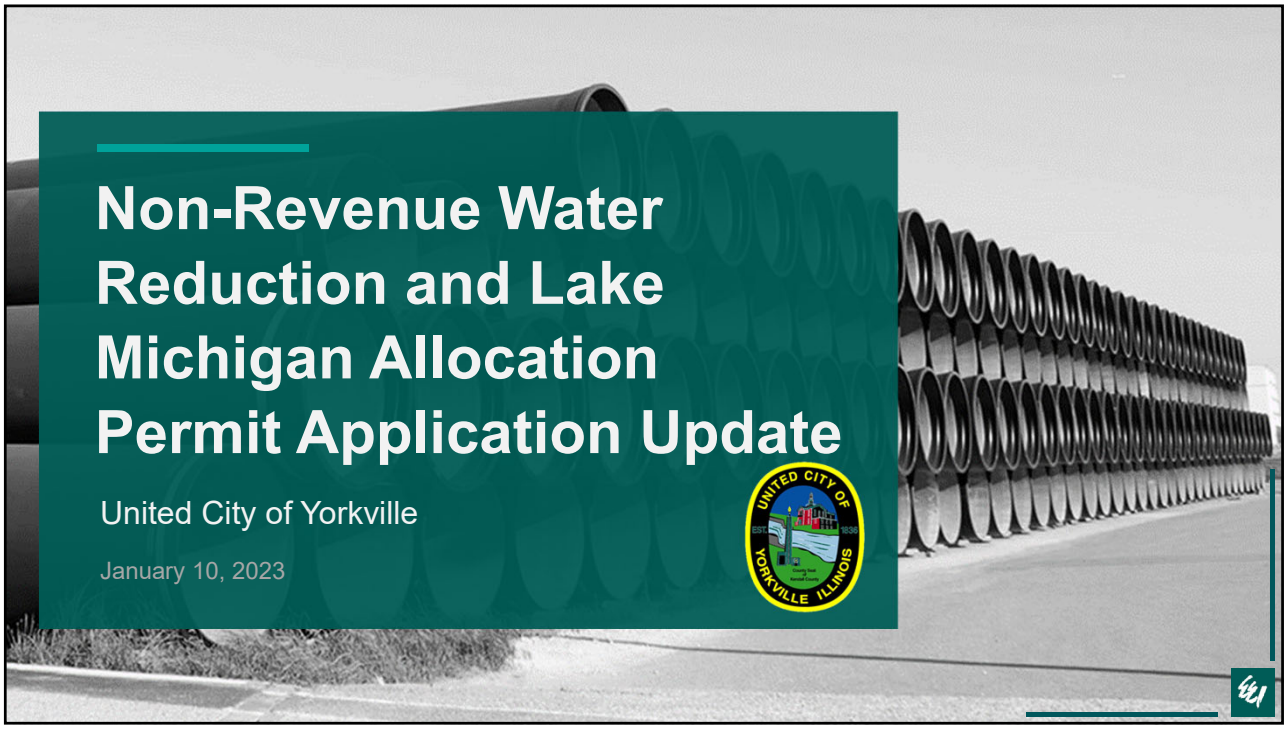
7. Alternative Water Source Selection

On January 10, 2023, the revised NRW Reduction Plan was presented to the City Council. Following the presentation on January 10, 2023, the City Council unanimously voted to adopt a Resolution Reaffirming the Selection of Lake Michigan as the Preferred Water Source and the DuPage Water Commission as the Preferred Water Supplier and to continue to work with the Villages of Oswego and Montgomery.

United City of Yorkville
Hearing Exhibit No. 3A

APPENDIX A

January 10, 2023 City Council Presentation (Non-Revenue Water Reduction and Lake Michigan Allocation Permit Application Update)



Non-Revenue Water Reduction and Lake Michigan Allocation Permit Application Update

United City of Yorkville

January 10, 2023



Agenda

1. Lake Michigan Allocation Permit Process Status
2. IDNR Regulatory Requirements
3. Water Audit Background
4. WY2021 Water Audit
5. Key Non-Revenue Water Reduction Plan Initiatives
6. Q&A

Lake Michigan Allocation Permit Process Status

Hearing Process and Anticipated Schedule

• Submittal No. 1	4/1/22
• Prehearing No. 1 (Attorneys)	6/17/22
• Prehearing No. 2 (Attorneys and Engineers)	10/21/22
• City Council Update	1/10/23
• Submittal No. 2	2/14/23
• Prehearing No. 3	4/5/23
• Hearing	TBD
• Hearing Officers Rules on Allocation	TBD
• IDNR Develops and Issues Permit	TBD



PERMIT REQUIREMENTS

- Permit Required for all Lake Michigan Water Users
- The Illinois Department of Natural Resources (IDNR) Issues and Regulates Permits for Lake Michigan Water Withdrawals
- Non-Revenue Water (NRW) Must be Less Than 10% (WY2021 = 14.2%)



Pre-Hearing No. 2 Takeaways

- Permittee Loses Autonomy Due to Regulatory Requirements
- Applicants are to have "procedures to minimize Lake Michigan diversion" and implement "effective programs of leak prevention, detection and correction." IDNR suggests Yorkville increase rate of watermain replacement to include pre-1980's installations.

Pre-Hearing No. 2 Takeaways (cont.)

- Additional Questions Regarding the Fox River Alternatives
- IDNR Noted that the Water Main Replacement Varies per Alternative:
  - Waterlink (Lake Michigan-DWC)
  - Fox River (Yorkville alone)
- Additional Items Discussed with IDNR:
  - Population – 2050 CMAP Projections:
    - October 2018 → 47,796
    - October 2022 → 24,630
  - Contingency for Capital Costs
  - Refining Application

IDNR REGULATORY REQUIREMENTS

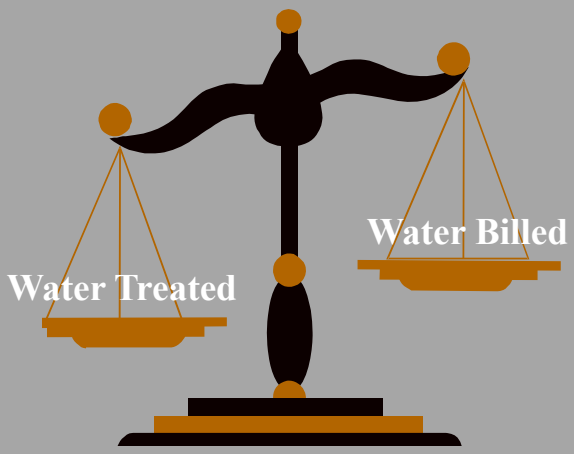
Regulatory Requirements of Lake Michigan Water Allocation Permittee

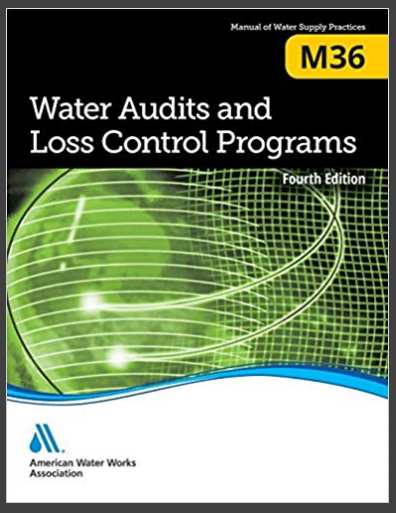


- Annual Data Collection and Testing
- Annual Water Audit Preparation (and Water System Improvement Plan if NRW < 10%)
- Coordination, Implementation, and Management of Conservation Program Activities
- Ongoing Infrastructure Improvements Required to Achieve and Remain in Compliance with NRW < 10%

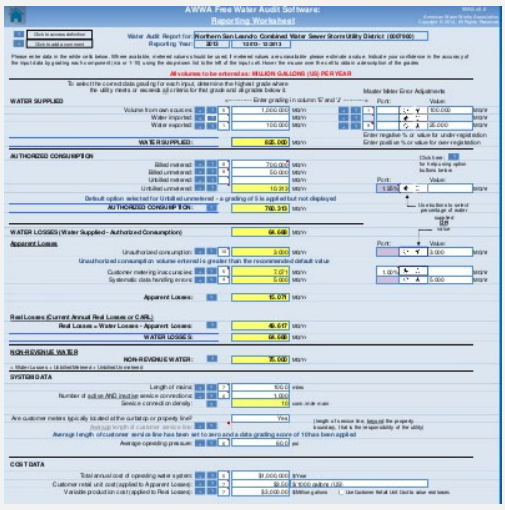
WATER AUDIT BACKGROUND

Millions of Gallons of Water Being Pumped into the Distribution System Exceeds the Gallons Being Sold





AWWA M36 Manual and Water Audit Software



Non-Revenue Water Components:

UNBILLED AUTHORIZED USE

- Hydrant Flushing
- Fire Use (Fighting, Training, Hydrant maintenance)
- Auto-flushers
- Construction uses



APPARENT LOSSES

- Data Handling Error
- Customer Meter Inaccuracies
- Theft



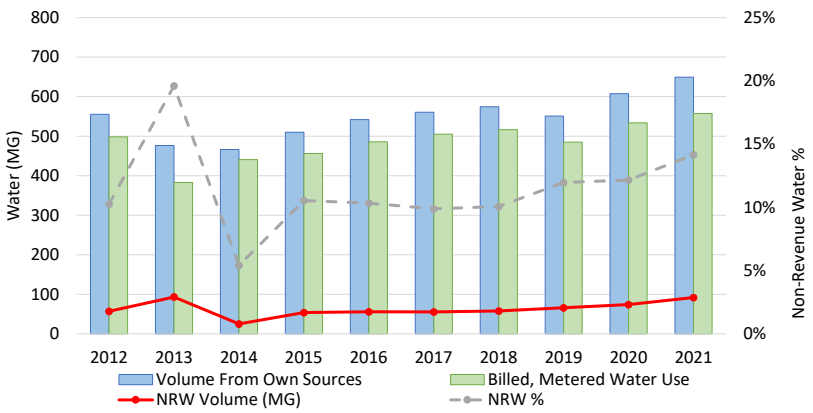
REAL LOSSES

- Water Main Breaks/Leaks
- Service Line Leakage up to Customer Meter
- Storage Tank Overflows



WY2021 WATER AUDIT

Historical Water Audits



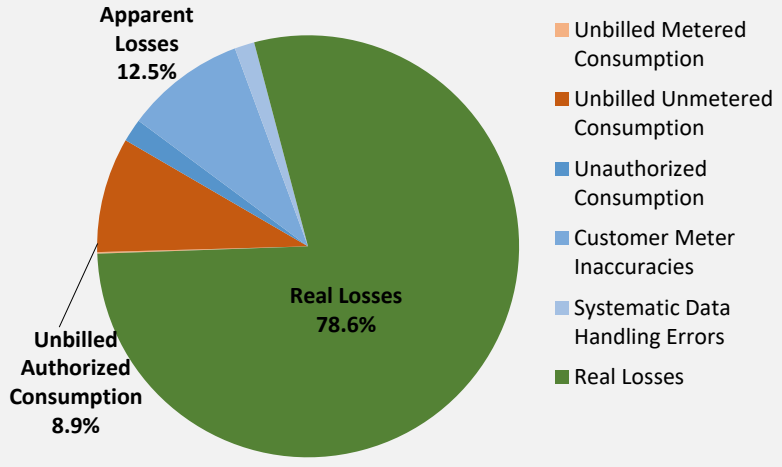
Volume versus % of Volume

IDNR Submittal No. 1 - WY2021:

92 MG NRW

14.2% NRW

Non-Revenue Water – Components by Volume



IDNR Submittal No. 1 - WY2021:

92 MG NRW

14.2% NRW

KEY NRW REDUCTION PLAN INITIATIVES



KEY NRW REDUCTION PLAN INITIATIVES

APPARENT LOSSES

- Customer Meter Replacement Program (AMI Technology)- Continue
- Master and Effluent Meter Testing and Calibrating, Annually



KEY NRW REDUCTION PLAN INITIATIVES

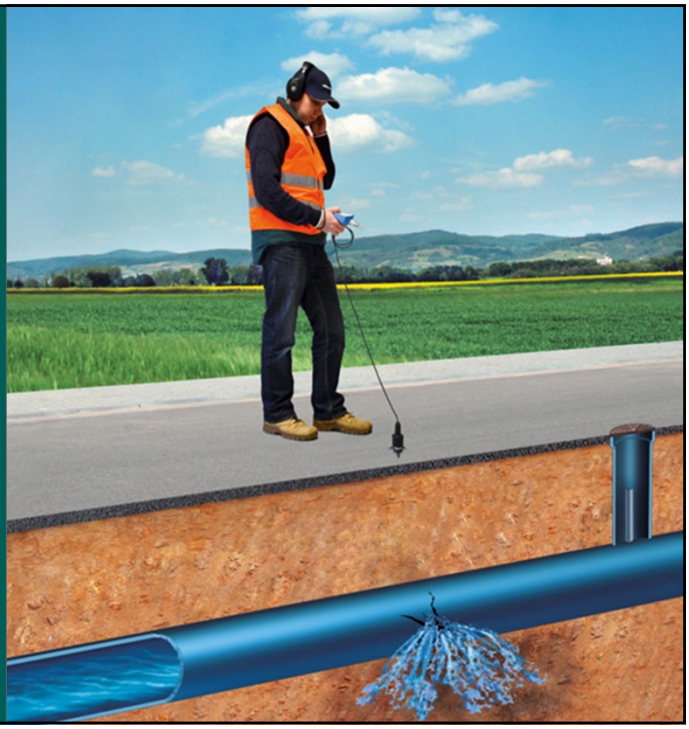
UNBILLED AUTHORIZED WATER USE

- Review Billing Software and Replace/Update it if Necessary
- Convert Unbilled Water Use to Billed Water Use
- Improve the Tracking of Unbilled, Unmetered Water:
  - Fire Protection Districts Use
  - Flushing Hydrants
  - Construction Use

KEY NRW REDUCTION PLAN INITIATIVES:

REAL LOSSES

- Annual Leak Detection on 100% of Distribution System - Continue

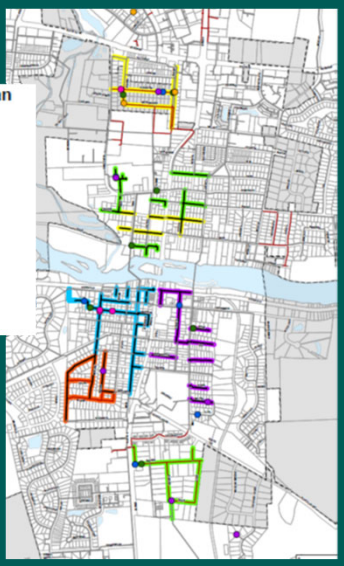


IDNR SUBMITTAL NO 1 (APRIL 2022)

Replace all 1950s water including high water main break areas installed in the 1960s and 1970s by 2027



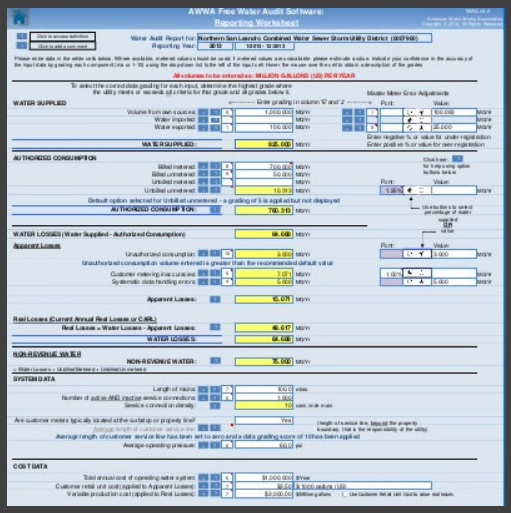
IDNR SUBMITTAL NO 2 (JANUARY 2023)



Replace all pre-1970s water main including high main break locations

Water Main Replacement Comparisons

IDNR Submittal	1 (April 2022)			2 (Proposed February 2023)		
	Replacement Length			Replacement Length		
Year	feet	miles	Cost	feet	miles	Cost
2023	2,250	0.4	$956,250	8,666	1.6	$3,683,050
2024	3,796	0.7	$1,613,300	10,736	2.0	$4,562,800
2025	2,032	0.4	$863,600	8,648	1.6	$3,675,400
2026	2,786	0.5	$1,184,050	5,951	1.1	$2,529,175
2027	2,453	0.5	$1,042,525	6,508	1.2	$2,765,900
Total	**13,317**	**2.5**	**$5,659,725**	**40,509**	**7.7**	**$17,216,325**



KEY NRW REDUCTION PLAN INITIATIVES

GENERAL PLAN ITEMS

- Establish a Water Loss Team and Champion – Meet Quarterly
- Complete Annual Water Audit
- Monitor Impact of NRW Initiatives
  - ✓ Required by IDNR and Good Practice

Non-Revenue Water Reduction Plan Summary

Unbilled Authorized Use

- Review Billing Software and Replace/Update, if Necessary
- Convert Unbilled Water Use to Billed Water Use
- Improve the Tracking of Unbilled, Unmetered Water

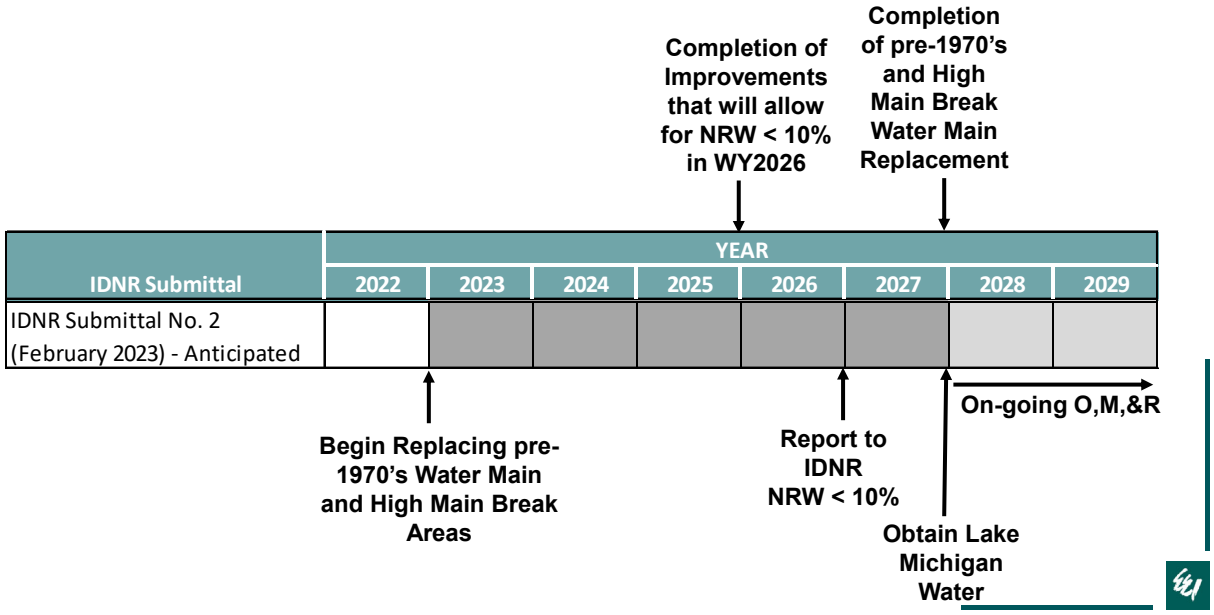
Apparent Losses

- Customer Meter Replacement Program
- Continue Annual Master & Effluent Meter Testing & Calibrating

Real Losses

- Annual Leak Detection on 100% of Distribution System
- Increase Annual Water Main Replacement Program

Projected Implementation Schedule



AWSS Alternatives Capital Cost Summary

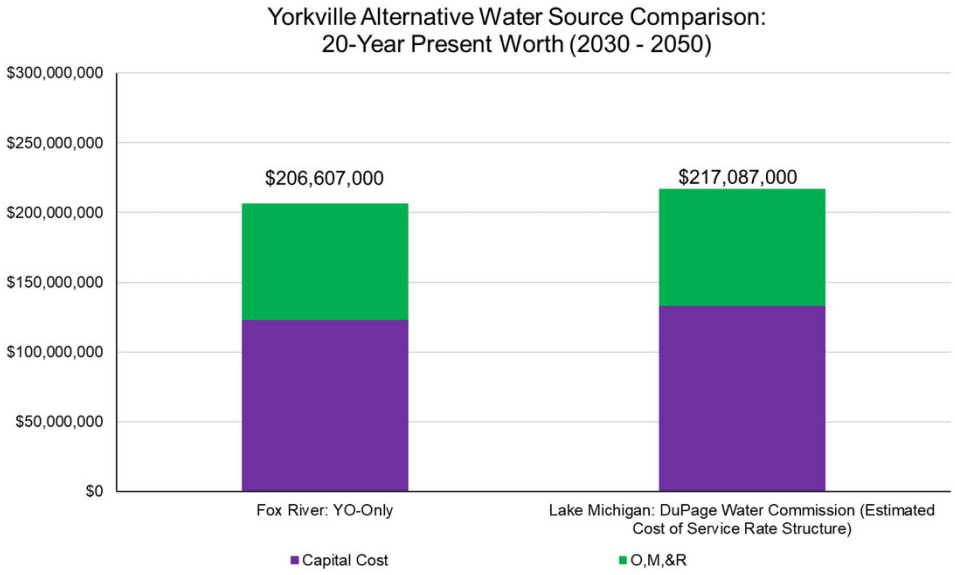
Fox River: YO Alone……..... $102,970,000*

Lake Michigan: DuPage Water Commission..... $111,380,000**

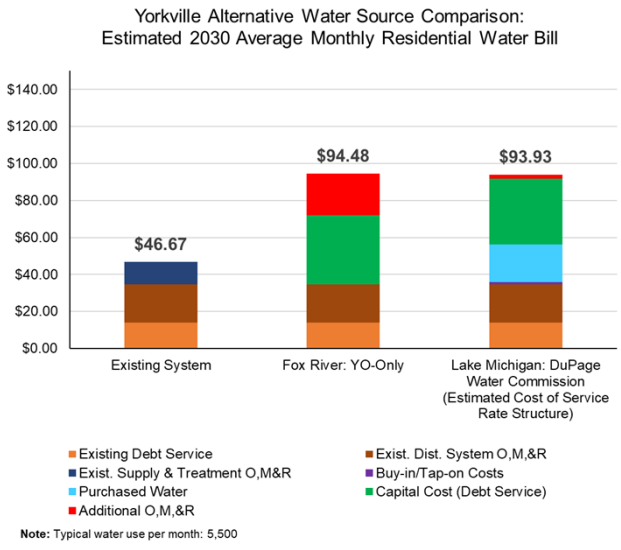
* *Includes 1/3 of NRW Reduction Costs*

** *Includes 100% of NRW Reduction Costs*

AWSS Alternatives Net Present Value Summary



Estimated 2030 Residential Water Bill Comparison



Next Steps

- Consider Approving Resolution in Support of Revised Application
- Prepare Revised Application to IDNR and Submit by 2/14/23
- Budget for Increased Water Main Replacement
  - Includes Contract B for 2023



Questions or Comments?

United City of Yorkville
Hearing Exhibit No. 3B

APPENDIX B

Fox Metro Reclamation District Letter

Fox Metro
Water Reclamation District
682 State Route 31 • Oswego, Illinois 60543-8500

October 10, 2022

Ms. Jennifer Hughes, P.E., CFM
Village of Oswego Public Works Director
100 Theodore Dr.
Oswego, IL 60543

Dear Ms. Hughes,

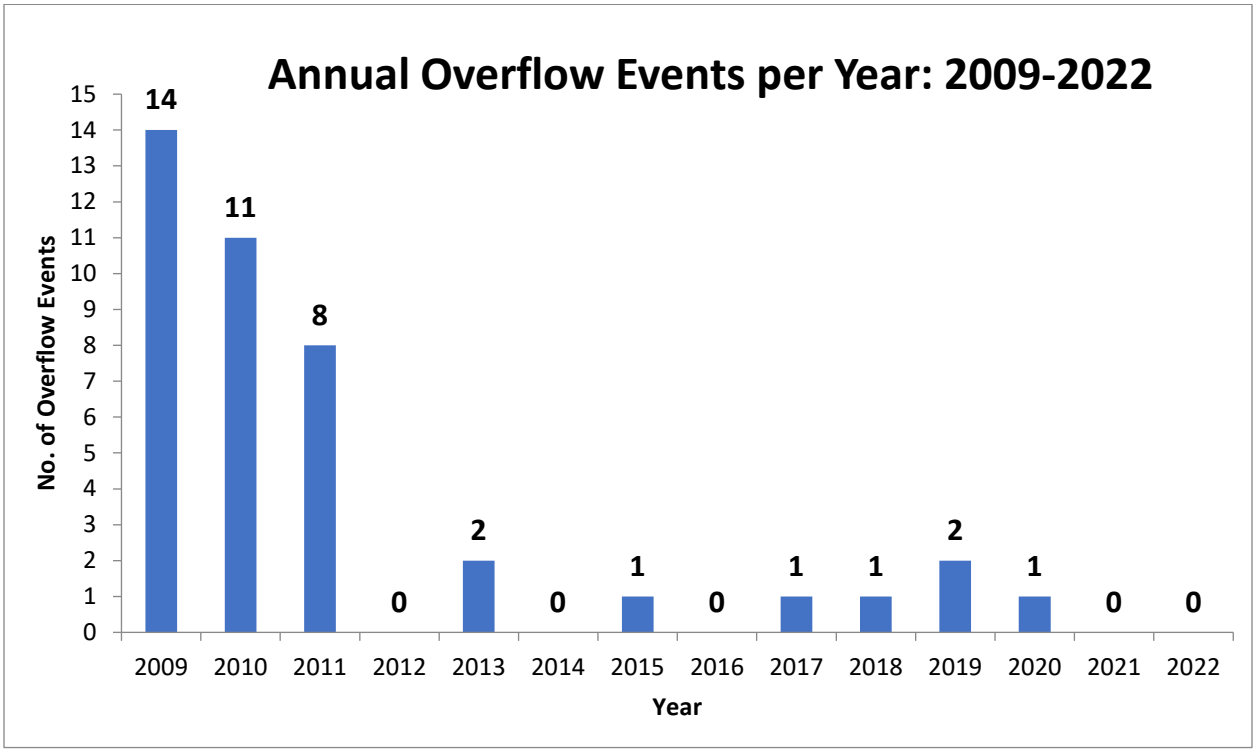
Fox Metro Water Reclamation District (Fox Metro) proudly serves the Village of Oswego (Village) with high quality wastewater treatment, along with Aurora, North Aurora, Montgomery, Sugar Grove, and small portions of Batavia and Yorkville. This letter has been prepared for use as a planning-level tool for evaluating the Village's proposed potable water intake near Orchard Road in the Fox River.

Fox Metro currently serves over 324,000 residents and discharges an average of 35 million gallons of treated effluent to the Fox River every day from our main wastewater treatment facility on Route 31, located approximately 3 river miles upstream of Orchard Road. A study and modeling would need to be conducted under different flow regimes to ascertain how much of Fox Metro's treated effluent would comprise the Fox River intake water. It can be logically concluded that the Fox Metro treated effluent would be a larger proportion of the water intake in low flow river conditions during a drought vs. a smaller proportion during heavy spring rains. To the best of our knowledge, there are no IEPA-permitted drinking water intakes in Illinois for direct potable water reuse due to the negative public perception of consuming treated wastewater and relative abundance of freshwater in the midwest. Other Fox River communities, such as Aurora and Elgin, are outside of the respective upstream wastewater treatment facilities affected areas.

Fox Metro's treated effluent discharge is permitted under the National Pollutant Discharge Elimination System (NPDES) permit program as authorized by the Clean Water Act. One of the requirements of our NPDES permit is seasonal disinfection from May 1 to October 31 each calendar year. The Village's proposed water intake at Orchard Road would likely require Fox Metro to disinfect year-round. The estimated doubled

chlorination and dechlorination costs are $400,000 per year in 2022 dollars. If this disinfection cost is solely needed for the Village, it would be a reasonable approach to add a surcharge to only the Oswego ratepayer bills instead of our entire service area.

Another important consideration for the Village is that Fox Metro's NPDES permit allows for a Combined Sewer Overflow (CSO) discharge at our wastewater treatment facility. CSO flow contains a mixture of untreated wastewater, partially treated wastewater, and stormwater. Fox Metro has made enormous efforts and spent millions of dollars to reduce our CSO discharges over the past 10 to 15 years, but the CSO at our main campus still must discharge during heavy rainfall events to prevent basement sewage backups. Below is a summary chart to demonstrate our compliance:



More information on Fox Metro's CSOs and compliance can be found on our website at: https://www.foxmetro.org/about/permit-compliance/cso/

Part of Fox Metro's CSO compliance is that our CSO does not discharge into a "sensitive area" under the USEPA's 1994 CSO Control Policy as currently permitted. Section II.C.3 of the CSO Control Policy defines a sensitive area as meeting any one of 5 criteria. One of the 5 criterion is discharge into a receiving stream that utilized for a public drinking water intake. If Fox Metro's CSO would be determined by IEPA or USEPA to now be located in a sensitive area from the Village installing the potable water intake, Fox Metro would be required to "eliminate or relocate the CSO where physically possible and economically

feasible". Fox Metro's CSO Long Term Control Plan proposed spending $257,800,000 in 2009 dollars over 20 years to achieve full compliance. Our Long Term Control Plan was approved by USEPA in 2014 and full compliance involves reducing (not eliminating) CSO discharges. Eliminating the CSO completely would be orders of magnitude higher in costs and financially burdensome on the remaining Fox Metro ratepayers outside of Oswego's service area. Relocating our existing CSO is not realistic – it needs to be located at our main campus for when influent flows exceed 151 million gallons per day. At the least, there would be significant consulting and legal costs incurred by Fox Metro to negotiate with IEPA and/or USEPA to contest the sensitive area determination.

Other NPDES permit implications beyond the year-round disinfection and CSO elimination discussed above are unknown. Some additional considerations for using the Fox River as a potable water source in this area should include:

- The Fox River's inclusion on the IEPA 303(d) list as an impaired waterway for low dissolved oxygen, nutrients, organic enrichment, PCBs, siltation, suspended solids, etc.;
- Emerging wastewater contaminates, such as pharmaceuticals and personal care products; and
- Drinking water taste and odor issues caused by high algal levels.

Fox Metro's recommendation is to not use the Fox River as a potable water source due to the close proximity of our effluent and CSO discharge points. A Fox River intake *upstream* of Fox Metro would likely be influenced by the 16 permitted CSO discharges located within the City of Aurora.

Please feel free to contact us with any questions or for further information.

Sincerely,

Karen Clementi

Digitally signed by Karen Clementi
Date: 2022.10.10 16:05:59 -05'00'

Karen K. Clementi
Assistant District Manager

United City of Yorkville
Hearing Exhibit No. 3C

APPENDIX C

DuPage Water Commission Letter

January 26, 2023

Mr. Bart Olson
City Administrator
United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

RE: DuPage Water Commission support for Lake Michigan water allocation, Montgomery, Oswego, and Yorkville (WaterLink Communities)

Dear Mr. Olson,

The DuPage Water Commission (DWC) is pleased to provide this document in support of the request for an IDNR Lake Michigan allocation made by the United City of Yorkville, in partnership with the Villages of Oswego and Montgomery (also referred to as the "WaterLink" communities).

The DuPage Water Commission is the largest wholesale water distributor of Lake Michigan water, and we value our role as stewards for this important natural resource endowed to the State of Illinois from the Supreme Court. DWC first began delivering water in 1992, and management of the transmission, distribution, and delivery of Lake Michigan diversion water is our sole mission. We are proud to maintain an infrastructure system which has very low water loss, high redundancy and resiliency, and sound financial management.

Importantly, it should be noted that despite population growth within the DWC service area and the addition of new customers, Lake Michigan water consumption for communities served by DWC has declined since the peak in 2006, despite adding 15 additional service areas. We believe this illustrates the shared commitment by the DWC and our customer communities to manage our resources in a sustainable manner and reduce the impact to Lake Michigan. In fact, it is possible for DWC to add the WaterLink communities, while still diverting less water from Lake Michigan than 20 years ago.

Following, please find a summary of considerations in support of the WaterLink communities' IDNR Water Allocation requests.

DWC Infrastructure & Capabilities:

Source Water Supply: The DWC is supplied with Lake Michigan source water from the City of Chicago, where it is treated at the James W. Jardine Purification Plant and conveyed into the tunnel system through the City of Chicago. DWC receives finished water at the Lexington Pumping Station at the west side of Chicago, where it is pumped from the 12'-diameter tunnel system into two 15-million-gallon reservoirs. The current pumping capacity of the Lexington Pumping Station is 220 MGD. The Lexington Pumping Station then conveys the drinking water to the DWC DuPage Pumping Station in Elmhurst through redundant 90" and 72" transmission mains, one on the north side of the I-290 Eisenhower Expressway, and one on the south side.

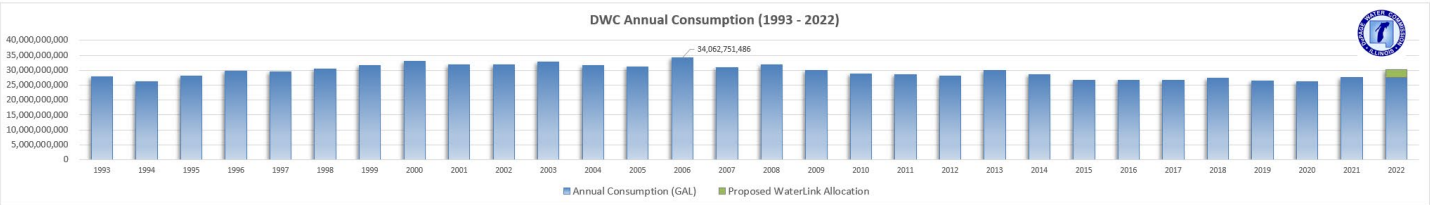
Pumping Capacity: The primary pumping operation for DuPage County is provided by the DWC DuPage Pumping Station, which includes two 15-million-gallon reservoirs and pumping capacity of 185 MGD. The station was built with the capability to add at tenth pump to increase pumping capacity to over 200 MGD. The DuPage Pumping station is powered by three Com Ed electrical feeds from independent substations and is supported by an emergency generator system capable of providing for current average day demand.

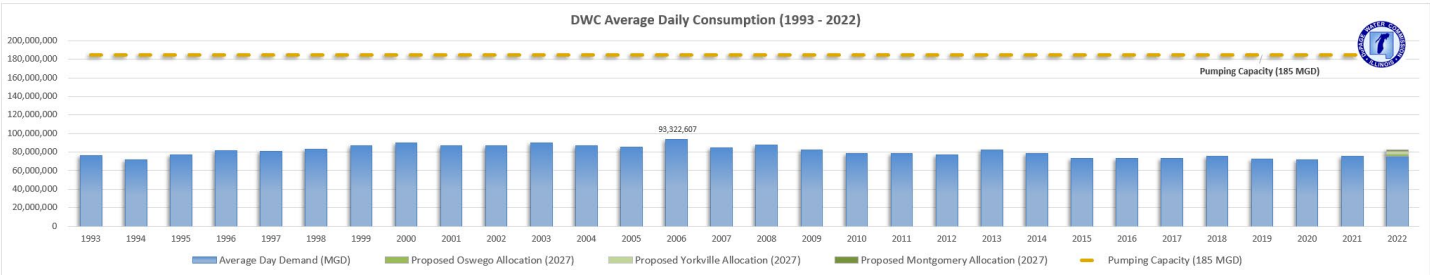
Water Storage: The DWC system has more than 90-million gallons of storage, including 60-million gallons of reservoir storage as noted above (including Lexington). Additionally, DWC maintains standpipe storage in five tanks (at four locations) throughout the County. The standpipes provide for both system storage and surge protection and 32.5 million gallons of storage is provided in the standpipes. Each DWC customer is also required to maintain storage equivalent to twice their average daily demand.

System Resiliency: The DWC pipeline infrastructure is well-designed, with significant redundancy and the ability to isolate most segments of the system without impacting service to the consumer communities. The DWC can remotely operate 34 critical valves throughout the County for this purpose. The distribution system includes 188 miles of pipeline, and 84 meter stations which contain 249 turbine meters. Each meter is tested annually, and each valve is exercised annually.

Historical Consumption & Trends: The DWC was designed and constructed based upon a forecast for growing population and increased consumption. However, during DWC's 30 years of water supply - despite growing population and an increase to the service area - total consumption has declined from a peak average day of 93 MGD in 2006 to approximately 75 MGD in recent years. Average water loss (or non-revenue water) from the DWC system has averaged less than 3% annually. It should be noted that since DWC began distributing water in 1992, the commission has increased from 23 charter customers to 29 customers, adding over 150,000 new consumers through population growth and the additional service areas.

Notably, the Village of Bartlett joined the DWC and began receiving water in 2019. As the chart below indicates, despite growth in the service area, total water delivery (diversion) has decreased and stabilized at a level of approximately 75 MGD, providing the ability to add Yorkville and the other WaterLink communities (Montgomery and Oswego), while remaining below the amount of water provided 20 years previously.





Expansion Capabilities: As noted above, the DWC is currently positioned to expand the Lake Michigan water service region without the necessity to increase water storage or pumping capabilities. Since construction of the original DWC system, several subsequent customers have been added, most recently the Village of Bartlett, which transitioned from Fox River/well water (Elgin) to Lake Michigan water in 2019 through an expansion of the DWC system. DWC continues to be considered by other communities as an alternative to surface water or well/aquifer sources.

Relative to Yorkville and the WaterLink communities, computations indicate that the existing network of DWC transmission mains are also adequate to provide the forecast 2050 flow. Therefore, the DWC infrastructure necessary to convey Lake Michigan drinking water is limited to an extension of the transmission system from the existing western DWC boundaries to the WaterLink Communities. The existing surplus pumping, storage, and conveyance capacity within the existing system reflect favorably on this alternative, as the new customers will realize the benefit of existing infrastructure which is already in service. The DWC understands that the WaterLink communities will need to address non-revenue water loss prior to receiving Lake Michigan source water; the DWC has considered this matter and is supportive of constructing the transmission main extension and allowing the WaterLink communities to commence Lake Michigan water service at different times as they come into compliance with water loss requirements.

Capital Improvement & Maintenance: DWC infrastructure is fairly new relative to long-lived infrastructure assets. Nonetheless, a multi-year Capital Improvement Plan is developed and updated annually to ensure all assets are maintained in a reliable condition, and that replacement and modification for all assets are programmed prior to the end of their expected life. DWC schedules and performs preventative maintenance on all assets in accordance with manufacturer recommendations.

Financial Position: The DWC is in an excellent financial position to support all existing activities, provide for asset maintenance and replacement, and to expand the service area in collaboration with new prospective communities. Currently, the DWC has no outstanding debt, and maintains Operating and Capital reserves greater than $200M - which meet the objectives defined by the DWC reserve policy. The current commodity cost for water from the City of Chicago is $4.33/thousand gallons, and the DWC wholesale rate to customers is $5.18, yielding a DWC operating cost of $0.85/thousand gallons. This amount funds the entire DWC operation, including funding of the Capital Program and maintenance of adequate reserves.

DWC Water Purchase and Sales Contracts:

Lake Michigan Water Purchase Contract: The DuPage Water Commission purchases commodity water from the City of Chicago in accordance with the 40-year Water Supply Contract executed on March 19, 1984, and which expires on March 19, 2024. DWC is currently engaged in negotiations with the City of Chicago to extend the contract. The Commission maintains the ability to unilaterally extend the contract under the existing terms for a period no less than 10 years, and no longer than 40 years.

DWC Water Sales Contract: The DWC Water Purchase and Sales contract was executed in 1986 and expires on February 24, 2024. Since the execution of the original contract with charter customers, several subsequent customers have been added, most recently the Village of Bartlett, which transitioned from Fox River/well water (Elgin) to Lake Michigan water in 2019 through an expansion of the DWC system. Negotiations are currently underway with the customer communities to update and extend the Water Sales Contract.

DWC & WaterLink Coordination:

DWC / Yorkville - WaterLink coordination: DWC has faithfully engaged with Yorkville and partner WaterLink communities in a productive and collaborative planning process beginning in 2017. This initiative is centered on the shared commitment to provide a more certain water future for the WaterLink communities, to ensure efficient and productive use of existing DWC infrastructure, and to maintain and enhance sustainable utilization of the Lake Michigan diversion.

Yorkville and partner WaterLink communities have earnestly considered various alternatives and have thoroughly studied and evaluated the feasibility of each. As this process has progressed, the commitment of DWC and the WaterLink communities has been formalized in several documents, including two Memoranda of Understanding issued by DWC in 2021, at which time the DWC Board of Commissioners directed DWC to engage in water supply negotiations with the WaterLink Communities. Since that time, DWC has met regularly with the WaterLink Village Managers as well as staff and consulting engineering teams to establish project milestone targets, and to discuss and prepare intergovernmental and legal documents, governance procedures, and prospective financing alternatives.

Yorkville and partner WaterLink communities will receive their full water supply from the DuPage Water Commission and will maintain storage in accordance with the City of Chicago and DWC Customer Agreement (2 days of storage). We understand that the WaterLink communities may wish to first receive water at different times and have included a staggered delivery schedule into our project planning. This approach will allow WaterLink communities to become compliant with water loss requirements.

Hydraulic Modeling: DWC has participated in water supply forecasting and hydraulic model testing for Yorkville and the WaterLink communities to determine what infrastructure is necessary to provide a reliable long-term water supply of Lake Michigan water. As noted previously, the hydraulic model indicates that existing pumping, storage, and transmission infrastructure is adequate in its current form and condition, with no additional facilities necessary to provide for 2050 forecasted flow conditions. A pipeline extension and delivery structures will be necessary to link the DWC system to Yorkville and partner communities. While a final route has not been determined, it is anticipated that a pipeline of approximately 20 miles will be necessary. Of note, CMAP 2050 forecasts indicate a generally stable water consumption forecast for existing customers, further bolstering confidence that the DWC surplus pumping and storage capacity will be more than adequate for the petitioner(s).

Construction, Agreements, and Financing: The expansion of Lake Michigan water service to Yorkville and the WaterLink communities will follow the process utilized for previous DWC Subsequent Customer Communities, most recently the Village of Bartlett in 2019. This process will include establishment of an intergovernmental agreement and funding escrow for engineering, followed by a Subsequent Customer Agreement prior to the delivery of water. Initial activities associated with drafting these agreements and establishing initial escrow requirements have commenced.

Enabling Legislation: The DuPage Water Commission operates under the IL Water Act of 1985. Our current governance structure consists of 13 commissioners, 7 of whom are appointed by the DuPage County Chairperson, and 6 of whom are appointed by the mayors of customer communities. There are 6 districts, with a County and Municipal appointee in each district, plus a chairperson appointed by the County. Since Yorkville and partner WaterLink Communities exist outside DuPage County, the IL Water Act of 1985 has been amended to permit DWC to provide water service outside of DuPage

County. This legislation provides a 7th district for areas outside the County, which will provide two additional appointees to the Board of Commissioners.

Conclusions:

The DuPage Water Commission is pleased to submit this letter in support of the United City of Yorkville's Lake Michigan water allocation request. The DWC has more than adequate capacity within our existing pumping, storage, and distribution system to provide for delivery of Lake Michigan water to the petitioner and has faithfully engaged Yorkville and partner communities to advance this project in a manner which will ensure a stable and reliable water future for their citizens. In fact, due to sound management and stewardship of water systems within DWC and existing customer communities, DWC can provide Lake Michigan water service to the WaterLink communities at a lower aggregate diversion level than existed twenty years ago. Therefore, the supply of Lake Michigan water through the DuPage Water Commission will present a favorable solution to reduce continued extraction from the Ironton-Galesville aquifer in a manner that is economically suitable, environmentally sustainable, and supports good governance among the partner organizations.

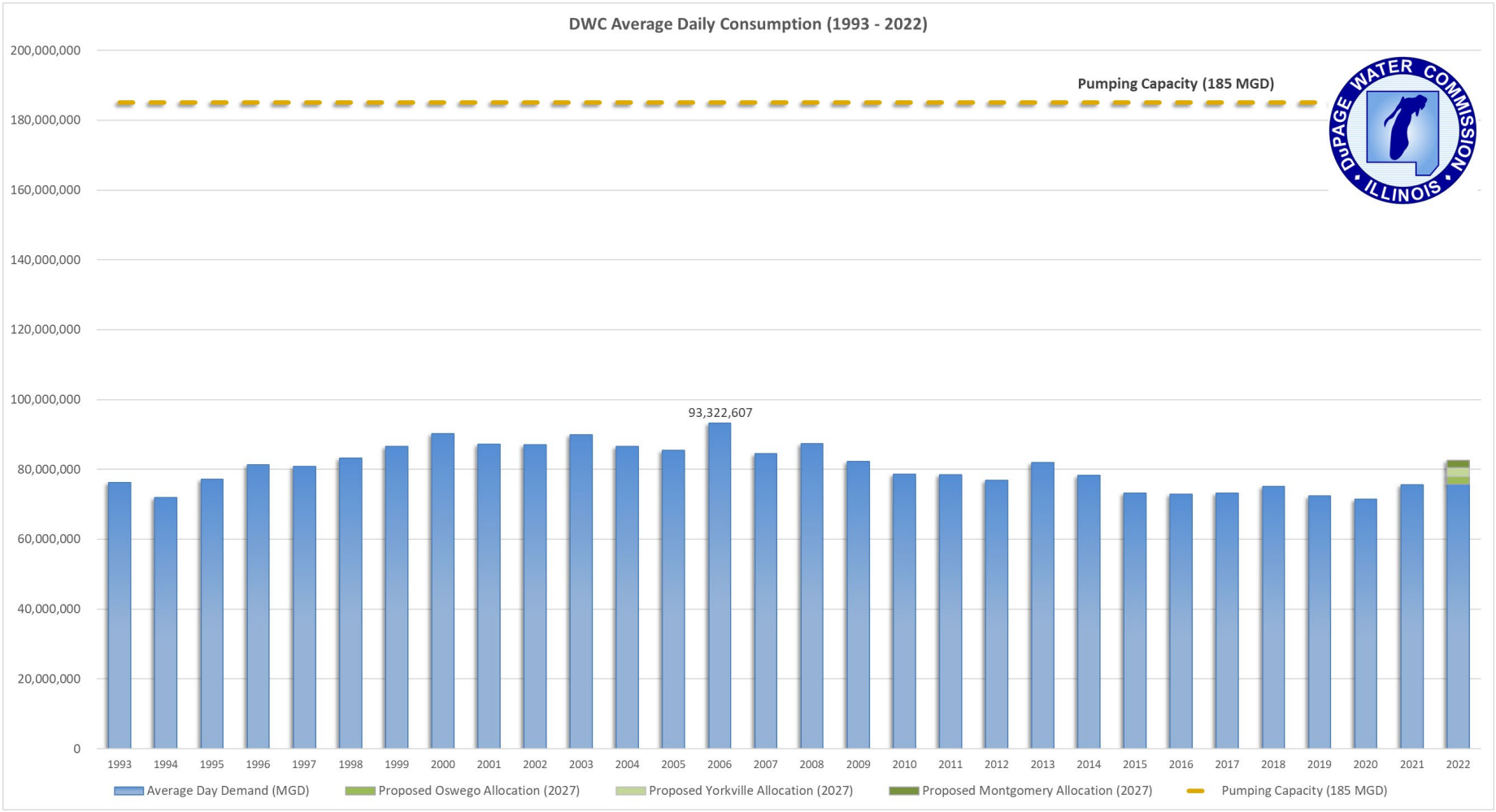
Please feel free to contact the DuPage Water Commission should you desire any additional information or have any questions.

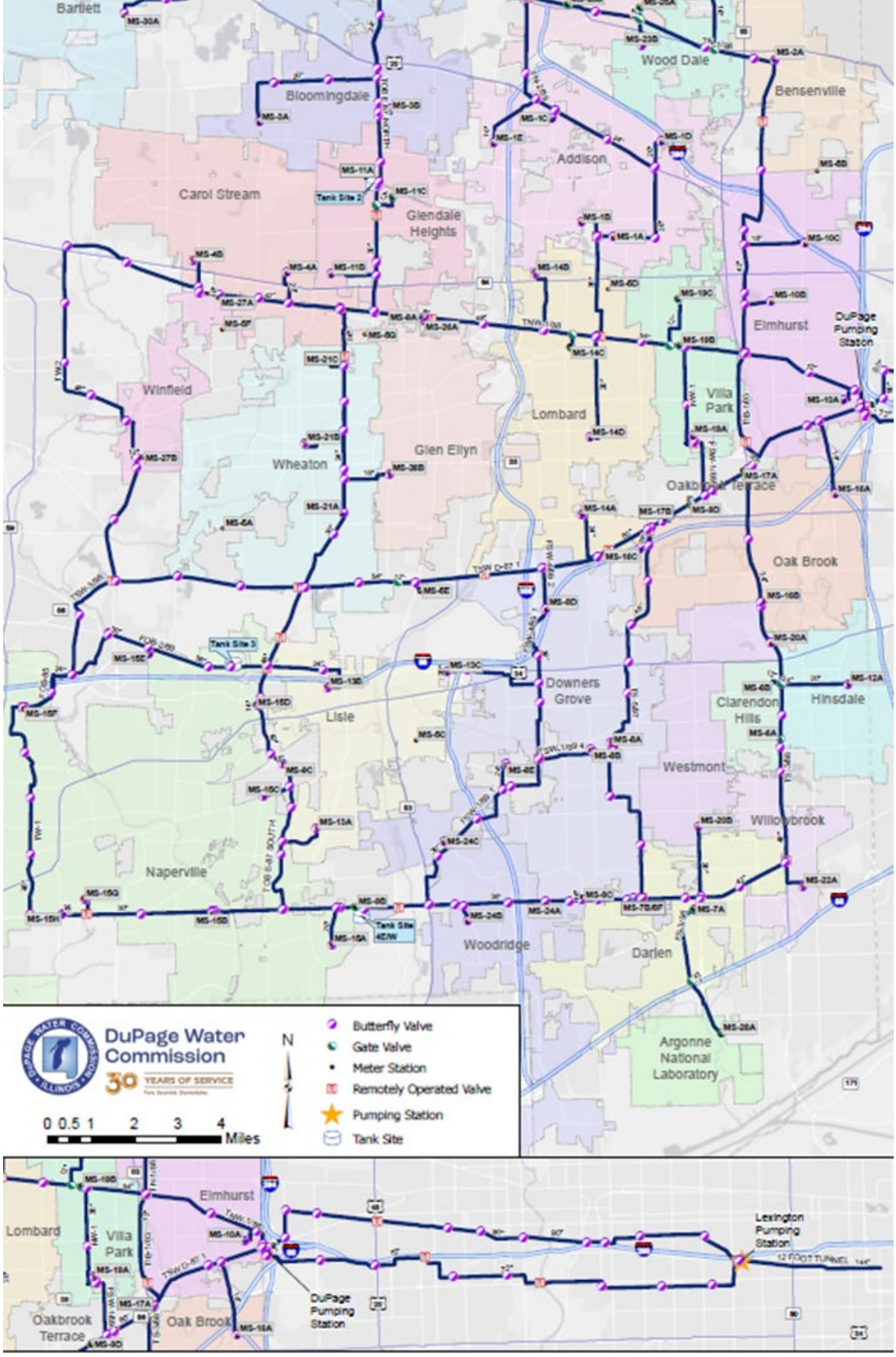
Sincerely,

Paul D. May, P.E.
General Manager

James Zay
Chairman of the Board

CE: *Jeff Zoephel, Village of Montgomery*
Dan DiSanto, Village of Oswego
Jennifer Hughes, Village of Oswego
Eric Dhuse, United City of Yorkville
Mark Wolf, Village of Montgomery
Irene Caminer, Caminer Law
Carolyn Grieves, Baxter & Woodman
Phil Luetkehans, LBGA Law
Cheryl Peterson, DWC Financial Administrator
Chris Bostick, Manager of Water Operations
File


DWC Average Daily Consumption (1993 - 2022)
Pumping Capacity (185 MGD)
93,322,607
200,000,000
180,000,000
160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0
1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Average Day Demand (MGD)
Proposed Oswego Allocation (2027)
Proposed Yorkville Allocation (2027)
Proposed Montgomery Allocation (2027)
Pumping Capacity (185 MGD)


Bartlett
Wood Dale
Bensenville
Bloomingdale
Addison
Carol Stream
Glendale Heights
Elmhurst
DuPage Pumping Station
Villa Park
Winfield
Lombard
Wheaton
Glen Ellyn
Oakbrook Terrace
Oak Brook
Downers Grove
Clarendon Hills
Hinsdale
Lisle
Westmont
Willowbrook
Naperville
Woodridge
Darien
Argonne National Laboratory
DuPage Water Commission
30 YEARS OF SERVICE
0 0.5 1 2 3 4 Miles
N
Butterfly Valve
Gate Valve
Meter Station
Remotely Operated Valve
Pumping Station
Tank Site
Lexington Pumping Station
12 FOOT TUNNEL



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Lake Michigan Allocation Order

File Name:
A.4c_Yorkville Lake Michigan Allocation Order

Description:
Final Administrative Decision on an Application for a Lake Michigan Water Allocation by the United City of Yorkville.

August 2024

FILED
OCT 0 4 2023
DEPT. OF NATURAL RESOURCES
OFFICE OF LEGAL COUNSEL

STATE OF ILLINOIS
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF WATER RESOURCES

IN THE MATTER OF	)	
	)	
APPLICATION FOR	)	
LAKE MICHIGAN	)	**No. LMO-22-06**
WATER ALLOCATION	)	
BY THE	)	
UNITED CITY OF YORKVILLE	)	

FINAL ADMINISTRATIVE DECISION ON AN APPLICATION FOR A LAKE MICHIGAN WATER ALLOCATION BY THE UNITED CITY OF YORKVILLE

By the Illinois Department of Natural Resources:

I. Legal Authority

This matter comes before the Illinois Department of Natural Resources ("Department") pursuant to its statutory authority under the Level of Lake Michigan Act, 615 ILCS 50, and its regulatory requirements set forth in its administrative rule for the Allocation of Water from Lake Michigan, 17 Ill. Admin. Code 3730 ("Lake Michigan Water Allocation Administrative Rule").

II. Procedural Background

The United City of Yorkville ("Applicant") has filed an Application for a Lake Michigan Water Allocation Permit with the Department. Public notice was effectuated for this proceeding pursuant to Section 3730.206 of the Department's Lake Michigan Water Allocation Administrative Rule. Department Staff, through Administrative Assistant Ronda Brown mailed notice of this proceeding to the Department's service list in the form of a Notice of Lake Michigan Allocation Proceeding on or about May 24, 2022. Department Staff published the same Notice of Lake Michigan Allocation Proceeding for this proceeding in the Chicago Tribune on June 1, 2022, and June 8, 2022. The Chicago Tribune also placed the Notice of Lake Michigan Allocation Proceeding on the statewide public notice website on these dates as well.

Pre-hearing conferences were held on this matter on June 17, 2022, October 21, 2022, and April 5, 2023. The parties agreed to the schedule for written testimony and for a Public Hearing for cross examination of witnesses. A Public Hearing was held via electronic communication commencing at 10:00 a.m. July 12, 2023.

Appearing at the Public Hearing on behalf of the Department Staff was Brian Navarrete, Legal Counsel, and Stephen Altman of the Department's Office of Water Resources. Appearing on behalf of the Applicant was Irene Caminer and Brian Caminer of Caminer Law, LLC, Legal Counsel, Bart Olson, City Administrator, Eric Dhuse, Director of Public Works, Brad Sanderson, Jeffrey Freeman, and Ali Ghassemi of Engineering Enterprises, Inc., Applicant's engineering consultant, and Daniel Abrams of the Illinois State Water Survey, Applicant's ground water consultant. In addition to the Department Staff and Applicant, several other parties intervened in this proceeding and attended proceedings as observers. Appearing on behalf of the Illinois Attorney General was Kevin Garstka.

The documentary evidence presented by the Applicant in support of its application and by the Department Staff, as well as the oral testimony presented at the July 12, 2023, Public Hearing make up the evidentiary record of this proceeding. No other parties provided evidence in this proceeding. Applicant filed its Lake Michigan Water Allocation Application as Applicant's Exhibit 1, a Report in Support of Application (Revised) as Applicant's Exhibit 2 along with 7 attached exhibits identified as Applicant's Exhibits 2A through 2G, a Technical Memorandum Addendum to Alternative Water Source Evaluation as Applicant's Exhibit 3 along with 3 attached exhibits identified as Applicant's Exhibits 3A through 3C, the written Testimony of Eric Dhuse as Applicant's Exhibit 4 along with 6 attached exhibits identified as Applicant's Exhibits 4A through 4F, the written Additional Testimony of Eric Dhuse as Applicant's Exhibit 5 along with 1 attached exhibit identified as Applicant's Exhibit 5A, the written Testimony of Daniel Abrams as Applicant's Exhibit 6 along with 6 attached exhibits identified as Applicant's Exhibits 6A through 6F, the written Testimony of Jeffrey Freeman as Applicant's Exhibit 7 along with 2 attached exhibits identified as Applicant's Exhibits 7A and 7B, Applicant's Water Audit as Applicant's Exhibit 8, and Applicant's Replies and Notice of Filing as Applicant's Exhibit 9. Department Staff filed the written Direct Testimony of Stephen Altman identified as Exhibit 1 (hereinafter "Department Staff Exhibit 1"). In addition to the evidence presented at the Public Hearing, Department Staff filed the Affidavit

of Ronda Brown pursuant to Agreed Motion to Reopen Hearing for Limited Purpose of Entering Affidavit of Ronda Brown as Department Exhibit 2. No objection was raised to the Department's Motion, which by this Order is granted and Department Exhibit 2 (hereinafter "Department Staff Exhibit 2") is entered into the record of this proceeding. A court reporter's transcript was prepared memorializing the testimony at the July 12, 2023, Public Hearing.

The above-identified documents and transcript are the evidentiary record upon which the Department bases its Final Administrative Decision findings and conclusions, and that upon which the attached Order is entered.

III. Issues Presented

The first issue presented is whether Illinois' current total Lake Michigan water diversion amounts allow for sufficient potential additional water diversion to grant Applicant's requested allocation amount.

The second issue presented is whether the Applicant qualifies for a Lake Michigan Water Allocation.

The third issue presented is whether the Applicant's requested amount of Lake Michigan water is the appropriate amount for which the Applicant should be issued a Lake Michigan Water Allocation.

The fourth issue presented is whether Applicant is in compliance with the Department's regulatory water conservation / efficiency requirements and, if not, whether an acceptable compliance plan is provided.

IV. Evidentiary Record

Applicant has applied for a Lake Michigan Water Allocation Permit for purposes of providing water for the Applicant's municipal water system, which currently (as of 2021) provides water to an estimated population of 23,143. (Applicant Ex. 1, Sect. III-B.) Maps were provided of Applicant's current municipal water system and future land use. (Applicant Ex. 2A) Applicant's proposed start date for a Lake Michigan Water Allocation is 2028 and extends to the 2050 permitting horizon. (Applicant Ex. 1, Sect. II.) Applicant's requested Lake Michigan water allocation amount in 2028 is 2.439 million gallons per day ("mgd") increasing to 3.566 mgd in 2050. (Applicant Ex. 1,

Sect. II.)

Department Staff provided information on whether Illinois' current total Lake Michigan water diversion amounts allow for sufficient potential additional water diversion to grant Applicant's requested diversion amount. According to Department Witness Stephen Altman, there is sufficient Lake Michigan water available to meet Applicant's requested amounts and still comply with the limitations of the United States Supreme Court Consent Decree in Wisconsin v. Illinois which are memorialized in Section 3 of the Level of Lake Michigan Act, 615 ILCS 50/3. (Department Staff Ex. 1, p. 2; Tr. 55.)

Applicant provided information on its requested classification for Lake Michigan Water Use to qualify for a Lake Michigan Water Allocation per the terms of the Department's Lake Michigan Water Allocation Administrative Rule, 17 Ill. Admin. Code 3730.303. Applicant is requesting classification as a Category IB Applicant on the basis that its primary water needs are residential, commercial, or industrial and its use of Lake Michigan water would reduce use of the Cambrian-Ordovician deep aquifer ("Deep Aquifer"). (Applicant Ex. 1, Sect. III; Applicant Ex. 2, p. 15.)

Applicant's water system uses four (4) Deep Aquifer wells. (Applicant Ex. 1, Sect. VII.A; Applicant Ex. 2, p. 3.) Applicant asserts that Applicant's current withdrawals from its Deep Aquifer water source are unsustainable. (Applicant Ex. 6, 6A – 6F; Tr. 15-24.)

Per Applicant's reported Deep Aquifer well use, its transfer to Lake Michigan water from its current ground water sources will result in reduced Deep Aquifer use of approximately three (3) mgd. (Applicant Ex. 1, Sect. IV.A.) Applicant will discontinue supplying water via Deep Aquifer wells upon changing to Lake Michigan water. (*Id.*)

Through water supply consultants, Applicant conducted a study of alternative sources of water supply. (Applicant Ex. 2, pp. 8-13.)

Applicant provided information on its projected annual total water demand through 2050. Applicant calculated its projected annual total water demand based on its population projections and per capita water use estimates. Applicant forecasts its 2028 population to be 31,897 persons increasing to 47,796 persons in 2050. (Applicant Ex. 1, Sect. IV.B.; Applicant Ex. 2, p. 6.) Applicant calculated its projected annual population figures from the Chicago Metropolitan Agency for Planning ("CMAP") forecast for population growth rate applicable to Applicant for the subject years. (Applicant Ex. 2, p. 6; Applicant Ex. 7, p. 5.) Applicant used a value of 75 gallons per capita

per day, based on Applicant's historic data, to project total water demands to 2050. (Applicant Ex. 2, pp. 6-7.) The result of Applicant's projected annual total water demand through 2050 begins at 2.439 mgd in 2028 increasing to 3.566 mgd in 2050. (Applicant Ex. 1, Sect. II.; Applicant Ex 2, pp. 6-8.) Applicant then apportioned the calculated total water demand to the four (4) required water use categories: Residential, Commercial, Manufacturing/Industrial/Institutional and Government. (See, Applicant Ex. 1, Sect. IV.B.)

Applicant provided information on its compliance with the Department's regulatory water efficiency / conservation requirements. According to the information provided, Applicant's water distribution system had a 2021 non-revenue water percentage of 12.7%, which exceeds the Department's 10% regulatory threshold. (Applicant Ex. 1, Sect. V; Applicant Ex. 4, p. 5.) Applicant testified that it will comply with the Department's 10% regulatory threshold for non-revenue water before using Lake Michigan water. (Tr. 45-46.) To achieve this compliance, Applicant provided a Water System Improvement Plan incorporating non-revenue percent reduction measures. (Applicant Ex. 7B.)

Applicant also provided its current water conservation ordinances which cover leakage monitoring, water meters for new construction, water meters for major remodeling, WaterSense labeled efficient plumbing fixtures, closed system air conditioners, public facility plumbing fixtures, car wash facilities and outside sprinkler systems. (Applicant Ex. 4E.) Applicant also provided information on conservation programs and public outreach. (Applicant Ex. 4F.)

In addition to the foregoing information provided into the record by Applicant, Department Staff testified that staff conducted a technical review of Applicant's application and supporting information and determined that, with the exception of Applicant's non-revenue water percentage of over 10%, said application complies with the Level of Lake Michigan Act and the Department's Lake Michigan Water Allocation Administrative Rule. (Department Staff Ex. 1, p. 2; Tr. 55-56.)

V. Findings and Conclusions

Based on the Department's mailing of the Notice of Prehearing of this proceeding to the Department's service list and the Department's publication of the Notice of Prehearing of this proceeding twice, no longer than one week apart and within 10 days of the first pre-hearing conference, the Department concludes that proper public notice was provided for this proceeding

pursuant to the requirements of Section 3730.206 of the Department's Administrative Rules for Allocation of Water from Lake Michigan.

The first issue presented is whether Illinois' current total Lake Michigan water diversion amounts allow for sufficient potential additional water diversion to grant Applicant's requested allocation amount. According to the testimony of Department Staff, there is sufficient Lake Michigan water available to meet the request of the Applicant consistent with Section 3 of the Level of Lake Michigan Act, 615 ILCS 50/3. No party questioned or objected to Department Staff's testimony on this issue. The Department finds that Department Staff's testimony on the amount of water available for additional allocations is accurate. Therefore, the Department concludes that Illinois' total current Lake Michigan water diversion amounts allow for sufficient potential additional water to grant Applicant's requested allocation amount.

The second issue presented is whether the Applicant qualifies for a Lake Michigan Water Allocation. The Department allocates Lake Michigan water pursuant to categories identified in Section 3730.303 of the Department's Lake Michigan Water Allocation Rule. Category IB is given the second highest priority. Under current circumstances where Illinois' total current Lake Michigan water diversion amounts allow for sufficient water to grant new allocation requests, Category IB applicants are granted Lake Michigan water allocations. To qualify for inclusion in Category IB, an applicant must demonstrate that its primary water needs are residential, commercial, or industrial and that its use of Lake Michigan water would reduce use of the Cambrian-Ordovician deep aquifer. With respect to this issue, first, Applicant's Lake Michigan Water Allocation Application is based on its future projections for four use components: residential use, commercial use, manufacturing use and governmental use. Therefore, the Department finds that Applicant's primary water uses are for residential, commercial, and industrial / manufacturing. Second, Applicant's service territory is currently serviced by water from four (4) Deep Aquifer wells operated by Applicant. Applicant projects that its transfer to Lake Michigan water from its current ground water sources will result in reduced Deep Aquifer use of approximately three (3) mgd averaged from 2028 through the 2050 planning horizon. Finally, upon use of a Lake Michigan Water Allocation, Applicant will discontinue production from its Deep Aquifer wells. Therefore, the Department finds that Applicant's use of Lake Michigan water would reduce use of the Cambrian-Ordovician deep aquifer.

The Department next considers whether Applicant complied with Subsection 3730.303(b)(1)

and (2). Subsection 3730.303(b)(1) states: "(b) in determining the need for Category IA and IB allocations, the Department will consider the following items: (1) Adequacy of supply from sources other than Lake Michigan." Applicant, through its water supply consultants, completed a study of alternative sources of water supply which included Lake Michigan sources and sources other than Lake Michigan. The details of this study are provided in Applicant's testimony and appear reasonable and sufficiently thorough. Subsection 3730.303(b)(2) states: "(b) in determining the need for Category IA and IB allocations, the Department will consider the following items: (2) Economics of alternative supplies." Initially, the Department notes that not all 4 items of Subsection 3730.303(b) necessarily apply with the same weight to both Category IA and IB water user allocation requests. The factor set forth in Subsection 3730.303(b)(2), economics of alternative supplies, is literally a part of the definition of Category IA water users set forth in Subsection 3730.303(a)(1) – "Applicants whose primary water needs are residential, commercial or industrial and whose future or continued use of Lake Michigan water is the most economical source of supply." Therefore, the issue of economics of the water supply source is significantly more relevant to consideration of requests for Category IA Lake Michigan water applications than to Category IB Lake Michigan water applications such as Applicant's. Further, this interpretation of Subsection 3730.303(b) is supported by reference to the fourth factor of this subsection which states "(4) For new applicants, allocations of Lake Michigan water will be made with the goal of reducing withdrawals from the Cambrian-Ordovician Aquifer (deep aquifer)." Similarly, to the second factor connecting to Category IA water users, this fourth factor directly connects to Category IB water users. The definition of Category IB water users set forth in Subsection 3730.303(a)(2) states: "Applicants whose primary water needs are residential, commercial or industrial and whose use of Lake Michigan water would reduce the regional use of the deep aquifer." This fourth factor of Subsection 3730.303(b) obviously does not apply to all Lake Michigan water applications, as not all applicants use deep aquifer wells for their water supplies. Therefore, it is consistent that the second factor of Subsection 3730.303(b) may not apply to all applicants as well. Also, it is clear that Applicant's request for Lake Michigan water as a current deep aquifer water user specifically fulfills the Subsection 3730.303(b)(4) factor. Based on the foregoing, the Department concludes that Applicant is in compliance with Subsection 3730.303(b)(1) and (2).

Based on the foregoing, the Department concludes that Applicant meets the regulatory

requirements for a Category IB applicant and, therefore, qualifies for a Lake Michigan Water Allocation. Applicant meets the definition for Category IB water users set forth in Subsection 3730.303(a)(2) and complies with the factors to be considered for Category IA and IB water users in Subsection 3730.303(b).

The third issue presented is whether the Applicant's requested amount of Lake Michigan water is the appropriate amount for which the Applicant should be issued a Lake Michigan Water Allocation. Applicant calculated its projected annual total water demand based on its population. Applicant forecasts its 2028 population to be 31,897 persons increasing to 47,796 persons in 2050. Applicant calculated its projected annual population figures based on the Chicago Metropolitan Agency for Planning ("CMAP") forecast for population growth rate applicable to Applicant for the subject years. The Department finds Applicant's population projection based on CMAP information acceptable. Applicant used a value of 75 gallons per capita per day, based on Applicant's historic data, to project total water demands to 2050. Based on the Department's experience, it finds Applicant's use of 75 gallons per capita per day to calculate total water use acceptable. The result of Applicant's projected annual total water demand begins at 2.439 mgd in 2028 and escalates to 3.566 mgd in 2050. Applicant then apportioned the calculated total water demand to the four (4) required water use categories: Residential, Commercial, Manufacturing/Industrial/Institutional and Government. Given the totality of the circumstances presented by Applicant, the Department finds that this is an acceptable methodology for determining future water demand.

Based on the foregoing, the Department concludes that Applicant's future water demand projection is based upon an acceptable methodology for calculating Applicant's projected total water demand and that the demand amounts determined are also acceptable. The Department also concludes that Applicant's future water demand projection appropriately considers the population of the area to be served, projected population growth, current and projected per capita consumption with the area, the nature and extent of industrial uses, municipal and hydrant uses, implementation of conservation practices (See, Subsection 3730.304(a)) and the reduction of non-revenue water to meet regulatory limits as required by Section 3730.304 of the Department's Allocation of Water from Lake Michigan administrative rule. As per Department policy, if, in the future, Applicant's water demand projections are determined to be inaccurate, the Department will adjust Applicant's water allocation amount to reflect circumstances as accurately as possible.

The fourth issue presented is whether Applicant is in compliance with applicable regulatory water conservation / efficiency requirements set forth in Section 3730.307 of the Department's Allocation of Water from Lake Michigan administrative rule and, if not, whether an acceptable compliance plan is provided. The water conservation / efficiency requirements applicable to Applicant include a 10% non- revenue water threshold (Subsection 3730.307(b)), a list of nine (9) required conservation practices (Subsection 3730.307(c)(1)-(9)), a program to end deep aquifer pumpage (Subsection 3730.307(d)) and a 1% unmetered hydrant use threshold (Subsection 3730.307(e)). Subsection 3730.307(f) also includes a recommendation regarding water rate structures.

With respect to Subsection 3730.307(b), Applicant's current (2021) non-revenue water loss as a percent of water supply is 12.7%, which violates the Department's non-revenue water loss standard of 10% or less. Subsection 3730.307(a) of the Department's Allocation of Water from Lake Michigan administrative rule provides: "Applicants whose non-revenue water exceeds the non-revenue thresholds ... shall submit a water system improvement plan that outlines the actions the applicant plans to undertake, along with a timeframe, to reduce non-revenue water to less than the thresholds outlined in this subsection." Applicant has provided a water system improvement plan to reduce its non-revenue water loss to less than 10% before it has requested to begin use of Lake Michigan water. The Department finds Applicant's water system improvement plan acceptable, particularly as Applicant's Lake Michigan water use will not begin until 2028, the Department will receive information on the efficacy of Applicant's water system improvement plan during the interim, and Applicant will have the Department's standard permit condition requiring compliance with the Department's non-revenue water loss standard of 10% or less before beginning its actual use of Lake Michigan water. Therefore, based on the inclusion of the foregoing permit condition, the Department concludes that Applicant is in compliance with Subsection 3730.307(b).

With respect to Subsection 3730.307(c)(1)-(9), Applicant provided its current water conservation ordinances which cover leakage monitoring, water meters for new construction, water meters for major remodeling, WaterSense labeled efficient plumbing fixtures, closed system air conditioners, public facility plumbing fixtures, car wash facilities and outside sprinkler systems. Applicant's ordinances specifically address the nine (9) conservation practices required by Subsection 3730.307(c)(1)-(9). Therefore, the Department concludes that Applicant is in compliance

with the Department's regulatory water conservation / efficiency requirements set forth in Subsection 3730.307(c)(1)-(9).

With respect to Subsection 3730.307(d), Applicant's application indicates that it will cease use of water from deep aquifer pumpage upon changing to Lake Michigan water. Subsection 3730.307(d) requires: "Within 90 days after receipt of an allocation permit, each permittee that uses any water from deep aquifer pumpage shall submit and implement a phased program designed to end this practice, other than for emergency or standby use, within five (5) years after the receipt of Lake Michigan water." To comply with Subsection 3730.307(d), within 90 days after receipt of its allocation permit, Applicant shall submit and implement a phased program designed to end its deep aquifer pumpage. This requirement will be set forth as a specific permit condition. Therefore, based on the inclusion of the foregoing permit condition, the Department concludes that Applicant is in compliance with the Department's requirement to cease deep aquifer pumpage set forth in Subsection 3730.307(d).

With respect to Subsection 3730.307(e), Subsection 3730.307(e) provides a regulatory limitation of unmetered hydrant use to 1% or less of net annual water system pumpage. The Department notes that Applicant has not requested a waiver to the Department's 1% unmetered hydrant use and no such waiver is provided by this Decision. Therefore, the Department concludes that Applicant is required to comply with the Department's limitation on unmetered hydrant use set forth in Subsection 3730.307(e).

With respect to Subsection 3730.307(f), Subsection 3730.307(f) provides: "The Department recommends that all permittees adopt water rate structures based on metered water use and that water rate structures be developed that will discourage excessive water uses. The Department also recommends that water rates reflect the full cost of water, including the long-term cost to properly maintain and operate the water supply distribution system in such a manner as to keep system losses to a minimum." As this Subsection is a recommendation, the Department does not have to determine compliance with same. However, the Department reiterates this recommendation to Applicant's future management of its water system using Lake Michigan water.

Based on the foregoing, the Department concludes that Applicant is in compliance with the Department's regulatory water conservation / efficiency requirements set forth in Section 3730.307 of the Department's Administrative Rules for Allocation of Water from Lake Michigan.

Nevertheless, as a deep aquifer water user, within 90 days after receipt of its allocation permit, Applicant shall submit and implement a phased program designed to end its deep aquifer pumpage. This requirement will be set forth as a specific permit condition. Further, Applicant will be subject to the Department's standard permit condition requiring compliance with the Department's non-revenue water loss standard of 10% or less before beginning its actual use of Lake Michigan water

In summary, this Decision holds as follows: First, Illinois' current total Lake Michigan water diversion amounts allow for sufficient potential additional water diversion to grant Applicant's requested allocation amount. Second, Applicant qualifies for a Lake Michigan Water Allocation as a Category IB water user. Third, Applicant's requested amount of Lake Michigan water is the appropriate amount for which the Applicant should be issued a Lake Michigan Water Allocation. Finally, Applicant, with the exception of Applicant's non-revenue water percentage of over 10%, is in compliance with the Department's regulatory water conservation / efficiency requirements. However, Applicant has provided a satisfactory compliance plan that, coupled with the Department's standard permit condition requiring compliance with the Department's non-revenue water loss standard of 10% or less before beginning its actual use of Lake Michigan water, satisfies compliance with the Department's regulatory water conservation / efficiency requirements. Based upon the entirety of the foregoing, the Department concludes that a Lake Michigan Water Allocation Permit should be issued to Applicant in the amounts and under the conditions of the following Order.

ORDER

The United City of Yorkville is hereby issued a Lake Michigan Water Allocation Permit in the amounts as set forth below. All allocation quantities are shown in million gallons per day. As a condition of this Lake Michigan Water Allocation Permit, the United City of Yorkville is required to comply with the Illinois Department of Natural Resources' ("Department") Administrative Rules for the Allocation of Water from Lake Michigan including, but not limited to, water conservation practices mandated by Section 3730.307, reporting requirements mandated by Section 3730.309 and the following 3 specific permit conditions:

1. The United City of Yorkville shall (1) implement the water system improvement plan set forth in its application (or as amended in the future upon approval of the Department), (2) provide the Department with annual reporting on its progress on such water system improvement plan implementation and on its ongoing non-revenue water standard compliance, and (3) begin actual use of Lake Michigan water **only after written approval** of the Department based on the United City of Yorkville completing an entire water year (October 1 – September 30) in compliance with the required 10% non-revenue water standard.

2. The United City of Yorkville shall, within 90 days after receipt of this Lake Michigan Water Allocation Permit, submit to the Department and implement a program designed to end use of the Cambrian-Ordovician deep aquifer upon its use of Lake Michigan water in 2028, other than for emergency or standby use.

3. The United City of Yorkville shall begin complying with the reporting requirements mandated by Section 3730.309 beginning in 2023.

YEAR	ALLOCATION	YEAR	ALLOCATION
2028	2.439	2040	2.780
2029	2.436	2041	2.841
2030	2.432	2042	2.902
2031	2.462	2043	2.963
2032	2.492	2044	3.024
2033	2.521	2045	3.085
2034	2.551	2046	3.181
2035	2.581	2047	3.277
2036	2.621	2048	3.374
2037	2.661	2049	3.470
2038	2.700	2050	3.566
2039	2.740		

This Decision on an Application by the United City of Yorkville for a Lake Michigan Water Allocation constitutes the Illinois Department of Natural Resources' Final Administrative Decision in this proceeding within the meaning of the Administrative Review Law (735 ILCS 5/3-101 et seq.), is appealable to the Circuit Court pursuant to the Administrative Review Law and shall be effective as of the date set forth below.

RECOMMENDED:

John Fischer
Hearing Officer

APPROVED:

Natalie Phelps Finnie
Director
Illinois Department of Natural Resources

Dated this 4th day of October 2023.

PROOF OF SERVICE

I hereby certify that the foregoing FINAL ADMINISTRATIVE DECISION was served by mail to the following by depositing said envelope in the U.S. Post Office in Springfield IL on the 5th Day of October 2023:

Irene Schild Caminer
Attorney for Petitioner
Caminer Law, LLC
2612 West Sunnyside Avenue
Chicago, Illinois

I hereby certify that the foregoing FINAL ADMINISTRAITVE DECISION was served by hand delivery to the following on the 5th Day of October 2023:

Brian Navarrete
Office of Legal Counsel
One Natural Resources Way
Springfield, Illinois

I hereby certify that the foregoing FINAL ADMINISTRAITVE DECISION was served by electronic mail to the following on this, the 5th Day of October 2023:

Brian Navarrete
Jim Casey
James Kessen
Steve Altman
Illinois Department of Natural Resources
Brian.M.Navarrete@illinois.gov
James.Casey@illinois.gov
James.Kessen@illinois.gov
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Irene Schild Caminer
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/s/ John Fischer_____
John Fischer
Hearing Officer
Illinois Department of Natural Resources
One Natural Resources Way
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John.Fischer@illinois.gov



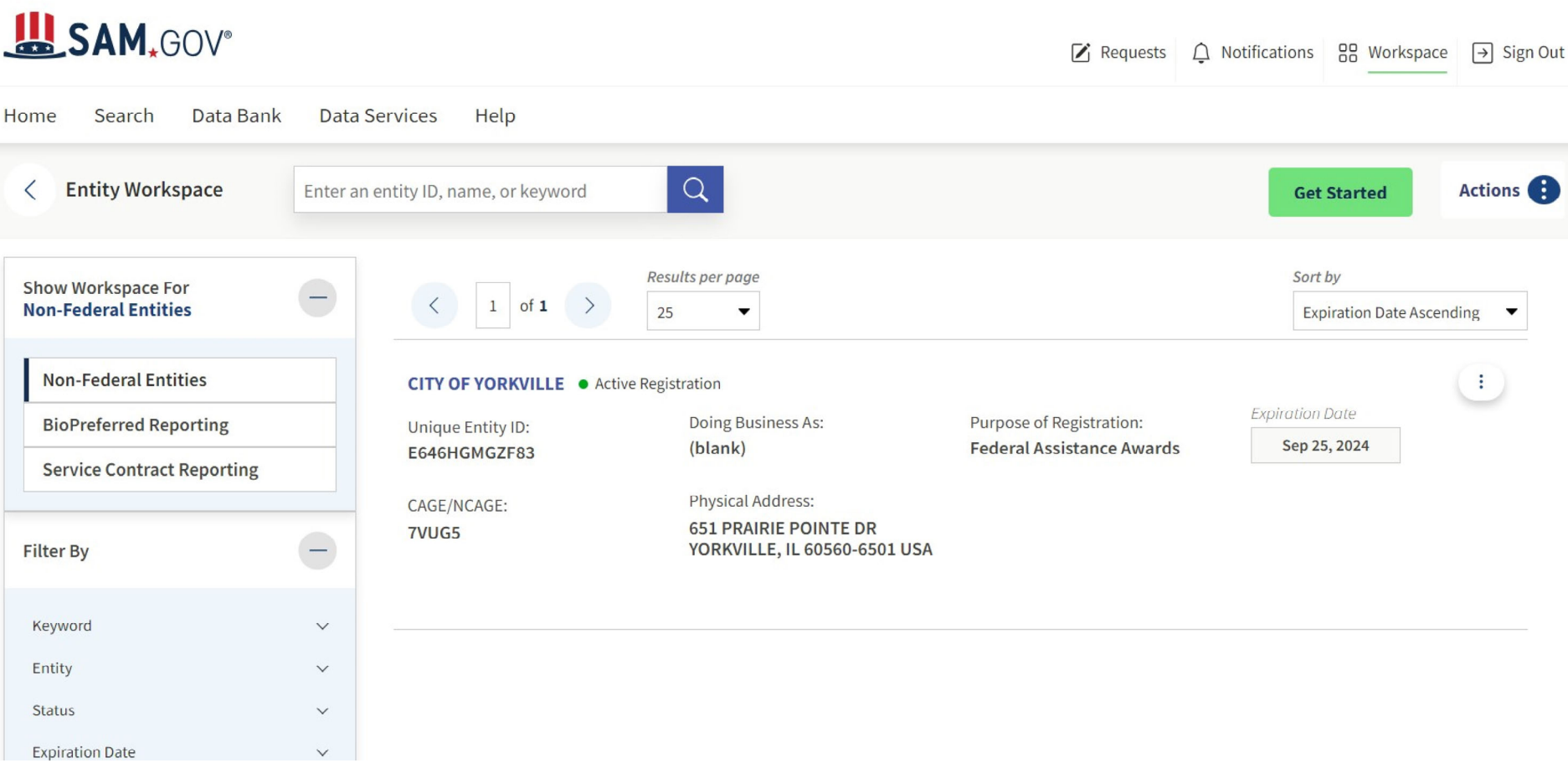
United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville SAM Screenshot

File Name:
A.10_Yorkville SAM Screenshot

Description:
"Screenshot of the System for Award Management showing the United City of Yorkville's registration number."

August 2024


SAM.GOV
Requests
Notifications
Workspace
Sign Out
Home
Search
Data Bank
Data Services
Help
Entity Workspace
Enter an entity ID, name, or keyword
Get Started
Actions
Show Workspace For
Non-Federal Entities
Non-Federal Entities
BioPreferred Reporting
Service Contract Reporting
Filter By
Keyword
Entity
Status
Expiration Date
1
of 1
Results per page
25
Sort by
Expiration Date Ascending
CITY OF YORKVILLE
Active Registration
Unique Entity ID:
E646HGMGZF83
Doing Business As:
(blank)
Purpose of Registration:
Federal Assistance Awards
Expiration Date
Sep 25, 2024
CAGE/NCAGE:
7VUG5
Physical Address:
651 PRAIRIE POINTE DR
YORKVILLE, IL 60560-6501 USA



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
WIFIA Authorization - Ordinance 2024-17

File Name:
B.1_WIFIA Authorization - Ordinance 2024-17

Description:
An ordinance authorizing the borrowing by the United City of Yorkville of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2024-17

AN ORDINANCE authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.

Adopted by the City Council on the
14th day of May, 2024

MINUTES of a regular public meeting of the City Council of the United City of Yorkville, Kendall County, Illinois, held in the City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, at 7 o'clock P.M., on the 14th day of May, 2024.

The Mayor called the meeting to order and directed the City Clerk to call the roll.

Upon the roll being called, John Purcell, the City Mayor, and the following Aldermen were physically present at said location: Koch, Transier, Plocher, Soling, Funkhouser, Marek, Tarulis, and Corneils.

The following Aldermen were allowed by a majority of the Aldermen of the City Council in accordance with and to the extent allowed by rules adopted by the City Council to attend the meeting by video or audio conference: None.

No Alderman was not permitted to attend the meeting by video or audio conference.

The following Aldermen were absent and did not participate in the meeting in any manner or to any extent whatsoever: None.

The Mayor announced that, in view of the need to provide funds for the enhancement of the City's water delivery system, the City Council would consider the adoption of an ordinance authorizing the borrowing of a loan payable solely from the revenue derived from the operation of the System or, in lieu thereof, payable from other revenue sources pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, and directing the publication of a notice setting forth the determination of the City Council to borrow such funds.

Whereupon Mayor Purcell presented and read by title an Ordinance as follows, a copy of which was provided to each Alderman prior to said meeting and to everyone in attendance at said meeting who requested a copy:

ORDINANCE 2024-17

AN ORDINANCE authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.

* * * * *

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the *"City"*), is a duly organized and existing municipality incorporated and existing under the provisions of the laws of the State of Illinois, and is now operating under the provisions of Illinois Municipal Code, as amended (the "*Code*"), and all laws amendatory thereof and supplementary thereto, including without limitation the Local Government Debt Reform Act of the State of Illinois, as amended (the *"Debt Reform Act"*); and

WHEREAS, the City has owned and operated a municipally-owned water supply system (the "*System*") under and pursuant to the provisions of Division 129 of Article 11 of the Code; and

WHEREAS, the Mayor and the City Council of the City (the "*City Council*") have determined that it is advisable, necessary and in the best interests of the public health, safety, welfare and convenience of the City to enhance the System by replacing existing water mains, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System, and by constructing a new water supply line and connection to the DuPage Water Commission for a new source of water (collectively, the "*Project*"), all in accordance with the preliminary plans and estimates of costs therefor heretofore presented to the City Council and

WHEREAS, the estimated costs of the Project, including, without limitation, legal, financial and other related banking fees and other expenses, does not exceed $160,000,000, but the City does not currently have sufficient funds on hand and lawfully available to pay such costs; and

WHEREAS, pursuant to Article 8 and Article 11 of the Code, the City is authorized to issue its water revenue bonds payable solely from the revenue derived from the operation of the System to pay the costs of the Project, subject to right of backdoor petition for referendum; and

WHEREAS, pursuant to the provisions of Section 15 of the Debt Reform Act, whenever the City has been authorized under applicable law (as defined in the Debt Reform Act) to issue revenue bonds under the Code, the City may issue its general obligation alternate bonds (as defined in the Debt Reform Act) in lieu of such revenue bonds; and

WHEREAS, the Debt Reform Act defines a bond as any instrument evidencing the obligation to pay money authorized or issued by or on behalf of a governmental unit under applicable law, including without limitation, bonds, notes, installment or financing contracts, leases, certificates, tax anticipation warrants or notes, vouchers, and any other evidences of indebtedness; and

WHEREAS, the City has applied to the United States Environmental Protection Agency (the "*EPA*") for a Water Infrastructure Finance and Innovation Act loan (the "*WIFIA Loan*") to finance the costs of the Project; and

WHEREAS, it is necessary and for the best interests of the City that the Project be undertaken, and, in order to finance the cost thereof, it will be necessary for the City to borrow from the EPA the WIFIA Loan in an aggregate amount not to exceed $160,000,000 and (a) payable from the revenue derived from the operation of the System (a "*Revenue-Backed WIFIA Loan*"), or (b) in lieu thereof, payable from (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited

into the City's Water Fund (the "*Water Fund*"), and (iii) certain moneys on deposit from time to time in the funds and accounts held within the Water Fund (collectively, the "*Pledged Revenues*"), as authorized to be borrowed at this time pursuant to the Debt Reform Act (an "*Alternate Revenue WIFIA Loan*"); and

WHEREAS, as provided in the Debt Reform Act, if the Pledged Revenues are insufficient to pay the principal and interest on the Alternate Revenue WIFIA Loan, ad valorem property taxes levied upon all taxable property in the City without limitation as to rate or amount are authorized to be extended and collected to pay the principal of and interest on the Alternate Revenue WIFIA Loan; and

WHEREAS, the costs of the Project are expected to be paid for from the proceeds of the Alternate Revenue WIFIA Loan which is authorized to be borrowed as an alternate bond pursuant to the Debt Reform Act, subject to the right of backdoor petition for referendum; and

WHEREAS, pursuant to and in accordance with the provisions of Section 15 of the Debt Reform Act, and in lieu of the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan, the City is authorized to borrow the WIFIA Loan as an Alternate Revenue WIFIA Loan in an aggregate principal amount not to exceed $160,000,000 for the purpose of providing funds to pay the costs of the Project; and

WHEREAS, before the City can borrow the Revenue-Backed WIFIA Loan or, in lieu thereof, the Alternate Revenue WIFIA Loan for said purpose, Division 129 of Article 11 of the Code and Section 15 of the Debt Reform Act require that the City Council must first adopt an Ordinance authorizing the borrowing of the Revenue-Backed WIFIA Loan or, in lieu thereof, the Alternate Revenue WIFIA Loan for said purpose and directing that notice of such authorization be published as provided by law.

NOW, THEREFORE, Be It and It Is Hereby Ordained by the City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. **Incorporation of Preambles**. The City Council hereby finds that all of the recitals contained in the preambles to this Ordinance are full, true and correct and does incorporate them into this Ordinance by this reference.

Section 2. **Determination to Borrow the WIFIA Loan**. It is necessary and in the best interests of the public health, safety, welfare and convenience of the City to undertake the Project in accordance with the estimate of costs as hereinabove described, and that for such purpose the WIFIA Loan is hereby authorized to be borrowed from the EPA as a Revenue-Backed WIFIA Loan in an aggregate principal amount not to exceed $160,000,000 or, in lieu thereof, as an Alternate Revenue WIFIA Loan in an aggregate principal amount not to exceed $160,000,000. The borrowing of the Revenue-Backed WIFIA Loan or, in lieu thereof, the Alternate Revenue WIFIA Loan shall be subject to the right of backdoor petition for referendum as set forth herein and the adoption of an ordinance setting forth the terms for the borrowing thereof.

Section 3. **Publication**. This Ordinance, together with a notice in the statutory form as set forth herein in Section 4 (the "*Notice*"), shall be published at least once within ten (10) days after passage hereof by the City Council in the *Beacon-News,* the same being a newspaper of general circulation in the City, and if no petition, signed by not less than 1,572 registered voters of the City (being the number of registered voters equal to ten percent (10%) of the registered voters of the City), asking that the question of the Project, as provided in this Ordinance, and the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan therefor be submitted to the electors of this City is filed with the City Clerk within thirty (30) days after the date of the publication of this Ordinance and the Notice, then the City shall be authorized to borrow the WIFIA Loan as a Revenue-Backed WIFIA Loan. If such petition is filed with the City Clerk within

thirty (30) days after the date of publication of this Ordinance and the Notice, an election on the proposition to borrow the WIFIA Loan as a Revenue-Backed WIFIA Loan shall be held on the 5th day of November, 2024 (being the next election held in accordance with the general election law of the State of Illinois). The City Clerk shall make a petition form available to anyone requesting one.

If no petition, signed by not less than 1,179 registered voters of the City (being the number of registered voters equal to the greater of (a) seven and one-half percent (7.5%) of the registered voters of the City, or (b) the lesser of (i) fifteen percent (15%) of the registered voters of the City, or (ii) 200 registered voters), asking that the borrowing of the WIFIA Loan as an Alternate Revenue WIFIA Loan be submitted to referendum, is filed with the City Clerk within thirty (30) days after the date of the publication of this Ordinance and the Notice, then the City shall be authorized to borrow the WIFIA Loan as an Alternate Revenue WIFIA Loan. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this Ordinance and the Notice, an election on the proposition to borrow the WIFIA Loan as an Alternate Revenue WIFIA Loan shall be held on the 5th day of November, 2024 (being the next election held in accordance with the general election law of the State of Illinois). The City Clerk shall make a petition form available to anyone requesting one.

It is expressly provided that in the event there shall be filed with the City Clerk in a timely manner a petition, asking that the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan be submitted to a referendum, the WIFIA Loan shall not be authorized to be borrowed as an Alternate Revenue WIFIA Loan until such time as the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan shall have been submitted to the electors of the City and a majority of votes cast on such question shall have been in favor thereof.

Section 4. **Form of Notice**. The notice of the intention to borrow the WIFIA Loan as a Revenue-Backed WIFIA Loan or, in lieu thereof, as an Alternate Revenue WIFIA Loan shall be in substantially the following form:

NOTICE OF INTENT OF
THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS
TO BORROW A WIFIA LOAN AS A $160,000,000 REVENUE-BACKED WIFIA LOAN
OR, IN LIEU THEREOF, AS AN $160,000,000 ALTERNATE REVENUE WIFIA LOAN
AND RIGHT TO FILE PETITION

PUBLIC NOTICE is hereby given that pursuant to an Ordinance (the "*Ordinance*") adopted on the 14th day of May, 2024 by the City Council (the *"City Council"*) of the United City of Yorkville, Kendall County, Illinois (the *"City"*), the City intends to borrow a Water Infrastructure Finance and Innovation Act loan (a "*WIFIA Loan*") from the United States Environmental Protection Agency, payable solely from the revenue derived from the operation of the City's water delivery system (the "*System*"), in an aggregate amount of not to exceed $160,000,000 and bearing interest per annum at a rate not to exceed the maximum rate authorized by law at the time such WIFIA Loan is borrowed (a "*Revenue-Backed WIFIA Loan*") or, in lieu thereof, a general obligation alternate revenue WIFIA Loan in an aggregate amount of not to exceed $160,000,000 (the "*Alternate Revenue WIFIA Loan*"), for the purpose of providing funds for the enhancement of the City's water delivery system, including, without limitation, replacing existing water mains, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System, and for the construction of a new water supply line and connection to the DuPage Water Commission for a new source of water.

The revenue sources for the payment of an Alternate Revenue WIFIA Loan will be (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the City's Water Fund. If these revenue sources are insufficient to pay an Alternate Revenue WIFIA Loan, the City will also levy ad valorem property taxes upon all taxable property in the City without limitation as to rate or amount to pay the principal of and interest on such Alternate Revenue WIFIA Loan. This notice is incorporated into the Ordinance.

Notice is hereby further given that a petition may be filed with the City Clerk (the *"City Clerk"*) within thirty (30) days after the date of publication of the Ordinance and this notice, signed by not less than 1,572 registered voters of the City (being the number of registered voters equal to ten percent (10%) of the registered voters of the City) asking that the question of the Project, as provided in the Ordinance, and the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan be submitted to the voters of the City. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this notice, an election on the proposition to borrow the WIFIA Loan as a Revenue-Backed WIFIA Loan shall be held on the 5th day of November, 2024. Forms of petitions for such purposes are available to any individual requesting one from the office of the City Clerk.

The Circuit Court may declare that an emergency referendum should be held prior to said election date pursuant to the provisions of Section 2A-1.4 of the Election Code of the State of Illinois, as amended. If no such petition is filed within said thirty (30) day period, then the City shall thereafter be authorized to borrow the WIFIA Loan as a Revenue-Backed WIFIA Loan for the purpose hereinabove provided.

Notice is further hereby further given that a petition may be filed with the City Clerk within thirty (30) days after the date of publication of the Ordinance and this notice, signed by not less

than 1,179 registered voters of the City (being the number of registered voters equal to the greater of (a) seven and one-half percent (7.5%) of the registered voters of the City, or (b) the lesser of (i) fifteen percent (15%) of the registered voters of the City, or (ii) 200 registered voters) asking that the borrowing of the WIFIA Loan as an Alternate Revenue WIFIA Loan be submitted to the voters of the City. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this notice, an election on the proposition to borrow the WIFIA Loan as an Alternate Revenue WIFIA Loan shall be held on the 5th day of November, 2024. Forms of petitions for such purposes are available to any individual requesting one from the office of the City Clerk.

The Circuit Court may declare that an emergency referendum should be held prior to said election date pursuant to the provisions of Section 2A-1.4 of the Election Code of the State of Illinois, as amended. If no such petition is filed within said thirty (30) day period, then the City shall thereafter be authorized to borrow the WIFIA Loan as an Alternate Revenue WIFIA Loan for the purpose hereinabove provided.

By order of the City Council of the United City of Yorkville, Kendall County, Illinois.

DATED this 14th day of May, 2024.

Jori Behland
City Clerk
United City of Yorkville, Kendall County,
Illinois

Note to Publisher: Please be certain that this notice appears over the name of the City Clerk.

Section 5. **Additional Ordinances**. If no petition with respect to the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan or, in lieu thereof, as an Alternate Revenue WIFIA Loan and meeting the requirements of applicable law is filed during the petition period hereinabove referred to, then the City Council may adopt additional ordinances or proceedings supplementing or amending this Ordinance providing for the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan or, in lieu thereof, as an Alternate Revenue WIFIA Loan and prescribing all the details of the Revenue-Backed WIFIA Loan or, in lieu thereof, the Alternate Revenue WIFIA Loan, so long as the maximum amount of the Revenue-Backed WIFIA Loan or, in lieu thereof, the Alternate Revenue WIFIA Loan as set forth in this Ordinance is not exceeded and there is no material change in the Project described herein. Such additional ordinances or proceedings shall in all instances become effective immediately without publication or posting or any further act or requirement. This Ordinance, together with such additional ordinances or proceedings, shall constitute complete authority for the borrowing of the WIFIA Loan as a Revenue-Backed WIFIA Loan or, in lieu thereof, as an Alternate Revenue WIFIA Loan under applicable law.

Section 6. **Severability**. If any section, paragraph, clause or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance.

(This space is intentionally blank)

Section 7. **Repealer and Effective Date**. All Ordinances and parts of Ordinances in conflict herewith be and the same are hereby repealed and that this Ordinance be in full force and effect forthwith upon its adoption.

ADOPTED by the City Council on the 14th day of May, 2024, pursuant to a roll call vote as follows:

DANIEL V. TRANSIER	AYE	KEN KOCH	AYE
MATT MAREK	AYE	ARDEN JOE PLOCHER	AYE
CHRIS FUNKHOUSER	AYE	SEAVER TARULIS	AYE
CRAIG SOLING	AYE	RUSTY CORNEILS	AYE

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, the 14th day of May, 2024.

MAYOR

PASSED by the City Council of the United City of Yorkville, Kendall County, Illinois, the 14th day of May, 2024.

CITY CLERK

Alderman Tarulis moved and Alderman Corneils seconded the motion that said Ordinance as presented and read by title be adopted.

After a full and complete discussion thereof, the Mayor directed the City Clerk to call the roll for a vote upon the motion to adopt said Ordinance.

Upon the roll being called, the following Aldermen voted AYE: Plocher, Funkhouser, Tarulis, Transier, Soling, Marek, Corneils, and Koch.

The following Aldermen voted NAY: None.

Whereupon the Mayor declared the motion carried and said Ordinance adopted, and in open meeting approved and signed said Ordinance and directed the City Clerk to record the same in full in the records of the City Council of the United City of Yorkville, Kendall County, Illinois, which was done.

Other business not pertinent to the adoption of said Ordinance was duly transacted at said meeting.

Upon motion duly made, seconded and carried, the meeting was adjourned.

City Clerk

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

CERTIFICATION OF MINUTES AND ORDINANCE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and that as such official I am the keeper of the records and files of the City and of the City Council thereof (the *"City Council"*).

I do further certify that the foregoing constitutes a full, true and complete transcript of the minutes of the meeting of the City Council held on the 14th day of May, 2024, insofar as same relates to the adoption of Ordinance No. 2024-17 entitled:

> AN ORDINANCE authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system,

a true, correct and complete copy of which said Ordinance as adopted at said meeting appears in the foregoing transcript of the minutes of said meeting.

I do further certify that the deliberations of the City Council on the adoption of said Ordinance were conducted openly, that the vote on the adoption of said Ordinance was taken openly, that said meeting was held at a specified time and place convenient to the public, that notice of said meeting was duly given to all of the news media requesting such notice, that an agenda for said meeting was posted at the location where said meeting was held and at the principal office of the City Council at least 96 hours in advance of the holding of said meeting and on a day that was not a Saturday, Sunday or legal holiday in the State of Illinois, that a true, correct and complete copy of said agenda as so posted is attached hereto as *Exhibit A,* that said meeting was called and held in strict compliance with the provisions of the Public Code of the State of Illinois, as amended, the Open Meetings Act of the State of Illinois, as amended, and the Local Government Debt Reform Act of the State of Illinois, as amended, and that the City Council has complied with all of the provisions of said Acts and with all of the procedural rules of the City Council in the conduct of said meeting and in the adoption of said Ordinance.

IN WITNESS WHEREOF, I hereunto affix my official signature, this 14th day of May, 2024.

(SEAL)

City Clerk, United City of Yorkville, Kendall County, Illinois

[Attach Agenda as Exhibit A]

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

PETITION –REVENUE-BACKED WIFIA LOAN

We, the undersigned, do hereby certify that we are registered voters of United City of Yorkville, Kendall County, Illinois, and as such voters, we do hereby petition you to cause that the following question be submitted to the voters of said City: "Shall the City Council of United City of Yorkville, Kendall County, Illinois, be authorized to borrow a Water Infrastructure Finance and Innovation Act loan ("*WIFIA Loan*") from the United States Environmental Protection Agency in an aggregate amount not to exceed $160,000,000 to provide funds for the enhancement of the City's water delivery system, including, without limitation, replacing existing water mains, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System, and for the construction of a new water supply line and connection to the DuPage Water Commission for a new source of water, as provided for by the Ordinance adopted by the City Council of said City on the 14th day of May, 2024, with the revenue sources to be used to pay the principal of and interest on said WIFIA Loan to be the revenues of the City's water delivery system?"; and we do hereby further request that the City Clerk certify said proposition to the County Clerk of The County of Kendall, Illinois, for submission to said City voters at the election to be held on the 5th day of November, 2024:

SIGNATURE	STREET ADDRESS OR RURAL ROUTE NUMBER	CITY, CITY OR TOWN	COUNTY
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois

The undersigned, being first duly sworn, deposes and certifies that he or she is at least 18 years of age, his or her residence address is _____ (Street Address), Yorkville, Kendall County, Illinois, that he or she is a citizen of the United States of America, that the signatures on the foregoing petition were signed in his or her presence and are genuine, that to the best of his or her knowledge and belief the persons so signing were at the time of signing said

petition registered voters of said City and that their respective residences are correctly stated therein.

_____

Signed and sworn to before me this
_____ day of _____, 2024.

_____
Illinois Notary Public

My commission expires _____

(NOTARY SEAL)

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

NO PETITION CERTIFICATE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and as such official I do further certify that pursuant to an Ordinance entitled:

> AN ORDINANCE authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system,

duly adopted by the City Council of the City (the *"City Council"*) on the 14th day of May, 2024, notice of authorization of the City to borrow a Revenue-Backed WIFIA Loan in an aggregate amount not to exceed $160,000,000 was published on the 17th day of May, 2024, in the *Beacon-News,* the same being a newspaper of general circulation in the City, and was not posted electronically on the City's World Wide Web pages.

I do further certify that no petition has ever been filed in my office as City Clerk or has ever been presented to me as such official requesting that the proposition to borrow said Revenue-Backed WIFIA Loan be submitted to the voters of the City, but that I provided a petition form regarding the same to every individual requesting one.

IN WITNESS WHEREOF, I hereunto affix my official signature, this Jon sign after 30 day wait 2024.

City Cl

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

PETITION – ALTERNATE REVENUE WIFIA LOAN

We, the undersigned, do hereby certify that we are registered voters of United City of Yorkville, Kendall County, Illinois, and as such voters, we do hereby petition you to cause that the following question be submitted to the voters of said City: "Shall the City Council of United City of Yorkville, Kendall County, Illinois, be authorized to borrow a Water Infrastructure Finance and Innovation Act loan ("*WIFIA Loan*") from the United States Environmental Protection Agency in an aggregate amount not to exceed $160,000,000 to provide funds for the enhancement of the City's water delivery system, including, without limitation, replacing existing water mains, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System, and for the construction of a new water supply line and connection to the DuPage Water Commission for a new source of water, as provided for by the Ordinance adopted by the City Council of said City on the 14th day of May, 2024, with the revenue sources to be used to pay the principal of and interest on said WIFIA Loan to be (i) the net revenues derived from the operation of the City's water delivery system, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the City's Water Fund, unless said revenue sources are insufficient to pay said WIFIA Loan, in which case ad valorem property taxes levied upon all taxable property in said City without limitation as to rate or amount are authorized to be extended for such purpose?"; and we do hereby further request that the City Clerk certify said proposition to the County Clerk of The County of Kendall, Illinois, for submission to said City voters at the election to be held on the 5th day of November, 2024:

SIGNATURE	STREET ADDRESS OR RURAL ROUTE NUMBER	CITY, CITY OR TOWN	COUNTY
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois

The undersigned, being first duly sworn, deposes and certifies that he or she is at least 18 years of age, his or her residence address is _____ (Street Address), Yorkville, Kendall County, Illinois, that he or she is a citizen of the United States of America, that the signatures on the foregoing petition were signed in his or her presence and are genuine, that to the best of his or her knowledge and belief the persons so signing were at the time of signing said petition registered voters of said City and that their respective residences are correctly stated therein.

_____

Signed and sworn to before me this
_____ day of _____, 2024.

_____
Illinois Notary Public

My commission expires _____

(NOTARY SEAL)

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

NO PETITION CERTIFICATE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and as such official I do further certify that pursuant to an Ordinance entitled:

> AN ORDINANCE authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system,

duly adopted by the City Council of the City (the *"City Council"*) on the 14th day of May, 2024, notice of authorization of the City to borrow an Alternate Revenue WIFIA Loan in an aggregate amount not to exceed $160,000,000 was published on the 17th day of May, 2024, in the *Beacon-News,* the same being a newspaper of general circulation in the City, and was not posted electronically on the City's World Wide Web pages.

I do further certify that no petition has ever been filed in my office as City Clerk or has ever been presented to me as such official requesting that the proposition to borrow said Alternate Revenue WIFIA Loan be submitted to the voters of the City, but that I provided a petition form regarding the same to every individual requesting one.

IN WITNESS WHEREOF, I hereunto affix my official signature, this ___ Jon Sign after 30 day wait.
2024.

_____
City

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

AGENDA
CITY COUNCIL MEETING
Tuesday, May 14, 2024
7:00 p.m.
City Hall Council Chambers
651 Prairie Pointe Drive, Yorkville, IL

Call to Order:

Pledge of Allegiance:

Roll Call by Clerk:

WARD I	WARD II	WARD III	WARD IV
Ken Koch	Arden Joe Plocher	Chris Funkhouser	Seaver Tarulis
Dan Transier	Craig Soling	Matt Marek	Rusty Corneils

Establishment of Quorum:

Amendments to Agenda:

Presentations:

Public Hearings:

1. Kelaka, LLC – Annexation
2. Hagemann – Annexation
3. Blackberry Oaks – Annexation

Citizen Comments on Agenda Items:

Consent Agenda:

1. Minutes of the Regular City Council – April 23, 2024
2. Bill Payments for Approval
   - $ 691,670.11 (vendors – FY 24)
   - $ 172,644.62 (vendors – FY 25)
   - $ 159,263.43 (wire payments)
   - $ 375,552.13 (payroll period ending 04/26/24)
   - $ 1,399,130.29 (total)

Mayor's Report:

1. CC 2024-34 Resolution Authorizing the Execution of an Intergovernmental Agreement Providing for the Sharing of Costs and Funding for the Construction of Facilities to Transport Lake Michigan Water to the Village of Oswego, Kendall and Will Counties, Illinois, The United City of Yorkville, Kendall County, Illinois, and the Village of Montgomery, Kane and Kendall Counties, Illinois

Mayor's Report (cont'd):

2. CC 2024-35 Ordinance Amending Title 3, Chapter 3 of the Code of Ordinances Creating a New Liquor License Class and Fee (Water Parks)
3. CC 2024-36 Resolution Approving an Agreement for Land Acquisition Consulting Services with Mathewson Right of Way Company
4. CC 2024-37 Ordinance Approving a Lease Agreement for Certain Real Estate in the United City of Yorkville, Kendall County, Illinois (We are Called to Care)
5. CC 2024-38 Resolution Authorizing Participation in Progressive Energy Group (PEG) and Authorizing the Finance Director to Approve a Contract With the Lowest Cost Electricity Provider by Rate Classification for a Period Up To 48 Months
6. CC 2024-39 2024 Bond – Municipal Advisor and Bond Council Engagement Letters
7. CC 2024-40 Ordinance authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $25,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.
8. CC 2024-41 Ordinance authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.
9. CC 2024-42 Ordinance authorizing the issuance of general obligation alternate revenue bonds of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $40,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of the acquisition of one or more parcels of real property and the construction of a new public works facility on any portion thereof.
10. CC 2024-43 Ordinance Authorizing the Acquisition of Certain Easements for the Construction of Water Mains

Public Works Committee Report:

Economic Development Committee Report:

1. EDC 2024-30 East Village of Westbury
    a. Ordinance Repealing a Planned Unit Development Agreement for the East Village of Westbury
    b. Ordinance Approving a Memorandum of Understanding Regarding the East Village of Westbury

Public Safety Committee Report:

Administration Committee Report:

Park Board:

Planning and Zoning Commission:

1. PZC 2024-05 & EDC 2024-19 Corneils Solar Farm
    a. Ordinance Annexing Certain Territory Generally Located Immediately North of Corneils Road, East of Beecher Road, and West of IL State Route 47 (Corneils Road Solar, LLC – Solar Farm)
    b. Ordinance Approving a Special Use for a Solar Farm with Freestanding Solar Energy Systems (Corneils Road Solar)
    c. Ordinance Approving the Rezoning to the A-1 Agricultural Zoning District of Certain Territory Generally Located Immediately North of Corneils Road, East of Beecher Road, and West of IL State Route 47 (Corneils Road Solar, LLC –Solar Farm)
2. PZC 2024-09 & EDC 2024-32 Kendall County Petition 24-04 – 1.5 Mile Review (1520 Cannonball Trail)
3. PZC 2024-10 & EDC 2024-33 Kendall County Petition 24-05 – 1.5 Mile Review (7709 and 7731 Bentgrass Circle – Lots 223 and 224 of Whitetail Ridge)
4. PZC 2024-11 & EDC 2024-34 Kendall County Petition 24-06 – 1.5 Mile Review (7789 Route 47)
5. PZC 2024-13 Ordinance Approving an Amendment to the Yorkville Unified Development Ordinance Regarding Park and Recreation and School Site Dedication (Land Cash)

City Council Report:

City Clerk's Report:

Community and Liaison Report:

Staff Report:

Mayor's Report (cont'd):

11. CC 2021-04 City Buildings Updates
12. CC 2021-38 Water Study Update

Additional Business:

Citizen Comments:

Executive Session:

Adjournment:

COMMITTEES, MEMBERS AND RESPONSIBILITIES

ADMINISTRATION: May 15, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Marek	Finance	Library
Vice-Chairman:	Alderman Plocher	Administration	
Committee:	Alderman Koch		
Committee:	Alderman Corneils		

ECONOMIC DEVELOPMENT: June 4, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Plocher	Community Development	Planning & Zoning Commission
Vice-Chairman:	Alderman Funkhouser	Building Safety & Zoning	Kendall Co. Plan Commission
Committee:	Alderman Transier		
Committee:	Alderman Tarulis		

PUBLIC SAFETY: July 11, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Transier	Police	School District
Vice-Chairman:	Alderman Tarulis		
Committee:	Alderman Soling		
Committee:	Alderman Funkhouser		

PUBLIC WORKS: May 21, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Koch	Public Works	Park Board
Vice-Chairman:	Alderman Soling	Engineering	YBSD
Committee:	Alderman Marek	Parks and Recreation	
Committee:	Alderman Corneils		



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Average Water Bill Breakdown

File Name:
B.4_Yorkville Average Water Bill Breakdown

Description:
Average Bi-Monthly Residential Water Bill for the United City of Yorkville.

August 2024

Residential Water Bills

Bi-Monthly Residential Water Bill - FY 2025 Rates

	Residential Bill at 1,470 cubic feet (CF) *1*
Usage 0-350 CF	350
Rate per CF	$0.00
Volume Charge 0-350 CF	$0.00
Usage over 350 CF	1,120
Rate per CF over 350 CF	$0.058
Volume Charge over 350 CF	$64.96
Total Volumetric Charge	$64.96
Base Charge	$33.00
Water Infrastructure Fee	$16.50
Total Bill	$114.46

	Residential Bill at 1,470 CF	Total Bill/CF 2
FY 2024	$94.26	$0.06
FY 2025	$114.46	$0.08
FY 2026	$134.05	$0.09
FY 2027	$151.64	$0.10
FY 2028	$178.67	$0.12
FY 2029	$211.10	$0.14
FY 2030	$211.10	$0.14
FY 2031	$211.10	$0.14
FY 2032	$211.10	$0.14
FY 2033	$242.37	$0.16
FY 2035	$254.49	$0.17
FY 2040	$298.88	$0.20
FY 2045	$321.63	$0.22
FY 2050	$346.12	$0.24
FY 2055	$376.08	$0.26
FY 2060	$399.82	$0.27

1. 1,470 CF is average use for a residential user

2. Price paid per CF used, includes base charge and infrastructure fee



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
2023 Yorkville Capital Projects Fund Annual Budget

File Name:
B.5a_2023 Yorkville Capital Projects Fund Annual Budget

Description:
2023 Citywide Capital - Capital Projects Fund Schedule of Revenues, Expenditures and Changes in Fund Balance.

August 2024

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental			
Grants	$ 1,174,620	1,174,620	29,777
Licenses, Permits and Fees			
Building Permits	-	-	276,710
Development Fees	2,500	2,500	14,396
Road Contribution Fee	50,000	50,000	174,000
Charges for Services			
Road Infrastructure Fee	846,600	846,600	880,006
Investment Income	150	150	36,964
Miscellaneous	1,117,000	1,117,000	1,014,482
Total Revenues	3,190,870	3,190,870	2,426,335
Expenditures			
Public Works	249,827	249,827	152,882
Capital Outlay	4,918,224	4,918,224	2,132,206
Debt Service			
Principal Retirement	210,000	210,000	210,000
Interest and Fiscal Charges	109,813	109,813	109,813
Total Expenditures	5,487,864	5,487,864	2,604,901
Excess (Deficiency) of Revenues Over (Under) Expenditures	(2,296,994)	(2,296,994)	(178,566)
Other Financing Sources (Uses)			
Transfers In	804,352	804,352	2,902,227
Transfers Out	(104,209)	(104,209)	(104,209)
	700,143	700,143	2,798,018
Net Change in Fund Balance	(1,596,851)	(1,596,851)	2,619,452
Fund Balance - Beginning			2,165,601
Fund Balance - Ending			4,785,053

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Works			
Street Lighting and Signs	$ 131,827	131,827	77,042
Sidewalk and Street Lighting Supplies	55,000	55,000	51,583
Professional Services	10,000	10,000	-
Engineering Services	17,000	17,000	14,054
Asphalt Patching	35,000	35,000	9,715
Bad Debt	1,000	1,000	488
Total Public Works	249,827	249,827	152,882
Capital Outlay			
Fox Hill Improvements	75,000	75,000	135,732
Mill Road Improvement	200,000	200,000	448,532
US 34 (Center/Eldamain Road) Project	106,576	106,576	-
Road To Better Roads Program	1,435,000	1,435,000	650,514
Bristol Bridge Road	635,300	635,300	128,958
Shared Use Path Maintenance	140,000	140,000	-
Raintree Village Improvements	190,000	190,000	4,377
Parking Lot Maintenance	151,000	151,000	1,024
Sidewalk Replacement Program	200,000	200,000	171,753
RT 71 (RT47/Orchard Road) Project	25,253	25,253	-
US 34 (IL 47/Orchard Road) Project	84,903	84,903	-
Baseline Road Improvements	35,000	35,000	36,900
Rebuild Illinois Project	330,192	330,192	-
Corneils Road Improvements	145,000	145,000	-
Kennedy Road (Freedom Place)	100,000	100,000	101,671
Kennedy Road (North)	450,000	450,000	420,836
Van Emmon LAFO Project	583,000	583,000	-
Kennedy Road Bike Trail	32,000	32,000	31,909
Total Capital Outlay	4,918,224	4,918,224	2,132,206

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Debt Service			
Principal Retirement	$ 210,000	210,000	210,000
Interest and Fiscal Charges	109,813	109,813	109,813
Total Debt Service	319,813	319,813	319,813
Total Expenditures	5,487,864	5,487,864	2,604,901

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Development Fees	$ 30,000	30,000	168,005
Charges for Services			
Buildings and Grounds Chargeback	199,586	199,586	199,586
Investment Income	1,200	1,200	47,977
Miscellaneous	-	-	55,863
Total Revenues	230,786	230,786	471,431
Expenditures			
Public Works	368,158	368,158	367,622
Capital Outlay	9,700,000	9,700,000	8,238,317
Debt Service			
Principal Retirement	570,000	570,000	570,000
Interest and Fiscal Charges	233,402	233,402	235,719
Total Expenditures	10,871,560	10,871,560	9,411,658
Excess (Deficiency) of Revenues Over (Under) Expenditures	(10,640,774)	(10,640,774)	(8,940,227)
Other Financing Sources			
Transfers In	776,443	776,443	803,877
Net Change in Fund Balance	(9,864,331)	(9,864,331)	(8,136,350)
Fund Balance - Beginning			10,002,257
Fund Balance - Ending			1,865,907

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Works			
Salaries and Wages	$ 54,720	54,720	60,247
Overtime	-	-	2,494
Retirement Plan Contribution	4,932	4,932	5,155
FICA Contribution	4,186	4,186	5,098
Group Health Insurance	1,800	1,800	1,950
Group Life Insurance	127	127	123
Dental Insurance	933	933	931
Vision Insurance	157	157	152
Vehicle and Equipment Chargeback	55,000	55,000	-
Computer Replacement Chargeback	1,401	1,401	-
Facility Management Services	68,362	68,362	61,914
Telecommunications	540	540	3,151
Property and Building Maintenance Services	150,000	150,000	175,711
Professional Services	-	-	36
Wearing Apparel	1,000	1,000	1,747
Property and Building Maintenance Supplies	25,000	25,000	48,913
Total Public Works	368,158	368,158	367,622
Capital Outlay			
City Hall Improvements	8,200,000	8,200,000	6,841,632
Public Works Facility	1,500,000	1,500,000	1,396,685
Total Capital Outlay	9,700,000	9,700,000	8,238,317
Debt Service			
Principal Retirement	570,000	570,000	570,000
Interest and Fiscal Charges	233,402	233,402	235,719
Total Debt Service	803,402	803,402	805,719
Total Expenditures	10,871,560	10,871,560	9,411,658



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
2022 Yorkville Capital Projects Fund Annual Budget

File Name:
B.5b_2022 Yorkville Capital Projects Fund Annual Budget

Description:
2022 Citywide Capital - Capital Projects Fund Schedule of Revenues, Expenditures and Changes in Fund Balance.

August 2024

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Building Permits	$ -	-	203,480
Development Fees	5,000	5,000	4,715
Road Contribution Fee	100,000	100,000	8,000
Charges for Services			
Road Infrastructure Fee	785,000	785,000	837,007
Interest Income	500	500	4,712
Miscellaneous	2,521,322	2,521,322	1,619,841
Total Revenues	3,411,822	3,411,822	2,677,755
Expenditures			
Public Works	301,214	301,214	285,078
Capital Outlay	4,438,876	4,438,876	2,679,942
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	115,813	115,813	115,813
Total Expenditures	5,055,903	5,055,903	3,280,833
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,644,081)	(1,644,081)	(603,078)
Other Financing Sources (Uses)			
Transfers In	2,396,250	2,396,250	3,138,492
Transfers Out	(489,382)	(489,382)	(489,382)
	1,906,868	1,906,868	2,649,110
Net Change in Fund Balance	262,787	262,787	2,046,032
Fund Balance - Beginning			119,569
Fund Balance - Ending			2,165,601

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Works			
Street Lighting and Signs	$ 125,214	125,214	114,101
Sidewalk and Street Lighting Supplies	52,500	52,500	44,475
Professional Services	13,500	13,500	-
Engineering Services	109,000	109,000	126,167
Bad Debt	1,000	1,000	335
Total General Government	301,214	301,214	285,078
Capital Outlay			
Asphalt Patching	35,000	35,000	5,264
Fox Hill Improvements	85,000	85,000	158
Mill Road Improvement	2,260,000	2,260,000	1,560,439
Blackberry Woods Subdivision	6,101	6,101	-
Road To Better Roads Program	1,148,725	1,148,725	812,945
Bristol Bridge Road	70,000	70,000	76,381
Sidewalk Replacement Program	300,000	300,000	159,960
RT 71 (RT47/Orchard Road) Project	82,050	82,050	-
US 34 (Center/Eldamain Road) Project	110,000	110,000	-
US 34 (IL 47/Orchard Road) Project	85,000	85,000	-
Raintree Village Improvements	165,000	165,000	6,355
Kennedy Road (North)	60,000	60,000	58,440
Kennedy Road Bike Trail	32,000	32,000	-
Total Capital Outlay	4,438,876	4,438,876	2,679,942
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	115,813	115,813	115,813
Total Debt Service	315,813	315,813	315,813
Total Expenditures	5,055,903	5,055,903	3,280,833

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Development Fees	$ 35,000	35,000	21,231
Charges for Services			
Buildings and Grounds Chargeback	147,738	147,738	108,431
Interest Income	3,000	3,000	1,172
Miscellaneous	2,000	2,000	576
Total Revenues	187,738	187,738	131,410
Expenditures			
Public Works	334,738	334,738	238,056
Capital Outlay	6,980,000	6,980,000	1,078,232
Debt Service			
Interest and Fiscal Charges	239,511	239,511	239,522
Total Expenditures	7,554,249	7,554,249	1,555,810
Excess (Deficiency) of Revenues Over (Under) Expenditures	(7,366,511)	(7,366,511)	(1,424,400)
Other Financing Sources (Uses)			
Debt Issuance	8,707,478	8,707,478	9,260,000
Premium on Debt Issuance	-	-	525,011
Transfers In	689,033	689,033	3,709,380
Transfers Out	(2,030,000)	(2,030,000)	(2,067,734)
	7,366,511	7,366,511	11,426,657
Net Change in Fund Balance	-	-	10,002,257
Fund Balance - Beginning			-
Fund Balance - Ending			10,002,257

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Works			
Salaries and Wages	$ 50,117	50,117	33,558
Retirement Plan Contribution	5,216	5,216	3,339
FICA Contribution	3,547	3,547	2,640
Group Health Insurance	21,690	21,690	900
Group Life Insurance	109	109	62
Dental Insurance	1,352	1,352	444
Vision Insurance	197	197	75
Computer Replacement Chargeback	-	-	1,191
Facility Management Services	65,510	65,510	62,592
Telecommunications	-	-	2,331
Property and Building Maintenance Services	160,000	160,000	116,890
Professional Services	-	-	45
Wearing Apparel	-	-	841
Hanging Baskets	2,000	2,000	412
Property and Building Maintenance Supplies	25,000	25,000	12,736
Total Public Works	334,738	334,738	238,056
Capital Outlay			
City Hall Improvements	6,980,000	6,980,000	1,078,232
Debt Service			
Interest and Fiscal Charges	239,511	239,511	239,522
Total Expenditures	7,554,249	7,554,249	1,555,810



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
2021 Yorkville Capital Projects Fund Annual Budget

File Name:
B.5c_2021 Yorkville Capital Projects Fund Annual Budget

Description:
2021 Citywide Capital - Capital Projects Fund Schedule of Revenues, Expenditures and Changes in Fund Balance.

August 2024

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Building Permits	$ -	-	240,594
Development Fees	41,000	41,000	134,274
Road Contribution Fee	100,000	100,000	112,000
Charges for Services			
Road Infrastructure Fee	780,000	780,000	787,642
Interest	1,098	1,098	72
Miscellaneous	153,572	153,572	173,690
Total Revenues	1,075,670	1,075,670	1,448,272
Expenditures			
General Government	347,489	2,388,489	2,437,260
Capital Outlay	819,950	819,950	363,537
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	121,813	121,813	121,813
Total Expenditures	1,489,252	3,530,252	3,122,610
Excess (Deficiency) of Revenues Over (Under) Expenditures	(413,582)	(2,454,582)	(1,674,338)
Other Financing Sources (Uses)			
Transfers In	260,000	306,000	1,442,336
Transfers Out	(138,895)	(138,895)	(236,584)
	121,105	167,105	1,205,752
Net Change in Fund Balance	(292,477)	(2,287,477)	(468,586)
Fund Balance - Beginning			588,155
Fund Balance - Ending			119,569

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government			
Property and Building Maintenance Services	$ 258,989	258,989	197,918
Property and Building Maintenance Supplies	72,000	118,000	82,825
Buildings and Structures	-	1,995,000	2,046,503
Professional Services	15,000	15,000	109,350
Bad Debt	1,500	1,500	664
Total General Government	347,489	2,388,489	2,437,260
Capital Outlay			
Asphalt Patching	35,000	35,000	5,612
Mill Road Improvement	-	-	41,252
Blackberry Woods Subdivision	10,973	10,973	4,767
Fountain Village Subdivision	38,599	38,599	1,175
Road To Better Roads Program	312,500	312,500	103,363
Sidewalk Construction	130,000	130,000	11,919
RT 71 (RT47/Orchard Road) Project	53,878	53,878	110,955
US 34 (Center/Eldamain Road) Project	110,000	110,000	-
US 34 (IL 47/Orchard Road) Project	27,000	27,000	-
Raintree Village Improvements	70,000	70,000	84,494
Kennedy Road Bike Trail	32,000	32,000	-
Total Capital Outlay	819,950	819,950	363,537
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	121,813	121,813	121,813
Total Debt Service	321,813	321,813	321,813
Total Expenditures	1,489,252	3,530,252	3,122,610



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
2020 Yorkville Capital Projects Fund Annual Budget

File Name:
B.5d_2020 Yorkville Capital Projects Fund Annual Budget

Description:
2020 Citywide Capital - Capital Projects Fund Schedule of Revenues, Expenditures and Changes in Fund Balance.

August 2024

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2020

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental			
Grants	$ -	-	38,000
Licenses, Permits and Fees			
Building Permits	-	-	2,530
Development Fees	52,180	52,180	38,386
Road Contribution Fee	100,000	100,000	114,000
Charges for Services			
Road Infrastructure Fee	746,500	746,500	775,218
Interest	7,500	7,500	61,060
Miscellaneous	3,015,849	3,015,849	49,998
Total Revenues	3,922,029	3,922,029	1,079,192
Expenditures			
General Government	417,570	667,570	459,791
Capital Outlay	3,656,089	3,656,089	441,677
Debt Service			
Principal Retirement	195,000	195,000	195,000
Interest and Fiscal Charges	127,663	127,663	127,663
Total Expenditures	4,396,322	4,646,322	1,224,131
Excess (Deficiency) of Revenues Over (Under) Expenditures	(474,293)	(724,293)	(144,939)
Other Financing Sources (Uses)			
Transfers In	-	250,000	240,663
Transfers Out	(152,086)	(152,086)	(136,998)
	(152,086)	97,914	103,665
Net Change in Fund Balance	(626,379)	(626,379)	(41,274)
Fund Balance - Beginning			629,429
Fund Balance - Ending			588,155

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2020

	Budget		
	Original	Final	Actual
General Government			
Property and Building Maintenance Services	$ 342,820	342,820	207,025
Property and Building Maintenance Supplies	27,000	27,000	11,341
Buildings and Structures	41,250	291,250	240,663
Professional Services	5,000	5,000	-
Bad Debt	1,500	1,500	762
Total General Government	417,570	667,570	459,791
Capital Outlay			
Asphalt Patching	35,000	35,000	16,235
Mill Road Improvement	3,105,000	3,105,000	186,548
Blackberry Woods Subdivision	7,549	7,549	7,050
Pavilion Road	137,500	137,500	-
Fountain Village Subdivision	-	-	9,440
Road To Better Roads Program	80,000	80,000	99,289
Whispering Meadows Subdivision	22,500	22,500	2,828
Sidewalk Construction	5,000	5,000	2,712
RT 71 (RT47/Orchard Road) Project	30,333	30,333	-
US 34 (Center/Eldamain Road) Project	110,226	110,226	96,568
US 34 (IL 47/Orchard Road) Project	90,981	90,981	18,842
Raintree Village Improvements	-	-	2,165
Kennedy Road Bike Trail	32,000	32,000	-
Total Capital Outlay	3,656,089	3,656,089	441,677
Debt Service			
Principal Retirement	195,000	195,000	195,000
Interest and Fiscal Charges	127,663	127,663	127,663
Total Debt Service	322,663	322,663	322,663
Total Expenditures	4,396,322	4,646,322	1,224,131



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Combined Capital Improvement Program
FY25-29

File Name:
B.5e_Yorkville Combined Capital Improvement Program FY25-29

Description:
United City of Yorkville Capital Improvement Program FY2025-2029 Project Cost Summary

August 2024

UNITED CITY OF YORKVILLE
CAPITAL IMPROVEMENT PROGRAM FY2025-2029
PROJECT COST SUMMARY

PROJECT FUNDING

Project Code	Project Title	FY25	FY26	FY27	FY28	FY29	Future Years	Total Cost	Funded		Unfunded
									City	Grants / Developer	
WM01	Water Rate Study	100,000	-	-	-	-	-	100,000	100,000	-	-
WM02	Well No. 10, Raw Water Main and Water Treatment Plant Modifications	6,197,000	748,000	-	-	-	-	6,945,000	6,945,000	-	-
WM03	Well No. 7 Electrical	560,000	-	-	-	-	-	560,000	560,000	-	-
WM04	North Central EWST Re-Paint	20,000	-	-	-	-	-	20,000	20,000	-	-
WM05	South Central EWST Rehabilitation	-	-	-	-	-	350,000	350,000	350,000	-	-
WM06	2023 Water Main Replacement	115,000	-	-	-	-	-	115,000	115,000	-	-
WM07A	2024 Water Main Replacement - Contract A	2,367,000	-	-	-	-	-	2,367,000	2,367,000	-	-
WM07B	2024 Water Main Replacement - Contract B	3,012,000	-	-	-	-	-	3,012,000	3,012,000		
WM08	W. Center and YBSD Water Main	550,000	-	-	-	-	-	550,000	550,000	-	-
WM09	2025 Water Main Replacement	320,000	3,916,000	-	-	-	-	4,236,000	4,236,000	-	-
WM10	2026 Water Main Replacement	80,000	170,000	3,078,000	-	-	-	3,328,000	3,328,000	-	-
WM11	2027 Water Main Replacement	-	90,000	190,000	3,411,000	-	-	3,691,000	3,691,000	-	-
WM12	2028 Water Main Replacement	-	-	50,000	105,000	1,872,000	-	2,027,000	2,027,000	-	-
WM13	Rt 34 Water Main Improvements (East)	23,000	-	-	-	-	-	23,000	23,000	-	-
WM14	Rt 71 Water Main Replacement - Phase 1 (East)	13,000	-	-	-	-	-	13,000	13,000	-	-
WM15	Rt 47 Water Main Replacement - Water Park Way to Jericho	1,090,000	-	-	-	-	-	1,090,000	1,090,000	-	-
WM16	Rt 47 Water Main Replacement - Kennedy to Water Park Way	931,000	-	-	-	-	-	931,000	931,000	-	-
WM17	Rt 47 and 71 Water Main Replacement (Rt 71 - Caton Farm)	308,000	3,273,000	-	-	-	-	3,581,000	3,581,000	-	-
WM18	WTP No. 4 Cation Exchange Media Replacement	-	-	-	-	-	225,000	225,000	225,000	-	-
WM19	WTP No. 7 Cation Exchange Media Replacement	-	-	-	-	-	195,000	195,000	195,000	-	-
WM20	Eldamain Water Main Loop	9,295,000	-	-	-	-	-	9,295,000	9,295,000	-	-
	Sub-Total Water	24,981,000	8,197,000	3,318,000	3,516,000	1,872,000	770,000	42,654,000	42,654,000	-	-
WW01	SSES Rehabilitation and Replacement	-	-	440,000	440,000	440,000	-	1,320,000	1,320,000	-	-
WW02	East Fox Street Sanitary Sewer Replacement	-	15,000	165,000	-	-	-	180,000	180,000	-	-
WW03	Route 71 Sanitary Sewer Replacement - Phase 1 (East)	23,000	-	-	-	-	-	23,000	23,000	-	-
WW04	Route 34 Sanitary Sewer Replacement	1,000	-	-	-	-	-	1,000	1,000	-	-
WW05	Sanitary Sewer Rate Study	50,000	-	-	-	-	-	50,000	50,000	-	-
WW06	Corneils Road Sanitary Sewer (Green Door)	867,500	-	-	-	-	-	867,500	-	-	-
WW07	Southern Sanitary Sewer (Green Door)	1,513,000	-	-	-	-	-	1,513,000	-	-	-
WW08	Rt 47 Sewer Replacement - Kennedy to Water Park Way	931,000	-	-	-	-	-	931,000	931,000	-	-
	Sub-Total Sanitary	3,385,500	15,000	605,000	440,000	440,000	-	4,885,500	2,505,000	-	-
RW01	Pavement Management Update	90,000	-	-	-	-	-	90,000	90,000	-	-
RW02	Roads to Better Roads Program	1,822,000	1,622,000	1,622,000	1,622,000	1,622,000	-	8,310,000	8,310,000	-	-
RW03	Roads to Better Roads Program - Subdivision Paving	2,201,000	2,201,000	2,201,000	2,077,000	-	-	8,680,000	8,680,000	-	-
RW04	Sidewalk Replacement Program	200,000	200,000	200,000	200,000	200,000	-	1,000,000	1,000,000	-	-
RW05	Corneils Road - ComEd	90,000	34,000	-	-	-	-	124,000	124,000	-	-
RW06	Bristol Ridge STP	15,000	-	-	-	-	-	15,000	15,000	-	-
RW07	Van Emmon STP	10,000	521,000	-	-	-	-	531,000	531,000	-	-
RW08	Route 71 Improvements - Phase I (East)	26,000	-	-	-	-	-	26,000	26,000	-	-
RW09	Route 34 Improvements (Rt 47 to Orchard)	85,000	-	-	-	-	-	85,000	85,000	-	-
RW10	Route 34 Improvements (Center to Eldamain)	107,000	-	-	-	-	-	107,000	107,000	-	-
RW11	Rt 47 Improvements - Water Park Way to Jericho	-	180,000	180,000	180,000	-	-	540,000	540,000	-	-
RW12	Bristol Bay Drive Connection	-	82,500	-	-	-	-	82,500	82,500	-	-
RW13	Bertram Drive Connection	52,000	577,000	-	-	-	-	629,000	629,000	-	-
RW14	Route 47 Improvements - Kennedy to Water Park Way	180,000	180,000	180,000	-	-	-	540,000	540,000	-	-
RW15	Rt 47 and 71 Improvements (Rt 71 - Caton Farm)	90,000	90,000	90,000	-	-	-	270,000	270,000	-	-
RW16	Kennedy Road - Freedom Place (Grande Reserve)	835,000	-	-	-	-	-	835,000	835,000	-	-
RW17	Kennedy Road - Emerald to Freedom	125,000	125,000	150,000	2,750,000	-	-	3,150,000	957,000	2,193,000	-
RW18	Cannonball Trail Curve Improvements	50,000	50,000	50,000	-	-	-	150,000	150,000	-	-
RW19	Prairie Point Pedestrian Bridge	50,000	-	-	-	-	-	50,000	50,000	-	-
	Sub-Total Roadway	5,928,000	5,812,500	4,623,000	6,829,000	1,822,000	-	25,014,500	22,821,500	2,193,000	-
	ANNUAL PROGRAM TOTALS	**34,294,500**	**14,024,500**	**8,546,000**	**10,785,000**	**4,134,000**	**770,000**	**72,554,000**	**67,980,500**	**2,193,000**	**-**

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UNITED CITY OF YORKVILLE
CAPITAL IMPROVEMENT PROGRAM FY2025-2029
PROJECT COST SUMMARY

1/18/2024

PROJECT FUNDING

Project Code	Project Title	FY25	FY26	FY27	FY28	FY29	Future Years	Total Cost	Funded		Unfunded
									City	Grants / Developer	
LM01	IDNR - Water System Improvement Plan	15,000	15,000	15,000	15,000	15,000	-	75,000	75,000		75,000
LM02	WIFIA Related Expenses	700,000	700,000	-	-	-	450,000	1,850,000	1,850,000		1,850,000
LM03	Annual Water Audit / Non-Revenue Water Reduction Plan	40,000	42,000	44,000	46,000	48,000	50,000	270,000	270,000	-	270,000
LM04	Annual Leak Detection	40,000	42,000	44,000	46,000	48,000	50,000	270,000	270,000	-	270,000
LM05	Meter Retrofit Program	800,000	1,000,000	1,000,000	-	-	-	2,800,000	2,800,000	-	2,800,000
LM06	AWSS - Corrosion Control Study / Source Water Transfer Plan	360,000	360,000	-	-	-	-	720,000	720,000	-	720,000
LM07	DWC Water Transmission Mains	8,065,000	34,936,000	36,928,000	28,827,000	-	-	108,756,000	108,756,000	-	108,756,000
LM08	DWC Buy-In Costs	-	-	-	295,200	295,200	8,265,600	8,856,000	8,856,000	-	8,856,000
LM09	North Receiving Station	77,000	100,000	1,000,000	1,037,000	-	2,053,000	4,267,000	4,267,000	-	4,267,000
LM10	NW Elevated Water Storage Tank (1.5 MG)	250,000	6,741,000	2,983,000	-	-	-	9,974,000	9,974,000	-	9,974,000
LM11	South Receiving Station	125,000	150,000	1,622,000	1,682,000	-	-	3,579,000	3,579,000	-	3,579,000
LM12	South Receiving Station Standpipe (1.5 MG)	520,000	3,934,000	1,744,000	-	-	-	6,198,000	6,198,000	-	6,198,000
LM13	Route 126 Water Main Improvements	67,000	1,076,000	2,618,000	-	-	-	3,761,000	3,761,000	-	3,761,000
LM14	Upsizing Existing 12" Water Main Improvement Along Route 126	90,000	-	-	-	-	-	90,000	90,000	-	90,000
LM15	Blue Stem Drive Water Main Improvements	57,000	713,000	-	-	-	-	770,000	770,000	-	770,000
LM16	Water Treatment Plant Decommissioning	-	-	19,000	285,000	577,000	-	881,000	881,000	-	881,000
LM17	Bi-Directional Flow Meters - BPS's and PRV's	-	30,000	180,000	-	-	-	210,000	210,000	-	210,000
LM18	Montgomery Interconnect	-	-	52,000	528,000	-	-	580,000	580,000	-	580,000
ANNUAL PROGRAM TOTALS		**11,206,000**	**49,839,000**	**48,249,000**	**32,761,200**	**983,200**	**10,868,600**	**153,907,000**	**153,907,000**	**-**	**153,907,000**

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United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Pension and OPEB Funding and Liabilities
FY 2023

File Name:
B.7_Yorkville Pension and OPEB Funding and Liabilities FY 2023

Description:
Note 4 to the 2023 Annual Comprehensive Financial Report - Employee Retirement System.

August 2024

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS

The City contributes to two defined benefit pension plans, the Illinois Municipal Retirement Fund, a defined benefit agent multiple-employer public employee retirement system and the Police Pension Plan which is a single-employer pension plan. A separate report is issued for the Police Pension Plan and may be obtained by writing to the City at 651 Prairie Pointe Drive, Yorkville, Illinois 60560. IMRF does issue a publicly available financial report that includes financial statements and required supplementary information for the plan as a whole, but not by individual employer. That report may be obtained on-line at www.imrf.org. The benefit, benefit levels, employee contributions, and employer contributions are governed by Illinois Compiled Statutes (ILCS) and can only be amended by the Illinois General Assembly.

The aggregate amounts recognized for the two pension plans are:

	Net Pension Liability	Deferred Outflows	Deferred Inflows	Pension Expense
IMRF	$ 1,449,870	1,754,838	118,931	247,146
Police Pension	12,864,611	2,185,870	1,239,958	1,327,575
	14,314,481	3,940,708	1,358,889	1,574,721

Illinois Municipal Retirement (IMRF)

Plan Descriptions

Plan Administration. All employees (other than those covered by the Police Pension Plan) hired in positions that meet or exceed the prescribed annual hourly standard must be enrolled in IMRF as participating members. The plan is accounted for on the economic resources' measurement focus and the accrual basis of accounting. Employer and employee contributions are recognized when earned in the year that the contributions are required, benefits and refunds are recognized as an expense and liability when due and payable.

Benefits Provided. IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. IMRF provides two tiers of pension benefits. Employees hired ***before*** January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last 10 years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

Employees hired ***on or after*** January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the *lesser* of:

- 3% of the original pension amount
- or 1/2 of the increase in the Consumer Price Index of the original pension amount.

Plan Membership. As of December 31, 2022, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	51
Inactive Plan Members Entitled to but not yet Receiving Benefits	59
Active Plan Members	61
Total	171

Contributions. As set by statute, the City's Regular Plan Members are required to contribute 4.50% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. For the year-ended April 30, 2023, the City's contribution was 7.97% of covered payroll.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Net Pension Liability/(Asset). The City's net pension liability/(asset) was measured as of December 31, 2022. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation performed, as of December 31, 2022, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.25%
Salary Increases	2.85% to 13.75%
Cost of Living Adjustments	2.75%
Inflation	2.25%

For nondisabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Actuarial Assumptions – Continued.

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	25.50%	4.90%
Domestic Equities	35.50%	6.50%
International Equities	18.00%	7.60%
Real Estate	10.50%	6.20%
Blended	9.50%	6.25% - 9.90%
Cash and Cash Equivalents	1.00%	4.00%

Discount Rate

The discount rate used to measure the total pension liability was 7.25%, same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability/(Asset)	$ 4,221,473	1,449,870	(657,243)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Changes in the Net Pension Liability/(Asset)

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability/ (Asset) (A) - (B)
Balances at December 31, 2021	$ 16,822,361	18,681,025	(1,858,664)
Changes for the Year:			
Service Cost	392,560	-	392,560
Interest on the Total Pension Liability	1,213,553	-	1,213,553
Difference Between Expected and Actual Experience of the Total Pension Liability	382,869	-	382,869
Changes of Assumptions	-	-	-
Contributions - Employer	-	404,024	(404,024)
Contributions - Employees	-	227,639	(227,639)
Net Investment Income	-	(2,103,296)	2,103,296
Benefit Payments, including Refunds of Employee Contributions	(559,948)	(559,948)	-
Other (Net Transfer)	-	152,081	(152,081)
Net Changes	1,429,034	(1,879,500)	3,308,534
Balances at December 31, 2022	18,251,395	16,801,525	1,449,870

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2023, the City recognized pension expense of $247,146. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions – Continued

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 398,200	(20,194)	378,006
Change in Assumptions	-	(98,737)	(98,737)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	1,249,772	-	1,249,772
Total Expenses to be Recognized in Future Periods	1,647,972	(118,931)	1,529,041
Pension Contributions Made Subsequent to the Measurement Date	106,866	-	106,866
Total Deferred Amounts Related to IMRF	1,754,838	(118,931)	1,635,907

The $106,866 reported as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the reporting year ended April 30, 2024. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/ (Inflows) of Resources
2024	$ (11,706)
2025	323,529
2026	504,094
2027	713,124
2028	-
Thereafter	-
Total	1,529,041

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan

Plan Descriptions

Plan Administration. The Police Pension Plan is a single-employer defined benefit pension plan that covers all sworn police personnel. The defined benefits and employee and minimum employer contribution levels are governed by Illinois Compiled Statutes (40 ILCS 5/3-1) and may be amended only by the Illinois legislature. The City accounts for the Fund as a pension trust fund. The Fund is governed by a five-member pension board. Two members of the Board are appointed by the City Mayor, one member is elected by pension beneficiaries and two members are elected by active police employees.

Plan Membership. At April 30, 2023, the measurement date, membership consisted of the following:

Inactive Plan Members Currently Receiving Benefits	13
Inactive Plan Members Entitled to but not yet Receiving Benefits	8
Active Plan Members	33
Total	54

Benefits Provided. The following is a summary of the Police Pension Plan as provided for in Illinois State Statutes.

The Police Pension Plan provides retirement benefits through two tiers of benefits as well as death and disability benefits. Covered employees hired before January 1, 2011 (Tier 1), attaining the age of 50 or older with 20 or more years of creditable service are entitled to receive an annual retirement benefit of ½ of the salary attached to the rank held on the last day of service, or for one year prior to the last day, whichever is greater. The annual benefit shall be increased by 2.5 percent of such salary for each additional year of service over 20 years up to 30 years, to a maximum of 75 percent of such salary. Employees with at least eight years but less than 20 years of credited service may retire at or after age 60 and receive a reduced benefit. The monthly benefit of a police officer who retired with 20 or more years of service after January 1, 1977 shall be increased annually, following the first anniversary date of retirement and be paid upon reaching the age of at least 55 years, by 3 percent of the original pension and 3 percent compounded annually thereafter. Covered employees hired on or after January 1, 2011 (Tier 2), attaining the age of 55 or older with 10 or more years of creditable service are entitled to receive an annual retirement benefit equal to the average monthly salary obtained by dividing the total salary of the police officer during the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest by the number of months of service in that period. Police officer salary for the pension purposes is capped at $106,800, plus the lesser of ½ of the annual change in the Consumer Price Index or 3 percent compounded. The annual benefit shall be increased by 2.5 percent of such a salary for each additional year of service over 20 years up to 30 years to a maximum of 75 percent of such salary. Employees with at least 10 years may retire at or after age 50 and receive a reduced benefit (i.e., ½ percent for each month under 55).

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. The monthly benefit of a Tier 2 police officer shall be increased annually at age 60 on the January 1st after the police officer retires, or the first anniversary of the pension starting date, whichever is later. Noncompounding increases occur annually, each January thereafter. The increase is the lesser of 3 percent or ½ of the change in the Consumer Price Index for the proceeding calendar year.

Contributions. Covered employees are required to contribute 9.91% of their base salary to the Police Pension Plan. If an employee leaves covered employment with less than 20 years of service, accumulated employee contributions may be refunded without accumulated interest. The City is required to contribute the remaining amounts necessary to finance the plan and the administrative costs as actuarially determined by an enrolled actuary. However, effective January 1, 2011, ILCS requires the City to contribute a minimum amount annually calculated using the projected unit credit actuarial cost method that will result in the funding of 90% of the past service cost by the year 2040. For the year-ended April 30, 2023, the City's contribution was 44.25% of covered payroll.

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation performed, as of April 30, 2023, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.00%
Salary Increases	Graded by Years of Service
Cost of Living Adjustments	2.50%
Inflation	2.50%

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Actuarial Assumptions – Continued

Mortality rates were based on the PubS-2010 base rates projected generationally using Scale MP2021.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%, the same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the net pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 17,426,325	12,864,611	9,203,592

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Changes in the Net Pension Liability

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability (A) - (B)
Balances at April 30, 2022	$ 27,041,964	14,483,328	12,558,636
Changes for the Year:			
Service Cost	723,495	-	723,495
Interest on the Total Pension Liability	1,845,726	-	1,845,726
Changes of Benefit Terms	-	-	-
Difference Between Expected and Actual Experience of the Total Pension Liability	148,948	-	148,948
Changes of Assumptions	(612,496)	-	(612,496)
Contributions - Employer	-	1,334,771	(1,334,771)
Contributions - Employees	-	381,767	(381,767)
Net Investment Income	-	83,160	(83,160)
Benefit Payments, including Refunds of Employee Contributions	(1,245,047)	(1,245,047)	-
Administrative Expense	(26,932)	(26,932)	-
Net Changes	833,694	527,719	305,975
Balances at April 30, 2023	27,875,658	15,011,047	12,864,611
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability			53.85%

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2023, the City recognized pension expense of $1,327,575. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions – Continued

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 519,437	(503,001)	16,436
Change in Assumptions	608,741	(736,957)	(128,216)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	1,057,692	-	1,057,692
Total Deferred Amounts Related to Police Pension	2,185,870	(1,239,958)	945,912

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/ (Inflows) of Resources
2024	$ 188,625
2025	35,202
2026	541,521
2027	235,071
2028	19,743
Thereafter	(74,250)
Total	945,912

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS

General Information about the OPEB Plan

Plan Description. The City's defined benefit OPEB plan, Retiree Benefits Plan (RBP), provides OPEB for all permanent full-time general and public safety employees of the City. RBP is a single-employer defined benefit OPEB plan administered by the City. Article 11 of the State Compiled Statutes grants the authority to establish and amend the benefit terms and financing requirements to the City Board. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Benefits Provided. RBP provides coverage under the City of Yorkville group health program by contributing the monthly premium to retirees and their dependents.

Plan Membership. As of April 30, 2023, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	8
Inactive Plan Members Entitled to but not yet Receiving Benefits	-
Active Plan Members	93
Total	101

Total OPEB Liability

The City's total OPEB liability was measured as of April 30, 2023 and was determined by an actuarial valuation as of that date.

Actuarial Assumptions and Other Inputs. The total OPEB liability in the April 30, 2023 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.50%
Salary Increases	3.50%
Discount Rate	3.77%
Healthcare Cost Trend Rates	6.75% for 2023, decreasing 0.25% per year to an ultimate rate of 4.5% for 2031 and later years
Retirees' Share of Benefit-Related Costs	100% of projected health insurance premiums for retirees

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Total OPEB Liability – Continued

Actuarial Assumptions and Other Inputs – Continued. The discount rate was based upon the expected rate of return associated with funded benefits, and unfunded benefits, the 20-year municipal bond rate.

Mortality rates were based on the PubS-2010 table rates projected generationally using Scale MP2021 for Police Officers. For all others, the PubG-2010 table base rates projected generationally using Scale MP2021 was used.

Change in the Total OPEB Liability

	Total Total OPEB Liability
Balance at April 30, 2022	$ 1,102,487
Changes for the Year:	
Service Cost	52,680
Interest on the Total Pension Liability	36,695
Changes of Benefit Terms	-
Difference Between Expected and Actual Experience	(283,584)
Changes of Assumptions or Other Inputs	21,122
Benefit Payments	(59,096)
Net Changes	(232,183)
Balance at April 30, 2023	870,304

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The discount rate used to measure the total pension liability was 3.77%, while the prior valuation used 3.42%. The following presents the total OPEB liability, calculated using the discount rate, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher:

	1% Decrease (2.77%)	Current Discount Rate (3.77%)	1% Increase (4.77%)
Total OPEB Liability	$ 940,471	870,304	804,307

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability, calculated using varied Healthcare Trend Rates, as well as what the total OPEB liability would be if it were calculated using a Healthcare Trend Rate that is one percentage point lower or one percentage point higher:

	(Varies)	Healthcare Cost Trend Rates (Varies)	(Varies)
Total OPEB Liability	$ 775,842	870,304	981,736

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended April 30, 2023, the City recognized OPEB expense of $82,767. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 267,570	(265,230)	2,340
Change in Assumptions	81,375	(209,954)	(128,579)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	-	-
Total Deferred Amounts Related to OPEB	348,945	(475,184)	(126,239)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB – Continued

Fiscal Year	Net Deferred (Inflows) of Resources
2024	$ (6,608)
2025	(6,608)
2026	(6,608)
2027	(6,608)
2028	(6,608)
Thereafter	(93,199)
Total	(126,239)

SUBSEQUENT EVENT

On August 2, 2023, the United City of Yorkville issued $9,985,000 of Series 2023A General Obligation Alternate Revenue Source with interest rates ranging from 4.375% to 5.000% and maturing on December 30, 2053.

REQUIRED SUPPLEMENTARY INFORMATION

Required supplementary information includes financial information and disclosures that are required by the GASB but are not considered a part of the basic financial statements. Such information includes:

- Schedule of Employer Contributions
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Changes in the Employer's Net Pension Liability/(Asset)
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Investment Returns
  - Police Pension Fund

- Schedule of Changes in the Employer's Total OPEB Liability
  - Retiree Benefit Plan

- Budgetary Comparison Schedule
  - General Fund
  - Library – Special Revenue Fund
  - Parks and Recreation – Special Revenue Fund

Notes to the Required Supplementary Information

Budgetary Information – Budgets are adopted on a basis consistent with generally accepted accounting principles.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2023

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2016	$ 311,346	$ 311,346	$ -	$ 2,853,781	10.91%
2017	308,134	308,134	-	2,898,722	10.63%
2018	344,487	344,487	-	3,217,682	10.71%
2019	350,666	350,666	-	3,506,685	10.00%
2020	365,540	365,540	-	3,665,848	9.97%
2021	440,315	440,315	-	4,060,573	10.84%
2022	428,230	428,230	-	4,128,183	10.37%
2023	371,172	371,172	-	4,659,881	7.97%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	21 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation	2.25%
Salary Increases	2.85% - 13.75%, Including Interest
Investment Rate of Return	7.25%
Retirement Age	See the Notes to the Financial Statements
Mortality	For non-disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2023

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	$ 571,437	$ 624,168	$ 52,731	$ 2,220,146	28.11%
2016	722,940	722,940	-	2,294,948	31.50%
2017	825,413	825,413	-	2,320,642	35.57%
2018	966,211	966,211	-	2,543,266	37.99%
2019	963,361	963,361	-	2,449,210	39.33%
2020	1,111,484	1,111,484	-	2,631,165	42.24%
2021	1,226,371	1,230,604	4,233	2,744,017	44.85%
2022	1,334,771	1,334,771	-	2,694,486	49.54%
2023	1,320,595	1,334,771	14,176	3,016,544	44.25%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	17 Years
Asset Valuation Method	Fair Value
Inflation	2.50%
Salary Increases	Graded by years of service
Investment Rate of Return	7.00%
Retirement Age	Tier 1 - 20% at 50 to 100% at age 65
	Tier 2 - 5% at 50 to 100% at age 65
Mortality	PubS-2010 base rates projected generationally using Scale MP2021

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2023

	12/31/2015	12/31/2016
Total Pension Liability		
Service Cost	$ 303,003	317,347
Interest	764,628	825,222
Differences Between Expected and Actual Experience	40,167	27,153
Change of Assumptions	-	-
Benefit Payments, Including Refunds of Member Contributions	(295,309)	(318,792)
Net Change in Total Pension Liability	812,489	850,930
Total Pension Liability - Beginning	10,191,193	11,003,682
Total Pension Liability - Ending	11,003,682	11,854,612
Plan Fiduciary Net Position		
Contributions - Employer	$ 311,346	308,134
Contributions - Members	129,289	132,252
Net Investment Income	49,844	684,949
Benefit Payments, Including Refunds of Member Contributions	(295,309)	(318,792)
Other (Net Transfer)	(289,688)	39,225
Net Change in Plan Fiduciary Net Position	(94,518)	845,768
Plan Net Position - Beginning	9,896,191	9,801,673
Plan Net Position - Ending	9,801,673	10,647,441
Employer's Net Pension Liability/(Asset)	$ 1,202,009	1,207,171
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	89.08%	89.82%
Covered Payroll	$ 2,853,781	2,898,722
Employer's Net Pension Liability/(Asset) as a Percentage of Covered Payroll	42.12%	41.64%

Changes of Assumptions. Changes in assumptions related to the discount rate were made in 2015 through 2018 and 2020. Changes in assumptions related to the demographics were made in 2017.

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
330,734	316,829	356,154	384,165	376,700	392,560
887,780	924,525	1,024,674	1,104,694	1,136,979	1,213,553
132,182	507,597	213,134	(69,685)	189,246	382,869
(449,845)	508,408	-	(340,717)	-	-
(365,819)	(442,124)	(499,031)	(509,477)	(749,354)	(559,948)
535,032	1,815,235	1,094,931	568,980	953,571	1,429,034
11,854,612	12,389,644	14,204,879	15,299,810	15,868,790	16,822,361
12,389,644	14,204,879	15,299,810	15,868,790	16,822,361	18,251,395
335,204	365,769	324,580	429,468	443,761	404,024
139,927	167,364	172,689	173,017	188,122	227,639
1,792,699	(594,987)	2,196,500	1,983,375	2,628,659	(2,103,296)
(365,819)	(442,124)	(499,031)	(509,477)	(749,354)	(559,948)
(226,729)	196,498	(8,647)	(97,125)	(10,755)	152,081
1,675,282	(307,480)	2,186,091	1,979,258	2,500,433	(1,879,500)
10,647,441	12,322,723	12,015,243	14,201,334	16,180,592	18,681,025
12,322,723	12,015,243	14,201,334	16,180,592	18,681,025	16,801,525
66,921	2,189,636	1,098,476	(311,802)	(1,858,664)	1,449,870
99.46%	84.59%	92.82%	101.96%	111.05%	92.06%
3,109,498	3,467,005	3,582,558	3,844,833	3,994,256	4,539,593
2.15%	63.16%	30.66%	(8.11%)	(46.53%)	31.94%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability
April 30, 2023

	4/30/2015	4/30/2016
Total Pension Liability		
Service Cost	$ 522,029	576,907
Interest	986,212	1,097,143
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	(483,445)	322,766
Change of Assumptions	999,313	1,116,723
Benefit Payments, Including Refunds of Member Contributions	(435,435)	(443,314)
Administrative Expenses	-	-
Net Change in Total Pension Liability	1,588,674	2,670,225
Total Pension Liability - Beginning	14,306,459	15,895,133
Total Pension Liability - Ending	15,895,133	18,565,358
Plan Fiduciary Net Position		
Contributions - Employer	$ 624,168	722,940
Contributions - Members	214,237	222,736
Contributions - Others	-	-
Net Investment Income	343,590	(30,493)
Benefit Payments, Including Refunds of Member Contributions	(435,435)	(443,314)
Administrative Expense	(14,285)	(13,448)
Net Change in Plan Fiduciary Net Position	732,275	458,421
Plan Net Position - Beginning	5,690,471	6,422,746
Plan Net Position - Ending	6,422,746	6,881,167
Employer's Net Pension Liability	$ 9,472,387	11,684,191
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	40.41%	37.06%
Covered Payroll	$ 2,220,146	2,294,948
Employer's Net Pension Liability as a Percentage of Covered Payroll	426.66%	509.13%

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

4/30/2017	4/30/2018	4/30/2019	4/30/2020	4/30/2021	4/30/2022	4/30/2023
611,857	589,463	650,245	672,849	745,174	726,664	723,495
1,283,144	1,349,196	1,374,562	1,517,322	1,613,488	1,715,607	1,845,726
-	-	-	43,601	-	-	-
123,907	(1,529,007)	105,712	51,301	137,349	278,036	148,948
(565,454)	498,740	612,775	(54,912)	(97,277)	270,434	(612,496)
(469,494)	(501,417)	(597,064)	(798,961)	(906,100)	(975,134)	(1,245,047)
-	-	-	-	-	-	(26,932)
983,960	406,975	2,146,230	1,431,200	1,492,634	2,015,607	833,694
18,565,358	19,549,318	19,956,293	22,102,523	23,533,723	25,026,357	27,041,964
19,549,318	19,956,293	22,102,523	23,533,723	25,026,357	27,041,964	27,875,658
825,413	966,211	963,361	1,111,484	1,230,604	1,334,771	1,334,771
234,058	249,421	243,941	269,903	261,904	278,502	381,767
32,388	-	-	-	-	-	-
473,420	421,975	717,071	(121,161)	3,124,939	(731,141)	83,160
(469,494)	(501,417)	(597,064)	(787,372)	(893,334)	(955,800)	(1,245,047)
(11,774)	(12,266)	(12,693)	(11,589)	(12,766)	(19,334)	(26,932)
1,084,011	1,123,924	1,314,616	461,265	3,711,347	(93,002)	527,719
6,881,167	7,965,178	9,089,102	10,403,718	10,864,983	14,576,330	14,483,328
7,965,178	9,089,102	10,403,718	10,864,983	14,576,330	14,483,328	15,011,047
11,584,140	10,867,191	11,698,805	12,668,740	10,450,027	12,558,636	12,864,611
40.74%	45.55%	47.07%	46.17%	58.24%	53.56%	53.85%
2,320,642	2,543,266	2,449,210	2,631,165	2,744,017	2,694,486	3,016,544
499.18%	427.29%	477.66%	481.49%	380.83%	466.09%	426.47%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Investment Returns
April 30, 2023

Fiscal Year	Annual Money-Weighted Rate of Return, Net of Investment Expense
2015	5.89%
2016	(0.43%)
2017	6.54%
2018	5.09%
2019	7.56%
2020	(1.08%)
2021	26.92%
2022	(4.76%)
2023	(0.91%)

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2023

	4/30/2019
Total OPEB Liability	
Service Cost	$ 43,414
Interest	40,335
Changes in Benefit Terms	-
Differences Between Expected and Actual Experience	-
Change of Assumptions or Other Inputs	12,225
Benefit Payments	(122,570)
Net Change in Total OPEB Liability	(26,596)
Total OPEB Liability - Beginning	1,077,271
Total OPEB Liability - Ending	1,050,675
Covered-Employee Payroll	$ 5,675,523
Total OPEB Liability as a Percentage of Covered-Employee Payroll	18.51%

Notes:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Changes of Assumptions. Changes of assumptions related to the discount rate were made in 2019 through 2023.

4/30/2020	4/30/2021	4/30/2022	4/30/2023
46,531	62,448	63,305	52,680
37,312	29,424	24,995	36,695
-	-	-	-
-	328,449	-	(283,584)
72,122	(136,858)	(112,346)	21,122
(132,377)	(126,246)	(104,947)	(59,096)
23,588	157,217	(128,993)	(232,183)
1,050,675	1,074,263	1,231,480	1,102,487
1,074,263	1,231,480	1,102,487	870,304
5,874,167	6,432,473	6,657,610	7,482,410
18.29%	19.14%	16.56%	11.63%



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville 2016 Comprehensive Water Works System Master Plan

File Name:
B.8a_Yorkville 2016 Comprehensive Water Works System Master Plan

Description:
United City of Yorkville Comprehensive Water Works System Mater Plan.

August 2024

Engineering Enterprises, Inc.



Comprehensive Water Works System Master Plan - 2016

March 2017

52 Wheeler Road, Sugar Grove, IL 60554 ~ (630) 466-6700 tel ~ (630) 466-6701 fax ~ www.eeiweb.com

WATER WORKS SYSTEM MASTER PLAN

United City of Yorkville, Kendall Co, IL

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COMPREHENSIVE WATER WORKS SYSTEM MASTER PLAN - 2016

United City of Yorkville, IL

ACKNOWLEDGEMENTS

Mayor
Gary J. Golinski

Alderman	Carlo Colosimo
Alderman	Ken Koch
Alderman	Jacquelyn Milschewski
Alderman	Larry Kot
Alderman	Chris Funkhouser
Alderman	Joel Frieders
Alderman	Seaver Tarulis
Alderman	Diane Teeling

City Administrator
Bart Olson

City Clerk
Beth Warren

Finance Director
Rob Fredrickson

Public Works Director
Eric Dhuse

Community Development Director
Krysti Barksdale-Noble

Water Department Foreman
Tom Konen

ABBREVIATIONS	MEANING
ADD	AVERAGE DAY DEMAND
AMCL	ALTERNATIVE MAXIMUM CONTAMINANT LEVEL
AWWA	AMERICAN WATER WORKS ASSOCIATION
BAC	BIOLOGICALLY ACTIVATED CARBON
BCL	BOTTOM CAPACITY LINE
BMP	BEST MANAGEMENT PRACTICE
BP/PRV	BOOSTER PUMPING / PRESSURE REDUCING VALVE
BPS	BOOSTER PUMP STATION
CCL	CONTAMINANT CANDIDATE LIST
CF	CUBIC FEET
CFS	CUBIC FEET PER SECOND
CLCJAWA	CENTRAL LAKE COUNTY JOINT ACTION WATER AGENCY
CITY	UNITED CITY OF YORKVILLE
CIP	CAPITAL IMPROVEMENT PROJECT
CMAP	CHICAGO METROPOLITAN AGENCY FOR PLANNING
CMAP PLAN	2050: NORTHEASTERN ILLINOIS REGIONAL WATER SUPPLY/DEMAND PLAN
CT	CURRENT TRENDS
DBP	DISINFECTANT/DISINFECTION BYPRODUCT
DWC	DUPAGE WATER COMMISSION
EWST	ELEVATED WATER STORAGE TANK
FBRR	FILTER BACKWASH RECYCLING RULE
FF	FIRE FLOW
FPS	FEET PER SECOND
FT	FOOT
GAL	GALLON(S)
GIS	GRAPHICAL INFORMATION SYSTEM
GPCD	GALLONS PER CAPITA PER DAY
GPM	GALLONS PER MINUTE
GST	GROUND STORAGE TANK
GWR	GROUND WATER RULE (2006)
GWS	GROUNDWATER SYSTEM

GWUDI	GROUND WATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER
HE	HIGH EFFICIENCY
HAA5	HALOACETIC ACIDS
HGL	HYDRAULIC GRADE LINE
HET	HIGH EFFICIENCY TOILET
IDSE	INITIAL DISTRIBUTION SYSTEM EVALUATION
IDNR	ILLINOIS DEPARTMENT OF NATURAL RESOURCES
IEMA	ILLINOIS EMERGENCY MANAGEMENT AGENCY
IEPA	ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
IESWTR	INTERIM ENHANCED SURFACE WATER TREATMENT RULE
IN	INCH(ES)
ILI	INFRASTRUCTURE LEAKAGE INDEX
ISGS	ILLINOIS STATE GEOLOGICAL SURVEY
ISO	INSURANCE SERVICE OFFICE
ISWS	ILLINOIS STATE WATER SURVEY
IWC	ILLINOIS WATER COMPANY
JAWA	JOINT ACTION WATER AGENCY
LCR	LEAD AND COPPER RULE (1991)
LRAA	LOCATIONAL RUNNING ANNUAL AVERAGE
LRI	LESS RESOURCE INTENSIVE
LT2SWTR	LONG TERM 2 SURFACE WATER TREATMENT RULE
MCL	MAXIMUM CONTAMINANT LEVEL
MCLGs	MAXIMUM CONTAMINATE LEVEL GOALS
MOU	THE CALIFORNIA MEMORANDUM OF UNDERSTANDING
MMM	MULTIMEDIA MITIGATION
MRDLGs	MAXIMUM RESIDUAL DISINFECTANT LEVEL GOALS
MRDLs	MAXIMUM RESIDUAL DISINFECTANT LEVELS
MDD	MAXIMUM DAY DEMAND
MG	MILLION GALLONS
MGD	MILLION GALLONS PER DAY
MG/L	MILLIGRAMS PER LITER
MHD	MAXIMUM HOUR DEMAND (PEAK HOUR DEMAND)
MRI	MORE RESOURCE INTENSIVE
MSL	MEAN SEA LEVEL

MTBE	METHYL-T-BUTYL ETHER
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NSMJAWA	NORTHWEST SUBURBAN MUNICIPAL JOINT ACTION WATER AGENCY
PCI/L	PICOCURIES PER LITER
PE	POPULATION EQUIVALENT
PLC	PROGRAMMING LOGIC CONTROLLERS
PPB	PARTS PER BILLION
PPC	PUBLIC PROTECTION CLASSIFICATION
PPM	PARTS PER MILLION
PSI	POUNDS PER SQUARE INCH
RO	REVERSE OSMOSIS
RTBR	ROAD TO BETTER ROADS
RWSP	REGIONAL WATER SUPPLY PLAN
SCADA	SUPERVISORY CONTROL AND DATA ACQUISITION
SDWA	SAFE DRINKING WATER ACT
SIU	SOUTHERN ILLINOIS UNIVERSITY CARBONDALE
SF	SQUARE FEET
SFU	SINGLE FAMILY UNIT
SMCL	SECONDARY MAXIMUM CONTAMINANT LEVEL
TCL	TOP CAPACITY LINE
TCR	TOTAL COLIFORM RULE
TTHM	TOTAL TRIHALOMETHANE
UCM	UNREGULATED CONTAMINANT MONITORING
UCMR	UNREGULATED CONTAMINANT MONITORING RULES
UG/L	MICROGRAMS PER LITER
USEPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
USGS	UNITED STATES GEOLOGICAL SURVEY
UV-AOP	ULTRA VIOLET ADVANCED OXIDATION PROCESS
VFD	VARIABLE FREQUENCY DRIVE
WIFIA	WATER INFRASTRUCTURE FINANCE AND INNOVATION ACT
WM	WATER MAIN
WRT	WATER RECLAMATION TECHNOLOGY, LLC
WTP	WATER TREATMENT PLANT
WWTF	WASTEWATER TREATMENT FACILITY

EXECUTIVE SUMMARY

The United City of Yorkville is a flourishing community that is situated on the western edge of the Chicago suburbs. The City is the County Seat of Kendall County and has many scenic and recreational assets. Much like the surrounding communities, Yorkville saw a decrease in development during the economic downturn. Recently, Yorkville has once again begun to see an increase in growth within the City.

Meanwhile, regional projections suggest the population in Northeastern Illinois (11 county region of Cook, Lake, DuPage, Will, Kane, Kendall, McHenry, Dekalb, Boone, Kankakee and Grundy) may increase to more than 12 million by 2050, which is an increase of nearly 4 million from the 2000 census population. With this increase in growth, there will be additional demand on the region's water resources. Regional water planning by the Chicago Metropolitan Agency For Planning (CMAP) led Regional Water Supply Planning Group (RWSPG) have quantified the water supply and demand relationship throughout the region, and have concluded water conservation is necessary to provide for a sustainable region. In addition, there are portions of Northeastern Illinois whose current water supply will not be sustainable even with conservation and without growth.

Given the anticipated growth, the City wisely decided it was an ideal time to reevaluate the long-term expansion of the City's Water Works System. Therefore, the City embarked on completing this Comprehensive Water Master Plan. The main goal of this plan is to provide planning to maintain a sustainable and cost-efficient Water Works System for current and projected future water uses. In addition to evaluating the needs for the United City of Yorkville alone, the report will evaluate the needs for the combined communities of Montgomery, Yorkville and Oswego in order to determine the feasibility of combining water procurement and treatment resources. This master plan also evaluates water demands based on business as usual or current trends (CT) scenarios, as well as a less resource intensive (LRI) scenario that would occur if Yorkville committed to moderate water conservation best management practices. Less water use typically results in less infrastructure needs. Finally, this report outlines the capital costs savings that would be associated with moderate water conservation.

The Water Works System Master Plan is divided into ten sections. A summary of each of the sections follows.

Introduction

The current United City of Yorkville corporate limits encompasses about 20.15 square miles while the planning area outside of the corporate boundary adds another 52.77 square miles of land for a total of 72.92 square miles of land within the study area. The City offers many opportunities for growth with a significant amount of undeveloped land in the northern and southern portions of the study area and infill growth within the existing City limits. These areas will one day provide homes to new City residents, as well as contribute to the local economy with new commercial, industrial and institutional land uses. Based

on the 2010 US Census, the City's population was estimated to be 16,921. CMAP estimates the United City of Yorkville's population will grow at a rate of 3.2% until 2040. If this growth rate remains constant for ten years after 2040, the City is projected to have a population of 59,565 people in 2050.

Existing Water Works System

The United City of Yorkville first installed a public water supply that was sourced from springs located in a hillside in 1886. These hillside springs were sufficient until 1923 when the City constructed its first well. The City has since built a total of eight wells, five of which are still being utilized by the City. Wells No. 1 and 2 were both decommissioned and Well No. 5 was sold to the City of Plano after its construction was completed.

While the water quality withdrawn from the deep sandstone wells is good, all of the wells exceed the maximum contaminant limit (MCL) of 5.0 pCi/l for combined radium. The City utilizes cation exchange treatment at all of the WTPs to reduce the combined radium levels below its MCL. The cation exchange water treatment process also softens the water. Wells No. 3 and 4 are tributary to the same water treatment plant (WTP) at the heart of the City, Well No. 7 and its WTP are located in the southern area of the City, and Wells No. 8 and 9 are located in the northeastern area of the City and share a WTP.

The City's Water Works System contains five elevated water storage tanks (EWSTs) that have a combined storage of 4.55 million gallons (MG). The City's water main network consists of approximately 150 miles of 1" to 16" pipe and operates as four pressure zones. The City utilizes a Supervisory Control and Data Acquisition (SCADA) system to monitor the supply, treatment, storage and distribution components of the Water Works System. With Staff's continual focus on system maintenance, the Water Works System components are currently in good condition.

Historical and Projected Water Use

The City's water use from 2010–2014 was reviewed to identify water use trends for the Water Works System. The water supply and storage systems were assessed for adequacy using evaluation parameters that rate the adequacy of their components. The evaluation concluded that the water supply and storage were sufficient for the 2010-2014 evaluated period and will continue to be sufficient for the near-future. If current trends are followed, the City will need to add additional supply around 2025 and additional storage around 2040. If moderate conservation efforts result in a LRI scenario, the City will need additional supply around 2035 and additional storage after 2045.

The average 2010–2014 water use for the City was calculated to be 88 gallons per capita per day (gpcd) with an average maximum day demand to average day demand (MDD:ADD) ratio of 1.91. Typically, residential and commercial development engenders higher water use due to the amount of water it takes to start landscaping a previously undeveloped area. In order to project business as usual trends, the per capita usage was rounded up to 90 gpcd and the MDD:ADD ratio was rounded up to 2.0 in order to allow

for factor of safety. An assumed value of 2.0 was used to establish the max hour demand to max day demand ratio (MHD:MDD). The needs assessment calculations determined that if current trends are followed, the water supply and treatment deficit in 2050 would be approximately 6,700 gpm and the storage deficit would be 1.7 MG.

The City does have the potential of reducing that deficit, though. In an effort to define a reasonable LRI demand scenario for the City, a systematic process was used to efficiently review available information, select relevant water conservation strategies and calculate estimated savings. Following a review of the 13 water conservation measures recommended by the CMAP and a quantification of the amount of demand reduction applicable for the United City of Yorkville, it was determined the projected water use per capita per day could be reduced by 11% to 80 gpcd under the LRI demand projection. Utilizing a 80 gpcd usage rate, a MDD:ADD ratio of 1.75 and a MHD:MDD ratio of 2.0, the 2050 LRI projected water demands were developed. The water supply and treatment deficit is cut to approximately 4,200 gpm under the LRI scenario. The water storage capacity deficit is reduced to 0.63 MG, which is less than half of the CT value.

Regulatory Review

A comprehensive review of the existing and future regulations was conducted to determine the current and future regulatory status of the Water Works System. The City's Water Works System is meeting all existing and near future regulations. If the City decides to switch their water source to surface water from the Fox River, they will become subject to applicable surface water regulations.

Sustainable Source Water Assessment

Groundwater from shallow and deep aquifers, surface water from the Fox River and surface water from Lake Michigan were all evaluated for their long-term ability to serve as Yorkville's potable water source.

A review of the underlying Sub-Regional planning area revealed that the potential for municipal shallow sand and gravel or shallow bedrock wells is low in the Yorkville area. Regional modeling of the deep sandstone aquifer indicates its long-term sustainability could be an issue in parts of Northeastern Illinois by 2050. As part of this planning effort, multiple groundwater withdrawal and future local well configurations were evaluated through the use of the Illinois State Water Survey (ISWS) regional deep sandstone water model. All models indicate that the deep sandstone aquifers will likely be sustainable not too far past 2050. Of course, the rate of desaturation is highly dependent on how much Yorkville and the surrounding communities are withdrawing from the deep aquifers. While obtaining water from the deep sandstone wells is currently the most economical option, it is unwise to completely dewater this aquifer before switching to an alternate water source. Depleting the aquifer may result in the drying up of private or public wells, water quality concerns and a lack of backup supply once another source is identified.

Modeling completed by the ISWS revealed that the Fox River is able to serve as a sustainable source of Yorkville's water for the average and maximum day future demands. While the Fox River would typically be able to provide all source water, under certain scenarios (such as drought or poor water quality) the City of Yorkville would need to utilize an alternate water source. The low flow years are projected to occur once in 10-20 years on the long-term average. That being said, historical research along with future conditions analyses with the ILSAM surface water model demonstrated the likely number of low flow days per year where Yorkville would need to have a backup supply of water would be minimal. Therefore, if the deep aquifer is used as the back-up supply source, it would be a sustainable backup supply due to its minimal long term use.

The use of surface water from Lake Michigan was also evaluated. While portions of the Illinois American system appear to have capacity, the cost for extending service to the City (including the piping and connection fees) would be cost prohibitive.

For the basis of this report and for the 2050 planning period, use of the Fox River, either alone or in conjunction with the neighboring communities of Montgomery and Oswego, is deemed as the most sustainable option.

Water Supply and Treatment Evaluation

The sustainable source water assessment revealed that the aquifer used by the United City of Yorkville is expected to be unable to sustain Yorkville's projected long-term water demands. This section outlines the first four of the six total water demand and procurement scenarios to be considered by the United City of Yorkville. The last two alternatives (3A and 3B) are evaluated in the Sub-Regional Water Supply and Treatment Analysis section. All six alternatives are outlined below.

- Alternative 1A (1A-CT) – The City's 2050 CT projected water demand is met entirely by collecting groundwater from deep sandstone wells.
- Alternative 1B (1B-LRI) - The City's 2050 LRI projected water demand is met entirely by collecting groundwater from deep sandstone wells.
- Alternative 2A (2A-CT) – The City's 2050 CT projected water demand is met by using surface water from the Fox River and from one additional deep sandstone well. All current wells will be used as backup.
- Alternative 2B (2B-LRI) – The City's 2050 LRI projected water demand is met entirely by using surface water from the Fox River. All current wells will be used as backup.
- Alternative 3A (3A-CT) – The United City of Yorkville's, the Village of Oswego's and the Village of Montgomery's 2050 CT projected water demands are met entirely by constructing a surface water treatment plant near the Fox River/Orchard Road intersection that is capable of providing water for all three communities. Select current and future wells will be used as backup.
- Alternative 3B (3B-LRI) – The United City of Yorkville's, the Village of Oswego's and the Village of

Montgomery's 2050 LRI projected water demands are met entirely by constructing a surface water treatment plant near the Fox River/Orchard Road intersection that is capable of providing water for all three communities. Select current and future wells will be used as backup.

If the City were to continue to use groundwater as their main water source, as outlined in Alternatives 1A and 1B, it is recommended that the City continue to treat their water using cation exchange water treatment plants. These facilities can remove the cations associated with hardness, as well as the cations that cause hardness in water. The locations of Alternates 1A and 1B water infrastructure, along with additional descriptions, can be found in section 6.

If the City were to utilize the Fox River as a main water source, it is recommended to use lime-softening as the main treatment mechanism. Lime softening can be used to treat hardness and other contaminants found in the Fox River. The locations of Alternates 2A and 2B water infrastructure, along with additional descriptions, can be found in section 6.

Water Storage and Distribution Evaluation

Water storage and distribution were also evaluated. Modeling included information gathering for the pipe network, pressure zones, water storage tanks, booster pump stations and ground elevations. Information gathering also took place for water treatment plants and water use demands. While some information was provided by the City, there were on-site visits to key water facilities as well as fire flow and static pressure testing in several areas. The measurement of fire flow and static pressure testing assisted with model verification for all scenarios.

Modeling was completed both for the existing infrastructure, as well as for potential future Alternatives 1, 2 and 3 as listed in the Water Supply and Treatment Evaluation. Modeling for the existing scenario was based off of knowledge of the existing system coupled with knowledge of the existing water demands. Comparison of the calculated maximum day demands and maximum hour demands found that the calculated and modeled demands were higher than the actual demands, which lead to a conservative model.

Modeling of the existing water distribution system revealed no major issues. While there are some areas with marginally higher than optimal water pressure levels and some areas with marginally lower than optimal water pressure levels, all water pressures meet the applicable standards. Modeling of fire flow demands revealed no major issues; however, flows within the North pressure zone were generally low due to a lack of looped mains. The City plans to continue to connect dead-end water mains as land is developed and funds become available. The North Central pressure zone has some of the most notable fire flow demand issues; the combination of the older, smaller water mains in combination with the higher fire flow demands of businesses compared to residential areas are the primary causes of the issue. It is recommended the City take into consideration the replacement of these water mains as funds become

available and as land develops. There were no specific improvements listed for the South Central or North Pressure Zones.

Scenarios for both the CT and LRI trends gave a need for additional storage regardless of water supply and treatment alternatives. The projected CT storage deficit was approximately 1,624,000 gallons per day and the projected LRI storage deficit was approximately 631,000 gallons per day. All scenarios assumed the addition of a 2.0 MGD EWST within the planning period. While the new EWST would be oversized for the LRI demand scenario, it would fit with the projected future demands beyond 2050. The addition of an 2.0 MG EWST was evaluated at a capital cost of $4.9 million for all scenarios. As stated in Section 3, if the City were to alternate to a less resource intensive water use scenario, the City would be able to put the EWST online later than if the City continued to use water at their current rate.

Water Distribution for all three scenarios was also evaluated. Water distribution for Alternates 2 and 3 presented more changes to the Alternate 1 distribution system due to the change in a multi-point system (from several wells) to a single-point distribution system (from a Fox River intake and WTP). Alternates 1, 2 and 3 had proposed water distribution estimated costs of approximately $4.5 million, $22.2 million and $22.6 million respectively. All three scenarios include costs for necessary capital improvements projects as well as for projects which are not necessary but should be completed as funds become available and roads are repaved.

Sub-Regional Water Supply and Treatment Analysis

The feasibility of constructing a Sub-Regional Fox River intake and WTP that would be able to serve Montgomery, Yorkville and Oswego through the year 2050 was evaluated. The analysis was based off population projections and water usage projections for all three communities. CMAP projected population growth rates, along with the open area within each community were considered to evaluate population projections in 2050. In order to evaluate likely future water usage projections, historic water usage trends for each community was considered. Two different scenarios for water usage projections were evaluated for each community. The CT water scenario evaluated the water needs that if each community continued to use water at historical rates. The LRI water use scenario evaluated a water scenario where each community makes a moderately higher commitment to water conservation strategies.

The projected 2050 populations of Montgomery, Yorkville and Oswego are 42,000, 59,565 and 90,996 respectively. If each community continues to use water according to current trends, the combined maximum day demand water needs of the sub-region are 32.9 MGD. If each community commits to more water conservation tactics, the combined maximum day demand of the Sub-Region is 24.8 MGD.

Aquifer modeling completed as part of this project has revealed evidence that the aquifer utilized for the majority of each communities' water needs is being used at a rate which is unsustainable. Modeling of the projected scenarios revealed that while the aquifer has no threat of dewatering in the short term, if the

aquifer continues to be used unsustainably, the aquifer may dewater to a point where it is at the top of the Ironton-Galesville within the next few decades.

The ability of the Fox River to provide water for all three communities under various demand scenarios was evaluated. It was determined that the Fox River is a viable source of potable water for a Sub-Regional WTP. If a Sub-Regional intake and WTP were to be built, the proposed best area would be in the Orchard Rd/Fox River corridor in the western area of Oswego. This location would allow for near equidistant travel between the main distribution infrastructure for Montgomery, Yorkville and Oswego. This central location would ensure that the water age for all communities is similar and that the costs for distribution mains are fairly split between communities. Finally, the central location would allow for the connection of existing and future wells to the WTP to serve as a backup source of water during events where the Fox River may not be able to be used. These events may include droughts or periods of poor water quality.

The costs of each community to utilize the Sub-Regional WTP was evaluated as part of this study. This evaluation considered the projected capital and operating costs for the WTP and distribution system split between each community based on usage. Section 8.9 outlines the projected change to the average Montgomery, Yorkville and Oswego water bills and Section 8.9 also compares the projected average monthly water bill of the communities to other communities which are utilizing surface water. The analysis completed shows that all three communities would have lower or comparable rates to other local communities using surface water.

The Sub-Regional analysis also outlined the next steps that must be taken if the United City of Yorkville were to decide to build a Sub-Regional WTP with the neighboring communities of the Village of Montgomery and the Village of Oswego.

Water Works System Evaluation and Recommendations

This report evaluated the United City of Yorkville's future water use based on two different water demand scenarios and three different supply and treatment scenarios. This section outlines the recommended improvements for Alternatives 3A and 3B, which are the recommended scenarios. The recommended improvements will meet the projected water supply and treatment needs of the United City of Yorkville given both CT and LRI demand scenarios. The recommendations are broken down into general, supply & treatment and storage & distribution. Under the CT demand scenario, the following improvements are recommended:

- *CT General*
  - Governance $20,000
- *CT Supply & Treatment:*
  - Fox River Water Quality Testing $45,000

- Land Acquisition $400,000
- WTP Component Pilot Testing $33,000
- Well No. 6 $2,419,000
- Well No. SR-1 $2,339,000
- 32 MGD Fox River Intake Pump Station $2,389,000
- 32 MGD Single Stage Claricone® $24,290,000
- Well Transmission Mains $9,616,000
- Treated Water Transmission Mains $12,990,000

- *CT Storage & Distribution:*
  - EWST No. 6 (2.0 MG) $4,870,000
  - Water Distribution System Improvements $22,561,000

With the reduction in water demands for the LRI scenario, the planning period system needs decrease. The changes to the recommended improvements with a future water demand that is consistent with the LRI projections are as follows:

- *LRI General*
  - Governance $20,000
- *LRI Supply & Treatment:*
  - Fox River Water Quality Testing $45,000
  - Land Acquisition $400,000
  - WTP Component Pilot Testing $33,000
  - Well No. 6 $2,419,000
  - Well No. SR-1 $714,000
  - 25 MGD Fox River Intake Pump Station $2,161,000
  - 25 MGD Single Stage (ClariCone® LSWTP) $21,886,000
  - Well Transmission Main $9,298,000
  - Treated Water Transmission Mains $12,990,000
- *LRI Storage & Distribution:*
  - EWST No. 6 (2.0 MG) $4,870,000
  - Water Distribution System Improvements $22,561,000

The costs were split into immediate, near-future and long-term investments. The total projected capital cost of the CT scenario was $82.1 million and the total projected capital cost of the LRI scenario was $77.5 million. The recommended path going forward is the LRI path which is projected to save the City over $4.5 million. If the City pairs with the communities of Montgomery and Oswego, those communities are projected to save on capital costs by switching to a LRI scenario, as well.

Although both population and approximate timeframes for improvements were provided as part of the Master Plan Phasing and Implementation Plans, it will ultimately be the water demands on the system

that dictate when and what improvements will need to be constructed. Additionally, if the sub-regional WTP moves forward, the City should be aware of the time frames that will be associated with such a major project. As the City continues to mature, expand and practice water conservation strategies, the water demands will evolve. It is recommended the City continuously monitor and evaluate its Water Works System as they develop. The staging of these water works improvements is dependent on the construction schedule and financing of annexed and proposed developments.

Sustainable Water Works System and Wastewater System Planning

The over $4.5 million capital cost difference between the CT and LRI water scenarios clearly demonstrates the financial benefits of a modest reduction in per capita water use through increased water conservation. To that end, this Water Works Master Plan is a valuable planning tool and stepping stone for the City's Water Works System. The next steps for the City are to review the existing policies regarding the City's water conservation strategies and goals and to develop financing alternatives for the identified improvements. By evaluating water conservation opportunities, the City will not only show how they continue to be good stewards of our limited resource of water, but the City also has the potential to significantly reduce the required capital investment in the Water Works System.

Next steps for the City also include working with the communities of Montgomery and Oswego in order to move the potential Sub-Regional WTP forward. A Sub-Regional surface water treatment plant would likely be more cost-effective for the United City of Yorkville to complete and operate than a surface water treatment that only treats Yorkville's water. Whether the City chooses to move forward with a sub-regional WTP or a local surface water treatment plant is an important decision the City should work with the other communities in order to discover. It is known that at the current rate at which the aquifer used by the City is being pumped, is unsustainable.

This Master Plan advocates similar goals to those of the regional water supply planning efforts championed by CMAP. The water supply sources of the western portion of Northeastern Illinois know no political boundaries. Their geographic extent is such that their availabilities are dependent on everyone's wise use of the resource.

SECTION 1: INTRODUCTION

The United City of Yorkville is a flourishing community that is situated approximately 45 miles southwest of downtown Chicago. Illinois Route 47, Illinois Route 71, and US Route 34 all pass through Yorkville. The Fox River, which offers multiple scenic and recreational amenities, is at the heart of the City.

The City has rich history; it was settled in 1833, named in 1836 and officially incorporated as a city in 1874. The United City of Yorkville had originally been two separate cities located on different sides of the Fox River– Yorkville and Bristol. The cities merged to form the United City of Yorkville in 1975. Currently, the City has a population of approximately 20,000 people and offers many amenities such as parks, recreation centers, easy commutes to Chicago and nearby continued education. Yorkville is also the county seat of Kendall County.

The City's population has grown significantly over the last two decades and the utility infrastructure has grown proportionately to meet the added demands. In the latter part of the 2000s and early part of the 2010s, the housing market took a downward turn and residential growth in the community went to a near standstill. With the indicators for development pointing towards another period of population growth, City leadership prudently decided it was a wise time to reevaluate the asset planning and expansion approach of the Water Works System. Therefore, the City engaged EEI to assist with the completion of this Comprehensive Water Works System Master Plan.

1.1 Purpose

The Chicago Metropolitan Agency for Planning (CMAP) continuously conducts regional planning for the Chicago Metropolitan Area. In addition to conducting housing, transportation and population growth planning, the agency also provides planning for water resources. With the development of CMAP's Water 2050 plan, the Regional Water Supply Planning Group has concluded the current supply of water within Northeastern Illinois will be unable to meet the regional current trends water use for portions of the planning area. Therefore, it is imperative that the region place a focus on developing a framework for water supply planning and management including water conservation measures as a means to extend our limited water supply resources. Because the population growth for the United City of Yorkville is expected to significantly increase, it is wise to consider the effect the additional future population will have on the City's existing resources and the resources shared throughout Northeastern Illinois.

With the United City of Yorkville's sustainability focus, and with the recommendations of Water 2050, the City decided it would be appropriate to evaluate the expansion of the Water Works System under two water demand scenarios. Utilizing water demand terminology from Water 2050, the Current Trends (CT) water demand scenario will evaluate the expansion of the system under "business as usual" water use patterns. Following a review of potential water conservation programs and establishment of water conservation goals, a Less Resource Intensive (LRI) water demand projection will be created. The system expansion will then be

planned under the lower demand projection, as well. Lastly, the capital cost for the improvements needed to expand the system to meet both demand projections will be compared to determine the capital cost savings with the higher water conservation commitment.

In addition to defining the expansion of the Water Works System and evaluating the capital cost savings of a focused community wide comprehensive conservation effort, this report also will present findings from a sustainable source water assessment and a regulatory audit review. With sustainability at this Master Plan's core, the United City of Yorkville will have the roadmap for expanding and operating a sustainable Water Works System into the future.

1.2 Previous Water Works System Planning Documents

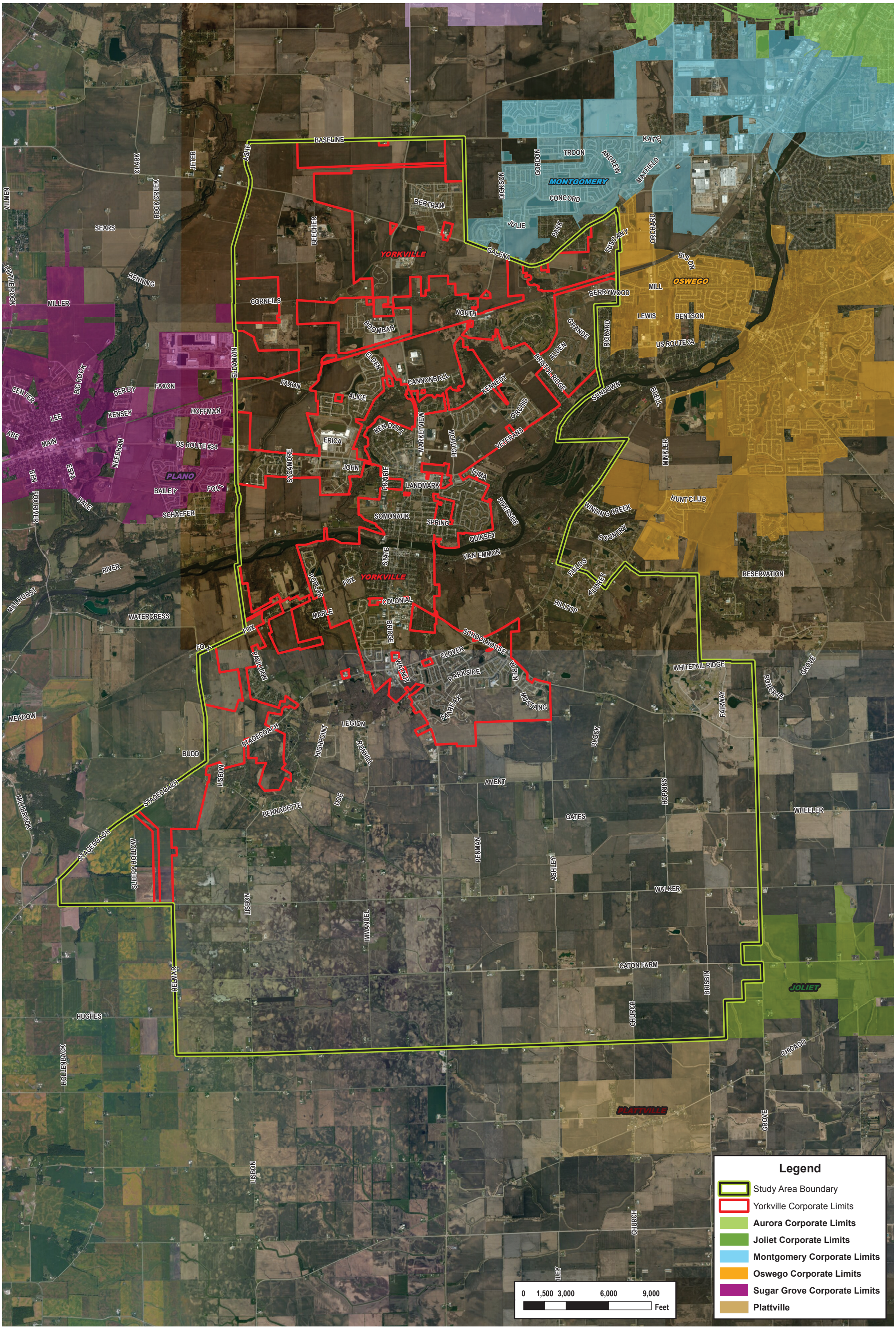
As the growth and water use patterns of the City have changed, the United City of Yorkville has continued to plan for the infrastructure management and expansion of their Water Works System. The most recent Water Works System Planning efforts prior to this Master Plan were the 1999/2000 Water System Project Plan and associated update in 2004. Where applicable, the findings of these reports and studies are referenced and built upon within the context of this Master Plan. The 'Groundwater Studies for Water Supply Planning in Kendall County, Illinois' document is also referenced. This document was prepared by the Prairie Research Institute and outlines various intricacies of the groundwater system in Kendall County.

1.3 Study Area

The study area for this report, as well as, the City's corporate boundaries are depicted on Exhibit 1-1. The current City corporate limits encompass about 20.15 square miles while the planning area outside of the corporate boundary adds another 52.77 square miles for a total of 72.92 square miles within the study area. Exhibit 1-1 also identifies the neighboring communities' corporate limits.

1.4 Historical Population

Table No. 1-1 provides the City's population figures from 1960 to 2014. Yorkville experienced relatively moderate growth between 1960 and 1990, growing from 1,568 persons in 1960 to 3,925 persons in 1990. Like many communities located in northeastern Illinois, Yorkville grew significantly throughout the 1990s and early 2000s. From 1990 to 2000 the population grew over 58% whereas the decade of 2000 to 2010 saw an expansive growth of 173%. By 2014, the City's population had grown to just under 18,000 people as identified in the Special Census conducted that year.



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DATE:	AUGUST 2015
PROJECT NO.:	YO1437-P
BY:	JPS
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXH1-1.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 1-1
STUDY AREA

NORTH

Table No. 1-1: Historical Population

United City of Yorkville, IL

Year	Population	Annual % Increase
1960	1,568	--
1970	2,049	2.7%
1980	3,422	5.3%
1990	3,925	1.4%
2000	6,189	4.7%
2003	8,789	12.4%
2005	11,204	12.9%
2008	16,838	14.5%
2010	16,921	0.2%
2014	17,878	1.4%

1.5 Projected Population

Forecasting future population patterns in a geographic location can be very complex. Economic conditions, social perspectives, governmental influences, environmental factors and many other circumstances can disrupt population dynamics. A perfect example of a situation that altered the City's potential population growth pattern occurred just in the last few years. With the rapid growth trends of the 1990s and early 2000s, and the available land remaining to develop within the planning boundary, the City was preparing for a continued steady population increase. However, with the subsequent downturn in the economy, the situation has changed and now the City is trying to balance Water Works System planning for a moderate growth rate consistent with current patterns, all the while preparing for a potential upswing in the economy that could attract a massive influx of developers back to the City. Nevertheless, reasonable population projections should be made utilizing the most current, best available sources of information in order to establish a baseline for determining immediate, near-future and long-term Water Works System needs.

The United City of Yorkville offers many opportunities for population growth with a significant amount of undeveloped land throughout the outer limits of the study area and infill within the existing City limits. When a municipality in Northeastern Illinois is preparing a Master Plan, the basis for population projections is often those published by CMAP. CMAP had estimated a population of 43,486 for the year 2040; from that calculation, the growth rate was calculated to be 3.20% per annum. That growth rate was then projected from 2014 to 2050 using the same growth rate projected through 2040 and found to be 59,565.

The projected population trends are summarized in Table No. 1-2 and graphed with the historical trends in Exhibit 1-2.

Table No. 1-2: Projected Population

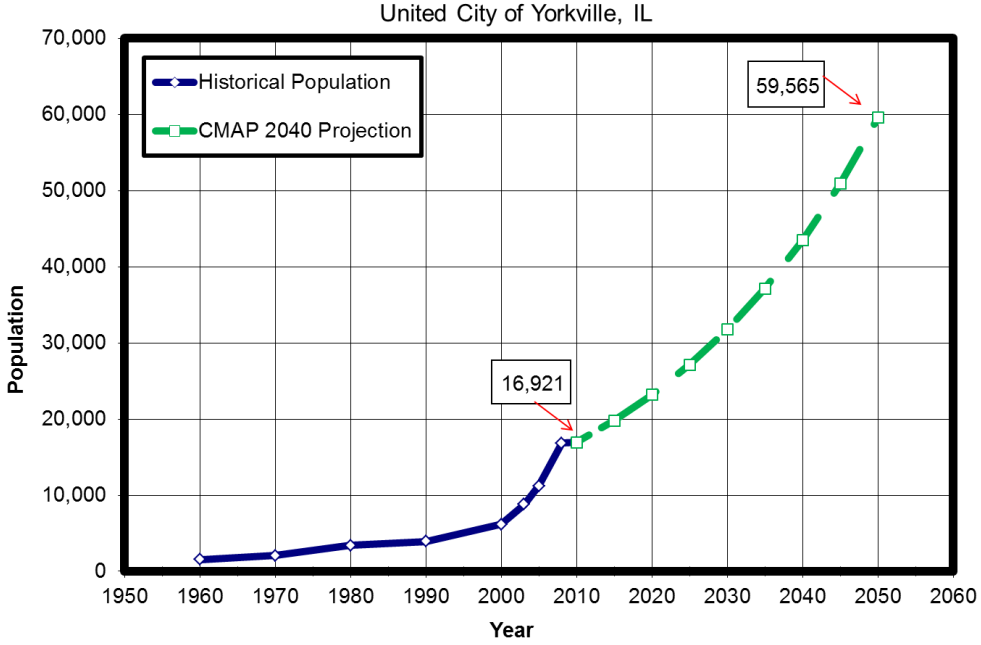
United City of Yorkville, IL

Year	Population	Annual % Increase
2010	16,921	3.20%
2015	19,804	3.20%
2020	23,178	3.20%
2025	27,126	3.20%
2030	31,747	3.20%
2035	37,156	3.20%
2040[Δ]	43,486	3.20%
2045	50,894	3.20%
2050	59,565	3.20%

Notes:
[Δ] CMAP 2040 population projection

Exhibit 1-2: Historical and Projected Population Summary

United City of Yorkville, IL



SECTION 2: EXISTING WATER WORKS SYSTEM

The United City of Yorkville's existing Water Works System can be divided into five main components, namely: 1) supply, 2) treatment, 3) storage, 4) distribution and 5) controls. The condition of all of the City's Water Works System facilities is excellent. It is obvious City staff operates and maintains the system with diligence and intelligence. In order to establish a foundation for asset management and system expansion, an inventory of the existing system must first be completed. Following a brief overview of the City's Water Works System, this section of the report will provide that inventory. Exhibit 2-1 summarizes the existing layout of the City's Water Works System.

2.1 Overview

The initial water supply for Yorkville was installed in 1886. The supply water was obtained from springs located on a hillside about 0.5 miles south of town. The springs were located approximately 2,400 feet north and 1,400 feet east of the southwest corner of Section 4, Township 36 North, Range 7 East (Woller and Gibb). Water was collected by tiles within the springs, stored in a collecting reservoir located at the site of the springs and then piped to the water distribution system in town. As the town grew, the springs were capable of producing only a portion of the water supply to meet the consumer demands. Additionally, because the springs were sometimes adversely affected by seasonal fluctuations, such as drought, they were not reliable and the need for additional water resources became apparent.

Well No. 1 was built to supplement the spring water in 1923, and Well No. 2 was built to eliminate the need for the springs in 1954. Well No. 1 was taken out of service in 1964 and Well No. 2 has also been abandoned. Since then, Wells No. 3, 4, 5, 7, 8 and 9 have all been built to take care of the water needs for Yorkville. Well No. 5 has since been sold to Plano, but the remaining wells are all still in service. The City's three water treatment plants (WTPs) were constructed in the 2000s. Elevated water storage tanks (EWSTs) have been added to the system and water main extension have been completed as the City grew.

2.2 Supply

The United City of Yorkville currently utilizes the deep sandstone aquifer as its sole source of water supply. The construction and capacity characteristics of the City's five (5) deep water wells are summarized in Table No. 2-1 along with a summary of the pumping equipment and maintenance history.

The City had historically obtained water from the shallow sand and gravel deposits, as well as, the Galena-Platteville, Glenwood-St. Peter and Ironton-Galesville Formations. The following sections provide detailed descriptions of the City's former and current sources of water supply.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

1.0 MG NORTH EWST

1.5 MG NORTHEAST EWST
WELL NO. 8, WELLS NO. 8 & 9
WATER TREATMENT PLANT

WELL NO. 9

NORTH BP/PRV STATION

NORTH CENTRAL
PRV STATION

300,000 GAL NORTH
CENTRAL EWST

WELLS NO. 3 & 4
WATER TREATMENT PLANT

WELL NO. 4

WELL NO. 3

SOUTH BP/PRV STATION

SOUTH CENTRAL
BP/PRV STATION

500,000 GAL SOUTH
CENTRAL EWST

1.25 MG SOUTH EWST
WELL NO. 7, AND WELL NO. 7
WATER TREATMENT PLANT

SOUTH CENTRAL
PRV STATION

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

NORTH

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE:	AUGUST 2015
PROJECT NO.:	YO1437-P
BY:	JPS
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXHIBIT-1.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 2-1
EXISTING WATER WORKS SYSTEM

Table No. 2-1: Existing Water Supply Summary

United City of Yorkville, IL

WELL NO.	AQUIFER							DEPTH (BELOW GRADE)			EQUIPMENT INSTALL DATE	DESIGN CONDITION		INSTALLED MANUFACTURER AND TYPE		PUMPING ASSEMBLY		COMMENTS
	SG	SL	GP	SP	IG	CO	MS	WELL (FT)	CASING (FT)	PUMP (FT)		FLOW (GPM)	TDH (FT)	PUMP	MOTOR	PUMP	MOTOR	
3				♦	♦			1335	430 (AND 88' OF 12" I.D. LINER FROM DEPTH OF 723' TO 811')	505	2009	600	550	BJ/FS - 11MQH 9 Stage	BJ 150 HP, 14" H, 460V	Rebuilt	Refurbished	Pulled due to severe sand wear of bowl, a fairly constant issue with this well that typically produces 650-675 GPM. The City minimizes use of this well.
										505	2008	700	550	BJ/FS - 11MQH 9 Stage	BJ 150 HP, 14" H, 460V	Refurbished	New	Motor Replaced due to Presumed Lightning Strike; Pump Reused
										500	2004	700	550	BJ/FS - 11MQH 9 Stage	BJ 200 HP	Rebuilt	New	Motor Replaced due to Presumed Lightning Strike; Pump Rebuilt due to Sand Corrosion
										UN	1998	700	UN	BJ/FS - 11MQH 9 Stage	BJ 175 HP	New	UN	TV Survey Showed 16-Inch Casing Badly Corroded, So Raised Pump Setting. During the well rehab, it was noted that the power cable had some nicks.
										UN	1991	650	550	BJ/FS	BJ	New	New	Well Development with Primacord 1 LB Block Shots - Created Current Sand Issues; Modified to Pump Into System Rather Than Reservoir
										UN	1972	UN	UN	UN	100 HP Westinghouse	UN	UN	None
										UN	1960	650	UN	UN	100 HP Westinghouse	New	New	None
4				♦	♦			1401	476	665	2008	1,100	655	BJ/FS - 13/12MQLH(5)L(5) 10 Stage	BJ 250 HP 14" H 460V	New	Refurbished	No apparent sand issues. The well was bailed to a new depth of 1401 ft.
								1,393		542	1992	1,225	650	BJ/FS - 13MQL/12MQL 10 Stage	BJ 250 HP 14" H 460V	Refurbished	Refurbished	None
										569	1976	1,000	650	BJ/FS - 13MQ/12MQL 10 Stage	BJ 250 HP 14" H 460V	New	New	Work started in August of 1975, finished in January of 1976.
7					♦			1,527	1,318	1,105	2007	1,200	1,270	BJ/FS - 13MQ/12MQH(9)L(6) 15 Stage	BJ 400 HP 17" H 2,300 V	Rebuilt	Rebuilt	Repairs were required due to pipe separation with culminated in fishing of pipe, bowl, motor and cable. Motor sent back for routine factory repair, bowl rebuilt, all pipe rethread and new cable.
										1,125	2004	1,000	1,270	BJ/FS - 13MQ/12MQH(9)L(6) 15 Stage	BJ 400 HP 17" H 2,300 V	New	New	None
8					♦			1,384	930	840	2004	1,100	900	BJ/FS - 13MQ/12MQH5L7 12 stage	BJ 400 HP 17" H 2,300V	New	New	There is a well rehab scheduled to begin in 2015.
9					♦			1,368	1,170	870	2009	1,100	1,000	BJ/FS - 13MQ/12MWH5L9 14 Stage	BJ 400 HP 17" H 2,300V	Rebuilt	Rebuilt	Well rehab included repairs due to pipe separation, similar to well #7. Reused motor & bowl, rethreaded all pipe and furnished new cable.
										870	2004	1,000	1,000	BJ/FS - 13MQ/12MQH5L9 14 stage	BJ 400 HP 18" H 2,300V	New	New	None
TOTAL FLOW CAPACITY ALL SOURCES:												**5,100 GPM**						
												7.34 MGD						
TOTAL FIRM CAPACITY:												**3,900 GPM**						
												5.62 MGD						

Notes:

♦ Aquifer Designations: SG = Sand & Gravel; SL = Silurian Dolomite; GP = Galena-Platteville Dolomite; SP = St. Peter (Ancell) Sandstone; IG = Ironton-Galesville Sandstone; MS = Mt. Simon Sandstone, CO = Cambrian-Ordovician

♦ UN = Unknown

2.2.1 Shallow Sand and Gravel Wells (Abandoned) – Well No. 2 was completed in 1954 to a depth of 42 feet by Layne Christensen and has since been abandoned. Little documentation is available regarding the history of Well No. 2.

Well No. 5 was completed in 1998 to a depth of 91 feet by Layne Christensen. This well was located northwest of the intersection Route 34 and Eldamain Road. When the pump was installed, the static water level was 23 feet from grade. The well was sold to the City of Plano in 2007 – the well was never connected to the United City of Yorkville's Water Works system.

2.2.2 Deep Sandstone Wells – Well No. 1, which was drilled in 1923 to a depth of 590 feet by B.L. Palmer and Sons, was taken out of service in 1964 and sealed in 1970. This well was open to the Galena-Platteville and the Glenwood-St. Peter Formations.

Well No. 3, which is open to the St. Peter (Ancell) aquifer, was drilled in 1960. Well No. 3 has had some maintenance problems due to sand and other issues – for that reason it is not utilized as much as the other wells and will likely be abandoned prior to the end of the planning period.

Well No. 4 was constructed in 1976. Well No. 4 is onsite with the Wells No. 3 & 4 WTP and the Tower Lane water tower. It is approximately 1401 feet deep and is open to the St. Peter-Ancell and the Ironton-Galesville aquifer.

Wells No. 7, 8 and 9 were all constructed in 2004 into the Ironton-Galesville aquifer at a depth of 1538 feet, 1384 feet and 1368 feet respectively.

More information about the City's well construction can be found in Table No. 2-1. The combined raw water capacity of all of the City's wells is 5,100 GPM whereas the firm capacity with the largest well out of service is 3,900 GPM. Schematics for each of the City's existing water wells are included in Appendix A of this report. Section 5 reviews the deep aquifer system and evaluates its continued use as a sustainable water supply source.

2.2.3 Well Water Quality – Table No. 2-2 presents a summary of the water quality of the raw water from the City's active wells. It should be pointed out that the values listed were obtained from the latest available data provided by the City or obtained from the IEPA Drinking Water Watch website. It is recommended that the City sample and test the raw water for those wells with results listed from sample collection dates more than a few years old.

Table No. 2-2: Well Water Quality Summary

United City of Yorkville, IL

Well No.	Bedrock Aquifer$^{\phi}$ SG	SL	GP	SP	IG	CO	MS	Alkalinity mg/l as $CaCO_3$	Hardness mg/l as $CaCO_3$	Ca (mg/l)	Mg (mg/l)	pH	SO_4^{2-} (mg/l)	TDS (mg/l)	Na (mg/l)	Cl (mg/l)	NH_3 mg/l as N	As (ug/l)	Ba (mg/l)	CN^- (ug/l)	F (mg/l)	Fe (mg/l)	Mn (mg/l)	Ra-226 (pCi/l)	Ra-228 (pCi/l)	Comb. Ra (pCi/l)	Comments
Primary MCL								**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**10**	**2**	**200**	**4**	**1**	**0.15**	**N/A**	**N/A**	**5**	
Secondary MCL								**N/A**	**N/A**	**N/A**	**N/A**	**6.5-8.5**	**250**	**500**	**N/A**	**250**	**N/A**	**10**	**2**	**200**	**2**	**0.3**	**0.05**	**N/A**	**N/A**	**5**	
3				♦	♦			343*	284*	165.5*	115.6*	7.2*	19.8*	318*	21.1*	4.13*	0.56*	ND**	0.088*	NR	0.71*	0.17*	0.006*	10.9*	4.43*	15.33*	*Data from USGS Survey, 2014; **Data from 2015 reported by Tom Konen.
4				♦	♦			319*	298*	175	120	7.5	NR	360*	18.0	4.5	0.15	ND**	0.13	NR	0.86	0.20	ND*	7.9*	6.5*	14.4*	*Data from a Well Water Quality Summary report in 2000; and The Basis of Design. **Data from 2015 reported by Tom Konen.
7					♦			288*	282*	170	112	7.63*	12*	304*	21.5*	10*	NR	ND***	ND*	NR	0.76	ND*	ND*	3.7**	5.8**	9.5**	*Data from a 'TestAmerican Analytical Testing Corporation Analytical Report' (2004). ** Data from ARRO Laboratory Testing in 2005. ***Data from 2015 reported by Tom Konen.
8					♦			290	252	153	104	7.5	NR	265	23.0	8.0	NR	ND*	ND	NR	0.82	0.16	ND	2.6	10.9	13.5	*Data from 2015 reported by Tom Konen. Otherwise values found in the design summary YO0316.
9					♦			290	270	173	97	7.5	NR	280	17.4	5.0	NR	ND**	ND	NR	0.82	0.31	ND	3.9*	4.7*	8.6*	*Data from ARRO Laboratory Testing in 2005. **Data from 2015 reported by Tom Konen.

Notes:

ϕ Aquifer Designations: SG = Sand & Gravel; SL = Silurian Dolomite; GP = Galena-Platteville Dolomite; SP = St. Peter (Ancell) Sandstone; IG = Ironton-Galesville Sandstone; MS = Mt. Simon Sandstone, CO = Cambrian-Ordovician

Ca = Calcium; Mg = Magnesium; SO_4^{2-} = Sulfate; TDS = Total Dissolved Solids; Na = Sodium; Cl = Chloride; NH_3 = Ammonia; As = Arsenic; Ba = Barium; F = Fluoride; Fe = Iron; Mn = Manganese; Ra-### = Radium; Comb. Ra = Combined Radium 226 & 228; NR = No Record Found; ND = Non Detect

Highlighted value indicates raw water concentration exceeds Primary MCL for parameter. In all cases, treatment is in place to reduce concentration below the MCL. Routine monitoring is required.

Highlighted value indicates raw water concentration exceeds Secondary MCL for parameter. In some cases, treatment is in place to reduce concentration below the MCL. Routine monitoring is recommended.

Highlighted value indicates raw water concentration for parameter that may be approaching Primary or Secondary MCL or may cause water quality issues. Routine monitoring is recommended.

2.3 Treatment

The United City of Yorkville operates three WTPs, two of the WTPs are connected to two wells each, and one WTP only has one connected well. All three of the WTPs employ processes that provide drinking water that meets or exceeds federal and state drinking water quality standards. Cation exchange is used at every facility to remove barium, radium, hardness and to a certain degree, iron from the connected deep wells.

2.3.1 Wells No. 3 and 4 Water Treatment Plant (WTP) – The Wells No. 3 and 4 WTP was originally constructed in 2006. It includes four vertical cation exchange vessels, chemical treatment mechanisms, and equipment for backwashing the cation exchange resins. Regeneration water from the cation exchange vessels is captured in the below slab concrete backwash holding tank and then drains into the sanitary sewer system. Chemical treatment includes disinfection with chlorine gas, blended phosphates for corrosion control and hydrofluosilicic acid for fluoridation. Exhibit 2-2 presents a flow diagram depicting Well No. 3 and 4 WTP unit processes. Table No. 2-3 provides summary information on Wells No. 3 and 4 WTP unit processes.

An inventory and audit of each process identified some potential deficiencies or asset management elements that should be considered for the planning period.

- Resin analysis should be considered, to EEI's knowledge, the resin has not been tested since its installment in 2006.
- A motor protective relay should be considered for the electrical gear.
- Replacing the brine system Badger Flow Meters with Mag-Meters should be considered.

Exhibit 2-2: Well No. 3 & 4 Water Treatment Plant Process Flow Diagram

United City of Yorkville, IL

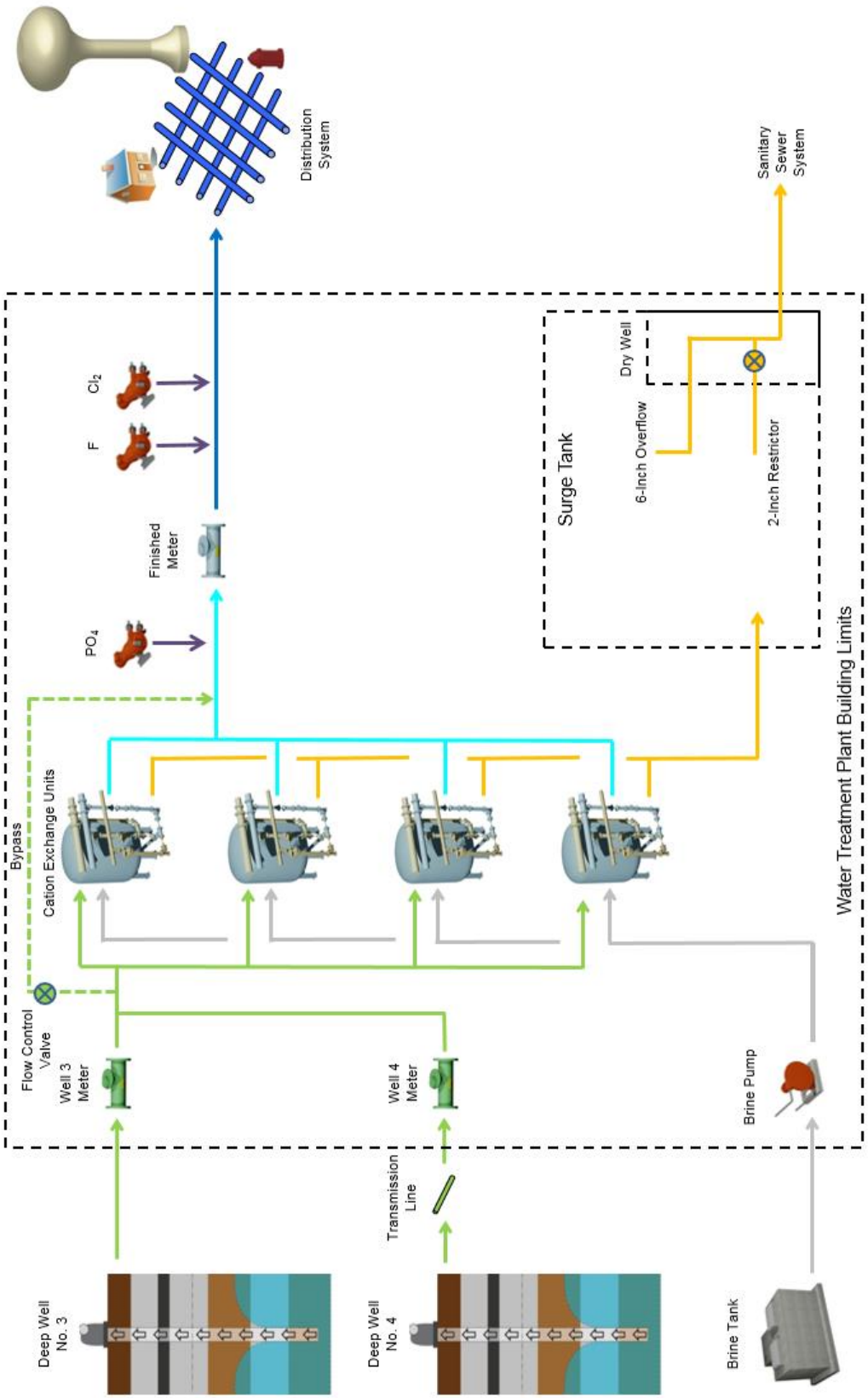


Table No. 2-3: Wells No. 3 & 4 Water Treatment Plant Unit Process Summary

United City of Yorkville, IL

Treatment Application Point No.	Process Unit	Components	Year Installed	Total Years in Operation	Last Modification	Condition	Size	Design Loading Rate *	Design Capacity	Comments and Recommendations
Wells No. 3 & 4 Water Treatment Plant										
Supply Wells No. 3 & 4	Cation Exchange (CE)	4 Vertical Pressure Vessels - 17" Gravel, 3" Torpedo Sand, 48" (254 cf) CE Resin per tank	2006	9	N/A	Good	9' Dia x 8' Sidewall Height Each	Surface Loading Rate: 4.99 GPM/SF @ 317 GPM	6.65 GPM/SF Max	Softening and radium removal. Consider resin analysis. No painting since the original.
	Backwash Holding Tank	Concrete Structure Below Treatment Room Floor	2006	9	N/A	Good	Depth = 6.5', Length = 45.0', Width = 12.0', Volume = 25,262 gallons	N/A	N/A	2" Restrictor and 6" Overflow Pipe
	Brine Pump	Watson-Marlow Brine Feed Pump	2006	9	N/A	Good	34 GPM @ 14.7 PSI; 5 HP	N/A	34 GPM	Consider Replacing Brine System Badger Flow Meters with Mag-Meters
	Brine Tank	Brine Storage Tank	2006	9	N/A	Good	2 - 12'-0" x 12'-0" x 7'-3" (Max Salt Bed Depth) Tank Sections (Overall Tank Dimensions 27'-0" x 21-'0")	N/A	N/A	
	Chlorine Gas Disinfection	Chemical Feed Equipment	2006	9	N/A	Good	Dual Cylinder Scale, 2 Booster Pumps each rated for 10 GPM @ 100 PSI and 1.5 HP, Injector, Regulator and Dual Switch Over Valve	N/A	N/A	Added before entering distribution system
	Hydrofluosilicic Acid	Chemical Feed Equipment	2006	9	N/A	Good	2 Day Tanks w/ Scale; 2 Feed Pumps: 10 GPD @ 140 PSI	N/A	N/A	Added before entering distribution system
	Phosphate	Chemical Feed Equipment	2006	9	N/A	Good	2 Day Tanks w/ Scale; 2 Feed Pumps: 24 GPD @ 110 PSI	N/A	N/A	Ortho/Poly blend For corrosion control and sequestering; Added before entering distribution system
	Electrical Gear	Motor Control Centers	2006	9	N/A	Good	N/A	N/A	N/A	Cutler-Hammer Freedom 2100 Motor Control Center, consider motor protective relay
	Controls	AB PLC & OIT	2006	9	N/A	Good	N/A	N/A	N/A	1 Main PLC and 1 Softener PLC
	Emergency Electrical Supply	No Generator; Wall Mounted Generator Cabinet/Receptacle and Manual Transfer Switch	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Temporary Generator Sizing Should be Confirmed

Notes:
Design Loading Rates are per IEPA standards and/or published water treatment plant design manuals.

2.3.2 Well No. 7 Water Treatment Plant (WTP) – The Well No. 7 WTP was constructed in 2005. The WTP acts nearly identically to the Wells No. 3 & 4 WTP. The treatment train begins with three vertical cation exchange vessels and then the typical municipal water treatment chemicals are added. Chemical treatment includes disinfection with chlorine gas, blended phosphates for corrosion control and hydrofluosilicic acid for fluoridation. Regeneration water from the cation exchange vessels is captured in the below slab concrete backwash holding tank and then pumped into the sanitary sewer system. There is no emergency generator for Well No. 7. Exhibit 2-3 presents a flow diagram depicting Well No. 7 WTP unit processes. Table No. 2-4 provides summary information on Well No. 7 WTP unit processes.

An inventory and audit of each process identified some potential deficiencies or asset management elements that should be considered for the planning period.

- To EEI's knowledge, the resin has not been tested since its installment in 2005; a resin analysis for the WTP should be considered.
- A motor protective relay should be considered for the electrical gear.

Exhibit 2-3: Well No. 7 Water Treatment Plant Process Flow Diagram

United City of Yorkville, IL

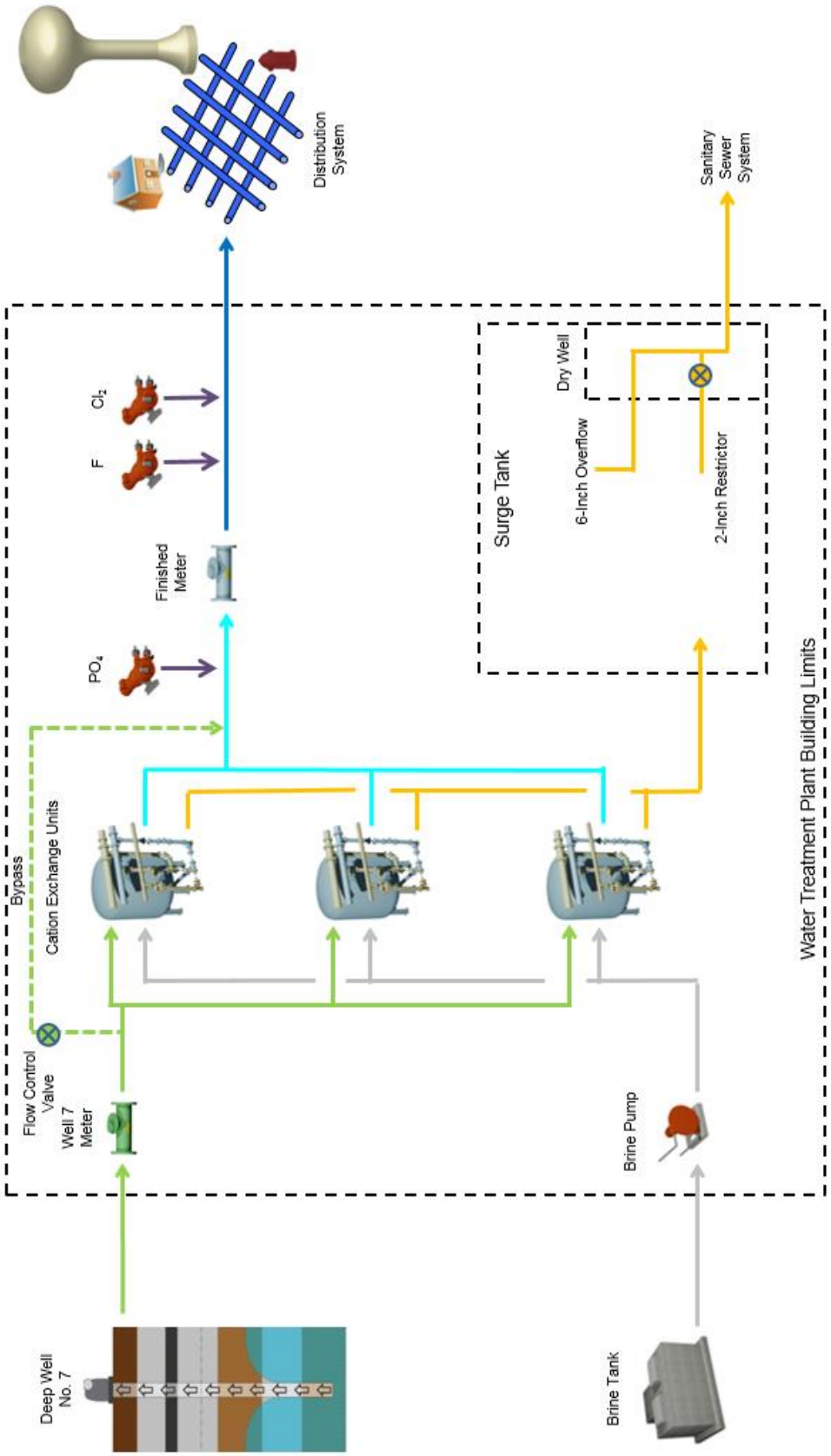


Table No. 2-4: Well No. 7 Water Treatment Plant Unit Process Summary

United City of Yorkville, IL

Treatment Application Point No.	Process Unit	Components	Year Installed	Total Years in Operation	Last Modification	Condition	Size	Design Loading Rate *	Design Capacity	Comments and Recommendations
Well No. 7 Water Treatment Plant										
Supply Well No. 7	Cation Exchange (CE)	3 Vertical Pressure Vessels - 17" Gravel, 3" Torpedo Sand, 48" (254 cf) CE Resin per tank	2005	10	N/A	Good	8' Dia x 8' Sidewall Height Each	Surface Loading Rate: 5.97 GPM/SF @ 300 GPM	7.04 GPM/SF Max	Softening and radium removal. Consider resin analysis. No painting since the original.
	Backwash Holding Tank	Concrete Structure Below Treatment Room Floor	2005	10	N/A	Good	Depth = 7'-3", Length = 32'-4", Width = 12'-0", Volume = 21,042 gallons	N/A	N/A	2" Restrictor and 6" Overflow Pipe
	Brine Pump	Barnant Ponndorf Brine Feed Pump	2005	10	2005	Good	34 GPM @ 14.7 PSI ;5 HP	N/A	34 GPM	
	Brine Tank	Brine Storage Tank	2005	10	N/A	Good	2-9'-6" x 9'-6" x 7'-3" (Max Salt Bed Depth) Tank Sections (Overall Tank Dimensions 21'-2" x 18'-0")	N/A	N/A	
	Chlorine Gas Disinfection	Chemical Feed Equipment	2005	10	2015 - Well 7 Booster Pump Replaced	Good	Dual Cylinder Scale, Booster Pump rated for 10 GPM @ 100 PSI, 1.5 HP, Injector, Regulator and Dual Switch Over Valve	N/A	N/A	Added before entering distribution system
	Hydrofluosilicic Acid	Chemical Feed Equipment	2005	10	N/A	Good	1 Day Tank w/ Scale; 1 Feed Pump: 10 GPD @ 140 PSI	N/A	N/A	Added before entering distribution system
	Phosphate	Chemical Feed Equipment	2005	10	N/A	Good	1 Day Tank w/ Scale; 1 Feed Pump: 24 GPD @ 110 PSI	N/A	N/A	Ortho/Poly blend For corrosion control and sequestering; Added before entering distribution system
	Electrical Gear	Motor Control Centers	2005	10	N/A	Good	N/A	N/A	N/A	Freedom, 2100 Series, Consider Motor Protective Relay
	Controls	AB PLC & OIT	2005	10	N/A	Good	N/A	N/A	N/A	1 Main PLC and 1 Softener PLC
	Emergency Electrical Supply	No Generator; Connection for Portable Generator and Kirk Key Interlock	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Temporary Generator Sizing: 3P, 480 V, 600 A, 300 KW - Should be Confirmed

Notes:
Design Loading Rates are per IEPA standards and/or published water treatment plant design manuals.

2.3.3 Wells No. 8 and 9 Water Treatment Plant (WTP) – The Wells No. 8 and 9 Water Treatment Plant was constructed in 2004. Well No. 8 is located on site at the WTP and Well No. 9 is located approximately 180 ft. west of the intersection of Kennedy Road and Bristol Ridge Rd. The WTP for Wells No. 8 and 9 works similarly to how the WTPs for Wells No. 3, 4 and 7 work. Raw water is brought into the plant where it is treated by one of four vertical cation exchange units. The water is then chemically treated with chlorine, phosphates and fluoridation. Backwash equipment is also included at this site in order to be able to backwash the cation exchange resin. Exhibit 2-4 presents a flow diagram depicting Wells No. 8 & 9 WTP unit processes. Table No. 2-5 provides summary information on Wells No. 8 & 9 WTP unit processes.

An inventory and audit of each process identified some potential deficiencies or asset management elements that should be considered for the planning period.

- To EEI's knowledge, the resin has not been tested since its installment in 2004. An analysis of the resin should be considered for this plant.

Exhibit 2-4: Wells No. 8 & 9 Water Treatment Plant Process Flow Diagram

United City of Yorkville, IL

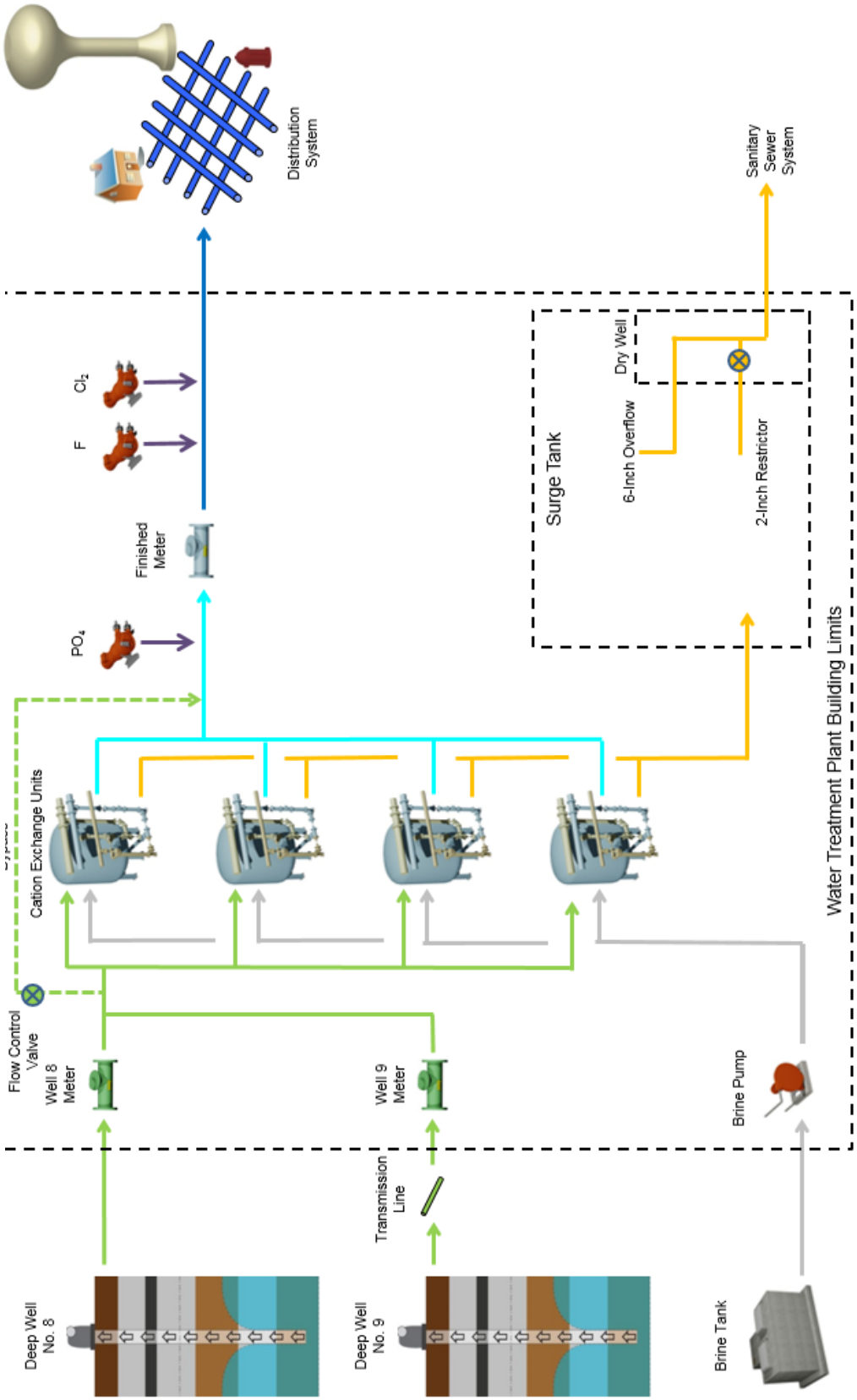


Table No. 2-5: Wells No. 8 & 9 Water Treatment Plant Unit Process Summary

United City of Yorkville, IL

Treatment Application Point No.	Process Unit	Components	Year Installed	Total Years in Operation	Last Modification	Condition	Size	Design Loading Rate *	Design Capacity	Comments and Recommendations
Wells No. 8 & 9 Water Treatment Plant										
Supply Wells No. 8 & 9	Cation Exchange (CE)	4 Vertical Pressure Vessels - 17" Gravel, 3" torpedo sand, 48" (201 cf) CE Resin per tank	2004	11	N/A	Good	8' Dia x 8' Sidewall Height Each	Surface Loading Rate: 5.97 GPM/SF @ 300 GPM	7.96 GPM/SF Max	Softening and radium removal. Consider resin analysis. No painting since the original.
	Backwash Holding Tank	Concrete Structure Below Treatment Room Floor	2004	11	N/A	Good	Depth = 6.5', Length = 35.0', Width = 12.0', Volume = 20,426 gallons	N/A	N/A	2" Restrictor and 6" Overflow Pipe
	Brine Pump	Watson-Marlow/Bredel Brine Feed Pump	2004	11	N/A	Good	32 GPM @ 15 psi; 5 HP	N/A	32 GPM	
	Brine Tank	Brine Storage Tank	2004	11	N/A	Good	2 - 12'-0" x 12'-0" x 7'-3" (Max Salt Bed Depth) Tank Sections (Overall Tank Dimensions 27'-0" x 21'-0")	N/A	N/A	
	Chlorine Gas Disinfection	Chemical Feed Equipment	2004	11	2014 - Well 9 Booster Pump Replaced	Good	Dual Cylinder Scale, Booster Pumps, rated for 13 gpm @ 75 PSI; 1.5 HP, Injector, Regulator and Dual Switch Over Valve	N/A	N/A	Added before entering distribution system
	Hydrofluosilicic Acid	Chemical Feed Equipment	2004	11	N/A	Good	2 Day Tanks w/ Scales; 2 Feed Pumps: 1.75 GPH @ 150 PSI	N/A	N/A	Added before entering distribution system
	Phosphate	Chemical Feed Equipment	2004	11	N/A	Good	2 Day Tanks w/ Scales; 2 Feed Pumps: 1.75 GPH @ 150 PSI	N/A	N/A	Ortho/Poly blend For corrosion control and sequestering; Added before entering distribution system
	Electrical Gear	Motor Control Centers	2005	10	N/A	Good	N/A	N/A	N/A	Cutler-Hammer with Motor Protective Relay
	Controls	AB PLC & OIT	2004	11	N/A	Good	N/A	N/A	N/A	1 Main PLC and 1 Softener PLC
	Emergency Electrical Supply	Standby Generator with ATS	2004	11	N/A	Good		N/A	N/A	800 KW Diesel Generator

Notes:

Design Loading Rates are per IEPA standards and/or published water treatment plant design manuals.

2.4 Storage

The City's Water Works System currently includes 4.55 million gallons of water storage, all of which is elevated storage with spheroid type storage tanks. The water storage components are distributed within the four pressure zones of the system, which will be further discussed in section 6. Exhibit 2-1 identifies the locations of all of the storage tanks and Table No. 2-6 provides the capacity, type of storage and pertinent elevations for each tank.

Table No. 2-6: Existing Water Storage Summary
United City of Yorkville, IL

Site/ Tank Name	Type	Year Constr.	Capacity (Gallons)	Top of Foundation (Feet)	Headrange (Feet)	Overflow Elevation (Foot)	Comments
North Pressure Zone							
North EWST	Spheroid	2003	1,000,000	661.0	770.0 - 810.0	810.0	
Northeast EWST	Spheroid	2004	1,500,000	652.5	764.0 - 810.0	810.0	Also known as Grande Reserve.
		Subtotal:	**2,500,000**				
North Central Pressure Zone							
North Central EWST	Spheroid	1969	300,000	633.5	730.5-763.0	763.0	Also known as Tower Lane; Rehabilitated (overcoat) in 2008.
		Subtotal:	**300,000**				
South Central Pressure Zone							
South Central EWST	Spheroid	1986	500,000	715.0	812.50 - 850.0	850.0	Also known as South. Rehabilitated (full blast with polyurethane and clearcoat on the exterior) in 2005.
		Subtotal:	**500,000**				
South Pressure Zone							
South EWST	Spheroid	2004	1,250,000	768.0	874.0 - 920.0	920.0	Also known as Raintree.
		Subtotal:	**1,250,000**				
		TOTAL:	**4,550,000**				

Pressures and pressure zones directly correspond to the ground elevations and hydraulic grade lines of the Water Works System. If elevated tanks are part of the system, the water level within the tank typically controls the hydraulic grade line. One (1) psi of pressure is equivalent to 2.31 feet of water (i.e. the elevation difference between the tank level and the ground elevation at any location). Targeted pressure ranges are based on several different standards including AWWA, Ten State Standards and the USEPA. These ranges are listed in Table No. 2-7.

In areas of variable topography, multiple pressure zones can be created to maintain consistent and adequate pressures throughout the service area and to generally meet the pressure ranges defined above. If necessary, booster pump stations and pressure reducing valve stations are placed at pressure zone boundaries to allow transfer of water between the different zones. A booster pump allows water to be transferred from a lower pressure zone to a higher pressure zone. Alternately, a pressure reducing valve allows water to be transferred from a higher pressure zone to a lower pressure zone.

Table No. 2-7: Recommended Pressures By AWWA, Ten State Standards, & USEPA

United City of Yorkville, IL

Minimum Pressure	20 psi	All ground level points
	35 psi	All points within distribution system
Maximum Pressure	100 psi	All points within distribution system
Fire Flow Minimum	20 psi	All points within distribution system
Ideal Range	50 - 75 psi	Residences
	35 - 60 psi	All points within distribution system

The ground elevations throughout the Yorkville planning boundary range from approximately 575 feet (near the Fox River) to approximately 775 feet (in the south pressure zone) above mean sea level (MSL). The Fox River flowing generally east to west through the center of the City is largely responsible for shaping the local topography resulting in lower ground elevations in the moderate river valley that spans through the City center.

Given the elevation variances throughout the City planning area, the City has split the water distribution system into four different zones. Table No. 2-8 outlines the ground elevations throughout the pressure zone and the associated range of pressures at the corresponding ground elevation. Table No. 2-8 also highlights the operating pressures and the corresponding ground elevation for each of Yorkville's four pressure zones. the blue shaded area represents the ideal range of operating pressures (40-80 psi +/-) and the yellow shaded area represents the near-ideal operating pressures. The North Pressure Zone, North Central Pressure Zone and South Pressure Zone all have areas of minor low pressure. The South Central Pressure Zone and the South Pressure Zone both have areas of minor high pressure. As shown in Table No. 2-8, while there are some zones that are slightly too high or too low, the pressure zones are currently adequate for the areas they serve. Exhibit 2-5 provides the hydraulic profile for the existing overall Water Works System.

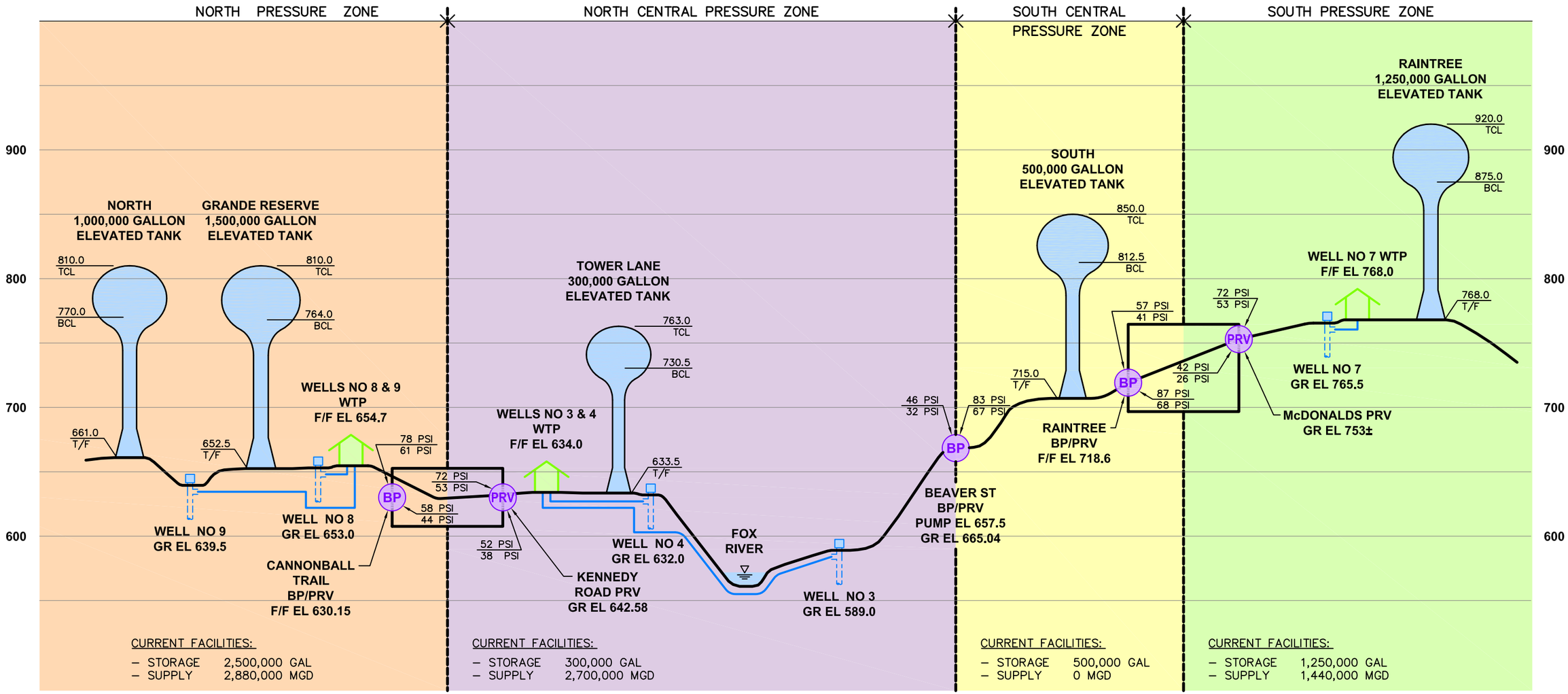
Table No. 2-8: Pressure Zone Summary Table

United City of Yorkville, IL

	Hydraulic Grade Line			Ground	Static Pressure		
	High (Feet)	Mid (Feet)	Low Design (Feet)	Elevation (Feet)	High (Psi)	Mid (Psi)	Low Design (Psi)
North Pressure Zone				690	52.0	42.0	32.0
North EWST (1,000,000 Gal)	810.00	790.00	770.00	680	56.3	46.3	36.4
Northeast EWST (1,500,000 Gal)	810.00	787.00	764.00	670	60.6	50.7	40.7
				660	65.0	55.0	45.0
				650	69.3	59.3	49.4
				640	73.6	63.7	53.7
				630	77.9	68.0	58.0
				625	80.1	70.1	60.2
North Central Pressure Zone				660	44.6	37.6	30.5
North Central EWST (300,000 Gal)	763.00	746.75	730.50	650	48.9	41.9	34.9
				640	53.3	46.2	39.2
				630	57.6	50.6	43.5
				620	61.9	54.9	47.8
				610	66.2	59.2	52.2
				600	70.6	63.5	56.5
				590	74.9	67.9	60.8
				580	79.2	72.2	65.2
South Central Pressure Zone				715	58.5	50.3	42.2
South Central EWST (300,000 Gal)	850.00	831.25	812.50	710	60.6	52.5	44.4
				700	65.0	56.8	48.7
				690	69.3	61.2	53.0
				680	73.6	65.5	57.4
				670	77.9	69.8	61.7
				660	82.3	74.2	66.0
South Pressure Zone				790	56.3	46.5	36.8
South EWST (1,250,000 Gal)	920.00	897.50	875.00	780	60.6	50.9	41.1
				770	65.0	55.2	45.5
				760	69.3	59.5	49.8
				750	73.6	63.9	54.1
				740	77.9	68.2	58.5
				730	82.3	72.5	62.8
				720	86.6	76.9	67.1
				715	88.8	79.0	69.3

Notes:
1) High Hydraulic Grade Line = Tank's TCL
2) Mid Hydraulic Grade Line = (Tank's TCL + Tank's BCL) / 2
3) Low Hydraulic Grade Line = Tank's BCL
4) If a zone has more than 1 tank, the static pressure is calculated at the lowest elevation
5) The blue shaded area represents the ideal range of operating pressures (40-80 psi +/-) and corresponding ground elevation served
6) The yellow shaded area represents ground surface elevations within Village service area that are marginally above or below ideal range

EXHIBIT 2-5:
EXISTING WATER WORKS SYSTEM HYDRAULIC PROFILE
UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS



CURRENT FACILITIES:
- STORAGE 2,500,000 GAL
- SUPPLY 2,880,000 MGD

CURRENT FACILITIES:
- STORAGE 300,000 GAL
- SUPPLY 2,700,000 MGD

CURRENT FACILITIES:
- STORAGE 500,000 GAL
- SUPPLY 0 MGD

CURRENT FACILITIES:
- STORAGE 1,250,000 GAL
- SUPPLY 1,440,000 MGD

LEGEND:

BCL	=	BOTTOM CAPACITY LINE
BP/PRV	=	BOOSTER PUMP/PRESSURE REDUCING VALVE STATION
EL	=	ELEVATION
F/F	=	FINISHED FLOOR
GAL	=	GALLONS
GR	=	GROUND
MGD	=	MILLION GALLONS PER DAY
PSI	=	POUNDS PER SQUARE INCH
T/F	=	TOP OF FOUNDATION
TCL	=	TOP CAPACITY LINE
WTP	=	WATER TREATMENT PLANT

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2.5 Distribution

The City's water distribution system is an interconnected conveyance system that transfers water through approximately 150 miles of piping, ultimately providing water to the public for domestic, industrial and fire protection uses. Depending on the well and WTP, either the well pumps or high service pumps pressurize the Water Works System and allow water to move throughout it. Since the system is served by four pressure zones, booster pump stations and pressure reducing valves are necessary to ensure adequate water transfer across the pressure zones throughout the city.

2.5.1 Pressure Zones – The United City of Yorkville has four pressure zones: the North Pressure Zone, the North Central Pressure Zone, The South Central Pressure Zone and the South Pressure Zone.

The North Pressure Zone includes the North and Grande Reserve EWSTs, Wells No. 8 and 9 and the Wells No. 8 and 9 WTP. The North Pressure Zone has a storage capacity of 2.5 million gallons and a supply capacity of 2.88 MGD.

The North Central Pressure Zone includes the Tower Lane EWST, Wells No. 3 and 4 and the Wells No. 3 and 4 WTP. The North Central Pressure Zone has a storage capacity of 300,000 gallons and a supply capacity of 2.7 MGD.

The South Central Pressure Zone includes the South EWST. The South Central Pressure zone has a storage capacity of 500,000 gallons and has no supply capacity.

The South Pressure Zone includes the Raintree EWST, Well No. 7 and the Well No. 7 WTP. The South Pressure Zone has a storage capacity of 1.25 million gallons and has a supply capacity of 1.44 MGD.

When the City expands to the south, a new pressure zone will need to be created. This pressure zone is designated as the 'Southeast Pressure Zone'. In the coming years, if new residential, commercial, or industrial land uses begin to develop in or near the Southeast Pressure Zone, the United City of Yorkville will have to ensure that there is adequate water resource infrastructure to serve the water customers.

2.5.2 Booster Pump Stations and Pressure Reducing Valve Stations – The United City of Yorkville has three Booster Pump/Pressure Reducing Valve (BP/PRVs) Stations and two Pressure Reducing Valve Stations (PRVs). Table No. 2-9 outlines the information for the BP/PRV and PRV stations in Yorkville. Booster Pumps can be used to increase pressure when water needs to flow from a lower elevation to a higher one. Pressure Reducing Valves are used to ensure that water flowing from a higher pressure zone to a lower one meets the hydraulic grade line of the lower zone. The system is currently operated by leaving the PRVs slightly open so that some water is able to flow from each of the higher pressure zones into the lower zones. Opening of these PRVs ensures that water is not becoming stagnant in the pipes.

Table No. 2-9: Booster Pumping & Pressure Reducing Valve Stations Summary

United City of Yorkville, IL

Treatment Application Point No.	Process Unit	Components	Year Installed	Total Years in Operation	Last Modification	Condition	Size	Design Loading Rate *	Design Capacity	Comments and Recommendations
North Booster Pump/Pressure Reducing Valve Station (Cannonball Trail)										
Transfers Water Between North Central Pressure Zone and North Pressure Zone	Booster Pumps	3 Horizontal Split Case Centrifugal Pumps	2005	10	NA	Good	Pump 1: 50 GPM @ 135' TDH 5 HP; Pumps 2 & 3: 800 GPM @ 135' TDH 40 HP	Firm Capacity 850 GPM	1.2 MGD	Located in building. Pump 1: Aurora Series 341 Model 1 1/4 x 1 1/2 x 7; Pumps 2 & 3: Aurora Series 341 Model 4 x 4 x 7B
	Pressure Reducing Valves	1 - 3" Cla-Val PRV; 1- 10" Cla-Val PRV	2005	10	NA	Good	3" Valve Max Rated Flowrate: 460 GPM; 10" Valve Max Rated Flowrate: 4,900 GPM	NA	7.1 MGD	
	Emergency Electrical Supply	Natural Gas Generator	2005	10	NA	Good	100kW	NA	N/A	
South Central Booster Pump/Pressure Reducing Valve Station (Beaver St)										
Transfers Water Between North Central Pressure Zone and South Central Pressure Zone	Booster Pumps	2 Horizontal Split Case Centrifugal Pumps	1986	29	NA	Good	Pumps 1 & 2: 700 GPM @ 115' TDH 30 HP (4" x 5" x 11")	Firm Capacity 700 GPM	1.0 MGD	Located in Unground Vault. Built by Engineered Fluid.
	Pressure Reducing Valves	1 - 3" Cla-Val PRV; 1- 10" Cla-Val PRV	1986	29	NA	Good	3" Valve Max Rated Flowrate: 460 GPM; 10" Valve Max Rated Flowrate: 4,900 GPM	NA	7.1 MGD	
South Booster Pump/Pressure Reducing Valve Station (Raintree)										
Transfers Water Between South Central Pressure Zone and South Pressure Zone	Booster Pumps	3 Horizontal Split Case Centrifugal Pumps	2004	11	NA	Good	Pump 1: 50 GPM @ 125' TDH 5 HP; Pump 2: 1000 GPM @ 125' TDH 60 HP; Pump 3: 1000 GPM @ 125' TDH 60 HP	Firm Capacity 1050 GPM	1.5 MGD	Located in building. Pump 1: Aurora Series 321 Model 1 1/4 x 1 1/2 x 7A; Pumps 2 & 3: Aurora Series 341 Model 5 x 6 x 12
	Pressure Reducing Valves	1 - 3" Cla-Val PRV; 1- 10" Cla-Val PRV	2004	11	NA	Good	3" Valve Max Rated Flowrate: 460 GPM; 10" Valve Max Rated Flowrate: 4,900 GPM	NA	7.1 MGD	
	Emergency Electrical Supply	Natural Gas Generator	2004	11	NA	Good	150kW	NA	NA	
North Central Pressure Reducing Valve Station (Kennedy Rd.)										
Transfers Water From North Pressure Zone to North Central Pressure Zone	Pressure Reducing Valves	1 - 1.5" Cla-Val PRV; 1- 4" Cla-Val PRV; 1- 12" Cla-Val PRV	2007	8	NA	Good	1.5" Valve Max Rated Flowrate: 125 GPM; 4" Valve Max Rated Flowrate: 800 GPM; 12" Valve Max Rated Flowrate: 7,000 GPM	NA	10.1 MGD	Underground
South Pressure Reducing Valve Station (Mc Donalds)										
Transfers Water From South Pressure Zone to South Central Pressure Zone	Pressure Reducing Valves	1 - 1.5" Cla-Val PRV; 1- 4" Cla-Val PRV; 1- 12" Cla-Val PRV	2005	10	NA	Good	1.5" Valve Max Rated Flowrate: 125 GPM; 4" Valve Max Rated Flowrate: 800 GPM; 12" Valve Max Rated Flowrate: 7,000 GPM	NA	10.1 MGD	Planning began in 2003, ground broke in 2004, and the station was completed in 2005.

Notes:
Firm Capacity is based on largest pump out of service.

The Cannonball Trail BP/PRV connects the North Pressure Zone to the North Central Pressure Zone, the Beaver Street BP/PRV connects the North Central Pressure Zone to the South Central Pressure Zone and Raintree BP/PRV connects the South Central Pressure Zone to the South Pressure Zone.

The Kennedy Road PRV connects the North Pressure Zone to the North Central pressure zone and the McDonald's PRV station connects the South Pressure Zone to the South Central Pressure Zone.

2.5.3 Water Main Network – Yorkville has approximately 792,000± feet (150± miles) of water main network throughout the city. The City has mains ranging from 1" to 16" in diameter.

2.6 Controls

The United City of Yorkville utilizes a SCADA system, consisting of Allen Bradley programming logic controllers (PLCs) to monitor the operation of the supply, treatment, storage and distribution components of the water system. The main SCADA node is located at the Wells No. 3 & 4 WTP.

SECTION 3: HISTORICAL AND PROJECTED WATER USE

The United City of Yorkville's historical water use has intensified along with the City's growth in population. The purpose of this section of the report is to provide a summary of the City's historical water production and use.

3.1 Historical Water Use

The City's Water Department tracks water production in daily, monthly and yearly increments. Water use by all of the City residents, businesses, industrial users and government/ institutions is tracked through bi-monthly meter readings.

The historical total water use, or essentially the total amount of source water utilized in the production and distribution of potable water within the City's Water Works System, was analyzed from January 1, 2010 – December 31, 2014. Table No. 3-1 summarizes the total raw water pumped by the City's Water Department.

Table No. 3-1: Historical Water Production
United City of Yorkville, IL

YEAR	2010	2011	2012	2013	2014	AVG.
WATER CONSUMERS	16,921	17,160	17,400	17,639	17,878	
ANNUAL PUMPAGE	552,211,400 GAL	623,194,100 GAL	598,997,900 GAL	513,563,000 GAL	504,429,000 GAL	
MAXIMUM MONTHLY PUMPAGE	55,228,200 GAL	75,797,700 GAL	73,414,800 GAL	56,361,000 GAL	48,679,000 GAL	
MAXIMUM DRY WEATHER MONTH	JULY	JULY	JUNE	JULY	JULY	
AVERAGE DAILY PUMPAGE	1,512,900 GAL	1,707,400 GAL	1,636,600 GAL	1,407,000 GAL	1,382,000 GAL	
AVERAGE DAILY PUMPAGE DURING MONTH WITH MAXIMUM PUMPAGE	1,781,555 GAL	2,445,087 GAL	2,447,160 GAL	1,818,097 GAL	1,570,290 GAL	
MAXIMUM DAILY PUMPAGE	2,947,000 GAL	3,513,100 GAL	3,246,000 GAL	2,771,000 GAL	2,170,000 GAL	
COMPUTED MAXIMUM HOUR	245,583 GAL	292,758 GAL	270,500 GAL	230,917 GAL	180,833 GAL	
COMPUTED MAXIMUM HOUR	4,093 GPM	4,879 GPM	4,508 GPM	3,849 GPM	3,014 GPM	
AVG. GAL./PERSON/DAY	89 GPCD	99 GPCD	94 GPCD	80 GPCD	77 GPCD	88
RATIO OF MAX. AVG. DAY TO AVG. D	1.18	1.43	1.50	1.29	1.14	1.31
RATIO OF MAX. DAY TO AVG. DAY	1.95	2.06	1.98	1.97	1.57	1.91

Notes:
Assumed ratio of max hour to max day demand (MHD:MDD) = 2.0

Inspection of this table indicates that the water use characteristics and metrics are fairly consistent with many Northeastern Illinois communities during the same period. For instance, the maximum day demand to average day demand ratio (MDD:ADD) has averaged 1.91 for the past five years. It reached its maximum in 2011 at 2.06 which occurred during a summer when Illinois experienced below average rainfall in July and August. Coupled with above-average temperatures, the result was a rapidly developed drought that continued through 2012. The drought in turn led to extensive lawn irrigation and peak maximum day water use. The significance of the MDD:ADD ratio is that it is proportional to the amount of supply, treatment and storage required for a municipality. A greater ratio results in greater supply, treatment and storage requirements. The system must be designed to meet these requirements for every day of every year while the increased demand may be limited to just a few days of each year. Therefore, this value should be minimized as much as possible. In 2013, the MDD:ADD ratio stabilized in parallel with the normalizing temperature and precipitation trends which is likely indicative of decreased water use for landscaping activities. In 2014, the MDD:ADD ratio dropped to 1.57. In addition to the climate, the rate of development can also impact the MDD:ADD ratio because seasonal construction water use for activities such as watering newly placed sod increases the maximum day use. Therefore, in the event of an economic upswing and subsequent industrial or housing development, or when the region experiences another drought, there is a potential that the MDD:ADD ratio could creep up again.

Another significant water use parameter to be mindful of is the average gallons (of water production) per person per day. A population equivalent (PE) is a unit of measure often utilized to determine the impacts of existing and additional water consumers to the system. For many northeastern Illinois communities, one PE is typically in the range of 75 – 120 gpd. Lower values are often times associated with established mainly residential communities that practice water conservation, while larger values are typically observed in developing communities that may have a significant commercial and industrial base that consumes a fair amount of water. Inspection of Table No. 3-1 shows that the historical average water use per PE per day in the United City of Yorkville is approximately 88 gpcd which is in the range of expected values for the community. It should be noted, this water use per PE also accounts for all consumer types including residential, commercial, industrial, government/industrial, etc. Similar to the MDD:ADD ratio, this value has a direct impact on the water system infrastructure and therefore, should be minimized when possible. Section 3.2.2 provides an overview of means to reduce the MDD:ADD ratio and the average gallons per person per day including water conservation goals and strategies, many of which the City has already incorporated.

3.1.1 Historical System Evaluation – The water supply and storage systems of the City were evaluated for adequacy using five parameters which generally rate the strength of the supply and storage systems. The parameters used are as follows:

1. *Ultimate Source Capacity* - The ability of the system to supply the maximum day demand with the largest well out of service.

2. *Reliable Source Capacity* - The ability of the system to supply the maximum day demand with all wells operating 16 hours per day.

3. *Peak Hour Storage* - The ability of the system to have sufficient storage to meet the peak hour demand for 4 hours without depleting storage more than 50 percent.

4. *Fire Flow* - The ability of the system to meet a design fire flow rate for the design period and meet maximum day demand with the largest well out of service. A common design fire flow is 3,000 GPM for 3 hours.

5. *Emergency Supply* - The ability of the system to supply the average day demand using elevated storage and supply sources with standby power generator systems only. Normally 80% of storage tank capacity is assumed to be available.

Table No. 3-2 summarizes the system analysis for the previous five calendar years (2010–2014). Table No. 3-3 indicates the corresponding excess or required capacity needed to meet 100% of each of the parameters listed above. Tables No. 3-2 and 3-3 consider all existing active wells are on-line and that each water treatment plant is available to meet the City's water demand.

For further clarification, a summary of the system analysis calculations using all active wells for calendar year 2011 follows (the year of the highest maximum daily demand over the analysis period).

Test No. 1: *Ultimate Source Capacity* – The 2011 maximum day demand was 3,513,100 gallons per day (gpd). The total supply capacity for the water system is 5,616,000 gpd. To obtain the *Ultimate Source Capacity* of the existing system, the capacity of the largest well (Well No. 7 is 1,728,000 gpd) is subtracted from the total well capacity:

Total Well Capacity	=	7,344,000 gpd
Largest Well Capacity	=	1,728,000 gpd
Ultimate Source Capacity	=	5,616,000 gpd

Since the *Ultimate Source Capacity* (5,616,000 gpd) is more than the 2011 maximum day demand (3,513,100 gpd) the supply facilities are adequate for Test No. 1.

Table No. 3-2: Water Works System Evaluation - *Historical Analysis*

United City of Yorkville, IL

TEST PARAMETERS		YEAR				
		2010	2011	2012	2013	2014
1.0	Ultimate Source Capacity	2,669,000 GAL	2,102,900 GAL	2,370,000 GAL	2,845,000 GAL	3,446,000 GAL
2.0	Reliable Source Capacity*	1,949,000 GAL	1,382,900 GAL	1,650,000 GAL	2,125,000 GAL	2,726,000 GAL
3.0	Peak Hour Storage	1,292,667 GAL	1,103,967 GAL	1,193,000 GAL	1,351,333 GAL	1,551,667 GAL
4.0	Fire Flow	3,433,625 GAL	3,362,863 GAL	3,396,250 GAL	3,455,625 GAL	3,530,750 GAL
5.0	Emergency Supply	3,711,100 GAL	3,516,600 GAL	3,587,400 GAL	3,817,000 GAL	3,842,000 GAL

Table No. 3-3: Water Works System Evaluation - *Historical Analysis*
Corresponding Available Or Required Capacity

United City of Yorkville, IL

TEST PARAMETERS		YEAR				
		2010	2011	2012	2013	2014
1.0	Ultimate Source Capacity	1,853 GPM	1,460 GPM	1,646 GPM	1,976 GPM	2,393 GPM
2.0	Reliable Source Capacity*	2,030 GPM	1,441 GPM	1,719 GPM	2,214 GPM	2,840 GPM
3.0	Peak Hour Storage	1,292,667 GAL	1,103,967 GAL	1,193,000 GAL	1,351,333 GAL	1,551,667 GAL
4.0	Fire Flow	3,433,625 GAL	3,362,863 GAL	3,396,250 GAL	3,455,625 GAL	3,530,750 GAL
5.0	Emergency Supply	3,711,100 GAL	3,516,600 GAL	3,587,400 GAL	3,817,000 GAL	3,842,000 GAL

Notes:
Assumes wells are operating 16 hours/day for Reliable Source Capacity.

Test No. 2: *Reliable Source Capacity* – The 2011 maximum day demand was 3,513,100 gpd. The *Reliable Source Capacity* is determined by calculating the maximum volume of water deliverable by the supply source(s) in 16 hours, or two-thirds of the daily well capacity (16 hours/day / 24 hours/day = 66%).

Total Well Capacity = 7,344,000 gpd

16 Hour Pumping Capacity = 7,344,000 gpd x $\frac{16 \text{ hours}}{24 \text{ hours}}$ = 4,896,000 gpd

The *Reliable Source Capacity* (4,896,000 gpd) is more than the 2011 maximum day demand (3,513,100 gpd), so the supply facilities are adequate for Test No. 2.

Test No. 3: *Peak Hour Storage* – The 2011 peak hour demand is 292,758 gal/hr.

Peak Hour Demand = Max. Day Demand x 2 x $\frac{1 \text{ day}}{24 \text{ hours}}$

= 3,513,100 gpd x 2 x $\frac{1 \text{ day}}{24 \text{ hours}}$

= 292,758 gal/hr

The storage required to meet the peak hour demand for 4 hours is:

4-Hour, Peak Demand = 292,758 gal/hr x 4 hrs = 1,171,032 gal

The total storage capacity of the existing facilities, at their current operating levels, is 4,550,000 gallons, and therefore 50% of the existing facilities is 2,275,000 gallons. Since the required *Peak Hour Storage* for 4 hours (1,171,200 gal) is less than 50% of the existing facilities (2,275,000 gal), the storage facilities for Test No. 3 are adequate.

Test No. 4: *Fire Flow* – The maximum day demand plus fire flow demands for 3 hours is 979,140 gallons.

Maximum Day Demand (3 Hours) = 3,513,100 gpd x 3 hrs x $\frac{1 \text{ day}}{24 \text{ hours}}$ = 439,138 gal

Fire Flow Demand (3 Hours) = 3,000 GPM X 60 min/hr X 3 hr = 540,000 gal

Maximum Day + Fire Flow = 979,138 gal

The total flow rate available from the system with the largest supply out of service is 3,900 GPM. The total amount of water from the remaining wells over 3 hours is 702,000 gallons. If 80% of the 4,550,000 gallons from EWST storage is available, there is 3,640,000 gallons available from storage. The total supply available for 3 hours is then 4,342,000 gallons.

Storage	=	3,640,000 gal
Wells	= +	702,000 gal
		4,342,000 gal

Since the 3-hour maximum day demand plus fire flow (979,138 gal) is less than 80% of the available storage facilities and the available supply (4,342,000 gal), the facilities are adequate for Test No. 4.

Test No. 5: *Emergency Supply* – The 2011 average day demand is 1,707,400 gpd and 80% of the available storage is 3,640,000 gallons. The only Yorkville well that has an emergency generator is Well No. 8, this emergency generator is also able to power the WTP for Wells No. 8 and 9.

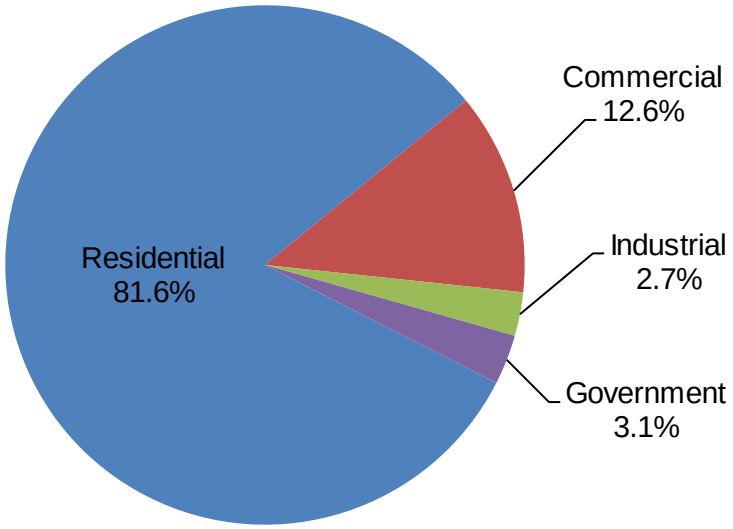
80% of Existing Storage	=	4,550,000 x 80% =	3,640,000 gal
Emergency Generator Supply	=		+ 1,584,000 gal
Total Emergency Supply	=		5,224,000 gal

Since the Total Emergency Supply (5,224,000 gal) is greater than the Average Daily Demand (1,707,400 gal), the system is adequate for Test No. 5, *Emergency Supply*.

Inspection of Tables No. 3-2 and 3-3 shows that all five parameters are satisfied for all five years for the United City of Yorkville. The year where the most demand occurred was 2011, this year was the year of a drought which increased the city's demand on water for irrigation. The parameters used to evaluate the water system show that the city's water system is adequate for the time being. However, considering the City's expected growth, the City needs to consider the best means for a sustainable system that can be expanded in the coming years. In sections 3.2.1 and 3.2.3, this report will use the five parameters used above to evaluate the City's Water Works System against future population and corresponding water usage expectations.

3.1.2 Water Consumption – The City's 2014 annual fiscal/reporting year (May – April) records were reviewed based on the various water use classifications. Exhibit 3-1 presents the water usage by consumer type for Reporting Year 2014. Residential usage within the City consumes the largest percentage of water at 81.6%. Industrial and Commercial users account for 12.6% and 2.7% respectively. The remaining 3.1% of the total annual water usage is from government sources.

Exhibit 3-1: FY 2014-15 Billed Water Use By Consumer Type
United City of Yorkville, IL



3.1.3 Water Audit – As defined in the AWWA Manual M36: Water Audits and Loss Control, 4th Edition (2016), Non-Revenue Water is the difference between system input volume (water produced) and billed authorized consumption. It consists of the following:

- Unbilled Authorized Consumption (fire hydrant flushing, water treatment plant process water, municipal buildings whose water is not metered, etc.);
- Apparent Losses (non-physical losses such as unauthorized consumption (water theft), meter inaccuracies, systematic data handling errors, etc.) and;
- Real Losses (physical losses from the distribution system and storage tanks up to the point of connection to the customer meter).

Water loss in the system equates to lost revenue for the utility. It is critical to the success of any water utility to manage and minimize water loss. In response to the need for consistent water loss auditing and benchmarking, the AWWA released Version 5 of their audit software in August 2014. This tool is focused on identifying water distribution system losses, not water treatment losses. This smart Microsoft Excel based audit program offers water utilities a tool to accurately and consistently identify, record, trend and benchmark the apparent and real losses in their water system. The audit provides a roadmap to help utilities reduce water waste and better prioritize infrastructure investments by identifying water losses that are viable to eliminate and economically recoverable. Another benefit of the audit is that it provides a yardstick by which to

compare against past performance or other similar sized utilities. For instance, by completing the audit, several operational efficiency and financial performance indicators are calculated. A common operational efficiency performance indicator that many utilities refer to is the Infrastructure Leakage Index (ILI). The ILI is a comparison benchmark that focuses on real losses. The ILI score ranges from 0 to 10 with a lower score representing a more robust distribution system.

During 2014 the United City of Yorkville has tracked their water loss using available resources. The data was recovered and input into the AWWA Version 5 audit program. The water used for treatment processes (unbilled & metered) in 2014 was approximately 0.2% whereas water used for purposes such as flushing, fire-fighting and main breaks (unbilled & unmetered) is estimated at approximately 1.2% over the same period. Made up of the apparent losses and real losses, the total water loss was 10.3%. Adding the unbilled water identified above to the total water loss provides the non-revenue water which averages about 11.8% of the pumped water supply. The ILI score was 0.68 for this period, which is indicative of a fairly tight distribution system. Table No. 3-4 outlines the information evaluated in the summary.

Table No. 3-4: Water Accounting

United City of Yorkville, IL

	Water Supply Treated	Water Billed and Metered	Water Unbilled and Metered		Water Unbilled and Unmetered		Authorized Consumption (C+D+F)	Water Losses				Non-Revenue Water D+F+K		Infrastructure Leakage Index
								Apparent	Real (B-H-I)	Total (I+J) or (B-H)				
Year A	MG B	MG C	MG D	% E	MG F	% G	MG H	MG I	MG J	MG K	% L	MG M	% N	O
2014	500.503	441.505	1.184	0.24%	6.256	1.25%	448.946	16.046	35.511	51.558	10.30%	58.998	2.93%	0.68

Currently, there are no water loss regulatory requirements or standards that apply to the United City of Yorkville. However, in order to establish a reasonable goal for water loss, it is recommended that the benchmarking indicators of other utilities be reviewed for comparison. In 2011, as a result of a water audit data collection initiative, the AWWA Water Loss Control Committee created its first dataset of validated water audit data which has been posted for review by water utility stakeholders. The document is titled *Validated Water Audit Data For Reliable Utility Benchmarking.* Twenty-one utilities provided their water audit data for review and careful validation by members of the Committee's Water Audit Software Subcommittee. Data from the entire group of utilities was assembled with results that document the first North American benchmark performance indicators using the AWWA water audit methodology. This is a significant step toward improving the level of accountability and the robustness of water audit data within North America.

Table No. 3-5 presents a comparison of the United City of Yorkville's performance indicators alongside the North American Data set for utilities with less than 50,000 service connections. Review of this table suggests that the United City of Yorkville is performing better than the average of the water utilities compared against. However, there is always room for improvement. As noted in Table No. 3-5, the validity score was 61, based on a scale of 0 to 100. The higher the validity score, the more accurate the water audit information and results will be. We recommend the City continue to improve this validity in the future years. In addition, based on the water audit, the annual cost of apparent and real losses is over $100,000 as demonstrated in

Table No. 3-5. Minimizing lost revenue should be an incentive for continued water loss reduction. Understanding that a certain amount of water loss is unavoidable (i.e. leakage that cannot be detected, all meters have a certain level of inaccuracy, etc.), it is recommended the City aim to achieve an economic level of water loss where the benefit of Water Works System Improvements to correct water loss is greater than or equal to the cost of the improvements.

Table No. 3-5: Water Audit Summary and Comparison

United City of Yorkville, IL

Key Performance Indicators	FY2014-15	2013 AWWA Validated Data Set (Average)
Financial Indicators		
Non-Revenue Water as Percent by Volume of Water Supplied:	11.8%	21.0%
Non-Revenue Water as Percent by Cost of Operating System:	2.6%	9.6%
Annual Cost of Apparent Losses:	$ 70,123	N/A
Annual Cost of Real Losses:	$ 35,376	N/A
Operational Efficiency Indicators		
Apparent Losses Per Service Connection Per Day (gallons/connection/day):	6.3	11.5
Real Losses Per Service Connection Per Day (gallons/connection/day):	14.0	56.0
Unavoidable Annual Real Losses (UARL) (million gallons/year):	NA	N/A
From Above, Real Losses = Current Annual Real Losses (CARL) (million gallons/year):	35.51	N/A
Infrastructure Leakage Index (ILI) [CARL/UARL]:	0.68	3.0
Validity Score	61	77

Notes:

City's Water Distribution System has achieved a better score than the 2013 Validated Data Set

City's Water Distribution System has achieved a lesser score than the 2013 Validated Data Set

As indicated in Section 1.1, this Comprehensive Water Works System Master Plan is being prepared for an approximate 35-year planning period through the year 2050. The population of the United City of Yorkville is anticipated to grow at an annual rate of 3.2%. In addition to the residential growth, the City also expects commercial and industrial properties to continue to develop at a steady rate thereby increasing the water demand during the next 35 years. With this growth, the water demand of the City's Water Works System is expected to grow also.

3.2 Planning Period Projected Water Use

Understanding that water resources are limited and water use trends are likely to change during the next 35 years, two different water demand scenarios were investigated as part of this Master Plan. The first scenario is based on the current trends of the existing Water Works System, reflecting current demand conditions and recent trends in development. The second scenario is the less resource intensive water demand projection, which is based on potential intervention by the municipality to optimize water use through water conservation.

3.2.1 Current Trends (CT) Water Use Projection & System Evaluation – In Section 1.5, the population projections for the planning period were summarized. The next step is to equate the population to a water use demand per capita. Table No. 3-6 summarizes the total projected CT water use for incremental PE increases to the year 2050 population projection of 59,565 (+41,687 PE).

As previously identified, the estimated historical average water use per person per day in the United City of Yorkville is approximately 88 gpcd. The 88 gpcd was rounded up to 90 gpcd and that usage rate was used to project the demand to 2050. This projection assumes the proportion of the residential water use to all other types of water users will remain the same into the future. The CT MDD for the planning period was established utilizing an MDD:ADD ratio of 2.00. As seen in Table No. 3-1, the average MDD:ADD over the course of the last five years was 1.91; however, a factor of safety was added for future calculations due to the fact that during a dry year, this number will increase. A MHD:MDD ratio of 2.0 was used for all calculations.

Table No. 3-7 summarizes the CT projected water capacity analysis for 5,000 PE increment increases to the year 2050 population projection. Table No. 3-8 indicates the corresponding excess or required capacity needed to meet 100% of each of the test parameters. Tables No. 3-7 and 3-8 consider all existing active wells are on-line and that each water treatment plant is available to meet the City's water demand. It should be noted that although Tables No. 3-7 and 3-8 assume all wells to be online, future water use predictions in Section 6 factor in the potential for Well No. 3 to be abandoned due to maintenance issues.

Review of Tables No. 3-7 and 3-8 show that if water usage statistics remain the same, the water supply will fail to be adequate when 10,000 people have been added to the population (expected to happen around 2025). When 10,000 people are added, the Reliable Source Capacity is no longer met. When more people are added to the population, such as is expected on the path to 2050, Ultimate Source Capacity, Peak Hour Storage, and Emergency Supply also fail to become adequate when 15,000 people, 25,000 people and 41,687 people have been added to the population, respectively.

Table No. 3-6: Projected Water Use - CT

United City of Yorkville, IL

YEAR	2014	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE
ESTIMATED POPULATION	17,878	22,878	27,878	32,878	37,828	42,878	47,878	52,878	59,565
ADDITIONAL POPULATION EQUIVALENTS	--	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
ANNUAL PUMPAGE	504,429,000 GAL	751,542,300 GAL	915,792,300 GAL	1,080,042,300 GAL	1,244,292,300 GAL	1,408,542,300 GAL	1,572,792,300 GAL	1,737,042,300 GAL	1,956,710,250 GAL
MAXIMUM MONTHLY PUMPAGE	48,679,000 GAL								
MAXIMUM DRY WEATHER MONTH	JULY								
AVERAGE DAILY PUMPAGE	1,381,997 GAL	2,059,020 GAL	2,509,020 GAL	2,959,020 GAL	3,409,020 GAL	3,859,020 GAL	4,309,020 GAL	4,759,020 GAL	5,360,850 GAL
AVERAGE DAILY PUMPAGE DURING MONTH WITH MAXIMUM PUMPAGE	1,570,290 GAL								
MAXIMUM DAILY PUMPAGE	2,170,000 GAL	4,118,040 GAL	5,018,040 GAL	5,918,040 GAL	6,818,040 GAL	7,718,040 GAL	8,618,040 GAL	9,518,040 GAL	10,721,700 GAL
COMPUTED MAXIMUM HOUR	180,833 GAL	343,170 GAL	418,170 GAL	493,170 GAL	568,170 GAL	643,170 GAL	718,170 GAL	793,170 GAL	893,475 GAL
COMPUTED MAXIMUM HOUR	3,014 GPM	5,720 GPM	6,970 GPM	8,220 GPM	9,470 GPM	10,720 GPM	11,970 GPM	13,220 GPM	14,891 GPM
AVG. GAL./PERSON/DAY	77 GPCD	90 GPCD	90 GPCD	90 GPCD	90 GPCD	90 GPCD	90 GPCD	90 GPCD	90 GPCD
RATIO OF MAX. DAY TO AVG. DAY	1.57	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00

Notes:

Assumed ratio of Max Hour to Max Day Demand (MHD:MDD) = 2.0

Table No. 3-7: Water Works System Evaluation - CT

United City of Yorkville, IL

TEST PARAMETERS	YEAR	POPULATION EQUIVALENT INCREASE							
	2014	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
1.0 Ultimate Source Capacity	3,446,000 GAL	1,497,960 GAL	597,960 GAL	(302,040) GAL	(1,202,040) GAL	(2,102,040) GAL	(3,002,040) GAL	(3,902,040) GAL	(5,969,700) GAL
2.0 Reliable Source Capacity	2,726,000 GAL	777,960 GAL	(122,040) GAL	(1,022,040) GAL	(1,922,040) GAL	(2,822,040) GAL	(3,722,040) GAL	(4,622,040) GAL	(6,401,700) GAL
3.0 Peak Hour Storage	1,551,667 GAL	902,320 GAL	602,320 GAL	302,320 GAL	2,320 GAL	(297,680) GAL	(597,680) GAL	(897,680) GAL	(1,298,900) GAL
4.0 Fire Flow	3,530,750 GAL	3,287,245 GAL	3,174,745 GAL	3,062,245 GAL	2,949,745 GAL	2,837,245 GAL	2,724,745 GAL	2,612,245 GAL	2,353,788 GAL
5.0 Emergency Supply	3,842,003 GAL	3,164,980 GAL	2,714,980 GAL	2,264,980 GAL	1,814,980 GAL	1,364,980 GAL	914,980 GAL	464,980 GAL	(136,850) GAL

Table No. 3-8: Water Works System Evaluation - CT
Corresponding Available Or Required Capacity

United City of Yorkville, IL

TEST PARAMETERS	YEAR	POPULATION EQUIVALENT INCREASE							
	2014	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
1.0 Ultimate Source Capacity	2,393 GPM	1,040 GPM	415 GPM	(210) GPM	(835) GPM	(1,460) GPM	(2,085) GPM	(2,710) GPM	(4,146) GPM
2.0 Reliable Source Capacity*	2,840 GPM	810 GPM	(127) GPM	(1,065) GPM	(2,002) GPM	(2,940) GPM	(3,877) GPM	(4,815) GPM	(6,668) GPM
3.0 Peak Hour Storage	1,551,667 GAL	902,320 GAL	602,320 GAL	302,320 GAL	2,320 GAL	(372,100) GAL	(747,100) GAL	(1,122,100) GAL	(1,623,625) GAL
4.0 Fire Flow	3,530,750 GAL	3,287,245 GAL	3,174,745 GAL	3,062,245 GAL	2,949,745 GAL	2,837,245 GAL	2,724,745 GAL	2,612,245 GAL	2,353,788 GAL
5.0 Emergency Supply	3,842,003 GAL	3,164,980 GAL	2,714,980 GAL	2,264,980 GAL	1,814,980 GAL	1,364,980 GAL	914,980 GAL	464,980 GAL	(171,063) GAL

Notes:
Assumes wells are operating 16 hours/day for Reliable Source Capacity

3.2.2 Water Conservation Goals & Strategies – As part of the Master Plan, the United City of Yorkville is interested in understanding the potential reduction in future water system capital improvements resulting from a LRI demand scenario for the City. The LRI demand scenario is calculated based on water conservation practices that are judged to be suitable for the City based on a variety of factors including regional climate, and political and social appropriateness.

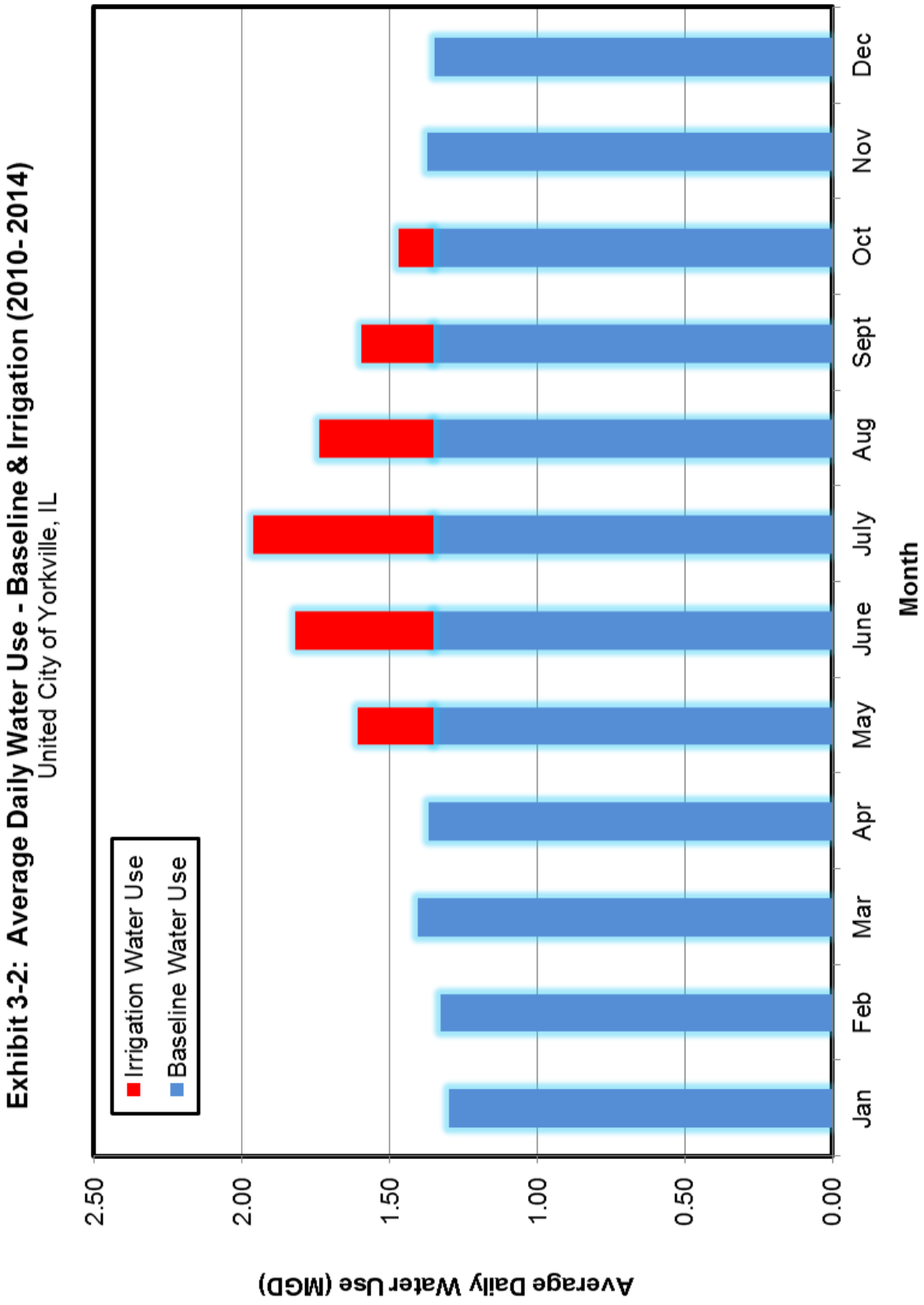
To define a reasonable LRI demand scenario, a systematic process was used to efficiently review available information, select relevant water conservation strategies and calculate estimated savings. The resulting water demand savings are applied to the baseline water use projections developed for the Master Plan and the LRI demand scenario can be established.

3.2.2.1 *Water Use Review* – In the first step, baseline water use was reviewed and further analyzed to better understand the allocation of water across the City's customer base and categories relevant to water conservation planning.

The first water use breakdown focused on defining the City's water use in the categories of indoor use, outdoor use and non-revenue water. These categories are important because they represent the most common three areas where water conservation strategies can be applied to reduce water use in any community.

Outdoor water use as a percentage of annual water use is calculated by first estimating the average water use during cool weather months from November through April. This average water use can be considered the baseline indoor use because air temperature and precipitation in the Midwestern United States between November and April timeframe limits the need for outdoor water use. This calculation was performed for the period of 2010 through 2014. Based on this calculation, the average amount of outdoor water use from 2010-2014 was 12.9% of the total water use. Exhibit 3-2 summarizes the monthly analysis for the time period.

In any water utility, there is a difference between the amount of source water obtained and the total amount of water that the utility can reasonably account for in terms of customer billing and estimates. This water is often referred to as non-revenue water. As previously discussed in Section 3.1.3, an analysis of the City's annual water production was performed and it was estimated that the real losses associated with the distribution system is on average approximately 8% of the annual water pumpage. In terms of water conservation, this number reflects the baseline amount of water loss that the City can work to decrease through utility best management practices.


Exhibit 3-2: Average Daily Water Use - Baseline & Irrigation (2010- 2014)
United City of Yorkville, IL
Irrigation Water Use
Baseline Water Use
Average Daily Water Use (MGD)
2.50
2.00
1.50
1.00
0.50
0.00
Jan
Feb
Mar
Apr
May
June
July
Aug
Sept
Oct
Nov
Dec
Month

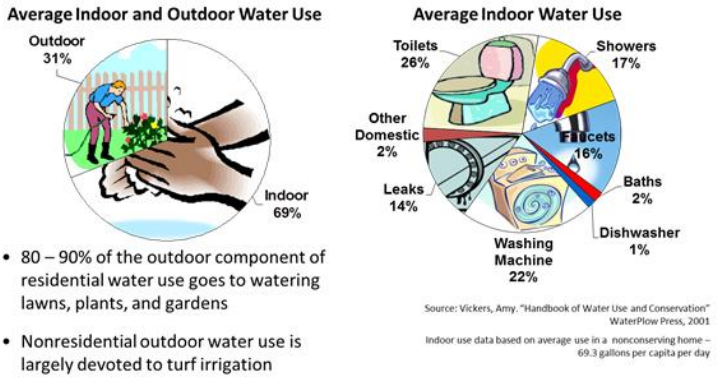
Because the City's water is used predominately by residential customers, significant water savings can be realized from conservation programs that specifically address residential water use. To better understand potential areas for water savings inside residential properties, a review was performed of typical indoor water uses in a non-conserving home. Exhibit 3-3 illustrates how the average residential household in the United States uses water, with an approximate 31% of their water use for outdoor use and 69% for indoor use. While an annual average outdoor water use across the nation is approximately 31%, outdoor water use in the Midwest likely is much lower than that value. It is unknown whether a study has evaluated the Midwest or Illinois outdoor water use, but past master plans completed by EEI have determined average outdoor water use in the City of Elgin, City of Algonquin and the Village of Huntley are 10%, 6% and 22% respectively. At 12.9%, the United City of Yorkville's outdoor water use is below the national average; however, it is comparable with some of its neighbors. Even though Yorkville's outdoor water usage is not comparatively high, it is always advantageous to conserve water in the outdoors where possible.

In addition to water savings on the outdoor water use side, there also are some opportunities where additional water conservation approaches on indoor water use can make an impact on overall water use. For instance, Exhibit 3-3 shows the estimated indoor water use breakdown, which indicates toilets and washing machines are the top two indoor water users with approximately 26% and 22% of indoor water use, respectively.

Several conclusions relevant to potential water use reductions from water conservation were made from this analysis. First, because the City's customer base is mainly residential, significant water savings can be realized from conservation programs that specifically address residential water use. In addition, outdoor water use on average is approximately 12.9% of total annual water use. Since it is likely a portion of the outdoor water use is wasted and the fact that outdoor water use drives the maximum day demands on the Water Works System, it would seem reductions in outdoor water use could make a big effect on the total water use within the community and create a considerable cost savings. Finally, real losses for the City are estimated at 8% and the City could realize water savings in this category by further implementing utility best management practices.

Exhibit 3-3: Average Indoor and Outdoor Water Use in a Residential Non-Conserving Home

National Average



3.2.2.2 BMP Overview – In the second step, drivers, goals and criteria for evaluating potential water conservation programs are evaluated and an inventory is made of all potential water saving measures or strategies.

The current drivers for implementing water conservation in the United City of Yorkville are a combination of stewardship and cost savings. In recent years, the City has taken a proactive approach to increasing their focus on sustainability across all parts of the City's operation. Water is a finite and precious resource and water conservation is an area that the City has a significant opportunity to influence leadership provided by the Water Department. Therefore, as part of this Master Plan, a goal was established to calculate potential water savings that could be achieved with conservation strategies relevant to Yorkville.

The City also wanted to understand the potential reduction in future water system capital requirements that would result from a LRI demand scenario for the City in the planning year of 2050. Water conservation has been demonstrated as a cost effective strategy to reduce capital expenditures by deferring system improvements associated with expanding infrastructure to meet increasing water demands. With this information, the City would be able to further justify spending resources to implement water conservation programming if there were savings identified in future capital expenditures using the LRI demand scenario.

The City's current philosophy regarding water conservation is that education is a key first step in creating awareness around the City's finite water supply and has been involved with student and adult outreach in this area. The next logical step in promoting water conservation is selection and implementation of water conservation programs that can result in measurable water savings.

Potential water savings estimated for the LRI scenario should be determined by selecting water conservation best practices that would result in measurable water savings, are relevant to the United City of Yorkville and would be reasonably accepted by the local community.

A review of best management practices in water conservation was performed with the goal of creating a consolidated list of the potential options to use as a basis for the estimated water savings for the City's LRI demand scenario. In the context of water conservation, a Best Management Practice (BMP) consists of generally accepted conservation measures or incentives that directly or indirectly result in proven, beneficial and cost-effective water savings. BMPs vary depending on local or regional water-use characteristics and demand reduction needs.

While water conservation has recently become more relevant in the Midwestern United States, other parts of the country including California have experienced decades of drought and have applied water conservation to help address serious water supply challenges. The most popular set of water conservation BMPs were developed as part of The California Memorandum of Understanding (MOU) Regarding Urban Water

Conservation in California. The document has been signed by more than 260 water utilities, public advocacy organizations and other interested groups who are members of the California Urban Water Conservation Council and are committed to ensuring adequate water supply to residents of California. A set of 14 BMPs are outlined in the MOU and provide guidelines on the expected water savings and requirements for program implementation.

The BMPs developed for the California MOU were selected because they have proven significant conservation benefits, are technically and economically feasible, are environmentally and socially acceptable and are not otherwise unreasonable for most water suppliers to carry out.

These BMPs have been adopted by water utilities across the United States and recently were evaluated and adopted by the Chicago Metropolitan Agency for Planning (CMAP) document titled *Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan* (CMAP Plan). CMAP, the official regional planning agency for northeastern Illinois, released their Water Supply and Demand Plan in March of 2010, which includes a set of 13 water conservation measures and recommendations for demand management. These recommendations are based on the BMPs developed for the California MOU.

Table No. 3-9 provides a summary of the 13 recommendations from the CMAP Plan which were determined to be relevant for the Northeastern Illinois region. These BMPs address each of the main categories of water use within the City including indoor, outdoor and non-revenue water as well as a variety of customer classes such as residential and non-residential customers. An evaluation was performed to assess the relevance of these BMPs to the United City of Yorkville and their ability to address the main categories of water use within the City.

The BMPs presented in the CMAP Plan represent demonstrated, successful water conservation programs each with specific water conservation measures and incentives that contribute to the program's success. A *water conservation measure* is a device or practice that results in a more efficient use of water and reduces water demand. A *water conservation incentive* increases customer awareness about the value of reducing water use and motivates water users to implement conservation or efficiency measures. Successful water conservation programs appropriately match measures with incentives to drive reduction in water use.

Table No. 3-9: Evaluation of Best Management Practices (BMPs) for Water Conservation

United City of Yorkville, IL

Conservation Program Description	RWSP Number	California MOU Number	Utility	All Customers	Residential	Non-Residential	Purpose/Description	Description of Basis for Water Savings	Low Estimate from RWSP (mgd)	High Estimate from RWSP (mgd)	Program Cost	Implementation Obstacles
System Water Audits, Leak Detection and Repair	6	1	x				To perform a water audit by the water utility which consists of compiling the consumptive uses and losses of water managed in a single system; losses can be either apparent (paper losses due to metering and billing errors) and real losses (physical losses including leakage from distribution mains, customer service lines and overflows from distribution system tanks to storage facilities).	A leak-free water system is not a technically feasible or an economic objective, but a good rule of thumb is that losses should not constitute more than 10% of the total volume of water entering the system.	5.9	29.7	Varies for each utility based on the amount of water loss and reduction goal	Utility staff capacity
Metering with commodity rates for all new connections and retrofit of existing connections	7	2	x				To bill customers for the volume of water they use which is measured by meters for each customer; require that each new connection is metered and provide meters to all existing connections without a meter; maintain a record of all meters including testing, repair and replacement schedule and status.	Assume meter retrofits and volumetric rates combined will result in a 20% reduction in demand for retrofitted accounts.	30.3	31.5	Utility: meter purchase, meter installation	Utility investment cost
Retail Conservation Pricing	11	3		x			To provide economic incentives (a price signal) to customers to use water efficiently. Because conservation pricing requires a volumetric rate, metered water service is a necessary condition of conservation pricing; can include a uniform rate, seasonal rate, tiered rate or allocation-based rate.	Not quantified			Utility: administrative; Customer: increased water bill	Utility staff capacity, political will
Water Waste Prohibition for residential and non-residential customers	8	4		x			Standard Accounts: To enact and enforce measures prohibiting gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative fountains. Large-Landscape: To provide non-residential customers with support and incentives to improve their landscape water use efficiency; should include landscape water use analysis/surveys, voluntary water use budgets, and when cost effective, include the following: installation of dedicated landscape meters, training in landscape maintenance and irrigation design, and financial incentives such as loans, rebates, or grants for the purchase and/or installation of water efficient irrigation systems. Regular-Landscape: To provide residential customers with clear information and guidelines on when to water outdoor landscapes and provide a financial incentive (fine or additional fee) when water schedules are broken.	Not quantified Assume landscape surveys and assistance will result in a 15% reduction in demand for landscape water use by accounts that participate in survey/assistance programs.	12.1	60.3	Political will (i.e. ordinance creation); Utility: enforcement Utility: survey/budget calculation; Customer: hardware investment	Political will (i.e. ordinance creation); Utility staff capacity for enforcement Investment cost, social mindset
Conservation Coordinator	1	5		x			To designate a water conservation coordinator (and support staff if necessary) whose duties would include the following: coordination and oversight of conservation programs and BMP implementation; preparation and submittal of annual implementation report; communication and promotion of water conservation issues to utility management, operations and planning staff; preparation of annual conservation budget; and coordination with other regional utility conservation specialists. Agencies jointly operating regional conservation programs are not intended to have staff duplication and redundant conservation coordinator positions.	Not quantified	na	na	Utility: variable	Utility staff capacity
School Education Programs	13	6		x			To educate students in the service area about water conservation and efficient water use; program examples include: working with school districts and private schools to provide instructional assistance, education materials, and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. Education materials shall meet the state education framework requirements, and grade appropriate materials shall be distributed to grade levels K-3, 4-6, 7-8, and high school.	Not quantified	na	na	Variable depending on the scale, frequency and type of public programs; school district: administrative; government advocates: programmatic	Already full classroom curriculum
Public Information Programs	12	7		x			To promote and educate customers about water conservation and water conservation benefits; program examples include: providing speakers to employees, community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote water conservation practices; and coordinating with other government agencies, industry groups, public interest groups and the media.	Not quantified	na	na	Variable depending on the scale, frequency and type of public programs	Difficult to quantify cost/benefits; investment cost
Water Survey for Residential Customers	2	8			x		To conduct on-site survey and assessment of water-using hardware, fixtures, equipment, landscaping, irrigation systems and management practices to determine the efficiency of water use and to develop recommendations for improving indoor and outdoor water-use efficiency for residential customers.	Dependent on house age, device, leaks, etc. customers to see 3 - 20 gpcpd reduction in indoor water use and 10% reduction in outdoor water use if they implement the recommendations from the survey	0.1	0.7	Utility: hardware, administrative; customer: lead repair	Utility staff capacity, investment cost, customer cooperation
Residential Plumbing Retrofit	3	9			x		To provide assistance and resources to residential customers to help them change, alter, or adjust plumbing fixtures or other equipment or appliances to save water or make them operate more efficiently; typically includes the replacement of shower heads and sink faucets	Assume between 2.9 - 7.2 gpcpd water savings from low-flow showerhead retrofit and 1.3 gpcpd water savings for toilet retrofit	5.2	26.0	Utility: administrative/programmatic (rebate); Customer: cost or retrofit equipment	Utility staff capacity, investment cost of retrofit equipment, customer cooperation, rebate program funding

Table No. 3-9: Evaluation of Best Management Practices (BMPs) for Water Conservation

United City of Yorkville, IL

Conservation Program Description	RWSP Number	California MOU Number	Utility	All Customers	Residential	Non-Residential	Purpose/Description	Description of Basis for Water Savings	Low Estimate from RWSP (mgd)	High Estimate from RWSP (mgd)	Program Cost	Implementation Obstacles
High-Efficiency Clothes Washing Machine Financial Incentive Replacement	5	10			x		To encourage the replacement and purchase of high-efficiency clothes washing machines by providing incentives (such as rebates, bill credits, and tax incentives) to water customers; Could include partnering with energy utilities or government organizations; applies to residential customers.	Water use by clothes washers is typically the second largest source of indoor residential water demand, representing 21.7% of indoor water use. Assume 4,200 gal/year/household of water savings for each high-efficiency clothes washing machine replacement.	3.2	16.1	Sponsor: rebate offer; Customer: purchase price minus rebate	Utility staff capacity, organization support from regional/county agency
Residential Ultra Low Flush Toilet Replacement Program	4	11			x		To encourage the replacement and purchase of Ultra Low Flush Toilets (1.6 gal or less) by providing incentives (such as rebates, bill credits, and tax incentives) to water customers; Could include partnering with energy utilities or government organizations; applies to residential customers.	Water use by toilets is typically the largest source of indoor residential water demand, representing 26% of indoor water use for the average non-conserving household. Assume 4,000 - 11,000 gal/year/household of water savings for each ultra low flow toilet replacement.	15.0	74.8	Sponsor: rebate offer; Customer: purchase price minus rebate	Utility staff capacity, organization support from regional/county agency
Conservation Programs for Commercial, Industrial, and Institutional Accounts	10	12				x	To provide assistance and incentives to commercial, industrial and institutional customers to encourage them to improve indoor and outdoor water-use efficiency; program can include replacement of existing toilets with ultra-low-flush toilets, water-use surveys, incentives and performance targets.	Savings is variable, depending on action taken	5.0	25.2	Utility: survey administration; Customer: hardware investment	Utility staff capacity; Customer cooperation, feasibility
Efficient Water Use Landscaping for Large Landscape Areas	9	13				x	To provide non-residential customers with support and incentives to improve their landscape water use efficiency; should include landscape water use analysis/surveys, voluntary water use budgets, and when cost effective, include the following: installation of dedicated landscape meters, training in landscape maintenance and irrigation design, and financial incentives such as loans, rebates, or grants for the purchase and/or installation of water efficient irrigation systems.	Assume landscape surveys and assistance will result in a 15% reduction in demand for landscape water use by accounts that participate in survey/assistance programs.	1.0	5.1	Utility: survey/budget calculation; Customer: hardware investment	Investment cost, social mindset

Notes:
Adapted from the Memorandum of Understanding regarding Urban Water Conservation in California and the CMAP Plan

3.2.2.3 BMP Selection – During the third step, the BMPs and other conservation measures are evaluated for their relevance to the United City of Yorkville and potential water savings are estimated.

Table No. 3-10 presents a summary of the evaluation of CMAP Plan BMPs with respect to their relevance for the United City of Yorkville. All of these BMPs were determined to be relevant for the City and could be reasonably relied on for measurable water savings with proper implementation. The BMPs address all the areas that were previously identified as high potential water savings for the City including residential water use, outdoor water use and non-revenue water. Potential water savings for each BMP were calculated and are discussed in more detail in this section. Because the CMAP Plan recommended BMPs are comprehensive and include programs that address each of the areas of water savings within the City, no additional water conservation measures were selected for incorporation into the LRI water demand scenario.

As indicated in Table 3-10, all of the CMAP Plan recommended BMPs are relevant for the United City of Yorkville. The City is already metering all of their customers based on the volume of water that each customer uses. This practice is fundamental to water conservation program success because volumetric metering allows customers to see the impacts of their behaviors and changes in hardware. It is recommended that the City continue to follow this practice. Another key output of the BMP evaluation is that baseline education and public outreach activities are essential elements to support all other water conservation programs. The City has already taken steps to implement education and public outreach programs and should continue to do so to increase these activities as the City moves forward with other conservation programming.

Potential water savings associated with each of the BMPs listed in Table No. 3-9 were calculated for use in the LRI demand scenario. The estimated water savings were calculated using information provided in the CMAP Plan and the California MOU. A summary of key assumptions related to potential water savings calculated for each BMP are listed in Table No. 3-11. The LRI water saving calculations are presented in Appendix B.

Potential water savings for each BMP are presented in Table No. 3-12. Based on the assumptions outlined previously, the City could implement water conservation BMPs and realize approximately 11% of water use reduction from the 2050 base demands. The two largest categories of water savings would be realized from outdoor water use and utility focused programs, which make up 33% and 37% of the water reduction respectively. The remainder of the water savings is provided through indoor residential and commercial, industrial and institutional focused programs.

Table No. 3-10: Summary of BMP Evaluation for the United City of Yorkville LRI Water Demand Scenario

United City of Yorkville, IL

Conservation Program Description	Sector Focus	Recommendations for Yorkville
System Water Audits, Leak Detection and Repair	Utility	●
Metering with commodity rates for all customers	Utility	○
Retail Conservation Pricing	All Customers	○○
Water Waste Prohibition for residential and non-residential customers	All Customers	●
Conservation Coordinator	All Customers	
School Education Programs	All Customers	□
Public Information Programs	All Customers	
Water Survey for Residential Customers	Residential	□
Residential Plumbing Retrofit	Residential	●
High-Efficiency Clothes Washing Machine Financial Incentive Replacement	Residential	●
Residential Ultra Low Flush Toilet Replacement Program	Residential	●
Conservation Programs for Commercial, Industrial and Institutional Accounts	Non-residential	●
Efficient Water Use Landscaping for Large Landscape Areas	Non-residential	□

Legend	
Symbol	**Symbol Description**
●	Recommended for the United City of Yorkville. Potential water savings estimated for the LRI water demand scenario
○	Currently being completed by the United City of Yorkville. No additional water savings estimated.
○○	Recommended for the United City of Yorkville. No additional water savings estimated due to political nature of item.
□	Recommended for the United City of Yorkville Considered to be a baseline educational component or part of another program; no water savings estimated

Table No. 3-11: Potential Water Savings Calculation Assumptions by BMP

United City of Yorkville, IL

Best Management Practice	Key Assumptions
High Efficiency Toilet Replacement	Assume 90% of Households Upgrade to HET by 2050
High Efficiency Clothes Washing Machines	Assume 100% of Households Replace Washing Machines
Faucet and Showerhead retrofits	Assume 90% of Households Replace Faucets & Showerheads
Water Conservation for Commercial, Industrial and Institutional	Assume 15% of CII Is Non Process Related Water Use
	Nonresidential is 18% of Yorkville's Daily Demand
	Assume 50% of CII Participation
Water waste prohibition programs –	50% of Outdoor Water used is Wasted (EPA)
Existing Properties	Assume 50% Reduction of Outdoor Waste
New Construction	Assume 5% New Landscape Water Waste Reduction
Efforts to reduce system losses	8.0% of Water Supply Loss from Unidentified Losses
	Assume 50% Reduction in Unidentified Losses
Baseline Education Efforts: Conservation Coordinator, School Education Programs and Public Information Programs	Assumed to be a baseline component of any water conservation program; no specific water savings calculated from these programs.

Table No. 3-12: Potential Estimated Water Savings From Water Conservation and Efficiency

United City of Yorkville, IL

Category		Water Saved (MGD)	% Of Total (%)
Outdoor	All Customers	0.172	3.2%
	New Landscape	0.017	0.3%
Utility Water - System Losses		0.214	4.0%
Indoor Residential	High Efficiency Toilets (HET)	0.049	0.9%
	High Efficiency Washing Machines (HEWM)	0.019	0.3%
	Retrofits	0.032	0.6%
Commercial, Industrial, and Institutional Customers		0.074	1.4%
Total Estimated Savings =		**0.578**	**11%**

3.2.2.4 Implementation – The final step in the process is to implement the chosen conservation programs by integrating them into the City's current operation and programs. The potential water savings will only be achieved by proper investment into the implementation of the water conservation programs. Developing an implementation plan and investment budget for the City was not in the scope for this Master Plan; however this would be the next required step to realize the future potential water savings.

3.2.3 Less Resource Intensive (LRI) Water Use Projection Evaluation – As discussed in Section 3.1.2.3, successful implementation of the water conservation strategies could result in meeting a 11% reduction goal in water use by the year 2050. Table No. 3-13 summarizes the total projected LRI water use for incremental PE increases to the year 2050 population projection of 59,565 (+41,687 PE).

With the LRI adjustment, the average water use per person per day in the United City of Yorkville is projected to be reduced from 90 gpcd under the CT scenario to 80 gpcd under the LRI scenario. The United City of Yorkville's anticipated average day demand in 2050 is reduced from 5.36 MGD under the CT scenario to 4.77 MGD under the LRI scenario. As stated previously, outdoor water use makes up a large portion of the City's total water use, and it has a large effect on the maximum day water use within the community. With enforcement of existing water conservation programs focused on wiser outdoor water use along with spreading out the water demand (i.e. odd/even lawn sprinkling requirements), the MDD:ADD ratio should come down. Therefore, the LRI MDD:ADD ratio was established at 1.75 (the CT MDD:ADD average ratio was 2.00). The MHD:MDD ratio of 2.0 was maintained the same as CT water projection. Mature communities with minimal growth will often experience MDD:ADD ratios between 1.3 – 1.5. Given the United City of Yorkville's growth potential, a ratio higher than 1.5 was deemed appropriate.

Table No. 3-14 summarizes the LRI projected water capacity analysis for incremental PE increases to the year 2050 population projection. Table No. 3-15 indicates the corresponding excess or required capacity needed to meet 100% of each of the test parameters. Tables No. 3-14 and 3-15 consider that all existing active wells are on-line and that each water treatment plant is available to meet the City's water demand.

Inspection of Tables No. 3-14 and 3-15 indicates that while the *Ultimate Source Capacity, Reliable Source Capacity and Peak Hour Storage* continue to fail with additional PE increases, the water supply and storage deficits are roughly cut in half under the LRI scenario when compared to the CT scenario by the end of the planning period.

Table No. 3-13 Projected Water Use - LRI

United City of Yorkville, IL

YEAR	2014	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE	FUTURE
ESTIMATED POPULATION	17,878	22,878	27,878	32,878	37,828	42,878	47,878	52,878	59,565
ADDITIONAL POPULATION EQUIVALENTS	--	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
ANNUAL PUMPAGE	504,429,000 GAL	668,037,600 GAL	814,037,600 GAL	960,037,600 GAL	1,106,037,600 GAL	1,252,037,600 GAL	1,398,037,600 GAL	1,544,037,600 GAL	1,739,298,000 GAL
MAXIMUM MONTHLY PUMPAGE	48,679,000 GAL								
MAXIMUM DRY WEATHER MONTH	JULY								
AVERAGE DAILY PUMPAGE	1,381,997 GAL	1,830,240 GAL	2,230,240 GAL	2,630,240 GAL	3,030,240 GAL	3,430,240 GAL	3,830,240 GAL	4,230,240 GAL	4,765,200 GAL
AVERAGE DAILY PUMPAGE DURING MONTH WITH MAXIMUM PUMPAGE	1,570,290 GAL								
MAXIMUM DAILY PUMPAGE	2,170,000 GAL	3,202,920 GAL	3,902,920 GAL	4,602,920 GAL	5,302,920 GAL	6,002,920 GAL	6,702,920 GAL	7,402,920 GAL	8,339,100 GAL
COMPUTED MAXIMUM HOUR	180,833 GAL	266,910 GAL	325,243 GAL	383,577 GAL	441,910 GAL	500,243 GAL	558,577 GAL	616,910 GAL	694,925 GAL
COMPUTED MAXIMUM HOUR	3,014 GPM	4,449 GPM	5,421 GPM	6,393 GPM	7,365 GPM	8,337 GPM	9,310 GPM	10,282 GPM	11,582 GPM
AVG. GAL./PERSON/DAY	77 GPCD	80 GPCD	80 GPCD	80 GPCD	80 GPCD	80 GPCD	80 GPCD	80 GPCD	80 GPCD
RATIO OF MAX. DAY TO AVG. DAY	1.57	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75

Notes:
Assumed ratio of Max Hour to Max Day Demand (MHD:MDD) = 2.0

Table No. 3-14: Water Works System Evaluation - LRI

United City of Yorkville, IL

TEST PARAMETERS	YEAR	POPULATION EQUIVALENT INCREASE							
	2014	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
1.0 Ultimate Source Capacity	3,446,000 GAL	2,413,080 GAL	1,713,080 GAL	1,013,080 GAL	313,080 GAL	(386,920) GAL	(1,086,920) GAL	(1,786,920) GAL	(3,587,100) GAL
2.0 Reliable Source Capacity	2,726,000 GAL	1,693,080 GAL	993,080 GAL	293,080 GAL	(406,920) GAL	(1,106,920) GAL	(1,806,920) GAL	(2,506,920) GAL	(4,019,100) GAL
3.0 Peak Hour Storage	1,551,667 GAL	1,207,360 GAL	974,027 GAL	740,693 GAL	507,360 GAL	274,027 GAL	40,693 GAL	(192,640) GAL	(504,700) GAL
4.0 Fire Flow	3,530,750 GAL	3,401,635 GAL	3,314,135 GAL	3,226,635 GAL	3,139,135 GAL	3,051,635 GAL	2,964,135 GAL	2,876,635 GAL	2,651,613 GAL
5.0 Emergency Supply	3,842,003 GAL	3,393,760 GAL	2,993,760 GAL	2,593,760 GAL	2,193,760 GAL	1,793,760 GAL	1,393,760 GAL	993,760 GAL	458,800 GAL

Table No. 3-15: Water Works System Evaluation - LRI
Corresponding Available Or Required Capacity

United City of Yorkville, IL

TEST PARAMETERS	YEAR	POPULATION EQUIVALENT INCREASE							
	2014	+5000	+10000	+15000	+20000	+25000	+30000	+35000	+41687
1.0 Ultimate Source Capacity	2,393 GPM	1,676 GPM	1,190 GPM	704 GPM	217 GPM	(269) GPM	(755) GPM	(1,241) GPM	(2,491) GPM
2.0 Reliable Source Capacity*	2,840 GPM	1,764 GPM	1,034 GPM	305 GPM	(424) GPM	(1,153) GPM	(1,882) GPM	(2,611) GPM	(4,187) GPM
3.0 Peak Hour Storage	1,551,667 GAL	1,207,360 GAL	974,027 GAL	740,693 GAL	507,360 GAL	274,027 GAL	40,693 GAL	(240,800) GAL	(630,875) GAL
4.0 Fire Flow	3,530,750 GAL	3,401,635 GAL	3,314,135 GAL	3,226,635 GAL	3,139,135 GAL	3,051,635 GAL	2,964,135 GAL	2,876,635 GAL	2,651,613 GAL
5.0 Emergency Supply	3,842,003 GAL	3,393,760 GAL	2,993,760 GAL	2,593,760 GAL	2,193,760 GAL	1,793,760 GAL	1,393,760 GAL	993,760 GAL	458,800 GAL

Notes:
* Assumes wells are operating 16 hours/day for Reliable Source Capacity.

3.3 Projected Water Use Summary

Table No. 3-16 summarizes the comparison between the CT and LRI scenarios demonstrating a 11% water use reduction between the CT scenario to LRI scenario by the year 2050. The 11% reduction will occur incrementally over the next 35 years. Exhibit 3-4 further illustrates the significance water conservation can have based on the LRI scenario. By reducing water use, capacity improvements in the Water Works System can be delayed or avoided altogether. This concept will be discussed in detail in Section 9.

Table No. 3-16: Water Use Projection Summary

United City of Yorkville, IL

Year / Increment	Population Projection	ADD[υ] Water Use Projection		MDD[ζ] Water Use Projection		MHD[π] Water Use Projection	
		CT (MGD)	LRI (MGD)	CT (MGD)	LRI (MGD)	CT (MGD)	LRI (MGD)
2014	17,878	1.38	1.38	2.17	2.17	4.34	4.34
+5,000	22,878	2.06	1.83	4.12	3.20	8.24	6.41
+10,000	27,878	2.51	2.23	5.02	3.90	10.04	7.81
+15,000	32,878	2.96	2.63	5.92	4.60	11.84	9.21
+20,000	37,878	3.41	3.03	6.82	5.30	13.64	10.61
+25,000	42,878	3.86	3.43	7.72	6.00	15.44	12.01
+30,000	47,878	4.31	3.83	8.62	6.70	17.24	13.41
+35,000	52,878	4.76	4.23	9.52	7.40	19.04	14.81
+41,687	59,565	5.36	4.77	10.72	8.34	21.44	16.68

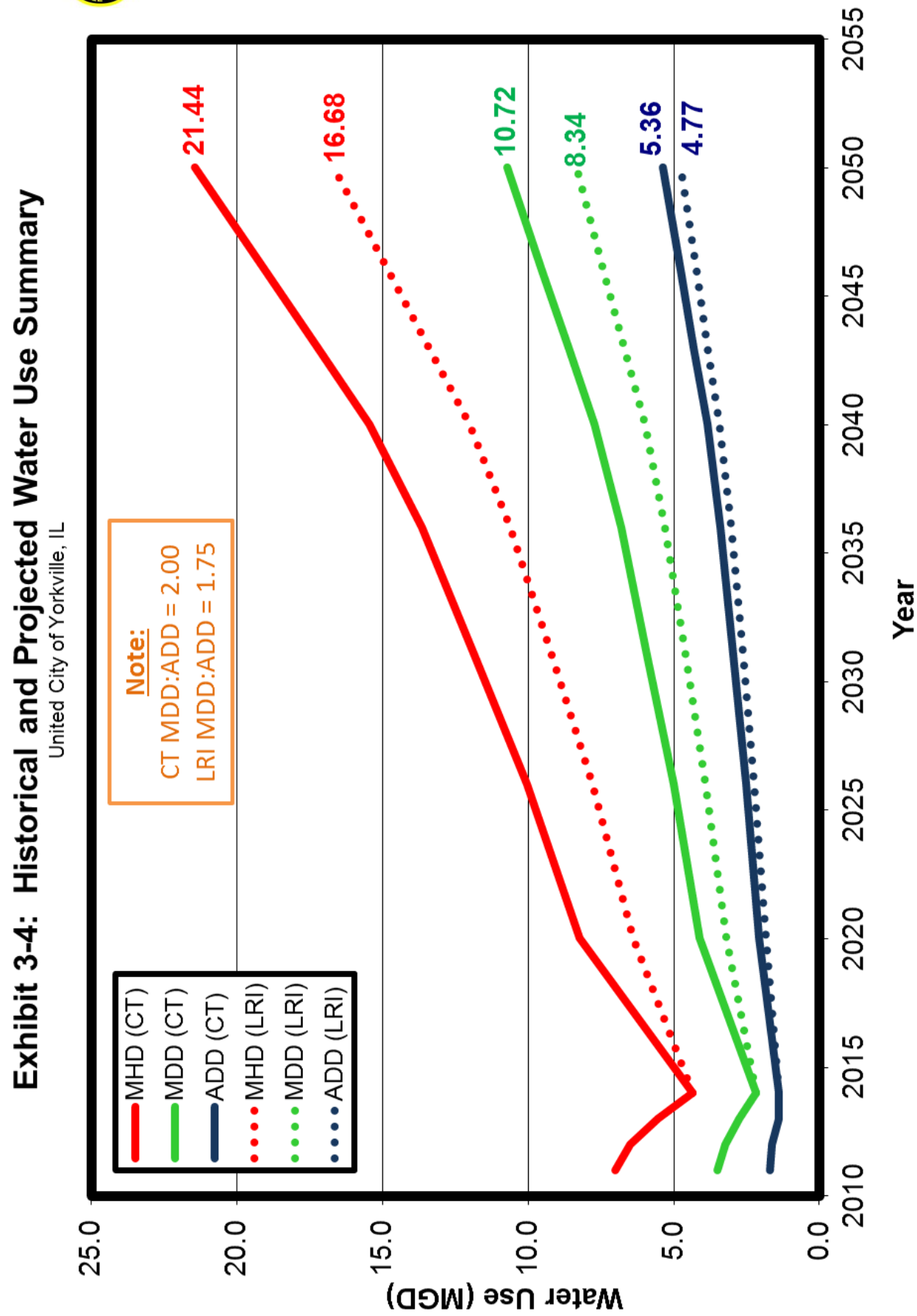
Notes:

ADD = Average Day Demand; MDD = Maximum Day Demand; MHD = Maximum Hour Demand

[u] CT ADD based on 90 gpcd; LRI ADD based on 80 gpcd

[z] CT MDD:ADD = 2.00; LRI MDD:ADD = 1.75

[p] MHD:MDD = 2.00


Exhibit 3-4: Historical and Projected Water Use Summary
United City of Yorkville, IL
MHD (CT)
MDD (CT)
ADD (CT)
MHD (LRI)
MDD (LRI)
ADD (LRI)
Note:
CT MDD:ADD = 2.00
LRI MDD:ADD = 1.75
21.44
16.68
10.72
8.34
5.36
4.77
Water Use (MGD)
25.0
20.0
15.0
10.0
5.0
0.0
2010
2015
2020
2025
2030
2035
2040
2045
2050
2055
Year

SECTION 4: REGULATORY REVIEW

Under the Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (USEPA) sets legal limits on the levels of certain contaminants in drinking water. The legal limits reflect both the level that protects human health and the level that water systems can achieve using the best available technology. Besides prescribing these legal limits, USEPA rules set water testing schedules and methods that water systems must follow. The rules also list acceptable techniques for treating drinking water. SDWA gives individual states the opportunity to set and enforce their own drinking water standards if the standards are at least as strong as USEPA's national standards. The Illinois Environmental Protection Agency (IEPA) directly oversees the water systems within Illinois. The purpose of this section of the report is to evaluate the City's current compliance with existing, near future and potential future regulations relative to the Water Works System.

4.1 Existing Regulations

USEPA has drinking water regulations for more than 90 chemical and microbiological contaminants. Table No. 4-1 presents the recent and near future drinking water regulations that could apply to the United City of Yorkville's water treatment systems. Table No. 4-1 also presents the City's status with regard to compliance with the regulations. A brief description of the regulations is presented below.

4.1.1 Surface Water Treatment Rule – The Surface Water Treatment Rule (1989) seeks to prevent waterborne diseases caused by viruses, *Legionella* and *Giardia lamblia*. These disease-causing microbes are present at varying concentrations in most surface waters and in groundwater under the direct influence of surface water (GWUDI). The rule requires that water systems filter and disinfect water from surface water sources to reduce the occurrence of unsafe levels of these microbes.

4.1.2 Total Coliform Rule – The current Total Coliform Rule (TCR) (published in 1989) continues to be the only microbial drinking water regulation that applies to all public water systems. Systems are required to meet legal limits (i.e. Maximum Contaminant Levels (MCL)) for total coliforms, including fecal coliforms, as determined by monthly monitoring. The TCR specifies the frequency and timing of the monthly microbial testing by water systems based on population served. The rule also requires public notification as indicated by monitoring results.

4.1.3 Lead and Copper Rule – The Lead and Copper Rule (LCR) (1991) requires systems to monitor drinking water at customer taps. If lead concentrations exceed an action level of 15 ppb or copper concentrations exceed an action level of 1.3 parts per million (ppm) or milligrams per liter (mg/L) in more than 10% of customer taps sampled, the system must undertake a number of additional actions to control corrosion. If the action level for lead is exceeded, the system must also inform the public about steps they should take to protect their health and may have to replace lead service lines under their control.

Table No. 4-1: Drinking Water Regulation Compliance Summary

United City of Yorkville, IL

Regulation	Year Enacted	In Compliance?		Compliance Status
		Yes	No	
Surface Water Treatment Rule	1989	N/A		Only applies to surface water and GWUDI systems
Total Coliform Rule (TCR)	1989	✓		System is routinely monitored as required
Lead and Copper Rule	1991	✓		System is routinely monitored as required
Unregulated Contaminant Monitoring Rule	1998	✓		System is routinely monitored as required
Interim Enhanced Surface Water Treatment Rule	1998	N/A		Only applies to surface water and GWUDI systems
Stage 1 Disinfectant / Disinfection Byproducts Rule	1998	✓		System is routinely monitored as required
Radionuclides Rule	2000	✓		System is routinely monitored as required
Arsenic Rule	2001	✓		System is routinely monitored as required
Filter Backwash Recycling Rule	2001	✓		System is routinely monitored as required
Long Term 1 Surface Water Treatment Rule	2002	N/A		Only applies to surface water and GWUDI systems with fewer than 10,000 customers
Long Term 2 Surface Water Treatment Rule	2005	N/A		Only applies to surface water and GWUDI systems
Stage 2 Disinfectant / Disinfection Byproducts Rule	2005	✓		IDSE Completed; Compliance Monitoring Plan submitted to IEPA
Ground Water Rule	2006	✓		System is routinely monitored as required
Total Coliform Rule (TCR 2010)	2010	✓		System is routinely monitored as required
Radium Treatment Residuals Rule	2011	✓		IEMA registration required for WTPs and the WWTF sludge disposal; Monitoring and reporting required for WWTF biosolids disposal
Radon Rule	Proposed	N/A		Proposed rule would set MCL at 300 pCi/L or 4,000 pCi/L with a multimedia mitigation program to address radon in indoor air

4.1.4 Unregulated Contaminant Monitoring Rule – EPA uses the Unregulated Contaminant Monitoring Rule (UCMR) (1988) program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act. Every five years EPA reviews the list of contaminants, largely based on the Contaminant Candidate List.

4.1.5 Interim Enhanced Surface Water Treatment Rule – The Interim Enhanced Surface Water Treatment Rule (IESWTR) (1998) amends the existing Surface Water Treatment Rule to strengthen microbial protection, including provisions specifically to address *Cryptosporidium,* and to address risk trade-offs with disinfection byproducts. The final rule includes treatment requirements for waterborne pathogens, e.g., *Cryptosporidium*. In addition, systems must continue to meet existing requirements for *Giardia lamblia* and viruses.

4.1.6 Stage 1 Disinfectant/Disinfection Byproducts Rule – The Stage 1 Disinfectant/Disinfection Byproducts Rule (Stage 1 DBPR) (1998) establishes maximum residual disinfectant level goals (MRDLGs) and maximum residual disinfectant levels (MRDLs) for three chemical disinfectants – chlorine, chloramines and chlorine dioxide. It also establishes maximum contaminant level goals (MCLGs) and maximum contaminant levels (MCLs) for total trihalomethanes, haloacetic acids, chlorite and bromate.

4.1.7 Radionuclides Rule – The Radionuclides Rule (2000) retained the existing MCLs for combined radium-226 and radium-228, gross alpha particle radioactivity and beta particle and photon activity. The rule regulated uranium for the first time. The current combined radium MCL is 5 pCi/L.

4.1.8 Arsenic Rule – The Arsenic Rule (2001) reduced the MCL for drinking water from 50 parts per billion (ppb) or micrograms per liter (ug/L) to 10 ppb. Water systems had to comply with this standard by January 23, 2006.

4.1.9 Filter Backwash Recycling Rule – The Filter Backwash Recycling Rule (FBRR) (2001) requires systems that recycle to return specific recycle flows through all processes of the system's existing conventional or direct filtration system or at an alternate location approved by the state.

4.1.10 Long Term 1 Surface Water Treatment Rule – This EPA promulgated rule requires cryptosporidium removal, enhanced filtration requirements, microbial inactivation benchmarking and other requirements for surface water or ground water under the direct influence of surface water. The Long Term 1 Surface Water Treatment Rule (2002) does not apply to Yorkville because this rule is only for systems with less than 10,000 customers.

4.1.11 Long Term 2 Surface Water Treatment Rule – The Long Term 2 Surface Water Treatment Rule (LT2SWTR) (2005) requires systems to monitor their source water, calculate and average Cryptosporidium concentration and use those results to determine if their source is vulnerable to contamination and may

require additional treatment. This rule will become applicable to Yorkville if the decision is made to switch from using groundwater to using surface water or groundwater under the direct influence of surface water.

4.1.12 Stage 2 Disinfectant/Disinfection Byproducts Rule – The Stage 2 Disinfectant/Disinfection Byproducts Rule (Stage 2 DBPR) (2005) requires some systems to complete an initial distribution system evaluation (IDSE) to characterize DBP levels in their distribution systems and identify locations to monitor DBPs for Stage 2 DBPR compliance. The Stage 2 DBPR bases total trihalomethane (TTHM) and haloacetic acids (HAA5) compliance on a locational running annual average (LRAA) calculated at each monitoring location. A Compliance Monitoring Plan was due April 1, 2012. The plan includes the compliance monitoring locations, dates and compliance calculation procedures.

4.1.13 Groundwater Rule – The Ground Water Rule (GWR) (2006) establishes a risk-targeted approach to identify groundwater systems (GWSs) susceptible to fecal contamination and requires corrective action to correct significant deficiencies and source water fecal contamination in all public GWSs.

4.1.14 Total Coliform Rule – The proposed revisions to the TCR (2010) will require public water systems that are vulnerable to microbial contamination to identify and fix problems, and establish criteria for systems to qualify for and stay on reduced monitoring.

4.1.15 Radium Treatment Residuals Rule – In 2011, the Illinois Emergency Management Agency (IEMA) provided the leadership for the revisions to Title 32 of the Illinois Administrative Code, Section 330.40(d). With these revisions, entities handling water and wastewater treatment residuals containing radium must register with IEMA and meet the disposal standards specified in the rule. The rule only applies to Water Treatment Plants and Wastewater Treatment Facilities who are part of a 'system' where deep sandstone aquifers known to contain radium are used as a water supply source.

4.2 Near Future Regulations

The SDWA includes a process that USEPA follows to identify and list unregulated contaminants which may require a national drinking water regulation in the future. USEPA must periodically publish this list of contaminants (called the Contaminant Candidate List or CCL) and decide whether to regulate at least five or more contaminants on the list (called Regulatory Determinations). EPA uses this list of unregulated contaminants to prioritize research and data collection efforts to help determine whether a specific contaminant should be regulated. Based on the current discussion relative to these proposed rules, it is anticipated the United City of Yorkville will have no compliance concerns with meeting them.

4.2.1 Radon Rule – The USEPA proposed new regulations for radon in drinking water. The proposed regulations provide flexibility in how to limit exposure to radon by focusing efforts on the greatest public health risks from radon - those in indoor air - while also reducing the highest risks from radon in drinking water. The

proposed rule provides for a multimedia approach to address risks from radon in drinking water and radon in indoor air from soil. The Safe Drinking Water Act directs the EPA to propose and finalize a maximum contaminant level (MCL) for radon in drinking water, but also to make available an alternative approach: a higher alternative maximum contaminant level (AMCL) accompanied by a multimedia mitigation (MMM) program to address radon risks in indoor air. The proposed rule would set the MCL at 300 pCi/L or 4,000 pCi/L for a system with a MMM program.

4.2.2 Lead and Copper Rule Revisions – The USEPA proposed revisions to the LCR to enhance the implementation of the LCR in the areas of monitoring, treatment, customer awareness and lead service line replacement and to improve compliance with the public education requirements of the LCR and ensure drinking water consumers receive meaningful, timely and useful information needed to help them limit their exposure to lead in drinking water.

Given the recent heightened attention to lead concentrations, primary sparked by the unfortunate circumstances that arose in Flint, Michigan, the USEPA currently is evaluating the lead standard. The USEPA is scheduled to issue a revised rule in 2017.

4.2.3 Contaminant Candidate List (CCL) – As noted above, SDWA includes a process that USEPA must follow to identify and list unregulated contaminants which may require a national drinking water regulation in the future. The contaminants on the CCL are not regulated by existing national primary drinking water regulations, are known or anticipated to occur in public water systems and may require regulation. In preparing the 2009 CCL, USEPA evaluated approximately 7,500 chemicals and microbes and selected 104 chemicals or chemical groups and 12 microbiological contaminants for the Final CCL3.

4.3 Potential Future Water Works System Regulations

USEPA has identified three additional chemical contaminants through the CCL and UCMR process that are currently being considered for regulation. These are MTBE (methyl-t-butyl ether), Perchlorate and Sulfate. No schedule for regulatory action has been presented by USEPA. Based on the current discussion relative to these potential rules, it is anticipated the United City of Yorkville will have no compliance concerns with meeting them.

4.3.1 MTBE – MTBE is a member of a group of chemicals commonly known as fuel oxygenates. Oxygenates are added to fuel to increase its oxygen content. MTBE is used in gasoline throughout the United States to reduce carbon monoxide and ozone levels caused by auto emissions. MTBE has replaced the use of lead as an octane enhancer since 1979. Releases of MTBE to ground and surface water can occur through leaking underground storage tanks and pipelines, spills, emissions from marine engines into lakes and reservoirs and to some extent from air deposition.

4.3.2 Perchlorate – Perchlorate is both a naturally occurring and man-made chemical that is used to produce rocket fuel, fireworks, flares and explosives. Perchlorate can also be present in bleach and in some fertilizers. Perchlorate may have adverse health effects because scientific research indicates that this contaminant can disrupt the thyroid's ability to produce hormones needed for normal growth and development.

4.3.3 Sulfate – Sulfate is a substance that occurs naturally in drinking water. Health concerns regarding sulfate in drinking water have been raised because of reports that diarrhea may be associated with the ingestion of water containing high levels of sulfate. Of particular concern are groups within the general population that may be at greater risk from the laxative effects of sulfate when they experience an abrupt change from drinking water with low sulfate concentrations to drinking water with high sulfate concentrations.

Sulfate in drinking water currently has a secondary maximum contaminant level (SMCL) of 250 milligrams per liter (mg/L), based on aesthetic effects (i.e., taste and odor). This regulation is not a federally enforceable standard, but is provided as a guideline for States and public water systems. USEPA estimates that about 3% of the public drinking water systems in the country may have sulfate levels of 250 mg/L or greater.

SECTION 5: SUSTAINABLE SOURCE WATER ASSESSMENT

The foundation of all Water Works Systems is the source of supply. Therefore, the foundation of a sustainable Water Works System must be built on a sustainable source water assessment. The United City of Yorkville generally has four potential sources of water to consider, namely: 1) local shallow groundwater, 2) deep sandstone groundwater, 3) surface water through the Fox River and 4) surface water from Lake Michigan. The City currently utilizes five deep sandstone wells for water supply sources. In this section, the sustainability of the City's current supply source will be evaluated and then the potential integration of other sources of water will be explored.

5.1 Existing Groundwater Resources in the Yorkville Area

Many municipalities in Northeastern Illinois who do not receive Lake Michigan water rely on the deep sandstone aquifer as their main source of supply. Based on the current and projected area deep sandstone withdrawal rates, the deep sandstone aquifers likely will have significant water level drawdown into the future. With this increase in drawdown, energy costs of pumping water from the deep sandstone aquifer will continue to rise, water quality within the deep sandstone aquifers could degrade and the long-term sustainability of the deep sandstone aquifer for the region will continue to be a question. At the time of this report, 100% of Yorkville's potable water is supplied from groundwater; therefore, it is vital that Yorkville ensures that this groundwater is sustainable.

Since the construction of the City's community Water Works System, the United City of Yorkville has relied on groundwater resources for its source of supply. As stated in Section 2.2.1, one of the City's abandoned wells was in the shallow sand and gravel aquifer and another was in the Galena-Platteville and Glenwood-St. Peter-Ancell Formations. Six more wells have been constructed by the City since that time, one of which was constructed as a shallow well and was sold to the city of Plano. The other five wells, which are all still fully utilized by the City, are deep wells into the Glenwood St. Peter and/or Ironton-Galesville aquifers. Two of the five wells, Wells No. 3 and 4, were constructed to be open to the Ancell-St. Peter and Ironton-Galesville aquifers, the other three wells are open to only the Ironton-Galesville aquifer. As the City's planning boundary expands and the need for additional water supply increases, the City will need to determine if they should continue to seek water from the aquifers they currently are withdrawing from or whether alternative water sources would be more sustainable and cost effective to utilize.

Shallow groundwater, if available in sustainable capacity, can reduce demand on the deep aquifers, reduce radium levels in the water supply and add water supply at an affordable cost. Like deep groundwater sources, shallow groundwater sources typically have few organic constituents, so the cost to treat shallow groundwater is typically considerably less costly to treat than surface water supplies. Shallow well water can be obtained from sand and gravel aquifers in the glacial drift and/or the fractured dolomite bedrock in the

Maquoketa or Galena-Platteville systems. Diversifying water resources when possible is always encouraged to minimize a community's susceptibility to drawing down the water supply in a specific groundwater aquifer.

In recent years, several water studies have focused on water supply availability within Northeastern Illinois. Two of the studies, which include the *Groundwater Studies for Water Supply Planning in Kendall County, Illinois (ISWS, 2013)* and the *Northeastern Illinois Regional Water Supply/Demand Plan* (*CMAP/RWSPG, 2010)*, have evaluated the sustainability of the shallow aquifers, deep sandstone aquifers and the Fox River within the Northeastern Illinois region. As part of these studies, the Illinois State Geologic Survey (ISGS) and Illinois State Water Survey (ISWS) staffs have developed a three-dimensional geologic model of a portion of Northeastern Illinois and deep sandstone macroscale geologic and groundwater flow models that cover a portion of the Midwest. In this section of the report, a summary of the work completed by the ISGS & ISWS will be reviewed to identify the groundwater resource availability for the City.

5.1.1 Shallow Sand & Gravel and Bedrock Aquifers – In Northeastern Illinois, the availability of shallow well water sufficiently productive for a municipal well varies and shallow well construction and development often requires extensive studies, exploration, drilling and testing. In the Yorkville area, there are several known Quaternary period (2.588 million years ago to present) aquifers; however, these sand and gravel aquifers lie mainly directly northwest of the City. These sand and gravel aquifers are remnants of the last major episode of glaciation in the Midwest (approximately 110,000 to 10,000 years ago). These glacial sand and gravel deposits rest on a surface of eroded Silurian aged bedrock (443.7 to 416 million years ago) and the Upper Bedrock Unit. These aquifers have been studied extensively by the ISGS and ISWS and mapped with a relative degree of certainty.

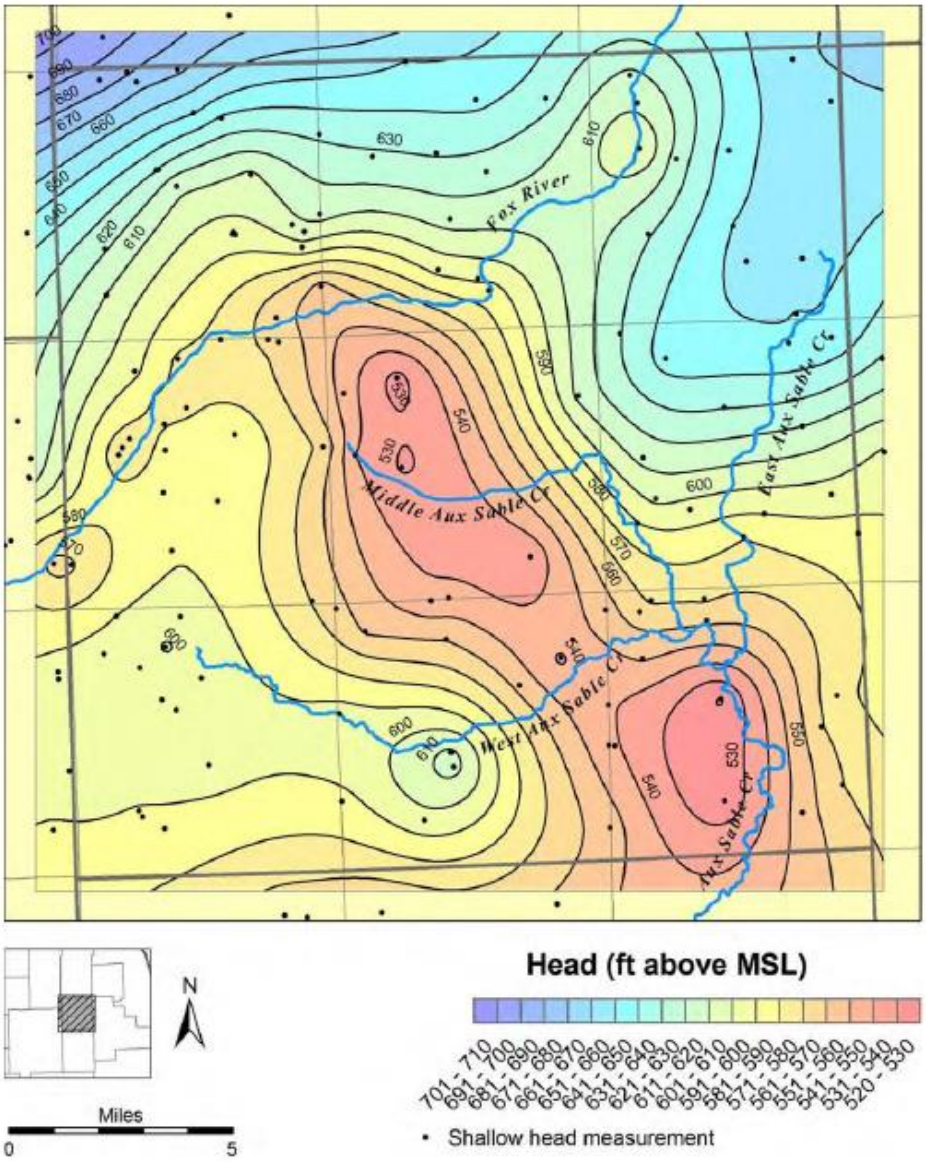
Exhibit 5-1 outlines the head in feet above MSL for the sand and gravel aquifers and the Shallow Bedrock aquifers in Kendall County. The map shows a belt of lower heads trending from the northwest part of the county to the southeast part of the county. The area of lower heads approximately follows the Sandwich Fault and is comprised of predominantly shaly, relatively impermeable rocks of the Maquoketa Unit. There are several potential reasons why heads along the Sandwich Fault may be so low:

1) Reduced heads may reflect the low transmissivity of the Shallow Bedrock Aquifer where even relatively low pumpage, such as from domestic wells, could cause steep, narrow cones of depression.
2) Wells in this central area may be completed into the Galena-Platteville dolomite and thusly could be impacted by the lower water levels in the underlying Ancell unit.
3) Groundwater may be moving down the Sandwich Fault into the deeper units where heads have been greatly lowered by pumping. While the vertical permeability of the fault is unknown, chemical evidence suggests groundwater was previously moved upward through the fault and flow directions may have changed from upward to downward due to the increasing use of the lower aquifers.

Areas around the Fox River and Aux Sable Creek also demonstrate lower heads than other areas. Lower heads around these areas suggest that the wells are hydraulically connected to the surface water.

Exhibit 5-1: 2006 Potentiometric Surface of Sand and Gravel Aquifers and Shallow Bedrock Aquifer

United City of Yorkville, IL



5.1.2 Deep Sandstone Aquifer – Within the City's Planning Area, deep well water can be obtained from formations in the Ordovician and/or the Cambrian aquifer systems. In general, the Ordovician aquifer system consists of (in descending order) the Maquoketa Unit, the Galena-Platteville dolomite, the Glenwood-St. Peter-Ancell sandstone (hereinafter referred to as the St. Peter or Ancell Unit) and the Prairie du Chien-Eminance dolomite/sandstone formations. Furthermore, the Cambrian aquifer system generally consists of (in descending order) the Potosi-Franconia unit, the Ironton-Galesville sandstone, the Eau Claire sandstone

and the Mt. Simon sandstone formations. The major deep water bearing formations in order from the ground surface to the deepest are the St. Peter sandstone, the Ironton-Galesville sandstone and the Mt. Simon sandstone formations. With observed water production capacities in the maximum range of 400 GPM to 500 GPM, the St. Peter formation is generally the greatest water producer of the Ordovician aquifer system. Based on capacities of other wells in this formation within northeastern Illinois, the water production from the Ironton-Galesville formation of the Cambrian aquifer system can be projected at a rate of 1,000 GPM. The Eau Claire and Mt. Simon formations have also demonstrated high production capability. Because they are deeper (and hence more costly to construct and operate) than the Ironton-Galesville formation and because, in some cases, the total dissolved solids levels and brackishness within the Mt. Simon aquifer have been excessive, the Eau Claire and Mt. Simon formations are often times not considered for potable water supply.

In the past (1970s and 1980s), the deep formations throughout Northeastern Illinois had experienced declining static and pumping water levels, in some instances, due to aquifer mining of groundwater systems. Aquifer mining occurs when groundwater is withdrawn from an aquifer at unsustainable rates for a period of time such that the critical water level is reached and exceeded. The critical water level for the deep bedrock system in Northeastern Illinois according to most researchers is the top of the Ironton-Galesville aquifer. The demand from growing populations resulted in over-pumping and thus, lowered groundwater levels. In fact some literature has suggested that water levels within the high pumping centers had dropped more than 900 feet in the deep sandstone aquifers lying deep below the Fox River Valley. This trend was due to the fact that the demand from the deep wells was in excess of the naturally occurring recharge rate. Because of the declining yields of the deep well formations, many Chicago suburban communities turned to alternate sources of supply including shallow groundwater and surface water from adjacent rivers. Moreover, Lake Michigan water became available for many communities in Cook, DuPage, Lake and Will Counties. Since many suburban communities took advantage of these alternate water supply sources, the burden on the deep well supply has been reduced and the static water levels have rebounded to a certain extent.

Exhibits 5-2 and 5-3 display the ISWS modeled head for the Ancell and Ironton-Galesville aquifers in 2005; purple lines represent the Sandwich Fault and the red box outlines Kendall County. The cone of depression in each exhibit is centered over Joliet and is spreading towards the Yorkville region. This model data was created to have uniform and re-creatable results. Actual measured heads in high usage areas can be below the modeled values displayed in the map.

Literature from the Illinois State Water Survey (ISWS) has suggested that in 1995 the deep bedrock withdrawals totaled 67 MGD and in 2000 the total was about 72 MGD. It has been suggested that the maximum sustainable yield of the deep aquifer system in Northeastern Illinois is approximately 65 – 80 MGD. If the estimates of the practical sustained yield are correct and if the withdrawals continue to exceed that level, the recovery may eventually discontinue and water levels could potentially decline once again. In fact, it has been documented that there already is some additional decline in some localized cases.

The Mt. Simon aquifer has not been used widely and therefore has not experienced a significant drawdown due to water use. One of the main reasons the Mt. Simon aquifer has not been used heavily is because it currently is more expensive to draw water from as compared with other options. The aquifer is further underground and therefore extra energy usage must be used to pump the water to the surface. Additionally, the water in the aquifer is brackish and therefore more expensive and difficult to treat.

Exhibit 5-2: Modeled Heads in 2005 for the Ancell Sandstone Aquifer

United City of Yorkville, IL

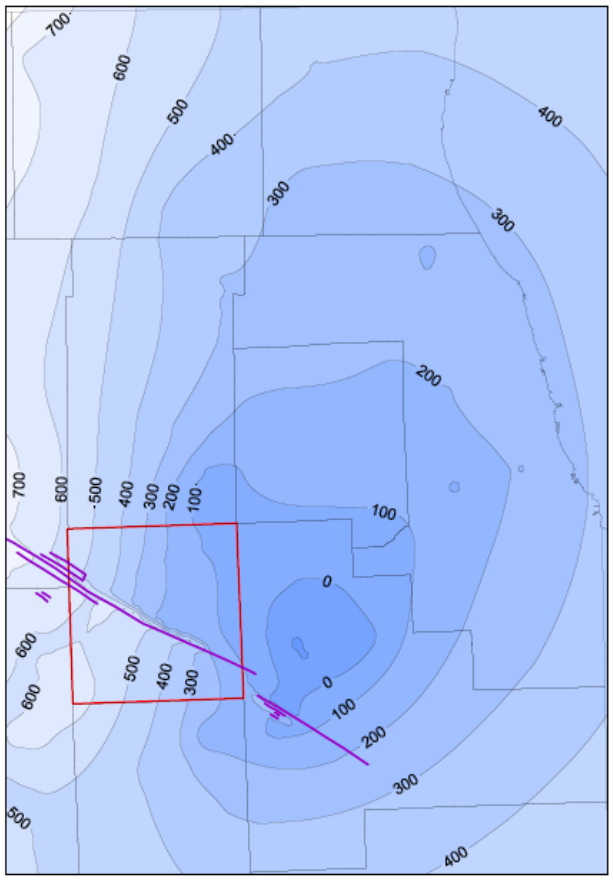
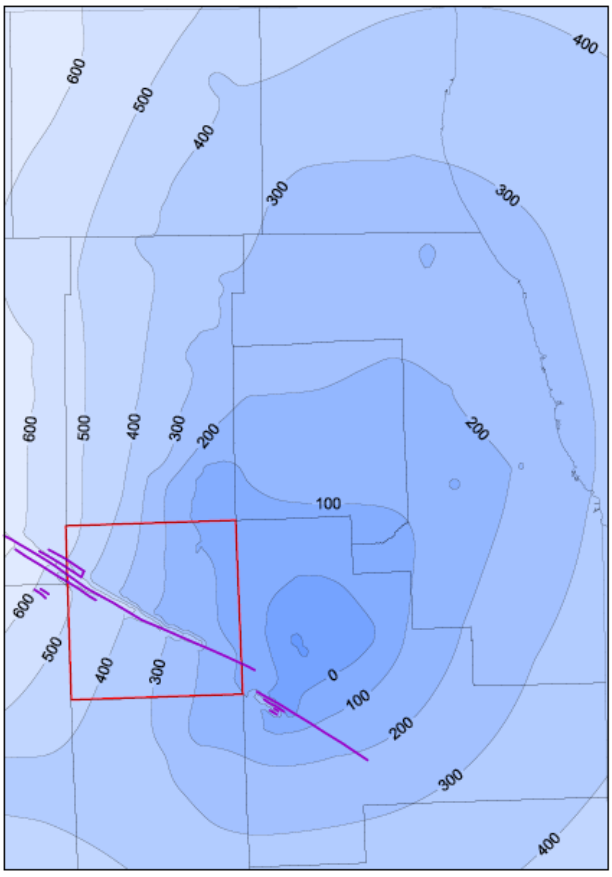


Exhibit 5-3: Modeled Heads in 2005 for the Ironton-Galesville Sandstone Aquifer

United City of Yorkville, IL



5.1.3 Sustainable Groundwater Supply Planning Map – In an effort to pull all of the existing groundwater resources information together, the project team, which included staff from the ISWS, utilized the ISGS/ISWS Northeastern Illinois geodatabase to map the existing water wells within, and adjacent to, the planning area. The Ashmore and Glasford Unit that lies north and west of Yorkville is typically thicker than in Yorkville itself thus lending itself to be used more readily for groundwater. Directly to the west of Yorkville, the City of Plano fully utilizes shallow wells instead of using deep wells. Exhibit 5-4 shows the viability of shallow wells in the study area along with the local shallow and deep wells utilized by Montgomery, Yorkville, Oswego and Plano.

Legend

- Municipal Shallow Bedrock Well
- Municipal Deep Bedrock Well
- Deep Bedrock One Mile Diameter Planning Setback
- Shallow Well 2000 Ft Diameter Planning Setback
- Existing Water Main
- Yorkville Study Area

Thickness of Ashmore and Glasford Unit

- Thickness < 25'
- Thickness =>25', <50'
- Thickness =>50', <75'
- Thickness =>75', <100'
- Thickness =>100', <125'
- Thickness =>125'

MO 11 (59')
MO 10 (87')
MO 12 (190')
MO 13 (183')
MO 4 (1353')
MO 14 (1403')
MO 15 (1397')
MO 3 (1336')
MO 8 (1378')
OS 11 (1403')
OS 7 (1535')
OS 9 (1514')
OS 6 (1392')
YO 8 (1384')
OS 4 (1396')
YO 9 (1368')
OS 3 (1370')
OS 8 (1425')
OS 10 (1397')
PL 9 (117')
PL 8 (97')
PL 3 (39.5')
PL 4 (36.5')
PL 5 (40.75')
YO 4 (1393')
YO 3 (1335')
YO 7 (1527')

0 1,800 3,600 7,200 10,800 14,400 Feet

NORTH

Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 *www.eeiweb.com*	**United City of Yorkville** **800 Game Farm Road** **Yorkville, IL 60560**	DATE: JANUARY, 2017 PROJECT NO.: YO1437-P BY: CLV PATH: H:\GIS\PUBLIC\YORKVILLE\2014\ FILE: YO1437_EXH5-4.MXD	**SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS** UNITED CITY OF YORKVILLE, ILLINOIS	**EXHIBIT 5-4** **SUSTAINABLE GROUNDWATER SUPPLY PLANNING MAP**

5.1.4 Sandwich Fault - The Sandwich Fault, which runs along the southeast side of the City, affects all aquifers discussed in this report to some extent. The Sandwich Fault is actually a series of parallel faults in a 2-mile wide zone which runs from northwest to southeast. The location and number of faults in Kendall County is difficult to determine because of the thick overlying till. Evidence from the shallow water levels and the chemistry within the fault suggest that there is a vertical flow along the fault but the transmissivity along the fault should be much smaller than the horizontal transmissivities of the sandstone.

Geologic uplift has caused area southwest of the fault line to rise which subsequently caused the erosion and removal of younger rocks. While northeast of the fault, the Ancell sandstone is overlaid by an aquitard, southwest of the fault the Ancell sandstone is at, or near the surface. Due to the proximity to the surface, the Ancell aquifer southwest of the fault is in a much more advantageous position for recharge as compared with the Ancell aquifer northeast of the fault. It is unlikely that the Mt. Simon aquifer is not significantly affected by the fault due to the fact that its thickness is greater than the thickness of the fault. Exhibits 5-5, 5-6 and 5-7 display the thicknesses of the shallow and deep aquifers, the proximity to the surface of the various geological units and how the geological units are affected by the Sandwich Fault.

While there is the possibility for water conductivity within the fault itself, it is unwise to consider drilling wells directly on the fault. Fractures within the bedrock can adversely affect drilling and can cause difficulties with both schedule and cost of wells. Drilling wells both northeast and southwest of the fault will allow the City to take advantage of the water levels on either side and build a factor of safety into their water supply by diversifying their aquifer usage.

Exhibit 5-5: Bedrock Surface Hydrogeology of Kendall County Illinois

United City of Yorkville, IL

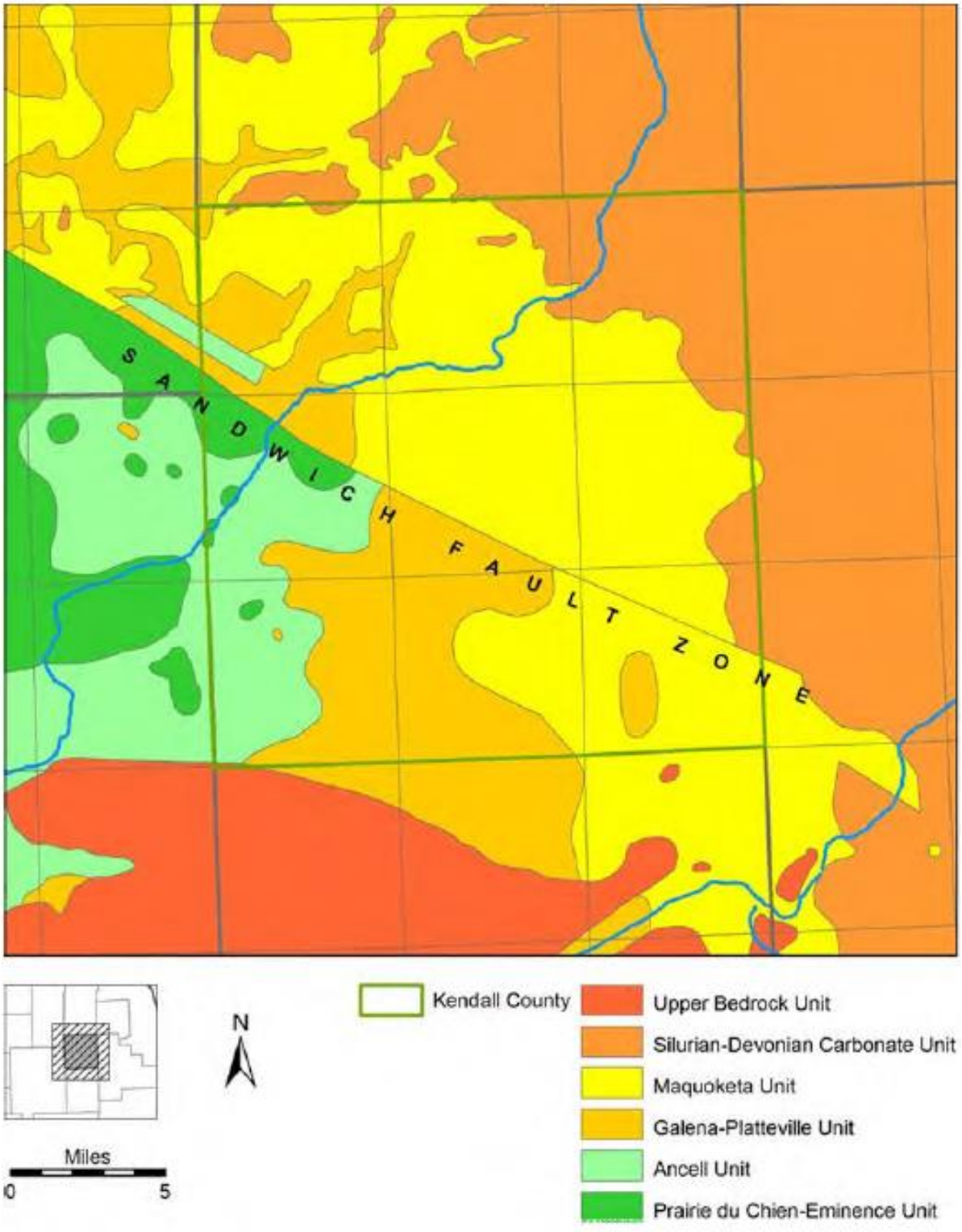


Exhibit 5-6: North/South View of Illinois Aquifers

United City of Yorkville, IL

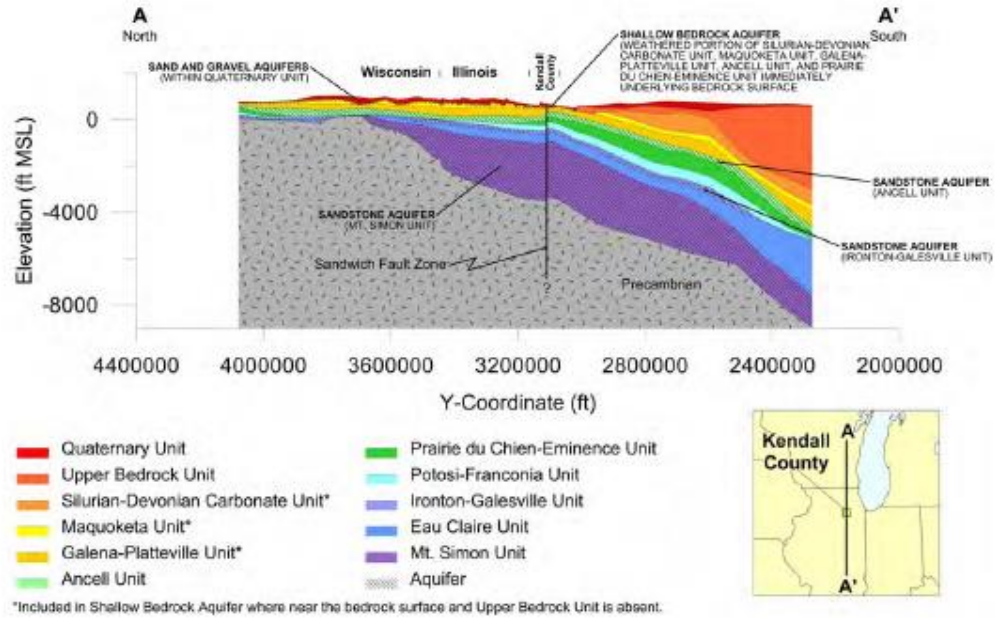
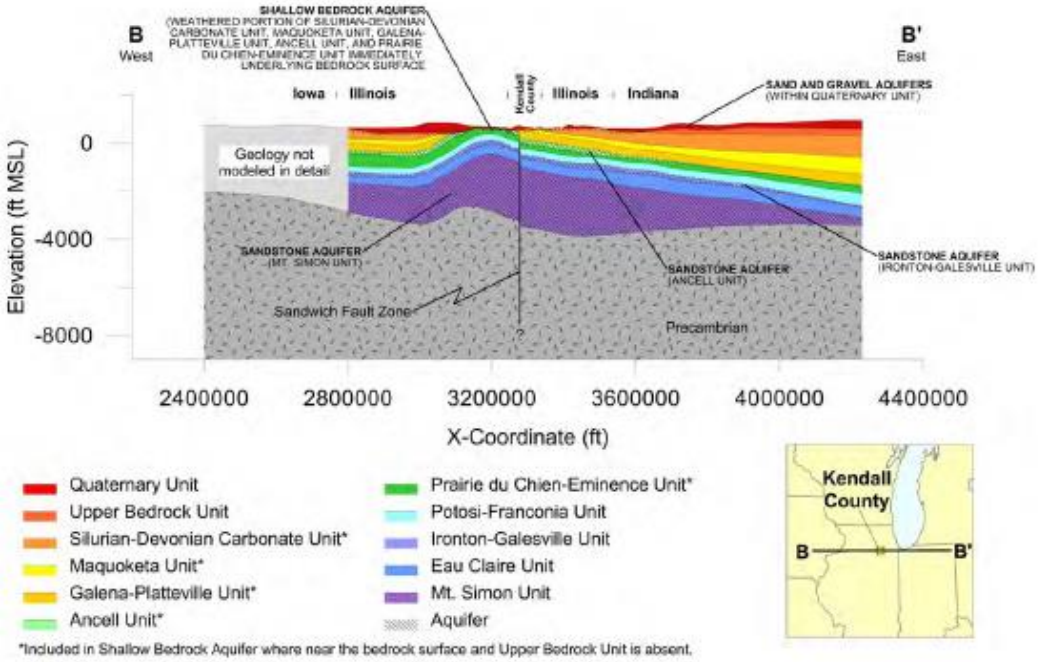


Exhibit 5-7: East/West View of Illinois Aquifers

United City of Yorkville, IL



5.2 Deep Sandstone Aquifer Modeling

As previously summarized, the ISGS and ISWS collaboratively developed a multistate deep sandstone aquifer model. Initial model results indicate the water levels within the aquifer are declining. The results also suggest the projected growth in the region, along with a current trends per capita water usage, could create some major aquifer challenges in portions of the region – primarily in Southeast Kane County, Northeast Kendall and Northwest Will County. Alternative water use scenarios also were modeled to project water levels under those scenarios. As one would expect, lower water demands under less resource intensive water use scenarios extend the capacity of the deep sandstone water supply resource further into the future.

When looking at the geologic stratigraphy of the region, the St. Peter Sandstone (Ancell Unit) and the Ironton-Galesville Sandstone appear to be separate aquifer units. However, many municipal wells in Northeastern Illinois are open to both units, and therefore water has transferred across those two units for many years. Given the manmade connection between the two units, the water levels of each individual unit have essentially merged together in most areas of Northeastern Illinois. Even though three of five of the City's current wells are cased through the Ancell unit, the hydraulic interconnection between the Ancell and Ironton-Galesville units likely exists in the Yorkville area. Therefore, water levels in the model utilized the upper Ancell Unit as the reference point.

The top of the Ancell Unit in the Yorkville area is approximately at an elevation of 155 ft MSL at Well No. 4, 150 at Well No. 7 and 135 ft MSL at Well No. 9. Therefore, at a static water elevation of approximately 280 ft, the artesian head above the top of the Ancell Unit at Well No. 4 was approximately 130 feet in 2010. At a static water level elevation of approximately 230 ft MSL, the head of Well No. 7 was 80 ft of artesian head above the top of the Ancell unit in 2010. At a static water elevation of approximately 115 ft MSL, the head of Well No. 9 was 20 ft below the top of the Ancell Unit in 2010.

5.2.1 2050 Northeastern Illinois Regional Deep Sandstone Aquifer Modeling – As part of this master planning project, the ISWS modified the regional deep sandstone model for multiple local scale alternatives. Six different scenarios were modeled using various assumptions in order to gain a better understanding of how the aquifer would respond to local projected changes in aquifer withdrawal. The scenarios have two different variables; one variable has three alternates and the other has two.

One variable is whether or not the city is using their CT, LRI, or MCT (modified current trends) to withdraw water from the aquifer. The MCT variable makes the assumption that the city will continue water use with the 'current trends' model, but takes into account whether or not the City is going to place all of their future wells into the Ironton-Galesville aquifer. While the Ironton-Galesville is currently the most cost-feasible aquifer to pull from, the assumption could be made that at some point the City would be willing to invest more money in order to pull from a different aquifer if it meant a more sustainable outcome. Additionally, future technology

may make obtaining water from other aquifers more cost-feasible than it currently is. This CT/LRI/MCT variable can be simplified down to be how much water the City is withdrawing from the St. Peter and Ironton-Galesville aquifer from a certain amount of wells.

The second variable is whether or not the City of Joliet, who currently has the largest regional effect on the aquifer, continues to obtain all of their water from deep sandstone wells. The variable accounts for what would occur if Joliet continued to withdraw water from the Ironton-Galesville aquifer at their current trends or if Joliet began to obtain 80% of their water from another source and only obtained 20% of their water from the Ironton-Galesville aquifer.

As described in Section 2, Well No. 3 has been pumping excessive amounts of sand and often requires expensive extra maintenance. Therefore, for the scenarios in Section 5, Well No. 3 is considered to be abandoned.

Exhibit 5-8 displays head projections for Yorkville Wells No. 4, 7 and 9 with comparisons for all CT, LRI and MCT values for both the variables of Joliet switching to surface water and continuing to use groundwater. Additionally, the CT static water levels have a corresponding pumping water level in the graph. The pumping water level was found by assuming the historical specific capacity will continue into the future. It is important to take note of the pumping level as well as the 'pump setting level' in all the hydrographs in Exhibit 5-8. When pumping water levels approach the pump setting level, the pump and motor will need to be lowered. At some point, the pump can no longer be lowered and sustain the same pumping rate. If the pumping water level drops to be near the top of the Ironton-Galesville then the production rate will need to be significantly reduced or the well will need to be abandoned.

Exhibit 5-9 displays several different modeling scenarios. The first picture displays the head above the Ironton-Galesville in 2014 and the following five pictures show the modeled drawdown for five different scenarios, each of these scenarios are described further in sections 5.2.2 through 5.2.6.

5.2.2 2050 CT Deep Sandstone Aquifer Modeling With Proposed Ironton-Galesville Wells – The first modeled scenario makes the assumption that the City of Joliet and the United City of Yorkville will both continue to make withdrawals at historical rates (scaled for population increase) until the year 2050. In this scenario, it is assumed that Well No. 3 is abandoned and seven new wells are added to supply a total of 5.36 MGD of water to Yorkville. Each of these wells would be pumping from the Ironton-Galesville aquifer exclusively apart from Well No. 4 which would continue pumping from both the Ironton-Galesville and the Ancell aquifers.

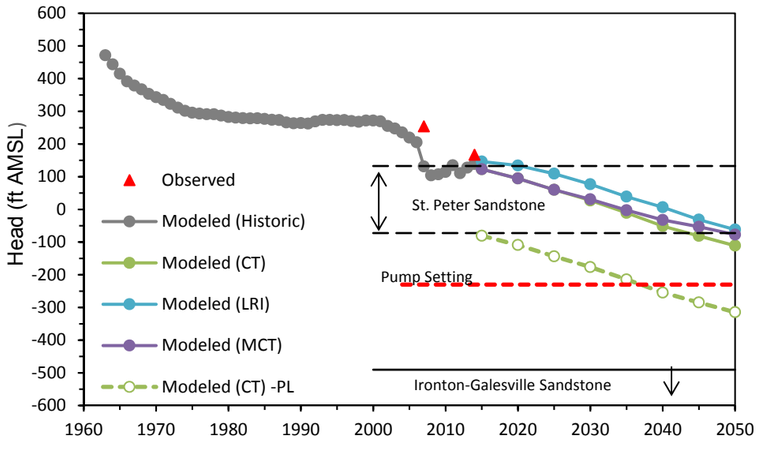
This scenario is considered to be the worst case scenario as far as aquifer use modeled in this study. As one can see by looking at Exhibit 5-9, this scenario predicts that the pumping water level in Well No. 9 would decrease below the current pump setting level between 2035 and 2040. The pumping level for Well No. 4 would be approaching the current pump setting level in the year 2050.

Exhibit 5-8: Historical and Projected Water Levels in Select Wells

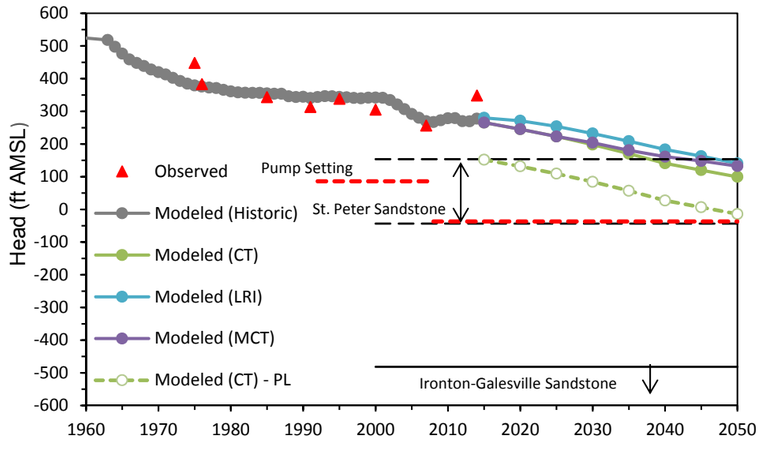
United City of Yorkville, IL

Projections with Joliet Continuing on Ground Water Supply Only

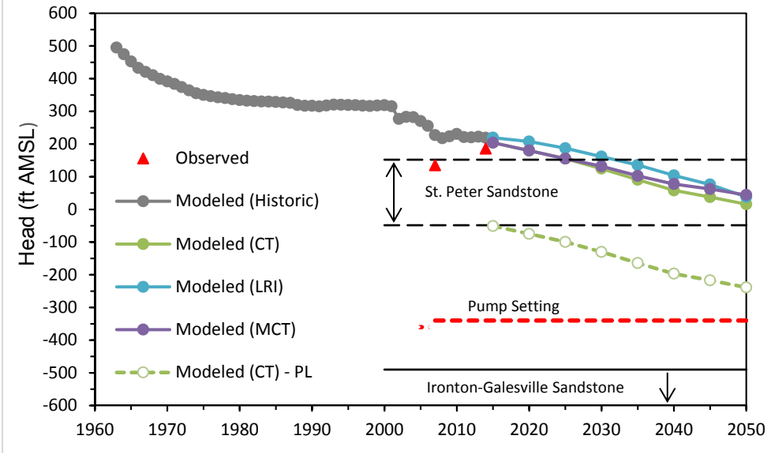
Well No. 9



Well No. 4

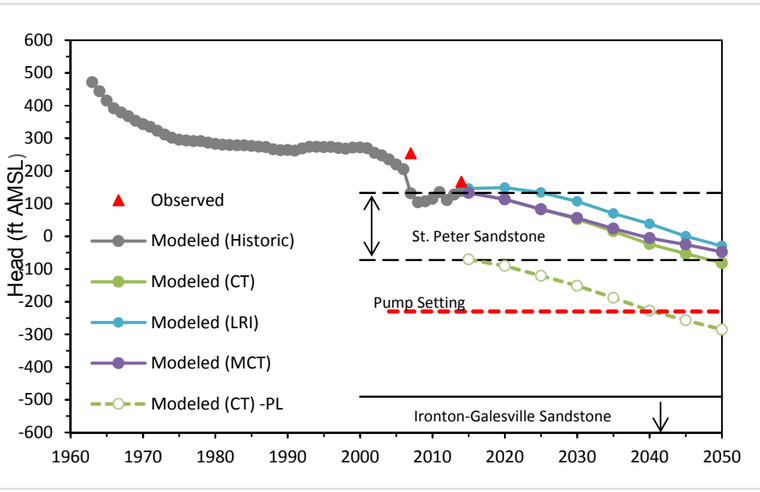


Well No. 7

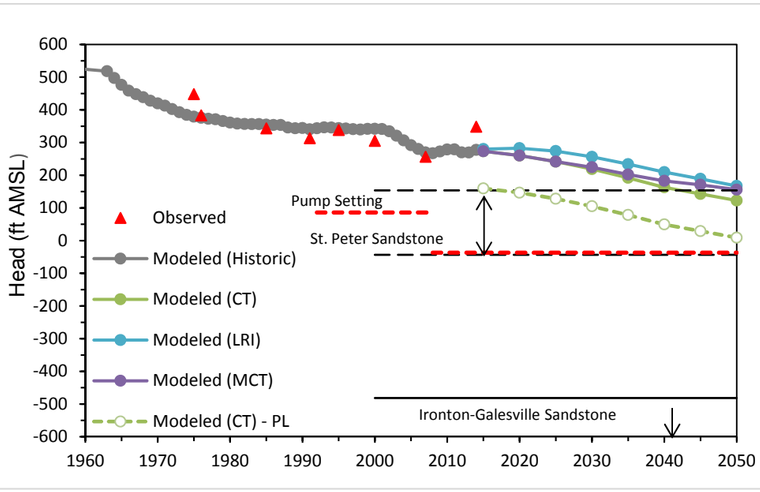


Projections with Joliet Integrating Surface Water into Water Supply Portfolio

Well No. 9



Well No. 4



Well No. 7

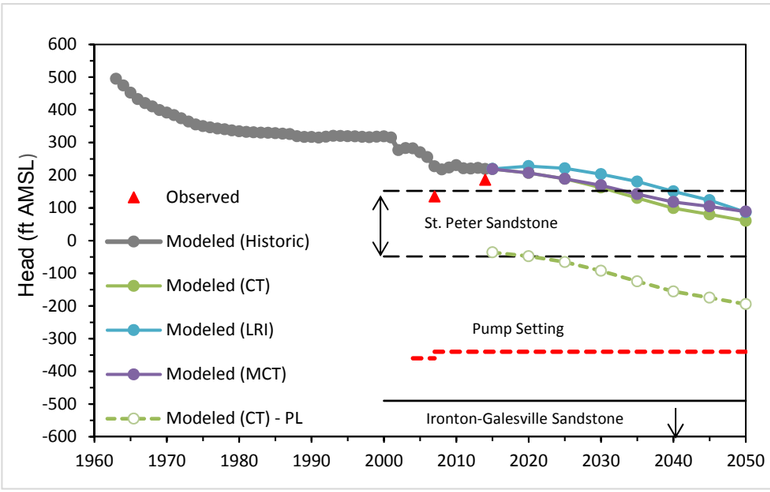
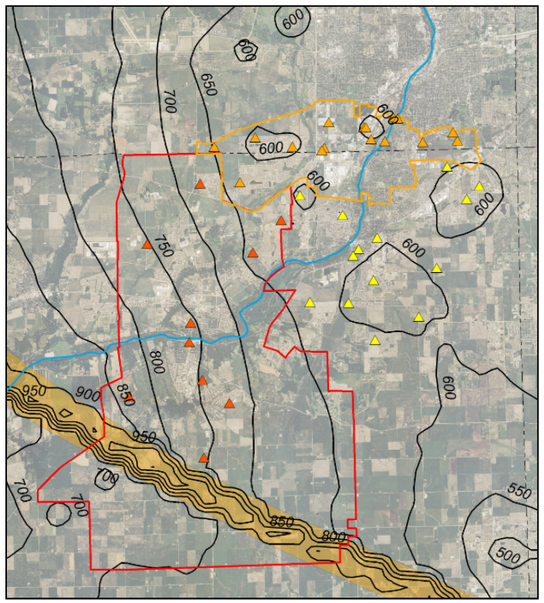


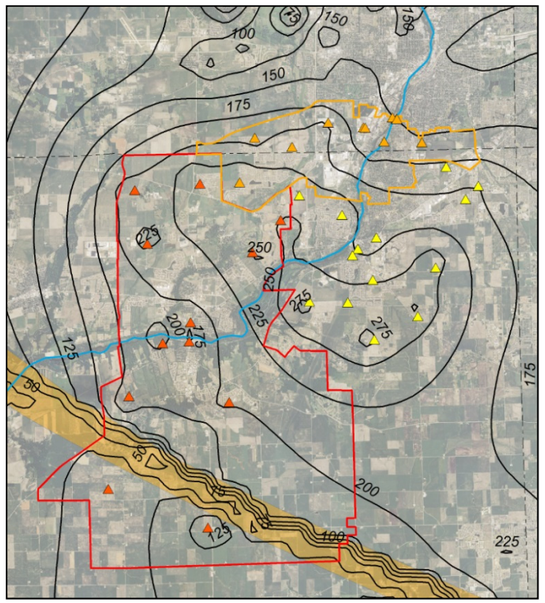
Exhibit 5-9: 2014 Head and Projected 2050 Drawdown in the Regional Deep Sandstone Aquifer

United City of Yorkville, IL

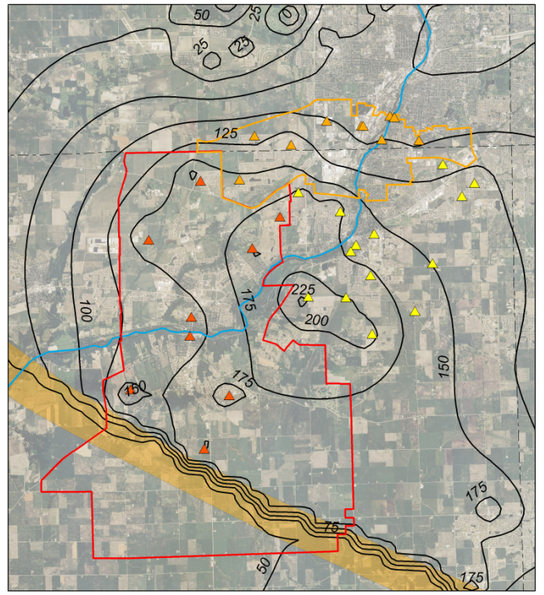
2014 Head Above Top of Ironton Galesville Aquifer



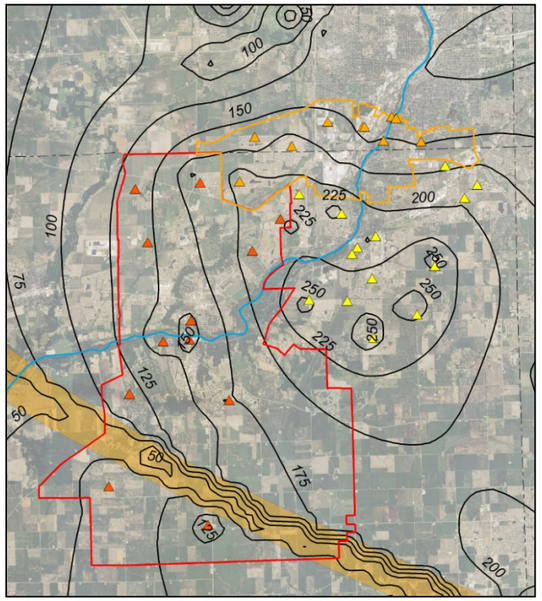
Alternate 1: 2050 Drawdown W/ CT Water Use; Joliet on Deep Aquifer



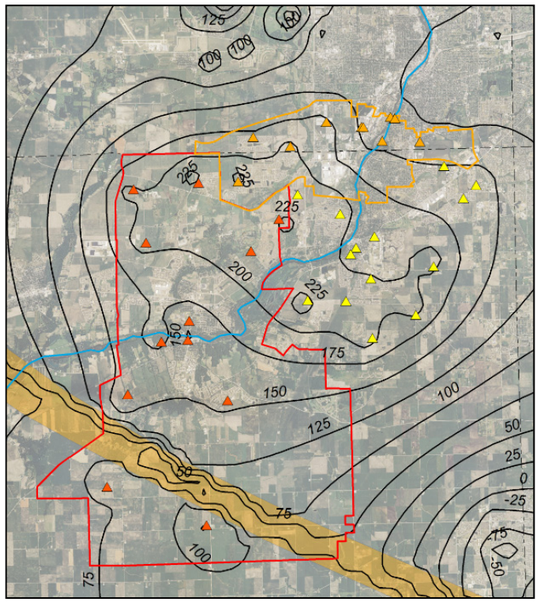
Alternate 2: 2050 Drawdown W/ LRI Water Use; Joliet on Deep Aquifer



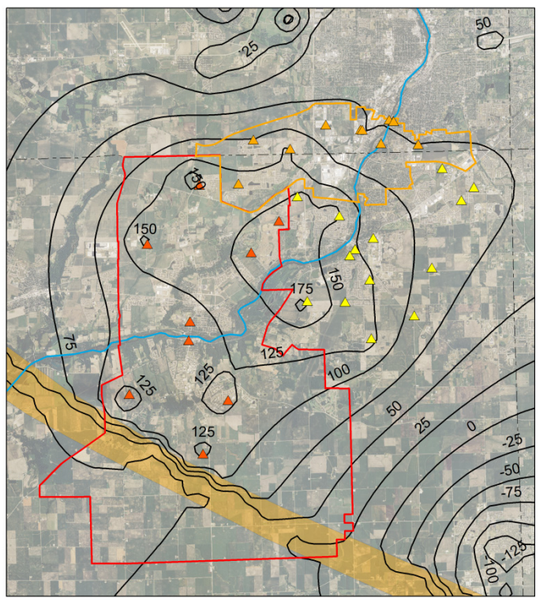
Alternate 3: 2050 Drawdown W/ MCT Water Use; Joliet on Deep Aquifer



Alternate 4: 2050 Drawdown W/ CT Water Use; Joliet Switches to Surface Water



Alternate 5: 2050 Drawdown W/ LRI Water Use; Joliet Switches to Surface Water



Explanation

- Village of Oswego Wells
- Village of Montgomery Wells
- City of Yorkville Wells
- Drawdown from 2014 (CT)
- County Boundary
- City of Yorkville Planning Boundary
- Village of Montgomery Planning Boundary
- Sandwich Fault Zone
- Fox River

In this scenario, the static water level for Wells No. 7 and 9 would be approaching, or be below, the bottom of the Ancell aquifer by 2050. In other words, the Ancell Aquifer would be fully dewatered at these two well locations. The static water level for Well No. 4 is not projected to drop as much as wells No. 7 and 9. Given wells No. 4's location in the center of town, where Joliet and Aurora's withdrawal have less of an effect, and its high specific capacity, Well No. 4's water levels will not decrease as much as the other wells.

5.2.3 2050 LRI Deep Sandstone Aquifer Modeling with Proposed Ironton-Galesville Wells – The purpose of the second scenario was to determine the change in water levels if Yorkville used moderate conservation efforts to reach the LRI scenario and Joliet continued to obtain its potable water from the Ironton-Galesville aquifer. In this scenario, Well No. 3 is abandoned and four new wells are added to the original wells for an average of 4.77 MGD drawn from the 8 wells total.

This scenario is called out as 'Alternate 2' in Exhibit 5-8. The difference between Yorkville CT and LRI values when Joliet has not modified from their current usage can be found in Exhibit 5-9. The model results suggest that when the United City of Yorkville uses moderate conservation efforts to reduce their water usage, the static water level rises by 49' for Well No. 9, 41' for Well No. 4 and 16' for Well No. 7 when compared to Alternate No. 1.

5.2.4 2050 MCT Deep Sandstone Aquifer Modeling with Partial Alternate Aquifer Withdrawal – The third scenario evaluated the change in ground water levels if Yorkville continued to use water at the current rate, but switched half of the future wells to pump from an aquifer other than the Ironton-Galesville. Currently, the Ironton-Galesville is the most cost feasible aquifer to draw from; however, future events may justify the added cost of utilizing a different aquifer.

This scenario is identified as 'Alternate 3' in Exhibit 5-9. Head in the Yorkville area drops by around 125' in the east part of the City, 150' in the central part of the City and 175' in the east part of the City. As seen in Exhibit 5-8, if Joliet does not switch to surface water and Yorkville does not implement conservation efforts, but instead chooses to obtain half of their new wells to an aquifer other than the Ironton-Galesville, the static water level head lowers by 34' for Well No. 9, 32' for Well No. 4 and 28' for Well No. 7 as compared to the 2014 head.

5.2.5 2050 CT Deep Sandstone Aquifer Modeling With Proposed Ironton-Galesville Wells and Joliet Moves to Predominantly Surface Water – The purpose of the fourth scenario was to determine if the Yorkville CT water use could be sustained if Joliet began to obtain 80% of their demand from surface water. In this scenario, Well No. 3 is abandoned and seven new wells are added to supply a total of 5.36 MGD of water to Yorkville. Each of these wells would be pumping from the Ironton-Galesville aquifer exclusively, except Well No. 4, which would continue to pull from both the Ironton-Galesville and the Ancell aquifers.

The drawdown that would occur in this scenario is called out as 'Alternate 4' in Exhibit 5-9. The differences between CT values when Joliet is using surface water and when Joliet is using ground water can be found in Exhibits 5-8 and 5-9. When Joliet switches to obtaining 80% of their water from surface water, the 2050 static water level projections only differ by 24' of head for Well No. 9, 23' of head for Well No. 4 and 44' of head for Well No. 7. The CT Scenario Model demonstrates Joliet's conversion to predominately surface water appears to have some affect on water levels within the region, but the affect is minimal. Joliet switching to surface water delays the CT static water levels from reaching the worst-case scenario for 4 years by Wells No. 9 and 4 and by 10 years for Well No. 7.

5.2.6 2050 LRI Deep Sandstone Aquifer Modeling with Proposed Ironton-Galesville Wells and Joliet Moves To Predominantly Surface Water – The purpose of the fifth scenario was to determine the change in water levels if Yorkville reduced their water usage to the LRI scenario and if Joliet switches to obtain 80% of their water needs from surface water. In this scenario, which is similar to scenario 2, Well No. 3 is abandoned and four new wells are added to the original for and an average of 4.77 MGD would be drawn from the 8 wells.

This scenario is called out as 'Alternate 5' in Exhibit 5-9. The head above the Iron-Galesville actually increases in the Joliet area that is southeast of the Yorkville planning area. Head in the Yorkville area drops by around 125' in the south part of the City, 150' in the northwest part of the City and 175' in the northeast part of the City. As seen in Exhibit 5-8, the difference in static water levels between the worst case scenario (no conservation efforts from Yorkville, Joliet remains on ground water) and the best case scenario (Yorkville implements conservation efforts, Joliet uses surface water) is 82' for Well No. 9, 67' for Well No. 4 and 71' for Well No. 7.

5.2.7 Model Results Summary – There is an infinite number of events which may have small or large effects on the head of the Ironton-Galesville aquifer; additionally, the region could grow differently than predicted and the regional withdrawals from the aquifer could be different as well. The purpose of modeling for this report was to evaluate, with the best information at the time, if the Ironton-Galesville aquifer will be able to support the United City of Yorkville's water needs through 2050. The modeling results found that the ability of the Ironton-Galesville aquifer to support the United City of Yorkville through 2050 is likely. However, there will continue to be additional decline in water levels in the Yorkville area as the aquifer continues to be pumped beyond its sustainable yield. The modeling results indicate water levels in the Joliet area would likely rebound if Joliet switches to surface water as its primary source. However, the water source change in the Yorkville area would not have much of a positive effect on water levels in the Yorkville area because withdrawals from Yorkville, and its neighbors would cause further drawdown in the aquifer.

The model results suggest there is little difference in water level declines no matter what water demand scenario is considered. The LRI scenario withdrawal would reduce water level declines as compared to the CT scenario, but the difference is minimal. The model results suggest the Ancell/St. Pete Sandstone Aquifer,

in 2050, will be dewatered in a portion of Yorkville's planning area. During, the pumping conditions the water levels will be within 200 feet of the top of the Ironton-Galesville in some areas.

It is hard to predict exactly when the aquifer levels would be so low that the well can no longer practically be used. It is highly unlikely that pumping assemblies could be lowered to withdraw near the top of the Ironton-Galesville. Motor horsepower limitations will likely reduce the amount of water the well can produce as the water wells continue to decline. As deeper formations are exposed to air, water quality changes could create unmanageable treatment requirements, too.

While a specific year for aquifer dewatering cannot be identified, the modeling has shown the aquifer is not sustainable for the Yorkville region for the long-term. The sooner the City switches to a more sustainable source, the better off the City will be for the long-term.

It also should be noted that non-municipal users in the region may have wells that only extend to the St. Peter sandstone and do not reach the Ironton-Galesville. If the regional water levels lower to the bottom of the St. Peter, many homeowners' and some business owners' wells may run dry. They may have to seek new sources of water for themselves. The sooner the deep sandstone water levels can be stabilized, the more the risk of these shallower wells being dewatered will be reduced.

Additionally, it is considered prudent to have a backup source of water when using either surface water or obtaining water from a third party such as JAWA or other chartered water group. Natural or manmade events such as a critical main break or drought could leave the City without any source of water for several days. If the City cannot use its typical water source, it is necessary to have water from an alternate source for the sake of baseline water use and firefighting uses. If the water levels in the deep aquifer are stabilized, it could be used as a backup source for Yorkville and the Sub-Region.

5.3 Fox River

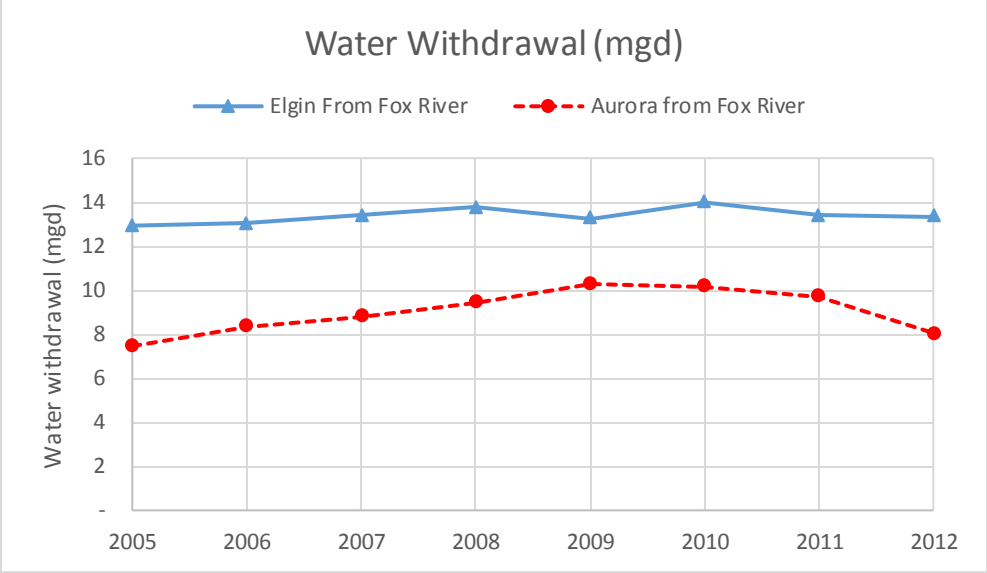
As part of the scope of this project, the ISWS evaluated the feasibility of the Fox River being the primary source of supply for United City of Yorkville, as well as the combined communities of Montgomery, Yorkville and Oswego, with potable water through the year 2050. All graphs and tables in section 5.3 represent data that has been compiled by the ISWS as part of the aforementioned study.

5.3.1 Fox River Watershed – Beginning in southeastern Wisconsin and running southwest to Ottawa, Illinois, the Fox River is approximately 202 miles long and is tributary to the Illinois River. The Fox River Watershed is currently only being used for potable water by the upstream communities of Elgin and Aurora. The Fox River also serves as the discharge point for several communities' wastewater treatment plants. On average, Aurora obtains about half of their water supply from the Fox River, whereas Elgin obtains approximately 90% of their

water from the Fox River. Exhibit 5-10 graphs the water withdrawals by both Elgin and Aurora from the years of 2005 to 2012 (most recent data).

Exhibit 5-10: Historical Fox River Withdrawal Information for Elgin and Aurora

United City of Yorkville, IL



5.3.2 Historical Fox River Flows – Over the historical monitored period of 100 years at the Dayton Dam, streamflows in the Fox River have increased. The changes in streamflow reflect increases in population and thus an increased effluent from wastewater treatment plants tributary to the Fox River. Two other factors which affect the Fox River flowrates are changes in river withdrawals from the Fox River and modifications in releases from the Stratton Dam immediately downstream of the Fox Chain of Lakes.

In the context of an investigation into a river for the purposes of determining whether or not it is fit to serve as the primary water source for one community or several communities, the streamflow must be taken into prime consideration. One of the two parameters that was used in the ISWS report to evaluate the low flows of the Fox River is the 'lowest 10%' number which is representative of streamflow in the bottom 10th percentile of flow; the bottom 10th percentile of flow is considered to be an extremely dry condition. The other parameter used is the 'Q7,10' number; the Q7,10 number demonstrates the streamflow during a 7-day 10-year low flow condition which is estimated to be about 80% of the lowest monthly flow.

An IDNR permit for any new Fox River withdrawal would likely include a protected low flow restriction, which could stipulate that the withdrawal must cease and an alternative source of water must be used if the river's flow were to fall below an established protected low flow amount. For instituting the protected flow amount, IDNR has in all cases to date used the Q7,10 number as the protected level. Based on its previous practices, IDNR would be expected to refer to the most recently published map of Q7,10 values, which for the Fox River

was issued by the ISWS in 2003. The possibility exists that IDNR could approach ISWS for a more recent estimate of the Q7,10; however, IDNR has not done this with any prior withdrawal request.

As indicated before, the Q7,10 of any river can shift over time, often in response to changes in water use practices (effluents, withdrawals, diversions) in its watershed but also to climatic variations and other factors. In contrast, the protected flow amount designated by IDNR is expected be a fixed flow value and thus will remain constant even as low flow conditions change in the future.

In Table No. 5-1, the 'Total Number of Deficit Days' column counts every day where the streamflow was below the Q7,10 number and the 'Longest Period of Nearly-Consecutive Deficit Days' column outlines how many of those days occurred consecutively or nearly consecutively. If the United City of Yorkville did not have a backup source of water, they would need to be able to store enough water for the days when they would not be able to pull from the Fox River.

Table No. 5-1: Historical Drought Information at Dayton, IL

United City of Yorkville, IL

Year	Total Number of Deficit Days	Longest Period of Nearly-Consecutive Deficit Days
1934	98	57 of 62 days
2005	50	25 of 26 days
1956	43	37 of 39 days
1946	38	24 of 26 days

5.3.3 Potential Fox River Withdrawal Locations – If Yorkville installed a Fox River Intake and subsequent treatment plant to serve their own community, it would be recommended to place the intake along the Fox River at the East end of the City. Positioning the WTP to be on the east end of the City would provide the City with the option of connecting the WTP to existing Wells No. 8 and 9 via a raw water main. If the wells were connected via raw water main, the wells would be able to pump raw water to the WTP in the event that the City was unable to draw from the River for any reason. Lastly, by locating the intake on the East end of the City and East of the dam, the water levels in the river will be fairly stable as they will be primarily continuous by the elevation at the top of the Dam.

Two other locations, in addition to the location for the Yorkville intake, were also evaluated for the potential Fox River Intakes, as part of this analysis by ISWS. Withdrawal just upstream of the Montgomery Dam was analyzed to determine if there was sufficient flow in the location to meet Montgomery's long-term demands. The third location evaluation reviewed whether a withdrawal from the Fox River near Orchard Road could supply water to Yorkville, Montgomery and Oswego (Sub-Regional withdrawal).

5.3.4 Fox River Flow Projections – Similarly to the past increases in streamflow, the Fox River flows are likely to increase due to an increased population in Northeast Illinois and thus an increase in effluent from WWTFs

upstream of Yorkville. Appendices C and D summarize the projected Fox River flow rates for taking into considerations the Yorkville and Sub-Regional withdrawal locations, respectively. The appendices clearly show future flows are projected to be higher than the current Q7,10 flows for the various flow ranges evaluated.

Waukesha Wisconsin currently discharges their WWTF effluent into the Fox River. Waukesha has recently requested to switch from their current water source to Lake Michigan water. If their request is granted, under law they must return their wastewater effluent to Lake Michigan. The flows from Wisconsin currently augment the Fox River base flow by approximately 40 cubic feet per second (cfs); Waukesha, along with the surrounding communities, provides more than half of the flow from Wisconsin into the Fox River Chain of Lakes. Thus, if Waukesha's request to use Lake Michigan is granted and they no longer discharge their WWTF effluent into the Fox River, the Fox River's flowrate will decrease.

Another factor which could affect the streamflow of the Fox River is the operation of the Stratton Dam. The Stratton Dam, operated by the Illinois Department of Natural Resources (IDNR), is located in McHenry County between the Fox River Chain of Lakes and the Fox River. The operation of this Dam could potentially increase the Q7,10 outflow estimate of the Fox River.

Apart from long-term trends regarding increases or decreases in flowrate, the Fox River's flow rates fluctuate throughout various months based on snow melt, precipitation and groundwater. Over the last 100 years the Fox River has been surveyed, all months except March have had at least one Q7,10 flow rate day. Table No. 5-2 shows the likelihood of at least one day reaching the Q7,10 low flow conditions based on the month for both the historical conditions and scenarios with increases in flow. As the flow rates increase, the likelihood of the river reaching current Q7,10 numbers decreases. Historically, September has been the month displaying the lowest flows and has seen a 4.7% chance where there is at least one day per month where the streamflow is below the Q7,10 number. Table No. 5-2 also summarizes the change in monthly risk of the flow falling below the Q7,10 level at 10 CFS increment increases. The table clearly shows how the risk diminishes considerably especially at a 50 CFS increase.

Table No. 5-2: Monthly Distribution of Probability of The Fox River Reaching Q7,10 Low Flow Rates at Dayton, IL

United City of Yorkville, IL

Month	Historical Conditions	Low Flows Change by +10 CFS	Low Flows Change by +20 CFS	Low Flows Change by +30 CFS	Low Flows Change by +40 CFS	Low Flows Change by +50 CFS
May	0.4%	0.1%	0.1%	<0.1%	<0.1%	<0.1%
June	0.3%	0.2%	0.1%	<0.1%	<0.1%	<0.1%
July	1.7%	1.1%	1.1%	0.5%	0.2%	<0.1%
August	3.6%	2.7%	2.5%	1.5%	0.9%	0.5%
September	4.7%	3.2%	3.0%	2.1%	1.4%	0.9%
October	2.4%	1.8%	1.5%	1.2%	1.0%	0.7%
November	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%

Table No. 5-3 outlines how Table No. 5-1 above would have been changed if 50 CFS had been added to the Fox River by finding the number of deficit days for each drought year where the deficit would have been more than 50 CFS. Although the statistically probable number of days drops heavily, the 1946, 1956 and 2005 droughts all show several days of nearly-consecutive days in a row. Therefore, while the risk of the river dropping below the Q7,10 level is reduced, there likely will be periods of time when a backup supply source will be needed.

Table No. 5-3: Deficit Days of Select Drought Years at Dayton, IL

United City of Yorkville, IL

Year	Total Number of Days With a Deficit ≥ 50 CFS	Nearly-Consecutive Days With Deficits ≥ 50 CFS
1934	1	1 day
2005	22	16 of 17 days
1956	24	24 of 35 days
1946	15	10 of 12 days

5.3.5 Fox River Withdrawal Permitting – As previously stated, an IDNR permit for any new Fox River withdrawal would likely include a protected low flow restriction, this restriction would stipulate that the withdrawal from the river must cease and an alternative source of water must be used if the river's flow were to fall below an established protected low flow amount. In all previous cases, the IDNR has used the Q7,10 value as the protected flow amount.

If Waukesha's request to use Lake Michigan water is granted, the flows in the Fox River would revert back to the levels that existed in the 1980s. Due to the fact that this is about the time when the IDNR implemented their Q7,10 estimate for Algonquin, the Q7,10 number would be likely to remain unchanged. However, if Waukesha's request is rejected the Q7,10 flowrate may be increased to reflect the increases in the Fox River Flows.

The values in Table No. 5-4 outline several scenarios showing the CT and LRI values for both historical (2007) and predicted future values for 2030, 2040 and 2050. The CT and LRI values, similarly to when CT and LRI values are used elsewhere in this report, represent how much water is used compared to the baseline scenario; CT designates current trends and LRI designates less resource intensive trends. If the communities upstream of Yorkville are collectively using less potable water, they will be discharging less wastewater effluent into the Fox River. The difference between the Q7,10 CT and LRI scenarios change from 17 CFS in 2030 to 29 CFS in 2050.

As seen in the tables in this section, the historical Q7,10 numbers are lower than the predicted future Q7,10 numbers; if the IEPA sets the low flow regulation based off of the predicted future number it will be higher, and thus more restrictive than if the regulation was based off of the historical Q7,10 number. There is a chance that if the Q7,10 number was increased after Yorkville began to use surface water, Yorkville would be grandfathered into the old Q7,10 number. If the IEPA decides to periodically update the Q7,10 numbers in the

future and the United City of Yorkville is not grandfathered into the older numbers, they will have to abide by the more stringent future streamflows. All of this being considered, it would seem the sooner a withdrawal permit is secured, the better off the City would be in the long-term.

Table No. 5-4: Fox River Low Flow Scenarios for Yorkville Withdrawal Location

United City of Yorkville, IL

Year	CT Q7,10 Values CFS	LRI Q7,10 Values CFS	April Lowest 10% CFS	July Lowest 10% CFS
2007	187	187	928	349
2030	221	204	978	395
2040	229	207	993	408
2050	240	211	1012	423

5.4 Lake Michigan Interconnection

Lake Michigan is currently the primary source of water for much of the population within the Chicago/Northeastern Illinois area. Confronted with diminishing groundwater resources, many communities in Northeastern Illinois joined together and formed unique intergovernmental cooperatives that own and operate independent Water Systems using Lake Michigan water as the source. Many of these cooperatives, under Illinois State Statute, have formed into a joint action water agency (JAWA) and are responsible for managing the delivery and pricing of the water supply to their charter communities.

There is an amount of Lake Michigan water usage allotted to the State of Illinois that limits the quantity used, and indirectly the area and population that can be served, by this resource. In the report *Water 2050: Northeastern Illinois Regional Water Supply/Demand Plan (CMAP)*, March 2010, it was estimated that 50 to 75 MGD in domestic water supply allocation may be available to new areas. This estimate takes into account a number of variables that could greatly affect this allocation including diversion of stormwater runoff, Lake Michigan water levels (which affects volume of water required to work the locks and leakage through the locks), discretionary diversions required to maintain water quality in the Chicago Sanitary and Ship Canal and accounting issues (a running average is used to evaluate the diversion). Also, as the population that currently uses Lake Michigan water continues to develop water conservation practices, water loss will be reduced and more water may become available to those communities seeking to use Lake Michigan water. Maximizing the Lake Michigan allocation to Northeastern Illinois communities will help preserve the groundwater resources in the region. With this guiding principle, the project team explored opportunities for a Lake Michigan water interconnection.

Appendix E schematically displays all major pipelines that distribute Lake Michigan water in Northeastern Illinois. The Illinois American pipeline is closest to the United City of Yorkville's Planning Area, so Illinois American was approached to determine the feasibility of connecting to their transmission system.

Illinois American evaluated three different routes for supplying the United City of Yorkville with potable water. The shortest route was approximately 105,000 LF (19.9 miles long) and had a connection point at Schmidt Rd & I55; the main then travelled southwest along I-55 to IL 126 and then continued along IL 126 into Yorkville. The longest route was approximately 114,000 LF (21.6 miles) long and also assumed a connection point at Schmidt Rd & I55. The main traveled southwest along I-55 to 127th St, then headed west along 127th St and Simons Rd, then ran south along Schlapp Rd, finally, it ran west along IL 126 into Yorkville. The mid-length route was 112,000 LF (21.2 miles) long and also connected at Schmidt and I-55. The main then ran southwest along I-55 to 135th St then travelled west along 135th St, then south along IL Rte 30, finally running west along IL126 into Yorkville. Exhibit 5-11 displays the potential connection point within the Yorkville System.

All three routes were evaluated using both 24" and 30" water main for the years 2015, 2030 and 2040. The ability to supply current demand was evaluated using the MDD from 2014. The 2030 and 2040 values were evaluated using the MDD, CT values. The modeling for the three different routes, evaluated using two different pipe sizes, for three different years can be found in Appendix F. All 18 scenarios show a drop in pressure below 20 PSI, which is a regulatory minimum. A potential intermediate pump station would have to be included with the pump. Additionally, a ground storage tank would have to be included in the cost analysis.

While a detailed cost analysis was not conducted, it is clear that the cost of the needed water transmission main extension, the needed pressure boosting station and the needed groundwater storage tank that is large enough to hold two days of Lake Michigan water, as well as the cost of the actual water, makes the Lake Michigan interconnection cost prohibitive for the United City of Yorkville at this time.

Exhibit 5-11: Potential Illinois American Water Deliver Location

United City of Yorkville, IL



SECTION 6: WATER SUPPLY AND TREATMENT EVALUATION

Previous sections of this report summarize the Water Works System components, provide a needs assessment analysis and provide a sustainable source water assessment for continued and future water supply for the City. This section will determine the required supply and treatment improvements to expand the system to meet the 2050 CT and LRI water demand projections for the United City of Yorkville. Section 7 will summarize the water distribution system and storage evaluation and plan for expansion. Section 8 will provide a review of a Sub-Regional water supply and treatment system to serve the United City of Yorkville, Village of Montgomery and Village of Oswego. A review of the cost of the improvements and a phasing and implementation program will be summarized for both the CT and LRI water demand scenarios in Section 9. Finally, a cost comparison of the CT and LRI recommendations will be presented in Section 9.5.3 to demonstrate the anticipated financial benefit to the City if the LRI goals outlined in Section 3 are reached.

The sustainable source water assessment in Section 5 concluded the continued use of the deep sandstone aquifer to meet future demands might sustain the United City of Yorkville until 2050, but would likely dewater the aquifer to the point that it would be unusable within a few decades after 2050. On the other hand, Section 5 also concluded the Fox River would be a sustainable water supply source for the City and the Sub-Region. While it is a sustainable source for the long-term supply, Section 5 also demonstrated there will be periods of time when a backup supply source will be needed. The backup supply source could undoubtedly be the deep sandstone aquifer as long as there is a sufficient quantity of water remaining in it.

This section, Section 6, outlines a plan for both surface water use and well water use for CT and LRI usage rates (a total of four scenarios) where the United City of Yorkville remains independent in their water supply and treatment approach. The scenario where well water is used is referred to as Alternate 1 and the scenario where surface water is used is referred to as Alternate 2. The alternates are divided into two categories, 'A' designates a "business as usual" or CT scenario and 'B' designates a LRI scenario. Section 8 outlines Alternate 3, a scenario where the United City of Yorkville joins with the Village of Montgomery and the Village of Oswego in order to build a surface water treatment plant which serves all three communities. Alternate 3 outlines both CT (A) and LRI (B) scenarios by combining the CT and LRI usage rates from each of the communities.

The following is a list of alternate water supply and treatment options that will be evaluated in this report:

- Alternative 1A (1A-CT) – The City's 2050 CT water demand is met entirely by collecting groundwater from deep sandstone wells.
- Alternative 1B (1B-LRI) - The City's 2050 LRI demand is met entirely by collecting groundwater from deep sandstone wells.
- Alternative 2A (2A-CT) – The City's 2050 CT water demand is met by using surface water from the Fox River and from one additional deep sandstone well. All current wells will be used as backup.

- Alternative 2B (2B-LRI) – The City's 2050 LRI water demand is met entirely by using surface water from the Fox River. All current wells will be used as backup.
- Alternative 3A (3A-CT) – The United City of Yorkville's, the Village of Oswego's, and the Village of Montgomery's 2050 CT water demands are met entirely by constructing a surface water treatment plant near the Fox River/Orchard Road intersection that is capable of providing water for all three communities. Select current wells will be used as backup.
- Alternative 3B (3B-LRI) – The United City of Yorkville's, the Village of Oswego's and the Village of Montgomery's 2050 LRI water demands are met entirely by constructing a surface water treatment plant near the Fox River/Orchard Road intersection that is capable of providing water for all three communities. Select current wells will be used as backup.

When reviewing the infrastructure mapping exhibits, it's important to note that existing infrastructure symbols are color-coded blue and future infrastructure is color coded in red. The exhibits also include 'potential future' items; potential future items are items which may be implemented after the 2050 timeline. The potential future items are color coded grey. These 'potential future' items are not included in the cost estimates for any of the scenarios.

6.1 CT Water Supply & Treatment Evaluation

As discussed in Section 3, the average per capita water usage for the City over the last five years is 88 gpcd. In order to provide a factor of safety and use a uniform value with the other communities in the area, a value of 90 gpcd was used for all future predicted CT calculations.

As seen in Table No. 3-9, a deficit of just over 3,500 GPM for the ultimate source capacity and just over 6,000 GPM for the reliable source capacity was predicted in the year 2050 for the current trends. These numbers assume that all current wells (Wells No. 3, 4, 7, 8 and 9), are in service. Well No. 3 has several performance issues related to sand production and it's planned that Well No. 3 will be abandoned prior to the end of the planning period. The abandonment of Well No. 3 would push the deficit of the water supply up 600 GPM or 576,000 gallons per day assuming a 16-hr pumping day. If Well No. 3 were abandoned prior to additional water sources coming online, the CT deficit would occur around 3,000 PE sooner than if Well No. 3 were to remain in service.

6.1.1 CT Water Supply Expansion

6.1.1.1 Water Wells – Alternate 1A evaluates the possibility of Yorkville obtaining all potable water from deep sandstone wells. Of the five wells that the city currently uses, two wells (Wells No. 3 and 4) are open to both the St. Peter (Ancell) aquifer and the Ironton-Galesville aquifer and three wells (Wells No. 7, 8 and 9) are open to only the Ironton-Galesville aquifer. As one can see from the raw water quality data discussed in Section 2, the water quality from wells open to the St. Peter and the Ironton-Galesville aquifer and the water

quality from wells open to only the Ironton-Galesville aquifer is very similar; therefore, there is no need to have different water treatment processes for Wells No. 3 and 4 than those that exist for Wells No. 7, 8 and 9.

The typical target production rate for an Ironton-Galesville well is 1,000 GPM. Assuming Well No. 3 is abandoned, the reliable source capacity has a deficit of 6,668 GPM and the ultimate source capacity has a deficit of 4,146 GPM. According to these numbers, seven 1,000 GPM wells will need to be added to Yorkville's current system for Alternate 1A.

When water wells are pumped, the water levels in the aquifer decline in a radial direction. While the deep sandstone formations are not purely homogenous, the characteristics of the aquifer are fairly consistent. In an effort to reduce hydraulic interference between deep sandstone wells, a typical minimum well spacing is one mile. By separating the wells by at least one mile, the drawdown in one deep sandstone well will be minimal at the edge of the drawdown from another one.

Of Yorkville's five existing wells, only Well No. 7 is treated by its own WTP. Wells No. 3 and 4 are treated by the same WTP and Wells No. 8 and 9 also share a WTP. It's often more cost-effective to position two wells one mile away (typical deep well offset zone) from each other and have one WTP treat both wells by transporting one well's water to the WTP by a raw water main than to have two smaller WTPs at each well. Therefore, when it was feasible, the plan allowed two wells to be treated by one WTP.

A summary of the wells needed to fulfil the 2050 CT requirements can be found below. The WTP information needed for these wells can be found in Section 6.1.2.1. The placement of wells, WTPs and other infrastructure can be found in Exhibit 6-1.

- Well No. 6 would be located on the northeast side of the City. The 1,000 GPM Ironton-Galesville Well No. 6 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be near the current North EWST. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 10 would be located on the west side of the City. The 1,000 GPM Ironton-Galesville Well No. 10 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be near the Pavillion Rd. and Hillview Ct. intersection. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 11 would be located near the center of town about one mile west of current Well No. 3. The 1,000 GPM well would be treated by the current water treatment plant located at Well No. 4. A raw water main would travel east along the railroad tracks from Well No. 11 to the existing Well No. 3 and would use the current raw water main that runs across the Fox River from Well No. 3 to the WTP at Well No. 4. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant (WTP)
- Elevated Water Storeage Tank (EWST)
- Future WTP
- Future Deep Well
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future Raw Water Main

1.0 MG NORTH EWST

WELL NO. 6 WTP

1.5 MG NORTHEAST EWST, WELL NO. 8, WELLS NO. 8 & 9 WATER TREATMENT PLANT

WELL NO. 14 WTP

WELL NO. 9

WELL NO. 12 WTP

NORTH CENTRAL PRV STATION

NORTH BP/PRV STATION

300,000 GAL NORTH CENTRAL EWST, WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT

WELL NO. 11

WELL NO. 3

SOUTH CENTRAL BP/PRV STATION

WELL NO. 10 WTP

500,000 GAL SOUTH CENTRAL EWST

SOUTH BP/PRV STATION

SOUTH CENTRAL PRV STATION

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

WELL NO. 15 WTP

WELL NO. 13 WTP

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
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United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE:	MARCH, 2017
PROJECT NO.:	YO1437-P
BY:	CLV
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXH6-1ALT1.1 CLV.4.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 6-1 ALTERNATE 1A WATER SUPPLY AND TREATMENT PLAN - CT

NORTH

- Well No. 12 would be located at the northwest side of town south of future Well No. 10. The 1,000 GPM Ironton-Galesville Well No. 12 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be along Beecher Rd, near the electrical substation. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 13 would be located south of the Sandwich fault. As stated in Section 5, directly southwest of the Sandwich Fault the aquifers and subsequent water levels are higher than directly northeast of the fault. The 1,000 GPM Ironton-Galesville Well No. 13 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be northeast of Highway 47 and W Helmar Rd. intersection. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 14 would be located in the northwest corner of the City. The 1,000 GPM Ironton-Galesville Well No. 14 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be south of Galena Rd. and west of W Beecher Rd. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 15 would also be located south of the Sandwich Fault. As a reminder, directly south of the Sandwich Fault the water level is higher that directly north of the Sandwich Fault. The 1,000 GPM Ironton-Galesville Well No. 15 and its corresponding WTP (discussed in Section 6.1.2.1) are proposed to be near the Lisbon Rd. and Walker Rd. intersection. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.

6.1.1.2 Fox River Intake & Water Wells – Alternate 2A involves Yorkville primarily obtaining potable water from the Fox River and using deep wells as a backup water source. The proposed intake station and WTP would be slightly northeast of the intersection of Rt. 34 and Tuma Rd. Section 6.1.2.2 discusses the treatment of surface water. Well No. 10, which would be drilled at the WTP site under this alternate, would be added in order to ensure enough backup supply. Like the other Ironton-Galesville wells, Well No. 10 would have an assumed capacity of 1,000 GPM. Exhibit 6-2 displays the proposed WTP, wells and other infrastructure for Alternate 2A.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

1.0 MG NORTH EWST

POTENTIAL FUTURE WELL NO. 6

POTENTIAL FUTURE RAW WATER MAIN

1.5 MG NORTHEAST EWST, WELL NO. 8, WELLS NO. 8 & 9 WATER TREATMENT PLANT

NORTH CENTRAL PRV STATION

NORTH BP/PRV STATION

WELL NO. 9

WELL NO. 10, FOX RIVER INTAKE, 12 MGD LIME SOFTENING WATER TREATMENT PLANT, AND 1.0 MG GST

300,000 GAL NORTH CENTRAL EWST, WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT

WELL NO. 3

SOUTH CENTRAL BP/PRV STATION

500,000 GAL SOUTH CENTRAL EWST

SOUTH BP/PRV STATION

SOUTH CENTRAL PRV STATION

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant
- Elevated Water Storeage Tank (EWST)
- Future Deep Well
- Proposed WTP Site
- Ground Storage Tanks
- Potential Future Deep Well
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future Raw Water Main
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0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

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FILE:	YO1437_EXHS-2ALT2-MSD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 6-2 ALTERNATE 2A WATER SUPPLY AND TREATMENT PLAN-CT

NORTH

6.1.2 CT Water Treatment Expansion

6.1.2.1 Well Treatment Systems – As stated in Section 6.1.1.1, a total of six new WTPs for Wells No. 6, 10, 12, 13, 14 and 15 would need to be added to the system in Alternate 1A. Well No. 11 would be treated by the WTP currently serving Wells No. 3 and 4. Each other new WTP would be located onsite with the well it is serving. The design basis for each of the new WTPs was based off of the water quality of the existing wells. Future Wells No. 6, 12 and 14 were designed based on the water quality found in Wells No. 8 and 9. Future Wells No. 10, 13 and 15 were designed based on the water quality found in Well No. 7.

Because the water from the deep sandstone aquifer is assumed to be very similar for the future wells to the current wells, the same method of treatment will be used. The current wells use cation exchange water treatment plants (CEWTPs) to treat the water. These cation exchange units remove the two major contaminates which are an issue in the deep aquifer, radium and hardness. The CEWTPs also chlorinate the water for disinfection and add fluoride for dental health.

6.1.2.2 Fox River Intake & Water Wells – Groundwater and surface water typically have different contaminants and therefore are typically treated differently. Deep wells, such as the ones used by Yorkville, are generally not affected by surface water contamination caused by road salt, organics, fertilization runoff, or other agricultural runoff. While the main concerns for the Ironton-Galesville aquifer water are hardness and radium, surface water from the Fox River is likely to include hardness, organic contaminates and other contaminates.

The neighboring communities of Elgin and Aurora, which both currently use the Fox River as a potable water source, provided Fox River raw water quality information for this project. Due to the proximity of these communities to Yorkville, the water quality was assumed to be identical for the proposed Yorkville WTP. The water quality summary can be found in Table No. 6-1, values from Elgin and Aurora were averaged and divided out based on the seasons. Total hardness, total organic carbon, total alkalinity and turbidity are all constituents which require the concentration to be lowered by more than 50% from the average influent values. TDS, chloride and nitrate all require a reduction in concentration by less than 50%.

Based on the available land area, cost and constituents, lime softening has been selected as the best surface water treatment plan. Two lime softening treatment systems were considered. The first system, which is depicted in Exhibit 6-3, is the split treatment lime softening process. In this system, which is similar to the City of Elgin's LSWTP, the softening process is accomplished in three separate basins. The basins are the pre-sedimentation, primary softening and recarbonation/secondary clarification basins. All three would be constructed outside of a building. Following the softening process, the water would be filtered with the use of membranes installed inside a building. Break point chlorination would be achieved following chlorine addition and detention time in the finished ground storage reservoirs. Two high service pump galleries, one that would pump to meet the North Pressure Zone Hydraulic Grade Line (HGL) and one that would target

Table No. 6-1: Fox River Water Quality Summary

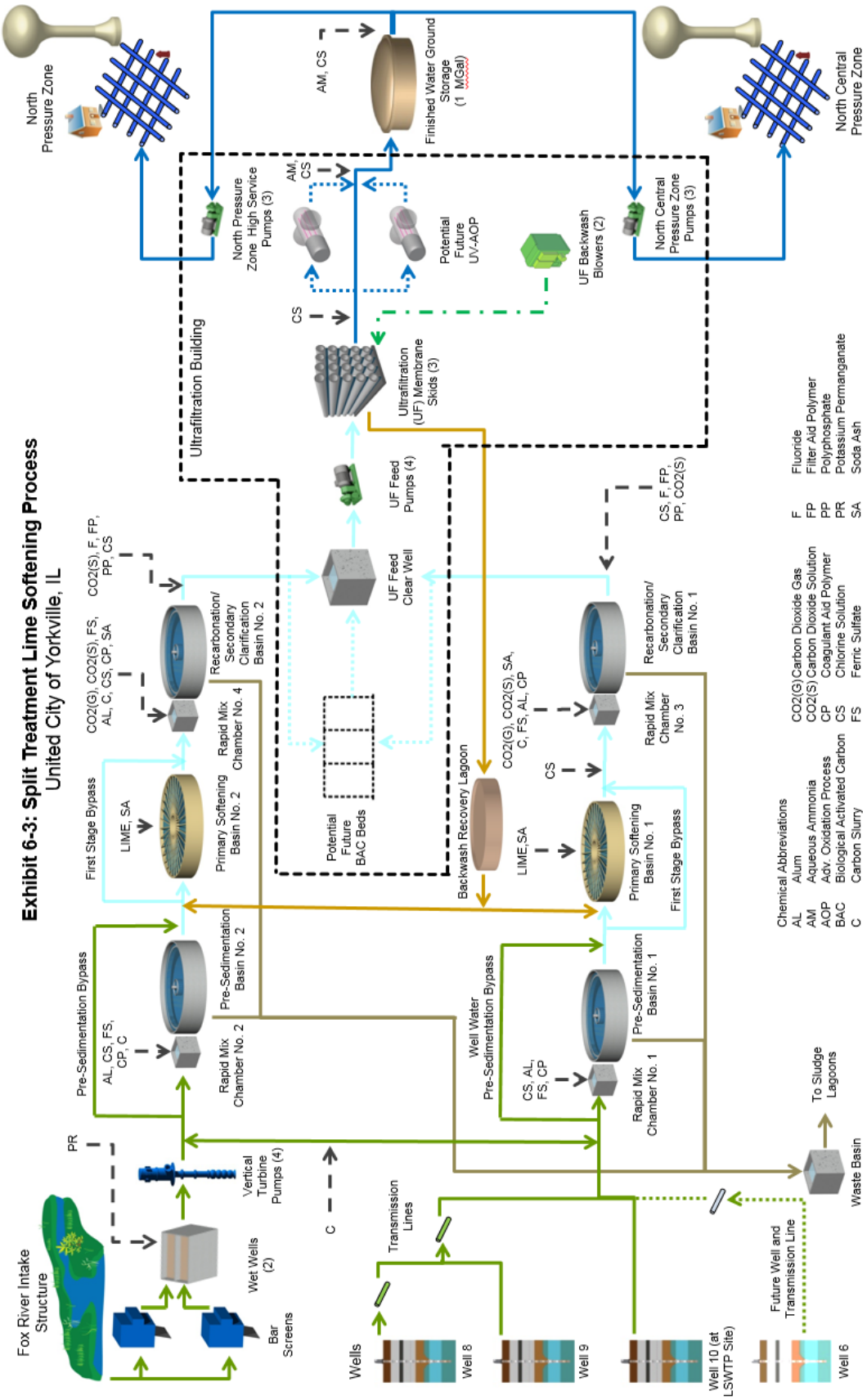
United City of Yorkville, IL

Parameter	Units	Quantity	Typical Spring Season Water Quality	Typical Summer Season Water Quality	Typical Fall Season Water Quality	Typical Winter Season Water Quality	National Primary Drinking Water Standard	National Secondary Drinking Water Standard	Target Effluent Water Quality
pH	(su)	Minimum	8.02	7.85	8.12	7.68	--	6.5 to 8.5	7.65
		Average	8.26	8.25	8.27	8.15			8.73
		Maximum	8.64	9.00	8.99	8.45			9.97
Temperature	(°C)	Minimum	14.6	21.0	12.8	4.7	--	--	
		Average	18.0	25.0	19.9	5.1			
		Maximum	20.2	29.4	20.8	17.8			
Alkalinity	(mg/l) (as $CaCO_3$)	Minimum	204	136	159	240	--	--	41
		Average	254	242	261	309			82
		Maximum	290	292	290	350			175
TDS	(mg/l)	Minimum	4.1			576.4	--	500	0.0
		Average	5.9			579.1			258
		Maximum	8.1			581.8			456
Total Hardness	(mg/l) (as $CaCO_3$)	Minimum	270	210	216	288	--	--	80.0
		Average	322	301	323	398			132
		Maximum	374	364	358	458			214
Calcium Hardness	(mg/l)	Minimum	118	81	111	158	--	--	
		Average	168	154	165	232			
		Maximum	206	187	192	297			
Magnesium Hardness	(mg/l)	Minimum	102	94	93	108	--	--	
		Average	154	147	158	166			
		Maximum	194	208	190	214			
Non-Carbonaceous Hardness	(mg/l)	Minimum	48	13	35	28	--	--	
		Average	68	60	62	89			
		Maximum	110	164	104	147			
Total Organic Carbon	(mg/l)	Minimum		8.83	7.55	7.11	--	--	1.20
		Average	6.50	10.92	8.53	7.86			2.86
		Maximum		13.00	9.50	8.61			4.47
Fluoride	(mg/l)	Minimum	0.166	0.297	0.184	0.120	4	2	0.23
		Average	0.181	0.385	0.307	0.196			1.07
		Maximum	0.208	0.899	0.351	0.420			1.53
Chloride	(mg/l)	Minimum	141.96	137.19	139.78	116	--	250	56.4
		Average	156.75	162.15	153.96	128			136.9
		Maximum	169.69	208.94	238.93	233			220.5
Sulfate (SO_4^{2-})	(mg/l)	Minimum				43.2	--	250	31.4
		Average				46.1			61.0
		Maximum				51.1			106.4
Nitrate (NO_3^-)	(mg/l)	Minimum				8.41	10	--	1.17
		Average				10.60			7.16
		Maximum				12.48			18.57
Nitrite (NO_2^-)	(mg/l)	Minimum				0.07	1	--	0.00
		Average				0.08			0.08
		Maximum				0.08			0.30
Ammonia	(mg/l)	Minimum				0.10	--	--	
		Average				0.12			
		Maximum				0.13			
Turbidity	(NTU)	Minimum	4.96	11.00	8.00	1.20	Maximum of 1 and < 0.3 in 95% of Samples	--	0.04
		Average	11.77	19.36	10.88	2.05			0.10
		Maximum	25.00	38.00	28.60	8.10			0.28
Total Chlorine	(mg/l)	Minimum					4	--	1.75
		Average							2.85
		Maximum							4.20
Dissolved Oxygen	(mg/l)	Minimum	4.10	6.05	7.6	10.23	--	--	
		Average	7.84	7.78	9.21	12.5			
		Maximum	8.33	10.20	11.1	13.3			
Odor	(su)	Minimum	22.00	17.83	5.30	2.70	--	--	
		Average	43.89	71.69	42.65	26.25			
		Maximum	110.20	104.7	75.30	77.30			
Color	(su)	Minimum	24	32	22	16	--	--	
		Average	28	34	29	19			
		Maximum	40	39	49	27			
Conductivity	(umhos)	Minimum	808	800	808	932	--	--	
		Average	1012	968	960	1183			
		Maximum	1129	1054	1172	1348			
Absorbance (Filtered)	(254 nm)	Minimum	0.167	0.079	0.146	0.121	--	--	
		Average	0.205	0.203	0.197	0.153			
		Maximum	0.281	0.258	0.217	0.217			
Coliforms	(cfu)	Minimum				258	<5% of Samples Positive[2]	--	0
		Average				623			0
		Maximum				1200			0

Notes:

1. National Primary Drinking Water Standards are either Maximum Contaminant Levels or Treatment Technique (for Turbidity only).
2. No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or E. coli if two consecutive TC-positive samples, and one is also positive for E.coli fecal coliforms, system has an acute MCL violation.

Exhibit 6-3: Split Treatment Lime Softening Process
United City of Yorkville, IL



the South Central Pressure Zone HGL, would transfer the water from the ground storage reservoirs into the distribution system.

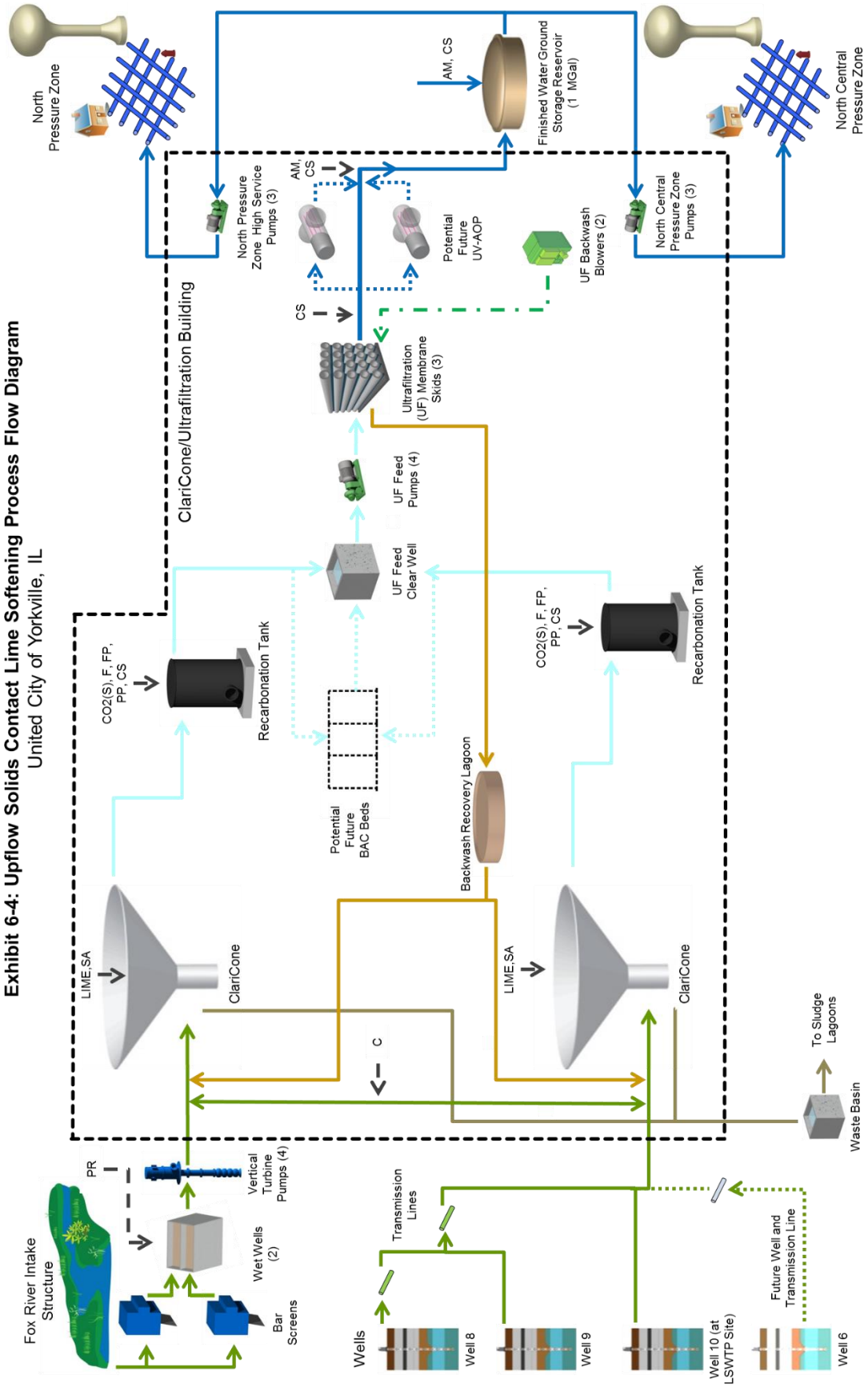
Ammonia would be added to the water within the ground stage reservoir and pump station, so chloraminated water is distributed throughout the system. Additional chemical feed systems for carbon dioxide (injected prior to the recarbonation/secondary clarification tank), alum, powdered active carbon, coagulant polymer, ferric sulfate, polyphosphate and potassium permanganate would also be installed, too. The chemical injection points are identified on Exhibit 6-3.

It is also important to note the process flow diagram references two potential future treatment unit process – biologically activated carbon beds and ultraviolet advanced oxidation process systems. Both processes would provide a higher level of surface water treatment, especially for taste and odor constituents. Neither Elgin's or Aurora's WTPs currently contain these unit processes. However, if there continue to be harmful algae bloom outbreaks in the river, the addition of one or both of these treatment systems may be appropriate to meet a higher level of treatment. At a minimum, both unit processes should be considered for future hydraulic profile renovations in the future.

The second lime softening water treatment process considered was the upflow solids contact clarifier (or single stage) system. Chicago Bridge and Iron (Claricone) and Westech (Solids Contact Clarifier) provide clarifiers for this type of system. In this system, all three of the sedimentation and softening basins within the split treatment system are combined into the clarifier. The solids upflow contactor(s) are then installed inside of a building. The City of Aurora utilizes this type of softening process to treat the Fox River Water. Exhibit 6-4 depicts the process flow diagram for this type of treatment system. Other than the front end softening and clarification process being different, the back end treatment unit, storage and pumping system would be exactly the same as the split treatment system. The potential other treatment processes also would be considered for this treatment system.

A cost-analysis was completed for both systems to determine which system was more cost-effective for the City. The cost of the two systems were found to be very similar (within 7% of each other), but the upflow solids contactor system was found to be slightly cheaper. In addition, the operational challenges of the split treatment system in a Midwest climate makes that system less attractive. Therefore, all LSWTP system cost estimates presented form this point forward will be based off the single stage Claricone process.

Lime softening would not only remove the unwanted constituents found in the Fox River, it would be able to effectively treat the problem constituents found in the deep wells. This versatility would allow the United City of Yorkville to procure and treat well water in the event that they were not able to use surface water in the event of a drought or other emergency event. The proposed WTP location on the East end of the City would also allow for the cost-effective connection of Wells No. 8 and 9. The connection to these wells would all the LSWTP to treat the water from these wells and the existing CEWTP facility would be repurposed for another


Exhibit 6-4: Upflow Solids Contact Lime Softening Process Flow Diagram
United City of Yorkville, IL
North Pressure Zone
North Central Pressure Zone
AM, CS
Finished Water Ground Storage Reservoir (1 MGal)
North Pressure Zone High Service Pumps (3)
Potential Future UV-AOP
UF Backwash Blowers (2)
North Central Pressure Zone Pumps (3)
CS
Ultrafiltration (UF) Membrane Skids (3)
UF Feed Pumps (4)
UF Feed Clear Well
CO2(S), F, FP, PP, CS
Recarbonation Tank
Potential Future BAC Beds
Backwash Recovery Lagoon
LIME,SA
ClariCone
To Sludge Lagoons
Waste Basin
PR
Vertical Turbine Pumps (4)
Wet Wells (2)
Bar Screens
Fox River Intake Structure
Transmission Lines
Wells
Well 8
Well 9
Well 10 (at LSWTP Site)
Future Well and Transmission Line
Well 6

City use. Well No. 6 would still be near the current North EWST and would be connected to the Wells No. 8 and 9 raw water main, and thus the proposed LSWTP, by its own potential future raw water main. Well No. 10 would be located at the LSWTP and would not need significant infrastructure in order to be treated by the plant. In this alternate, it is assumed the existing CEWTPs that treat groundwater will remain in service with very limited use (a couple hours per week), so they are available to pump into the system during emergencies.

6.2 LRI Water Supply & Treatment Evaluation

The predicted per capita water usage if the United City of Yorkville were to implement conservation efforts is 80 gpcd (comparable to the 90 gpcd under the CT values). Additionally, the MDD:ADD ratio dropped from 2.0 in the CT scenario to 1.75 in the LRI scenario. As seen in Table No. 3-16, when the LRI values are implemented a deficit of nearly 2,000 GPM for the ultimate source capacity and a deficit of over 3,500 GPM for the reliable source capacity was determined for 2050. These numbers assume all current wells are in service. As stated before, Well No. 3 will likely be abandoned before the end of the planning period. If Well No. 3 is abandoned, the LRI deficit would occur about 5,000 PE sooner than if Well No. 3 remained.

6.2.1 LRI Water Supply Expansion

6.2.1.1 Water Wells – If Yorkville were to use the Ironton-Galesville aquifer to obtain the LRI amounts of their water, they would follow the same pattern as setting up wells as found in the CT section. Once again, Well No. 3 would be assumed to be abandoned; when Well No. 3 is abandoned, the 2050 supply deficit would increase to just under 2,500 GPM for the Ultimate Source Capacity test and just under 4,200 GPM for the Reliable Source Capacity. Because the deficit for the Ultimate Source Capacity number wouldn't be far above the 4,000 GPM threshold, the number of needed wells would be rounded down to four wells (Wells No. 6, 10, 11 and 12). The position of the wells, WTPs and other proposed Alternate 1B infrastructure can be found in Exhibit 6-5. The position of the wells, WTPs and other infrastructure for the LRI scenario would follow the pattern used for the CT scenario.

- Well No. 6 would be located on the northeast side of the City. The 1,000 GPM Ironton-Galesville Well No. 6 and its corresponding WTP (discussed in Section 6.1.2) are proposed to be near the current North EWST. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 10 would be located on the west side of the City. The 1,000 GPM Ironton-Galesville Well No. 10 and its corresponding WTP (discussed in Section 6.1.2) are proposed to be near the Pavillion Rd. and Hillview Ct. intersection. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

1.0 MG NORTH EWST

WELL NO. 6 WTP

1.5 MG NORTHEAST EWST, WELL NO. 8, AND WELLS NO. 8 & 9 WATER TREATMENT PLANT

WELL NO. 9

WELL NO. 12 WTP

NORTH BP/PRV STATION

NORTH CENTRAL PRV STATION

300,000 GAL NORTH CENTRAL EWST

WELL NO. 4

WELLS NO. 4 & 11 WATER TREATMENT PLANT

WELL NO. 11

WELL NO. 3

SOUTH BP/PRV STATION

SOUTH CENTRAL BP/PRV STATION

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

WELL NO. 10 WTP

500,000 GAL SOUTH CENTRAL EWST

SOUTH CENTRAL PRV STATION

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant (WTP)
- Elevated Water Storage Tank (EWST)
- Future Deep Well
- Future WTP
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
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BY:	CLV
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FILE:	YO1437_EXHS-4&7L.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 6-5 ALTERNATE 1B WATER SUPPLY AND TREATMENT PLAN - LRI

NORTH

- Well No. 11 would be located near the center of town about one mile west of current Well No. 3. The 1,000 GPM well would be treated by the current water treatment plant located at Well No. 4. A raw water main would travel east along the railroad tracks from Well No. 11 to the current Well No. 3 and would use the current raw water main that runs across the Fox River from Well No. 3 to the WTP at Well No. 4. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.
- Well No. 12 would be located at the northwest side of town south of future Well No. 10. The 1,000 GPM Ironton-Galesville Well No. 12 and its corresponding WTP (discussed in Section 6.1.2) are proposed to be along Beecher Rd., near the electrical substation. The well would be constructed with a 24-inch surface casing and an 18-inch long string casing.

6.2.1.2 Fox River Intake & Water Wells – As mentioned in Section 5.2.4, the LSWTP for both the CT and LRI scenarios would be located along the river on the East part of the City. The design of the intake would be similar to the CT scenario; however, in the LRI scenario the size of the intake would have a capacity of 9 MGD instead of 12 MGD. Alternate 2B, similarly to Alternate 2A, assumes the existing CEWTPs used to treat groundwater will remain in service with very limited use (a couple hours per week), so they are available to pump into the system during emergencies.

Two potential future wells, Wells No. 6 and 10, would be considered for future addition within Alternate 2B. Well No. 6 would still be near the current North EWST and would be connected to the Wells No. 8 and 9 raw water main, and thus the proposed LSWTP, by its own potential future raw water main. Well No. 10 would still be located at the LSWTP and would not need significant infrastructure in order to be treated by the plant. Exhibit 6-6 displays the locations of the wells, WTPs and other infrastructure.

6.2.2 LRI Water Treatment Expansion

6.2.2.1 Well Treatment Systems – If the City were to use the Ironton-Galesville aquifer to meet the LRI water use demands, the City would follow the same pattern as setting up wells as found in the CT section, but they would only add four additional wells (Wells No. 6, 10, 11 and 12). Once again, Well No. 3 would be assumed to be abandoned and Well No. 11 would connect to the Well No. 4 WTP. CEWTPs would be used to treat the water for radium and hardness for Wells No. 6, 10 and 12.

6.2.2.2 Fox River & Water Well Treatment System – If the Fox River is chosen to supply water for the LRI scenario, the treatment plant would be designed using the same major functions as the CT plant. The plant would still be a single state LSWTP and would still include filtration along with typical re-carbonation and disinfection treatment processes. The plant would be designed to treat 9 MGD using 3 ClariCones instead of the 12 MGD with 4 ClariCones needed for the CT scenario.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

POTENTIAL FUTURE WELL NO. 6

1.0 MG NORTH EWST

POTENTIAL FUTURE RAW WATER MAIN

1.5 MG NORTHEAST EWST, WELL NO. 8, AND WELLS NO. 8 & 9 WATER TREATMENT PLANT

WELL NO. 9

NORTH CENTRAL PRV STATION

NORTH BP/PRV STATION

WELL NO. 8 & 9 RAW WATER MAIN

FOX RIVER INTAKE, 9 MGD LIME SOFTENING WATER TREATMENT PLANT, AND 1.0 MG GST

300,000 GAL NORTH CENTRAL EWST, WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT

POTENTIAL FUTURE WELL NO. 10

WELL NO. 3

SOUTH BP/PRV STATION

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

SOUTH CENTRAL BP/PRV STATION

500,000 GAL SOUTH CENTRAL EWST

SOUTH CENTRAL PRV STATION

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant (WTP)
- Elevated Water Storage Tank (EWST)
- Proposed WTP Site
- Ground Storage Tanks
- Potential Future Deep Well
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future Raw Water Main
- Potential Future Raw Water Main

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

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DATE:	MARCH, 2017
PROJECT NO.:	YO1437-P
BY:	CLV
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXHIBIT-6-6_ALT2-WSMP

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 6-6 ALTERNATE 2B WATER SUPPLY AND TREATMENT PLAN - LRI

NORTH

6.3 Water Supply and Treatment Improvements Cost Estimates

Detailed cost estimates for the proposed improvements under each scenario are provided in Appendix G. Below is a summary of the capital costs for the improvements under the CT and LRI water demand scenarios for both Alternates 1 and 2 as described above.

6.3.1 Alternate 1A: CT Water Supply & Treatment Cost Estimates

- Well No. 6 and Well No. 6 CEWTP $6,839,000
- Well No. 10 and Well No. 10 CEWTP $6,839,000
- Well No. 11 $2,419,000
- Well No. 11 Raw Water Main (to Wells 3 & 4 CEWTP) $1,188,000
- Well No. 12 and Well No. 12 CEWTP $6,839,000
- Well No. 13 and Well No. 13 CEWTP $6,839,000
- Well No. 14 and Well No. 14 CEWTP $6,839,000
- Well No. 15 and Well No. 15 CEWTP $6,839,000

6.3.2 Alternate 1B: LRI Water Supply & Treatment Cost Estimates

- Well No. 6 and Well No. 6 CEWTP $6,839,000
- Well No. 10 and Well No. 10 CEWTP $6,839,000
- Well No. 11 $2,419,000
- Well No. 11 Raw Water Main (to Wells 3 & 4 CEWTP) $1,188,000
- Well No. 12 and Well No. 12 CEWTP $6,839,000

6.3.3 Alternate 2A: CT Water Supply & Treatment Cost Estimates

- 12 MGD Fox Fiver Intake Pump Station $5,217,000
- 12 MGD Single State (Claricone) LSWTP $35,088,000
- Wells No. 8 & 9 Raw Water Main $3,267,000
- Well No. 10 $2,419,000

6.3.4 Alternate 2B: LRI Water Supply & Treatment Cost Estimates

- 9 MGD Fox Fiver Intake Pump Station $4,828,000
- 9 MGD Single State (Claricone) LSWTP $29,572,000
- Wells No. 8 & 9 Raw Water Main $3,267,000

As stated, Section 7 will discuss the water storage and distribution system improvements and Section 8 will discuss Alternate 3 for the Sub-Regional approach. Section 9 will provide an overview for the recommended alternative based on the City's preference, including an overview of the phasing and implementation plan that will be used by the United City of Yorkville for the recommended improvements.

SECTION 7: WATER STORAGE AND DISTRIBUTION SYSTEM EVALUATION

Water storage and the distribution system are critical components of the United City of Yorkville's overall Water Works System. Adequate storage and a well-maintained distribution system are essential to efficiently convey adequate water capacity to the City's residents and commercial/industrial users, both during normal periods of relatively lower water demands and also during critical periods of high water demand such as fires and other emergencies that rely on available water supply. A water distribution system is the infrastructure that delivers pressurized, potable water from the treatment plants to the customer. The water distribution system model of the United City of Yorkville is comprised of 1) potable water main, 2) fire hydrants, 3) valves, 4) storage tanks, 5) high service pumps and 6) pressure reducing valves. These various components operate dynamically within the various pressure zones. In Section 2, the various components were inventoried and discussed briefly. Exhibit 2-1 depicts the existing Water Works System. The following section will first evaluate the condition of the existing water storage and distribution system infrastructure and will then provide recommendations for these existing components.

This section will then determine the required improvements to expand the system to meet the 2050 CT water storage required for each water demand scenario. The different alternatives that were evaluated will be reviewed for each scenario where applicable. The cost of the CT improvements will also be reviewed in this section. As previously noted in Section 6, Section 8 will then summarize a phasing and implementation program for both the CT and LRI water demand scenarios, that will include the recommended water storage and distribution improvements as well as the recommended supply and treatment improvements identified in Section 6.

7.1 Model Development

The water distribution system of the United City of Yorkville was evaluated using a computer model of the water system developed within Bentley WaterCAD hydraulic modeling software. Over the last few years, the City has converted their electronic water atlas maps from AutoCad to a geographical information system (GIS) database which was used as the basis of the model. The hydraulic model development and verification process was completed with the intent to determine deficiencies in the existing system and to make recommendations to the City for master planning to meet their 2050 projected needs. The model was created to accommodate a steady-state analysis only.

7.1.1 Information Gathering – As indicated above, the hydraulic model developed is primarily based on the water infrastructure contained within the City's GIS database. Shapefiles for the water main network, valves, WTPs and tanks were obtained on December 22, 2015, and imported into WaterCAD via the Model Builder. During data transfer from the City's GIS database to WaterCAD model, maintaining naming convention consistency was a priority.

In addition to the GIS database, the following resources were used to further refine the model: 1) Record drawings from various facilities, 2) pump curves, 3) SCADA set points and 4) data collected in the field by both City staff and representatives from Engineering Enterprises, Inc.

The water use demands for the calendar year of 2014 were placed on the system and then elevations were applied by interpolating the contours from Kendall County. This section of the report documents the development of the model.

7.1.1.1 Pipe Network – The pipe network is primarily comprised of pipes and junctions. Junctions are not valves, but rather the intersection between two pipes. Gate valves are typically not modeled, they were imported into the model for this project as junctions such that consistency with GIS naming conventions for the pipes could be maintained where feasible.

Connectivity is essential to developing a hydraulic model, and junctions allow for the connectivity between pipes basically by joining two pipes together. WaterCAD's Model Builder has an option to automatically generate junctions at the intersection of two pipes within a specified tolerance of existing nodes or junctions which is how much of the connectivity was achieved. However, given that this is an automated process that is governed by tolerances, the water main connectivity assumptions are not always made correctly. Manual review and revisions to the model were required accordingly.

Similar to gate valves, fire hydrants (and the fire hydrant laterals) are also not commonly modeled unless the intent of the water model is to prepare hydrant flushing sequences (i.e. a uni-directional hydrant flushing program). The fire hydrants and laterals provide another level of complexity to the model and calculations during the analysis otherwise.

7.1.1.2 Pressure Zones – Pressure zone boundaries were defined in the model consistent with those identified in Exhibit 2-1. Locations of the known closed valve locations were implemented in efforts to define the exact pressure zone boundaries within the model. These closed boundary valves were modeled as closed pipes adjacent to the closed valve location. In addition, three booster pump and pressure reducing valve stations and two pressure reducing valve stations were modeled between the various pressure zones as shown on Exhibit 2-1 and outlined previously in Table No. 2-9. Minimal data regarding sizes, set points and operation was able to be retrieved for these PRVs. It was assumed that they operate based on local pressure and set points were based on field data collected.

7.1.1.3 Water Storage Tanks – Five elevated water storage tanks were included in the model zones as shown on Exhibit 2-1 and outlined in Table No. 2-6. Record drawing information, when available, was utilized to obtain the elevation, head range and site layout information.

7.1.1.4 Water Treatment Plants – Wells and water treatment plants as shown in Exhibit No. 2-1 were input into the model only with respect to the high service pumps and well pumps that pump directly into the system. Record drawing information and operations and maintenance manuals were used to enter them into the model.

7.1.1.5 Booster Pump Stations (BPSs) – The high service pumps at three booster pump stations (BPSs) were input into the model primarily with respect to the high service pumps. Record drawings, engineering drawings, operations and maintenance manuals and pump manufacturers were utilized to obtain info regarding the BPSs.

7.1.1.6 Ground Elevations – Ground elevations are a critical component to the success of model verification. Initially, ground elevations within the GIS shapefiles were imported into the water model based on the Kendall County contours. Node elevations within the water model were applied by interpolating Kendall County contours using a module within WaterCAD called TRex. Record and engineering drawings were utilized for the water treatment plants, storage tanks and booster pump stations when available. Record drawings for some subdivisions were used to verify certain locations randomly as well.

7.1.1.7 Water Use Demands – To remain consistent with the supply and treatment analysis included in this report, water use demands from calendar year 2014 were placed in the model. It shall be noted that the treated water amount, not the billed amount of water was distributed throughout the system for analysis purposes.

7.1.2 Field Reconnaissance– The field reconnaissance consisted of a site visit to key water facilities and performing fire flow testing on two different occasions.

7.1.2.1 Site Visit to Key Water Facilities – August 25, 2015, Jeff Freeman, Michele Piotrowski and Christa Van't Hul of EEI visited all water treatment plants, water storage facilities, booster pump stations and pressure reducing valve stations to gather any additional information.

7.1.2.2 Fire Flow Testing – A fire flow test provides actual pressures and flow data at specific locations within the distribution system. For this project, fire flow testing was completed on two separate occasions as follows:

1. December 15, 2015
2. November 22, 2016

The fire flow test procedure requires at least two hydrants (a residual and a flow hydrant), ideally on the same section of main. Static pressures are first recorded at the residual hydrant. Then, the flow hydrant is opened. At that time, pressures on both the residual and flow hydrants are recorded. The Water Works System conditions (i.e. tank levels and pumps running), typically obtained from the SCADA system, at the time of the

flow test are recorded. Flow calculations based on the formulas provided in AWWA's Manual of Water Supply Practices M17 – Installation, Field Testing and Maintenance of Fire Hydrants are then performed.

A total of twenty-one locations were identified to be tested and evenly spread across the Water Works System. The locations of these tests are depicted in Exhibit 7-1. Some of the flow tests were not completed due to concerns for potential water main breaks.

7.1.2.3 Static Pressures – The pressure reducing valve stations are connected to the central SCADA system, but it is challenging for the operators to determine which valves are open at any given point in time. Based on discussions with the operators, these valves operate based on local pressure and the set points are not known. To obtain a better understanding of how these valves are operating, City staff obtained pressure readings from SCADA for both upstream and downstream of the pressure reducing for comparison with water model results.

7.1.3 Model Verification – Verification of the updated model was completed to establish confidence in the accuracy of its representation of the physical water system. Verification was achieved by comparing data collected during field testing to results obtained from the updated water distribution system hydraulic model. In addition, head and flow rates of all high service pumps were reviewed to confirm they are consistent with their curve data and any field data we collected.

During verification of the water model, the following primary adjustments/considerations can be made to align the field data with the mode data:

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

LOCATION NO. 1
BRISTOL BAY DRIVE
DEC. 2015
STATIC PRESSURE = 67 psi
AVAILABLE FIRE FLOW = 3,543 gpm
NOV. 2016
STATIC PRESSURE = 64 psi
AVAILABLE FIRE FLOW = 3,996 gpm

LOCATION NO. 2
BRIDGE STREET
DEC. 2015
STATIC PRESSURE = 66 psi
AVAILABLE FIRE FLOW = 3,670 gpm
NOV. 2016
STATIC PRESSURE = 65 psi
AVAILABLE FIRE FLOW = 3,896 gpm

LOCATION NO. 3
BOOMBAH BOULEVARD
DEC. 2015
STATIC PRESSURE = 70 psi
AVAILABLE FIRE FLOW = 2,608 gpm

LOCATION NO. 4
TUSCANY TRAIL
DEC. 2015
STATIC PRESSURE = 63 psi
AVAILABLE FIRE FLOW = 1,840 gpm

LOCATION NO. 5
KENNEDY ROAD
DEC. 2015
STATIC PRESSURE = 66 psi
AVAILABLE FIRE FLOW = 2,681 gpm

LOCATION NO. 6
IROQUOIS LANE
DEC. 2015
STATIC PRESSURE = 73 psi
AVAILABLE FIRE FLOW = 1,751 gpm
NOV. 2016
STATIC PRESSURE = 67 psi
AVAILABLE FIRE FLOW = 2,482 gpm

LOCATION NO. 7
FAIRHAVEN DRIVE
DEC. 2015
STATIC PRESSURE = 72 psi
AVAILABLE FIRE FLOW = 1,275 gpm

LOCATION NO. 8
AUTUMN CREEK BOULEVARD
DEC. 2015
STATIC PRESSURE = 67 psi
AVAILABLE FIRE FLOW = 2,179 gpm
NOV. 2016
STATIC PRESSURE = 70 psi
AVAILABLE FIRE FLOW = 3,313 gpm

LOCATION NO. 9 (TEST NOT PERFORMED)
WEST KENDALL DRIVE
NOV. 2016
STATIC PRESSURE = 52 psi
AVAILABLE FIRE FLOW = 3,532 gpm

LOCATION NO. 10
GAME FARM ROAD
DEC. 2015
STATIC PRESSURE = 55 psi
AVAILABLE FIRE FLOW = 3,877 gpm
NOV. 2016
STATIC PRESSURE = 51 psi
AVAILABLE FIRE FLOW = 4,357 gpm

LOCATION NO. 11 (TEST NOT PERFORMED)
SPRING STREET

Note: Available Flow is at a Residual Pressure of 20 PSI

LOCATION NO. 12 (TEST NOT PERFORMED)
HYDRAULIC AVENUE

LOCATION NO. 13
KELLY AVENUE
DEC. 2015
STATIC PRESSURE = 47 psi
AVAILABLE FIRE FLOW = 1,679 gpm

LOCATION NO. 14 (TEST NOT PERFORMED)
BLAINE STREET

LOCATION NO. 15 (TEST NOT PERFORMED)
DEER STREET

LOCATION NO. 16
GREEN BRIAR ROAD
DEC. 2015
STATIC PRESSURE = 65 psi
AVAILABLE FIRE FLOW = 2,444 gpm
NOV. 2016
STATIC PRESSURE = 67 psi
AVAILABLE FIRE FLOW = 3,751 gpm

LOCATION NO. 17
WALSH DRIVE
DEC. 2015
STATIC PRESSURE = 55 psi
AVAILABLE FIRE FLOW = 2,643 gpm

LOCATION NO. 18
WINDETT RIDGE ROAD
DEC. 2015
STATIC PRESSURE = 72 psi
AVAILABLE FIRE FLOW = 2,839 gpm
NOV. 2016
STATIC PRESSURE = 70 psi
AVAILABLE FIRE FLOW = 4,356 gpm

LOCATION NO. 19
HAMPTON LANE
DEC. 2015
STATIC PRESSURE = 67 psi
AVAILABLE FIRE FLOW = 3,183 gpm
NOV. 2016
STATIC PRESSURE = 63 psi
AVAILABLE FIRE FLOW = 3,653 gpm

LOCATION NO. 20
CALLANDER TRAIL
DEC. 2015
STATIC PRESSURE = 82 psi
AVAILABLE FIRE FLOW = 1,816 gpm
NOV. 2016
STATIC PRESSURE = 80 psi
AVAILABLE FIRE FLOW = 2,205 gpm

LOCATION NO. 21
BARBERRY CIRCLE
NOV. 2016
STATIC PRESSURE = 70 psi
AVAILABLE FIRE FLOW = 2,837 gpm

Legend

- Fire Hydrant
- Residual Fire Hydrant
- 1st Flow Fire Hydrant
- 2nd Flow Fire Hydrant
- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Study Area Boundary
- Yorkville Corporate Limits
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

0 750 1,500 3,000 4,500 Feet

NORTH

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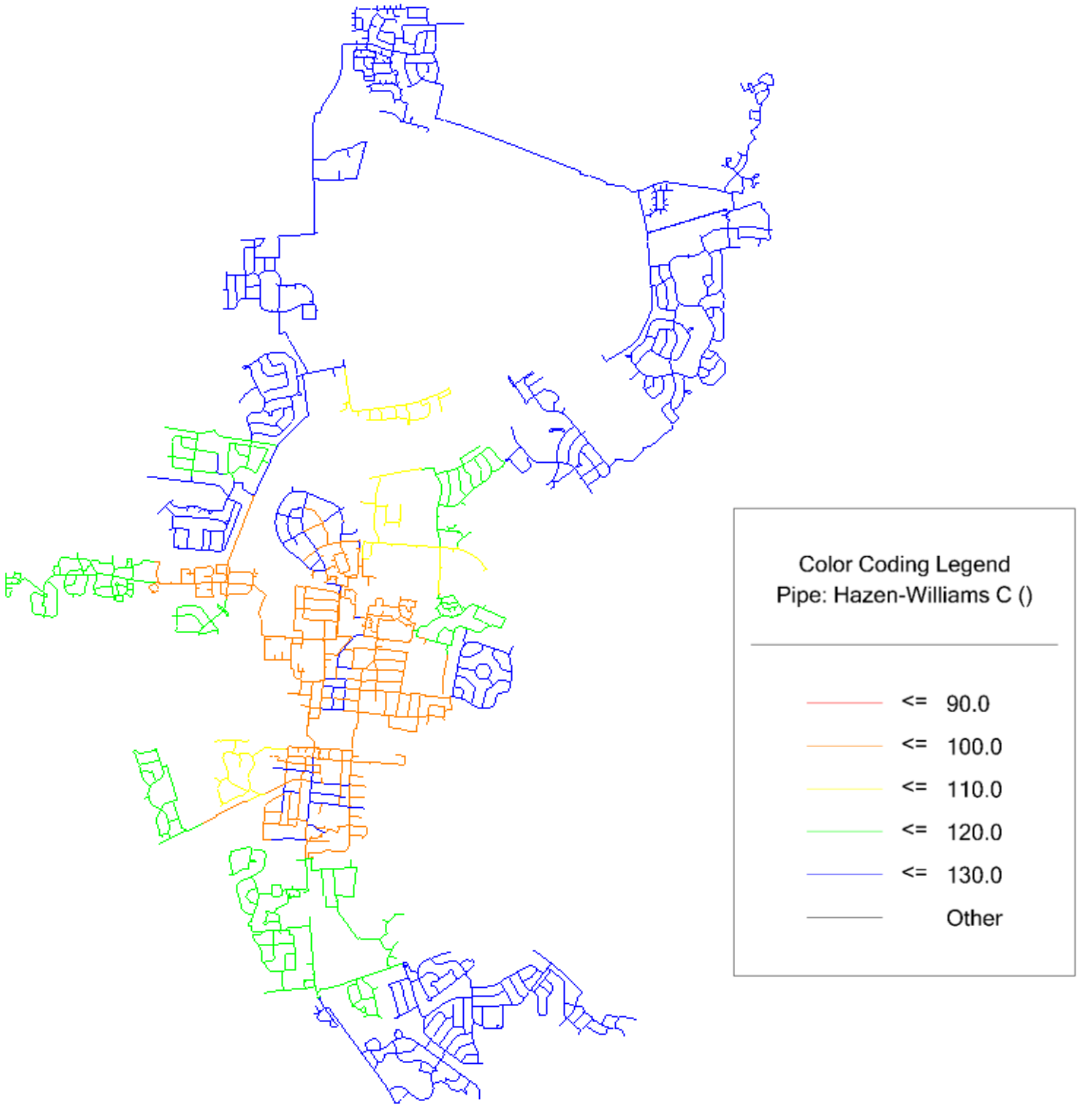
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WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-1
FIRE FLOW TEST RESULTS

1. *Modify water use demands.* – When comparing the fire flow, demands were modified based on the pumped water use the days that the flow testing was completed. Without more accurate information, the demands were distributed evenly throughout the system.
2. *Modify Hazen Williams pipe roughness coefficient (C-factor) of the water main.* – The C-factor, also known as the friction factor, is primarily adjusted based on the material and age of the pipe. When cement-lined ductile iron is new, the C-factor is approximately 130. As the pipe ages, the C-factor can reduce (indicating the friction increases and part of the flow through the pipe will decrease). Several iterations of modeling various C-factors were completed in the model. The C-factor has been adjusted for best-fit of the flows, and Exhibit 7-2 reflects the C-factors that were utilized for the verified model:

Exhibit 7-2: Hazen Williams C-Factor – Verified Water Model
United City of Yorkville, IL



3. *Modify elevations of the junctions and tank elevations.* – As indicated previously, the two-foot Kendall County contours were primarily utilized to develop the elevations of the junctions within the model. Furthermore, the base elevations of the tanks were obtained from engineering drawings and the tank levels were recorded at the time of the time of flow testing so that they could be mimicked identically within the model.
4. *Confirm the pump curves and which pumps are running.* – Pump curves were entered per the shop drawings that were obtained. It shall also be noted that no pumps were running during flow testing except during Flow Tests No. 2 and 10 on December 15, 2015.
5. *Confirm operations/settings of the PRVs.* – Both the booster pump stations and the pressure reducing valve only stations have two to three valves of different sizes within each station. These PRVs can have a major impact on the pressures and available flow at various points within the system. Minimal information regarding set points was provided or available for the pressure reducing valve stations. However, pressures upstream and downstream of the PRVs were provided during the flow testing on November 22, 2016 which allowed us another opportunity to verify model results were aligning with field results.
6. *Valves may be closed or partially closed within the system.* – After performing the flow testing on December 15, 2015, the City staff performed some valve verification at a few locations. Some valves were identified as being partially closed. Therefore, additional flow testing was completed on November 22, 2016. Based on our analysis, some of the lows are still significantly higher in the model than the field. We, subsequently, recommend that the City implement a valve exercising program across the City. Given the amount of development and construction that has occurred over the last several years, it is not uncommon for valves to be closed or partially closed where they are not intended to be.

As indicated in the previous section, fire flow (FF) tests were performed at twenty-one locations within the water distribution system. These locations are previously illustrated on Exhibit 7-1, and a model to field comparison is provided in Table No. 7-1.

Table No. 7-1: Flow and Pressure Comparison (Model vs Field Data)

United City of Yorkville, IL

Test No.	Test Location	Flow Field Data			Simulated Available Flow @ 20 psi (gpm)	Difference Available Fire Flow @ 20 psi (gpm)	Model Simulated Static Pressure (psi)	Difference Static Pressure (psi)
		Test Date	Available Fire Flow @ 20 psi (gpm)	Static Pressure (psi)				
1	Bristol Bay Dr	11/22/2016	3,996	64	5,559	1,563	63.2	-0.8
1	Bristol Bay Dr	12/15/2015	3,543	67	5,568	2,025	63.0	-4
2	Bridge St	11/22/2016	3,896	65	7,749	3,853	65.1	0.1
2	Bridge St	12/15/2015	3,670	66	7,805	4,135	66.3	0.3
3	Boombah Blvd	11/22/2016	NA	NA	NA	NA	NA	NA
4	Tuscany Trail	NA	NA	NA	NA	NA	NA	NA
5	Kennedy Rd	NA	NA	NA	NA	NA	NA	NA
3	Boombah Blvd	12/15/2015	2,608	70	4,305	1,697	68.1	-1.9
4	Tuscany Trail	12/15/2015	1,840	63	2,468	628	62.0	-1
5	Kennedy Rd	12/15/2015	2,681	66	2,654	-27	66.5	0.5
6	Iroquois Ln	11/22/2016	2,482	67	2,832	350	64.1	-2.9
7	Fairhaven Dr	NA	NA	NA	NA	NA	NA	NA
6	Iroquois Ln	12/15/2015	1,751	73	2,840	1,089	67.3	-5.7
7	Fairhaven Dr	12/15/2015	1,275	72	2,101	826	70.1	-1.9
8	Autumn Creek Blvd	11/22/2016	3,313	70	4,026	713	67.2	-2.8
8	Autumn Creek Blvd	12/15/2015	2,179	67	4,066	1,887	68.2	1.2
9 or 22	West Kendall St	11/22/2016	3,532	52	3,717	185	49.1	-2.9
10	Game Farm Rd	11/22/2016	4,357	51	6,911	2,554	49.2	-1.8
10	Game Farm Rd	12/15/2015	3,877	55	7,464	3,587	53.6	-1.4
13	Kelly Ave	12/15/2015	1,679	47	1,692	13	47.7	0.7
13	Kelly Ave	NA	NA	NA	NA	NA	NA	NA
16	Green Briar Rd	11/22/2016	3,751	67	6,621	2,870	74.3	7.3
16	Green Briar Rd	12/15/2015	2,444	65	3,442	998	67.1	2.1
17	Walsh Dr	NA	NA	NA		NA		NA
17	Walsh Dr	12/15/2015	2,634	55	3,301	667	52.6	-2.4
18	Windett Ridge Rd	11/22/2016	4,356	70	13,236	8,880	69.7	-0.3
18	Windett Ridge Rd	12/15/2015	2,839	72	13,808	10,969	73.5	1.5
19	Hampton Ln	11/22/2016	3,563	63	5,599	2,036	58.5	-4.5
19	Hampton Ln	12/15/2015	3,183	67	5,855	2,672	61.8	-5.2
20	Callander Trail	11/22/2016	2,205	80	2,101	-104	79.8	-0.2
20	Callander Trail	12/15/2015	1,816	82	2,186	370	83.9	1.9
21	East Barberry Circle	11/22/2016	2,837	70	3,874	1,037	75.4	5.4

7.1.3.1 North Pressure Zone (Orange) – Static pressures generally align between model and field data. However, the available fire flow at a residual pressure of 20 psi appears to be higher in the water model than the field, particularly on the west side of the City along Route 47 (Flow Tests No. 1, 2, 3, 6 and 7). Based on engineering judgment, the field flows appear low, particularly at Test Location No. 2. Closing valves throughout the pressure zone can result in similar results between the model and fire flow test data. However, if we closed valves at such locations, these locations would be purely conjecture. Therefore, no valves were modeled as closed. The model still demonstrates relative strengths and weaknesses of the distribution system. Therefore, we proceeded with model based on these values, but recommend the status of valves be verified in the field, possibly through a valve exercising program. The tests on the east side of the City within this pressure zone (Flow Tests No. 4, 5 and 8) Flow and pressures generally aligned at Flow Tests No. 4 and 5. Regarding Test No. 8, a partially closed valve was found along the 16" main on along Veterans Parkway which allowed for results to better match in 2016.

7.1.3.2 North Central Pressure Zone (Purple) – Static pressures generally align between model and field data. Similarly, the available fire flow at a residual pressure of 20 psi also is within reason between the model and field data, except at Test No. 10 (Game Farm Road). The flow in the model at this location is much higher than in the field. This is a location that has been under construction in recent years. It is possible that a valve may be closed or possibly closed in this general vicinity. Verifying valves in this vicinity is recommended, and is another location which may benefit from a valve exercise program. Closing valves throughout the pressure zone can result in similar results between the model and fire flow test data. However, if we closed valves at such locations, these locations would be purely conjecture. Therefore, no valves were modeled as closed. The model still demonstrates relative strengths and weaknesses of the distribution system.

7.1.3.3 South Pressure Zone (Green) – Static pressures obtained in the field mirror those in the model generally. However, the available flows at a residual pressure of 20 psi align at Test No. 20, but are significantly higher at Tests No. 18 and 19. City staff has noted several known valves to be intentionally closed due to the minimal demand resulting from several undeveloped lots. These known closed valves are reflected in the model, but flows are still higher. Closing valves throughout the pressure zone can result in similar results between the model and fire flow test data. However, if we closed valves at such locations, these locations would be purely conjecture. Therefore, no valves were modeled as closed.

7.1.3.4 South Central Pressure Zone (Yellow) – Static pressures and available flows align between model and field data at Test No. 17. However, available fire flows varied between the model and fire flow test data on Tests No. 16 and 21. The status of the PRVs are unknown at these locations. Pressure settings at the South Central (Route 47/71) PRV Station could be impacting static pressures and flows. By closing the PRVs at this location for Tests No. 16 and 21, the pressures and available flows have similar results between the field and the model. We recommend the City be aware of the impact of the PRVs on their Water Distribution System and track their set points for future model verification.

7.1.3.5 Summary and Observations – The analysis verifies that the City's water system is represented in the model within reason and that the hydraulic model is appropriate for the analysis of bulk water movement from supply points throughout the distribution system.

Some limitations on the model verification that may be considered as the need for more detailed analysis arises include the following:

1. Detailed verification of local distribution main through flow testing and/or C-Factor testing was not completed and may limit the accuracy of the analysis of localized distribution issues. Additional testing in various areas within the distribution system would allow for a more accurate model in those localized areas.
2. Data over a 24-hour period was not obtained and extended period simulations were not established or verified.
3. Some localized variations between modeled and observed pressure and flow data and unusual modeled results suggest that some system conditions (i.e. pipe diameter, valve position, connectivity assumptions) may not be accurately represented in the model. These discrepancies do not impact the analysis completed as part of this report, however, they may be resolved to increase the accuracy of the model.
4. All high service pumps did not run during flow testing. Therefore, the discharge flow and pressure modeled at each of the supply facilities and booster pump stations could not be verified for all pumps.
5. The demand distribution was based on the water usage the specific day of the flow tests and distributed evenly within the pressure zones and may not directly reflect typical average system demands. For analysis of the existing system, 2014 average and maximum day data was used. Maximum hour demands for all users were based on a factor of 2 of the 2014 maximum day demand. The demand distribution for current maximum day and maximum hour analysis may be modified as more detailed data becomes available to increase the reliability of analysis for localized distribution issues.
6. The pressure reducing valve stations play a critical role within the distribution system. They transfer water from higher pressure zones to lower pressure zones and can significantly impact the available flow during maximum demands and fire flow scenarios.
7. Given some differences in the available flow between the water model and field data at various locations within the system, it is possible that some valves are possibly partially closed or fully closed. We recommend the City begin a valve exercising program in accordance with AWWA recommendations and guidelines while refining the procedures to ensure all valves are open except for those that are intended to isolate a portion of the system or separate pressure zones. Water main sizes should be confirmed and documented during valve exercising as well. In addition, we recommend City staff verify and document PRV settings for future analysis. At the time of the next

Comprehensive Master Plan Update (in approximately 5 years), we recommend the model be updated and verified in more depth by obtaining additional flow testing at that time.

7.2 Existing Distribution System Evaluation

The strength and capacity of the existing water distribution system of the United City of Yorkville was evaluated in regard to service pressure, pipeline head loss rates and fire flow capacity. Service pressure, pipe velocities and system headloss were analyzed under two scenarios: 1) Maximum hour demand, and 2) Available fire flow under MDD conditions.

7.2.1 Evaluation Scenario Development – The MHD and MDD scenarios developed for evaluation are comprised of specific demand and supply conditions described in the following sections.

7.2.1.1 Demands – The system's existing capacity was analyzed under average day, maximum day and maximum hour demand conditions based on the 2014 pumpage. The MDD:ADD ratio utilized is 2.0 based on current trends. Similarly, the MHD:MDD ratio used is 2. The calculated MDD of 2.76 MGD (based on MDD:ADD of 2.0) is greater than the observed 2014 MDD of 2.17 MGD (based on the actual MDD:ADD of 1.57) resulting in a conservative model analysis. Demands were distributed evenly throughout the Water Distribution System.

7.2.1.2 High Service Pumps – Distribution system high service statuses at treatment plants and pump stations were assigned to reflect actual system operation to provide adequate water supply to each zone. The operation status of each water supply facility and booster pump station pump for maximum day and maximum hour demands are shown in Table No. 7-2.

Table No. 7-2: Summary of High Service Pump Summary In the Water Model
United City of Yorkville, IL

Facility	Pressure Zone Pump Services	Pump No.	Design		Status in the Model	
			Flow (Total) (gpm)	Pump Head (ft)	Maximum Day Demand	Peak Hour Demand
Supply - High Service Pumps						
Well 3	North Central	1	700	550	Off	Off
Well 4	North Central	1	1200	655	Off	Off
Well 7	South	1	1200	1270	On	On
Well 8	North	1	1200	900	Off	Off
Well 9	North	1	1200	1000	On	On
Booster Pump Stations - High Service Pumps						
North BPS	North	1	800	135	Off	Off
	North	2	800	135	Off	Off
South Central BPS	South Central	1	700	115	Off	Off
	South Central	2	700	115	Off	Off
South BPS	South	1	1000	125	Off	Off
	South	2	1000	125	Off	Off

While the system has the theoretical pumping capacity to achieve average day, maximum day and maximum hour demand utilizing pumping only, typical demands are met by a combination of supply from high service pumps and elevated tanks. To establish initial tank levels for each demand condition, tank data and SCADA information provided by the City were reviewed to determine a typical operating range of each tank. Evaluations of the model under maximum day demand and maximum hour demand conditions were completed at both high tank levels and low tank levels (i.e. just before high service pumps would typically turn on). These levels are outlined in Table No. 7-3.

Table No. 7-3: Summary of Water Storage Tank Levels in the Water Model
United City of Yorkville, IL

Water Storage Tank	Minimum Tank Level	Water Model		Maximum Tank Level
		Low Tank Level	High Tank Level	
North East EWST (Grand Reserve)	764	789	809	810
North Central EWST (Tower Lane)	730.5	734.5	762	763
South EWST (Raintree)	875	895	919	920
South Central EWST (South)	812.5	822.5	849	850
North EWST	770	785	809	810

7.2.1.3 Goals – The system's existing capacity was analyzed under average day, maximum day and maximum hour demand conditions based on the 2014 pumpage. The MDD:ADD ratio utilized is 2.0 under current trends. Similarly, the MHD:MDD ratio used is 2.

Per AWWA Manual M32 Computer Modeling of Water Distribution Systems, in general, the water distribution system and or pipe network is considered to be deficient if any of the following occurs at any location or under any condition:

1. Pressures during maximum day demand and fire flow conditions fall below 20 psi,
2. Pressures during maximum hour demand conditions fall below 30 to 40 psi,
3. Pressures rise above 90 to 110 psi (understanding that the Illinois Plumbing Code (Section 890.1210) requires a maximum of 80 psi for internal plumbing),
4. Velocities exceed 5 feet per second (fps),
5. Headlosses exceed 6 feet per 1,000 feet (ft) for pipes less than 16" in diameter, and
6. Headlosses exceed 2 feet per 1,000 feet (ft) for pipes 16" in diameter and greater.

The low pressure constraint under maximum day demand and fire flow conditions is critical and has been recommended by the National Fire Protection Association (NFPA). However, there is some engineering judgment required for the other pressure recommendations. With respect to the velocity and headloss constraints, the general parameters above are used to design new piping system and are general guidelines. Understanding that portions of the City are not a new design, but rather an existing distribution system, some latitude and engineering judgment should be used while evaluating the distribution system with the water model. To illustrate, having pipe velocities greater than 5 fps may result in wasted energy, requiring additional pumping costs; but, it may not be cost effective to replace the existing water main with a larger main. However, as velocities approach 10 fps, other issues commonly occur such as water hammer; and, these are more of the major concerns that we aim to identify.

These parameters are primarily tested under two scenarios:

1. Maximum Day Demand + Fire Flow Conditions, and
2. Maximum Hour Demand Conditions

Our analysis of these two scenarios is discussed in the next few sections.

7.2.2 Maximum Day Demand – The system pressures and available fire flow were analyzed under maximum day demand conditions to understand the system response under a typical 'maximum day demand' scenario.

System pressures were reviewed first to determine locations where there are pressures less than 40 psi under maximum day demand locations. Under this condition, the tank levels were set at the low operating levels (i.e. just prior to the low level alarms). No pumps were running under this scenario. Exhibit 7-3 depicts the locations where the static pressures are generally below 40 psi. The primary area where pressures were less than 40 psi is at the south end of the North Central Pressure Zone. However, the pressures were still over 35 psi at this location. Therefore, given this is a very rare occurrence with tanks low and pressures are still above 35 psi, this is not an area of concern. Under normal daily operations, the pressures are 40 psi or greater.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Note: Available Fire Flow is at a Residual Pressure of 20 PSI

Legend

Static Pressure

- < 25 PSI
- < 30 PSI
- < 35 PSI
- < 40 PSI

- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Study Area Boundary
- Yorkville Corporate Limits
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

0 750 1,500 3,000 4,500 Feet

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FILE:	YO1437_EXH7-4.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-3
EXISTING STATIC PRESSURES < 40 PSI CONDITIONS- TANKS AT LOW LEVELS

A similar analysis was performed to determine locations of system pressures greater than 80 psi. This analysis was performed while tanks are full and no pumps are running. Exhibit 7-4 depicts the areas where the pressures are greater than 80 psi. Although there are a few areas are greater than 80 psi, these findings were acceptable. The locations within the South Central Pressure Zone only rose to 82 psi. The locations identified within the South Pressure Zone ranged over 90 psi, but the City is aware of these pressures and planned for them by requiring individual pressure reducing valve within the internal plumbing of the homes.

7.2.3 Fire Flow Analysis – Once system pressures were reviewed, a fire flow simulation was performed based on 2014 maximum day demand conditions. To perform such an analysis, the Zoning Map was reviewed and integrated into the model by placing required fire flows of 1,500 gpm at model nodes in all residential areas and 3,500 gpm at model nodes in all other areas. It shall be noted that fire hydrants and leads were not explicitly included in the model. The 3,500 gpm fire flow demand is driven by the Insurance Service Offices' (ISO's) Public Protection Classification (PPC) grading. For purposes of calculating a community's PPC, ISO only includes buildings with a needed fire flow less than 3,500 gpm. ISO individually grades the protection of buildings with a needed fire flow in excess of 3,500 gpm, and their PPC can differ from that of the community or district that provides their fire protection. Also, a constraint was placed on the system for available fire flow without the velocity in any given pipe exceeding a velocity of 10 fps given this a recommended for good design.

Available fire flow was calculated at each modeled node to approximate flow available throughout the system. While typical fire flow standards call for a minimum residual pressure of 20 psi in the system, the analysis was run with a residual pressure requirement of 25 psi to account for minor losses from the modeled node to actual hydrant locations, through the hydrant lead and the hydrant itself. Similar to the system pressure analysis, the available fire flow analysis was calculated under the typical conditions (tanks are at 80% volume and pressure reducing valves are active). Exhibit 7-5 depicts the areas where the available fire flow does not meet the general needed fire flow of 1,500 gpm in residential areas and 3,500 gpm in all other locations.

Upon review of Exhibit 7-5, recommended fire flow needs are generally being met in the South, South Central and most of the North Pressure Zone. Within the North Pressure Zone, the Grande Reserve located at the northeast corner of the zone shows that additional flow is recommended. However, the available fire flow at this location is generally over 1,200 gpm at this location, and the primary reason for the minimal flow is because the main is not looped. In addition, the area at the southwest corner of this pressure zone, northeast of Beecher Road and Veterans Parkway (Kendall Market Place) has less than the desired 3,500 gpm. However, the available flow is generally over 3,000 gpm at this location per the model. Fire flow needs can vary from building to building. Therefore, 3,000 gpm may be adequate for the facilities at this location. To EEI's understanding, there have been no reports of inadequate fire flow. In addition, within the North Pressure Zone, the City shall continue to connect dead-end water mains as land is developed.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Note: Available Fire Flow is at a Residual Pressure of 20 PSI

Legend

Static Pressure

- > 80 PSI
- > 90 PSI
- > 100 PSI

- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Study Area Boundary
- Yorkville Corporate Limits
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

0 750 1,500 3,000 4,500 Feet

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FILE:	YO1437_Exh7-5.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-4
EXISTING STATIC PRESSURE > 80 PSI CONDITIONS - TANKS FULL

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Note: Available Fire Flow is at a Residual Pressure of 20 PSI and maximum pipe velocity of 10 fps.

Legend

- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Study Area Boundary
- Yorkville Corporate Limits
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

Available Fire Flows at a Residual Pressure of 25 PSI

- FF Deficiency < 250 GPM
- 251 < FF Deficiency < 500 GPM
- 501 < FF Deficiency < 750 GPM
- 751 < FF Deficiency < 1000 GPM
- FF Deficiency > 1,001 GPM

0 750 1,500 3,000 4,500 Feet

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FILE:	YO1437_EXHIBIT 7-5 DEFICIENCY.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-5
FIRE FLOW DEFICIENCIES PER THE MODEL

The North Central Pressure Zone presents the most challenges with respect to fire flow needs. This pressure zone includes the center of the City which has some of the oldest, smallest water mains along with businesses which is associated with higher fire flow demands. We recommend the City continue to increase smaller diameter mains to a minimum of 8" when replacement is possible. Where feasible, we recommend increasing some of the mains to 12" or 16" to further reinforce a larger diameter network within the critical downtown area.

7.2.4 Maximum Hour Demand Analysis – The system pressure, pipe velocities and headlosses were analyzed under maximum hour demand conditions to understand the system response under a typical 'worst case' scenario. No additional areas of concern were identified during this analysis.

7.2.5 Capital Improvement Plan – The City routinely reviews water main breaks and pipe conditions to identify targeted water main replacement. As part of the water model development, the 5-year Capital Improvement Plan (CIP) and integrated the program into the model under future scenarios.

7.2.6 Existing Distribution System Recommended Improvements – The available distribution system is generally strong; however, there are some areas of the City that would benefit from upgrades.

The model is very useful in reviewing velocity, headloss and pressure constraints within the water distribution system. However, engineering judgment shall always be applied to both the model analysis as well as the overall distribution system analysis. A distribution system can be evaluated by not only the parameters mentioned in the previous sections, but also by redundancy within the system. Water main breaks and regular maintenance of water distribution system facilities are a reality. If a tank is taken out of service to be rehabilitated, the City still must continue to supply all residents in the same capacity as if the tank is on line. Similarly, if pump(s) are being serviced or a water treatment plant is taken out of service for whatever reason, another supply source is required to fill the tanks in the pressure zone. Therefore, the pipe network and pumps should be such that they can overcome the headloss and fill the tanks regardless of conditions. Therefore, each pressure zone was reviewed to determine if it could operate if a major transmission line had a water main break or a pump was out of service. The following sub-sections outline observations and major concerns for each pressure zone accordingly.

7.2.6.1 North Pressure Zone – Within North Pressure Zone, the fire flow demand is primarily met by the North EWST and Northeast EWST and could be supplemented by the North BP/PRV Station when necessary. As shown on Exhibit 7-5 and discussed previously, there are a few locations where the available fire flow in the model is less than the needed fire flow. As development occurs, the City should continue with implementing a larger diameter looped network identified in this report, and the majority of these deficiencies will be addressed accordingly. These noted deficiencies per the model are primarily a result of dead-end mains and limited larger diameter network resulting from a growing community. The backbone of the larger diameter network has been integrated in the system, and it will strengthen as development occurs.

Two tanks within this pressure zone allow for redundancy for tank maintenance when necessary. In addition, two wells (Wells No. 8 and 9) provide redundancy in the supply to this pressure zone.

No specific improvements are being recommended for the North Pressure Zone at this time.

7.2.6.2 North Central Pressure Zone – The North Central Pressure Zone has one elevated water storage tank (North Central EWST) that maintains the hydraulic grade line within the zone. In addition, the North BP/PRV Station, North Central PRV Station, South Central BP/PRV Station provide another source for maintaining the hydraulic grade line by transferring water from the higher North and South Central Pressure Zones. The PRVs are critical to maximizing the fire flow availability within this pressure zone. Inventorying and reviewing the settings of the PRVs is recommended accordingly. In terms of fire flow availability, there are various locations on Exhibit 7-5 which are identified as having less than the desired fire flow. To increase the fire flow within this pressure zone, we recommend the City continue to increase smaller diameter mains to a minimum of 8" when replacement is possible. Where feasible, we recommend increasing some of the mains to 12" or 16" to further reinforce a larger diameter network within the critical downtown area. The City's current 5-year CIP program to replace and/or increase the water main includes the following:

- Appletree Court Watermain Replacement
- Center Street and Main Street Watermain Replacement
- W. Washington Street Watermain Replacement
- Elizabeth Street Watermain Replacement
- Main Street Watermain Replacement
- Orange/Olsen Watermain Looping
- Morgan Street Watermain Replacement
- E. Fox Street Watermain Replacement
- East Washington Watermain Replacement
- Orange Street Watermain Replacement

These are identified on the plan exhibits (Exhibits 7-6, 7-7 and 7-8) found later in Section 7.

From a supply perspective, Well No. 4 is located in this pressure zone. However, given this is the lowest pressure zone in the system, it reaps the benefit of water being transferred from the higher North and South Central Pressure Zones via PRVs which ultimately act as another source of supply for the zone in terms of evaluating redundant supply.

7.2.6.3 South Pressure Zone – The South Pressure Zone is the highest pressure zone within the City's distribution system and is served by the South EWST and Well No. 7 along with the South Central BP/PRV Station. The South EWST is how the fire flow demands are primarily met. In terms of supply redundancy, the South BP/PRV Station can be used when Well No. 7 requires maintenance. The only specific improvement

identified for this pressure zone is the Route 71 Water Main Replacement identified. The detailed cost estimate can be found in Appendix G. These are identified on the plan exhibits (Exhibits 7-6, 7-7 and 7-8) found later in Section 7.

7.2.6.4 South Central Pressure Zone – The South Central EWST maintains the hydraulic gradeline within this pressure zone along the South BP/PRV Station and the South Central PRV Station. There are no wells located with this pressure zone, and currently it is primarily fed from the higher South Pressure Zone through the PRVs. In addition, this pressure zone can also be served by pumping it from the lower North Central Station by way of the South Central BP/PRV Station.

No specific improvements are being recommended for the South Central Pressure Zone.

7.2.6.5 Overall System General Observations – When reviewing the overall distribution system, the following general observations were made:

1. Various dead-end water mains exist throughout the system. When feasible (as funds become available or development occurs), these dead-ends should be eliminated and looped.
2. The PRVs play a critical role within the distribution system. We recommend City staff collect and review the current PRV settings in efforts to maximize the available fire flow throughout the system.
3. Given the anticipated life span for water main is anywhere from 50 to 100 years and some of the water main is in excess of 50 years old, we recommend the City continue to implement a water main replacement program. The following items shall be considered as part of the replacement program:
    a. Aligning water main replacement with the reconstruction of any roadways to minimize design and construction costs as well as disturbance to the water customers.
    b. When routinely replacing water main in residential areas, the smallest diameter main should be 8", but confirmed by modeling analysis. For commercial and industrial areas, consideration shall be given to larger pipe. To service commercial//industrial areas at 3,500 gpm during a fire and not have the velocity exceed 10 fps, a minimum of 10" or 12" water main is required. Depending on looping of the pipe, a main larger than 12" is sometimes required.
    c. Water rates should be reviewed to confirm money is adequately reserved for such improvements.
4. The operations of the valves and hydrants play a significant role in how much fire flow is available in the system. If a valve is partially closed, it is the difference in meeting fire flow requirements in an area or not meeting fire flow requirements. We recommend implementing a valve exercise program.
5. As information is collected in the field, the water distribution system information within GIS should continue to be refined.

7.3 System Expansion Evaluation

The expansion of the United City of Yorkville's water system will require future water storage and transmission capacity to provide water to currently undeveloped areas of the City. As part of this study, the future water distribution system was reviewed under the following three scenarios:

1. Alternate 1A – Supply By Wells - CT
2. Alternate 2A – Supply By Fox River Intake (Yorkville Only) and Wells - CT
3. Alternate 3A – Supply By Fox River Intake (Sub-Regional) and Wells - CT

The following evaluation provides the required pipe diameters and recommended improvements to meet the future demands of the City's water system under all three scenarios.

7.3.1 Water Storage Evaluation – In Section 3, the Water Works Evaluation for the projected CT and LRI water use scenarios were completed.

7.3.1.1 Water Storage Evaluation - CT – In Section 3, the Water Works Evaluation for the projected CT water use scenario indicated that the City has adequate storage currently. However, a Maximum Hour Storage Capacity deficit of approximately 1.62 million gallons was identified by the end of the planning period, year 2050 with an additional 41,687 PE. Based on the CT analysis, the existing storage is adequate for approximately an additional 20,000 PE. Storage options include ground storage tanks, standpipes and EWSTs. The City Water Works System currently utilizes primarily spheroid type EWSTs. An EWST provides a benefit over ground storage tanks and standpipes from the perspective that the water does not need to be re-pumped from an EWST in order to provide adequate pressures. Pumping improvements require additional capital expense, consume energy to operate and require maintenance and replacement expense. Therefore, this evaluation will consider the implementation of a spheroid type EWST to provide the necessary storage capacity. For the CT water use scenario, a 2.0 MG spheroid EWST located in the South Pressure Zone is recommended. The cost estimate to construct a 2.0 MG is $4,870,000.

7.3.1.2 Water Storage Evaluation - LRI – In Section 3, the water works evaluation for the projected LRI water use scenario identified a Maximum Hour Storage Capacity deficit of approximately 630,000 million gallons by the end of the planning period, year 2050 with an additional 41,687 PE. To close the deficit, additional storage will need to be integrated into the Water Works System. Given our planning period is only 35 years, but water storage tanks have a typical lifespan of 100 years or greater, we recommend placing a 2.0 million gallon tank. Constructing a larger tank for future growth is more cost effective than building multiple smaller tanks as growth occurs, even beyond 2050. By building a larger tank, the capital cost per gallon of water storage will be less. In addition, long term maintenance cost will also decrease given the City will need to rehabilitate a less number of tanks. Building on the same concepts as described in the CT water use scenario, a 2.0 MG spheroid EWST located in the South Pressure Zone is recommended for the LRI water use scenario. The cost estimate to construct a 2.0 MG is $4,870,000.

7.3.2 Water Distribution System Assumptions – To properly size the expansion of the City's water distribution system, assumptions related to future conditions including the location of proposed mains, pressure zone boundaries, demands, facility operations and storage capacity were necessary.

7.3.2.1 Transmission Main Layout – The geographic placement of the proposed transmission mains was driven by the previously prepared Water Works System Needs Assessment and Project Plan dated July 2000, anticipated future land use and the proposed arterial streets within the area. Transmission mains were generally laid out to follow the alignment of the proposed arterial roads creating an approximately 1-mile grid. Additional mains were placed to avoid dead-end mains along the perimeter of the system.

7.3.2.2 Pressure Zone Boundaries – The pressure zone boundaries remained consistent with those outlined in the Water Works System Needs Assessment and Project Plan dated July 2000.

7.3.2.3 Demands – Demands for the existing distribution system were based on 2014 pumped water use area for the existing demands. For water demands in undeveloped areas, a density of 3.1 PE per acre was assumed with an average day demand of 90 gpd per PE. Utilizing the City's ultimate service area with an assumed population density of 3.1 P.E. per acre, total demand for each zone was calculated based on its geographic area as shown in Table No. 7-4.

Table No. 7-4: Future Demand Summary for Undeveloped Land

United City of Yorkville, IL

Future Demand for Future Areas	North	North Central	South	South Central	South East	Total
Area (acres)	8,375	3,178	10,988	10,988	8,682	42,211
Density (3.1 PE per Acre)	25,909	9,832	4,041	33,993	26,859	100,633
Water Use - ADD (90 GPD per PE) GPD	2,331,812	884,836	363,690	3,059,338	2,417,289	9,056,964
Water Use - MDD (2 * ADD) GPD	4,663,624	1,769,671	727,380	6,118,675	4,834,577	18,113,928
Water Use - PHD (2 * MDD) GPD	9,327,249	3,539,343	1,454,760	12,237,350	9,669,155	36,227,857

The transmission mains are sized for beyond 2050 because they have an estimated life of 75 to 100 years resulting in additional growth. In addition, it is unknown where development will occur, but the mains should be adequate to serve the density for any given area.

7.3.3 Booster Pump Facilities – The pump station capacities shall be monitored as growth occurs. Under Alternate 1A (Supply By Wells – CT), no modifications to the existing facilities are anticipated. Under Alternate 2A and 3A, the capacity of pumping facilities shall be monitored. Depending on where growth occurs through 2050, it is possible, although unlikely, that modifications to the existing booster pump stations may be necessary. This should be evaluated once more in the next water system planning update which is recommended to be completed approximately every five years.

7.3.4 Pressure Reducing Valve Facilities – Pressure reducing valves will need to be constructed as appropriate depending on where development occurs. We recommend the number of pressure reducing valves be minimized and be placed only on larger diameter main at strategic locations within the distribution system. The recommended locations are shown on Exhibits 7-6 (Alternate 1A), 7-7 (Alternate 2A) and 7-8 ((Alternate 3A) later in Section 7.

7.3.5 Water Storage Facilities – Under all three scenarios, a storage tank with a capacity of 2,000,000 gallons is warranted and is anticipated to be placed in the highest pressure zone, the South Pressure Zone. Additional potential storage locations were also identified. Storage in the distribution system will be needed in the future to provide supply during peak demands, fire flow and pressure equalization. The locations of the future tanks modeled are shown on Exhibits 7-6 (Alternate 1A), 7-7 (Alternate 2A) and 7-8 (Alternate 3A) later in Section 7.

7.3.6 Distribution System Expansion Analysis Results – Proposed water mains were assigned an initial assumed diameter and a series of model analyses were performed. Utilizing the model results to review the velocity and headloss through the pipes in the model as well as the available pressures during fire flow scenarios, pipe diameters were adjusted to meet fire flow, pressure, velocity and headloss criteria per the recommendations outlined in the AWWA Manual M32 Computer Modeling of Water Distribution Systems. These parameters, consistent with those outlined in Section 4, are as follows:

1. Pressures during maximum day demand and fire flow conditions fall below 20 psi,
2. Pressures during maximum hour demand conditions fall below 30 to 40 psi,
3. Pressures rise above 90 to 110 psi (understanding that the Illinois Plumbing Code (Section 890.1210) requires a maximum of 80 psi for internal plumbing),
4. Velocities exceed 5 feet per second (fps),
5. Headlosses exceed 6 feet per 1,000 feet (ft) for pipes less than 16” in diameter, and
6. Headlosses exceed 2 feet per 1,000 feet (ft) for pipes 16” in diameter and greater.

To systematically approach the sizing of pipes within the system, the analysis began at supply points where the largest water main diameters would be required. Working outward from each supply point, initial main sizes were adjusted to generally achieve less than a velocity of 5 fps in each future pipe and 10 fps in each existing pipe during maximum hour flow conditions. With each change in pipe diameter, the model results were reviewed to determine its effect on the proposed system and iterations were performed until headloss and velocity criteria were met.

Subsequently, fire flow analyses were performed on the proposed system. Areas where this flow and pressure could not be met often required an increase in the diameter of mains in the area to meet these fire flow criteria. Based on a transmission grid of approximately one square mile and typical headloss and velocity through future distribution mains, it was determined that adequate flow and pressure at each modeled

node on the proposed transmission mains should be 3,500 gpm at 25 psi to meet the typical fire flow requirements within the grid at 20 psi. This relatively conservative fire flow requirement was established because of the uncertainty of the specific fire flow needs of future development in the area.

After the system sizing was adjusted for fire flow, further iterations were completed running both maximum hour demand scenarios and maximum day with fire flow demand scenarios throughout the system to determine optimal sizing for the proposed piping. This included looking at the velocity and headloss across the entire proposed network; the flow from the existing and proposed elevated tanks; and the discharge pressure required at the existing and proposed facilities to meet system demands.

Under the Fox River scenarios (Alternates 2A and 3A), a review of the existing system also had to be completed given that there will only be one supply point (to the North Pressure Zone) initially to feed the entire water distribution system via the Fox River water source. Under Alternate 3A (Supply By Fox River Intake (Sub-Regional)), a second supply point is planned as the funding and demand dictates. An analysis was completed to ensure that all tanks could be filled and that water could be adequately distributed based on Maximum Day Demand (Fire Flow Analysis) and Maximum Hour Demand scenarios. This analysis was also an iterative process to size additional transmission mains as necessary to support the bulk transfer of water across the various zones while maintaining acceptable system pressures, velocities and headlosses.

The results of the analyses are discussed in the following sections.

7.4 Water Storage and Distribution Improvements Cost Estimates

The proposed transmission main network for the undeveloped areas as well as recommended existing system improvements for the three scenarios are summarized in the following sub-sections:

1. Alternate 1 – Supply By Wells
2. Alternate 2 – Supply By Fox River Intake (Yorkville Only) and Wells
3. Alternate 3 – Supply By Fox River Intake (Sub-Regional) and Wells

7.4.1 Alternate 1 – Supply By Wells – Under Alternate 1, the projects included in the Capital Improvement Plan improvements are the only identified distribution system projects to be completed in the near future. These projects are identified in Table No. 7-5.

Table No. 7-5: CIP - Summary of Conceptual Cost Estimates
United City of Yorkville, IL

ITEM	PROJECT	Estimated Cost
9a	Route 71 Watermain Replacement	$ 968,000
9b	Appletree Court Watermain Replacement (RTBR)	$ 149,000
9c	W. Washington Street Watermain Replacement (RTBR) - To be Constructed in 2017	$ 188,000
10	Elizabeth Street Watermain Replacement (RTBR)	$ 512,000
11	Main Street Watermain Replacement (RTBR)	$ 714,000
12	Orange/Olsen Watermain Looping (RTBR)	$ 168,000
13	Morgan Street Watermain Replacement (RTBR)	$ 376,000
14	E. Fox Street Watermain Replacement (RTBR)	$ 306,000
15	East Washington Watermain Replacement (RTBR)	$ 465,000
16	Orange Street Watermain Replacement (RTBR)	$ 660,000
	TOTAL - SUMMARY OF CONCEPTUAL COST ESTIMATES:	**$ 4,506,000**

The costs noted "RTBR" are part of the Roads-To-Better-Roads Program. All of the above costs were obtained from the CIP and therefore detailed cost estimates for these projects are not included with this report.

To summarize, the proposed Water Works System Improvements for Alternate 1A - CT are illustrated on Exhibit 7-6. In addition, an outline of all estimated costs of the recommended improvements for the 2050 planning period (including the water supply, treatment, storage and transmission improvements outlined in Sections 6 and 7) can be found in Table No. 7-6 for both the CT and LRI scenarios for Alternate 1.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

1.0 MG NORTH EWST

WELL NO.6 WTP

1.5 MG NORTHEAST EWST, WELL NO. 8.

WELL NO.14 WTP

WELL NO. 9

WELL NO.12 WTP

NORTH CENTRAL PRV STATION

NORTH BP/PRV STATION

300,000 GAL NORTH CENTRAL EWST, WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT

WELL NO. 11

WELL NO. 3

SOUTH CENTRAL BP/PRV STATION

WELL NO.10 WTP

500,000 GAL SOUTH CENTRAL EWST

SOUTH BP/PRV STATION

9a. ROUTE 71 WM REPLACEMENT

2.0 MG EWST

SOUTH CENTRAL PRV STATION

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

WELL NO.15 WTP

9b. APPLETREE COURT WM REPLACEMENT

11. MAIN STREET WM REPLACEMENT

14. EAST FOX STREET WM REPLACEMENT

9c. WEST WASHINGTON STREET WM REPLACEMENT

15. EAST WASHINGTON WM REPLACEMENT

16. ORANGE STREET WM REPLACEMENT

12. ORANGE / OLSEN WM LOOPING

13. MORGAN STREET WM REPLACEMENT

10. ELIZABETH STREET WM REPLACEMENT

WELL NO.13 WTP

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant
- Elevated Water Storeage Tank (EWST)
- Future BP/PRV
- Future PRV
- Future Deep Well
- Proposed WTP Site
- Ground Storage Tanks
- Potential EWST Site
- Alternate EWST Site
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future 8" Water Main
- Future 12" Water Main
- Future 16" Water Main
- Future 24" Water Main
- Future Raw Water Main

NOTE:
DUE TO THE VARYING TERRAIN AND ELEVATION WITHIN THE PLANNING AREA, EFFORTS WERE MADE TO MINIMIZE THE NUMBER OF PRESSURE ZONES. AS DEVELOPMENT OCCURS, THE ELEVATIONS WITHIN EACH DEVELOPMENT SHALL BE REVIEWED AT THAT TIME. INDIVIDUAL PRESSURE REDUCING VALVES WITHIN BUILDING/HOMES MAY BE REQURED IN CERTAIN AREAS.

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE:	MARCH, 2017
PROJECT NO.:	YO1437-P
BY:	CLV
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXH7-6ALT1-CT NEW .MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-6 ALTERNATE 1A
WATER WORKS SYSTEM PLAN - CT

NORTH

Table No. 7-6: Water Works System Master Plan Alternates 1A and1B Cost Estimate Summary
United City of Yorkville, IL

Impr. No.	Improvement	Capital Cost	Annual O&M		Total 20-Year Present Worth
			Annual Cost	20-Year Present Worth	
Alternate No. 1A: DSS Water Wells with CEWTPs - CT					
1A-CT-1	Well No. 6 and Well No. 6 CEWTP	$6,839,000	$287,001	$3,292,000	$10,131,000
1A-CT-2	Well No. 10 and Well No. 10 CEWTP	$6,839,000	$282,077	$3,235,000	$10,074,000
1A-CT-3	Well No. 11	$2,419,000	$112,885	$1,295,000	$3,714,000
1A-CT-4	Well No. 11 Raw Water Main (to Wells 3 & 4 CEWTP)	$1,188,000			$1,188,000
1A-CT-5	Well No. 12 and Well No. 12 CEWTP	$6,839,000	$287,001	$3,292,000	$10,131,000
1A-CT-6	Well No. 13 and Well No. 13 CEWTP	$6,839,000	$282,077	$3,235,000	$10,074,000
1A-CT-7	Well No. 14 and Well No. 14 CEWTP	$6,839,000	$287,001	$3,292,000	$10,131,000
1A-CT-8	Well No. 15 and Well No. 15 CEWTP	$6,839,000	$282,077	$3,235,000	$10,074,000
1A-CT-EX1	Existing Wells No. 3 & 4 CEWTP		$309,217	$3,547,000	$3,547,000
1A-CT-EX2	Existing Well No. 7 CEWTP		$282,077	$3,235,000	$3,235,000
1A-CT-EX3	Existing Wells No. 8 & 9 CEWTP		$309,217	$3,547,000	$3,547,000
		$44,641,000	$2,720,630	$31,205,000	$75,846,000
1A-CT-9	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
1A-CT-10	Water Distribution System Improvements	$4,506,000			$4,506,000
		$9,376,000	$50,000	$573,000	$9,949,000
		$54,017,000	**$2,770,630**	**$31,778,000**	**$85,795,000**
Alternate No. 1B: DSS Water Wells with CEWTPs - LRI					
1B-LRI-1	Well No. 6 and Well No. 6 WTP	$6,839,000	$318,287	$3,651,000	$10,490,000
1B-LRI-2	Well No. 10 and Well No. 10 CEWTP	$6,839,000	$312,282	$3,582,000	$10,421,000
1B-LRI-3	Well No. 11	$2,419,000	$130,039	$1,492,000	$3,911,000
1B-LRI-4	Well No. 11 Raw Water Main (to Wells 3 & 4 CEWTP)	$1,188,000			$1,188,000
1B-LRI-5	Well No. 12 and Well No. 12 CEWTP	$6,839,000	$318,287	$3,651,000	$10,490,000
1B-LRI-EX1	Existing Wells No. 3 & 4 CEWTP		$340,390	$3,904,000	$3,904,000
1B-LRI-EX2	Existing Well No. 7 CEWTP		$312,282	$3,582,000	$3,582,000
1B-LRI-EX3	Existing Wells No. 8 & 9 CEWTP		$340,390	$3,904,000	$3,904,000
		$24,124,000	$2,071,957	$23,766,000	$47,890,000
1B-LRI-6	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
1B-LRI-7	Water Distribution System Improvements	$4,506,000			$4,506,000
		$9,376,000	$50,000	$573,000	$9,949,000
		$33,500,000	**$2,121,957**	**$24,339,000**	**$57,839,000**

Notes:
All values based on 2016 construction costs

As noted previously, all transmission main planning is based on current trends. So, the water distribution system improvement costs in in Alternates 1A and 1B are the same. In addition, the CIP improvements are recommendations made prior to this study and are included as recommendations under all of the scenarios.

7.4.2 Alternate 2 – Supply By Fox River Intake (Yorkville Only) and Wells – Under Alternate 2, various water distribution system improvements are recommended in addition to the CIP improvements identified in Alternate 1. These projects are identified in Table No. 7-7.

Table No. 7-7: Alternate 2 - Water Distribution System Recommended Improvements
Summary of Conceptual Cost Estimates
United City of Yorkville, IL

ITEM	PROJECT	Estimated Cost
1	20" & 16" Water Main North West of Water Treatment Plant	$ 829,000
2	16" Tie Into Crimson Lane	$ 233,000
3	24" Water Main from Water Treatment Plan to Van Emmon	$ 9,597,000
4	16" Water Main along Center Street and Main Street	$ 869,000
5a	20" Water main on Van Emmon	$ 1,071,000
5b	20" Water main on Van Emmon	$ 473,000
6	20" Water Main from Mill Street to South Central EWST	$ 3,155,000
7	20" Water Main from South Central EWST to South BP/PRV	$ 1,450,000
8	PRV Station - North Pressure Zone to North Central Pressure Zone	Not. Incl. in Alt. 2
9a	Route 71 Watermain Replacement	$ 968,000
9b	Appletree Court Watermain Replacement (RTBR)	$ 149,000
9c	W. Washington Street Watermain Replacement (RTBR) - To be Constructed in 2017	$ 188,000
10	Elizabeth Street Watermain Replacement (RTBR)	$ 512,000
11	Main Street Watermain Replacement (RTBR)	$ 714,000
12	Orange/Olsen Watermain Looping (RTBR)	$ 168,000
13	Morgan Street Watermain Replacement (RTBR)	$ 376,000
14	E. Fox Street Watermain Replacement (RTBR)	$ 306,000
15	East Washington Watermain Replacement (RTBR)	$ 465,000
16	Orange Street Watermain Replacement (RTBR)	$ 660,000
	TOTAL - SUMMARY OF CONCEPTUAL COST ESTIMATES:	**$ 22,183,000**

The costs noted "RTBR" are part of the Roads-To-Better-Roads Program. Items No. 9a – 16 were obtained from the CIP and therefore detailed cost estimates for these projects are not included with this report. Detailed cost estimates for Items No. 1-8 can be found in Appendix G.

To summarize, the proposed Water Works System Improvements for Alternate 2A are illustrated on Exhibit 7-7. In addition, an outline of all estimated costs of the recommended improvements for the 2050 planning period (including the water supply, treatment, storage and transmission improvements outlined in Sections 6 and 7) can be found in Table No. 7-8.

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant
- Elevated Water Storeage Tank (EWST)
- Future BP/PRV
- Future PRV
- Future Deep Well
- Proposed WTP Site
- Ground Storage Tanks
- Potential EWST Site
- Alternate EWST Site
- Potential Future Deep Well
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future 8" Water Main
- Future 12" Water Main
- Future 16" Water Main
- Future 20" Water Main
- Future 24" Water Main
- Future Raw Water Main
- Potential Future Water Main

POTENTIAL FUTURE WELL NO. 6

1.0 MG NORTH EWST

POTENTIAL FUTURE RAW WATER MAIN

1.5 MG NORTHEAST EWST, WELL NO. 8.

WELL NO. 9

1. 20" AND 16" WM NORTH WEST OF WATER TREATMENT PLANT

NORTH CENTRAL PRV STATION

NORTH BP/PRV STATION

2. 16" WM TIE INTO CRIMSON LANE

WELL NO. 8 & 9 RAW WATER MAIN

WELL NO. 10, FOX RIVER INTAKE, 12 MGD LIME SOFTENING WATER TREATMENT PLANT, AND 1.0 MG GST

3. 24" WM FROM WATER TREATMENT PLANT TO VAN EMMON

300,000 GAL NORTH CENTRAL EWST, WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT

WELL NO. 3

4. 16" WM ALONG CENTER STREET AND MAIN STREET

SOUTH CENTRAL BP/PRV STATION

5a & 5b. 20" WM ON VAN EMMON

6. 20" WM FROM MILL STREET TO SOUTH CENTRAL EWST

500,000 GAL SOUTH CENTRAL EWST

SOUTH BP/PRV STATION

2.0 MG EWST

SOUTH CENTRAL PRV STATION

9a. ROUTE 71 WM REPLACEMENT

1.25 MG SOUTH EWST, WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT

7. 20" WM FROM SOUTH CENTRAL EWST TO SOUTH BP/PRV

9b. APPLETREE COURT WM REPLACEMENT

11. MAIN STREET WM REPLACEMENT

14. EAST FOX STREET WM REPLACEMENT

9c. WEST WASHINGTON STREET WM REPLACEMENT

15. EAST WASHINGTON STREET WM REPLACEMENT

16. ORANGE STREET WM REPLACEMENT

12. ORANGE / OLSEN WM LOOPING

13. MORGAN STREET WM REPLACEMENT

10. ELIZABETH STREET WM REPLACEMENT

NOTE:
DUE TO THE VARYING TERRAIN AND ELEVATION WITHIN THE PLANNING AREA, EFFORTS WERE MADE TO MINIMIZE THE NUMBER OF PRESSURE ZONES. AS DEVELOPMENT OCCURS, THE ELEVATIONS WITHIN EACH DEVELOPMENT SHALL BE REVIEWED AT THAT TIME. INDIVIDUAL PRESSURE REDUCING VALVES WITHIN BUILDING/HOMES MAY BE REQURED IN CERTAIN AREAS.

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

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Sugar Grove, Illinois 60554
(630) 466-6700
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United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE:	MARCH, 2017
PROJECT NO.:	YO1437-P
BY:	CLV
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE:	YO1437_EXH7-7_ALT2_NEW.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-7 ALTERNATE 2A
WATER WORKS SYSTEM PLAN - CT

NORTH

Table No. 7-8: Water Works System Master Plan Alternates 2A and 2B Cost Estimate Summary
United City of Yorkville, IL

Impr. No.	Improvement	Capital Cost	Annual O&M		Total 20-Year Present Worth
			Annual Cost	20-Year Present Worth	
Alternate No. 2A: Fox River Intake with Single Stage (ClariCone) LSWTP - CT					
2A-CT-1	12 MGD Fox River Intake Pump Station	$5,217,000	$218,063	$2,501,000	$7,718,000
2A-CT-2	12 MGD Single Stage (ClariCone) LSWTP	$35,088,000	$1,965,251	$22,541,000	$57,629,000
2A-CT-3	Wells No. 8 & 9 Raw Water Main	$3,267,000			$3,267,000
2A-CT-4	Well No. 10	$2,419,000	$53,950	$619,000	$3,038,000
2A-CT-EX1	Existing Wells No. 3 & 4 CEWTP		$108,634	$1,246,000	$1,246,000
2A-CT-EX2	Existing Well No. 7 CEWTP		$108,634	$1,246,000	$1,246,000
		$45,991,000	$2,454,532	$28,153,000	$74,144,000
2A-CT-5	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
2A-CT-6	Water Distribution System Improvements	$22,183,000			$22,183,000
		$27,053,000	$50,000	$573,000	$27,626,000
		$73,044,000	**$2,504,532**	**$28,726,000**	**$101,770,000**
Alternate No. 2B: Fox River Intake with Single Stage ClariCone LSWTP - LRI					
2B-LRI-1	9 MGD Fox River Intake Pump Station	$4,828,000	$204,703	$2,348,000	$7,176,000
2B-LRI-2	9 MGD Single Stage (ClariCone) LSWTP	$29,572,000	$1,726,058	$19,798,000	$49,370,000
2B-LRI-3	Wells No. 8 & 9 Raw Water Main	$3,267,000			$3,267,000
2B-LRI-EX1	Existing Wells No. 3 & 4 CEWTP		$102,719	$1,178,000	$1,178,000
2B-LRI-EX2	Existing Well No. 7 CEWTP		$102,719	$1,178,000	$1,178,000
		$37,667,000	$2,136,199	$24,502,000	$62,169,000
2B-LRI-4	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
2B-LRI-5	Water Distribution System Improvements	$22,183,000			$22,183,000
		$27,053,000	$50,000	$573,000	$27,626,000
		$64,720,000	**$2,186,199**	**$25,075,000**	**$89,795,000**

Notes:
All values based on 2016 construction costs

As noted previously, all transmission main planning is based on current trends. So, the water distribution system improvement costs in in Alternates 2A and 2B are the same. In addition, the CIP improvements identified in Alternate 1 are included in the Water Distribution System Improvements identified in Table No. 7-8 above.

7.4.3 Alternate 3 – Supply By Fox River Intake (Sub-Regional) and Wells – Under Alternate 3, various water distribution system improvements are recommended in addition to the CIP improvements identified in Alternate 1. These projects are outlined in Table No. 7-9.

Table No. 7-9: Alternate 3 - Water Distribution System Recommended Improvements
Summary of Conceptual Cost Estimates
United City of Yorkville, IL

ITEM	PROJECT	Estimated Cost
1	20" & 16" Water Main North West of Water Treatment Plant	$ 829,000
2	16" Tie Into Crimson Lane	$ 233,000
3	24" Water Main from Water Treatment Plan to Van Emmon	$ 9,597,000
4	16" Water Main along Center Street and Main Street	$ 869,000
5a	20" Water main on Van Emmon	$ 1,071,000
5b	20" Water main on Van Emmon	$ 473,000
6	20" Water Main from Mill Street to South Central EWST	$ 3,155,000
7	20" Water Main from South Central EWST to South BP/PRV	$ 1,450,000
8	PRV Station - North Pressure Zone to North Central Pressure Zone	$ 378,000
9a	Route 71 Watermain Replacement	$ 968,000
9b	Appletree Court Watermain Replacement (RTBR)	$ 149,000
9c	W. Washington Street Watermain Replacement (RTBR) - To be Constructed in 2017	$ 188,000
10	Elizabeth Street Watermain Replacement (RTBR)	$ 512,000
11	Main Street Watermain Replacement (RTBR)	$ 714,000
12	Orange/Olsen Watermain Looping (RTBR)	$ 168,000
13	Morgan Street Watermain Replacement (RTBR)	$ 376,000
14	E. Fox Street Watermain Replacement (RTBR)	$ 306,000
15	East Washington Watermain Replacement (RTBR)	$ 465,000
16	Orange Street Watermain Replacement (RTBR)	$ 660,000
	TOTAL - SUMMARY OF CONCEPTUAL COST ESTIMATES:	**$ 22,561,000**

The costs noted "RTBR" are part of the Roads-To-Better-Roads Program. Items No. 9a – 16 were obtained from the CIP and therefore detailed cost estimates for these projects are not included with this report. Detailed cost estimates for Items No. 1-8 can be found in Appendix G. These improvements are illustrated on Exhibit 7-8 which is the Water Works System Master Plan for Alternate 3A - CT. Consistent with the water distribution system planning for Alternates 1 and 2, all transmission main planning is based on current trends. Also, the CIP improvements identified in Alternate 1 included in the cost estimates above.

Given the same supply source connection point near the Fox River was considered under both Alternates 2 and 3, the recommended water distribution system improvements are nearly identical. The only difference between these two alternates is the PRV in the vicinity of the Fox River connection point. Under Alternate 2, the water treatment plant would have different pumps that could pump to both the North Pressure Zone

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

1.0 MG NORTH EWST
WELL NO. 6
1.5 MG NORTHEAST EWST, WELL NO. 8.
WELL NO. 8 AND 9 WTP
WELL NO. 9
1. 20" AND 16" WM NORTH WEST OF WATER TREATMENT PLANT
NORTH CENTRAL PRV STATION
NORTH BP/PRV STATION
2. 16" WM TIE INTO CRIMSON LANE
SUB REGIONAL CONNECTION
8. PRV STATION - NORTH PRESSURE ZONE TO NORTH CENTRAL PRESSURE ZONE
3. 24" WM FROM WATER TREATMENT PLANT TO VAN EMMON
300,000 GAL NORTH CENTRAL EWST
WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT
WELL NO. 3
FUTURE SUB REGIONAL CONNECTION
4. 16" WM ALONG CENTER STREET AND MAIN STREET
SOUTH CENTRAL BP/PRV STATION
5a & 5b. 20" WM ON VAN EMMON
6. 20" WM FROM MILL STREET TO SOUTH CENTRAL EWST
500,000 GAL SOUTH CENTRAL EWST
SOUTH BP/PRV STATION
2.0 MG EWST
SOUTH CENTRAL PRV STATION
9a. ROUTE 71 WM REPLACEMENT
1.25 MG SOUTH EWST
WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT
7. 20" WM FROM SOUTH CENTRAL EWST TO SOUTH BP/PRV
9b. APPLETREE COURT WM REPLACEMENT
11. MAIN STREET WM REPLACEMENT
9c. WEST WASHINGTON STREET WM REPLACEMENT
14. EAST FOX STREET WM REPLACEMENT
15. EAST WASHINGTON STREET WM REPLACEMENT
16. ORANGE STREET WM REPLACEMENT
12. ORANGE / OLSEN WM LOOPING
13. MORGAN STREET WM REPLACEMENT
10. ELIZABETH STREET WM REPLACEMENT

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant
- Elevated Water Storeage Tank (EWST)
- Future PRV
- Future BP/PRV
- Future Deep Well
- Ground Storage Tanks
- Potential EWST Site
- Alternate EWST Site
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future 8" Water Main
- Future 12" Water Main
- Future 16" Water Main
- Future 20" Water Main
- Future 24" Water Main
- Future Raw Water Main

NOTE:
DUE TO THE VARYING TERRAIN AND ELEVATION WITHIN THE PLANNING AREA, EFFORTS WERE MADE TO MINIMIZE THE NUMBER OF PRESSURE ZONES. AS DEVELOPMENT OCCURS, THE ELEVATIONS WITHIN EACH DEVELOPMENT SHALL BE REVIEWED AT THAT TIME. INDIVIDUAL PRESSURE REDUCING VALVES WITHIN BUILDING/HOMES MAY BE REQURED IN CERTAIN AREAS.

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

NORTH

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FILE:	YO1437_EXH7-8 ALT3 NEW.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 7-8 ALTERNATE 3A
WATER WORKS SYSTEM PLAN - CT

and the North Central Pressure Zone. Under Alternate 3 (Sub-Regional), the supply would only serve the North Pressure Zone. Therefore, a PRV station is required to reduce the pressure to accommodate the North Central Pressure Zone. In Section 8, the supply, treatment and distribution will be discussed and a summary of the recommended Water Works System Improvements will be provided accordingly.

7.4.4 General Considerations For Water Distribution System Planning - Alternates 1, 2 and 3 – Within the Exhibits 7-6, 7-7 and 7-8, "Future Pipe" diameter indicates the required equivalent diameter for adequate capacity in the area. This capacity can potentially be obtained by installing a parallel pipe with the existing pipe remaining or by abandoning the existing pipe remaining or by abandoning the existing pipe with new water main. A general route for proposed piping has been provided for planning purposes, but there may be a better route to achieve the required capacity depending on the circumstances and other projects the City is undergoing at the time of the improvements. The maximum day demand with fire flow condition was the primary criteria for the majority of the transmission main sizes, particularly when far from supply points, with larger mains needed to maintain pressure at high elevations during fire flows. Maximum Hour flows tended to govern the size of mains that were closer to supply points.

Ground elevation plays a large factor in the availability of adequate fire flow to an area and the resulting water main size necessary to support the flow. Final layout of mains along the pressure zone boundaries should be studied as developments are proposed and water mains are designed to ensure that local high or low ridges fall on the appropriate side of the pressure zone boundaries. Fire flow availability along the pressure zone boundary depends in areas on the inclusion of PRVs and BPSs.

SECTION 8: SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS

Section 6 of this report evaluated two different options for the United City of Yorkville's future water source: 1) continuing to obtain water using wells and deep aquifers and 2) treating surface water from the Fox River with a WTP that is only meant to serve the United City of Yorkville. This section evaluates a third option – 3) treating surface water from the Fox River within a sub-regional WTP and transmitting the treating water to the Village of Montgomery, United City of Yorkville and Village of Oswego.

8.1 Sub-Regional Planning Area

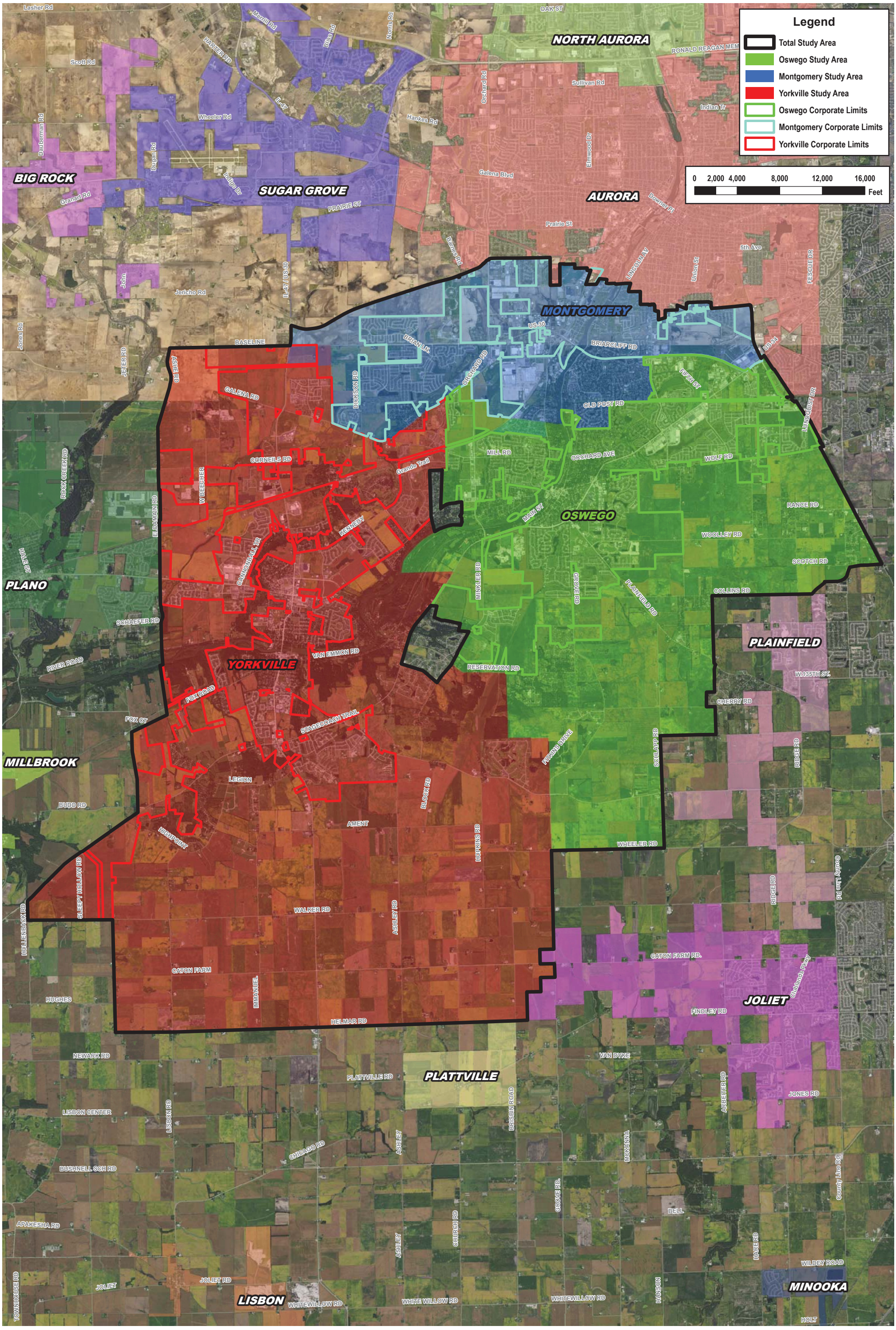
Exhibit 8-1 depicts the planning areas for the Village of Montgomery, United City of Yorkville and Village of Oswego. The sizes of the planning areas are as follows:

- Montgomery – 9.3 square miles of corporate limits and 15.6 square miles of other planning area.
- Yorkville – 20.2 square miles of corporate limits and 72.9 square miles of other planning area.
- Oswego – 15.1 square miles of corporate limits and 40.2 square miles of other planning area.

Within the combined 173.3 square mile planning area of all three communities, there currently are 44.6 square miles within corporate limits. There are 128.7 square miles of land area (74% of total area) within the total planning area that currently are not within one of the corporate boundaries. The Fox River flows through all three communities running from northeast to southwest.

8.2 Sub-Regional Historical & Projected Population

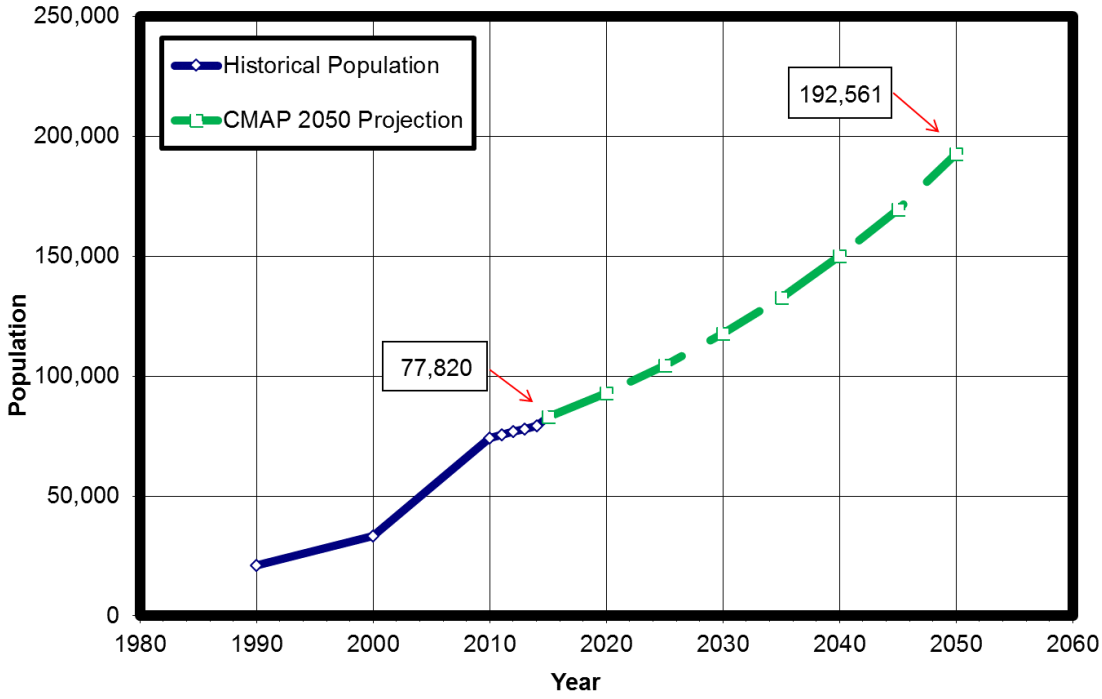
The total populations served by the Village of Montgomery, United City of Yorkville and Village of Oswego Water Works Systems in 2014 were 27,488, 17,878 and 32,454 respectively. The combined population served in 2014 was 77,820. The 2050 population projection for Yorkville was determined in the same manner that it was for Oswego. That is, the annual growth rate for CMAP's 2040 projection was compounded another ten years to determine 2050's value. When the same method was used for Montgomery, it became apparent that it would be an over estimate for their Village due to the fact the Village has a limited amount of undeveloped property within their planning area. Therefore, community development utilized the Village's comprehensive plan to estimate population growth in the undeveloped areas. The existing population served plus the additional build-out population then became the 2050 total population served estimate for the Village of Montgomery.



Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 *www.eeiweb.com*	**United City of Yorkville** 800 Game Farm Road Yorkville, IL 60560	DATE: JANUARY 2017 PROJECT NO.: YO1438 BY: MJT PATH: H:\GIS\PUBLIC\YORKVILLE\2014\ FILE: YO1438_EXH8-1 OSG,YORK,MON	**SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS** VILLAGE OF MONTGOMERY, ILLINOIS UNITED CITY OF YORKVILLE, ILLINOIS AND VILLAGE OF OSWEGO, ILLINOIS	**EXHIBIT 8-1** **SUB-REGIONAL STUDY AREA**

Exhibit 8-2 outlines the combined historical population as far back as 1990 as well as the predicted future population through 2050. The total combined population for the sub-region for 2014 was 77,820; at a growth rate of 1.10 % for the Village of Montgomery, 3.20% for the United City of Yorkville and 2.78% for Village of Oswego the 2050 population is projected to be 192,561 people for all three communities.

Exhibit 8-2: Sub-Regional Historical and Projected Population Summary
Village of Montgomery, United City of Yorkville, Village of Oswego



8.3 Sub-Regional Historical & Projected Water Use

To determine the Sub-Region water needs, the water needs of each community were determined and added together to find the total projected water demand. A summary of each community's historical water use, predicted future water use under a CT scenario and predicted future water use under the LRI scenario, can be found in Table No. 8-1.

A WTP is typically designed to produce enough water to meet the MDD of a Water Works System(s). In order to determine the maximum day demand, the ADD is multiplied by the MDD:ADD ratio that has been determined based on historical data. In the CT scenario, while all of the communities are assumed to have the same average day demand per capita, the MDD:ADD ratio was different for each community. When determining the total ADD and MDD demand, each community was evaluated separately and then added together to find the total.

Table No. 8-1: Community Water Use Characteristics

Village of Montgomery, United City of Yorkville, Village of Oswego

Parameter	Village of Montgomery	United City of Yorkville	Village of Oswego
2014 Population	27,488	17,878	32,454
Historical Water Use			
Average Daily Pumpage (2014)	2.44 MGD	1.38 MGD	2.50 MGD
Annual Minimum of Average Daily Pumpage Per Capita (2010 - 2014)	87.0 gpcd	77.3 gpcd	77.1 gpcd
Annual Average of Average Daily Pumpage Per Capita (2010 - 2014)	90.7 gpcd	88.0 gpcd	80.3 gpcd
Annual Maximum of Average Daily Pumpage Per Capita (2010 - 2014)	96.4 gpcd	99.5 gpcd	84.4 gpcd
Maximum Daily Pumpage (2014)	3.42 MGD	2.17 MGD	4.17 MGD
Minimum Maximum Day To Average Day Ratio (2010 - 2014)	1.40	1.57	1.67
Average Maximum Day To Average Day Ratio (2010 - 2014)	1.53	1.91	1.80
Maximum Maximum Day To Average Day Ratio (2010 - 2014)	1.66	2.06	1.90
Historical Water Use Additional Breakdown			
% of 2014 Water Use That Was For Residential Use	75.3 %	81.6 %	82.3 %
% of 2014 Water Use That Was For Non-Residential Use	24.7 %	18.4 %	17.7 %
Average Daily Residential Water Use Per Capita (2014)	51.7 gpcd	55.6 gpcd	55.3 gpcd
Average % of Water Supply For Outdoor Water Use	3.7 %	12.9 %	--
2014 Water Losses and Unbilled Authorized Consumption	22.7 %	11.8 %	--
Average % Water Distribution System Losses	20.8 %	8.0 %	--
% of Households Pre-1994	49.5 %	27.0 %	--
Water Use Projections - Current Trends (CT)			
2050 Population Projection	42,000	59,565	90,996
CT Average Daily Water Use Per Capita	90 gpcd	90 gpcd	90 gpcd
CT Maximum Day To Average Day Ratio	1.75	2.00	1.90
CT 2050 Average Daily Water Use	3.78 MGD	5.36 MGD	8.19 MGD
CT 2050 Maximum Daily Water Use	6.62 MGD	10.72 MGD	15.56 MGD
Water Use Projections - Less Resource Intenstive (LRI)			
Projected Water Use Savings For LRI Water Demand Projection	20 %	11 %	--
> Projected Distribution System Losses With 50% Reduction	10.4 %	4.0 %	--
> Projected Outdoor Water Use With 25% Reduction	2.8 %	9.7 %	--
> Projected Indoor Water Use Reduction For Fixture & Appliance Changes	6.4 %	2.6 %	--
LRI Average Daily Water Use Per Capita	72 gpcd	80 gpcd	75 gpcd
LRI Maximum Day To Average Day Ratio	1.50	1.75	1.75
LRI 2050 Average Daily Water Use	3.02 MGD	4.77 MGD	6.82 MGD
LRI 2050 Maximum Daily Water Use	4.54 MGD	8.34 MGD	11.94 MGD

Notes:

- A detailed water use evaluation was not completed for the Village of Oswego. It was not part of the scope of services for the project.
- The water losses and unbilled authorized consumption for the Village of Oswego is estimated to be 12.9% (same as Yorkville) for the average daily residential water use per capita calculation.

Exhibit 8-3 depicts the combined water usage projections. As expected, they generally follow the same exponential pattern seen in the population projections in Exhibit 8-2. For the CT scenario, a total maximum day demand of 32.9 MGD is projected for all three communities in 2050. As outlined below, Oswego is projecting the highest population and is therefore projected to be using the largest amount of water. Yorkville is projected to have the second highest water demand, and Montgomery is projected to have the smallest water demand in 2050.

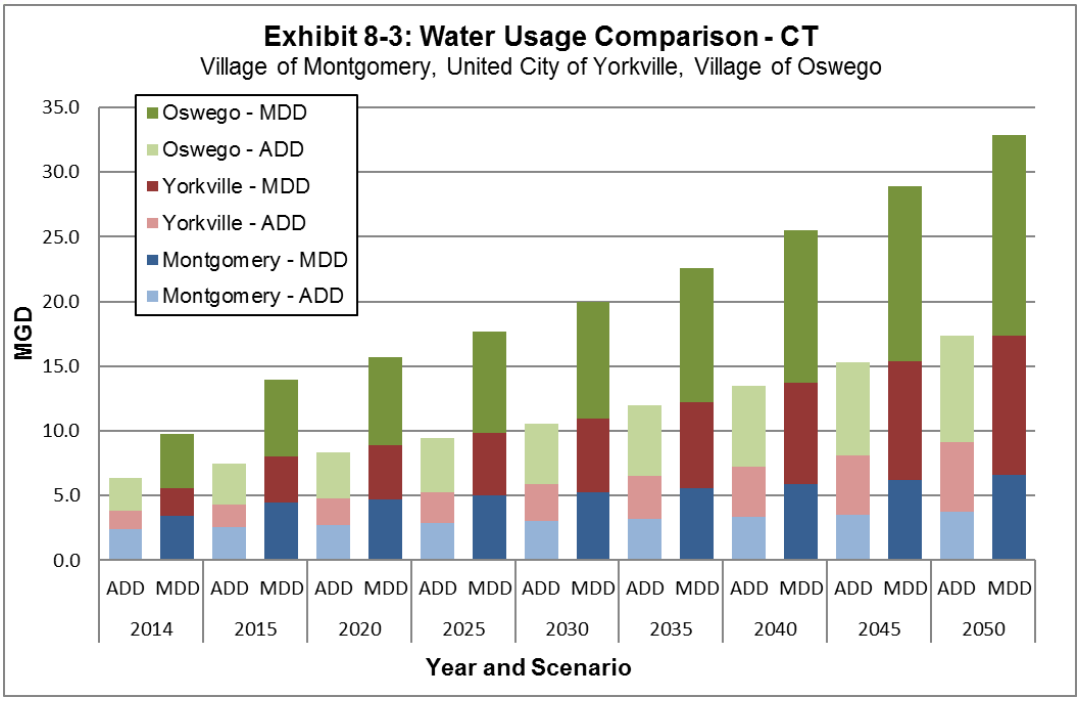


Exhibit 8-4 summarizes how water conservation efforts contributing to the LRI scenario would affect each of the communities' demands through the year 2050. If all three communities where to make a moderately higher commitment to conserve water, the combined 2050 average day demand drops from 17.3 MGD to 14.6 MGD and the 2050 maximum day demand drops from 32.9 MGD to 24.8 MGD.

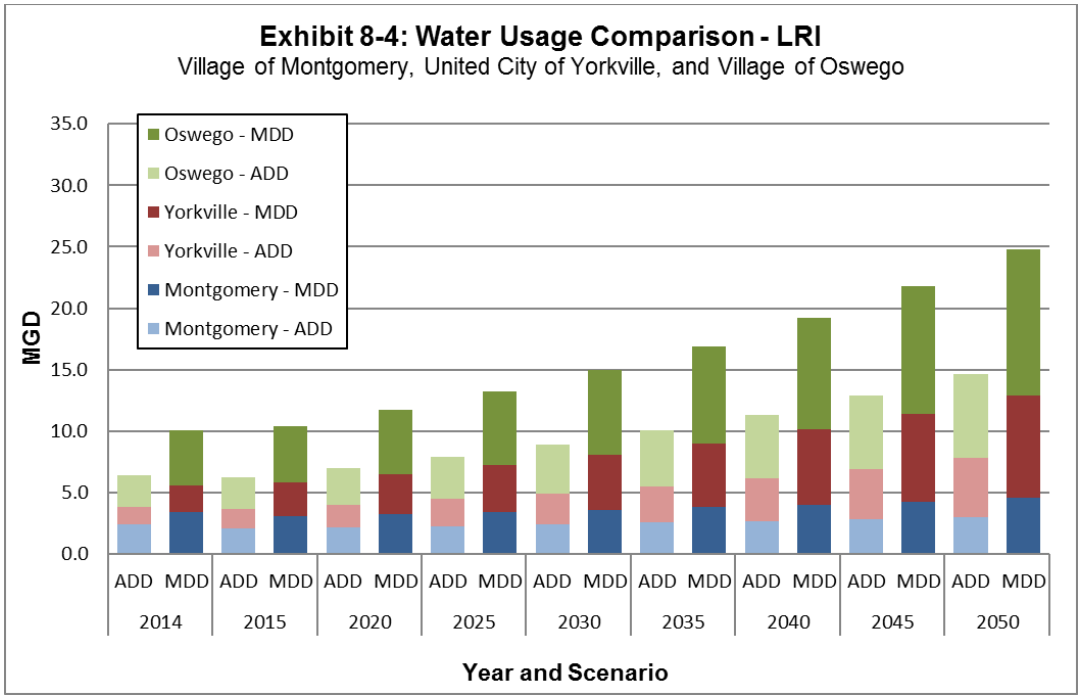


Table No. 8-2 below outlines the percent distribution of the ADD and MDD that is projected for each community. The percentage of usage between the communities does not differ significantly for any community between either the ADD or MDD or the CT and LRI values.

Table No. 8-2: Sub-Regional 2050 Water Use Projection Distribution

Village of Montgomery, United City of Yorkville, and Village of Oswego

Parameter	Water Works System			Total
	Montgomery	Yorkville	Oswego	
2050 CT WATER USE PROJECTION				
Average Day Demand				
Value (MGD)	3.78	5.36	8.19	17.33
% of Total	21.8%	30.9%	47.3%	--
Maximum Day Demand				
Value (MGD)	6.62	10.72	15.56	32.90
% of Total	20.1%	32.6%	47.3%	--
2050 LRI WATER USE PROJECTION				
Average Day Demand				
Value (MGD)	3.02	4.77	6.82	14.61
% of Total	20.7%	32.6%	46.7%	--
Maximum Day Demand				
Value (MGD)	4.54	8.34	11.94	24.82
% of Total	18.3%	33.6%	48.1%	--

8.4 Sub-Regional Existing Water Supply and Treatment Systems

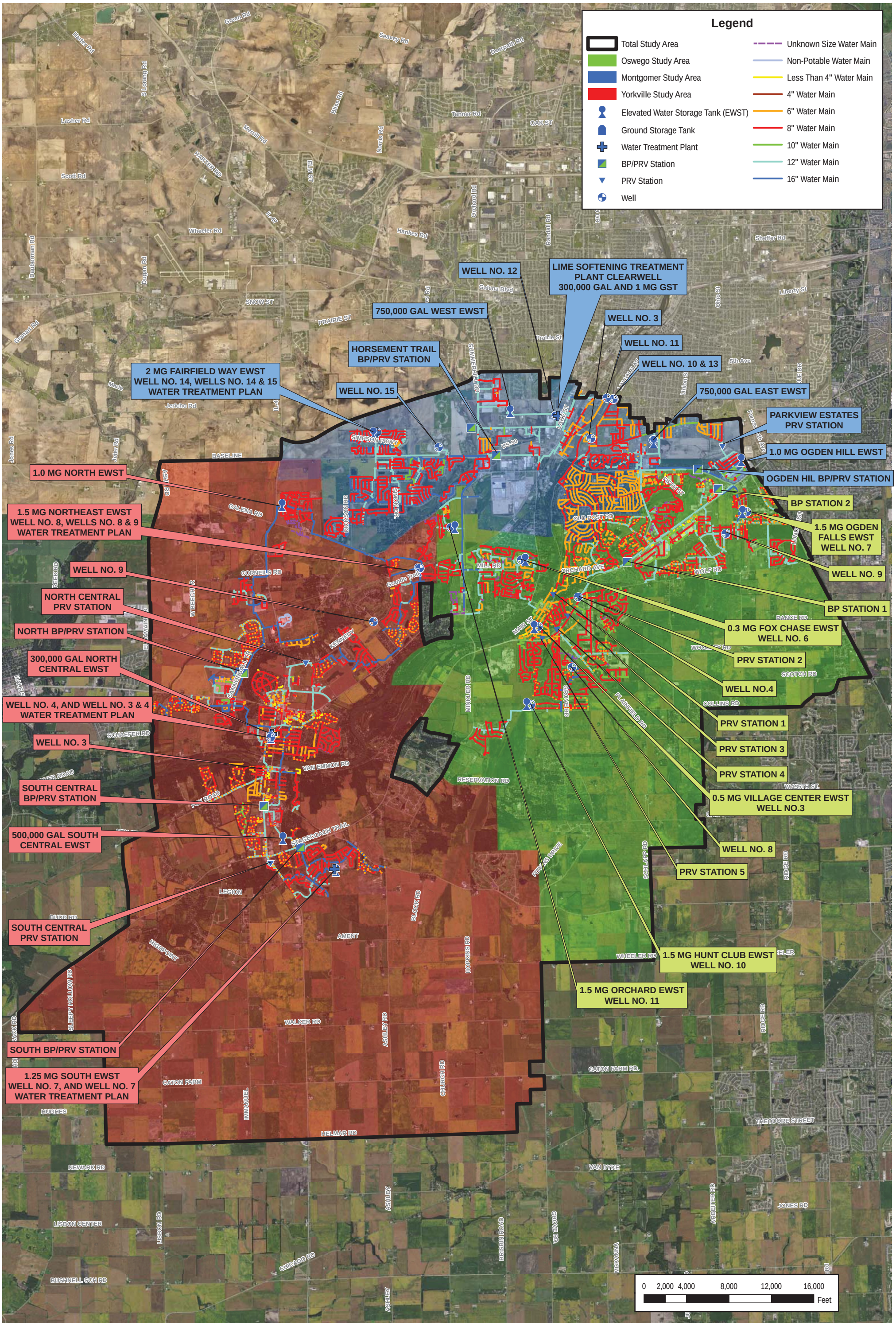
At the time of this study, the Village of Montgomery, United City of Yorkville and Village of Oswego all have supply and treatment systems that are adequate for their current needs. Exhibit 8-5 displays all existing water supply and treatment system infrastructure within the combined planning area. Sections 8.4.1, 8.4.2 and 8.4.3 outline the current sources, treatment and water quality within the sub-region.

8.4.1 Sub-Regional Supply Sources– The communities all currently use groundwater to meet their potable water needs.

A summary of each communities' water wells is as follows:

- Montgomery: two shallow sand and gravel wells, two shallow limestone wells and five deep sandstone Cambrian Ordovician wells
- Yorkville: five deep sandstone wells
- Oswego: eight deep sandstone wells

8.4.2 Sub-Regional Treatment Systems – As stated in the previous section, all of the communities currently obtain their drinking water from groundwater. The following list outlines the different water treatment systems that are used by the Village of Montgomery, United City of Yorkville and Village of Oswego.



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SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS
VILLAGE OF MONTGOMERY, ILLINOIS
UNITED CITY OF YORKVILLE, ILLINOIS
AND VILLAGE OF OSWEGO, ILLINOIS

EXHIBIT 8-5
EXISTING WATER WORKS SYSTEMS WITHIN THE SUB-REGION

- Montgomery has three WTPs
    - One CEWTP treats Wells No. 14 and 15 primarily for softening and radium removal
    - One CEWTP treats Well No. 8 primarily for softening and radium removal
    - One LSWTP treats Wells No. 3, 4, 10, 11, 12 and 13 primarily for softening and radium removal
- Yorkville has three WTPs
    - One CEWTP treats Wells No. 3 and 4 primarily for softening and radium removal
    - One CEWTP treats Well No. 7 primarily for softening and radium removal
    - One CEWTP treats Wells No. 8 and 9 primarily for softening and radium removal
- Oswego has eight WTPs
    - Eight radium selective ion exchange WTPs (leased from WRT) provide radium removal

8.4.3 Sub-Regional Existing Water Quality Summary – As stated in the previous section, all three communities withdraw water from deep sandstone wells; Montgomery also withdraws water from shallow sand and gravel wells and shallow limestone wells. Both the Village of Montgomery and United City of Yorkville take steps to remove radium and soften their water, but the Village of Oswego only removes the radium from the water and does not soften the water. Due to the relative proximity of the communities and the consistency of the deep aquifers, all the deep sandstone wells experience similar water quality.

8.5 Sub-Regional Fox River Withdrawal Considerations

The decision to have one Sub-Regional Fox River intake and water treatment plant used jointly by the Village of Montgomery, United City of Yorkville and Village of Oswego has several benefits and several challenges. One benefit of creating a Sub-Regional plant is that the communities would be able to save money on the operations and maintenance of the plant. A potential downside of creating a Sub-Regional plant would be the increased water transmission costs due to the need to build the plant in a convenient location for all three communities. This location may mean that the treated water would need to be pumped further than if each community built its own surface water treatment plant. However, a cost-effective Sub-Regional plan could only withstand one intake and WTP. The following sections identify the needed capacity and potential location for the Sub-Regional withdrawal.

8.5.1 Fox River Withdrawal Capacity – WTPs are sized to treat their maximum daily demand. As seen in Table No. 8-1, usage calculations for the communities determined that the sub-regional water demand for a current trends scenario would require a 32 MGD plant and a less resource intensive scenario would require a 25 MGD plant. The Fox River is capable of handling either withdrawal rate during normal flows. They have concluded the Fox River is a sustainable source of water for the Sub-Region. However, there will be times when the river baseflow drops below the permitted protected low flow (most likely would be set at the Q7,10 level at the withdrawal location). Sections 8.5.3 will address the backup water supply needs for the Sub-Regional System.

8.5.2 Potential Withdrawal Locations – Several locations were considered for the placement of the proposed Fox River Intake and Sub-Regional water treatment plant. Placing the WTP as close to equidistant from the main lines of each community's main distribution mains is important in order to 1) avoid placing an unfair burden on one community to provide a larger ratio of the raw and treated water transmission mains, and 2) ensure that the water age is not a factor for just one community. The location that meets this goal the best is in the Fox River/Orchard Road Intersection Corridor.

8.5.3 Backup Water Supply – As discussed, the risk of the Fox River flow dropping below the permitted protected low flow continues to reduce into the future, but there undoubtedly will be times when it will go below the permitted protected low flow. When those conditions exist, a backup water supply will be needed for the sub-region. The three communities have significant investment in water wells throughout the sub-region. Assuming the three communities limit their use of the deep aquifer to meet a minimum amount of their annual water demand and assuming Joliet switches to an alternate water supply source, the deep sandstone aquifer could be a reliable backup water source for the sub-region.

While the Fox River withdrawal and WTP will be sized to meet the maximum day demand, it would take a very large investment to set up the backup water supply network to meet the maximum day demand, too. Through discussions with each of the three communities' staff, it was decided the backup supply system would be sized to meet the 2050 Average Day Demand with the largest well being out of service. While it is understood the backup supply may be needed in times of higher demand (i.e. low flow conditions in the river likely will occur during a drought), the three communities would work to manage the water demands to fall inline with average day water uses so the costs for backup supply are more reasonable. With this target in mind, the target total flow rate of the wells that would be connected to the Sub-Regional WTP would be the CT and LRI ADD plus 1,200 gpm (the flow rate of the largest well that could be cost-effectively connected to the Sub-Regional WTP would be 400 gpm divided amongst each of the three communities). In the circumstance where the river withdrawal was limited or fully banned, the wells would pump to the Sub-Regional WTP. The WTP would distribute treated water of the same water quality as it would distribute when treating Fox River water.

When considering a Sub-Regional WTP near the Fox River/Orchard Road corridor, some of the three communities' wells can be cost-effectively pumped to that location while others are simply too expensive to connect. In an effort to balance an equitable distribution of a backup well network to the three communities, considering existing and potential additional wells, Tables No. 8-3 and 8-4 were created. Tables No. 8-3 and 8-4 summarize the CT and LRI backup water supply approaches, respectively. For both the CT and LRI scenarios, the existing wells which will not be connected to the Sub-Regional LSWTP will be abandoned in the far-future.

Under the CT scenario, two of the Village of Montgomery's existing wells and one new well would be connected. Two of the United City of Yorkville's existing wells and one additional new well would be connected in the CT scenario, as well. The Village of Oswego would connect four of their existing wells and add two new wells. One more additional well would be needed and the cost and utilization is 'split' between the Village of Montgomery and United City of Yorkville based on usage. This makes for a total of eight existing wells and five additional wells under the CT scenario.

Table No. 8-3: Backup Well Water Supply To Meet 2050 Average Day Demand - CT

Village of Montgomery, United City of Yorkville, Village of Oswego

Parameter	Water Works System						Total
	Montgomery		Yorkville		Oswego		
2050 CT WATER USE PROJECTION							
Average Day Demand (MGD)	3.78		5.36		8.19		17.33
Average Day Demand (gpm)	2,625		3,723		5,687		12,035
Average Day Demand With 400 gpm extra (gpm)	3,025		4,123		6,087		13,235
Wells To Be Connected To WTP							
	Well No.	Rate (gpm)	Well No.	Rate (gpm)	Well No.	Rate (gpm)	
	14	1,000	6	1,000	6	1,000	
	15	1,000	8	1,200	8	1,000	
	17	1,000	9	1,200	10	1,200	
	SR-1*	25	SR-1*	723	11	1,200	
	Total:	3,025	Total:	4,123	12	1,000	
					13	1,000	
					Total:	6,400	

Notes:
*Portion of new well SR-1; 96.7% for Yorkville & 3.3% for Montgomery

For the LRI scenario, the Village of Montgomery and United City of Yorkville would connect two existing wells and add one additional well, each. Oswego would connect the same four existing wells that were utilized under the CT scenario, but would not need to drill another one independently. Finally, a Sub-Regional well is once again added but this time its usage is split between the communities of Yorkville and Oswego.

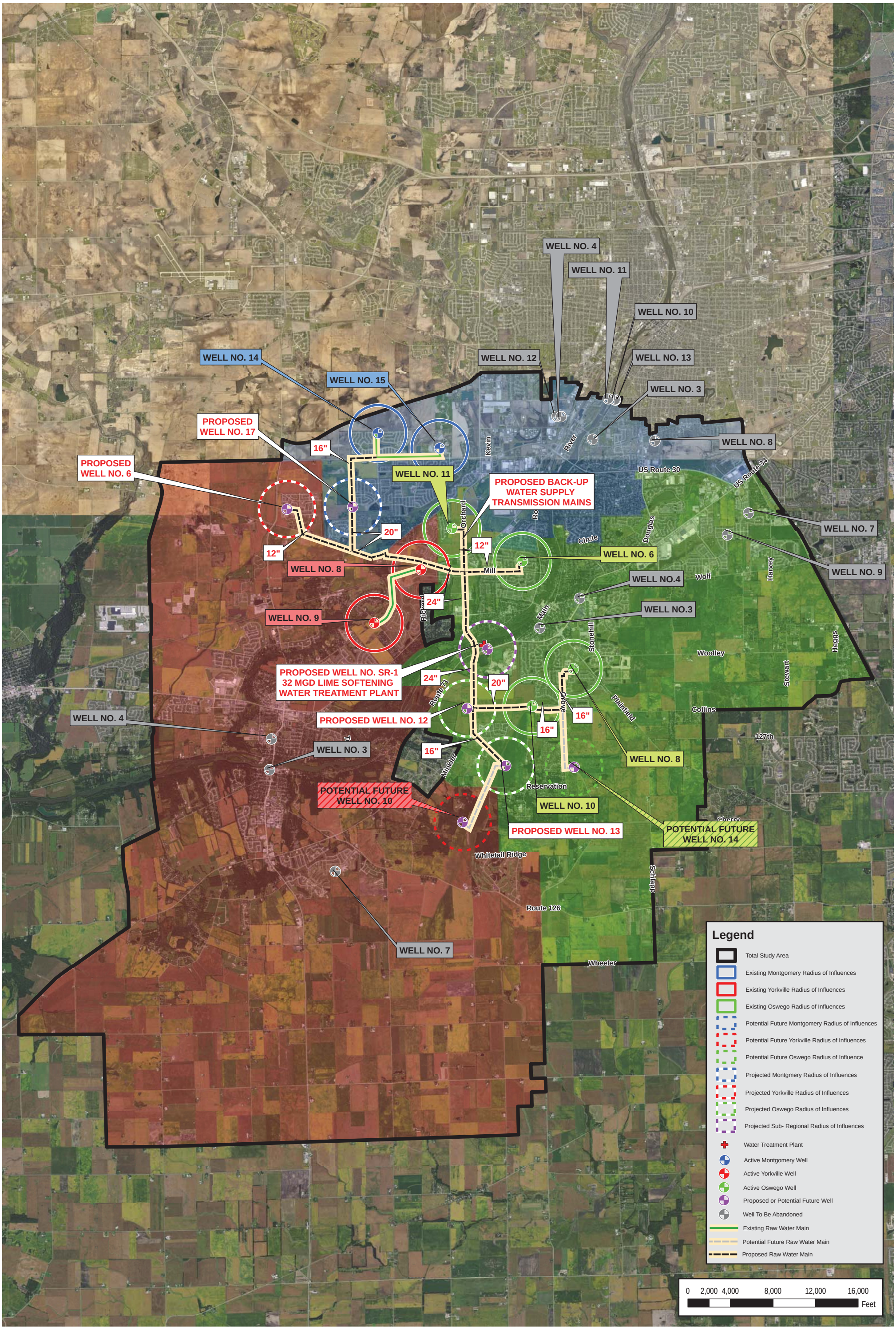
Table No. 8-4: Backup Well Water Supply To Meet 2050 Average Day Demand - LRI

Village of Montgomery, United City of Yorkville, Village of Oswego

Parameter	Water Works System						Total
	Montgomery		Yorkville		Oswego		
2050 LRI WATER USE PROJECTION							
Average Day Demand (MGD)	3.02		4.77		6.82		14.61
Average Day Demand (gpm)	2,100		3,309		4,739		10,149
Average Day Demand With 400 gpm extra (gpm)	2,500		3,709		5,139		11,349
Wells To Be Connected To WTP							
	Well No.	Rate (gpm)	Well No.	Rate (gpm)	Well No.	Rate (gpm)	
	14	1,000	6	1,000	6	1,000	
	15	1,000	8	1,200	8	1,000	
	17	1,000	9	1,200	10	1,200	
	Total:	3,000	SR-1*	309	11	1,200	
			Total:	3,709	SR-1*	739	
					Total:	5,139	

Notes:
*Portion of new well SR-1; 29.5% for Yorkville & 70.5% for Oswego

Exhibit 8-6 displays the proposed transmission main network for the backup water wells for the CT water use scenario. Exhibit 8-7 summarizes the backup transmission network for the LRI water use scenario. Both exhibits also display the Sub-Regional WTP, existing and proposed wells, and other infrastructure associated with each scenario.



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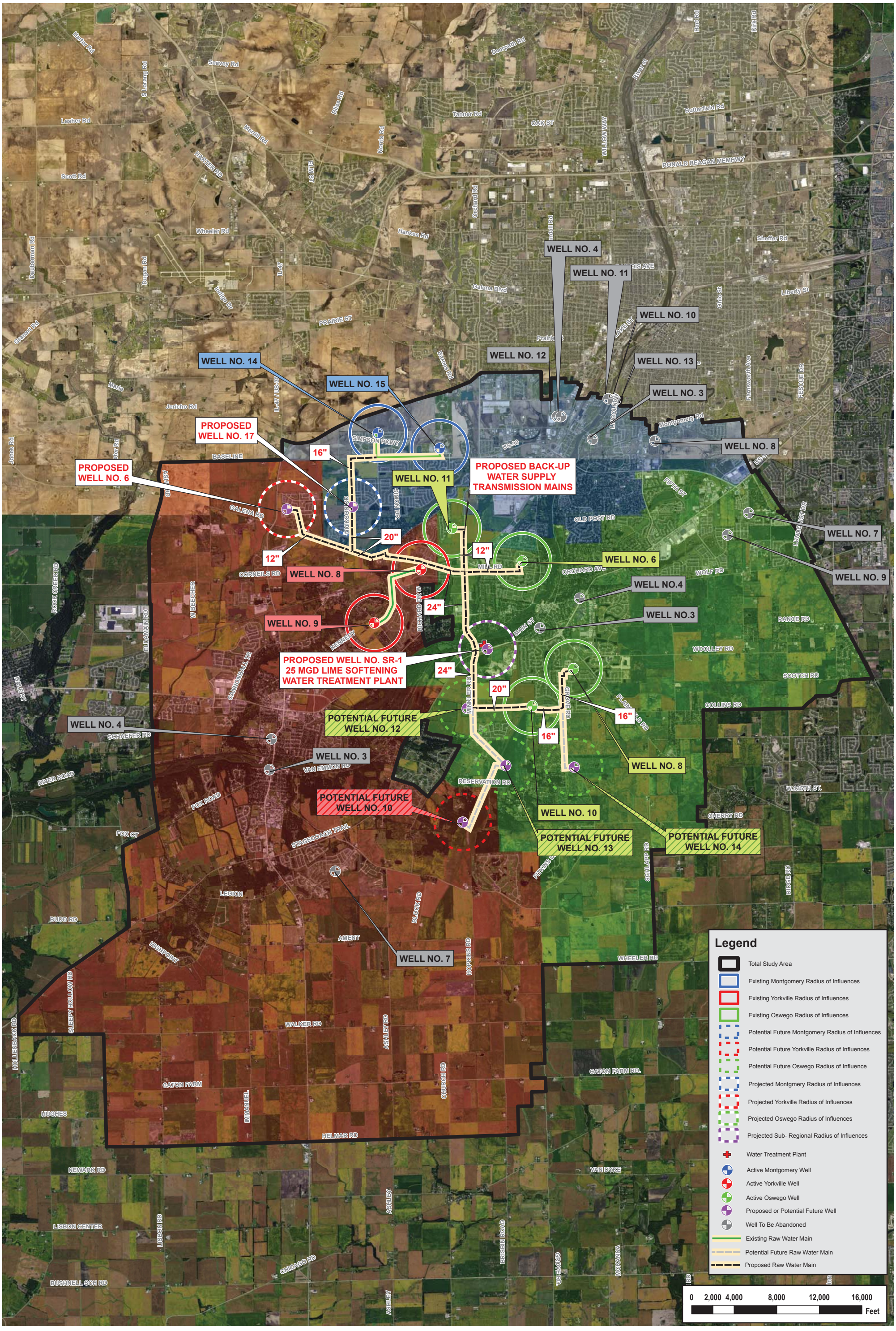
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SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS
VILLAGE OF MONTGOMERY, ILLINOIS
UNITED CITY OF YORKVILLE, ILLINOIS
AND VILLAGE OF OSWEGO, ILLINOIS

EXHIBIT 8-6
SUB-REGIONAL BACKUP WATER SUPPLY TRANSMISSION NETWORK - CT

NORTH



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SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS
VILLAGE OF MONTGOMERY, ILLINOIS
UNITED CITY OF YORKVILLE, ILLINOIS
AND VILLAGE OF OSWEGO, ILLINOIS

EXHIBIT 8-7
SUB-REGIONAL BACKUP WATER SUPPLY TRANSMISSION NETWORK - LRI

NORTH

8.6 Fox River Treatment Options

Fox River water quality data from both Elgin and Aurora were reviewed to determine the design constraints for the Sub-Regional surface water treatment plant. The hardness as averaged between all four seasons is 336 mg/L as $CaCO_3$ which is considered to be 'very hard'. Very hard water can diminish the effectiveness of detergents, stain surfaces and have other bothersome characteristics. The target hardness for the WTP effluent is 100-130 mg/L as $CaCO_3$, which is considered to be on the borderline of moderate to hard water, and which is consistent with the current finished water hardness within the Village of Montgomery and United City of Yorkville Water Works Systems.

8.6.1 Conventional Lime Softening – Lime softening is a common and cost effective way to treat both surface water and groundwater. Lime softening not only removes hardness, it can remove microorganisms and dissolved organic matter. When hydrated lime [Ca(OH)2] or quicklime (CaO) is added to raw water, the lime reacts with the calcium and magnesium particles. Due to the larger size of the particles and the increased pH of the water, the particles settle out taking the cations causing hardness with them.

Single-stage and two-stage lime softening is often considered to treat hard or very hard water. In single-stage treatment, lime is added to raise the pH above 10.3 and remove calcium. Two-stage treatment removes both calcium and magnesium by raising the pH to about 11-11.3 in the first stage to remove magnesium, then lowering the pH in the second stage to remove calcium. While two-stage processes often produce a better finished water quality than single stage and generally cost less to operate, they are typically more expensive to build. Because the magnesium hardness does not prove to be a large amount of the Fox River water hardness, single stage lime softening would be sufficient.

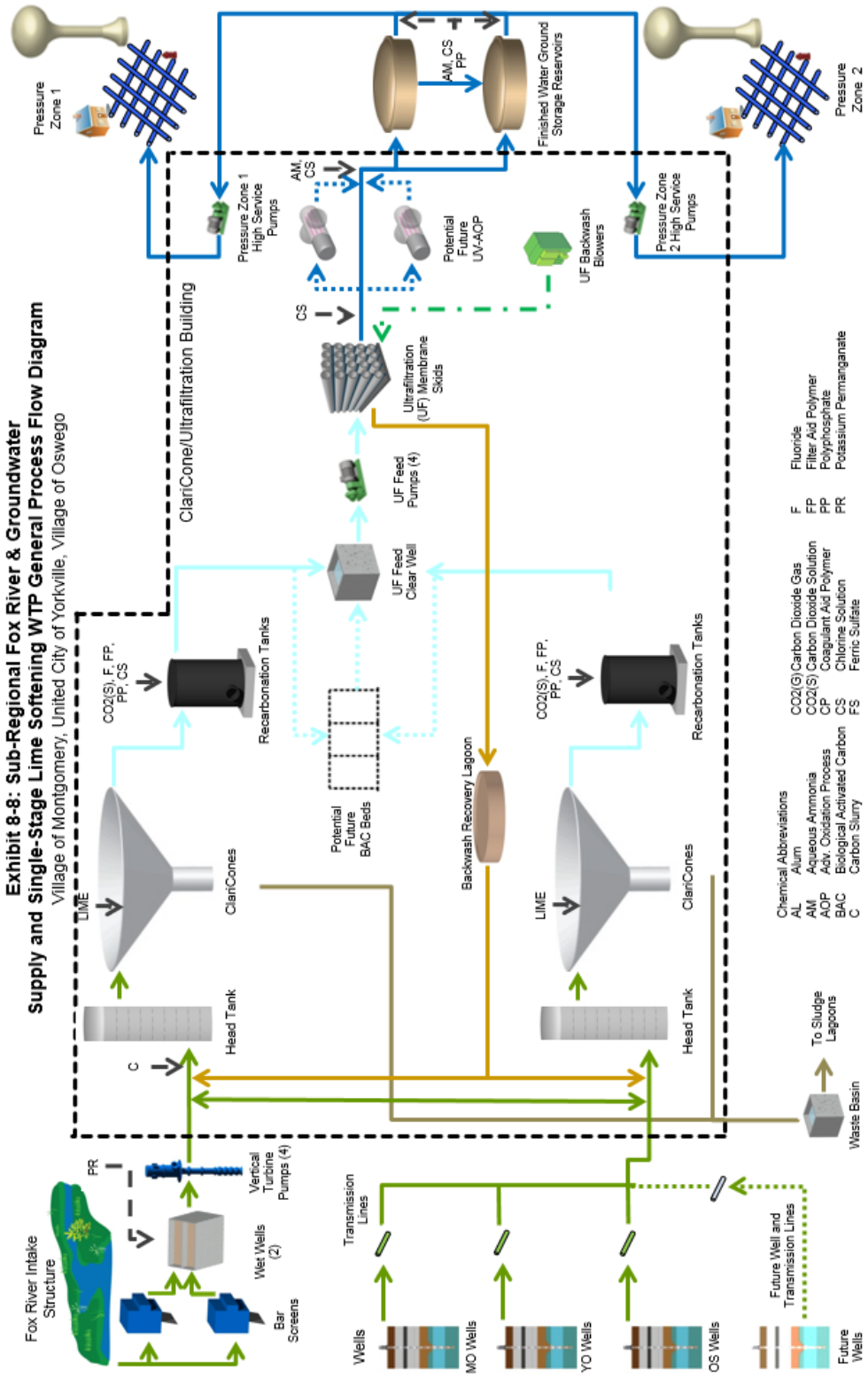
As discussed in Section 6, it was determined a single stage upflow clarifier, such as a Claricone, would be the most cost effective treatment option for the Sub-Regional WTP.

8.6.2 Membrane Treatment – Membrane treatment is the filtration of water by passing (in some cases with the help of gravity and in some cases with the help of a pump) water through a membrane which has very small pores. Any contaminants which do not fit through the pores will be prevented from passing through the membrane; thus, the effluent leaving the membrane will theoretically be free of all contaminants which are too large to pass through the pores. Membranes are often used later in the treatment train as a polishing step.

When using membrane technology, it can be useful to install the membranes using 'skids'. Skids allow for the membranes to take up a relatively small amount of square footage in the treatment areas. Additionally, skids allow the membranes to be installed quickly and cost effectively.

8.6.3 Lime Softening & Membrane Treatment – A combination of lime softening and membrane treatment has been selected for the Sub-Regional WTP. Although the ClariCones would theoretically remove many of the contaminants, the ultrafiltration membranes would catch many of the particles that wouldn't be removed by the lime softening process. Powder activated carbon would be added to the treatment process to further removal unwanted contaminants. Exhibit 8-8 displays the proposed general process flow diagram for both the CT and LRI water use scenarios.

EPA regulations regarding drinking water can change based on discovery of the effects contaminants can have on human health as well as pollution concentration levels water systems can attain by using the best available technology. While some 'near-future' regulations are well known, the EPA will likely continue to update regulations up to and through 2050. It is vital to consider potential future regulations in the design and layout of the WTP to avoid costly modifications in the future. For this reason, the design of the WTP should consider the addition of both biologically activated carbon (BAC) beds and ultra violet-advanced oxidation process (UV-AOP) treatment.


Exhibit 8-8: Sub-Regional Fox River & Groundwater
Supply and Single-Stage Lime Softening WTP General Process Flow Diagram
Village of Montgomery, United City of Yorkville, Village of Oswego
ClariCone/Ultrafiltration Building
Pressure Zone 1
Pressure Zone 2
Finished Water Ground Storage Reservoirs
AM, CS
PP
Pressure Zone 1 High Service Pumps
Pressure Zone 2 High Service Pumps
Potential Future UV-AOP
UF Backwash Blowers
CS
Ultrafiltration (UF) Membrane Skids
UF Feed Pumps (4)
UF Feed Clear Well
Recarbonation Tanks
CO2(S), F, FP, PP, CS
Potential Future BAC Beds
Backwash Recovery Lagoon
LIME
ClariCones
Head Tank
C
To Sludge Lagoons
Waste Basin
Chemical Abbreviations
AL Alum
AM Aqueous Ammonia
AOP Adv. Oxidation Process
BAC Biological Activated Carbon
C Carbon Slurry
CO2(G) Carbon Dioxide Gas
CO2(S) Carbon Dioxide Solution
CP Coagulant Aid Polymer
CS Chlorine Solution
FS Ferric Sulfate
F Fluoride
FP Filter Aid Polymer
PP Polyphosphate
PR Potassium Permanganate
PR
Vertical Turbine Pumps (4)
Wet Wells (2)
Bar Screens
Fox River Intake Structure
Transmission Lines
Future Well and Transmission Lines
Wells
MO Wells
YO Wells
OS Wells
Future Wells

8.7 Sub-Regional Water Distribution Evaluation

As stated previously in section 8, the proposed location for the Sub-Regional Water Treatment Plant is near the intersection of the Fox River and Orchard Rd. This area is centrally located between all three communities, which will allow for cost savings related to the transmission mains.

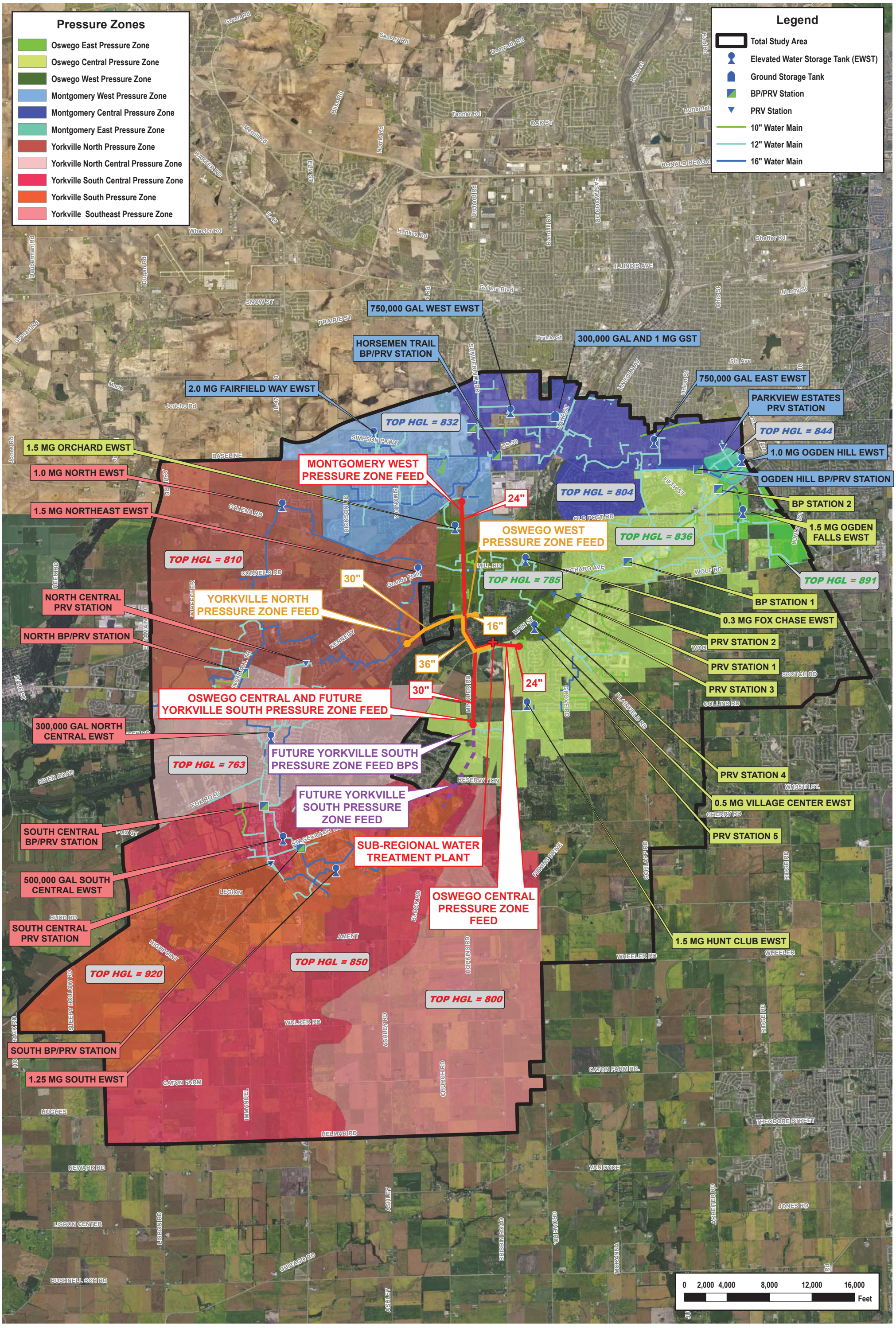
8.7.1 Transmission Mains – Exhibit 8-9 summarizes the proposed layout of the surface water transmission system for both the CT and LRI scenarios. The goals for locating and sizing the treated water transmission lines were as follows:

- Meet the HGL of as many of each of the communities' pressure zones with a minimal number of pump galleries needed at the WTP
- Minimize the length of pipe
- Provide redundancy (i.e. multiple connections) to each of the systems where cost-effectively feasible
- Size the pipes to meet the maximum day demand in 2050 with reasonable velocity and head loss

When evaluating the hydraulic grade lines of each community, it became apparent that the Village of Montgomery's West Pressure Zone Top HGL (Elevation = 832) and the Village of Oswego's Central Pressure Zone Top HGL (Elevation = 836) were very similar. It also became apparent that the United City of Yorkville's North Pressure Zone HGL (Elevation of 810) and the Village of Oswego's West Pressure Zone HGL (Elevation of 785) were similar, too. Therefore, the transmission main network would be set up with two pumping galleries that pump into two separate transmission main networks.

The High Transmission Main Network, the red pipeline on Exhibit 8-9 would transmit water to the Village of Montgomery through a route along Orchard Road. The High Transmission Main Network also would transmit water to the Village of Oswego's Middle Pressure Zone at the two proposed connection points on Exhibit 8-9. The Low Transmission Main Network, the orange pipeline on Exhibit 8-9, would transmit water to the United City of Yorkville through a connection along Route 34. It also would connect to the Village of Oswego's West Pressure Zone through a connection near Route 34. Finally, a future connection to the south side of the United City of Yorkville's system is planned through an extension of the High Transmission Main down Minkler Road. Given the higher HGL of the United City of Yorkville's South Pressure Zone, a booster pump station also will need to be added along that line.

Based on the initial plan, there are three transmission main connection points identified for the Village of Oswego and then one for both for the United City of Yorkville and Village of Montgomery. A second connection is planned for the United City of Yorkville at an appropriate time in the future. Unfortunately, there is no cost-effective route to provide a second connection to the Village of Montgomery. In lieu of constructing a very expensive second connection, it would be much better if the Village of Montgomery and Village of Oswego work on setting up additional interconnects within their distribution systems. For that matter, it would seem beneficial for all three communities to work together on interconnects, just in case issues arise within the transmission network.



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DATE:	JANUARY 2017
PROJECT NO.:	YO1437
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2014\
FILE:	YO1437_EXH8-9 OSG,YORK,MON

SUB-REGIONAL WATER SUPPLY AND TREATMENT ANALYSIS
VILLAGE OF MONTGOMERY, ILLINOIS
UNITED CITY OF YORKVILLE, ILLINOIS
AND VILLAGE OF OSWEGO, ILLINOIS

EXHIBIT 8-9
WATER DISTRIBUTION PLANNING
EXHIBIT - CT AND LRI

NORTH

8.7.2 United City of Yorkville Distribution Upgrades – The United City of Yorkville currently distributes their water using a 'decentralized system' due to the fact that each of the WTPs is producing water and adding the water to the distribution system at their respective locations in the City. In the proposed Sub-Regional scenario, the Sub-Regional treated water would be transmitted into the system on the northeast side of the system. All of the distribution upgrade information to be able to effectively distribute the water throughout the system to meet peak demands was summarized in Section 6.

8.8 Sub-Regional Costs

Cost estimates were developed for the water supply, treatment and transmission of the water. A summary of the CT and LRI cost estimates for the Alternate 3 scenario can be found in Table 8-5. The detailed Sub-Regional cost estimates are included in Appendix G.

The Sub-Regional costs were split several different ways in the cost scenarios based off the design parameter of the specific improvement. Because the capacity of the LSWTP is sized to meet the maximum day demand scenario, the costs were split based on the ratio of each community's MDD to the Sub-Regional MDD. The capacities of the backup raw water wells and raw water transmission mains were designed to meet the average day demand and therefore the costs were split based on the ratio of each community's ADD to the Sub-Regional ADD. Costs specific to each community were paid for by each community and if there was an odd ratio, such as with the Sub-Regional Well, the ratio was split based on usage. Finally, costs that were not capacity dependent, such as pilot testing, were split equally. When applicable, the cost tables, exhibits and appendices make note of how the costs are split using the superscripts A, M, R and E to show costs split by ADD ratios, MDD ratios, ratios based on use and evenly split costs, respectively.

Table No.8-5: Water Works System Master Plan Cost Estimate Summary

United City of Yorkville, IL

Impr. No.	Improvement	Capital Cost	Annual O&M		Total 20-Year Present Worth
			Annual Cost	20-Year Present Worth	
Alternate No. 3A: Sub-Regional Fox River Intake with ClariCone LSWTP & Existing DSS Water Wells - CT					
3A-CT-1	Well No. 6	$2,419,000	$73,832	$847,000	$3,266,000
3A-CT-2	Well No. SR-1[r]	$2,339,000	$71,396	$819,000	$3,158,000
3A-CT-3	32 MGD Fox River Intake Pump Station[m]	$2,389,000	$92,727	$1,064,000	$3,453,000
3A-CT-4	32 MGD Single Stage (ClariCone) LSWTP[m]	$24,290,000	$1,362,227	$15,625,000	$39,915,000
3A-CT-5	Well Transmission Mains[a]	$9,616,000			$9,616,000
3A-CT-6	Treated Water Transmission Mains	$12,990,000			$12,990,000
		$54,043,000	$1,600,181	$18,355,000	$72,398,000
3A-CT-7	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
3A-CT-8	Water Distribution System Improvements	$22,561,000			$22,561,000
		$27,431,000	$50,000	$573,000	$28,004,000
		$81,474,000	**$1,650,181**	**$18,928,000**	**$100,402,000**
Alternate No. 3B: Sub-Regional Fox River Intake with ClariCone LSWTP & Existing DSS Water Wells - LRI					
3B-LRI-1	Well No. 6	$2,419,000	$70,813	$812,000	$3,231,000
3B-LRI-2	Well No. SR-1[r]	$714,000	$20,890	$240,000	$954,000
3B-LRI-3	25 MGD Fox River Intake Pump Station[m]	$2,161,000	$85,088	$976,000	$3,137,000
3B-LRI-4	25 MGD Single Stage (ClariCone) LSWTP[m]	$21,886,000	$1,258,998	$14,441,000	$36,327,000
3B-LRI-5	Well Transmission Mains[a]	$9,298,000			$9,298,000
3B-LRI-6	Treated Water Transmission Mains	$12,990,000			$12,990,000
		$49,468,000	$1,435,789	$16,469,000	$65,937,000
3B-LRI-7	2.0 MG EWST	$4,870,000	$50,000	$573,000	$5,443,000
3B-LRI-8	Water Distribution System Improvements	$22,561,000			$22,561,000
		$27,431,000	$50,000	$573,000	$28,004,000
		$76,899,000	**$1,485,789**	**$17,042,000**	**$93,941,000**

Notes:

All values based on 2016 construction costs

a. Cost shown is portion of total cost based off of Average Daily Demand (CT: 21.8% for Montgomery, 30.9% for Yorkville, 47.3% for Oswego; LRI: 20.7% for Montgomery, 32.6% for Yorkville; 46.7% for Oswego).

m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).

r. Cost shown is portion of total cost based off of ratio of usage - For the SR-1 well, the ratios are as follows: (CT: 3.3% for Montgomery, 96.7% for Yorkville, 0% for Oswego; LRI: 0% for Montgomery, 29.5% for Yorkville; 70.5% for Oswego).

8.8.1 Sub-Regional Current Trends Water Use Scenario Costs– Table No. 8-5 displays the summary of the cost estimate for the CT scenario. The detailed cost estimates for the CT Water Use Scenario can be found in Appendix G.

The CT scenario includes the addition of two backup wells along with their transmission mains, the Sub-Regional intake station and LSWTP and the treated water transmission mains. As documented in Table No. 8-2, the United City of Yorkville is projected to account for 30.9% of the total Sub-Regional water demand under the ADD CT scenario and 32.6% of the total Sub-Regional water demand under the MDD CT scenario. The United City of Yorkville would need to fund 96.7% of the flow from the Sub-Regional well in this scenario.

The costs shown in Table No. 8-5 represent the estimated total which includes the engineering, legal and contingency costs. The capital costs for the CT scenario are approximately $81.5 million. Approximately 33% of the capital cost, $26.7 million, is the cost for the intake pump station and the 32 MGD LSWTP. Approximately 18% of the total cost, $14.4 million, consists of the two new wells and the well transmission

mains. The treated water transmission mains, distribution improvements and storage additions make up approximately the last 49% of the current trends capital cost at a cost of $40.4.

8.8.2 Sub-Regional Less Resource Intensive Water Use Scenario Costs – Table No. 8-5 displays the summary of the cost estimate for the LRI scenario. The detailed cost estimates for the LRI Water Use Scenario can be found in Appendix G.

The LRI scenario includes the addition of one backup well for the United City of Yorkville and one Sub-Regional backup well, which is also added to meet the Village of Oswego demands, the Sub-Regional Fox River intake, the LSWTP and the treated water transmission and distribution mains. As documented in Table No. 8-2, the United City of Yorkville is projected to account for 32.6% of the total Sub-Regional water demand under the ADD LRI scenario and 33.6% of the total Sub-Regional water demand under the MDD LRI scenario. In the LRI scenario, the United City of Yorkville also is projected to account for 29.5% of the output from the Sub-Regional backup well. The Village of Oswego would account for the other 70.5% of the output from the well.

The capital costs for the less resource intensive scenario are around $76.9 million. Approximately 31% of the capital cost, $24.0 million, is the cost for the intake pump station and the 25 MGD LSWTP. 16% percent of the total cost, $12.4 million, consists of the backup infrastructure of the two new wells and the well transmission mains. The treated water transmission mains, storage additions, and water distribution system improvements make up approximately the last 53%, $40.4 million, of the less resource intensive capital cost.

8.8.3 Sub-Regional Transmission Main Costs – The transmission main costs above can be found in Table No. 8-5 and the transmission main routes can be seen in Exhibit 8-9. The cost for the well transmission mains varies between the CT and LRI scenario due to the raw water main that would need to be constructed if the Village of Oswego Well No. 13 is connected to the LSWTP. The treated water transmission mains are identical in both scenarios. The detailed cost estimates for the transmission mains can be found in Appendix G.

The internal distribution improvements required under the Sub-Regional approach, and the costs for them, were presented in Section 7. The costs are added to the other system implementation costs below.

8.8.4 United City of Yorkville Sub-Regional Improvement Costs Summary – The capital cost difference between the current trends scenario and less resource intensive scenario for the United City of Yorkville is $4,575,000, so the City would be able to save over $4.5 million in capital costs by reducing their water usage. Recurring operations and maintenance costs would also contribute to a monetary difference between the CT and LRI scenarios.

8.8.5 Sub-Regional LRI Improvement Costs Summary – Table No. 8-6 outlines the capital cost distribution for the Sub-Regional water supply, treatment and distribution assuming all three communities follow the less resource intensive scenario. This table combines the LRI values for each community for the Sub-Regional W TP. The minimum internal distribution system improvements that would also be needed in order to incorporate the WTP are outlined for Montgomery and Yorkville. It should be noted the minimum internal distribution improvements for the Village of Oswego were not analyzed as part of the scope of this project. It is assumed the Village of Oswego will complete that analysis in the near future.

Table No. 8-6: Sub-Regional Capital Cost Distribution - LRI

Village of Montgomery, United City of Yorkville, Village of Oswego

Parameter	Water Works System			Total
	Montgomery	Yorkville	Oswego	
Additional Wells[r]	$2,419,000	$3,133,000	$1,705,000	$7,257,000
Well Transmission Main Network[a]	$5,904,000	$9,298,000	$13,319,000	$28,521,000
Fox River Intake & LSWTP[m]	$13,097,000	$24,047,000	$34,424,000	$71,568,000
Treated Water Transmission Main Network	$10,219,000	$12,990,000	$6,966,000	$30,175,000
Supply & Treatment Subtotal:	$31,639,000	$49,468,000	$56,414,000	$137,521,000
Minimum Internal Distribution System Impr.	$13,565,000	$18,055,000	*	
Total:	**$45,204,000**	**$67,523,000**		

Notes:
*Detailed modeling has not been completed to define the necessary distribution system improvements for the Village of Oswego WWS.
a. Cost shown is portion of total cost based off of Average Daily Demand (CT: 21.8% for Montgomery, 30.9% for Yorkville, 47.3% for Oswego; LRI: 20.7% for Montgomery, 32.6% for Yorkville; 46.7% for Oswego).
m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).
r. Cost shown is portion of total cost based off of ratio of usage - For the SR-1 well, the ratios are as follows: (CT: 3.3% for Montgomery, 96.7% for Yorkville, 0% for Oswego; LRI: 0% for Montgomery, 29.5% for Yorkville; 70.5% for Oswego).

8.9 Sub-Regional Cost Analysis

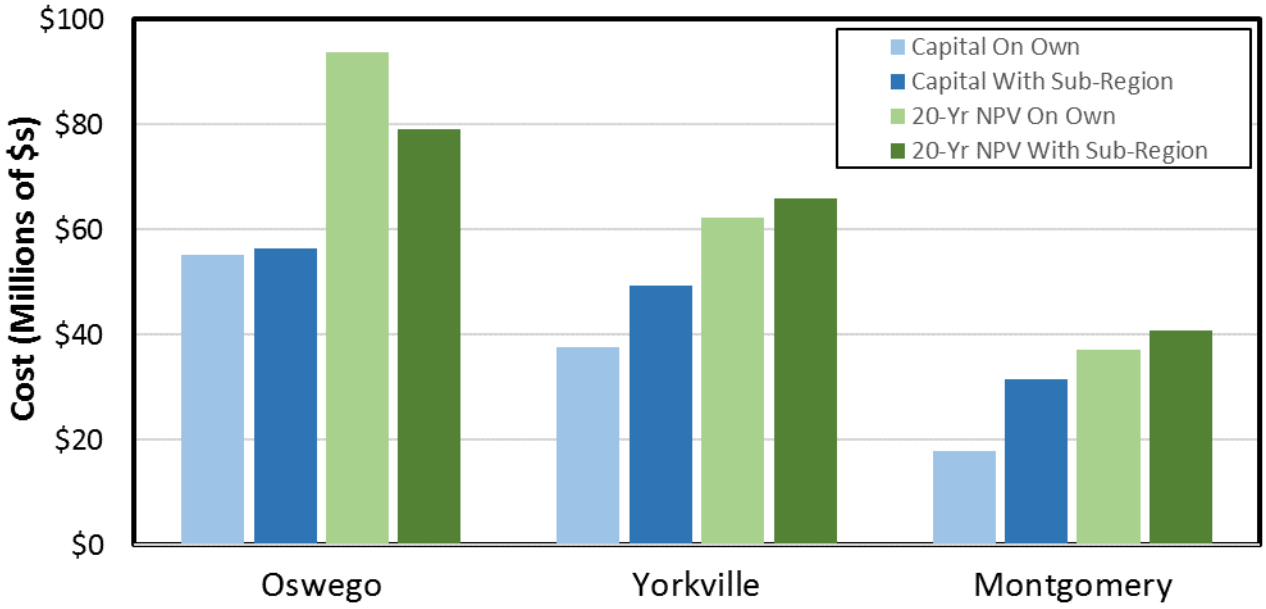
Subsection 8.9.1 compares the cost of the Sub-Regional WTP for each community as compared to the cost each community utilizing their own WTP system. Subsection 8.9.2 compares the projected water bills for Montgomery, Yorkville and Oswego to other local communities which utilize surface water treatment systems.

8.9.1 Fox River Alternatives Comparison – Exhibit 8-10 outlines the comparative costs for each of the communities to construct their own WTP, which withdraws water from the Fox River, as compared to the cost of each community constructing their own WTP for the Fox River. This exhibit takes into account the

recurring operations and maintenance costs as part of a net present value (NPV). The capital cost to implement their own system is lower for each community than to implement the Sub-Regional WTP. The 20-year NPV cost between the two options is very close for both Montgomery and Yorkville. The NPV difference beyond 20 years will continue to decrease over time, and there will be a cost savings for Montgomery and Yorkville participating in a Sub-Regional solution shortly after the 20-year time period. For Oswego, however, the 20-year NPV to implement their own WTP is much higher than utilizing a Sub-Regional WTP.

Exhibit 8-10: Capital & Net Present Value Cost Comparison - Supply, Treatment and Transmission - LRI

Village of Montgomery, United City of Yorkville, Village of Oswego



8.9.2 Projected Water Supply & Treatment Water Bill Comparison – In order to compare the projected cost of water under the scenario where Montgomery, Yorkville and Oswego would utilize a Sub-Regional WTP, a sample water bill that represents the usage of an average house was created for each community. Table No. 8-7 below outlines the sample monthly water bills for both the present and projected cost for each of the communities. This water bill assumes 7,000 gallons of billed water, which would be the equivalent of a 2.9-person household using 80 gpcd. Additionally, the sample water bill assumed a 40-year bond was used to pay for the capital costs for the Sub-Regional WTP upgrades and the bond was issued at a 4.0% interest rate.

Under the 2025 projected costs, the time period when the Sub-Regional improvements could be completed, the sample water bill for a typical 2.9-person household would be $37.40 for Montgomery, $50.51 for Yorkville and $41.36 for Oswego. The rates were calculated by assuming that the monthly base rate would be utilized only to cover the bond payment and the cost based on volume of water used would be charged based on the operations and maintenance costs.

Table No. 8-7: Water Works System Master Plan Water Rates Analysis - LRI

Village of Montgomery, United City of Yorkville, Village of Oswego

	Montgomery		Yorkville		Oswego	
	2015	2025	2015	2025	2015	2025
Population & Historical & Projected Water Billing Metrics						
Population	28,346	31,623	19,804	27,126	34,820	45,817
No. of Water Bills	9,175	10,236	6,400	8,766	11,100	14,606
Ratio of Population to No. of Bills	3.09	3.09	3.09	3.09	3.14	3.14
Calculated Average Daily Water Use (MGD)[ζ]	2.551	2.530	1.782	2.170	3.134	3.665
Annual Water Billed (MG)	624.68	619.46	421.37	513.03	766.82	896.89
Avg. Annual Water Billed (MGD)	1.711	1.697	1.154	1.406	2.101	2.457
Ratio of Water Use to Water Billed	1.491	1.491	1.544	1.544	1.492	1.492
2015 Total Water Billings ($)[τ]	$3,432,154.25		$2,150,311.65		$3,520,196.80	
2015 Normalized Water Rate ($/1000 Gal)[ψ]	$5.49		$5.10		$4.59	
2015 Base Water Rate ($16 for 350 CF)	--		$16.00		--	
2015 Actual Water Rate ($/1000 Gal)[π]	$5.30		$4.88		$4.04	
2015 Service Charge	$4.00		--		$6.34	
2015 Monthly Water Cost For Typical Residential User[θ]	$39.10	$52.55	$37.38	$50.24	$31.45	$42.27
Alternate No. 3B: Sub-Regional Fox River Intake with ClariCone LSWTP & Existing DSS Water Wells - LRI Cost Summary						
Sub-Regional Capital Cost[α]	$31,639,000	$38,911,979	$49,468,000	$60,839,400	$56,414,000	$69,382,104
Sub-Regional Annual O&M[κ]		$1,903,453		$1,576,412		$2,755,907
Capital Cost Debt Service Calculation						
No. of Payments (40-Yr Bond)		480		480		480
Annual Interest Rate		4.0%		4.0%		4.0%
Monthly Payment[μ]		$162,628		$254,271		$289,975
Potential Service Charge Options						
Monthly Debt Service Charge per User		$15.89		$29.01		$19.85
Water Rate ($/1000 Gal) To Cover Annual O&M Cost		$3.07		$3.07		$3.07
Estimated 2025 Monthly Water Supply & Treatment Cost[θ]		$37.40		$50.51		$41.36

Notes:

[ζ] 2015 Averge Daily Water Use computed with 2015 population X 90 gpcd; 2025 Average Daily Water Use computed with 2025 population X 80 gpcd

[τ] Montgomery and Yorkville are total revenue amounts; Total revenue for Oswego is calculated based on billed units and a bimonthly service charge of $6.34 per water bill

[ψ] Total revenue divided by number of units sold; Does not account for any base charges

[π] Actual water rate in 2015; Does not include service charge(s)

[θ] Based on 7,000 gallons of monthly water use; 2025 estimated water bill based on 3% inflation for 10 years

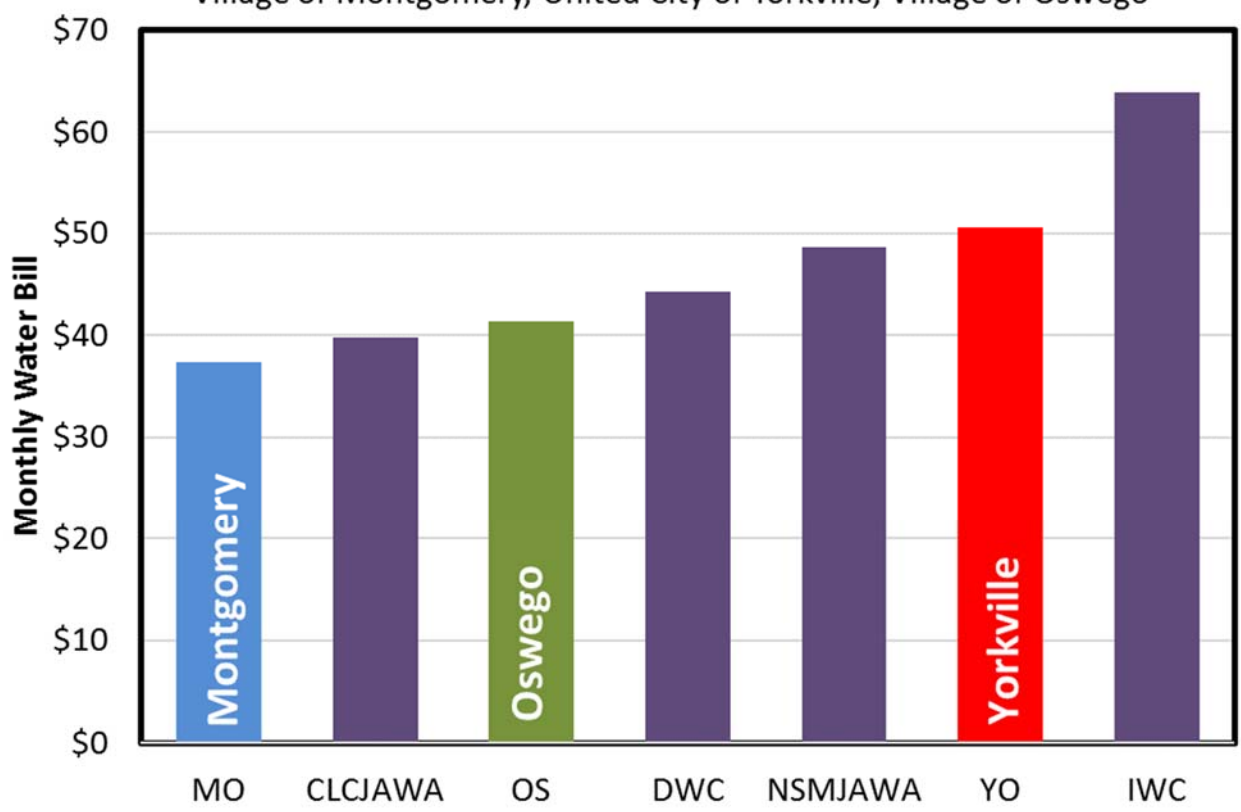
[α] Combined water supply, treatment, treated water transmission main; 2016 costs inflated 3% for 7 years for 2025 final costs (bid project in 2023)

[κ] Annual 2015 O&M cost is $0.25 M for Pump Station, $3.75 M for WTP and $0.78 M total for all backup wells. Costs distributed based on portion of 2025 water use.

[μ] Capital Cost Only

Exhibit 8-11 outlines the projected typical residential water bill for each of the three communities as compared to local communities that use Lake Michigan water. Many communities who jointly use surface water do so through a JAWA. As Exhibit 8-11 shows, the projected monthly water costs for all three communities are less than those of the Illinois Water Company (IWC). The costs of the Northwest Suburban Municipal Joint Action Water Agency (NSMJAWA), the Central Lake County Joint Action Water Agency (CLCJAWA) and the DuPage Water Commission (DWC) are all similar to the costs of Oswego and Yorkville. Although the cost to build and utilize the Sub-Regional WTP is higher than the current cost of utilizing deep wells, the cost is still lower than other communities who utilize surface water. It should be noted the projected water bills for the Lake Michigan suppliers only includes their wholesale rate. If any of the Sub-Regional communities were to connect to a Lake Michigan supplier, the additional costs for extending water service from the Lake Michigan system and any connection fees would have to be factored in.

Exhibit 8-11: Projected 2025 Typical Residential Water Bill
Village of Montgomery, United City of Yorkville, Village of Oswego



8.10 Sub-Regional Water Supply & Treatment Additional Considerations

Exhibit 8-12 outlines a general implementation plan for the Sub-Regional system. Overall, it is projected to take a minimum of nine years to implement the system. The communities' current wells within the deep sandstone aquifer (Cambrian Ordovician system) likely could continue to be the communities' main source of water for longer than nine years without major short and long term consequence. However, the sooner the communities can switch to the Fox River as the main supply source, the sooner water levels will recover in the Cambrian Ordovician aquifer.

The recommended first general work item for the sub-region would be to determine which form of governance that is most appropriate for the sub-regional system. One option would be forming a JAWA. A couple other governance options would be a Water Commission or Water District. It is recommended the three communities evaluate 3 – 5 forms of governance, define the one that is most appropriate for the sub-region and then work through the formation of the agency as early in the implementation timeframe as possible.

Exhibit 8-12: Potential Sub-Regional Phasing and Implementation Plan

Village of Montgomery, United City of Yorkville, Village of Oswego

WORK ITEM	YEAR								
	1	2	3	4	5	6	7	8	9
Governance Review									
Land Acquisition									
Fox River Water Quality Testing									
Water Treatment Plant Component Pilot Testing									
Design Engineering									
Project Financing									
Permitting & Bidding									
Construction									

Another early work item will be land acquisition for the intake and WTP. The three communities should identify potential properties in the Orchard Road/Fox River corridor that meet the size requirements and be prepared to move forward on property acquisition when the time is right. The recommended minimum property size is 20 acres.

Once the property for the facility is identified, then the next step will be to conduct Fox River water quality testing at the future intake location. It is recommended sampling occur over multiple years and through all four seasons to capture as many water quality variations as cost-effectively feasible.

Once the Fox River water quality at the intake is characterized, the design of the WTP could be initiated. As part of the design process, it is assumed pilot testing of some of the treatment processes may be required.

As the design progresses and the costs for the improvements are better defined, evaluation of project financing options would be the next step. Potential financing options to consider would be the IEPA Low Interest Loan Program, municipal bonds (presumably with a maturity greater than 20 years) and the Water Infrastructure Finance and Innovation Act (WIFIA) program.

Following design and permitting, and after the project financing plan is defined, the projects can be bid. It is presumed the construction of the improvements would be phased over multiple years.

SECTION 9: WATER WORKS SYSTEM EVALUATION & RECOMMENDATIONS

Previous sections of this report summarize the Water Works System components, provide a needs assessment analysis and provide a sustainable source water assessment for continued and future water supply for the City. Throughout this report, three different options were evaluated under two different usage scenarios. This section will summarize the selected improvements approach to expand the system to meet the 2050 CT and LRI water demand projections for the United City of Yorkville. Following a review of the cost of the improvements, a detailed phasing and implementation plan will be summarized for both the CT and LRI water demand scenarios. Finally, a cost comparison of the CT and LRI recommendations will be presented to demonstrate the anticipated financial benefit to the City if the LRI goals outlined in Section 3.2 are reached.

9.1 Water Supply and Treatment Evaluation & Recommendations

As stated previously in this report, Yorkville currently obtains their water from the Ironton-Galesville and St. Peter (Ancell) aquifers (collectively part of the Cambrian Ordovician Aquifer System). Analysis of the aquifers in the Yorkville region showed that they cannot sustainably meet the future water demands of the City and the Sub-Region. While there is no immediate threat of the dewatering of the aquifers to the point that they can no longer be pumped, the sooner the City can switch to a sustainable source the better off it will be. Because sub-regional systems can take up to 10 years to implement, it is vital to ensure existing water supplies can last the duration of construction. Additionally, when using surface water it is considered prudent to have backup water sources in the event that a drought or other event renders surface water unusable for any reason. Finally, for purposes of uncertainty in modeling it is wise to leave some room for error in predicting the amount of water in the aquifers.

In order to decrease the associated cost and risk of developing infrastructure to obtain and treat surface water from the Fox River, Yorkville's partnership with the neighboring communities of Montgomery and Oswego will be vital. Each community would benefit from a regional lime softening water treatment plant in the Long-Term. Cost, sustainability and reliability are all good reasons to pursue the Sub-Regional lime softening water treatment plant as opposed to each community building and maintaining a water treatment plant for their own use.

9.1.1 CT Water Supply and Treatment Evaluation & Recommendations – As discussed in Section 8, the construction of the LSWTP to serve Montgomery, Yorkville and Oswego would be designed in such a way to provide the projected maximum daily pumpage (or max. day demand) for all communities through the year 2050. The infrastructure for procuring, treating and transporting the water would need to be sized to treat 32 MGD for the CT scenario.

The Fox River is expected to be able to supply enough water for all three communities during the typical flows throughout all parts of the year. However, during periods of significant drought or poor water quality, the

communities would all need to rely on water produced from the existing or future wells to meet their daily water needs. As discussed in section 8, in order to provide enough 'backup' water from the wells, one additional well would need to be built that would supply the deficit for Yorkville and one well would be jointly utilized by Yorkville and Montgomery. Additional wells would be needed to serve Montgomery and Oswego, too. All future wells are assumed to be operated at a 1,000 gpm rate. The existing wells which are not part of the Sub-Regional backup plan would then be abandoned with the abandonment cost based on the well depth. Because Yorkville Well No. 3 is in the process of being abandoned at the time of this report, the costs for that well are not part of the Sub-Regional implementation cost. The potential salvage or demolition value of the WTPs was not evaluated because this cost will vary depending on the condition of the equipment at the time of abandonment. Similarly, while there is the potential for the WTP buildings to have a beneficial reuse as storage or other use, the potential salvage value was not calculated, because the value will depend highly on the condition of the building at the time of abandonment. A summary of the proposed CT water supply, treatment and transmission system is as follows:

- Well No. 6: the 1,000 gpm Ironton-Galesville Well No. 6 is proposed to be next to the existing North EWST off Bertram Dr in the north part of the City. This site had been designated as a potential area for the well historically, and the location next to current infrastructure is also notably advantageous.
- Well No. SR-1: the 1,000 gpm Ironton-Galesville Well No. SR-1 is proposed to be next to the future Sub-Regional Water Treatment Plant. A location next to the WTP would decrease the amount of raw water main that would be needed to pump the water from the well to the plant. Yorkville would need to plan to fund 96.7% of the production from this well.
- Well Transmission Mains: Well transmission mains are needed to transport water from the backup wells to the LSWTP. The two existing wells and two proposed wells would utilize the transmission mains, along with a total of nine other backup wells.
- 32 MGD Fox River Intake Pump Station: The 32 MGD Intake Pump Station is planned to be near the intersection of Orchard Rd and the Fox River.
- 32 MGD Single Stage (ClariCone®) LSWTP: The 32 MGD LSWTP is planned to be near the intersection of Orchard Rd and the Fox River.
- Treated Water Transmission Mains: The Treated water transmission mains would convey the treated water to the Montgomery, Yorkville and Oswego water distribution systems

9.1.2 LRI Water Supply and Treatment Evaluation & Recommendations – The Less Resource Intensive scenario projects that less water will be needed not only by Yorkville, but by all three communities combined. For the supply and treatment evaluation, this means that the three communities will need a smaller intake and treatment plant and less investment in the backup supply system. The unused wells would still need to be abandoned per comments in the CT scenario. A summary of the proposed LRI water supply, treatment and transmission system is as follows:

- Well No. 6: the 1,000 gpm Ironton-Galesville Well No. 6 is proposed to be next to the existing North EWST off Bertram Dr in the north part of the City. This site had been designated as a potential area for the well historically, and the location next to current infrastructure is also notably advantageous.
- Well No. SR-1: the 1,000 gpm Ironton-Galesville Well No. SR-1 is proposed to be next to the future Sub-Regional Water Treatment Plant. A location next to the WTP would decrease the amount of raw water main that would be needed to pump the water from the well to the plant. Yorkville would need to plan to fund 29.5% of the production from this well.
- Well Transmission Mains: Well transmission mains are needed to transport water from the backup wells to the LSWTP. The two existing wells and the two proposed Wells would utilize the transmission mains, along with a total of seven other backup wells.
- 25 MGD Fox River Intake Pump Station: the location for the Fox River Intake Pump Station would be the same as the locations considered for the CT scenario.
- 25 MGD Single Stage (ClariCone®) LSWTP: the location for the Fox River LSWTP would be the same as the locations considered for the CT scenario.
- Treated Water Transmission Mains: The Treated water transmission mains would convey the treated water to the Montgomery, Yorkville and Oswego water distribution systems.

9.2 Water Storage Evaluation & Recommendations

As water demands rise, the City will need to expand the amount of water storage within the Water Works System, so peak hour demands can be met. The storage expansion should be accomplished with the construction of EWSTs, ground storage tanks (GSTs), or a combination of the two. The benefit provided by EWSTs is that once the water has been pumped up to the tank, it can flow down by gravity. GSTs, however, require a pump to convey the water across the system. Given the constantly changing demands in the Water Works System, the seamless release of water from an EWST far exceeds the need to modify the pumping rate to meet the changed demand. The cost to construct and operate a 2.0 MG EWST or smaller is typically comparable to the cost of a similarly sized GST and pumping station. Based on the fact that GSTs and EWSTs are cost comparable, coupled with the fact that EWSTs are more simple to operate, it is recommended that water storage expansion take place in the form of EWSTs.

Placement and size of an EWST depend on the size of the pipes conveying the water from the EWST along with the needs of the area the EWST is serving. How the pressures around the area are affected when the EWST is full, partially full, or empty is another item of consideration. A description of the recommended water storage additions to meeting future CT and LRI water demand scenarios is as follows.

9.2.1 CT Water Storage Evaluation & Recommendations – Under the forecasted CT values, the United City of Yorkville would need one additional EWST as outlined below.

- EWST No. 6: It is recommended EWST No. 6 have a capacity of 2.0 MG and be located on the southwest portion of the City off of Highway 71 between the intersections of W High Point Rd and Legion Rd. The EWST would be in the City's highest pressure zone which would allow water from this EWST to flow down to the other pressure zones.

9.2.2 LRI Water Storage Evaluation & Recommendations – The calculations completed in Section 3 of this report show a peak hour storage deficit of just over 500,000 gallons by the year 2050. The location and information is identical to the EWST proposed for the CT scenario.

9.3 Water Distribution and Pressure Zone Evaluation & Recommendations

The water distribution system was summarized within Section 2. Based on a review of the hydraulic grade line of the Water Works System and the topography within the City's planning area, it would appear that continual growth of the City would mean more pressure zones south of the currently populated area. Additionally, the coordination with other communities pressure zones will attribute to the relative complexity of the pumping plan. The list below outlines all distribution changes that will be need for both the CT and LRI scenarios for the Sub-Regional Water supply plan.

CT and LRI Distribution System Recommendations

20" and 16" Water Main North West of Water Treatment Plant	$ 829,000
16" Tie Into Crimson Lane	$ 233,000
24" Water Main from Water Treatment Plan to Van Emmon	$ 9,597,000
16" Water Main along Center Street and Main Street	$ 869,000
(a) 20" Water main on Van Emmon	$1,071,000
(b) 20" Water main on Van Emmon	$ 473,000
20" Water Main from Mill Street to South Central EWST	$ 3,155,000
20" Water Main from South Central EWST to South BP/PRV	$ 1,450,000
PRV Station - North Pressure Zone to North Central Pressure Zone	$ 378,000
Route 71 Watermain Replacement	$ 968,000
Appletree Court Watermain Replacement (Roads to Better Roads - RTBR)	$ 149,000
W. Washington Street Watermain Replacement (RTBR) – To be Constructed in 2017	$ 188,000
Elizabeth Street Watermain Replacement (RTBR)	$ 512,000
Main Street Watermain Replacement (RTBR)	$ 714,000
Orange/Olsen Watermain Looping (RTBR)	$ 168,000
Morgan Street Watermain Replacement (RTBR)	$ 376,000
E. Fox Street Watermain Replacement (RTBR)	$ 306,000
East Washington Watermain Replacement (RTBR)	$ 465,000
Orange Street Watermain Replacement (RTBR)	$ 660,000

The Road to Better Roads (RTBR) program is a long-term plan designed to increase diameters and improve transmission in the heart of the City. While RTBR upgrades are not necessary for the implementation of the Sub-Regional WTP distribution system, they are recommended to be replaced on a higher priority scale than other mains. As it becomes reasonable for the City to replace the mains, such as during roadwork projects or as the main nears its useful life, the RTBR projects will occur. The total capital cost of all distribution recommendations is $22,561,000. The capital cost of only the necessary distribution costs that will set the system up to effectively transfer water across the system in the Sub-Regional plan, which does not include RTBR upgrades, is $18,055,000.

9.4 Recommended Improvements Summary

The improvements presented in this report will allow for water transfer with minimal headloss, appropriate water storage volume and the required water supply and treatment to continue to provide safe and adequate water to the United City of Yorkville given both CT and LRI demand scenarios. The recommendations are broken down into Supply, Treatment, Storage and Distribution. The recommended improvements will be presented in this Section, but the actual phasing and implementation of these improvements will be further discussed in Section 9.5.

9.4.1 CT Water Works System Master Plan – Detailed cost estimates for the proposed improvements described in Section 9.1 and 9.2 are provided in Appendix G. A summary of the capital costs for the United City of Yorkville can be found below. Under the CT demand scenario, the following improvements are recommended:

- *General*
  - Governance $20,000
- *Supply & Treatment:*
  - Fox River Water Quality Testing $45,000
  - Land Acquisition $400,000
  - WTP Component Pilot Testing $33,000
  - Well No. 6 $2,419,000
  - Well No. SR-1 $2,339,000
  - Abandon Unused Wells (Yorkville No. 4 and 7) $120,000
  - 32 MGD Fox River Intake Pump Station $2,389,000
  - 32 MGD Single Stage Claricone® $24,290,000
  - Well Transmission Mains $9,616,000
  - Treated Water Transmission Mains $12,990,000
- *Storage & Distribution:*
  - EWST No. 6 (2.0 MG) $4,870,000
  - Water Distribution System Improvements $22,561,000

The location of all the recommended improvements for the CT demand scenario, including the future large diameter water main network, are depicted in section 8.

9.4.2 LRI Water Works System Master Plan – Detailed cost estimates for the proposed improvements described in Section 9.1 and 9.2 are provided in Appendix G. All costs below are shown in capital cost. Under the LRI demand scenario, the following improvements are recommended:

- *General*
  - Governance $20,000
- *Supply & Treatment:*
  - Fox River Water Quality Testing $45,000
  - Land Acquisition $400,000
  - WTP Component Pilot Testing $33,000
  - Well No. 6 $2,419,000
  - Well No. SR-1 $714,000
  - Abandon Unused Wells (Yorkville No. 4 and 7) $120,000
  - 25 MGD Fox River Intake Pump Station $2,161,000
  - 25 MGD Single Stage (ClariCone® LSWTP) $21,886,000
  - Well Transmission Main $9,298,000
  - Treated Water Transmission Mains $12,990,000
- *Storage & Distribution:*
  - EWST No. 6 (2.0 MG) $4,870,000
  - Water Distribution System Improvements $22,561,000

The locations of all the recommended improvements for the LRI demand scenario are depicted in section 8.

9.5 Water Works System Phasing and Implementation Plan

In order to provide an organized logical phasing and implementation plan that also recognizes population projections for a 35-year period are less than exact, the recommendations have been prioritized and grouped into three categories: 1) Immediate Improvements, 2) Near-Future Improvements and 3) Long-Term Improvements.

The immediate improvements are the minimum improvements necessary to meet the City's demands for the next five years (2017-2021), as well as the improvements required to prepare the City to have the sub-regional WTP online in the next ten years. The Near-Future Improvements are the necessary improvements that will need to be made in the ten years following the immediate improvements (2022-2031). The Long-

Term Improvements are the improvements for the nineteen years following the Long-Term Improvements (2032 -2050).

9.5.1 CT Implementation Plan – Table No. 9-1 presents the recommended Phasing and Implementation Plan for the proposed improvements under the CT demand scenario along with the summary of costs for each of the five categories. The costs have been summarized for the total sub-regional, as well as Yorkville's portion of the cost.

As shown on the Phasing and Implementation Plan, the total cost of recommended Immediate, Near-Future and Long-Term Water Works System improvements is approximately $82.1 million, which includes $498,000 for the City's Immediate Needs, $79.1 million for Near-Future Improvements and $2.5 million for Long-Term Improvements. These improvements include a new surface water treatment facility (along with the appropriate appurtenances), additional backup water supply, backup water supply piping and finished water piping. The WTP would be jointed funded and used by the neighboring communities of Montgomery and Oswego.

9.5.2 LRI Implementation Plan – Table No. 9-2 presents the recommended Phasing and Implementation Plan for the proposed improvements under the LRI demand scenario along with the summary of costs for each of the five categories. The costs have been summarized for the total sub-regional, as well as Yorkville's portion of the cost. Exhibit 9-1 displays the buildout of the LRI Sub-Regional plan.

As shown on the Phasing and Implementation Plan, the total cost of recommended Immediate, Near-Future and Long-Term Water Works System improvements is approximately $77.5 million, which includes $498,000 for the City's Immediate Needs, $74.5 million for Near-Future Improvements and $2.5 million for Long-Term Improvements. These improvements include a new surface water treatment facility (along with the appropriate appurtenances), additional backup water supply, backup water supply piping and finished water piping. The WTP would be jointly funded and used by the neighboring communities of Montgomery and Oswego.

9.5.3 Capital Cost Savings With LRI Water Use Commitment – The major differences in the recommended improvements for the CT and LRI have been identified. In Tables No. 9-1 and 9-2, the Phasing and Implementation Plan for the recommended improvements under both the CT and LRI demand scenarios is provided along with cost estimate summaries for each phase and the total combined. Table No. 9-3 summarizes the potential financial benefit if the City meets their water conservation goals and is able to implement the improvements based on the LRI demand scenario.

Table No. 9-1: Water Works System Phasing & Implementation Plan - CT

United City of Yorkville, IL

Water Works System Component	Immediate (0 - 5 Years) 2017 - 2021		Near-Future (6 - 15 Years) 2022 - 2031		Long Term (16 - 34 Years) 2032 - 2050		Total
Sub-Regional Population	0 - 8,400 Population Equivalents Addition		8,403 - 33,700 Population Equivalents Addition		33,703 - 105,983 Population Equivalent Additions		
Montgomery Population	0 - 1,300 Population Equivalents Addition		1,301 - 4,800 Population Equivalents Addition		4,801 - 13,027 Population Equivalent Additions		
Yorkville Population	0 - 2,800 Population Equivalents Addition		2,801 - 11,700 Population Equivalents Addition		11,701 - 38,745 Population Equivalent Additions		
Oswego Population	0 - 4,300 Population Equivalents Addition		4,301 - 17,200 Population Equivalents Addition		17,201 - 54,211 Population Equivalent Additions		
	Description	Cost[θ]	Description	Cost[θ]	Description	Cost[θ]	
General	Governance[e]	$ 60,000					
Yorkville General Subtotal:		**$ 20,000**		**$ -**		**$ -**	**$ 20,000**
Sub-Regional General Subtotal:		**$ 60,000**		**$ -**		**$ -**	**$ 60,000**
Supply	Fox River Water Quality Testing[b,e]	$ 135,000	Raw Water Network[a]	$ 31,120,000	Montgomery Well No. 17	$ 2,419,000	
			Sub-Regional Well No. 1[r]	$ 2,419,000	Yorkville Well No. 6	$ 2,419,000	
					Oswego Well No. 12	$ 2,419,000	
					Oswego Well No. 13	$ 2,419,000	
					Abandon Unused Wells[c]	$ 700,000	
Yorkville Supply Subtotal:		**$ 45,000**		**$ 11,955,000**		**$ 2,539,000**	**$ 14,539,000**
Sub-Regional Supply Subtotal:		**$ 135,000**		**$ 33,539,000**		**$ 10,376,000**	**$ 44,050,000**
Treatment	Land Acquisition[e]	$ 1,200,000	32 MGD Intake Pump Station[m]	$ 7,327,000			
	WTP Component Pilot Testing[m]	$ 100,000	32 MGD LSWTP[m]	$ 74,508,000			
			Treated Water Transmission Network	$ 30,175,000			
Yorkville Treatment Subtotal:		**$ 433,000**		**$ 39,669,000**			**$ 40,102,000**
Sub-Regional Treatment Subtotal:		**$ 1,300,000**		**$ 112,011,000**		**$ -**	**$ 113,311,000**
Storage			Yorkville 2.0 MG EWST	$ 4,870,000			
Yorkville Storage Subtotal:		**$ -**		**$ 4,870,000**		**$ -**	**$ 4,870,000**
Sub-Regional Storage Subtotal:		**$ -**		**$ 4,870,000**		**$ -**	**$ 4,870,000**
Distribution			Montgomery Distribution System Improvements	$ 13,565,000			
			Yorkville Distribution System Improvements	$ 22,561,000			
			Oswego Distribution System Improvements	TBD			
Yorkville Distribution Subtotal:		**$ -**		**$ 22,561,000**		**$ -**	**$ 22,561,000**
Sub-Regional Distribution Subtotal:		**$ -**		**$ 36,126,000**		**$ -**	**$ 36,126,000**
YORKVILLE TOTAL:		**$ 498,000**		**$ 79,055,000**		**$ 2,539,000**	**$ 82,092,000**
SUB-REGIONAL TOTAL:		**$ 1,495,000**		**$186,546,000**		**$ 10,376,000**	**$198,417,000**

Notes:
Based on 2016 dollars and 2016 construction costs; includes engineering and contingency costs
a. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of Average Daily Demand (CT: 21.8% for Montgomery, 30.9% for Yorkville, 47.3% for Oswego; LRI: 20.7% for Montgomery, 32.6% for Yorkville; 46.7% for Oswego).
b. Assumes 3 years of testing
c. Assumes abandonment of Montgomery Wells No. 3, 4, 8, 10, 11, 12; Yorkville Wells No. 4, 7; and Oswego Wells No. 3, 4, 7, and 9; at a cost of $40,000 per shallow well (Montgomery Wells Nos. 10, 11, 12 and 13) $60,000 per deep well (all others)
e. Cost shown is split evenly between communities.
m. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).
r. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of ratio of usage - For the SR-1 well, the ratios are as follows: (CT: 3.3% for Montgomery, 96.7% for Yorkville, 0% for Oswego; LRI: 0% for Montgomery, 29.5% for Yorkville; 70.5% for
Not evaluated

Table No. 9-2: Water Works System Phasing & Implementation Plan - LRI

United City of Yorkville, IL

Water Works System Component	Immediate (0 - 5 Years) 2017 - 2021		Near-Future (6 - 11 Years) 2022 - 2031		Long Term (12 - 34 Years) 2032 - 2050		Total
Sub-Regional Population	0 - 8,400 Population Equivalents Addition		8,403 - 33,700 Population Equivalents Addition		33,703 - 105,983 Population Equivalent Additions		
Montgomery Population	0 - 1,300 Population Equivalents Addition		1,301 - 4,800 Population Equivalents Addition		4,801 - 13,027 Population Equivalent Additions		
Yorkville Population	0 - 2,800 Population Equivalents Addition		2,801 - 11,700 Population Equivalents Addition		11,701 - 38,745 Population Equivalent Additions		
Oswego Population	0 - 4,300 Population Equivalents Addition		4,301 - 17,200 Population Equivalents Addition		17,201 - 54,211 Population Equivalent Additions		
	Description	Cost[e]	Description	Cost[e]	Description	Cost[e]	
General	Governance[e]	$ 60,000					
Yorkville General Subtotal:		**$ 20,000**		**$ -**		**$ -**	**$ 20,000**
Sub-Regional General Subtotal:		**$ 60,000**		**$ -**		**$ -**	**$ 60,000**
Supply	Fox River Water Quality Testing[b,e]	$ 135,000	Raw Water Network[a]	$ 28,521,000	Montgomery Well No. 17	$ 2,419,000	
			Sub-Regional Well No. 1[r]	$ 2,419,000	Yorkville Well No. 6	$ 2,419,000	
					Abandon Unused Wells[c]	$ 700,000	
Yorkville Supply Subtotal:		**$ 45,000**		**$ 10,012,000**		**$ 2,539,000**	**$ 12,596,000**
Sub-Regional Supply Subtotal:		**$ 135,000**		**$ 28,521,000**		**$ 5,538,000**	**$ 34,194,000**
Treatment	Land Acquisition[e]	$ 1,200,000	25 MGD Intake Pump Station[m]	$ 6,431,000			
	WTP Component Pilot Testing[m]	$ 100,000	25 MGD LSWTP[m]	$ 65,137,000			
			Treated Water Transmission Network	$ 30,175,000			
Yorkville Treatment Subtotal:		**$ 433,000**		**$ 37,037,000**		**$ -**	**$ 37,470,000**
Sub-Regional Treatment Subtotal:		**$ 1,300,000**		**$ 101,743,000**		**$ -**	**$ 103,043,000**
Storage			Yorkville 2.0 MG EWST	$ 4,870,000			
Yorkville Storage Subtotal:		**$ -**		**$ 4,870,000**		**$ -**	**$ 4,870,000**
Sub-Regional Storage Subtotal:		**$ -**		**$ 4,870,000**		**$ -**	**$ 4,870,000**
Distribution			Montgomery Distribution System Improvements	$ 13,565,000			
			Yorkville Distribution System Improvements	$ 22,561,000			
			Oswego Distribution System Improvements	TBD			
Yorkville Distribution Subtotal:		**$ -**		**$ 22,561,000**		**$ -**	**$ 22,561,000**
Sub-Regional Distribution Subtotal:		**$ -**		**$ 36,126,000**		**$ -**	**$ 36,126,000**
YORKVILLE TOTAL:		**$ 498,000**		**$ 74,480,000**		**$ 2,539,000**	**$ 77,517,000**
SUB-REGIONAL TOTAL:		**$ 1,495,000**		**$171,260,000**		**$ 5,538,000**	**$178,293,000**

Notes:
Based on 2016 dollars and 2016 construction costs; includes engineering and contingency costs
a. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of Average Daily Demand (CT: 21.8% for Montgomery, 30.9% for Yorkville, 47.3% for Oswego; LRI: 20.7% for Montgomery, 32.6% for Yorkville; 46.7% for Oswego).
b. Assumes 3 years of testing
c. Assumes abandonment of Montgomery Wells No. 3, 4, 8, 10, 11, 12; Yorkville Wells No. 4, 7; and Oswego Wells No. 3, 4, 7, and 9; at a cost of $40,000 per shallow well (Montgomery Wells Nos. 10, 11, 12 and 13) $60,000 per deep well (all others)
e. Cost shown is split evenly between communities.
m. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).
r. Cost shown is total cost of improvement. Cost included in Village subtotal is portion of total cost based off of ratio of usage - For the SR-1 well, the ratios are as follows: (CT: 3.3% for Montgomery, 96.7% for Yorkville, 0% for Oswego; LRI: 0% for Montgomery, 29.5% for Yorkville; 70.5% for
Not evaluated

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

1.0 MG NORTH EWST
WELL NO. 6
1.5 MG NORTHEAST EWST, WELL NO. 8.
WELL NO. 8 AND 9 WTP
WELL NO. 9
1. 20" AND 16" WM NORTH WEST OF WATER TREATMENT PLANT
NORTH CENTRAL PRV STATION
NORTH BP/PRV STATION
2. 16" TIE INTO CRIMSON LANE
SUB REGIONAL CONNECTION
8. PRV STATION - NORTH PRESSURE ZONE TO NORTH CENTRAL PRESSURE ZONE
300,000 GAL NORTH CENTRAL EWST
3. 24" WM FROM WATER TREATMENT PLANT TO VAN EMMON
WELL NO. 4, AND WELL NO. 4 WATER TREATMENT PLANT
WELL NO. 3
4. 16" WM ALONG CENTER STREET AND MAIN STREET
FUTURE SUB REGIONAL CONNECTION
SOUTH CENTRAL BP/PRV STATION
5a. & 5b. 20" WM ON VAN EMMON
6. 20" WM FROM MILL STREET TO SOUTH CENTRAL EWST
500,000 GAL SOUTH CENTRAL EWST
SOUTH BP/PRV STATION
9a. ROUTE 71 WM REPLACEMENT
2.0 MG EWST
SOUTH CENTRAL PRV STATION
1.25 MG SOUTH EWST
WELL NO. 7, AND WELL NO. 7 WATER TREATMENT PLANT
7. 20" WM FROM SOUTH CENTRAL EWST TO SOUTH BP/PRV
9b. APPLETREE COURT WM REPLACEMENT
11. MAIN STREET WM REPLACEMENT
9c. WEST WASHINGTON STREET WM REPLACEMENT
14. EAST FOX STREET WM REPLACEMENT
15. EAST WASHINGTON STREET WM REPLACEMENT
16. ORANGE STREET WM REPLACEMENT
12. ORANGE / OLSEN WM LOOPING
13. MORGAN STREET WM REPLACEMENT
10. ELIZABETH STREET WM REPLACEMENT

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- BP/PRV Station
- PRV Station
- Well
- Water Treatment Plant
- Elevated Water Storeage Tank (EWST)
- Future PRV
- Future BP/PRV
- Ground Storage Tanks
- Potential EWST Site
- Alternate EWST Site
- Potential Future Deep Well
- WTP To Be Abandoned
- Well To Be Abandoned
- Unknown Size Water Main
- Non-Potable Water Main
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main
- Existing Raw Water Main
- Future Raw Water Main
- Future 8" Water Main
- Future 12" Water Main
- Future 16" Water Main
- Future 20" Water Main
- Future 24" Water Main

NOTE:
DUE TO THE VARYING TERRAIN AND ELEVATION WITHIN THE PLANNING AREA, EFFORTS WERE MADE TO MINIMIZE THE NUMBER OF PRESSURE ZONES. AS DEVELOPMENT OCCURS, THE ELEVATIONS WITHIN EACH DEVELOPMENT SHALL BE REVIEWED AT THAT TIME. INDIVIDUAL PRESSURE REDUCING VALVES WITHIN BUILDING/HOMES MAY BE REQURED IN CERTAIN AREAS.

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

NORTH

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE: MARCH, 2017
PROJECT NO.: YO1437-P
BY: CLV
PATH: H:\GIS\PUBLIC\YORKVILLE\2014\YO1437
FILE: YO1437_EXHB-1 ALT3B.MXD

WATER WORKS SYSTEM MASTER PLAN
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT 9-1 ALTERNATE 3B
WATER WORKS SYSTEM PLAN - LRI

Table No. 9-3: Capital Cost Savings With LRI Water Use Commitment

United City of Yorkville, IL

Water Works System Component	Present Worth Capital Cost		
	Current Trends (CT)	Less Resource Intensive (LRI)	Savings
General	$ 20,000	$ 20,000	$ -
Supply	$ 14,539,000	$ 12,596,000	$ (1,943,000)
Treatment	$ 40,102,000	$ 37,470,000	$ (2,632,000)
Storage	$ 4,870,000	$ 4,870,000	$ -
Distribution	$ 22,561,000	$ 22,561,000	$ -
TOTAL:	**$ 82,092,000**	**$ 77,517,000**	**$ (4,575,000)**

9.6 Water Works System Connection Fee Analysis

As development continues, the United City of Yorkville will need to continue to collect connection fees for the new developments purchase of capacity within the Water Works System. The calculated connection fee for Yorkville's share of the Sub-Regional system is included within Table No. 9-4. It is recommended the City adjust their connection fee as soon as possible, charge the revised fee and begin to save collected fees for investment in the future Sub-Regional system.

Table 9-4: Water Works System Improvements Connection Fee Analysis
United City of Yorkville, Illinois

WATER PROCUREMENT AND TREATMENT COST PER PE				
	Capacity (GPM)	**PE Served**	**Total Project Cost**	**Cost Per PE**
Additional Wells	1,295	15,540	$3,133,000	$202
Well Transmission Main Network[a]	4,695	59,565	$9,298,000	$157
Fox River Intake & LSWTP (25 MGD)[m]	5,791	59,565	$24,047,000	$404
Total Supply and Treatment			**$36,478,000**	**$763**

WATER TRANSMISSION, DISTRIBUTION MAIN AND DISTRIBUTION STORAGE COST PER PE				
	Size	**PE Served**	**Total Project Cost**	**Cost Per PE**
Treated Water Transmission Main Network	Varies	59,565	$12,990,000	$218
Elevated Water Storage Tank	2.0 MG	21,429	$4,870,000	$227
Distribution System Improvements	Varies	59,565	$22,561,000	$379
Total Water Transmission and Distribution			**$40,421,000**	**$824**
New Growth Pro Rata Water Transmission/Distribution/Storage Cost[c]			**$28,601,000**	**$824**

FEE SUMMARY		
	FEE PER PE	**FEE PER SINGLE FAMILY UNIT (3.5 PE/SFU)**
Water Supply and Treatment	$763	$2,671
Water Transmission and Distribution	$824	$2,884
Total Cost	**$1,587**	**$5,555**

Notes:
a. Cost shown is portion of total cost based off of Average Daily Demand (CT: 21.8% for Montgomery, 30.9% for Yorkville, 47.3% for Oswego; LRI: 20.7% for Montgomery, 32.6% for Yorkville; 46.7% for Oswego).
m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).
Max:Avg Day Ratio = 1.75
1 PE = 80 gpd (for all supply, treatment, storage, transmission, and distribution improvements)
c. Based on 2015 population of 19,804 PE and 2050 projected population of 59,565 PE

SECTION 10: SUSTAINABLE WATER WORKS SYSTEM PLANNING

Although both population and approximate timeframes for improvements have been provided in the previous sub-sections as part of the Phasing and Implementation plans, it is ultimately the water demands on the systems that dictate when and what improvements will need to be constructed. As the City continues to mature, expand and implement water conservation strategies, the water demands will evolve. It is recommended the City continuously monitor and evaluate its Water Works System as the City develops. The Phasing and Implementation Plan must continually be reviewed and should be modified based on the rate of development and where the development is actually occurring.

As emphasized in section 9.5.3 with the cost comparison of recommended Water Works System improvements between the CT and LRI scenarios, the financial benefits of minimal levels of water conservation can be huge for the City. To that end, this Comprehensive Water Works Master Plan is a valuable planning tool and stepping stone for the City's Water Works System. The recommended next steps for the City are as follows:

- Review current policies, consider revising existing policies and then enforce adopted policies regarding water conservation strategies and goals and develop financing alternatives for the identified improvements. By evaluating water conservation opportunities, the City will not only show how they continue to be good stewards of our limited resource of water, but the City also has the potential to significantly reduce the required capital investment in the system.
- Review the water rates to determine how revenue will be impacted by a significant decrease in water consumption resulting from water conservation measures. This will allow the City's water conservation efforts to be successful from a financial perspective.

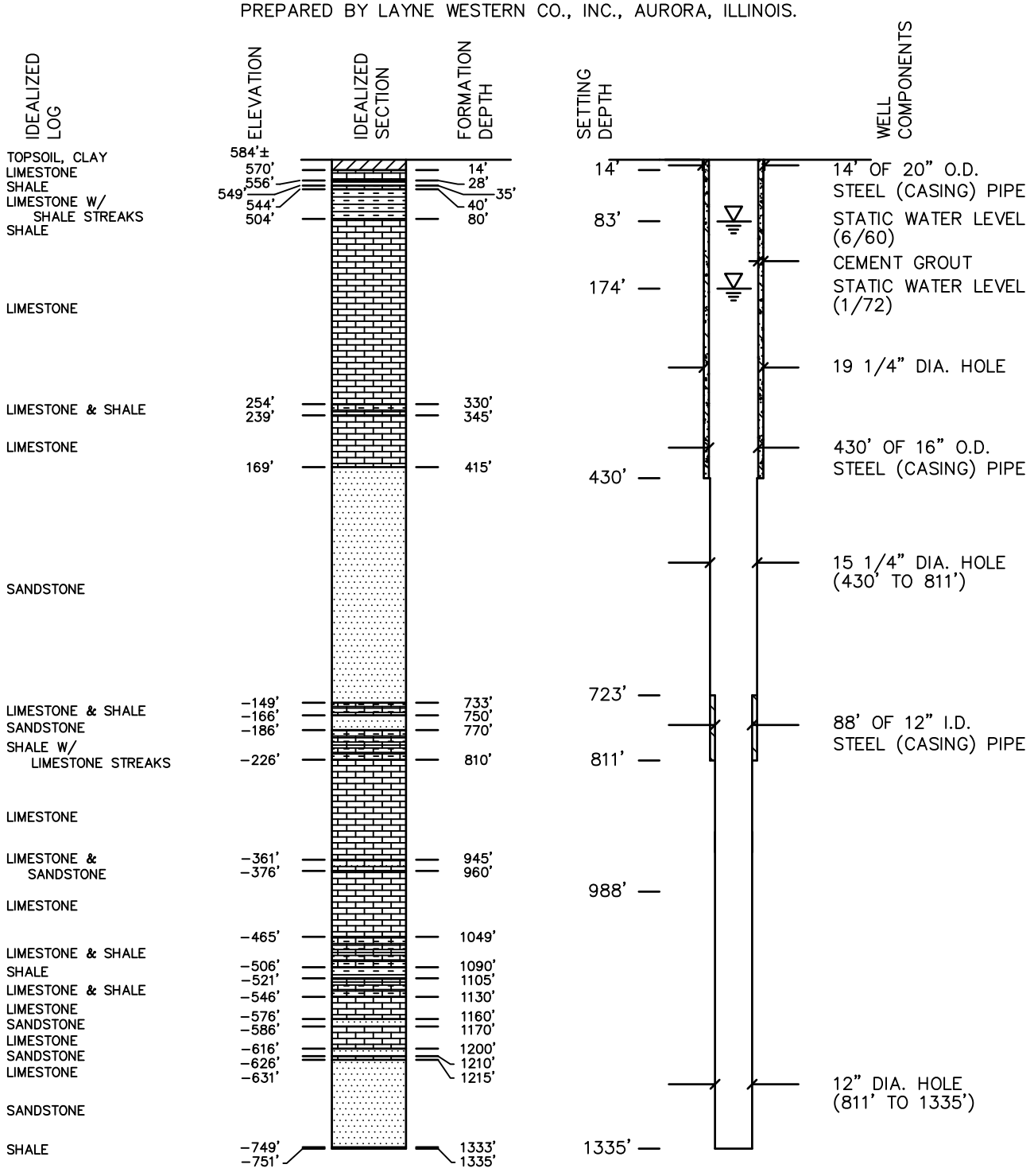
This Master Plan advocates similar goals to those of the regional water supply planning efforts. The water supply sources of Northeastern Illinois, namely Lake Michigan, the Fox River, shallow groundwater and deep groundwater, know no political boundaries. Their geographic extent is such that their availabilities are dependent on everyone's wise use of the resource. Therefore, we also recommend the City continue to build strong, collaborative relationships regionally for sustainable water use so the region and the United City of Yorkville can extend the capacity of the local water resources for an economically and environmentally sustainable region.

Appendix A

Well Schematics

SCHEMATIC OF EXISTING WATER WELL No. 3 (DEEP CONSOLIDATED AQUIFER) CITY OF YORKVILLE KENDALL COUNTY, ILLINOIS

DATA TAKEN FROM WELL CONSTRUCTION REPORT
PREPARED BY LAYNE WESTERN CO., INC., AURORA, ILLINOIS.

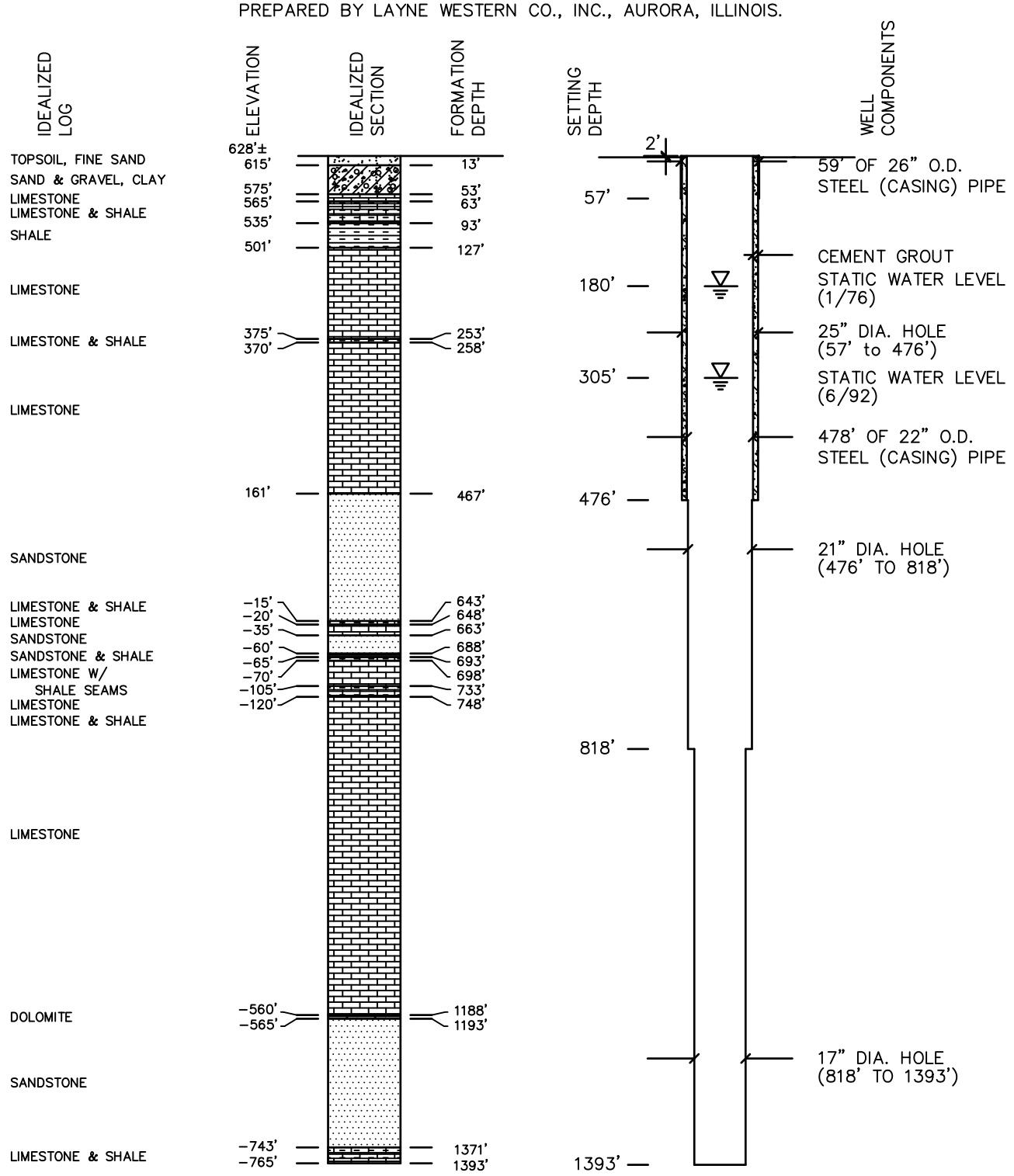


ENGINEERING ENTERPRISES, INC., SUGAR GROVE, ILLINOIS

Y0990105
JUNE 2000

SCHEMATIC OF EXISTING WATER WELL No. 4 (DEEP CONSOLIDATED AQUIFER) CITY OF YORKVILLE KENDALL COUNTY, ILLINOIS

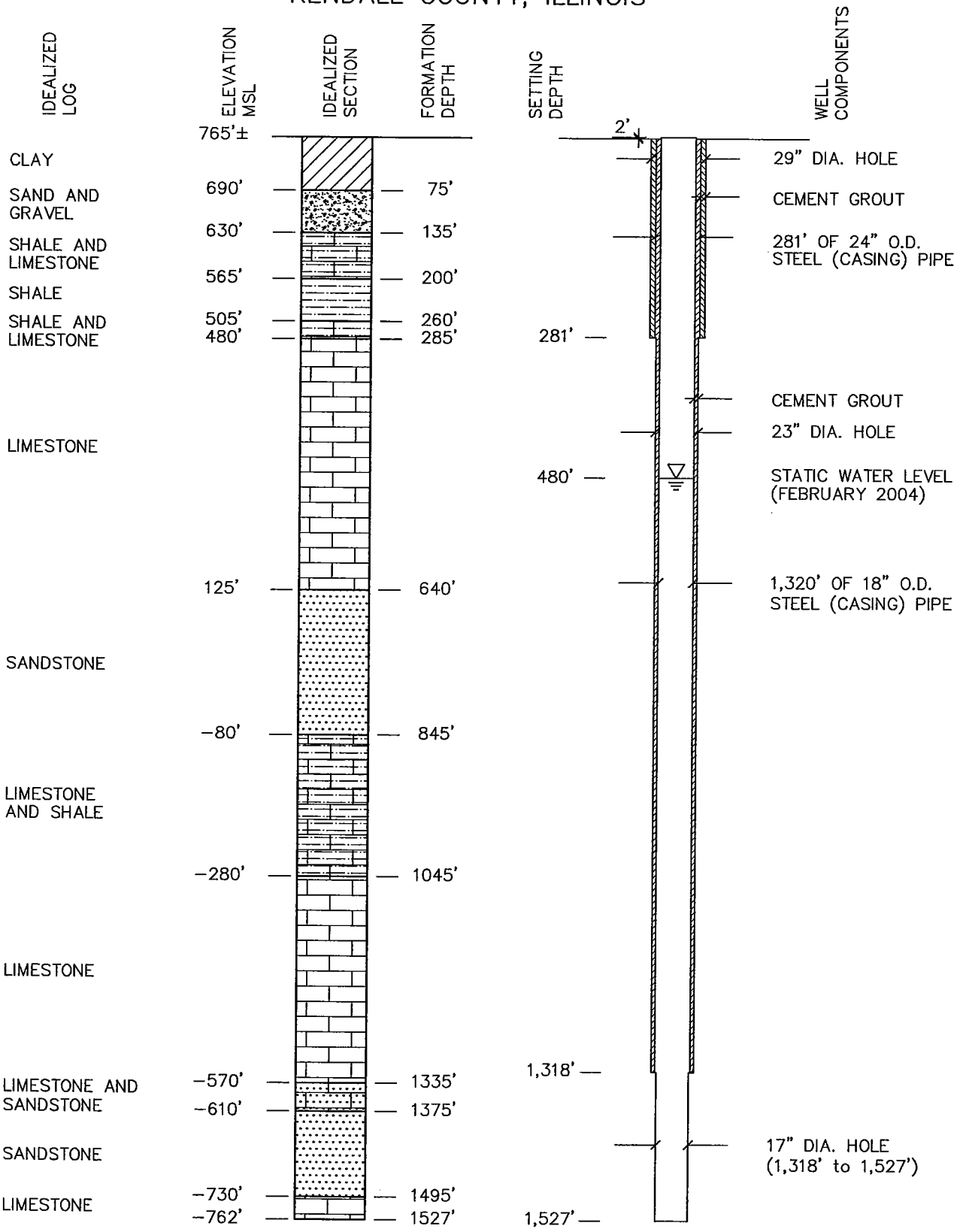
DATA TAKEN FROM WELL CONSTRUCTION REPORT
PREPARED BY LAYNE WESTERN CO., INC., AURORA, ILLINOIS.



ENGINEERING ENTERPRISES, INC., SUGAR GROVE, ILLINOIS

YO990106
JUNE 2000

SCHEMATIC OF EXISTING WATER WELL No. 7 (DEEP CONSOLIDATED AQUIFER) UNITED CITY OF YORKVILLE KENDALL COUNTY, ILLINOIS

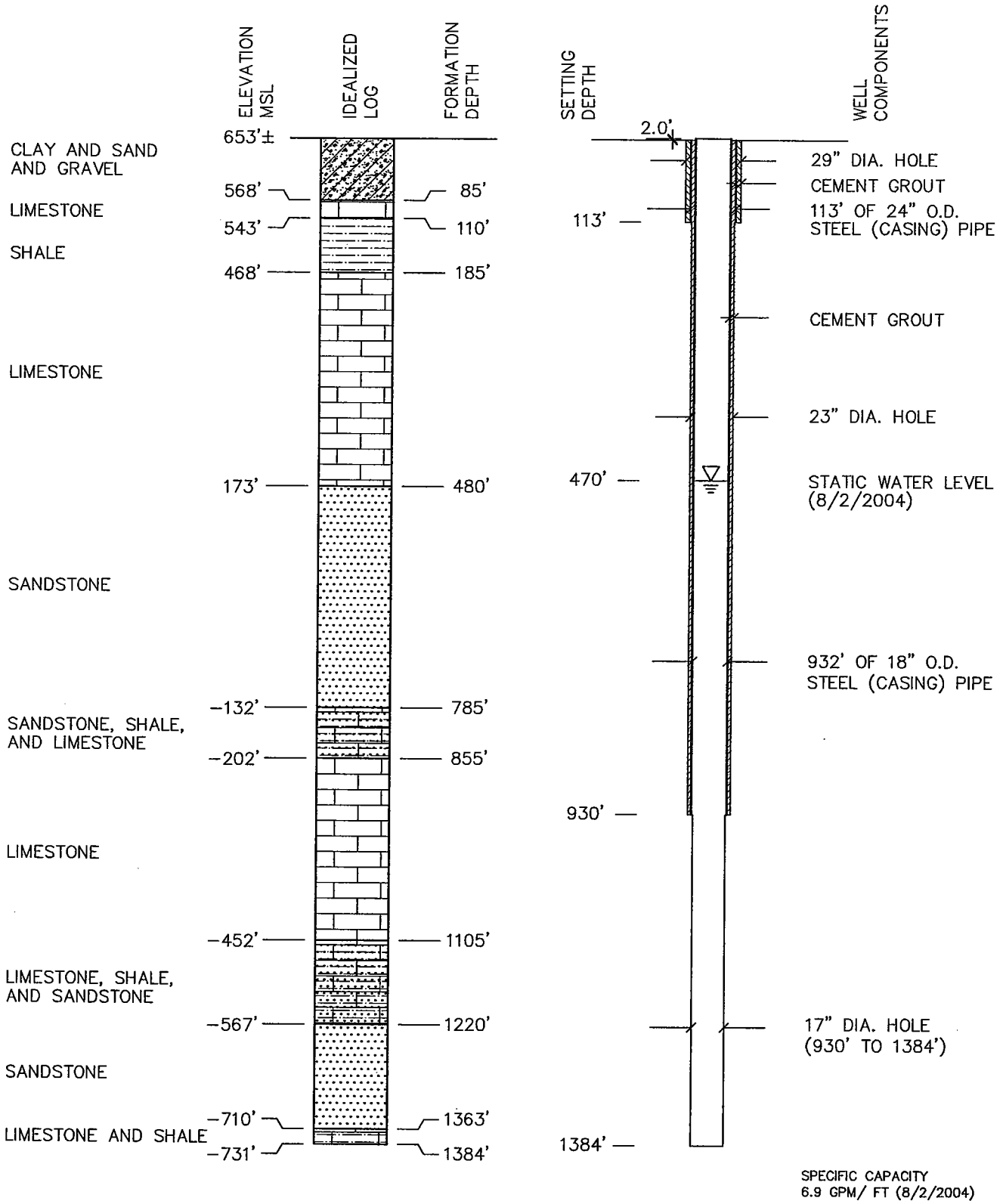


ENGINEERING ENTERPRISES, INC., CONSULTING ENGINEERS, SUGAR GROVE, ILLINOIS

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JUNE 2004

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SCHEMATIC OF EXISTING WATER WELL No. 8 (DEEP CONSOLIDATED AQUIFER) UNITED CITY OF YORKVILLE KENDALL COUNTY, ILLINOIS



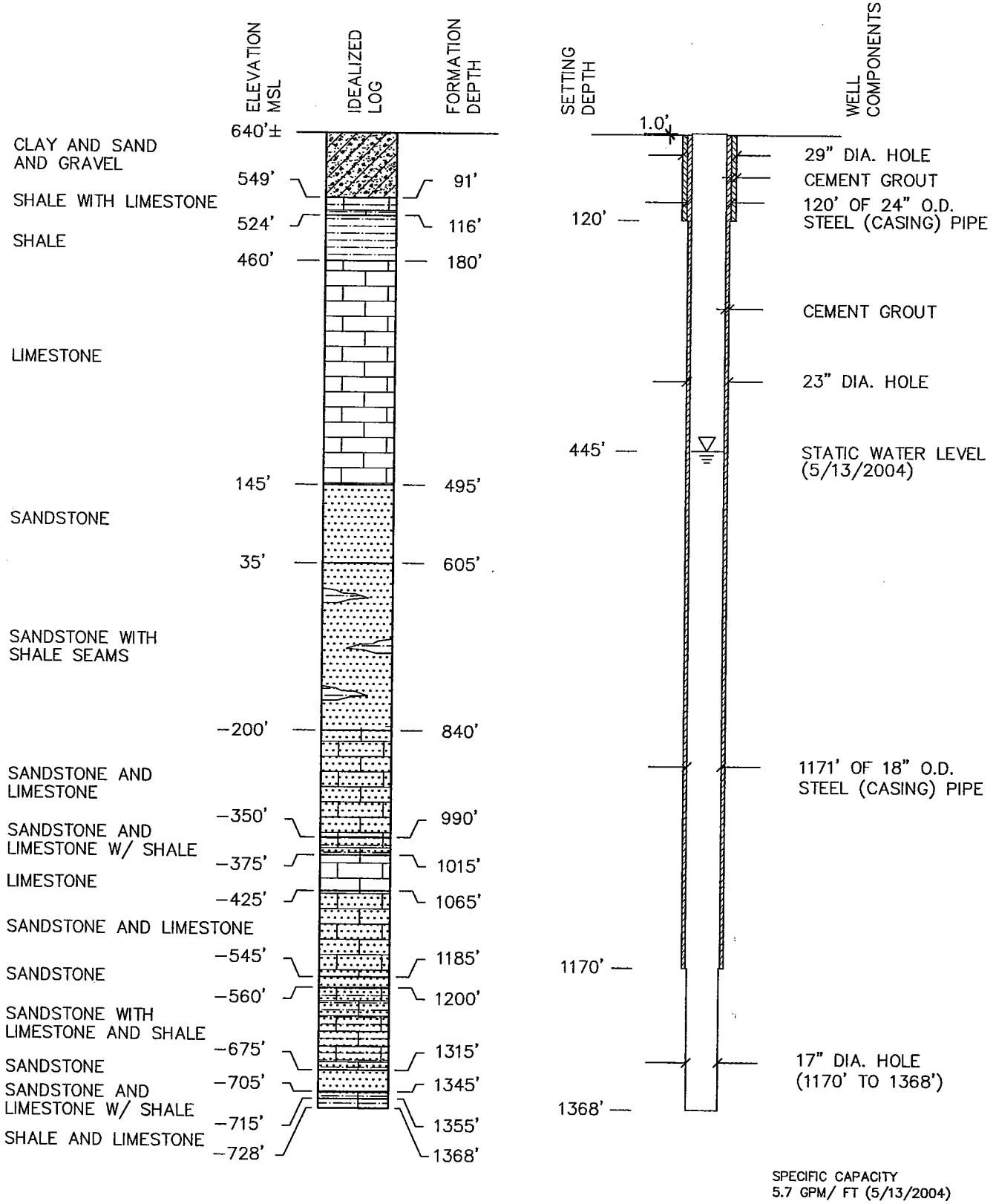
SPECIFIC CAPACITY
6.9 GPM/ FT (8/2/2004)

ENGINEERING ENTERPRISES, INC., CONSULTING ENGINEERS, SUGAR GROVE, ILLINOIS

AUGUST 2004
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SCHEMATIC OF EXISTING WATER WELL No. 9 (DEEP CONSOLIDATED AQUIFER) UNITED CITY OF YORKVILLE KENDALL COUNTY, ILLINOIS



SPECIFIC CAPACITY
5.7 GPM/ FT (5/13/2004)

ENGINEERING ENTERPRISES, INC., CONSULTING ENGINEERS, SUGAR GROVE, ILLINOIS

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Appendix B

Potential Water Savings From Water Conservation and Efficiency

POTENTIAL ESTIMATED WATER SAVINGS
FROM WATER CONSERVATION AND EFFICIENCY

United City of Yorkville, IL

	United City of Yorkville 2050 CT Water Demand Estimate	**1,957**	**MG**	
(a)	2050 Daily CT Water Demand Estimate	5.36	MGD	
	Outdoor Water Use			
(b)	Water Supply Spent on Outdoor Use	12.9%		
(c)	Outdoor Water Wasted	50%		**%**
(d)	Assumed Reduction of Outdoor Waste	50%		**Reduction**
(e)	New Landscape Water Waste Reduction	5%		**of Total**
	All Customers - Water Saved (a x b x c x d) =	**0.172**	**MGD**	29.8%
	New Landscape - Water Saved (a x b x c x e) =	**0.017**	**MGD**	3.0%
	Utility Water (System Loses)			
(f)	Water Supply Loss from Unidentified Losses	8.0%		
(g)	Assumed Reduction of Unidentified Losses	50%		
	System Losses - Water Saved (a x f x g) =	**0.214**	**MGD**	37.1%
	Indoor Residential			
(h)	Population (1994)	4,831		
(i)	Assumed People per Household (1994)	3		
(j)	No. of Households (1994)	1,610		
(k)	Assumed pre-1994 Flush Rate	3.5	gal/flush	
(l)	Assumed HET Flush Rate	1.28	gal/flush	
(m)	Assumed Flushes per Person per Day	5.1		
(n)	Assumed Percent Household Upgrade by 2050 for HET	90%		
(o)	Water Savings per Household per Year for HEWM	4,200	gal	
(p)	Assumed Percent Household Upgrade by 2050 for HEWM	100%		
(q)	Water Savings per Household per Day for 4 Retrofits	22	gal	
(r)	Assumed Percent household upgrade by 2050 for HET	90%		
	HET - Water Saved ((k - l) x m x h x n) =	**0.049**	**MGD**	8.5%
	HEWM - Water Saved (o x j x p) =	**0.019**	**MGD**	3.2%
	Retrofits - Water Saved (j x q x r) =	**0.032**	**MGD**	5.5%
	Commercial, Industrial, and Institutional			
(s)	Portion of CII That Is Nonprocess Related Water Use	15.0%		
(t)	Percent of Daily Demand (Non-Residential)	18.4%		
(u)	Assumed Percent Employee Participation	50.0%		
	CII - Water Saved (a x s x t x u) =	**0.074**	**MGD**	12.8%
	TOTAL ESTIMATED SAVINGS =	**0.578**	**MGD**	100.0%
	LESS RESOURCE INTENSIVE DEMAND (2040) =	**4.783**	**MGD**	
	PERCENT REDUCTION =	**11.0%**		

Notes:

Values calculated from City Data

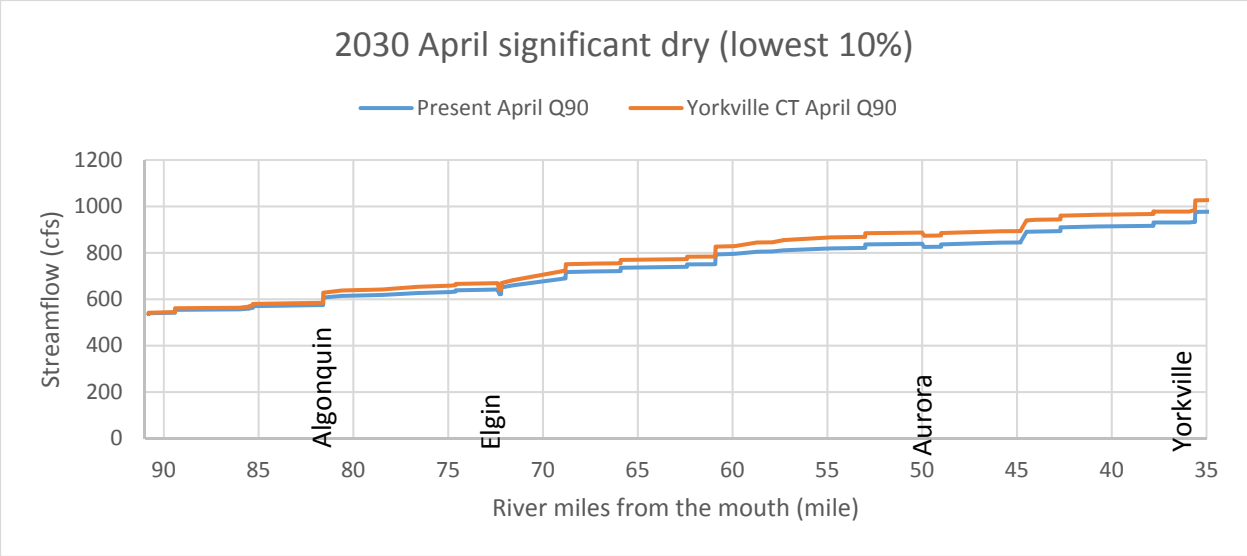
(c) Per EPA

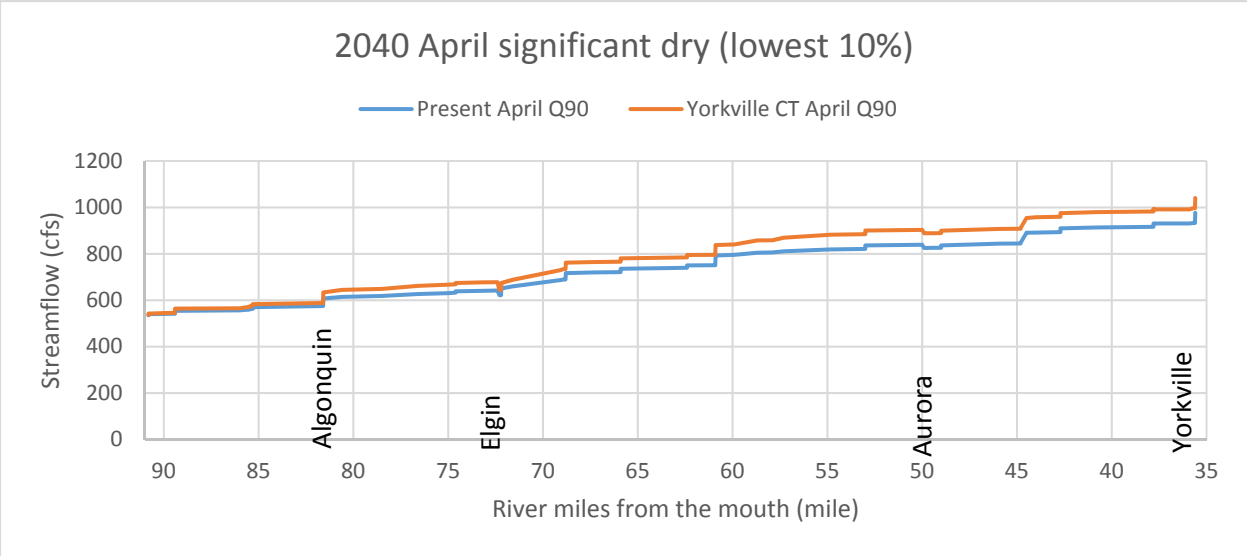
(o) From California Memorandum of Understanding

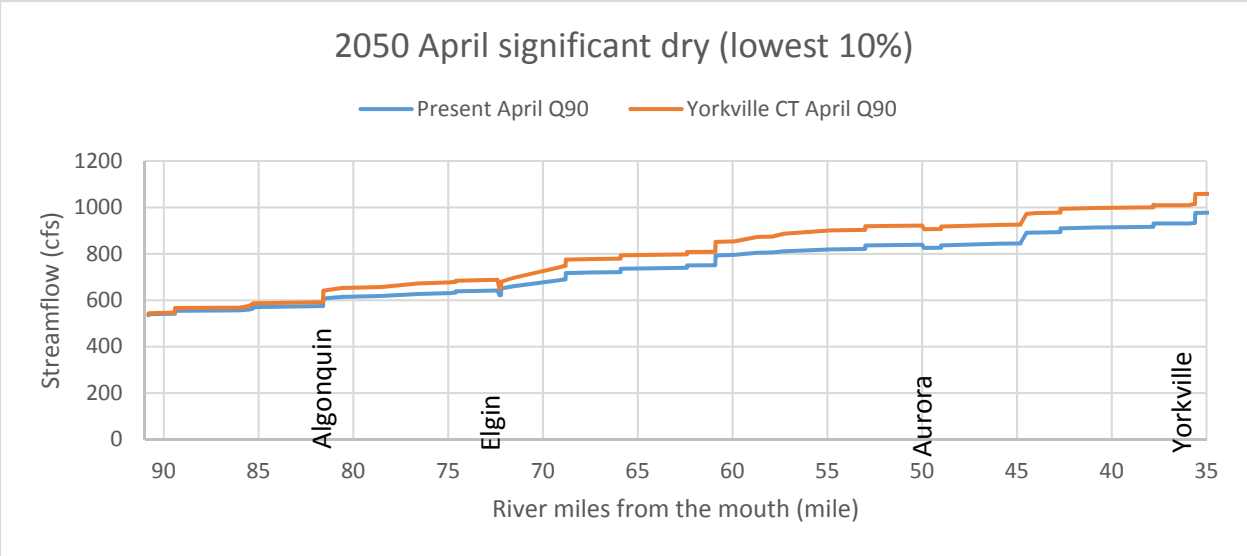
HET = High Efficiency Toilets; HEWM = High Efficiency Washing Machines

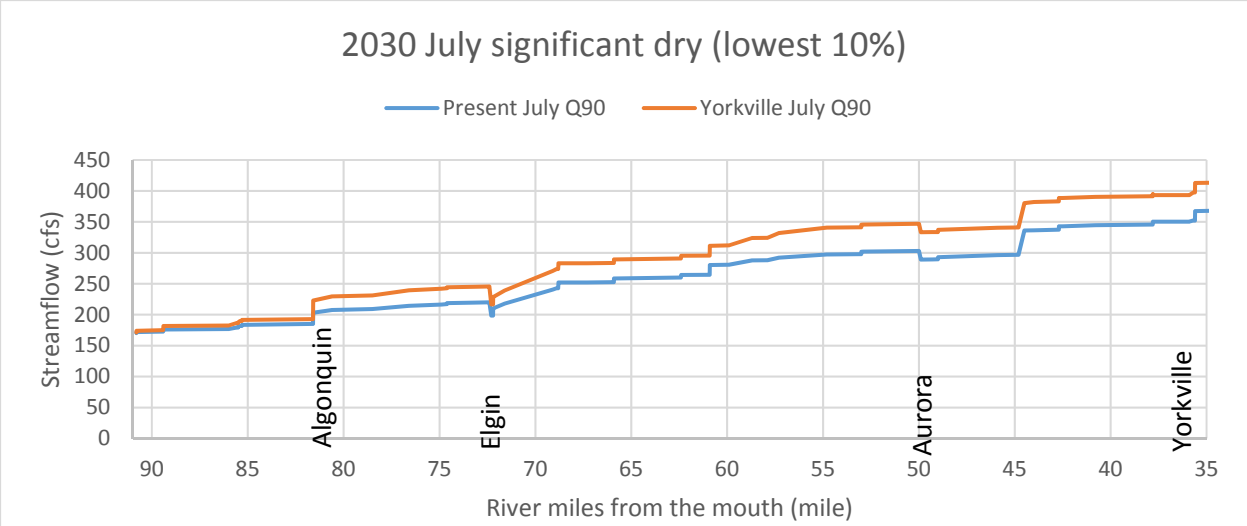
Appendix C

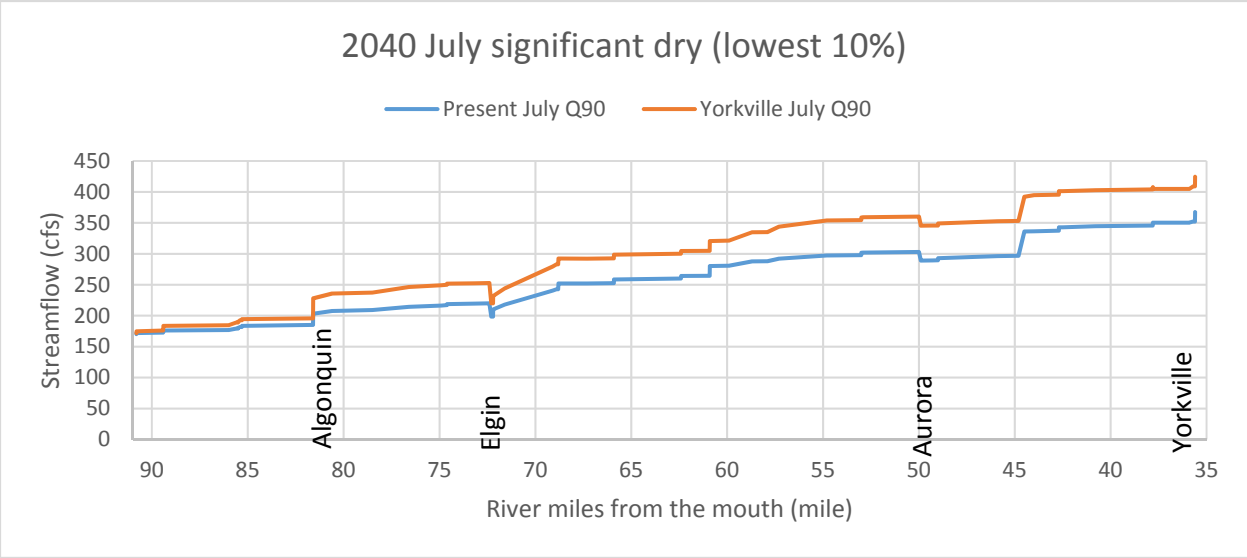
Yorkville Location Fox River Streamflow as Compared to Length of River

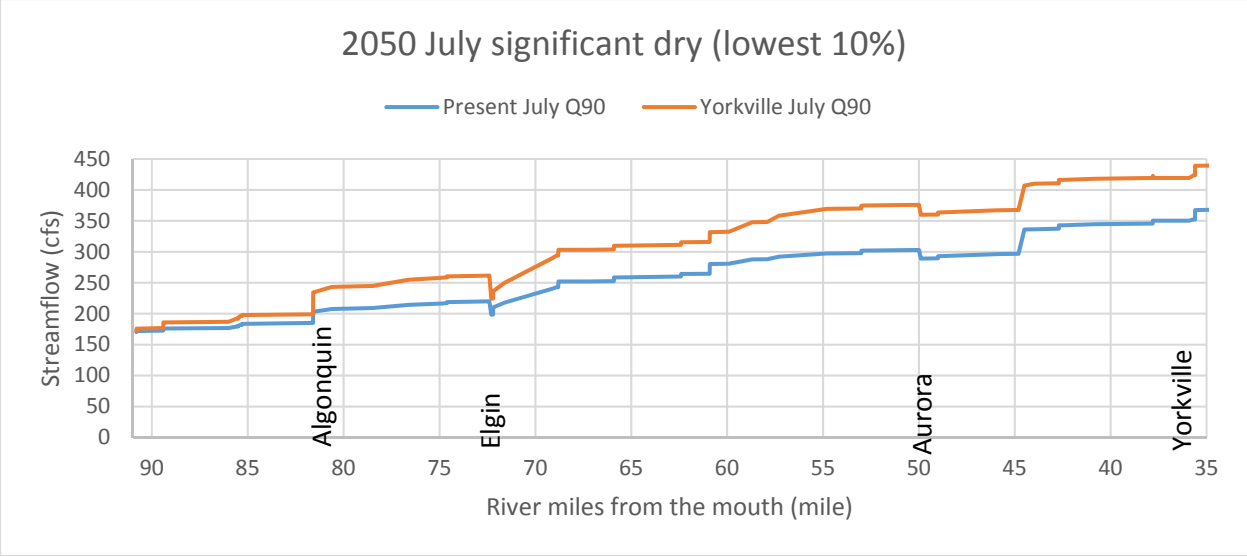

2030 April significant dry (lowest 10%)
Present April Q90
Yorkville CT April Q90
Streamflow (cfs)
1200
1000
800
600
400
200
0
Algonquin
Elgin
Aurora
Yorkville
90
85
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40
35
River miles from the mouth (mile)

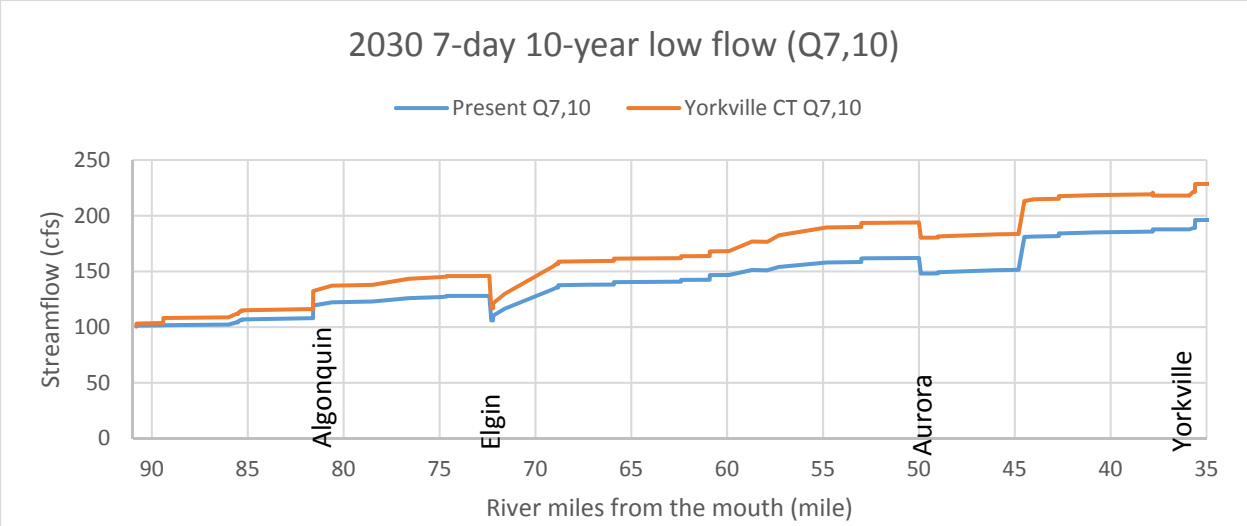

2040 April significant dry (lowest 10%)
Present April Q90
Yorkville CT April Q90
Streamflow (cfs)
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River miles from the mouth (mile)

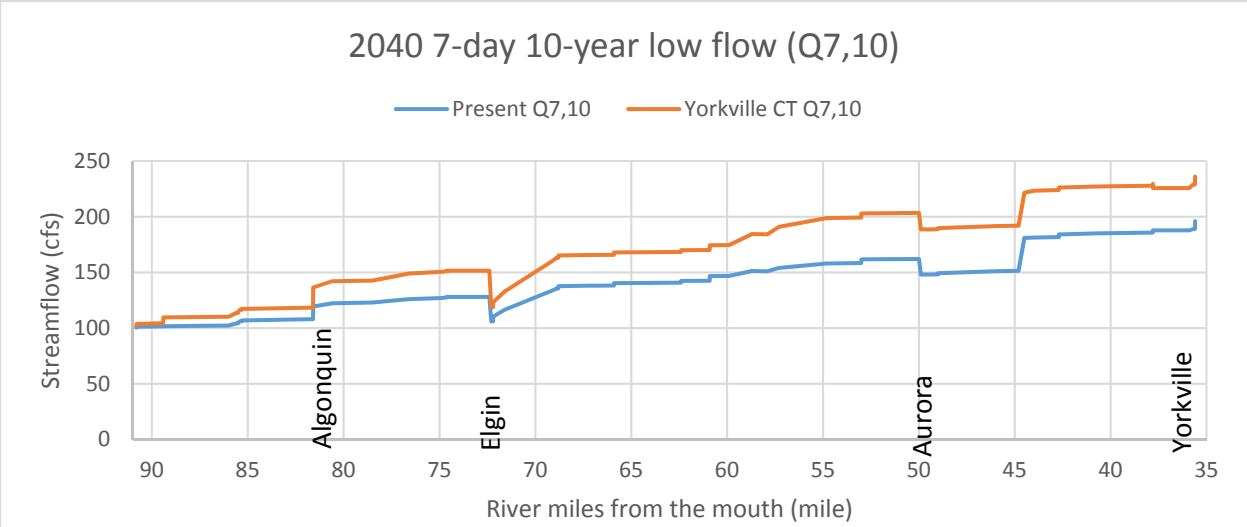

2050 April significant dry (lowest 10%)
Present April Q90
Yorkville CT April Q90
Streamflow (cfs)
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River miles from the mouth (mile)

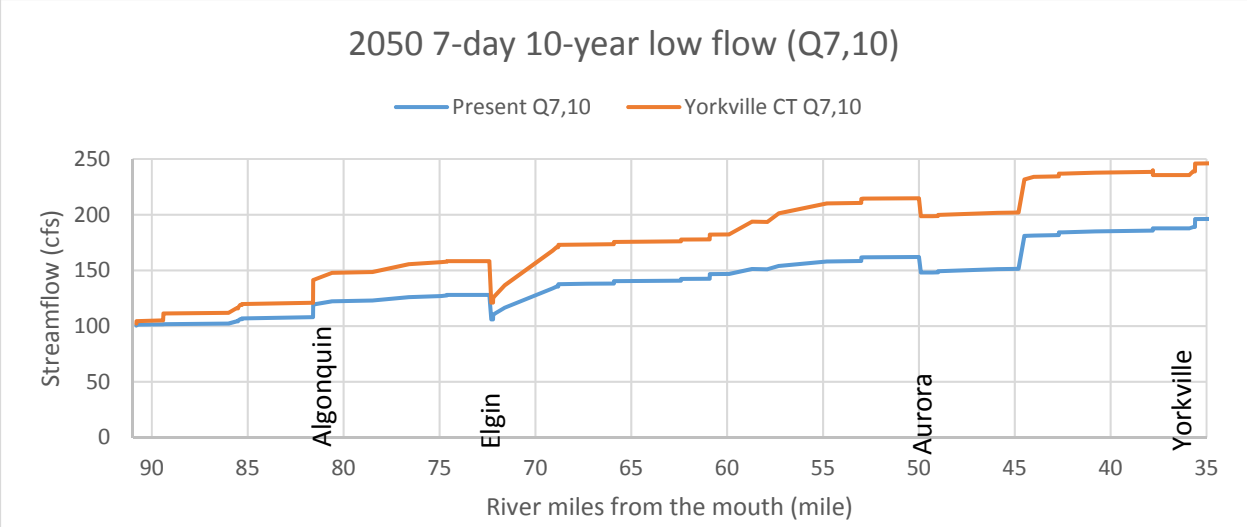

2030 July significant dry (lowest 10%)
Present July Q90
Yorkville July Q90
Streamflow (cfs)
450
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250
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Algonquin
Elgin
Aurora
Yorkville
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River miles from the mouth (mile)

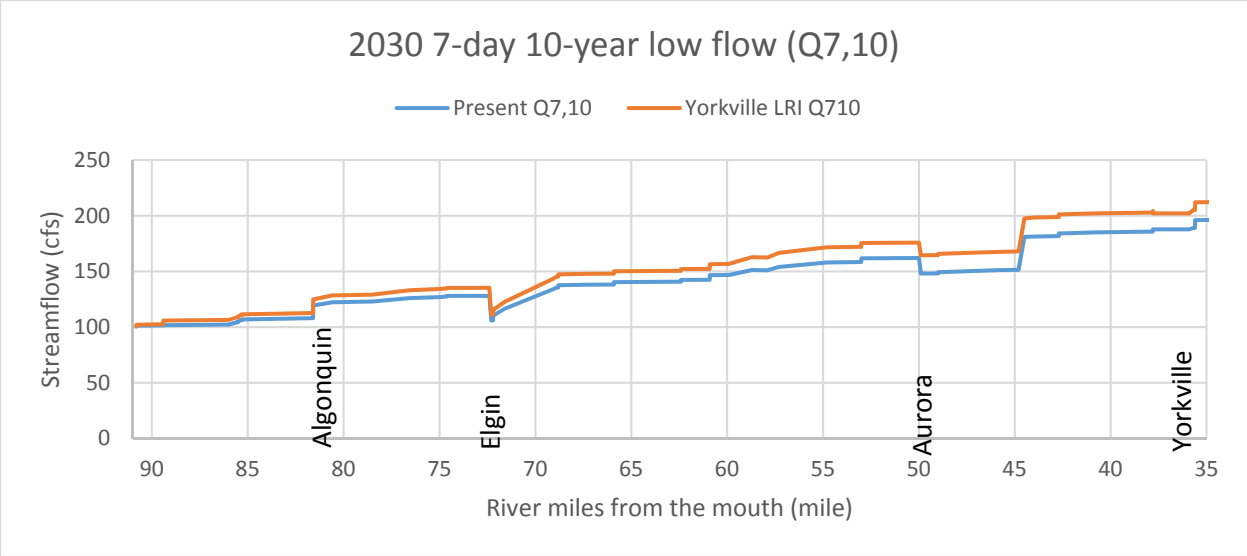

2040 July significant dry (lowest 10%)
Present July Q90
Yorkville July Q90
Streamflow (cfs)
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Algonquin
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River miles from the mouth (mile)

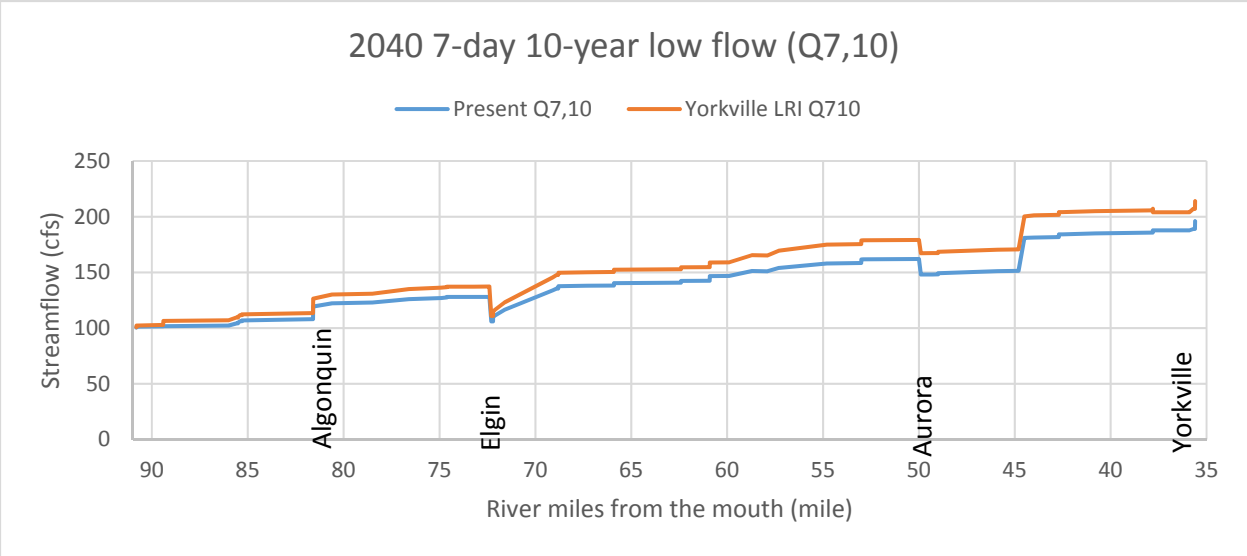

2050 July significant dry (lowest 10%)
Present July Q90
Yorkville July Q90
Streamflow (cfs)
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River miles from the mouth (mile)

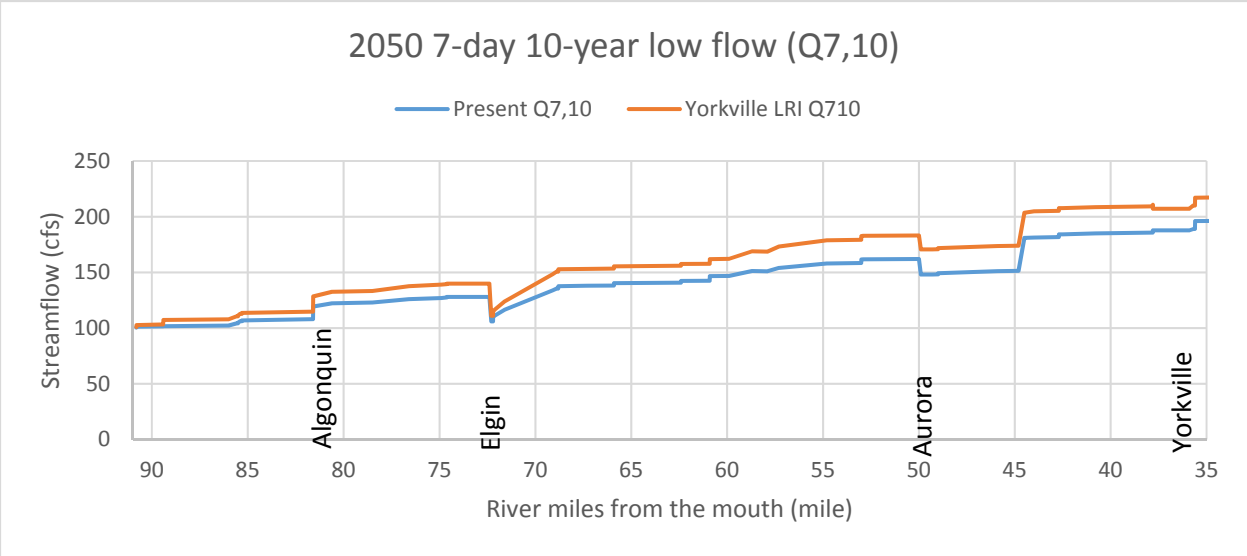

2030 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville CT Q7,10
Streamflow (cfs)
250
200
150
100
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Algonquin
Elgin
Aurora
Yorkville
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85
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75
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35
River miles from the mouth (mile)


2040 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville CT Q7,10
Streamflow (cfs)
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150
100
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Algonquin
Elgin
Aurora
Yorkville
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35
River miles from the mouth (mile)


2050 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville CT Q7,10
Streamflow (cfs)
250
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Algonquin
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River miles from the mouth (mile)

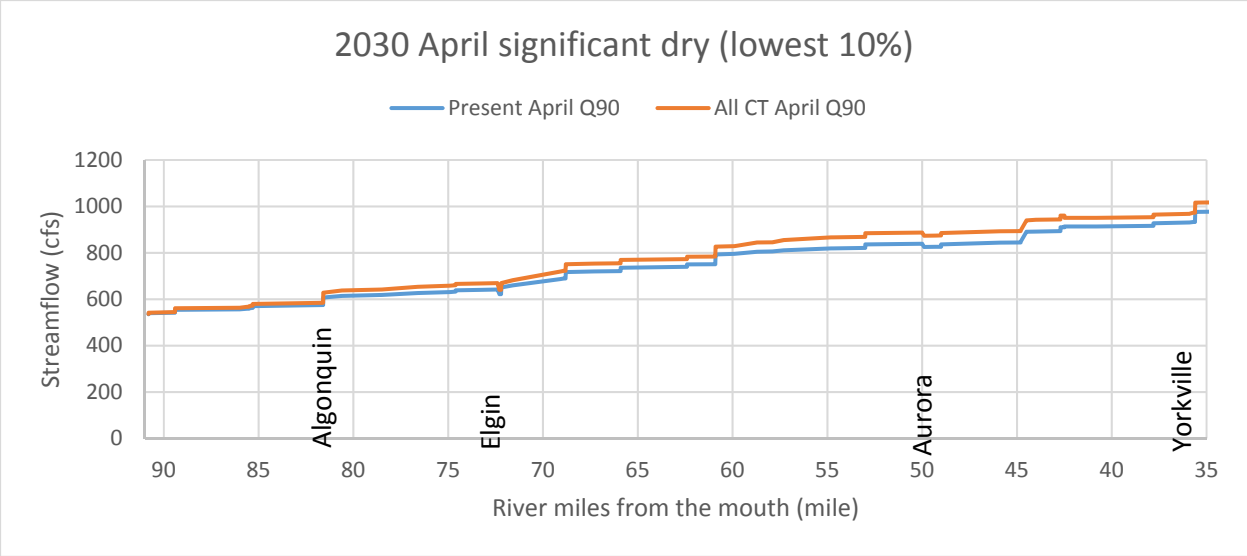

2030 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville LRI Q710
Streamflow (cfs)
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Aurora
Yorkville
River miles from the mouth (mile)

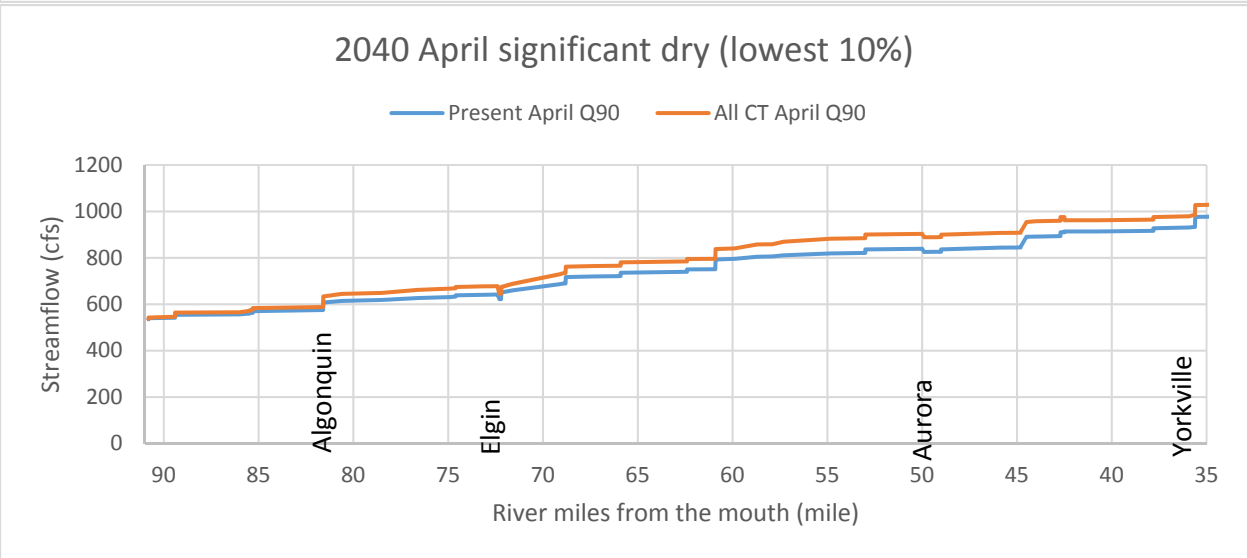

2040 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville LRI Q710
Streamflow (cfs)
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Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

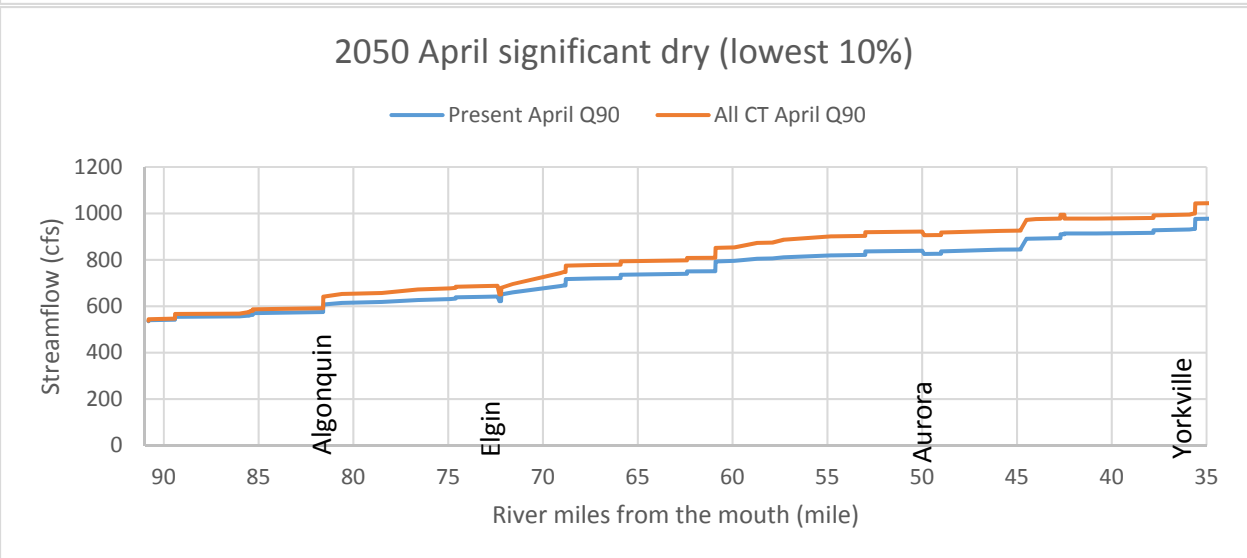

2050 7-day 10-year low flow (Q7,10)
Present Q7,10
Yorkville LRI Q710
Streamflow (cfs)
250
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Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

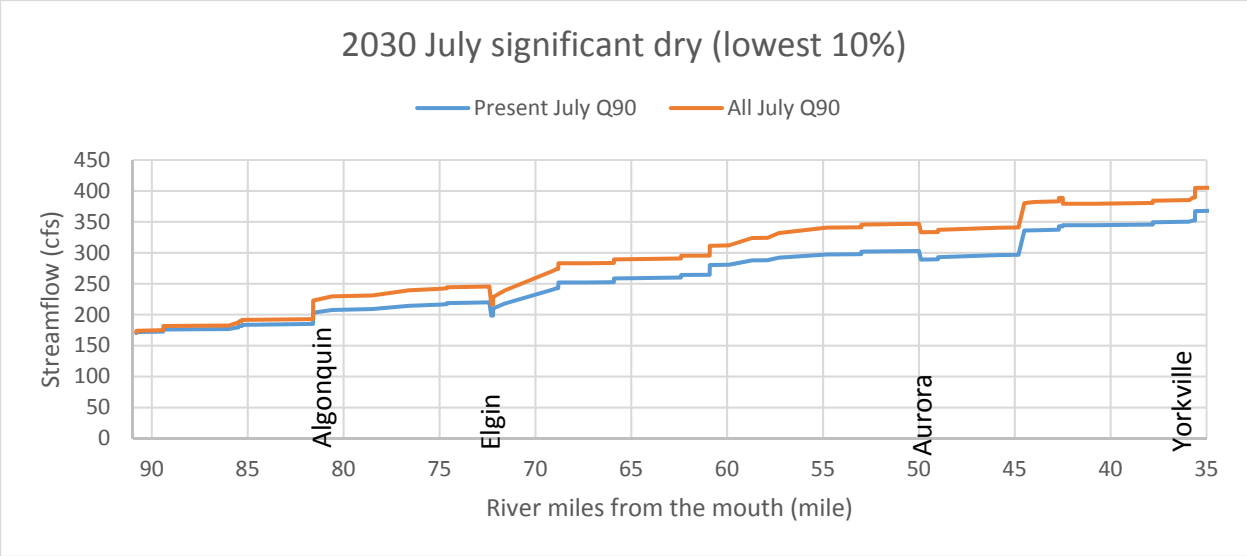
Appendix D

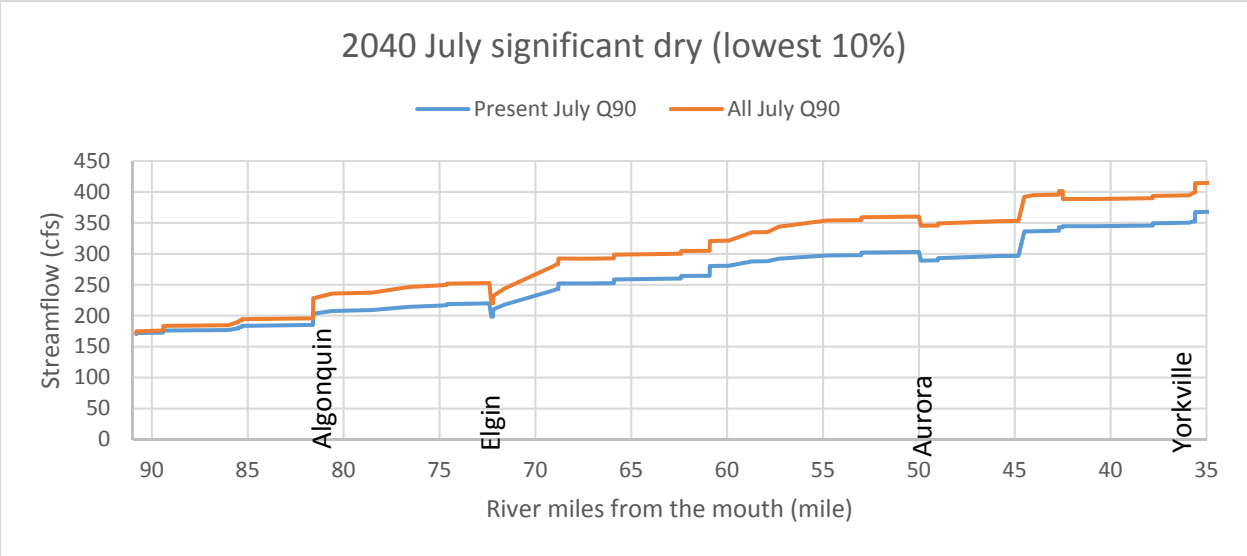
Sub-Regional Location Fox River Streamflow as Compared to Length of River

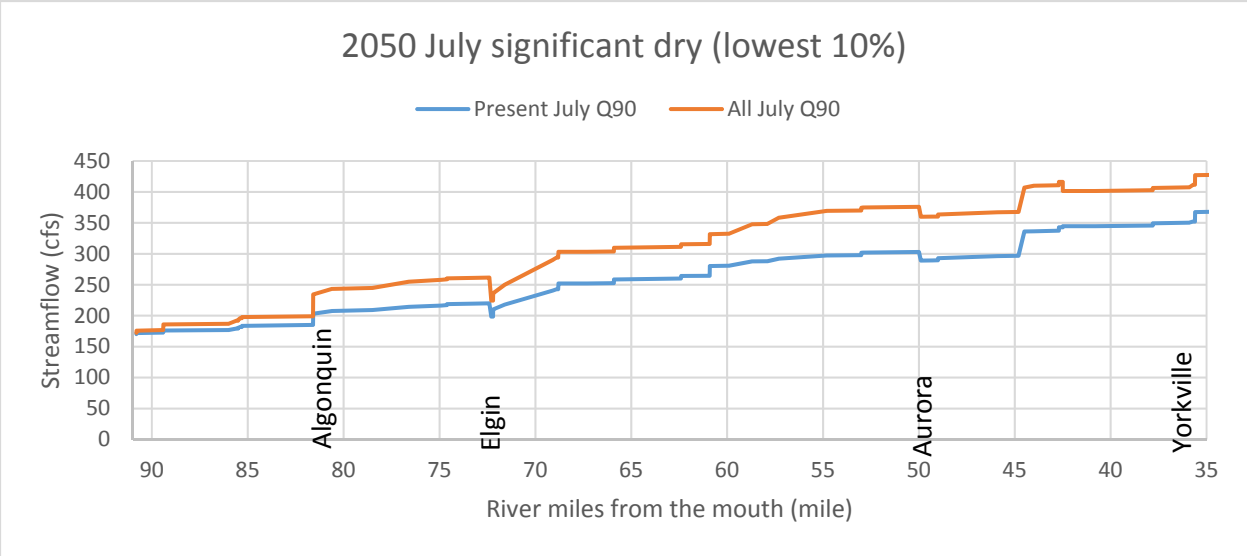

2030 April significant dry (lowest 10%)
Present April Q90
All CT April Q90
Streamflow (cfs)
1200
1000
800
600
400
200
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)

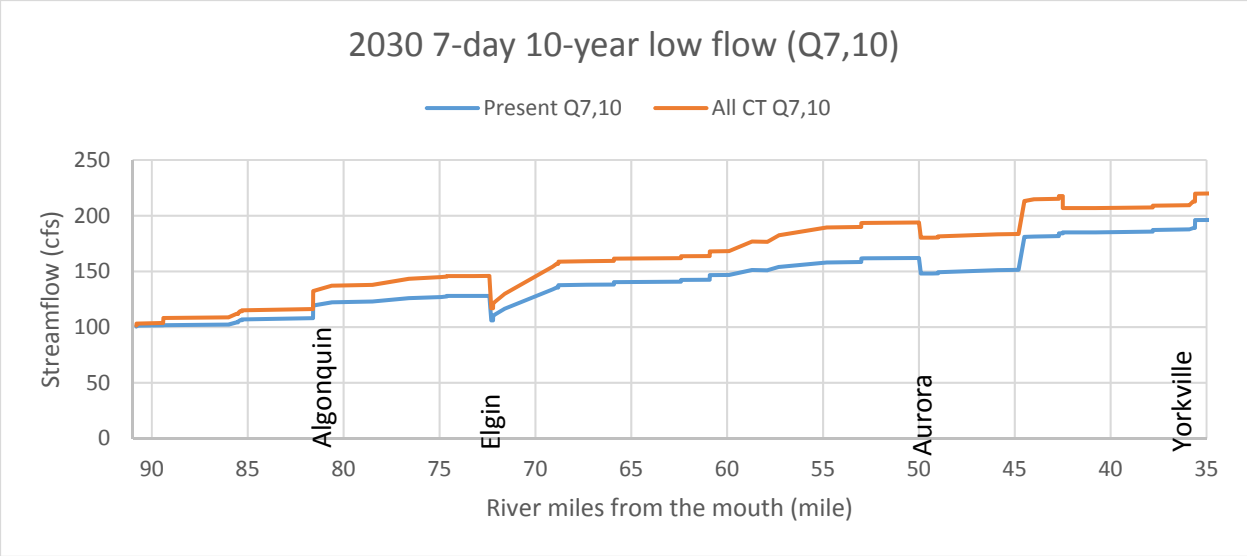

2040 April significant dry (lowest 10%)
Present April Q90
All CT April Q90
Streamflow (cfs)
1200
1000
800
600
400
200
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)

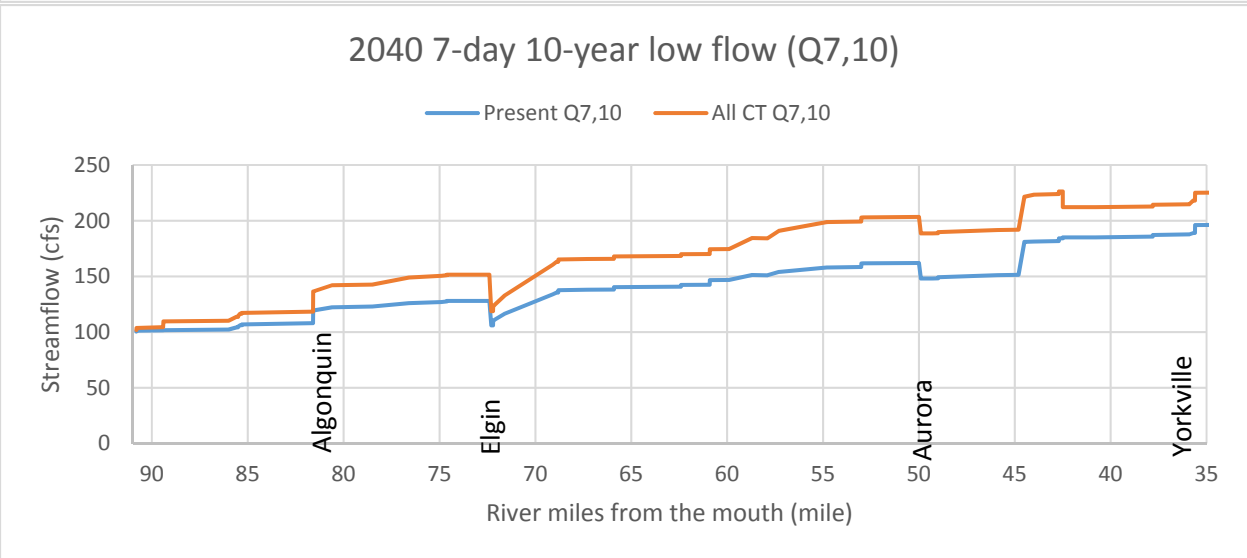

2050 April significant dry (lowest 10%)
Present April Q90
All CT April Q90
Streamflow (cfs)
1200
1000
800
600
400
200
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)

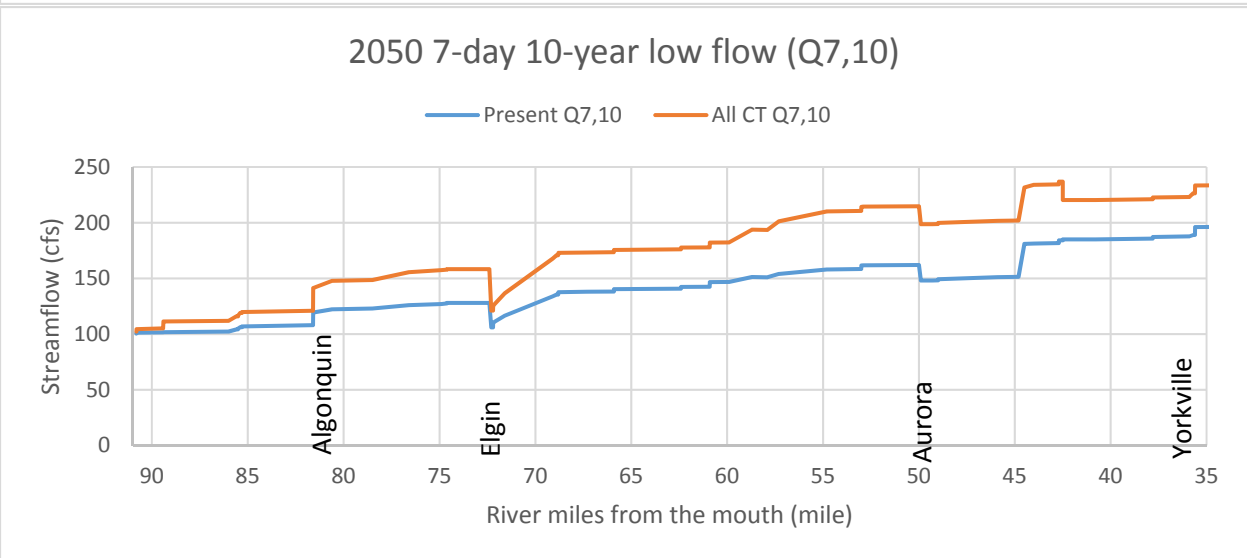

2030 July significant dry (lowest 10%)
Present July Q90
All July Q90
Streamflow (cfs)
450
400
350
300
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

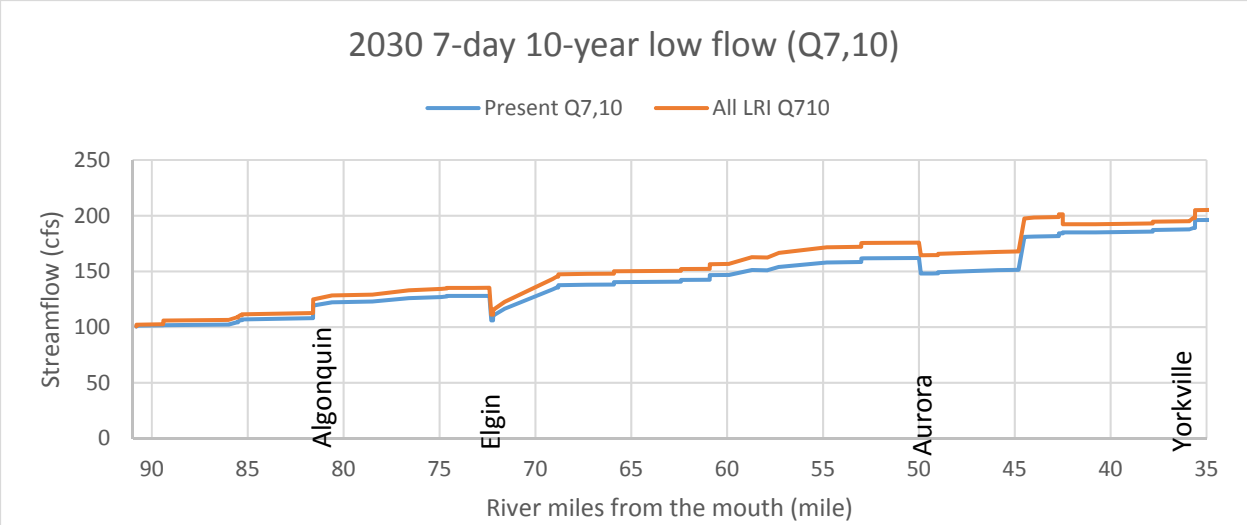

2040 July significant dry (lowest 10%)
Present July Q90
All July Q90
Streamflow (cfs)
450
400
350
300
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

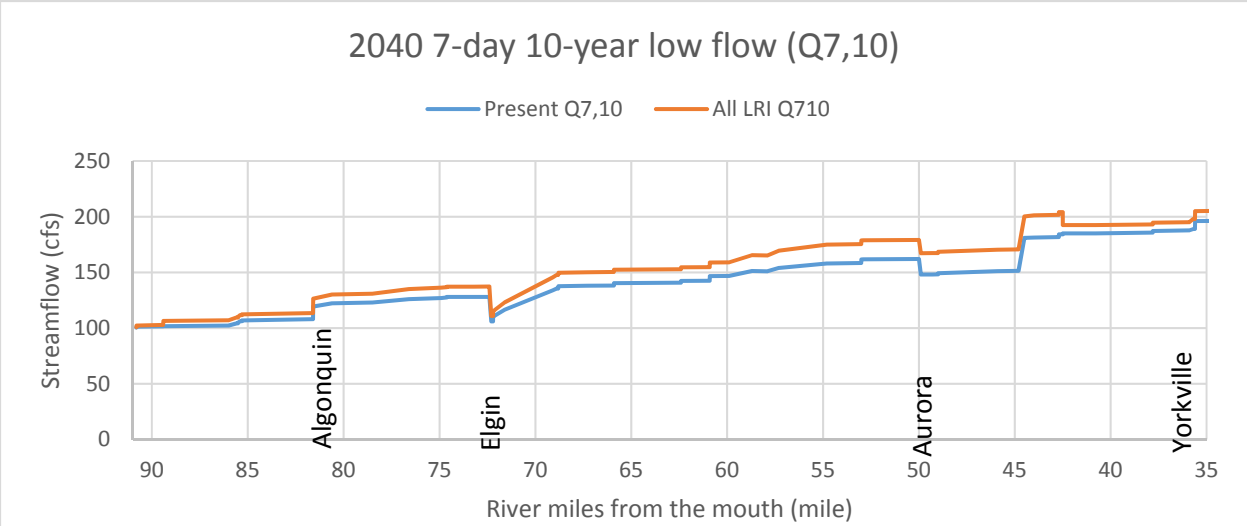

2050 July significant dry (lowest 10%)
Present July Q90
All July Q90
Streamflow (cfs)
450
400
350
300
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

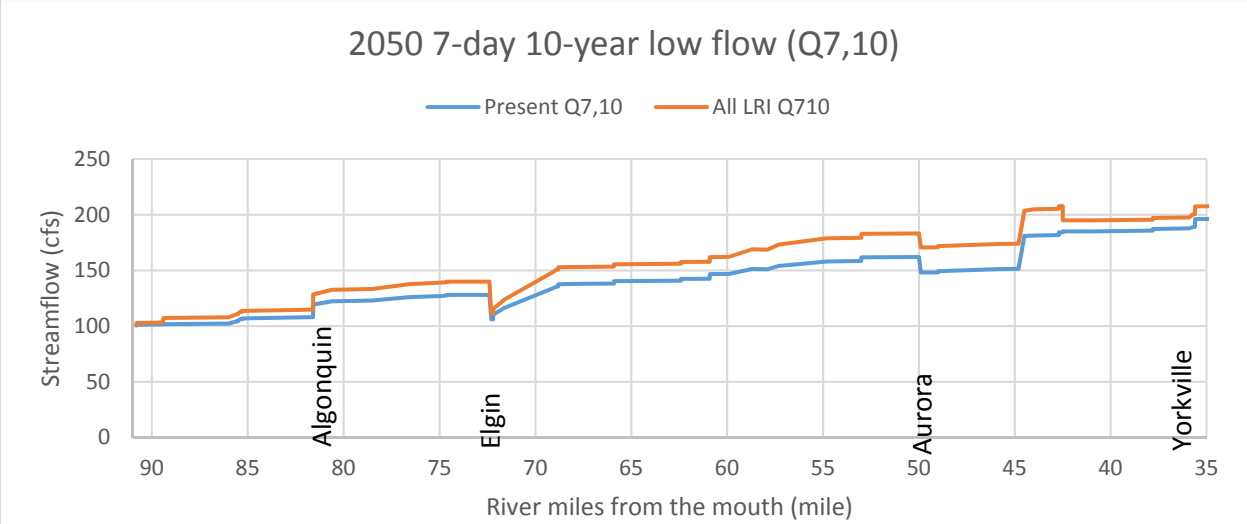

2030 7-day 10-year low flow (Q7,10)
Present Q7,10
All CT Q7,10
Streamflow (cfs)
250
200
150
100
50
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)


2040 7-day 10-year low flow (Q7,10)
Present Q7,10
All CT Q7,10
Streamflow (cfs)
250
200
150
100
50
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)


2050 7-day 10-year low flow (Q7,10)
Present Q7,10
All CT Q7,10
Streamflow (cfs)
250
200
150
100
50
0
Algonquin
Elgin
Aurora
Yorkville
90
85
80
75
70
65
60
55
50
45
40
35
River miles from the mouth (mile)

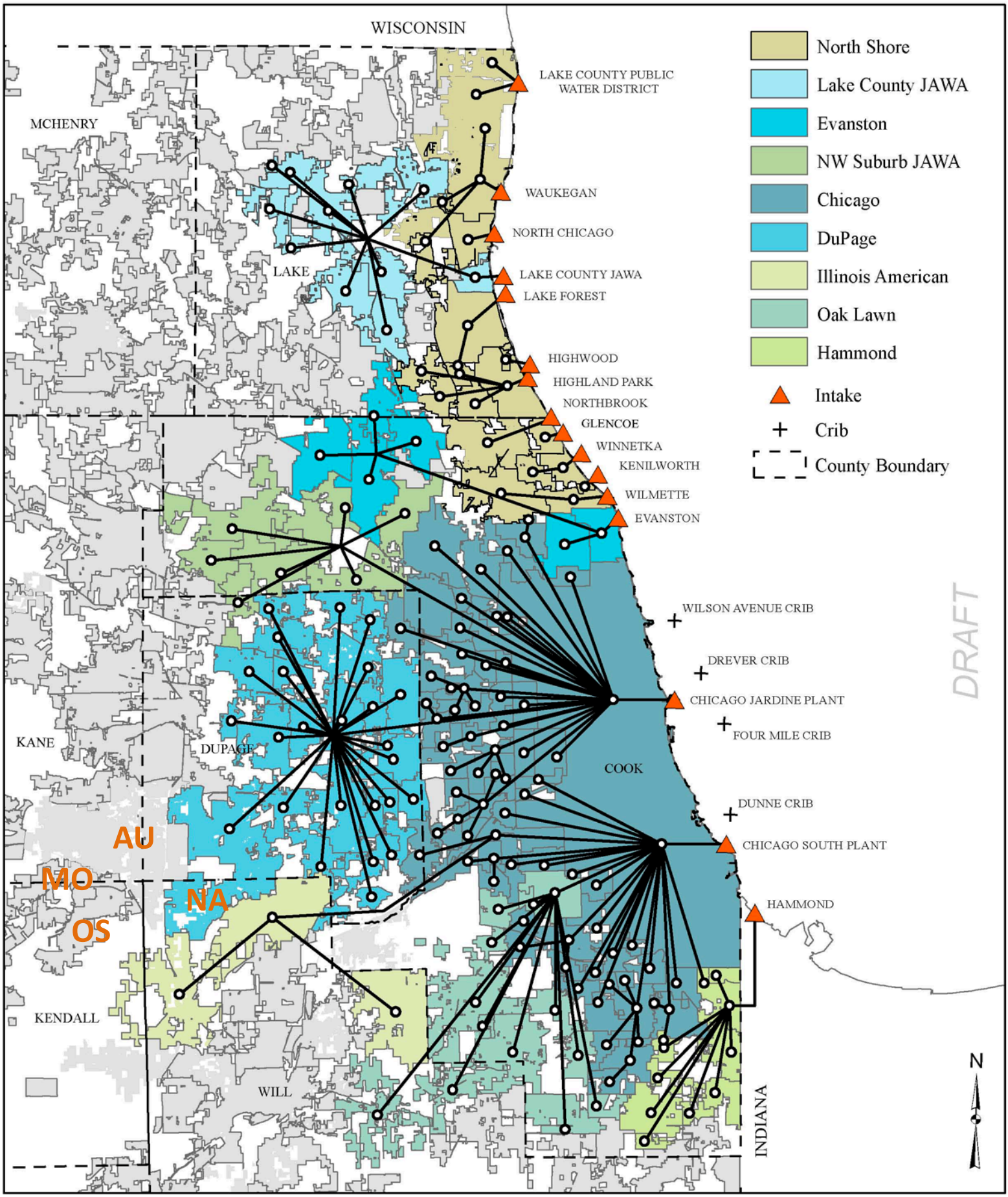

2030 7-day 10-year low flow (Q7,10)
Present Q7,10
All LRI Q710
Streamflow (cfs)
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)


2040 7-day 10-year low flow (Q7,10)
Present Q7,10
All LRI Q710
Streamflow (cfs)
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)


2050 7-day 10-year low flow (Q7,10)
Present Q7,10
All LRI Q710
Streamflow (cfs)
250
200
150
100
50
0
90
85
80
75
70
65
60
55
50
45
40
35
Algonquin
Elgin
Aurora
Yorkville
River miles from the mouth (mile)

Appendix E

Lake Michigan Allocation Network 2012



DISTRIBUTION NETWORK OF LAKE MICHIGAN WATER IN 2012

Prepared by:
Daniel R. Hadley and George S. Roadcap

ILLINOIS STATE WATER SURVEY
PRAIRIE RESEARCH INSTITUTE

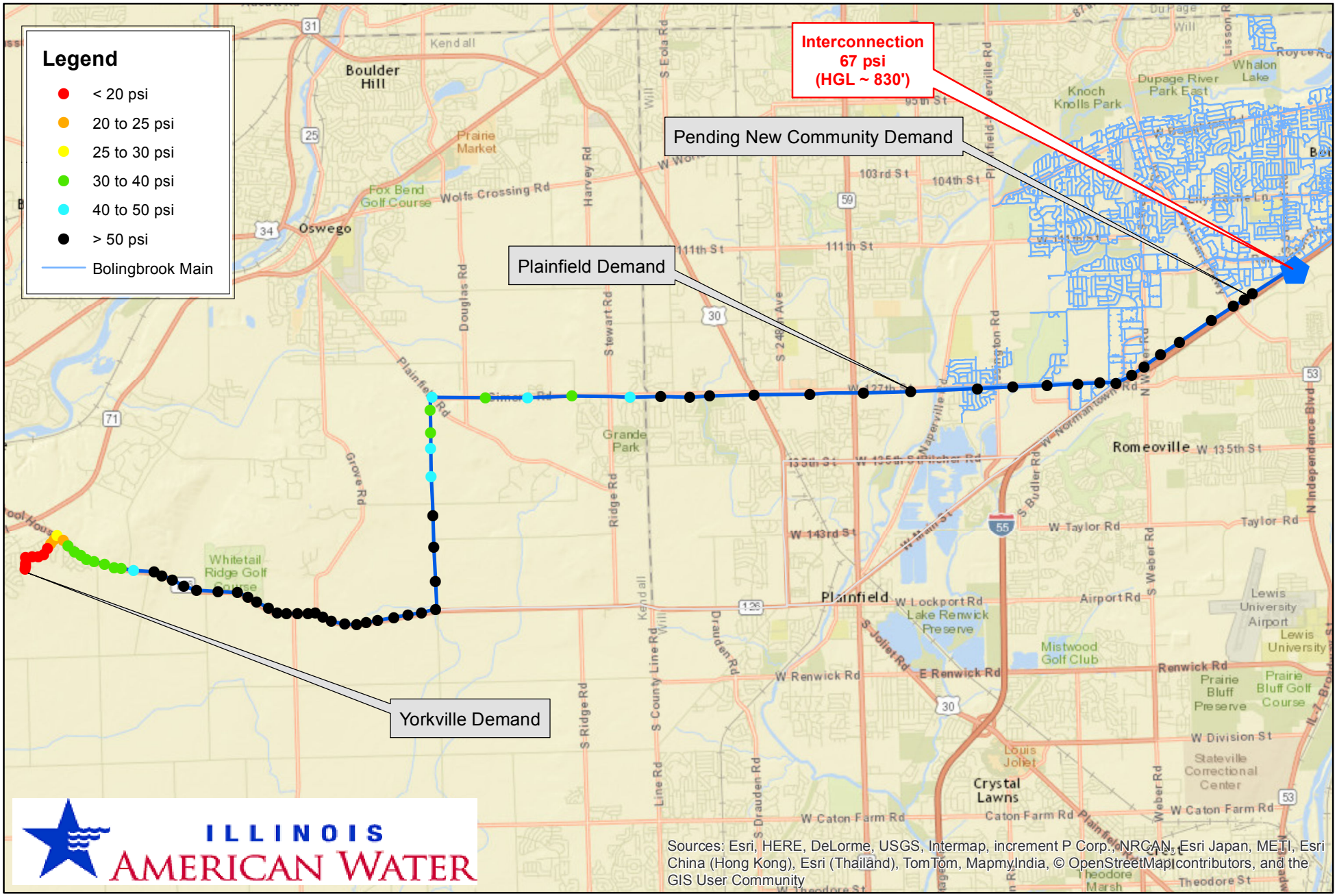
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ILLINOIS

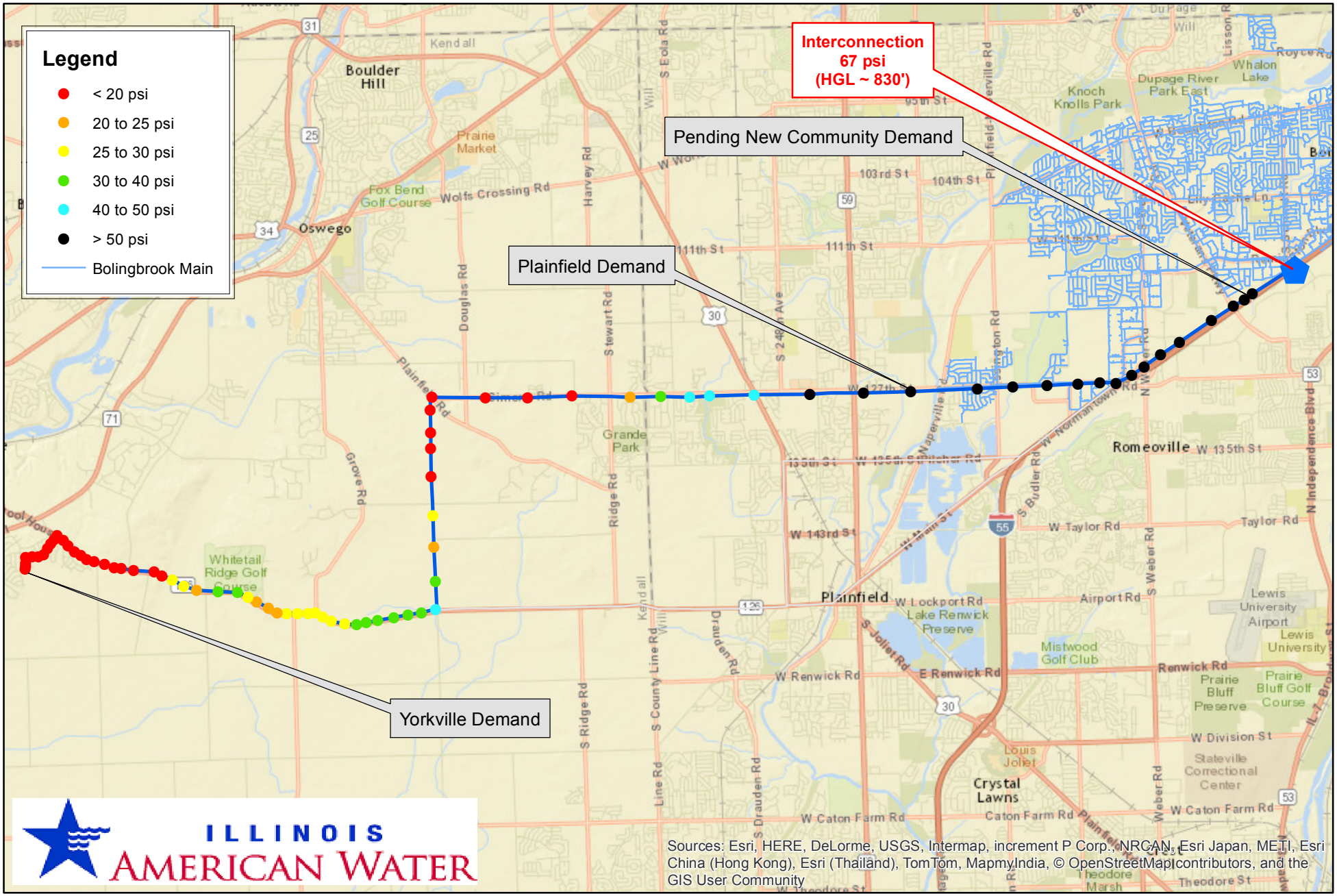
Appendix F

Illinois American Water Delivery Modeling

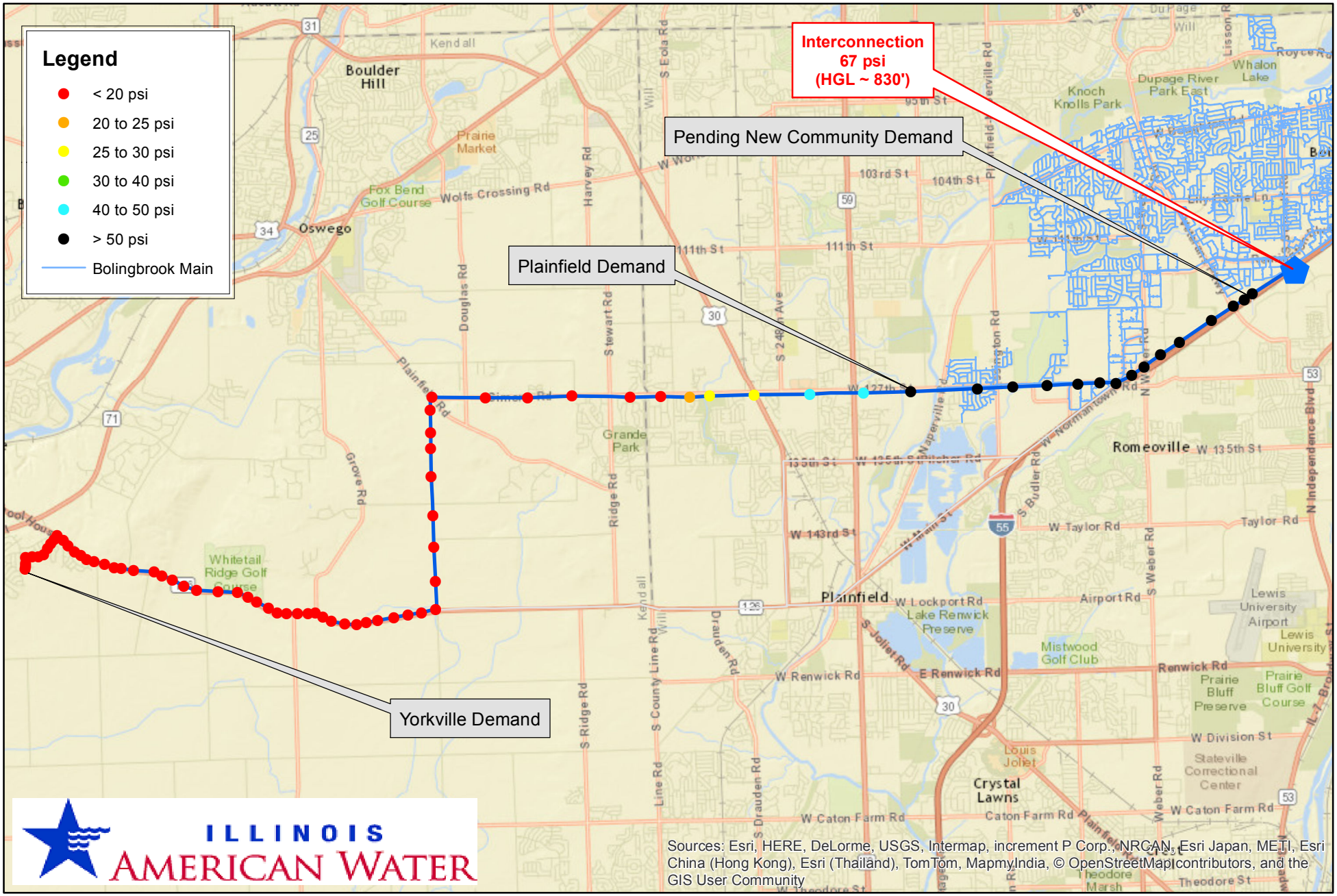
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2015 ALW Pipeline Demands
Yorkville 2.17 mgd



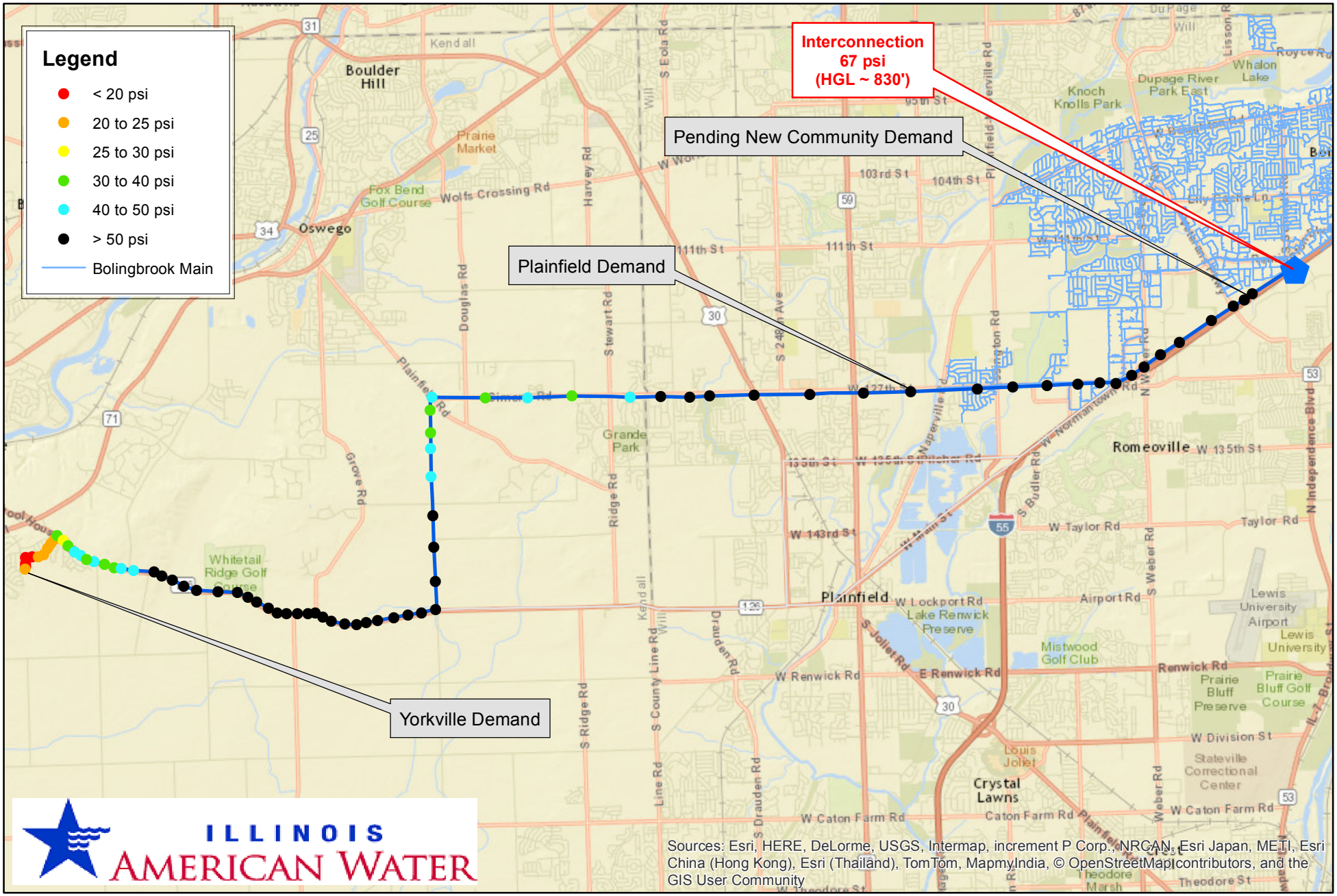
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Yorkville 5.71 mgd



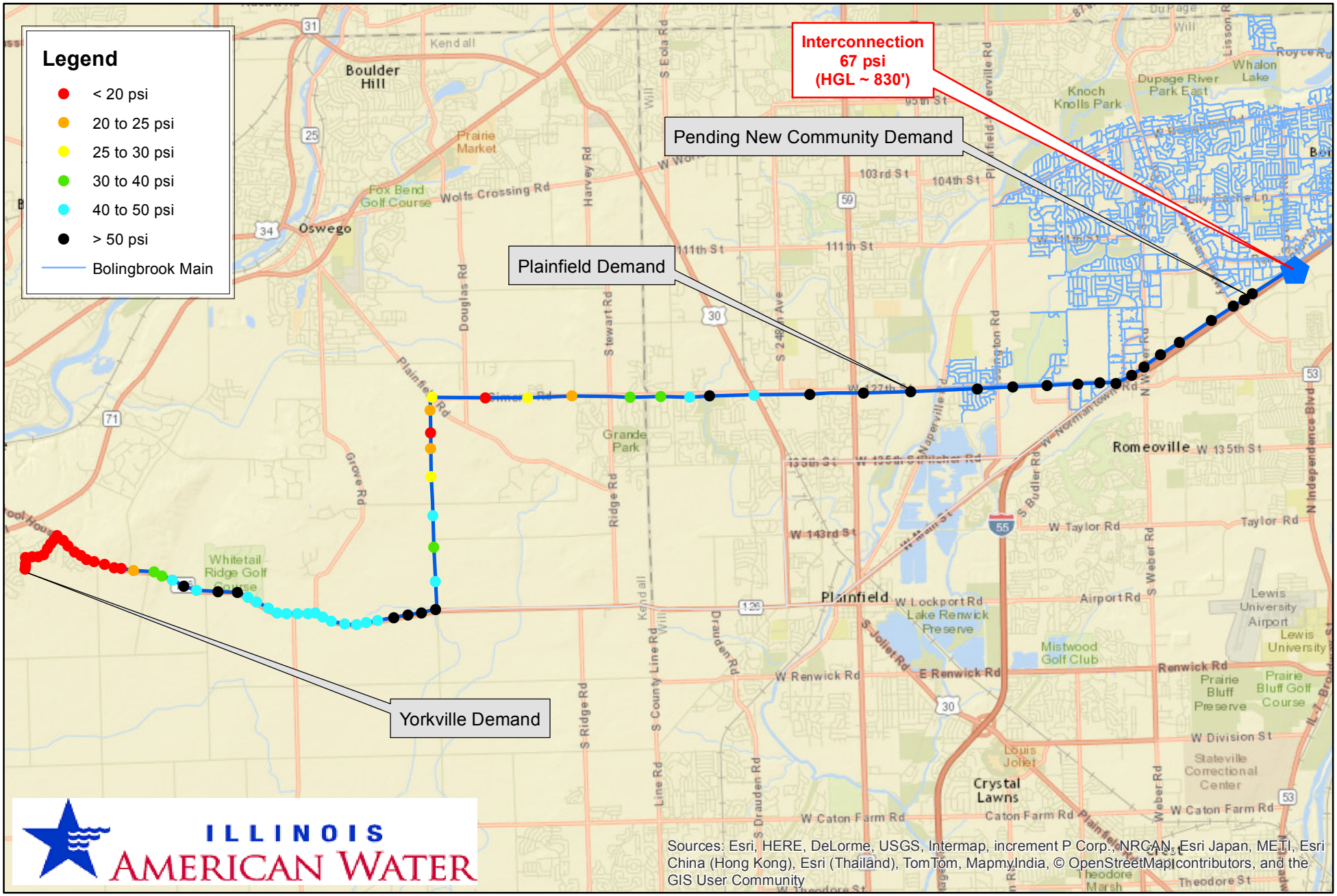
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Yorkville 7.83 mgd



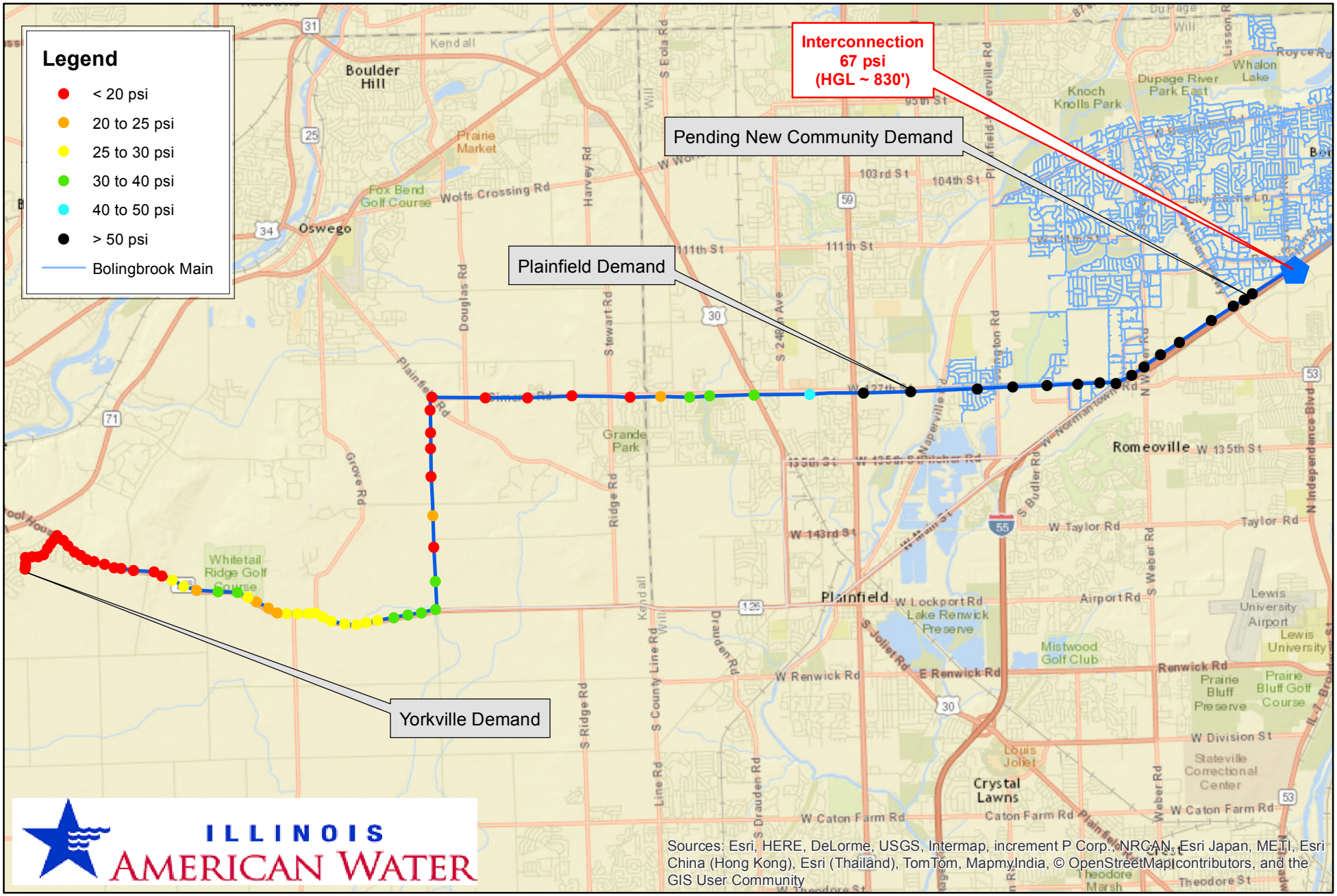
Route 1 - 30"
2015 ALW Pipeline Demands
Yorkville 2.17 mgd



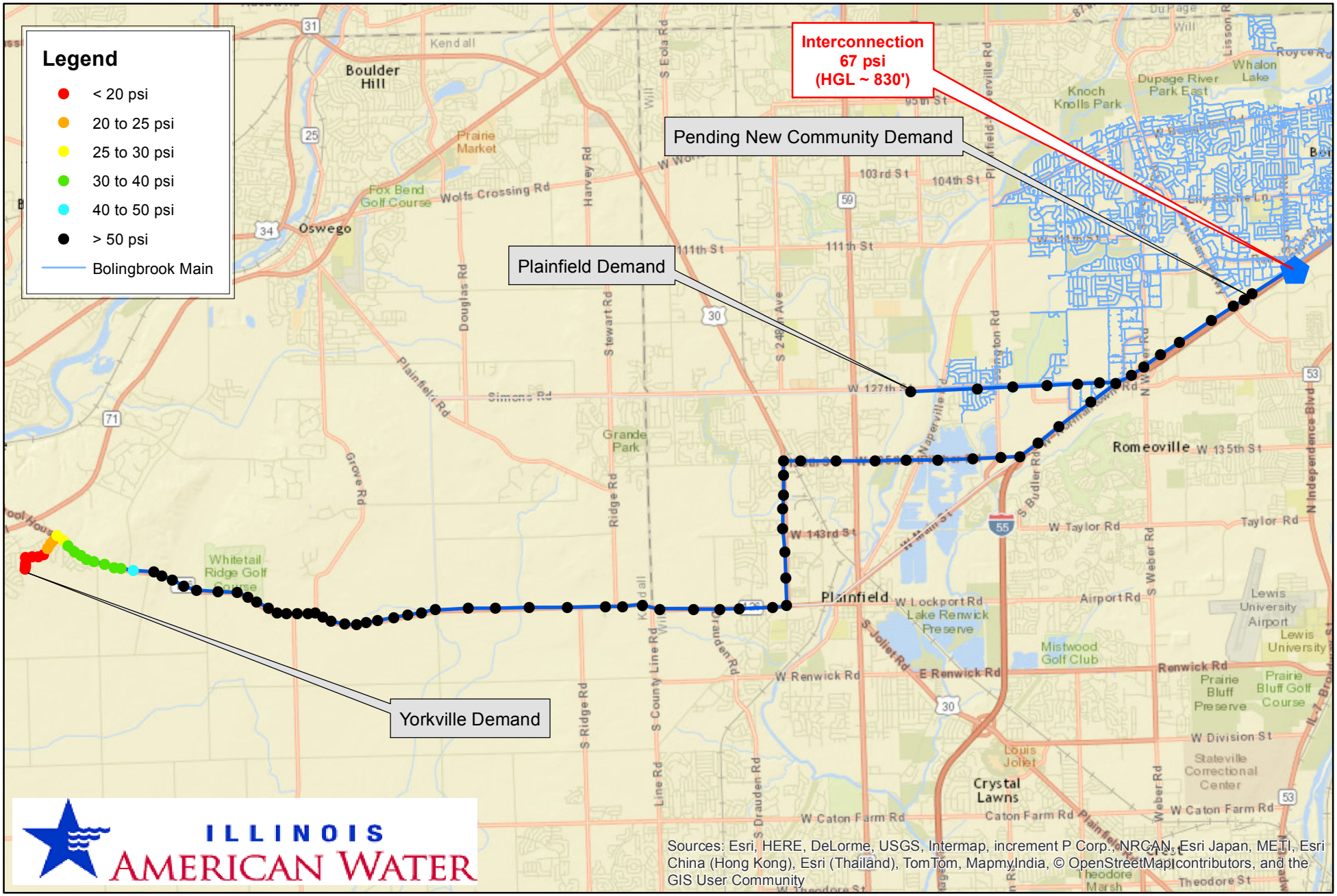
Route 1 - 30"
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Yorkville 5.71 mgd



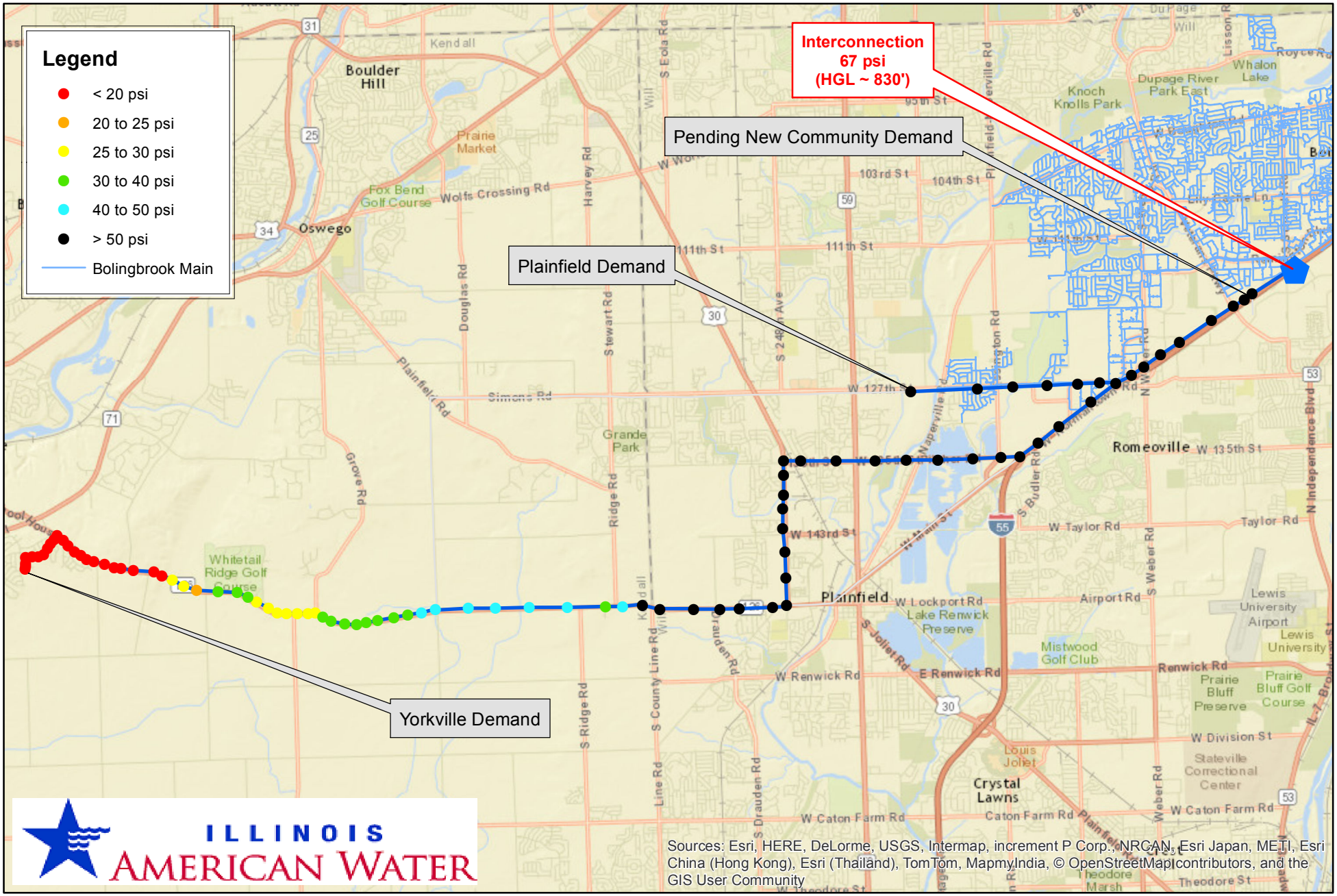
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2040 ALW Pipeline Demands
Yorkville 7.83 mgd



Route 2 - 24"
2015 ALW Pipeline Demands
Yorkville 2.17 mgd

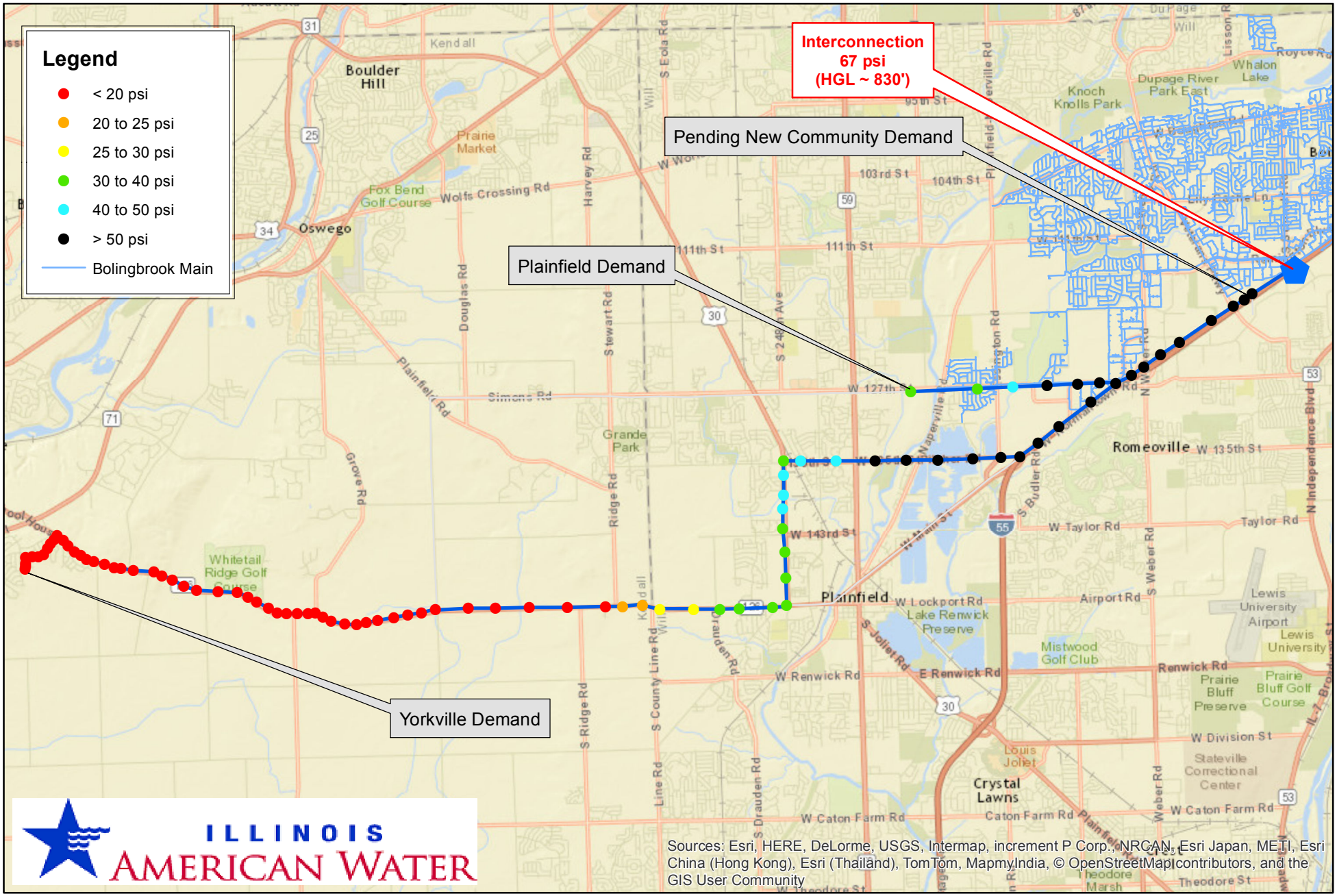


Route 2 - 24"
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Yorkville 5.71 mgd

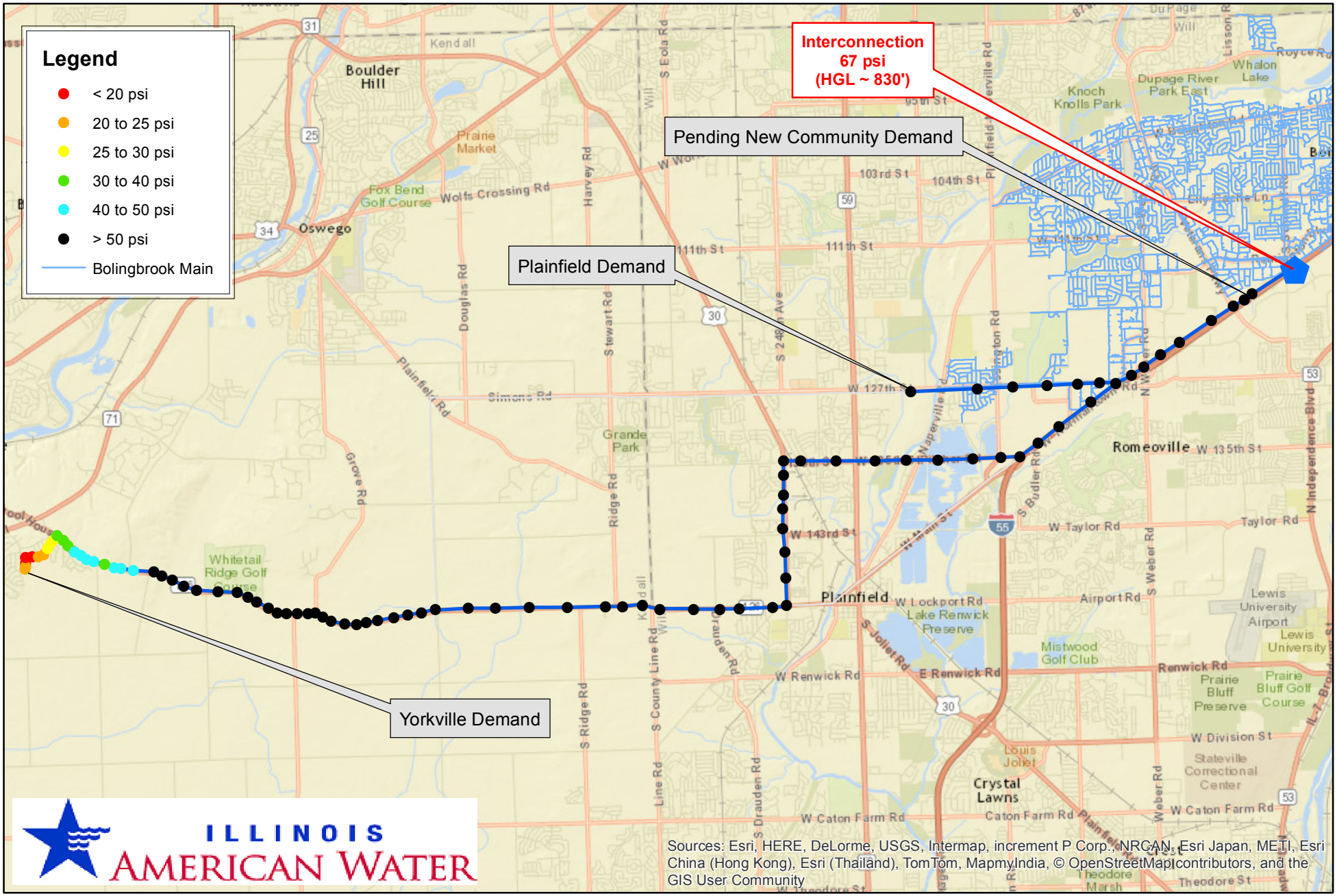


ILLINOIS AMERICAN WATER

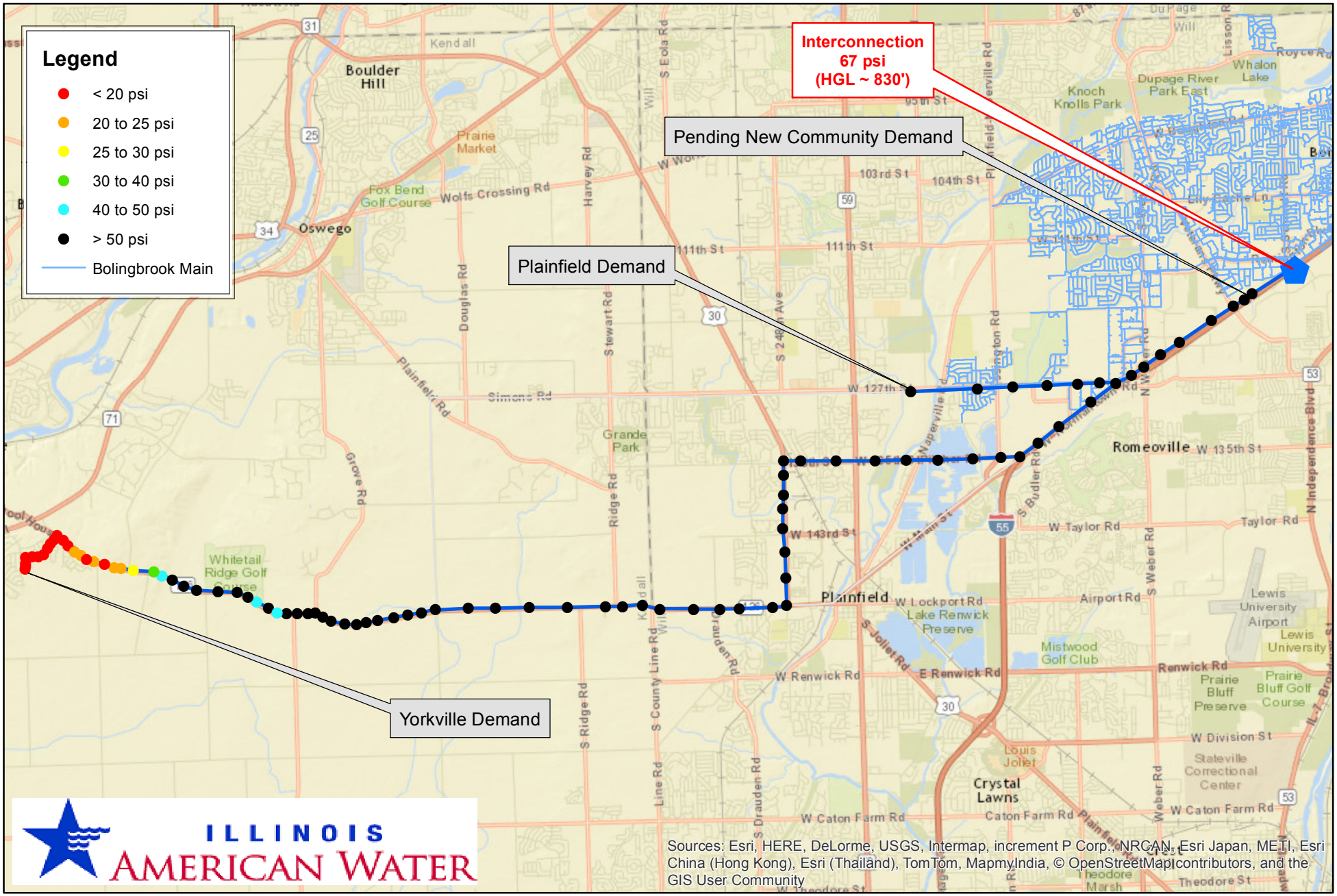
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2040 ALW Pipeline Demands
Yorkville 7.83 mgd



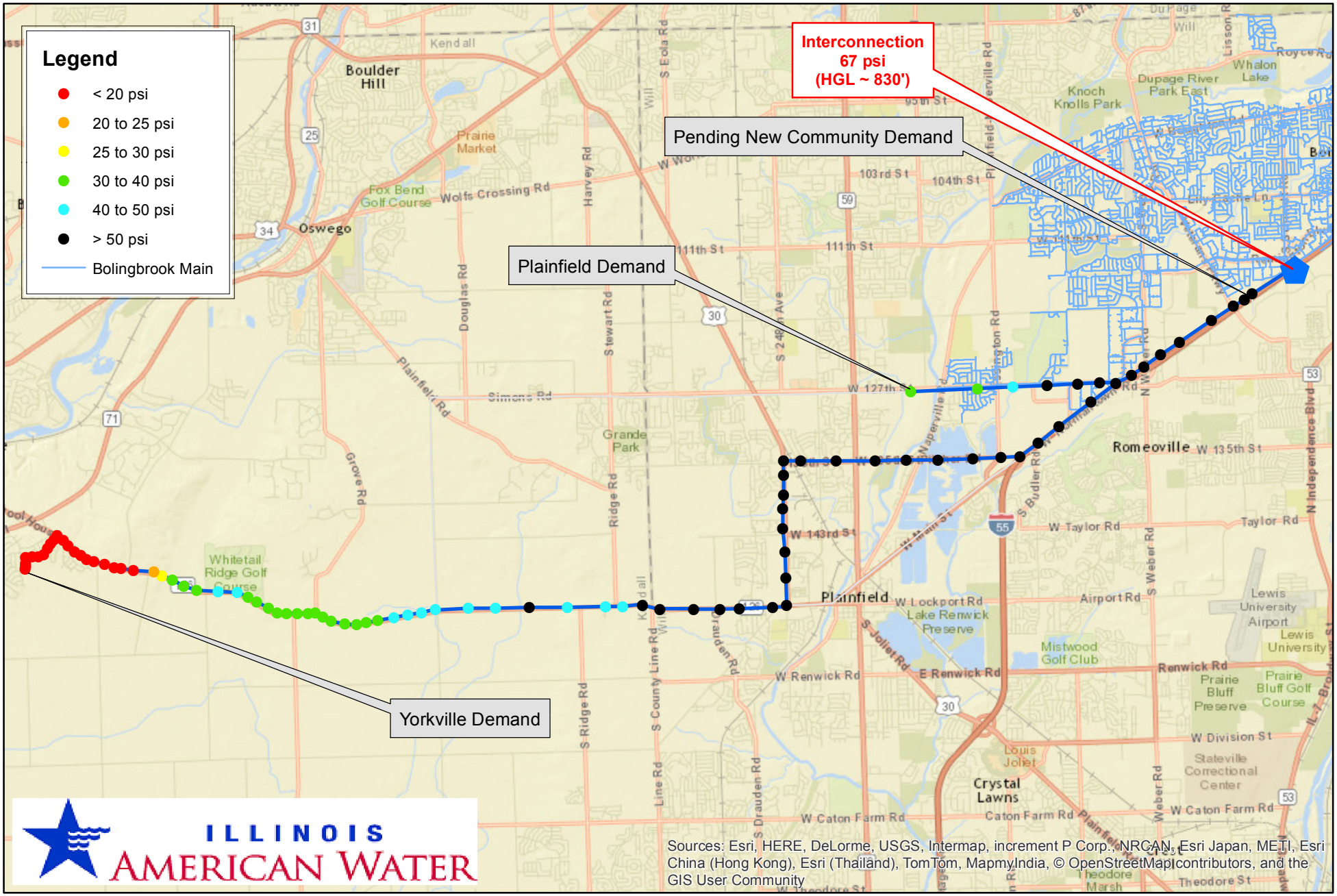
Route 2 - 30"
2015 ALW Pipeline Demands
Yorkville 2.17 mgd



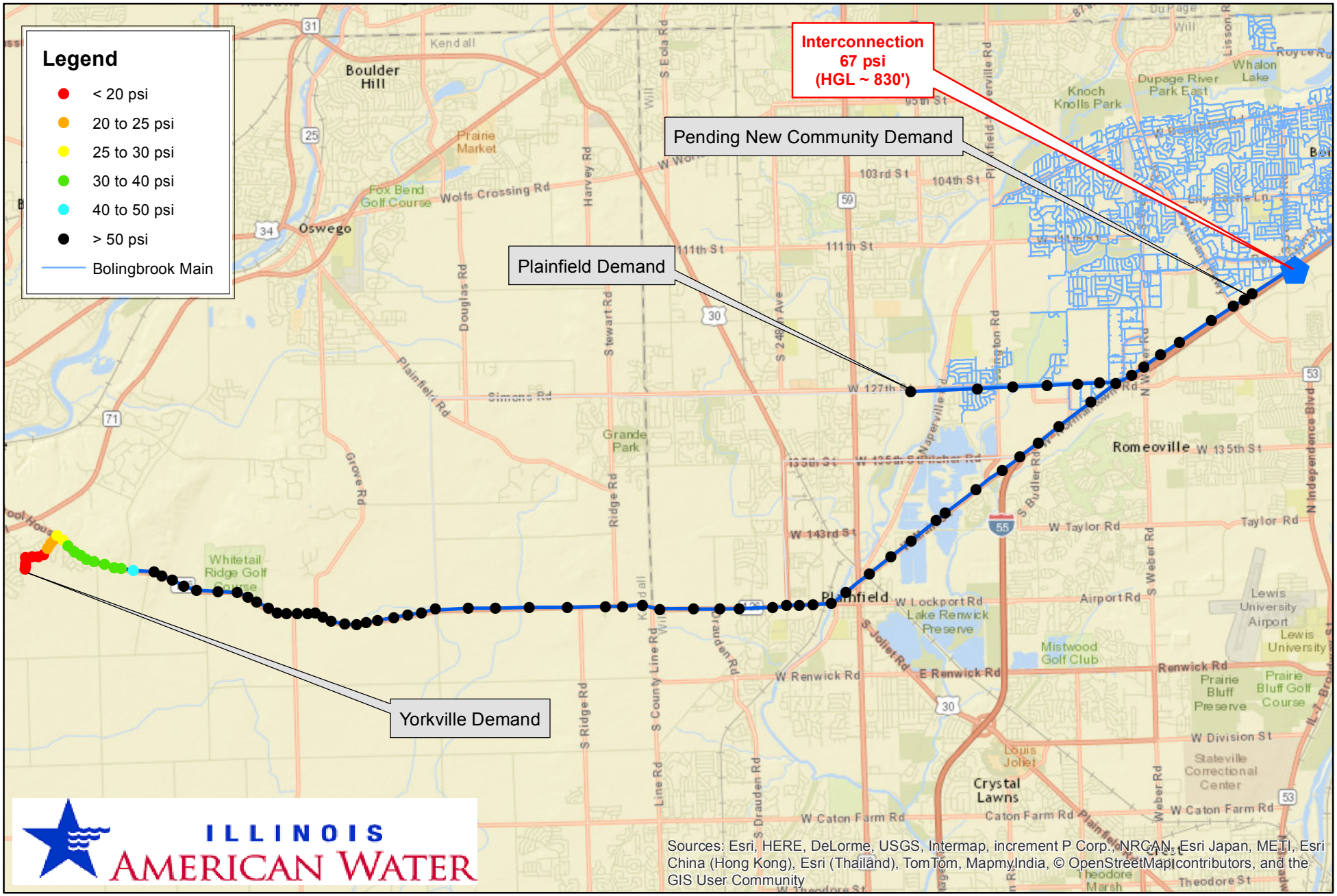
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2030 ALW Pipeline Demands
Yorkville 5.71 mgd



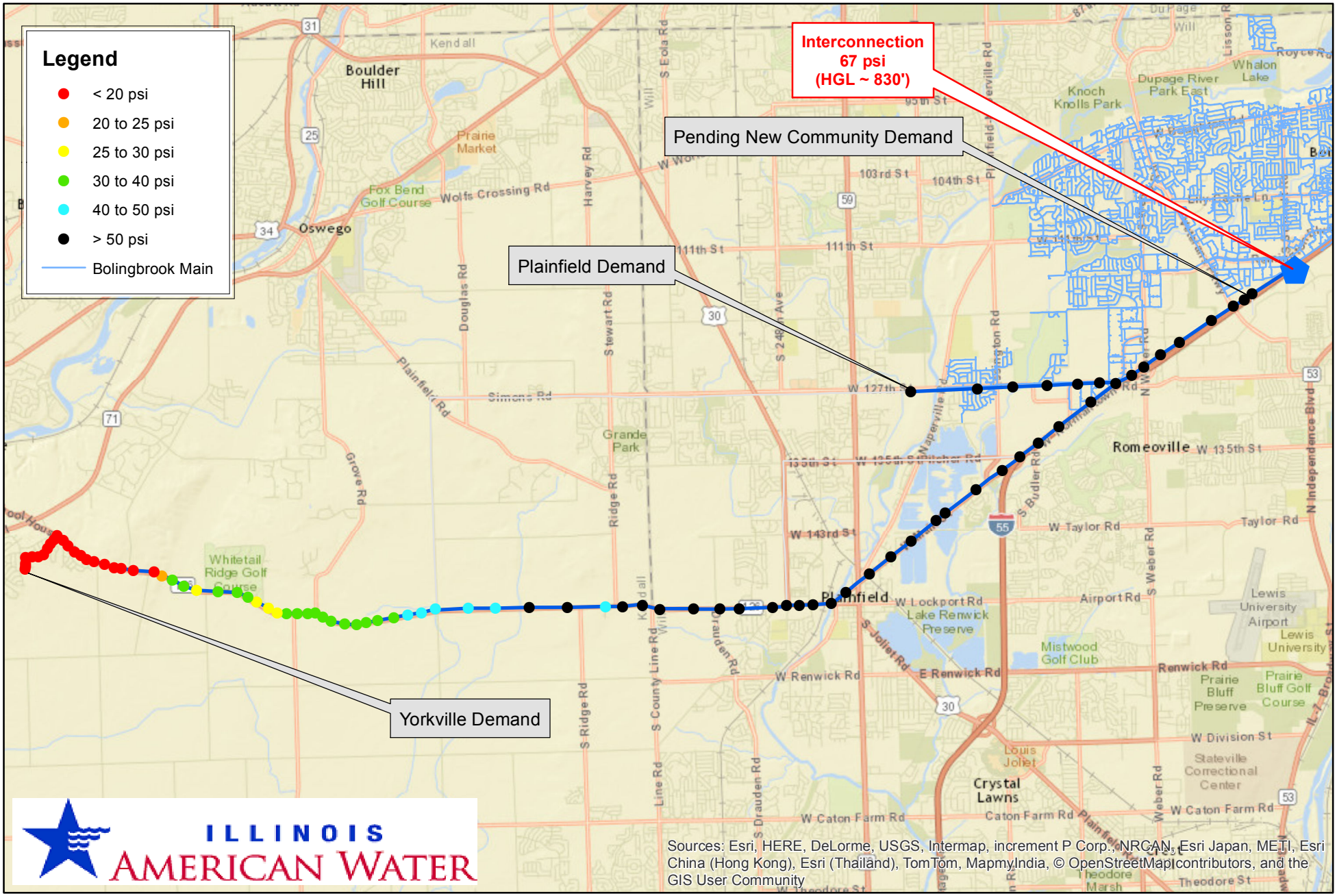
Route 2 - 30"
2040 ALW Pipeline Demands
Yorkville 7.83 mgd



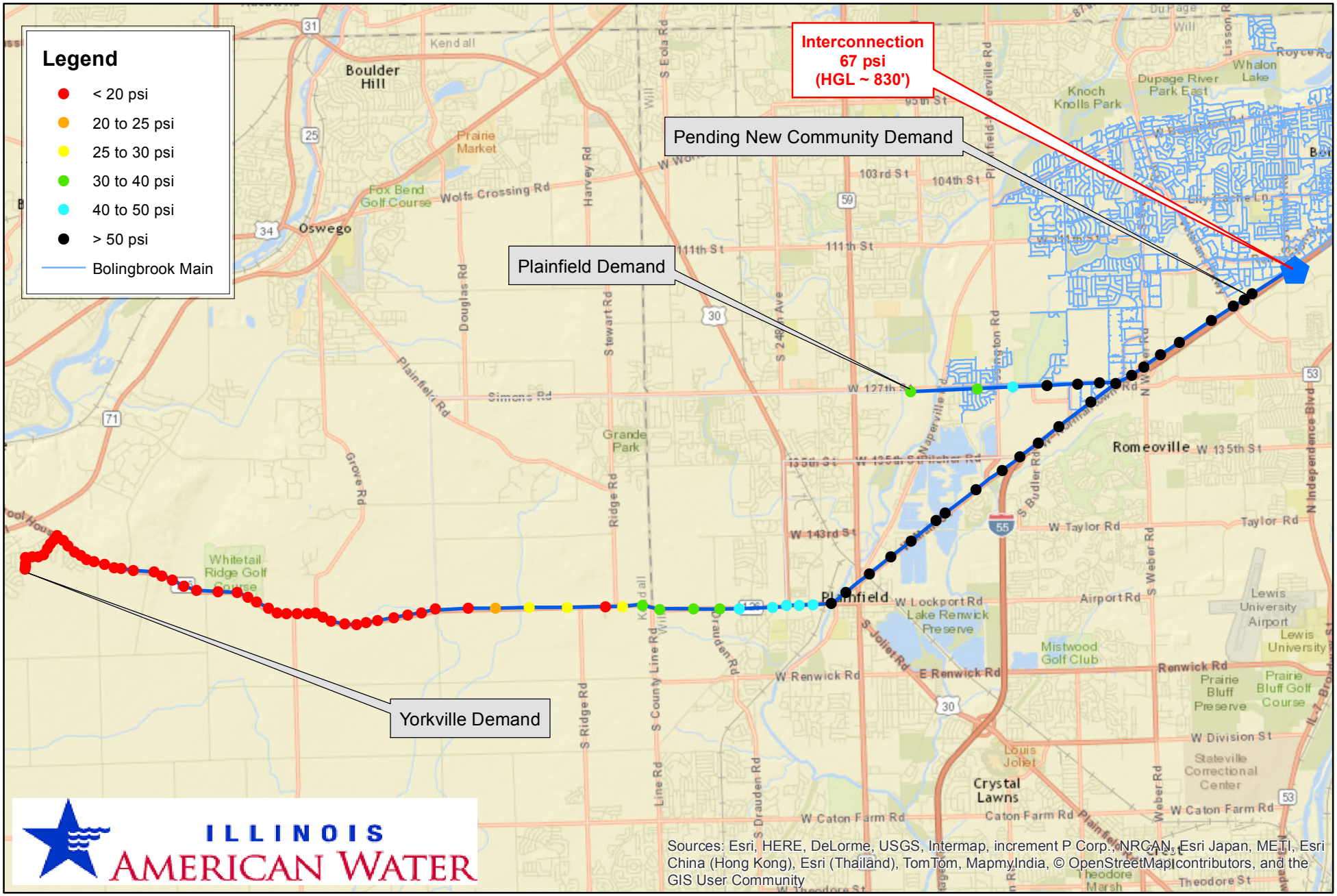
Route 3 - 24"
2015 ALW Pipeline Demands
Yorkville 2.17 mgd



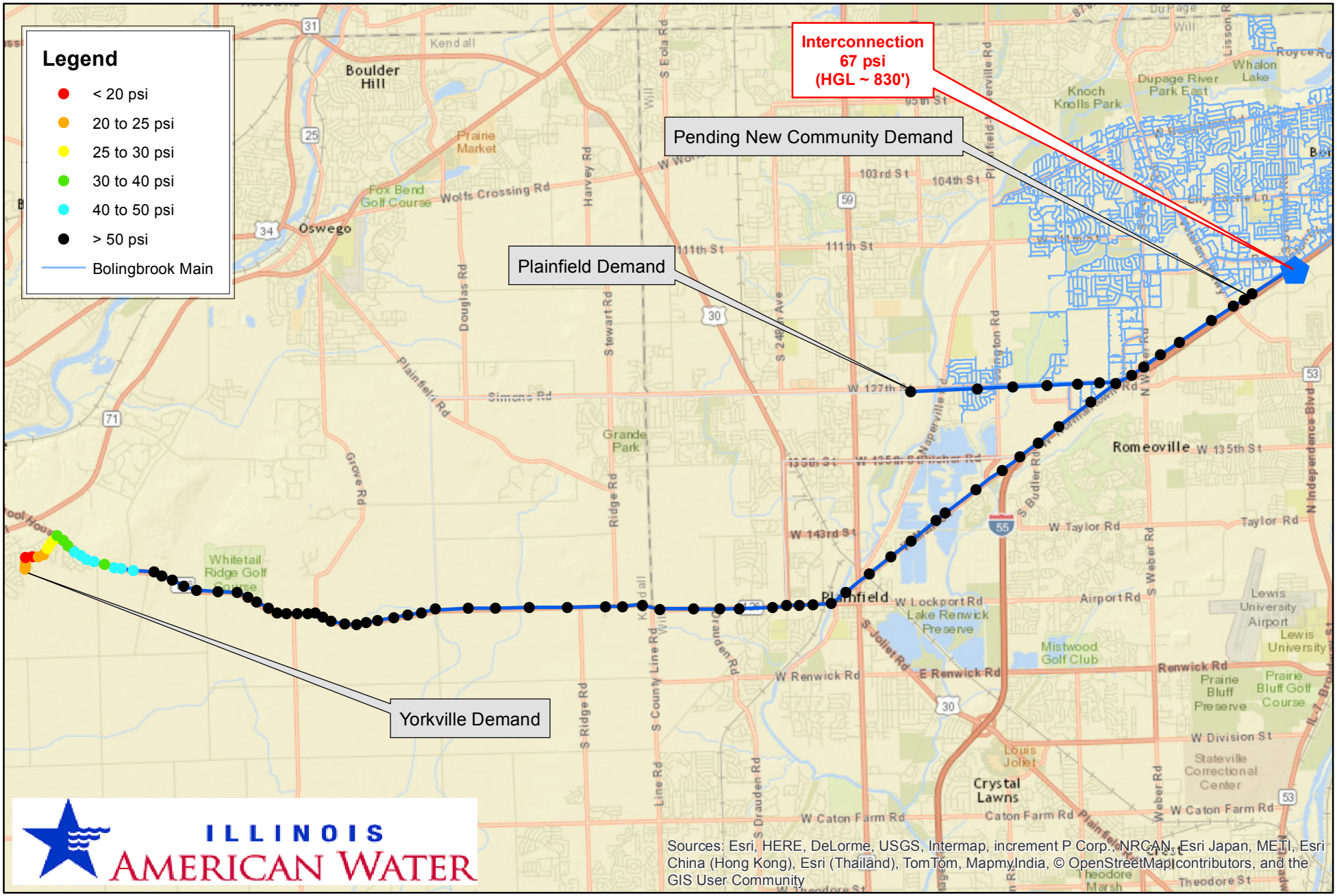
Route 3 - 24"
2030 ALW Pipeline Demands
Yorkville 5.71 mgd



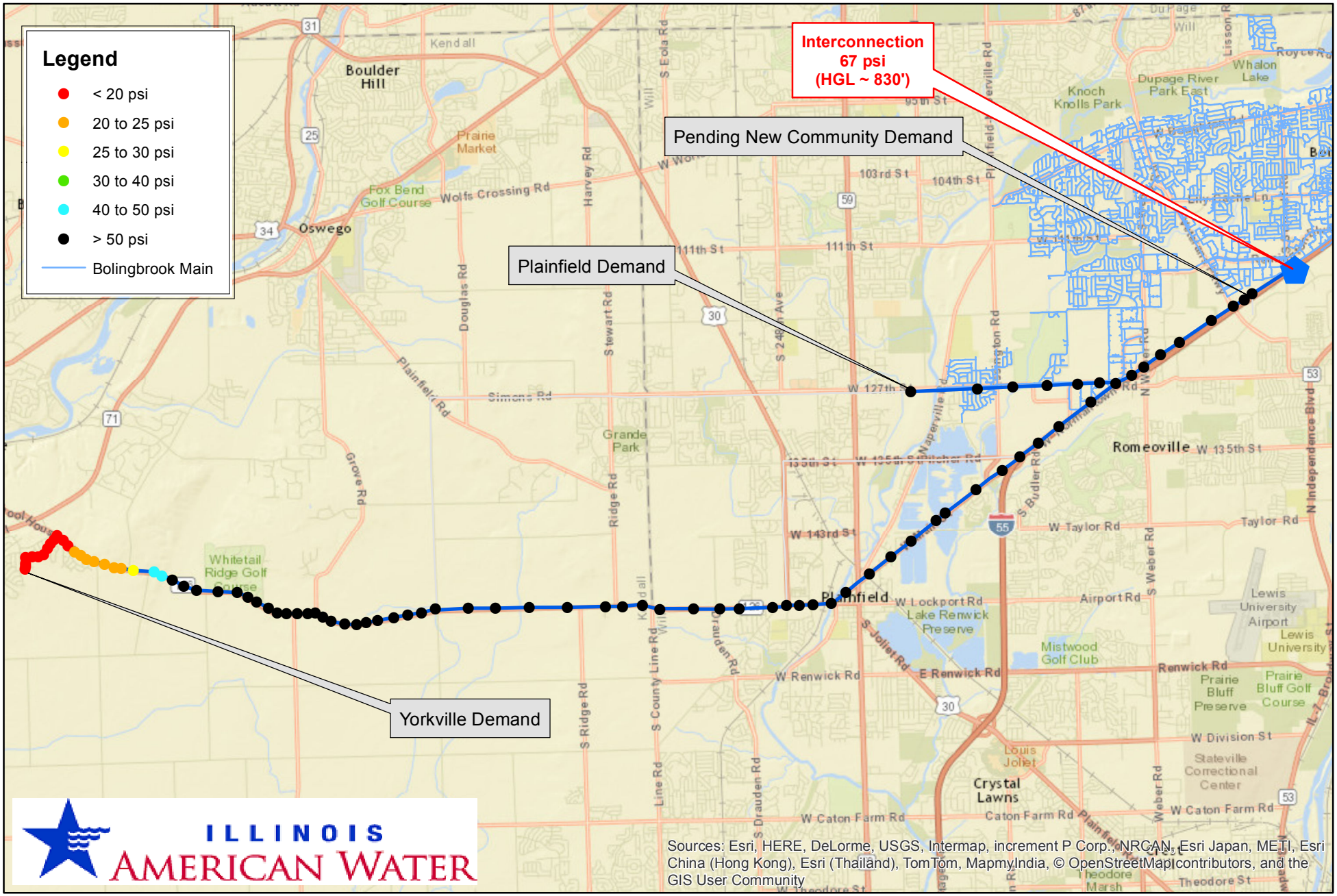
Route 3 - 24"
2040 ALW Pipeline Demands
Yorkville 7.83 mgd



Route 3 - 30"
2015 ALW Pipeline Demands
Yorkville 2.17 mgd

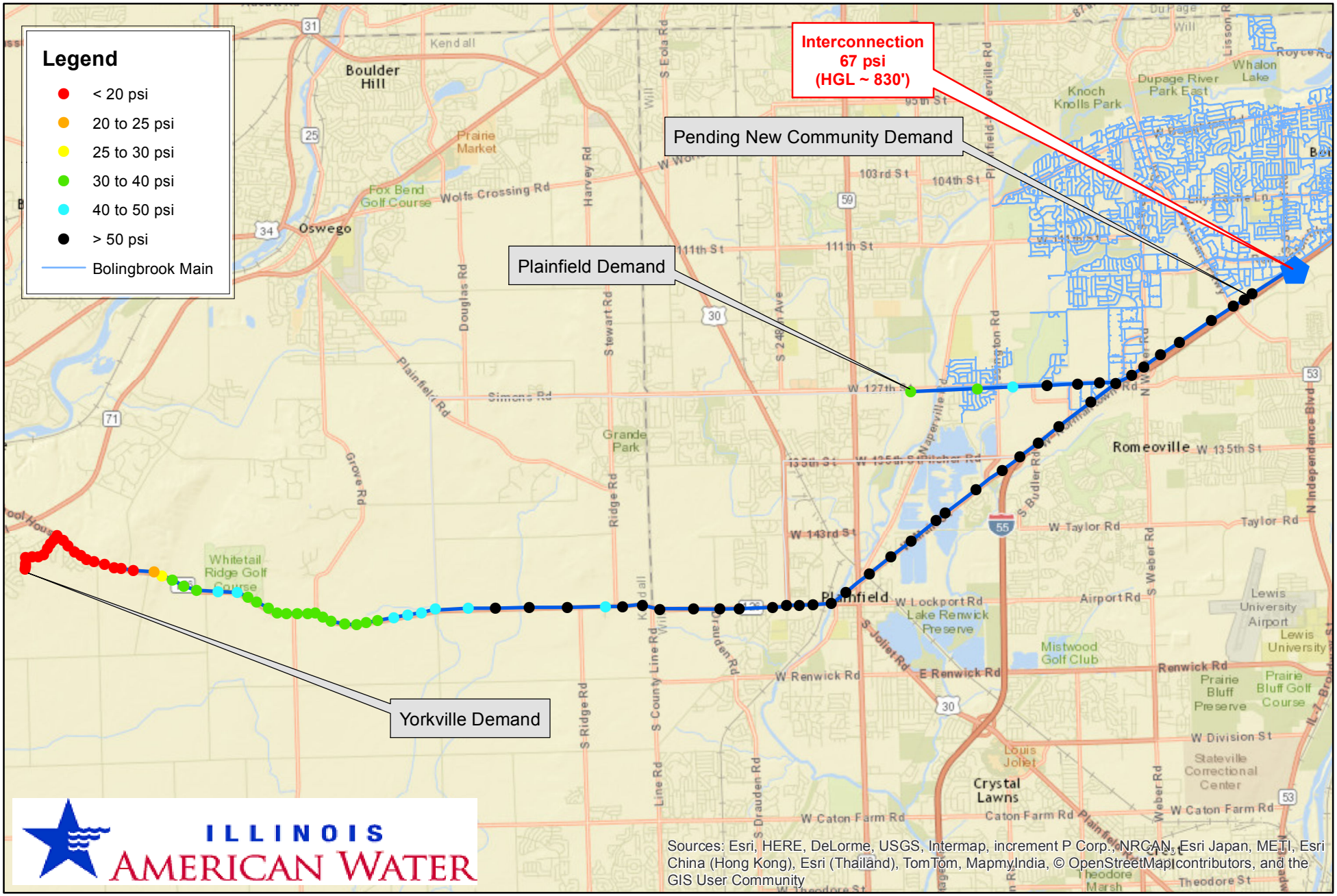


Route 3 - 30"
2030 ALW Pipeline Demands
Yorkville 5.71 mgd



ILLINOIS AMERICAN WATER

Route 3 - 30"
2040 ALW Pipeline Demands
Yorkville 7.83 mgd



ILLINOIS AMERICAN WATER

Appendix G

Detailed Cost Estimates

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 1A

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 1A (CT)
Well and Cation Exchange Water Treatment Plant
Wells/WTP 6, 10, 12, 13, 14, and 15
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (Approximately 3,500 SF)	$1,133,000
	Cation Exchange Treatment Equipment (3 - 8 FT Diameter Units)	$927,000
	Brine Pump & Piping	$30,000
	Brine Tank	$144,000
	Miscellaneous Piping and Meters	$125,000
	Chemical Feed Equipment	$125,000
	Power Distribution	$475,000
	Controls and Instrumentation	$84,000
	SCADA Integration	$35,000
	Emergency Generator	$250,000
3	SITE WORK	
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$150,000
	Paving	$30,000
	Fencing	$40,000
	Restoration & Landscaping	$50,000
	SUB-TOTAL	$5,223,000
	CONTINGENCY (10%)	$522,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$5,745,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$1,034,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$6,839,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 1A Well 6 & Well 6 CEWTP

Notes:

1. All values are based on 2016 construction costs.
2. Assumes well constructed at WTP site.
3. Estimate does not include air scrubbing equipment for aerator exhaust.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 1A (CT)
Well No. 11
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 1A Well 11

Notes:

1. All values are based on 2016 construction costs.
2. Assumes Well No. 11 Raw WM connects to Existing Well No. 3 Raw WM (Well No. 3 to be abandoned).
3. Assumes Wells No. 3 & 4 WTP will become Wells No. 4 & 11 WTP
4. Does not include cost to abandon Well No. 3

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 1B

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 1B (LRI)
Well and Cation Exchange Water Treatment Plant
Wells/WTP 6, 10, and 12
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (Approximately 3,500 SF)	$1,133,000
	Cation Exchange Treatment Equipment (3 - 8 FT Diameter Units)	$927,000
	Brine Pump & Piping	$30,000
	Brine Tank	$144,000
	Miscellaneous Piping and Meters	$125,000
	Chemical Feed Equipment	$125,000
	Power Distribution	$475,000
	Controls and Instrumentation	$84,000
	SCADA Integration	$35,000
	Emergency Generator	$250,000
3	SITE WORK	
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$150,000
	Paving	$30,000
	Fencing	$40,000
	Restoration & Landscaping	$50,000
	SUB-TOTAL	$5,223,000
	CONTINGENCY (10%)	$522,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$5,745,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$1,034,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$6,839,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 1B Well 6 & Well 6 CEWT

Notes:

1. All values are based on 2016 construction costs.
2. Assumes well constructed at WTP site.
3. Estimate does not include air scrubbing equipment for aerator exhaust.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 1B (LRI)
Well No. 11
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 1B Well 11

Notes:

1. All values are based on 2016 construction costs.
2. Assumes Well No. 11 Raw WM connects to Existing Well No. 3 Raw WM (Well No. 3 to be abandoned).
3. Assumes Wells No. 3 & 4 WTP will become Wells No. 4 & 11 WTP
4. Does not include cost to abandon Well No. 3

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 2A

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2A (CT)
Well No. 10
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 2A Well 10

Notes:

1. All values are based on 2016 construction costs.
2. Assumes Well construct at WTP Site.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2A (CT)
12 MGD Fox River Intake Pump Station
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	FOX RIVER INTAKE PUMP STATION	
	Structures (4,200 SF)	$2,750,000
	Equipment (Screen Eqpt., Pumps/Motors, Etc.)	$625,000
	Power Distribution (Including New Electrical Gear & VFDs)	$425,000
	Emergency Generator	$150,000
2	SITE WORK	
	Electrical	$15,000
	Paving	$20,000
	Fencing	$10,000
	Restoration & Landscaping	$5,000
	SUB-TOTAL	$4,000,000
	CONTINGENCY (10%)	$400,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$4,400,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$792,000
	3 PHASE, 480V ELECTRIC SERVICE UPGRADE	$20,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$5,000
	TOTAL ESTIMATED COST OF PROJECT	**$5,217,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 2A 12MGD Fox R. Intake PS

Notes:

1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2A (CT)
12 MGD Single Stage (ClariCone) LSWTP
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (with Clearwell) (Structures) (25,000 SF)	$5,000,000
	Head Tank (for Deep Well Influent)	$250,000
	Aerator (for Deep Well Influent)	$125,000
	Head Tank (for Fox River Influent)	$300,000
	ClariCones (x4, 48' diam. each)	$4,000,000
	Recarbonation Tanks (x2)	$600,000
	Ultrafiltration Membrane System	$3,220,000
	Low & High Service & Backwash Pumps	$650,000
	Low & High Service Pump Gallery Piping	$200,000
	PAC System	$450,000
	Lime Feed System	$1,250,000
	Carbon Dioxide Feed System	$600,000
	Anionic and Cationic Feed Systems	$300,000
	Ferric Chloride Feed System	$125,000
	Chlorine Feed System	$175,000
	Miscellaneous Piping and Meters	$750,000
	Backwash Recovery Lagoon	$350,000
	Power Distribution (Including New Electrical Gear & VFDs)	$2,000,000
	Controls and Instrumentation & SCADA Integration	$750,000
	Emergency Generator	$300,000
	HVAC Equipment	$300,000
2	SITE WORK	
	Ground Storage Tank (1 MG)	$1,000,000
	Sludge Lagoons	$2,500,000
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$750,000
	Electrical	$150,000
	Paving & Sidewalks	$200,000
	Fencing	$75,000
	Restoration & Landscaping	$100,000
	SUB-TOTAL	$26,470,000
	CONTINGENCY (10%)	$2,647,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$29,117,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$5,241,000
	3 PHASE, 480V ELECTRIC SERVICE	$100,000
	LAND ACQUISITION (15 Acres @ $40,000 / Acre)	$600,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$35,088,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 2A Single Stage LSWTP

Notes:
1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 2B

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2B (LRI)
Well No. 10
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

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Notes:

1. All values are based on 2016 construction costs.
2. Assumes Well construct at WTP Site.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2B (LRI)
9 MGD Fox River Intake Pump Station
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	FOX RIVER INTAKE PUMP STATION	
	Structures (3,600 SF)	$2,600,000
	Equipment (Screen Eqpt., Pumps/Motors, Etc.)	$550,000
	Power Distribution (Including New Electrical Gear & VFDs)	$350,000
	Emergency Generator	$150,000
2	SITE WORK	
	Electrical	$15,000
	Paving	$20,000
	Fencing	$10,000
	Restoration & Landscaping	$5,000
	SUB-TOTAL	$3,700,000
	CONTINGENCY (10%)	$370,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$4,070,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$733,000
	3 PHASE, 480V ELECTRIC SERVICE UPGRADE	$20,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$5,000
	TOTAL ESTIMATED COST OF PROJECT	**$4,828,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 2B 9MGD Fox R. Intake

Notes:

1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 2B (LRI)
9 MGD Single Stage (ClariCone) LSWTP
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (with Clearwell) (Structures) (20,000 SF)	$4,000,000
	Head Tank (for Deep Well Influent)	$250,000
	Aerator (for Deep Well Influent)	$125,000
	Head Tank (for Fox River Influent)	$250,000
	ClariCones	$3,000,000
	Recarbonation Tanks (x2)	$500,000
	Ultrafiltration Membrane System	$2,920,000
	Low & High Service & Backwash Pumps	$500,000
	Low & High Service Pump Gallery Piping	$175,000
	PAC System	$450,000
	Lime Feed System	$1,250,000
	Carbon Dioxide Feed System	$500,000
	Anionic and Cationic Feed Systems	$250,000
	Ferric Chloride Feed System	$100,000
	Chlorine Feed System	$175,000
	Miscellaneous Piping and Meters	$550,000
	Backwash Recovery Lagoon	$250,000
	Power Distribution (Including New Electrical Gear & VFDs)	$1,500,000
	Controls and Instrumentation & SCADA Integration	$600,000
	Emergency Generator	$300,000
	HVAC Equipment	$300,000
2	SITE WORK	
	Ground Storage Tank (1 MG)	$1,000,000
	Sludge Lagoons	$2,000,000
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$750,000
	Electrical	$150,000
	Paving & Sidewalks	$200,000
	Fencing	$75,000
	Restoration & Landscaping	$100,000
	SUB-TOTAL	$22,220,000
	CONTINGENCY (10%)	$2,222,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$24,442,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$4,400,000
	3 PHASE, 480V ELECTRIC SERVICE	$100,000
	LAND ACQUISITION (15 Acres @ $40,000 / Acre)	$600,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$29,572,000**

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 2B Single Stage LSWTP

Notes:
1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 3A

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3A (CT)
Well No. 6
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

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Notes:

1. All values are based on 2016 construction costs.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3A (CT)
Well No. SR-1
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**
	Total Estimated Cost of Project, Village of Montgomery[r]	$80,000
	Total Estimated Cost of Project, United City of Yorkville[r]	**$2,339,000**
	Total Estimated Cost of Project, Village of Oswego[r]	$0

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Notes:

1. All values are based on 2016 construction costs.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3A (CT)
32 MGD Sub-Regional Fox River Intake Pump Station
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	FOX RIVER INTAKE PUMP STATION	
	Structures (7,200 SF)	$4,000,000
	Equipment (Screen Eqpt., Pumps/Motors, Etc.)	$750,000
	Power Distribution (Including New Electrical Gear & VFDs)	$600,000
	Emergency Generator	$200,000
2	SITE WORK	
	Electrical	$20,000
	Paving	$25,000
	Fencing	$20,000
	Restoration & Landscaping	$10,000
	SUB-TOTAL	$5,625,000
	CONTINGENCY (10%)	$563,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$6,188,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$1,114,000
	3 PHASE, 480V ELECTRIC SERVICE UPGRADE	$20,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$5,000
	TOTAL ESTIMATED COST OF PROJECT	**$7,327,000**
	Total Estimated Cost of Project, Village of Montgomery[m]	$1,473,000
	Total Estimated Cost of Project, United City of Yorkville[m]	**$2,389,000**
	Total Estimated Cost of Project, Village of Oswego[m]	$3,466,000

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Notes:

1. All values are based on 2016 construction costs.
2. Fox River Intake Pump Station assumed to be constructed at same site as LSWTP.

m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3A (CT)
32 MGD Single Stage (ClariCone) Sub-Regional LSWTP
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (with Clearwell) (Structures) (100,000 SF)	$19,000,000
	Aerators	$284,000
	Head Tanks (x4, 8' diam. each)	$1,642,000
	ClariCones (x4, 66.5' diam. each)	$6,683,000
	Recarbonation Tanks (x4, 18.75' bottom diam. each)	$721,000
	Ultrafiltration Membrane System	$6,325,000
	Low & High Service & Backwash Pumps	$700,000
	Low & High Service Pump Gallery Piping	$250,000
	PAC System	$600,000
	Lime Feed System	$3,000,000
	Carbon Dioxide Feed System	$730,000
	Anionic and Cationic Feed Systems	$350,000
	Ferric Chloride Feed System	$250,000
	Chlorine Feed System	$275,000
	Miscellaneous Piping and Meters	$750,000
	Backwash Recovery Lagoon	$350,000
	Power Distribution (Including New Electrical Gear & VFDs)	$3,000,000
	Controls and Instrumentation & SCADA Integration	$900,000
	Emergency Generator	$400,000
	HVAC Equipment	$750,000
2	SITE WORK	
	Ground Storage Tank (x2, 3.0 MG each)	$5,000,000
	Sludge Lagoons	$2,750,000
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$1,000,000
	Electrical	$300,000
	Paving & Sidewalks	$300,000
	Fencing	$175,000
	Restoration & Landscaping	$200,000
	SUB-TOTAL	$56,685,000
	CONTINGENCY (10%)	$5,669,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$62,354,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$11,224,000
	3 PHASE, 480V ELECTRIC SERVICE	$100,000
	LAND ACQUISITION (20 Acres @ $40,000 / Acre)	$800,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$74,508,000**
	Total Estimated Cost of Project, Village of Montgomery[m]	$14,976,000
	Total Estimated Cost of Project, United City of Yorkville[m]	**$24,290,000**
	Total Estimated Cost of Project, Village of Oswego[m]	$35,242,000

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 3A 32 MGD SingleStage LSWTP

Notes:

1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).

Appendix G

Detailed Cost Estimates – Supply and Treatment - Alternate 3B

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3B (LRI)
Well No. 6
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**

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Notes:

1. All values are based on 2016 construction costs.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3B (LRI)
Well No. SR-1
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	1,000 GPM IRONTON GALESVILLE WELL (24X18)	
	Construction (Casing, Hole, Grout, Etc.)	$1,000,000
	Development (Disinfection, Testing, Etc.)	$225,000
	Equipment (Pump/Motor, Pitless Adapter, Etc.)	$400,000
2	ADDITIONAL PIPING AND ELECTRICAL	
	Miscellaneous Piping and Meters	$50,000
	Controls and Instrumentation	$15,000
	SCADA Integration	$20,000
3	SITE WORK	
	Paving	$15,000
	Fencing	$15,000
	Restoration & Landscaping	$20,000
	SUB-TOTAL	$1,760,000
	CONTINGENCY (10%)	$176,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$1,936,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$348,000
	3 PHASE, 480 V ELECTRIC SERVICE TO SITE	$30,000
	LAND ACQUISITION (10,000 SF)	$75,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$2,419,000**
	Total Estimated Cost of Project, Village of Montgomery[r]	$0
	Total Estimated Cost of Project, United City of Yorkville[r]	**$714,000**
	Total Estimated Cost of Project, Village of Oswego[r]	$503,000

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Notes:

1. All values are based on 2016 construction costs.

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
Alternate No. 3B (LRI)
25 MGD Sub-Regional Fox River Intake Pump Station
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	FOX RIVER INTAKE PUMP STATION	
	Structures (6,200 SF)	$3,500,000
	Equipment (Screen Eqpt., Pumps/Motors, Etc.)	$675,000
	Power Distribution (Including New Electrical Gear & VFDs)	$500,000
	Emergency Generator	$200,000
2	SITE WORK	
	Electrical	$15,000
	Paving	$20,000
	Fencing	$15,000
	Restoration & Landscaping	$10,000
	SUB-TOTAL	$4,935,000
	CONTINGENCY (10%)	$494,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$5,429,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$977,000
	3 PHASE, 480V ELECTRIC SERVICE UPGRADE	$20,000
	LAND ACQUISITION (Assumed Portion of Village's Property)	$0
	SOIL & MATERIAL TESTING	$5,000
	TOTAL ESTIMATED COST OF PROJECT	**$6,431,000**
	Total Estimated Cost of Project, Village of Montgomery[m]	$1,177,000
	Total Estimated Cost of Project, United City of Yorkville[m]	**$2,161,000**
	Total Estimated Cost of Project, Village of Oswego[m]	$3,093,000

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 3B 25MGD Sub-Reg Fox R. PS

Notes:

1. All values are based on 2016 construction costs.
2. Fox River Intake Pump Station assumed to be constructed at same site as LSWTP.

m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).

ENGINEER'S ESTIMATE OF PROBABLE CONSTRUCTION COST
25 MGD Single Stage (ClariCone) Sub-Regional LSWTP
United City of Yorkville, Kendall Co., IL

ITEM NO.	ITEM	AMOUNT
1	TREATMENT BUILDING, EQUIPMENT AND ELECTRICAL	
	Water Treatment Plant Building (with Clearwell) (Structures) (90,000 SF)	$17,400,000
	Aerators	$190,000
	Head Tanks (x4, 8' diam. each)	$1,214,000
	ClariCones (x4, 66.5' diam. each)	$5,087,000
	Recarbonation Tanks (x4, 18.75' bottom diam. each)	$550,000
	Ultrafiltration Membrane System	$5,635,000
	Low & High Service & Backwash Pumps	$600,000
	Low & High Service Pump Gallery Piping	$215,000
	PAC System	$575,000
	Lime Feed System	$3,000,000
	Carbon Dioxide Feed System	$625,000
	Anionic and Cationic Feed Systems	$325,000
	Ferric Chloride Feed System	$225,000
	Chlorine Feed System	$250,000
	Miscellaneous Piping and Meters	$625,000
	Backwash Recovery Lagoon	$300,000
	Power Distribution (Including New Electrical Gear & VFDs)	$2,500,000
	Controls and Instrumentation & SCADA Integration	$800,000
	Emergency Generator	$400,000
	HVAC Equipment	$675,000
2	SITE WORK	
	Ground Storage Tank (x2, 2.0 MG each)	$4,000,000
	Sludge Lagoons	$2,500,000
	Yard Piping (Water Main & Sanitary and Storm Sewer)	$850,000
	Electrical	$300,000
	Paving & Sidewalks	$275,000
	Fencing	$150,000
	Restoration & Landscaping	$200,000
	SUB-TOTAL	$49,466,000
	CONTINGENCY (10%)	$4,947,000
	TOTAL ESTIMATED COST OF CONSTRUCTION	**$54,413,000**
	DESIGN AND CONSTRUCTION ENGINEERING (18%)	$9,794,000
	3 PHASE, 480V ELECTRIC SERVICE	$100,000
	LAND ACQUISITION (20 Acres @ $40,000 / Acre)	$800,000
	SOIL & MATERIAL TESTING	$30,000
	TOTAL ESTIMATED COST OF PROJECT	**$65,137,000**
	Total Estimated Cost of Project, Village of Montgomery[m]	$11,920,000
	Total Estimated Cost of Project, United City of Yorkville[m]	**$21,886,000**
	Total Estimated Cost of Project, Village of Oswego[m]	$31,331,000

G:\Public\Yorkville\2014\YO1437-P Water Works System Master Plan\Eng\Cost Estimates\[Supply & Treatment Cost Estimates - YO.xlsx]Alt 3B 25 MGD SingleStage LSWTP

Notes:

1. All values are based on 2016 construction costs.
2. Estimate does not include Fox River Intake Raw Water Main to the LSWTP (estimated separately).

m. Cost shown is portion of total cost based off of Maximum Daily Demand (CT: 20.1% for Montgomery, 32.6% for Yorkville, 47.3% for Oswego; LRI: 18.3% for Montgomery, 33.6% for Yorkville; 48.1% for Oswego).

Appendix G

Detailed Cost Estimates – Storage – All Scenarios

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	MLP
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
ALTERNATES 1A, 1B, 2A, 2B, 3A, AND 3B
2.0 MG ELEVATED WATER STORAGE TANK

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	ELEVATED WATER STORAGE TANK (2.0 MILLION GALLONS)* (ASSUMES 100' T	LS	1	$ 3,825,000.00	$ 3,825,000.00
2	FRESH MIX SYSTEM	LS	1	$ 35,000.00	$ 35,000.00
3	CONTAINMENT	LF	1	$ 180,000.00	$ 180,000.00
4	YARD PIPING AND SITE WORK	LF	1	$ 150,000.00	$ 150,000.00
5	SCADA IMPLEMENTATION	EACH	1	$ 25,000.00	$ 25,000.00
6	ELECTRICAL SERVICE	EACH	1	$ 35,000.00	$ 35,000.00
7					
8					
10					
11					
12					
13					
14					
15					
15					
16					
16					
17					
18					

SUBTOTAL	$	4,250,000.00
CONTINGENCY (10%)	$	425,000.00
TOTAL	$	4,675,000.00
DESIGN ENGINEERING (1.5%)	$	70,200.00
CONSTRUCTION ENGINEERING (1.75%)	$	81,900.00
LEGAL FEES	$	3,000.00
LAND ACQUISITION	$	40,000.00
TOTAL PRELIMINARY COST ESTIMATE	**$**	**4,870,000.00**

Notes:

Stub left for proposed 24" WM along Rt 34

Stub left for proposed 16" WM connecting to Crimson Ln

09/12

Appendix G

Detailed Cost Estimates – Distribution – All Scenarios

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH/MWS/MLP
DATE:	March 10, 2017
PROJECT TITLE:	**Water Systems Master Plan**

Summary of Conceptual Cost Estimates

ITEM NO.	ITEM	ALTERNATE 1A/1B AMOUNT	ALTERNATE 2A/2B AMOUNT	ALTERNATE 3A/3B AMOUNT
1	20" & 16" Water Main North West of Water Treatment Plant		$ 829,000	$ 829,000
2	16" Tie Into Crimson Lane		$ 233,000	$ 233,000
3	24" Water Main from Water Treatment Plant to Van Emmon		$ 9,597,000	$ 9,597,000
4	16" Water Main along Center Street and Main Street		$ 869,000	$ 869,000
5a	20" Water main on Van Emmon		$ 1,071,000	$ 1,071,000
5b	20" Water main on Van Emmon		$ 473,000	$ 473,000
6	20" Water Main from Mill Street to South Central EWST		$ 3,155,000	$ 3,155,000
7	20" Water Main from South Central EWST to South BP/PRV		$ 1,450,000	$ 1,450,000
8	PRV Station - North Pressure Zone to North Central Pressure Zone		Not. Incl. in Alt. 2	$ 378,000
9a	Route 71 Watermain Replacement	$ 968,000	$ 968,000	$ 968,000
9b	Appletree Court Watermain Replacement (RTBR)	$ 149,000	$ 149,000	$ 149,000
9c	W. Washington Street Watermain Replacement (RTBR) - To be Constructed in 2017	$ 188,000	$ 188,000	$ 188,000
10	Elizabeth Street Watermain Replacement (RTBR)	$ 512,000	$ 512,000	$ 512,000
11	Main Street Watermain Replacement (RTBR)	$ 714,000	$ 714,000	$ 714,000
12	Orange/Olsen Watermain Looping (RTBR)	$ 168,000	$ 168,000	$ 168,000
13	Morgan Street Watermain Replacement (RTBR)	$ 376,000	$ 376,000	$ 376,000
14	E. Fox Street Watermain Replacement (RTBR)	$ 306,000	$ 306,000	$ 306,000
15	East Washington Watermain Replacement (RTBR)	$ 465,000	$ 465,000	$ 465,000
16	Orange Street Watermain Replacement (RTBR)	$ 660,000	$ 660,000	$ 660,000
17				
18				
19				
20				
21				
22				
23				
	TOTAL - SUMMARY OF CONCEPTUAL COST ESTIMATES:	**$ 4,506,000**	**$ 22,183,000**	**$ 22,561,000**

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	January 16, 2017
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
1. 20" and 16" Water Main North West of Water Treatment Plant

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 2,500.00	$ 2,500.00
2	TOPSOIL STRIPPING, PILING AND REPLACING	LS	1	$ 10,000.00	$ 10,000.00
3	WATER MAIN, 16-INCH D.I.P, CLASS 52	LF	1,400	$ 115.00	$ 161,000.00
4	WATER MAIN, 20-INCH D.I.P, CLASS 52	LF	1,400	$ 150.00	$ 210,000.00
5	PRESSURE CONNECTION, 16" TAPPING VALVE IN 60" VAULT	EACH	1	$ 9,000.00	$ 9,000.00
5	GATE VALVE, 16-INCH IN 60-INCH VALVE VAULT	EACH	1	$ 8,000.00	$ 8,000.00
6	GATE VALVE, 20-INCH IN 60-INCH VALVE VAULT	EACH	2	$ 25,000.00	$ 50,000.00
7	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	4	$ 20,000.00	$ 80,000.00
8	DUCTILE IRON FITTINGS	LB	3,000	$ 8.00	$ 24,000.00
9	SELECT GRANULAR BACKFILL	CY	50	$ 35.00	$ 1,750.00
10	FOUNDATION MATERIAL	CY	45	$ 35.00	$ 1,575.00
11	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 9,000.00	$ 9,000.00
12	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	45	$ 75.00	$ 3,375.00
13	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	LF	10	$ 50.00	$ 500.00
14	SIDEWALK REMOVAL AND REPLACEMENT	SF	50	$ 10.00	$ 500.00
15	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	10	$ 60.00	$ 600.00
16	RESTORATION	LS	1	$ 20,000.00	$ 20,000.00
17	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 10,000.00	$ 10,000.00
				SUBTOTAL	$ 602,000.00
				CONTINGENCY (10%)	$ 61,000.00
				TOTAL	$ 663,000.00
				DESIGN ENGINEERING (10%)	$ 66,300.00
				CONSTRUCTION ENGINEERING (10%)	$ 66,300.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ 30,000.00
				TOTAL PRELIMINARY COST ESTIMATE	**$ 828,600.00**

Notes:

assumes fire hydrants every 1000'

Stub left for proposed 24" WM along Rt 34

Stub left for proposed 16" WM connecting to Crimson Ln

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 17, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
2. 16" Tie Into Crimson Lane

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 1,000.00	$ 1,000.00
2	WATER MAIN, 16-INCH D.I.P, CLASS 52	LF	745	$ 115.00	$ 85,675.00
3	GATE VALVE, 16-INCH IN 60-INCH VALVE VAULT	EACH	2	$ 8,000.00	$ 16,000.00
4	CONNECTION TO EXISTING 16" WATERMAIN	EACH	1	$ 6,000.00	$ 6,000.00
5	CONNECTION TO EXISTING 20" WATERMAIN	EACH	1	$ 7,500.00	$ 7,500.00
6	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	2	$ 15,000.00	$ 30,000.00
7	DUCTILE IRON FITTINGS	LB	800	$ 8.00	$ 6,400.00
8	FIRE HYDRANT REMOVAL	EACH	1	$ 800.00	$ 800.00
9	VALVE ABANDONMENT	EACH	1	$ 500.00	$ 500.00
10	SELECT GRANULAR BACKFILL	CY	40	$ 35.00	$ 1,400.00
11	FOUNDATION MATERIAL	CY	15	$ 35.00	$ 525.00
12	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 2,500.00	$ 2,500.00
13	HMA PAVEMENT REMOVAL AND REPLACEMENT, 8"	SY	45	$ 80.00	$ 3,600.00
14	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	10	$ 60.00	$ 600.00
15	RESTORATION	LS	1	$ 1,000.00	$ 1,000.00
16	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 5,000.00	$ 5,000.00
				SUBTOTAL	$ 169,000.00
				CONTINGENCY (10%)	$ 17,000.00
				TOTAL	$ 186,000.00
				DESIGN ENGINEERING (10%)	$ 18,600.00
				CONSTRUCTION ENGINEERING (10%)	$ 18,600.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ 7,000.00
				TOTAL PRELIMINARY COST ESTIMATE	**$ 233,200.00**

Notes:

Assume in pavement

assumes 8" existing HMA thickness

Assuming Valve @ End of 16" Crimson WM (Tie into 16")
Added Valve on Yorkville-1 Cost Estimate (Tie into 20")

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
3. 24" Water Main from Water Treatment Plan to Van Emmon

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 50,000.00	$ 50,000.00
2	BORE AND JACK 30" STEEL CASING PIPE	LF	140	$ 650.00	$ 91,000.00
2	WATER MAIN, 24-INCH D.I.P, CLASS 52	LF	13,000	$ 250.00	$ 3,250,000.00
3	WATER MAIN, 24-INCH FUSIBLE PVC, DR-18, C905 WITH HORIZONTAL DIRECTIONAL DRILL	LF	650	$ 1,000.00	$ 650,000.00
4	PRESSURE CONNECTION, 8" TAPPING VALVE IN 60" VAULT	EACH	12	$ 7,000.00	$ 84,000.00
5	PRESSURE CONNECTION, 10" TAPPING VALVE IN 60" VAULT	EACH	1	$ 7,500.00	$ 7,500.00
6	PRESSURE CONNECTION, 12" TAPPING VALVE IN 60" VAULT	EACH	3	$ 8,000.00	$ 24,000.00
7	PRESSURE CONNECTION, 16" TAPPING VALVE IN 60" VAULT	EACH	1	$ 8,500.00	$ 8,500.00
8	BUTTERFLY VALVE, 24-INCH IN 72-INCH VALVE VAULT	EACH	10	$ 20,000.00	$ 200,000.00
9	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	35	$ 4,800.00	$ 168,000.00
10	DUCTILE IRON FITTINGS	LB	75,000	$ 8.00	$ 600,000.00
11	FIRE HYDRANT REMOVAL	EACH	13	$ 800.00	$ 10,400.00
12	WATER SERVICE CONNECTION, 1"	EACH	37	$ 1,100.00	$ 40,700.00
13	WATER SERVICE - TYPE K COPPER, 1"	LF	1,300	$ 30.00	$ 39,000.00
14	VALVE ABANDONMENT	EACH	12	$ 500.00	$ 6,000.00
15	SELECT GRANULAR BACKFILL	CY	8,400	$ 35.00	$ 294,000.00
16	FOUNDATION MATERIAL	CY	195	$ 35.00	$ 6,825.00
17	DISCONNECT AND ABANDON EXISTING WATER MAIN - 6"	EACH	2	$ 1,250.00	$ 2,500.00
18	DISCONNECT AND ABANDON EXISTING WATER MAIN - 8"	EACH	8	$ 1,500.00	$ 12,000.00
19	DISCONNECT AND ABANDON EXISTING WATER MAIN - 12"	EACH	6	$ 2,250.00	$ 13,500.00
20	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 40,000.00	$ 40,000.00
21	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	11,000	$ 40.00	$ 440,000.00
22	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	LF	1,000	$ 40.00	$ 40,000.00
23	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	14,500	$ 60.00	$ 870,000.00
24	RESTORATION	LS	1	$ 120,000.00	$ 120,000.00
25	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 200,000.00	$ 200,000.00
				SUBTOTAL	$ 7,268,000.00
				CONTINGENCY (10%)	$ 727,000.00
				TOTAL	$ 7,995,000.00
				DESIGN ENGINEERING (10%)	$ 799,500.00
				CONSTRUCTION ENGINEERING (10%)	$ 799,500.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ -
				TOTAL PRELIMINARY COST ESTIMATE	**$ 9,597,000.00**

Notes:
assumes fire hydrants every 300'

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
4. 16" Water Main along Center Street and Main Street

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 10,000.00	$ 10,000.00
3	WATER MAIN, 8-INCH D.I.P., CLASS 52	LF	30	$ 60.00	$ 1,800.00
4	WATER MAIN, 16-INCH D.I.P, CLASS 52	LF	1,800	$ 115.00	$ 207,000.00
5	BORE AND JACK 30" STEEL CASING PIPE	LF	120	$ 650.00	$ 78,000.00
5	PRESSURE CONNECTION, 16" TAPPING VALVE IN 60" VAULT	EACH	2	$ 9,000.00	$ 18,000.00
6	GATE VALVE, 8-INCH IN 48-INCH VALVE VAULT	EACH	3	$ 4,000.00	$ 12,000.00
7	GATE VALVE, 16-INCH IN 60-INCH VALVE VAULT	EACH	5	$ 7,000.00	$ 35,000.00
8	CONNECT TO EXISTING 16" WATERMAIN	EACH	2	$ 6,000.00	$ 12,000.00
10	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	7	$ 4,800.00	$ 33,600.00
11	DUCTILE IRON FITTINGS	LB	4,700	$ 8.00	$ 37,600.00
12	FIRE HYDRANT REMOVAL	EACH	4	$ 800.00	$ 3,200.00
13	VALVE ABANDONMENT	EACH	7	$ 500.00	$ 3,500.00
14	WATER SERVICE CONNECTION, 1"	EACH	22	$ 1,100.00	$ 24,200.00
15	WATER SERVICE - TYPE K COPPER, 1"	LF	726	$ 30.00	$ 21,780.00
16	SELECT GRANULAR BACKFILL	CY	1,250	$ 35.00	$ 43,750.00
17	FOUNDATION MATERIAL	CY	30	$ 35.00	$ 1,050.00
18	DISCONNECT AND ABANDON EXISTING WATER MAIN - 6"	EACH	2	$ 1,250.00	$ 2,500.00
19	DISCONNECT AND ABANDON EXISTING WATER MAIN - 8"	EACH	2	$ 1,500.00	$ 3,000.00
20	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 6,000.00	$ 6,000.00
21	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	1,500	$ 45.00	$ 67,500.00
22	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	LF	290	$ 40.00	$ 2,000.00
23	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	200	$ 60.00	$ 12,000.00
24	RESTORATION	LS	1	$ 5,000.00	$ 5,000.00
25	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 15,000.00	$ 15,000.00
				SUBTOTAL	$ 656,000.00
				CONTINGENCY (10%)	$ 66,000.00
				TOTAL	$ 722,000.00
				DESIGN ENGINEERING (10%)	$ 72,200.00
				CONSTRUCTION ENGINEERING (10%)	$ 72,200.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ -
				TOTAL PRELIMINARY COST ESTIMATE	**$ 869,400.00**

Notes:
assumes fire hydrants every 300'
assumes no water main replacement on Church Street

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
5a. 20" Water Main on Van Emmon

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 5,000.00	$ 5,000.00
2	WATER MAIN, 20-INCH D.I.P, CLASS 52	LF	2,200	$ 150.00	$ 330,000.00
3	PRESSURE CONNECTION, 16" TAPPING VALVE IN 60" VAULT	EACH	1	$ 9,000.00	$ 9,000.00
4	GATE VALVE, 20-INCH IN 60-INCH VALVE VAULT	EACH	2	$ 25,000.00	$ 50,000.00
5	CONNECTION TO EXISTING 24" WATER MAIN	EACH	1	$ 10,000.00	$ 10,000.00
6	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	7	$ 20,000.00	$ 140,000.00
7	DUCTILE IRON FITTINGS	LB	5,000	$ 8.00	$ 40,000.00
8	FIRE HYDRANT REMOVAL	EACH	4	$ 800.00	$ 3,200.00
9	VALVE ABANDONMENT	EACH	3	$ 500.00	$ 1,500.00
10	WATER SERVICE CONNECTION, 1"	EACH	15	$ 1,100.00	$ 16,500.00
11	WATER SERVICE - TYPE K COPPER, 1"	LF	495	$ 30.00	$ 14,850.00
12	SELECT GRANULAR BACKFILL	CY	1,600	$ 35.00	$ 56,000.00
13	FOUNDATION MATERIAL	CY	40	$ 35.00	$ 1,400.00
14	DISCONNECT AND ABANDON EXISTING WATER MAIN - 16"	EACH	2	$ 2,500.00	$ 5,000.00
15	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 7,000.00	$ 7,000.00
16	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	1,750	$ 45.00	$ 78,750.00
17	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	250	$ 60.00	$ 15,000.00
18	RESTORATION	LS	1	$ 15,000.00	$ 15,000.00
19	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 10,000.00	$ 10,000.00
				SUBTOTAL	$ 809,000.00
				CONTINGENCY (10%)	$ 81,000.00
				TOTAL	$ 890,000.00
				DESIGN ENGINEERING (10%)	$ 89,000.00
				CONSTRUCTION ENGINEERING (10%)	$ 89,000.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ -
				TOTAL PRELIMINARY COST ESTIMATE	**$ 1,071,000.00**

Notes:
assumes fire hydrants every 300'

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
5b. 20" Water Main on Van Emmon

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 2,000.00	$ 2,000.00
2	WATER MAIN, 20-INCH D.I.P, CLASS 52	LF	700	$ 150.00	$ 105,000.00
4	GATE VALVE, 20-INCH IN 60-INCH VALVE VAULT	EACH	3	$ 25,000.00	$ 75,000.00
5	CONNECTION TO EXISTING 24" WATER MAIN	EACH	1	$ 10,000.00	$ 10,000.00
6	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	3	$ 20,000.00	$ 60,000.00
7	DUCTILE IRON FITTINGS	LB	3,700	$ 8.00	$ 29,600.00
8	SELECT GRANULAR BACKFILL	CY	500	$ 35.00	$ 17,500.00
9	FOUNDATION MATERIAL	CY	20	$ 35.00	$ 700.00
12	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 2,500.00	$ 2,500.00
13	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	550	$ 45.00	$ 24,750.00
14	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	100	$ 60.00	$ 6,000.00
15	RESTORATION	LS	1	$ 15,000.00	$ 15,000.00
16	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 7,500.00	$ 7,500.00
				SUBTOTAL	$ 356,000.00
				CONTINGENCY (10%)	$ 36,000.00
				TOTAL	$ 392,000.00
				DESIGN ENGINEERING (10%)	$ 39,200.00
				CONSTRUCTION ENGINEERING (10%)	$ 39,200.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ -
				TOTAL PRELIMINARY COST ESTIMATE	**$ 473,400.00**

Notes:

assumes fire hydrants every 300'

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	MO1438-V
DESIGNED:	KDW
DATE:	February 17, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
6. 20" Water Main from Mill Street to South Central EWST

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	WATER MAIN, 20-INCH D.I.P, CLASS 52	LF	5,550	$ 150.00	$ 832,500.00
2	GATE VALVE, 20-INCH IN 60-INCH VALVE VAULT	EACH	4	$ 25,000.00	$ 100,000.00
3	PRESSURE CONNECTION, 8" TAPPING VALVE IN 60" VAULT	EACH	5	$ 7,000.00	$ 35,000.00
4	PRESSURE CONNECTION, 12" TAPPING VALVE IN 60" VAULT	EACH	2	$ 8,000.00	$ 16,000.00
5	GATE VALVE, 8-INCH IN 60-INCH VALVE VAULT	EACH	2	$ 4,000.00	$ 8,000.00
6	GATE VALVE, 12-INCH IN 60-INCH VALVE VAULT	EACH	2	$ 6,500.00	$ 13,000.00
7	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	12	$ 20,000.00	$ 240,000.00
8	BP/PRV STATION, COMPLETE	EACH	1	$ 543,000.00	$ 543,000.00
9	DUCTILE IRON FITTINGS	LB	18,000	$ 8.00	$ 144,000.00
10	FIRE HYDRANT REMOVAL	EACH	10	$ 800.00	$ 8,000.00
11	WATER SERVICE CONNECTION, 1"	EACH	15	$ 1,100.00	$ 16,500.00
12	WATER SERVICE - TYPE K COPPER, 1"	LF	500	$ 30.00	$ 15,000.00
13	VALVE ABANDONMENT	EACH	8	$ 500.00	$ 4,000.00
14	SELECT GRANULAR BACKFILL	CY	3,600	$ 35.00	$ 126,000.00
15	FOUNDATION MATERIAL	CY	100	$ 35.00	$ 3,500.00
16	DISCONNECT AND ABANDON EXISTING WATER MAIN - 6"	EACH	2	$ 1,250.00	$ 2,500.00
17	DISCONNECT AND ABANDON EXISTING WATER MAIN - 8"	EACH	3	$ 1,500.00	$ 4,500.00
18	DISCONNECT AND ABANDON EXISTING WATER MAIN - 12"	EACH	2	$ 2,250.00	$ 4,500.00
19	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 17,000.00	$ 17,000.00
20	HMA PAVEMENT REMOVAL AND REPLACEMENT, 4"	SY	3,375	$ 45.00	$ 151,875.00
21	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	LF	100	$ 40.00	$ 4,000.00
22	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	540	$ 60.00	$ 32,400.00
23	RESTORATION	LS	1	$ 15,000.00	$ 15,000.00
24	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 20,000.00	$ 20,000.00
				SUBTOTAL	$ 2,357,000.00
				CONTINGENCY (10%)	$ 236,000.00
				TOTAL	$ 2,593,000.00
				DESIGN ENGINEERING (10%)	$ 259,300.00
				CONSTRUCTION ENGINEERING (10%)	$ 259,300.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ 40,000.00
				TOTAL PRELIMINARY COST ESTIMATE	**$ 3,154,600.00**

Notes:
assumes fire hydrants everY 300'

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-P
DESIGNED:	JDH
DATE:	February 17, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
7. 20" Water Main from South Central EWST to South BP/PRV

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	TREE REMOVAL, ROOT PRUNING, TREE REPLACEMENT	LS	1	$ 20,000.00	$ 20,000.00
2	TOPSOIL STRIPPING, PILING AND REPLACING	LS	1	$ 5,000.00	$ 5,000.00
3	BORE AND JACK 30" STEEL CASING PIPE	LF	160	$ 650.00	$ 104,000.00
3	WATER MAIN, 12-INCH D.I.P, CLASS 52	LF	200	$ 90.00	$ 18,000.00
4	WATER MAIN, 16-INCH D.I.P, CLASS 52	LF	100	$ 115.00	$ 11,500.00
5	WATER MAIN, 20-INCH D.I.P, CLASS 52	LF	2,600	$ 150.00	$ 390,000.00
6	PRESSURE CONNECTION, 12" TAPPING VALVE IN 60" VAULT	EACH	2	$ 8,000.00	$ 16,000.00
7	PRESSURE CONNECTION, 16" TAPPING VALVE IN 60" VAULT	EACH	1	$ 9,000.00	$ 9,000.00
8	GATE VALVE, 20-INCH IN 60-INCH VALVE VAULT	EACH	3	$ 25,000.00	$ 75,000.00
9	FIRE HYDRANT ASSEMBLY, WITH AUXILIARY VALVE, 6-INCH MJ	EACH	7	$ 20,000.00	$ 140,000.00
10	DUCTILE IRON FITTINGS	LB	11,000	$ 8.00	$ 88,000.00
11	FIRE HYDRANT REMOVAL	EACH	4	$ 800.00	$ 3,200.00
12	VALVE ABANDONMENT	EACH	2	$ 500.00	$ 1,000.00
13	WATER SERVICE CONNECTION, 1"	EACH	2	$ 1,100.00	$ 2,200.00
14	WATER SERVICE CONNECTION - TYPE K COPPER, 1"	LF	110	$ 30.00	$ 3,300.00
15	SELECT GRANULAR BACKFILL	CY	1,200	$ 35.00	$ 42,000.00
16	FOUNDATION MATERIAL	CY	50	$ 35.00	$ 1,750.00
17	DISCONNECT AND ABANDON EXISTING WATER MAIN - 12"	EACH	2	$ 2,250.00	$ 4,500.00
18	WATER MAIN TESTING - PRESSURE AND DISINFECTION	LS	1	$ 10,000.00	$ 10,000.00
19	HMA PAVEMENT REMOVAL AND REPLACEMENT - 4"	SY	1,250	$ 45.00	$ 56,250.00
20	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	LF	25	$ 40.00	$ 1,000.00
21	NON-SPECIAL NON-HAZARDOUS WASTE REMOVAL	TON	200	$ 60.00	$ 12,000.00
22	RESTORATION	LS	1	$ 40,000.00	$ 40,000.00
23	TRAFFIC CONTROL AND PROTECTION	LS	1	$ 30,000.00	$ 30,000.00
				SUBTOTAL	$ 1,084,000.00
				CONTINGENCY (10%)	$ 109,000.00
				TOTAL	$ 1,193,000.00
				DESIGN ENGINEERING (10%)	$ 119,300.00
				CONSTRUCTION ENGINEERING (10%)	$ 119,300.00
				LEGAL FEES	$ 3,000.00
				LAND ACQUISITION	$ 15,000.00
				TOTAL PRELIMINARY COST ESTIMATE	**$ 1,449,600.00**

Notes:
assumes fire hydrants every 300'

no air release valves were included

Engineering Enterprises, Inc.
52 Wheeler Road, Sugar Grove, IL 60554

JOB NO:	YO1437-V
DESIGNED:	MLP
DATE:	February 16, 2016
PROJECT TITLE:	**Water Systems Master Plan**

Preliminary Cost Estimate
8. PRV Station - North Pressure Zone to North Central Pressure Zone

ITEM NO.	ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
1	FURNISH FACTORY BUILTBELOW GROUND PACKAGED PRV STATION WITH ALL NECESSARY PIPING, CONTROLS AND APPURTENANCES (INCLUDING CONNECTION FITTINGS AND PIPING)	L SUM	1	$ 75,000.00	$ 70,000.00
2	INSTALLATION OF FACTORY BUILT BELOW GROUND PACKAGE PRV STATION (INCLUDES CONNECTION TO 16" W.M. AND CONNECTION TO 4" DIA, PVC SUMP DISCHARGE PIPING)	L SUM	1	$ 35,000.00	$ 30,000.00
3	REINFORCED CONCRETE BASE PAD INCLUDING ANCHOR BOLTS AND ALL REQUIRED EXCAVTION, AGGREGRATE BASE, AND TRENCH BACKFILL.	L SUM	1	$ 15,000.00	$ 15,000.00
4	ELECTRICAL PRV INSTALLATION, PROVIDE SERVICE FROM EXISTING WELL HOUSE TO THE VALVE STATION	L SUM	1	$ 20,000.00	$ 20,000.00
5	DISINFECTION, SAMPLING AND BACTERIALOLOGICAL TESTING-BP/PRV STATION AND NEW FIRE HYDRANT	L SUM	1	$ 1,500.00	$ 1,500.00
6	CONNECTION TO WATER MAIN	EACH	2	$ 2,000.00	$ 4,000.00
7	DUCTILE IRON WATER MAIN, CL 52, 1"	FOOT	100	$ 125.00	$ 12,500.00
8	VALVE IN VAULT (BUTTERFLY), 16"	EACH	3	$ 15,000.00	$ 45,000.00
9	FIRE HYDRANT W/AUXILIARY VALVE (INCLUDING THE 12" X 6" TEE AND 6" LEAD)	EACH	1	$ 4,500.00	$ 4,500.00
10	FOUNDATION MATERIAL	CU YD	30	35.00	$ 1,050.00
11	SPECIAL WASTE DISPOSAL	TON	70	60.00	$ 4,200.00
12	RESTORATION	LS	1	25,000.00	$ 25,000.00
13	SCADA	LS	1	$ 25,000.00	$ 20,000.00
14					
15					
16					
17					$ -
18					$ -
19					$ -
				SUBTOTAL	$ 253,000.00
				CONTINGENCY (10%)	$ 26,000.00
				TOTAL	$ 279,000.00
				DESIGN ENGINEERING (10%)	$ 27,900.00
				CONSTRUCTION ENGINEERING (10%)	$ 27,900.00
				LAND ACQUISITION	$ 40,000.00
				LEGAL FEES	$ 3,000.00
				COMED - ELECTRICAL SERVICE	$ -
				TOTAL PRELIMINARY COST ESTIMATE	**$ 377,800.00**

Notes:



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
EEI Alternative Water Supply Study Presentation - September 2021

File Name:
B.8b_EEI Alternative Water Supply Study Presentation - September 2021

Description:
United City of Yorkville Alternative Water Source Study Summary - September 28, 2021

August 2024

ALTERNATIVE WATER SOURCE STUDY (AWSS) SUMMARY

United City of Yorkville

City Council Meeting
September 28, 2021

Presenter: Jeffrey W. Freeman, PE, CFM, LEED AP



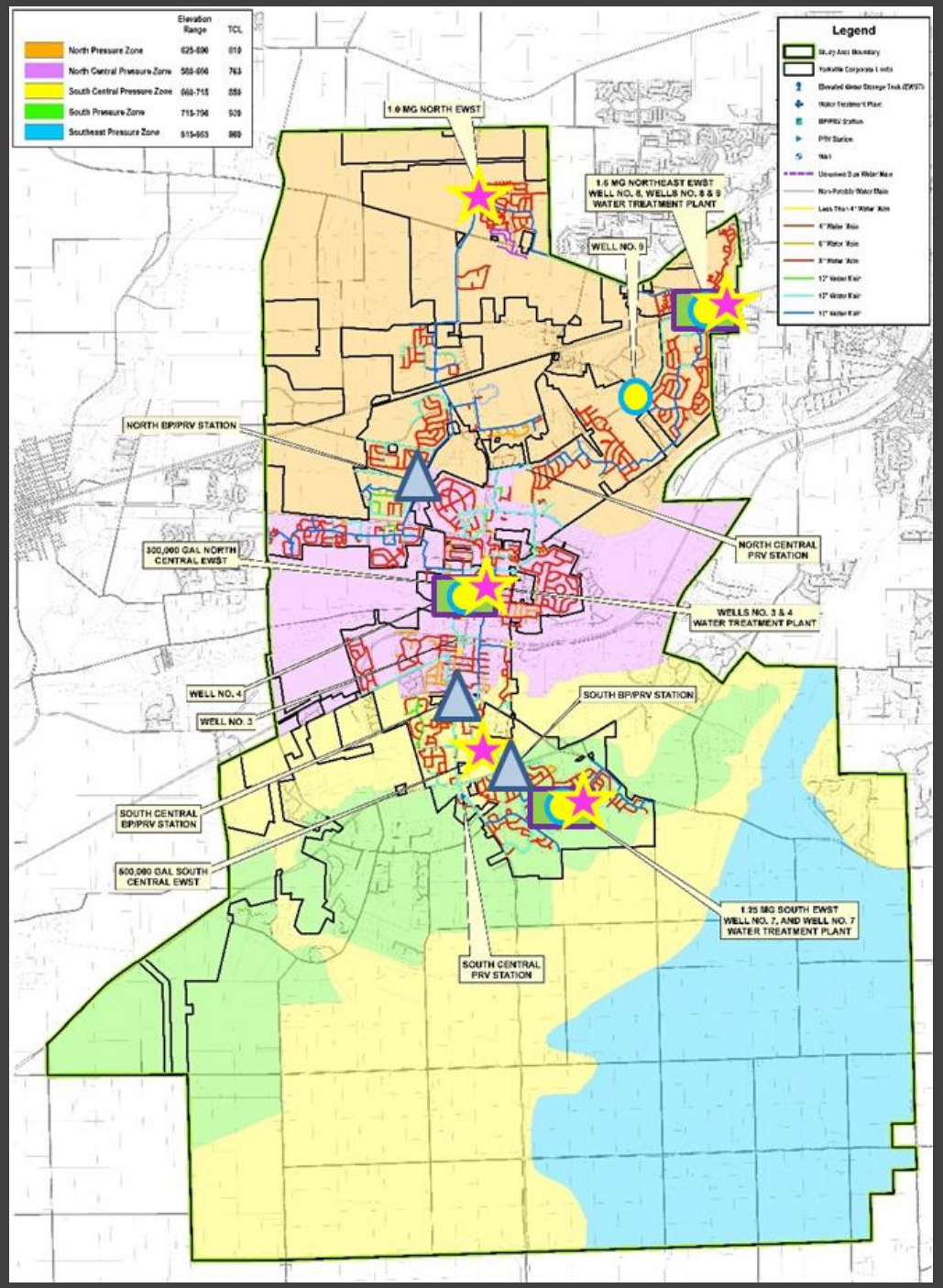
Agenda

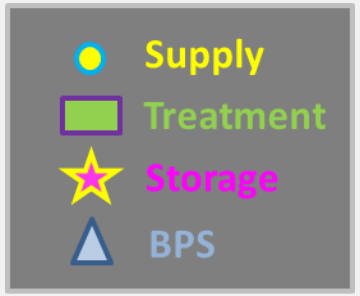
1. Existing Water Works System Overview
2. Water Source Sustainability and Alternatives
3. Summary of Previous Studies
4. Yorkville and Waterlink Background Information
5. Key Considerations Introduction
6. Supply Alternatives Overview
7. Cost Estimates Summary & Financial Analysis
8. Alternatives Implementation Schedule
9. Key Considerations Summary
10. Next Steps
11. Q&A



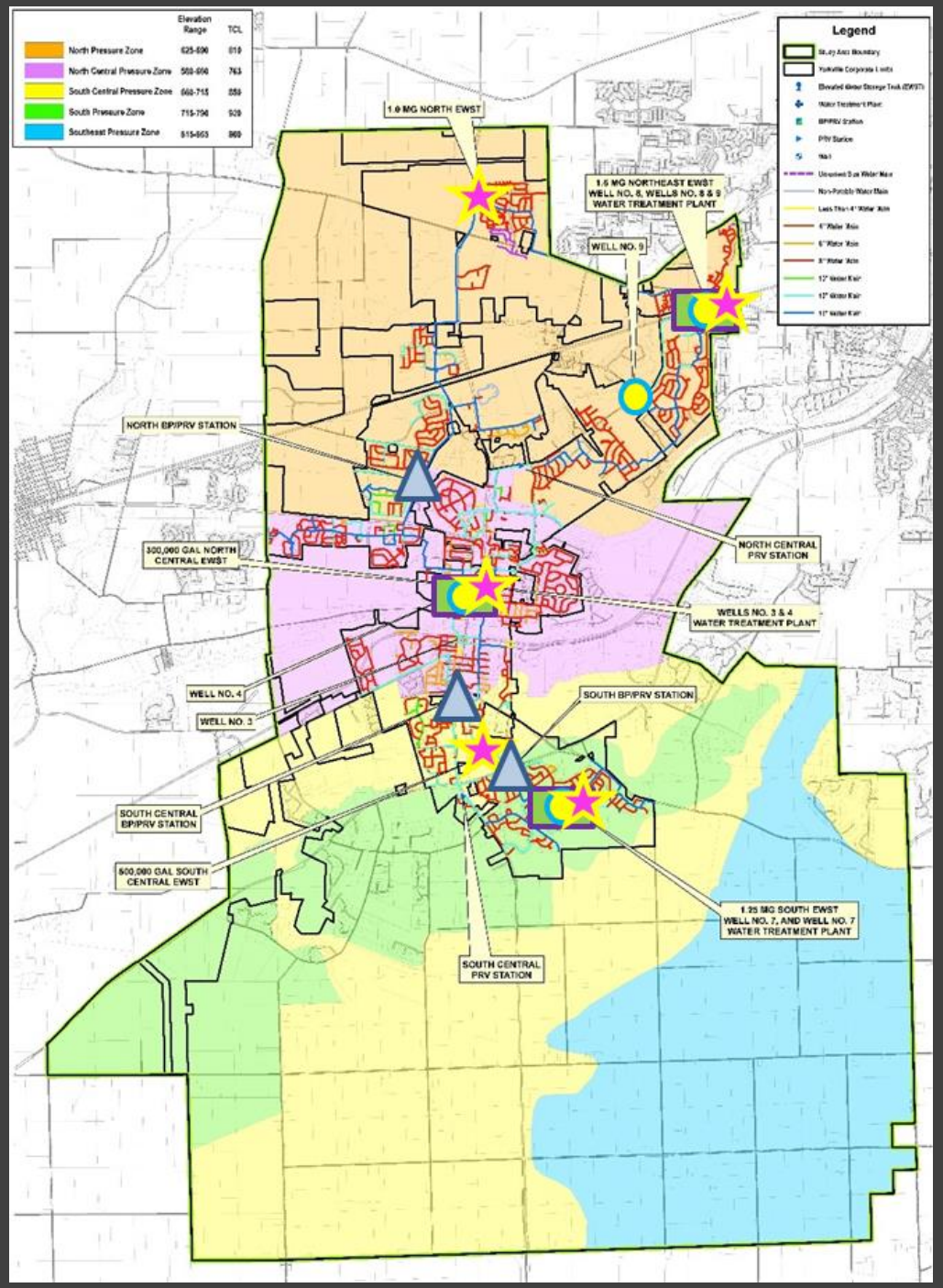
EXISTING WATER WORKS SYSTEM (WWS) OVERVIEW

Existing Water Works System





- **Supply:** Four (4) Active Deep Sandstone Water Wells [Nos. 4, 7, 8 & 9]
  - Three (3) Ironton-Galesville & One (1) St. Peter (Ancell) & Ironton Galesville
  - Flow Rate: 1,000-1,200 gpm
  - Exceed Radium Standard
- **Treatment:** Three (3) WTPs
  - All Plants Institute Cation Exchange ~~Treatment~~



Existing Water Works System

- **Storage:** Five (5) Elevated Water Storage Tanks (EWST) [300,000-1,500,000 gallons]
- **Distribution:**
  - 4" – 16" Water Main
  - Four (4) Pressure Zones
  - Three (3) Distribution System Booster Pump Stations
  - Two (2) Pressure Reducing Valve Vaults
- **Controls:** SCADA System

Supply
Treatment
Storage
BPS

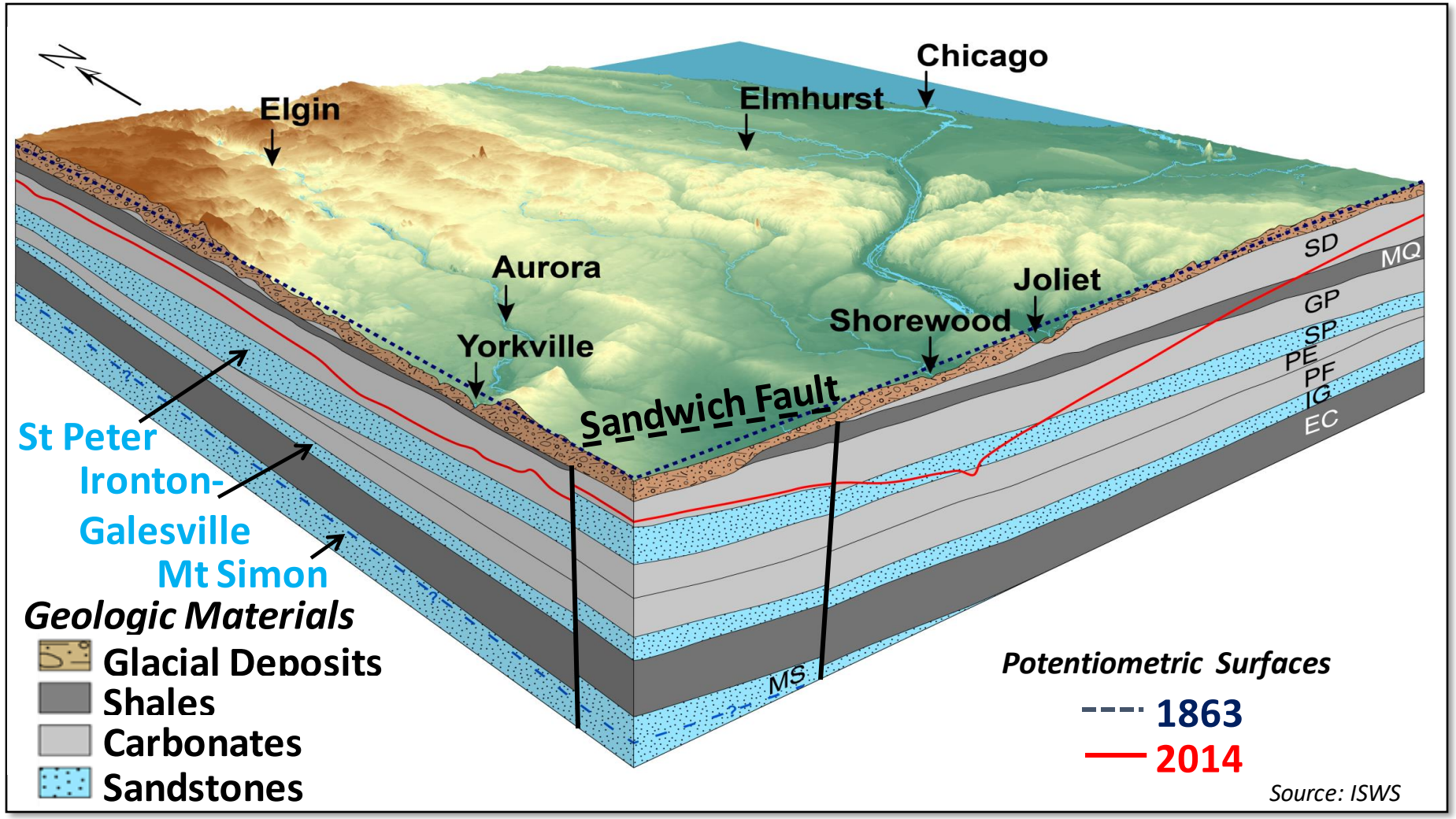


WATER SOURCE SUSTAINABILITY AND ALTERNATIVES

Deep Aquifer System Overview in Northeastern IL



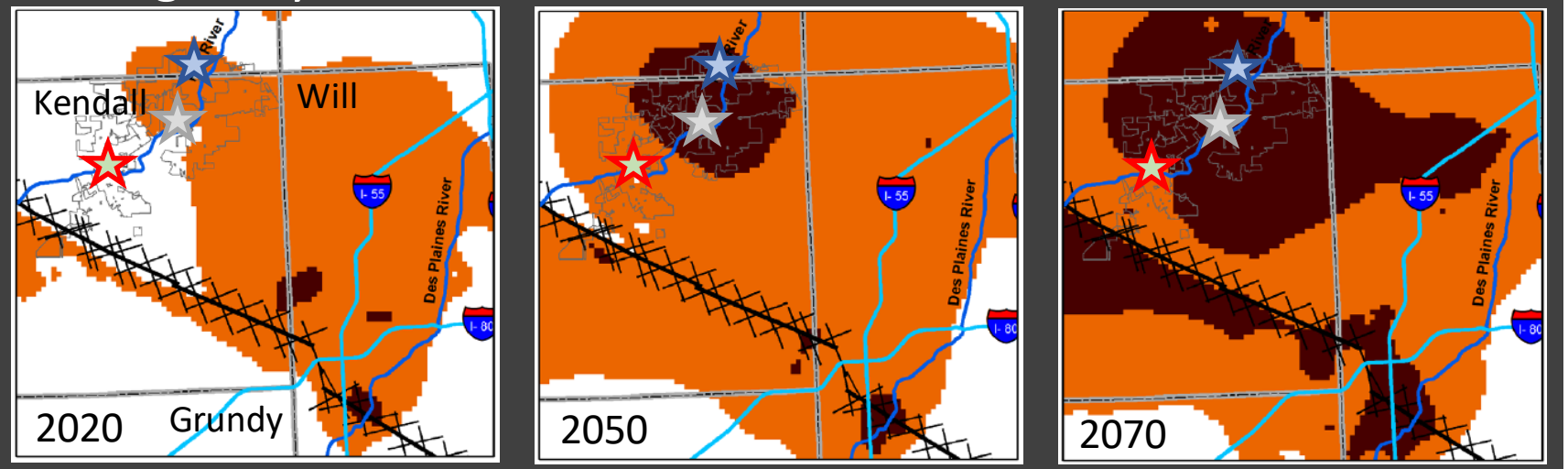
- Naturally Occurring Radium 226 & 228
- Illinois State Water Survey (ISWS) projects the Aquifer is pumped beyond its sustainable yield and water levels are declining
- A number of communities within the region are planning to move to an alternative water source



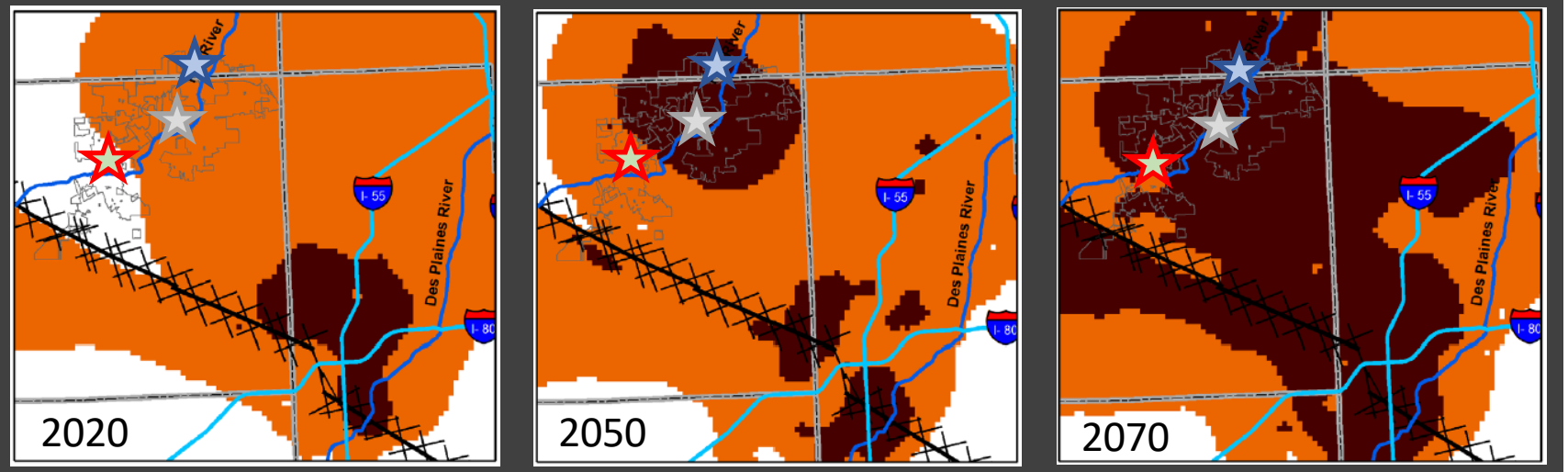
EXISTING DEEP WELLS GROUNDWATER MODELING

Illinois State Water Survey projects that Yorkville, Montgomery, and Oswego will be at "severe risk" of being able to meet demands and of well inoperability by 2050.

Average Day Water Use



Peak Water Use



Risk Zones

- Risk of declining well performance
- Risk of well inoperability

- Village of Montgomery
- Village of Oswego
- United City of Yorkville

Major Rivers

Sandwich Fault Zone

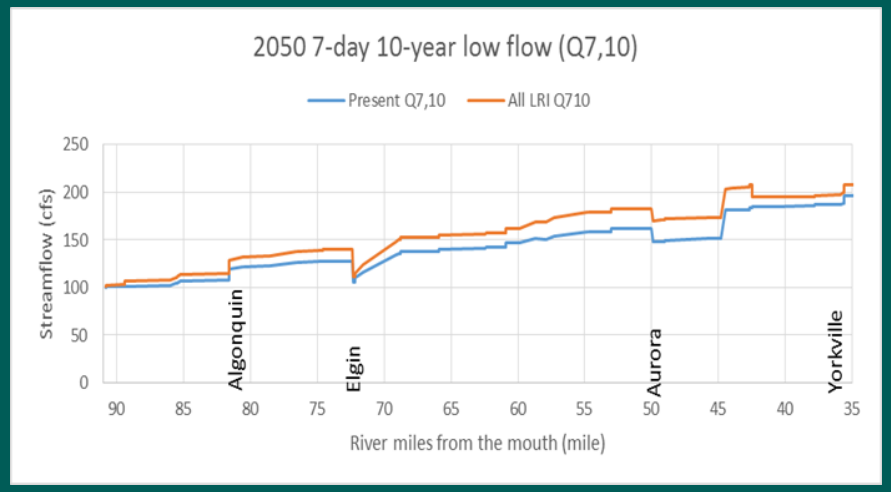
Interstates

Municipal Boundaries

Source: ISWS

FOX RIVER

- Water Source for Cities of Elgin and Aurora
- Modeling Conducted by the ISWS: River Baseflow Projected To Increase In the Future
- Most Sustainable Supply Source Currently Within Sub-Region
- Water Withdrawal May be Restricted by IDNR Due to Low Flows – Communities Required to Maintain Some Back-Up Wells
- Withdrawal Permitting Sooner Rather Than Later Likely Better



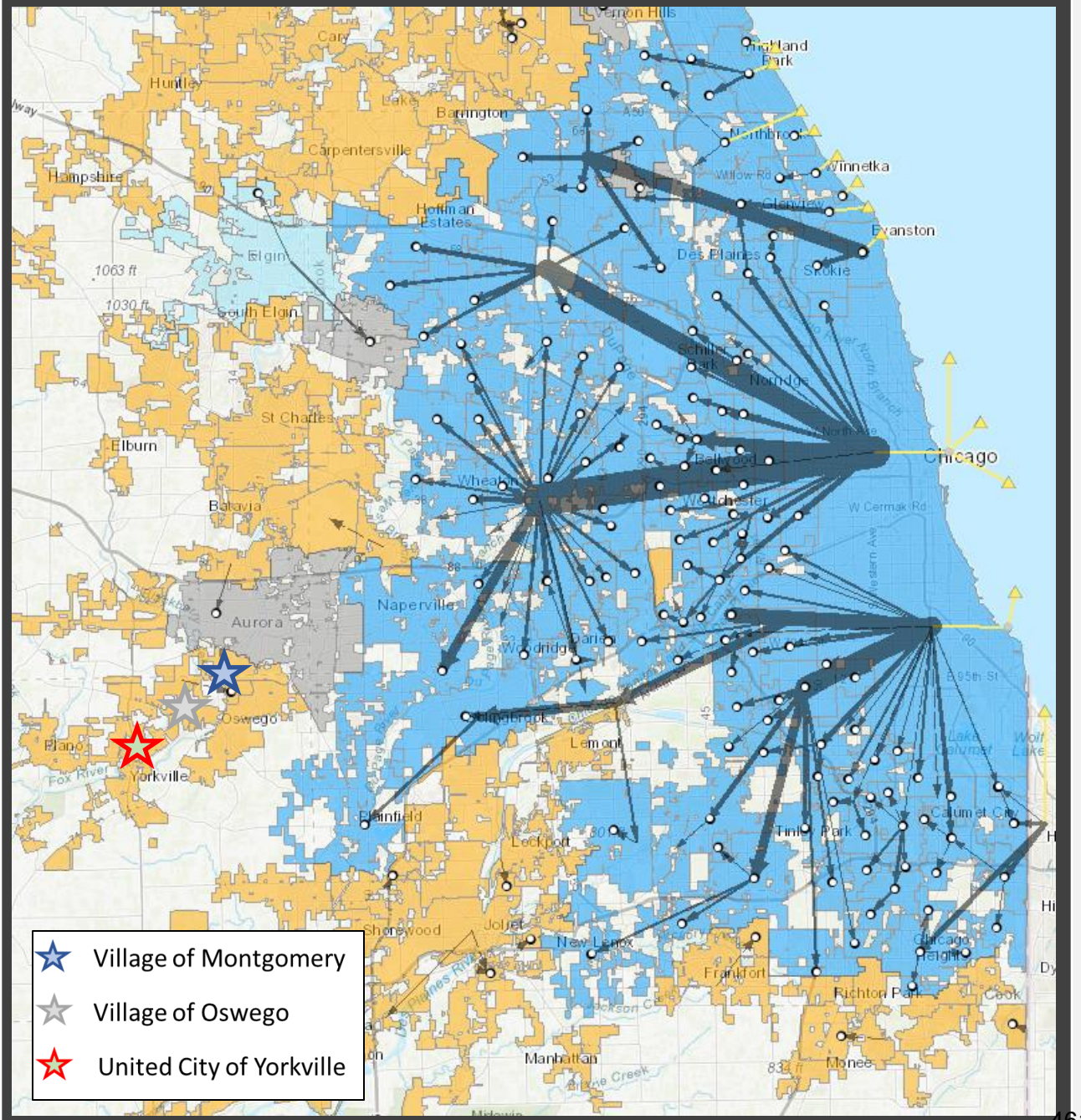
Projected Change In Monthly Risk Of River Flow Being Below Current Q7,10 Flow

Month	Current Conditions (%)	2050 Projected Conditions (%)
May	0.4	<0.1
June	0.3	<0.1
July	1.7	<0.1
August	3.6	0.5
September	4.7	0.9
October	2.4	0.7
November	0.4	0.2

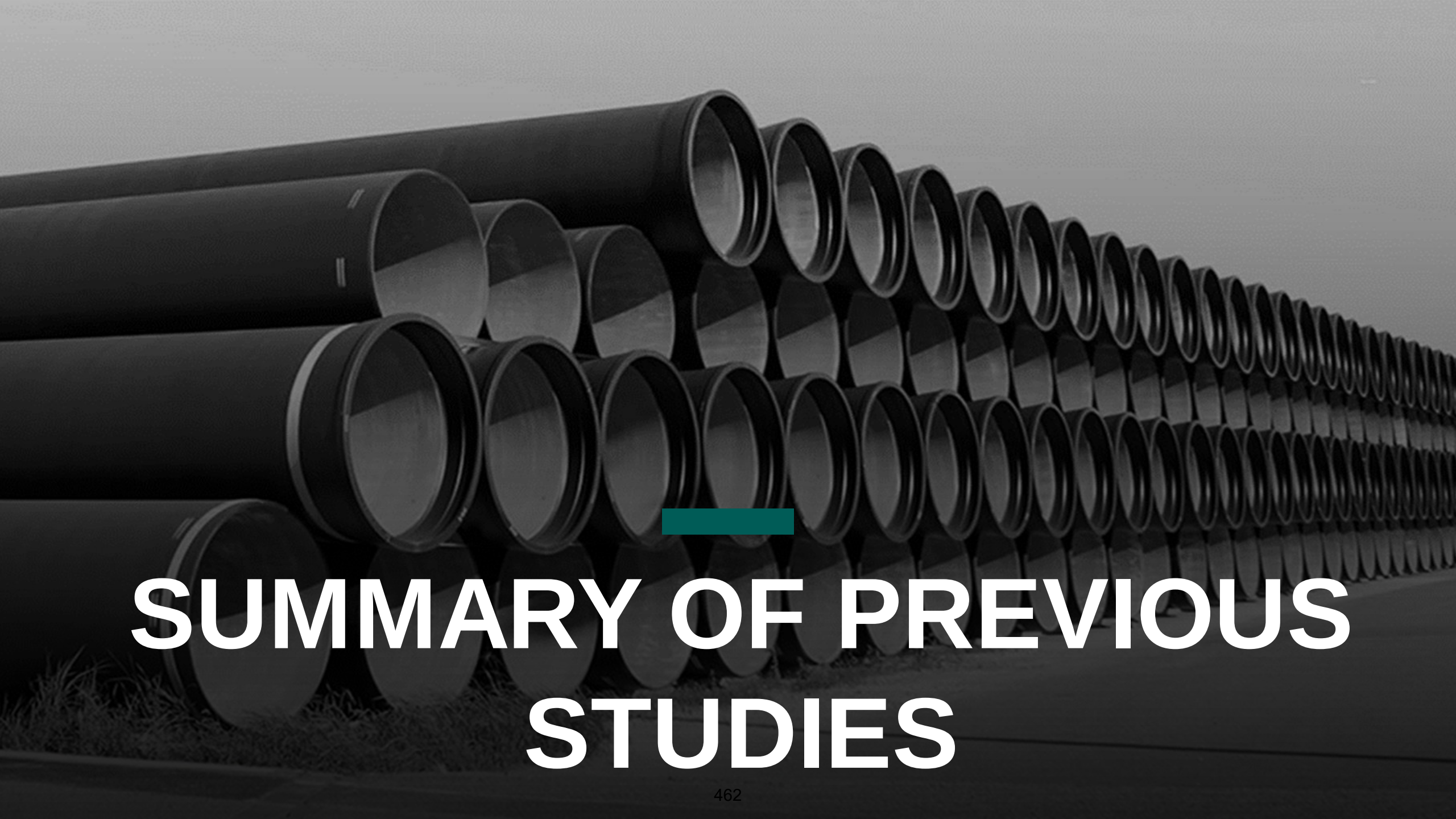
Historical & Projected Q7,10 Deficit Days In Four Worst Drought Years

Year	Total # Of Actual Deficit Days	2050 Projected # Of Deficit Days
1934	98	1
2005	50	22
1956	43	24
1946	38	15

LAKE MICHIGAN



- Total Illinois Diversion Limit Set at 3,200 cfs (2,068 MGD) by Supreme Court Decree
- Illinois Department of Natural Resources (IDNR) Manages Lake Michigan Allocation Process
- IDNR Has Recently Stated They Believe There is Sufficient Allocation to Serve Joliet and the Communities Currently Considering Connection
- Not required to maintain backup wells but can keep for emergency



SUMMARY OF PREVIOUS STUDIES

Population & Water Demand Projections

Regulatory Review

Sustainable Source Water Assessment



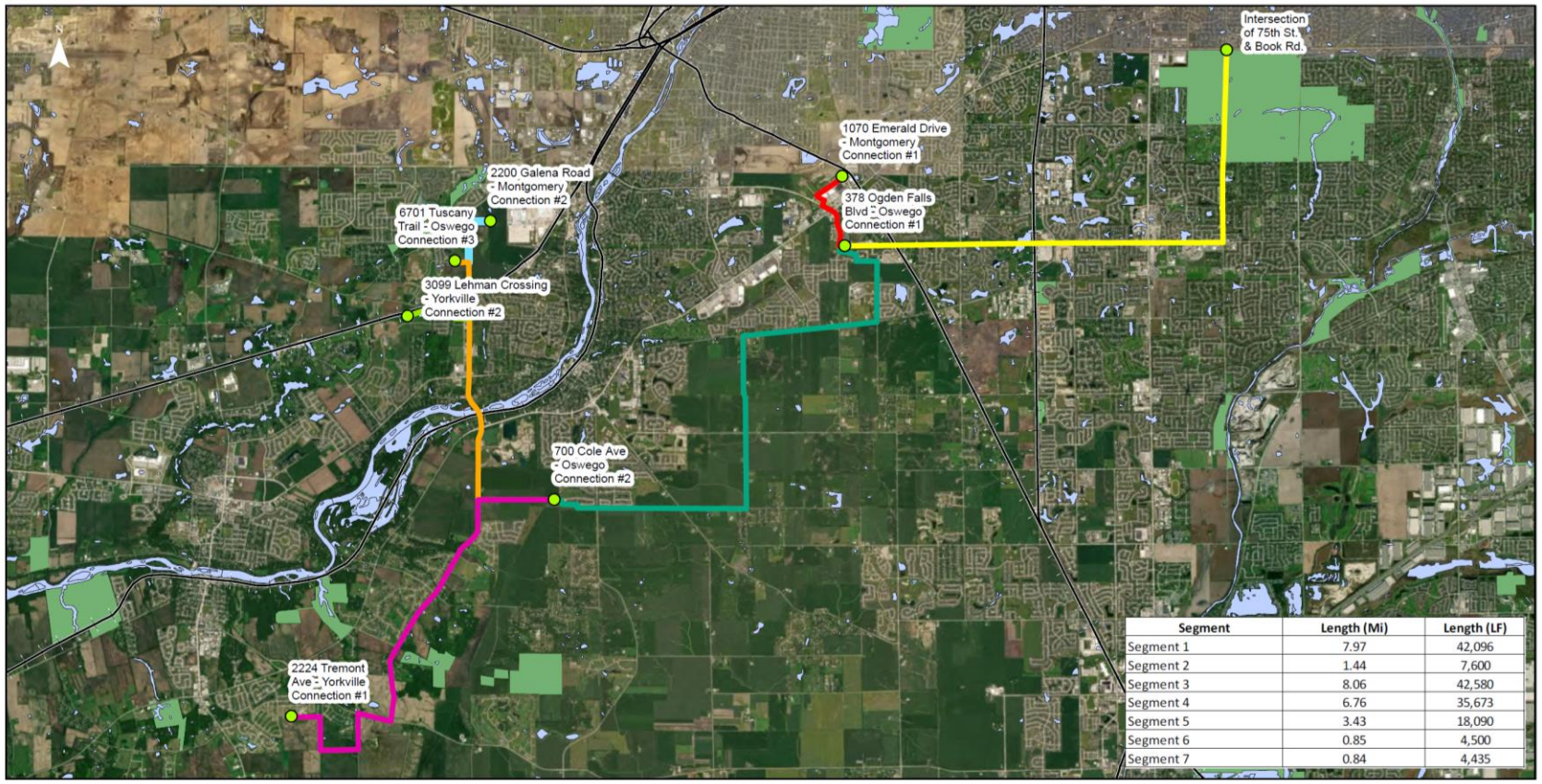
Wells

Fox River Alone

Fox River With Oswego & Yorkville

2016 United City of Yorkville Water Works System Master Plan

In 2016, the City analyzed the sustainability of the City's wells, continued use of the wells, and utilizing the Fox River either as an independent supply source or with the Village of Oswego and Village of Montgomery.



Segment	Length (Mi)	Length (LF)
Segment 1	7.97	42,096
Segment 2	1.44	7,600
Segment 3	8.06	42,580
Segment 4	6.76	35,673
Segment 5	3.43	18,090
Segment 6	0.85	4,500
Segment 7	0.84	4,435

2017 & 2018 DuPage Water Commission Connection Analysis

In 2017 & 2018, AECOM developed capital cost estimates for a DuPage Water Commission Connection to the Villages of Oswego and Montgomery and United City of Yorkville.

2020/2021 Alternative Water Source Project

The Village of Oswego initiated an Alternative Water Source Project where they are evaluating a number of water source options for the region. They have asked Montgomery and Yorkville to provide cost-sharing for the elements of the study that apply to the three communities.

Outputs To Be Utilized In COY AWSS



Requested Inputs From VOM & COY



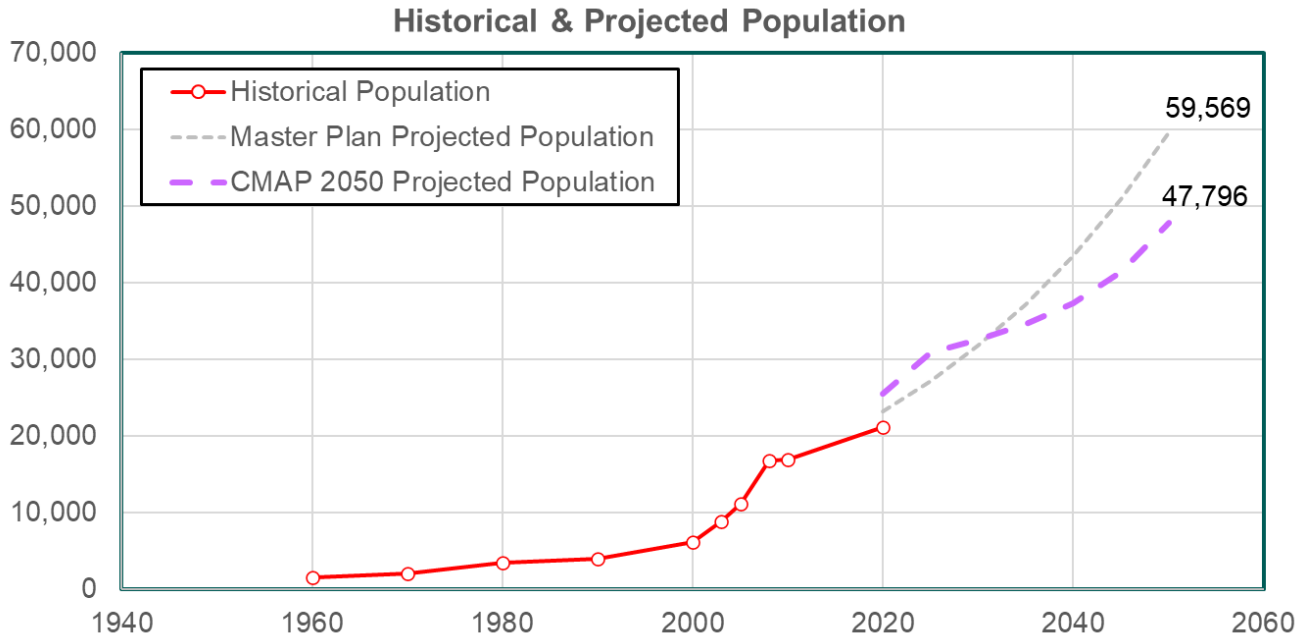
2020-2021 AWSS Update (Current Study)

- Review/Obtain Information from Oswego Water Study
  - Summarize Cost Analysis for Waterlink Sub-Regional Fox River System and Lake Michigan Alternatives (DWC, Joliet, and Illinois American)
- Water Distribution System Modeling and Analysis
  - Modeling Scenarios Analysis for Each Alternative, Including Review of Pressures, Available Fire Flows, Pipe Velocities, and Distribution System Improvements Necessary for Implementation
- Supply, Treatment, Storage, and Distribution Improvements Updated Cost Estimates and Analysis for Fox River: Yorkville Alone Option and Cost Analysis Summary of All Alternatives

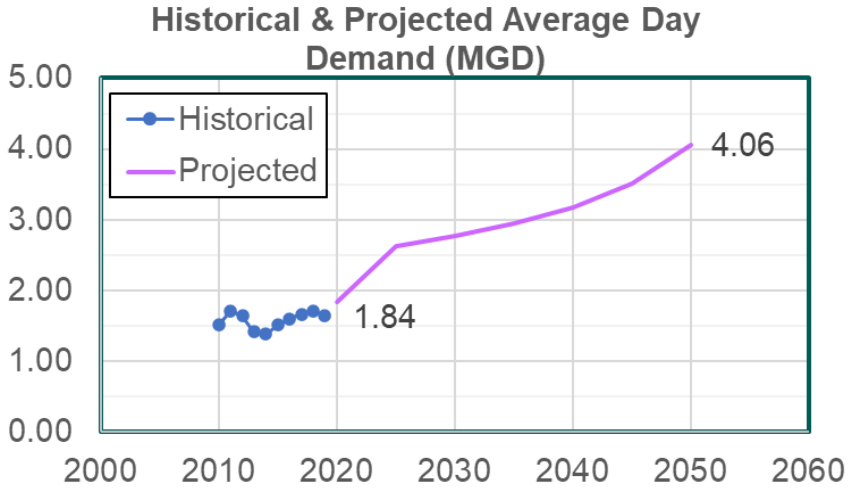


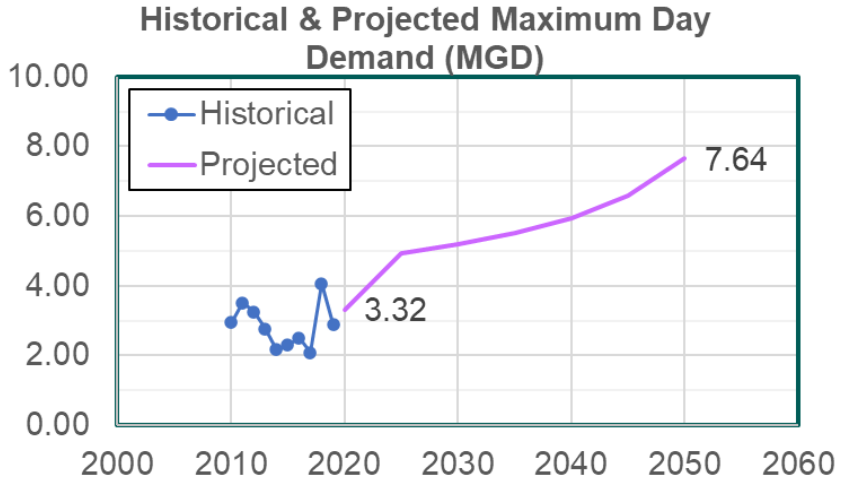
YORKVILLE AND WATERLINK BACKGROUND INFORMATION

Yorkville Historical and Projected Population and Water Demands

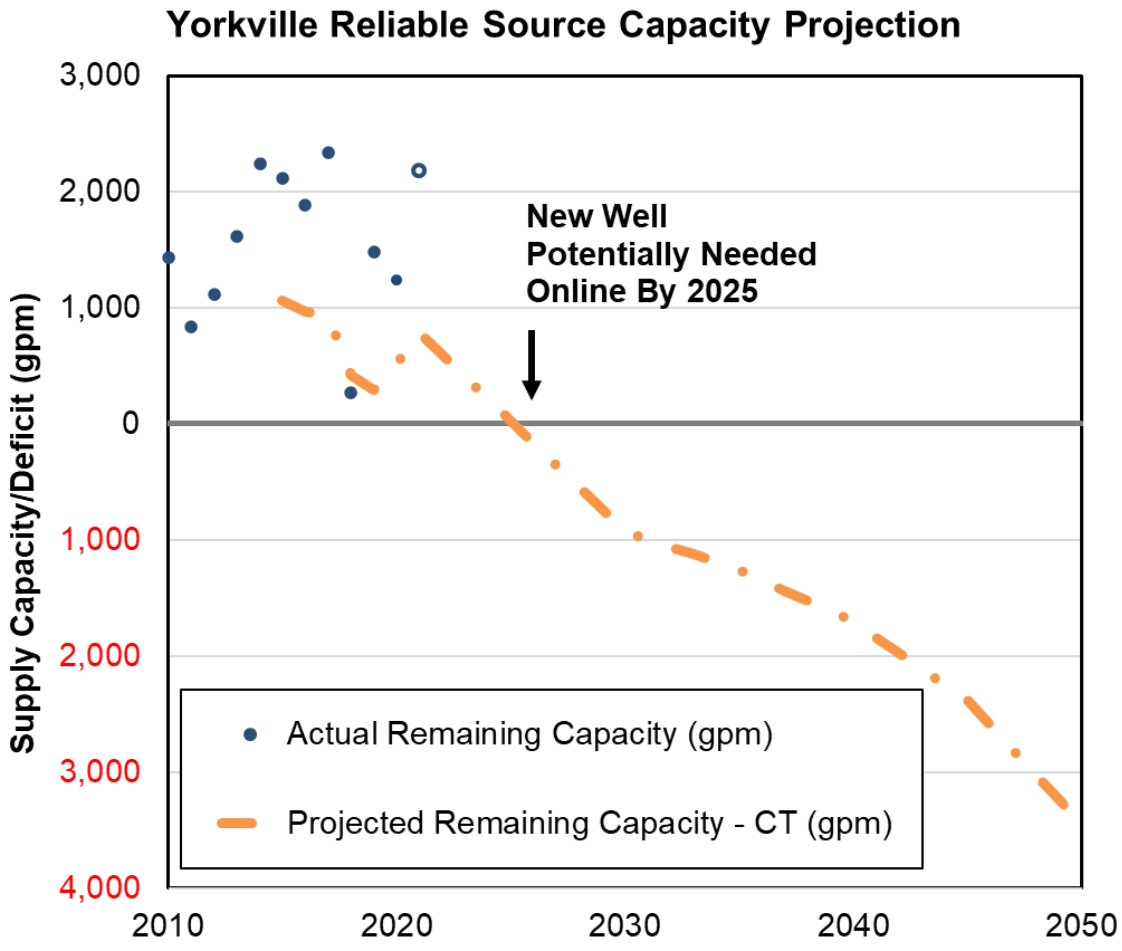


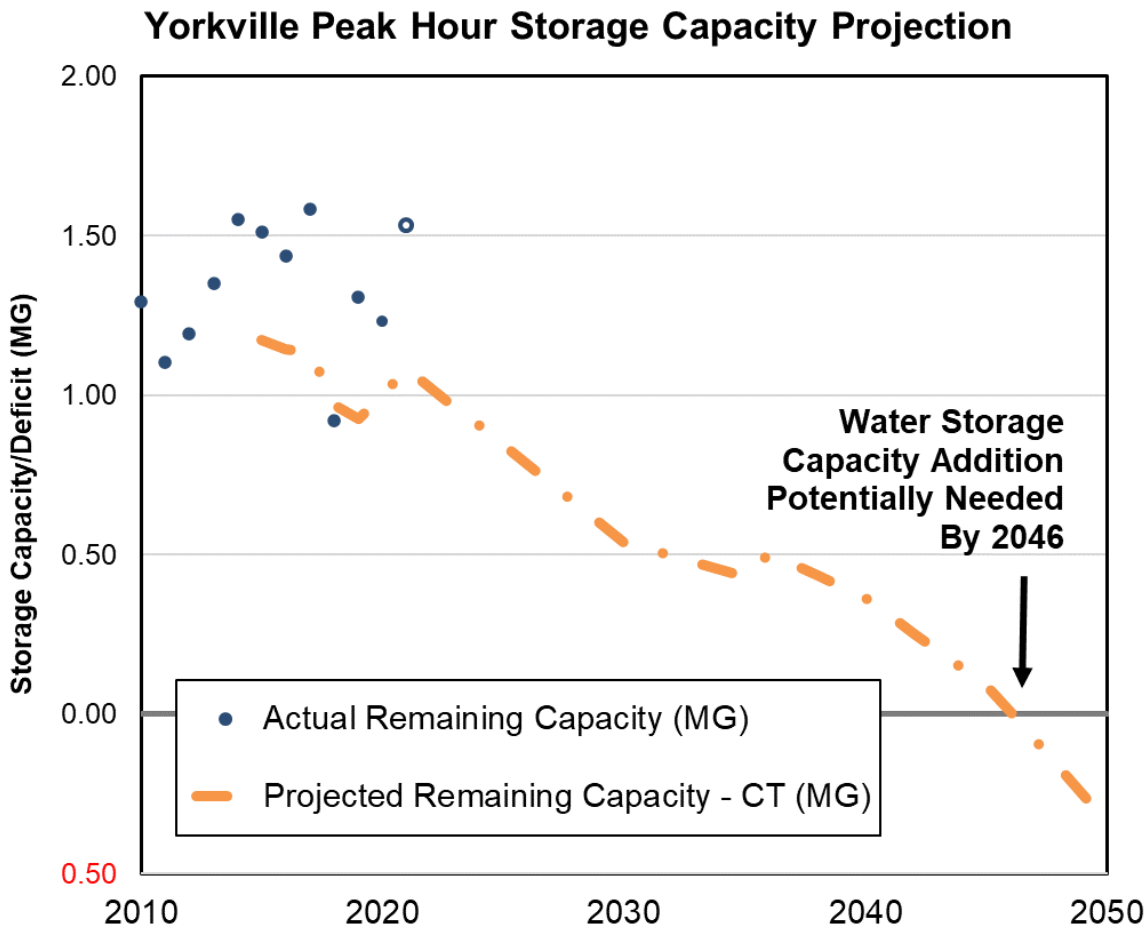
Estimated Future Yorkville Buildout Population (Circa 2100): 95,727



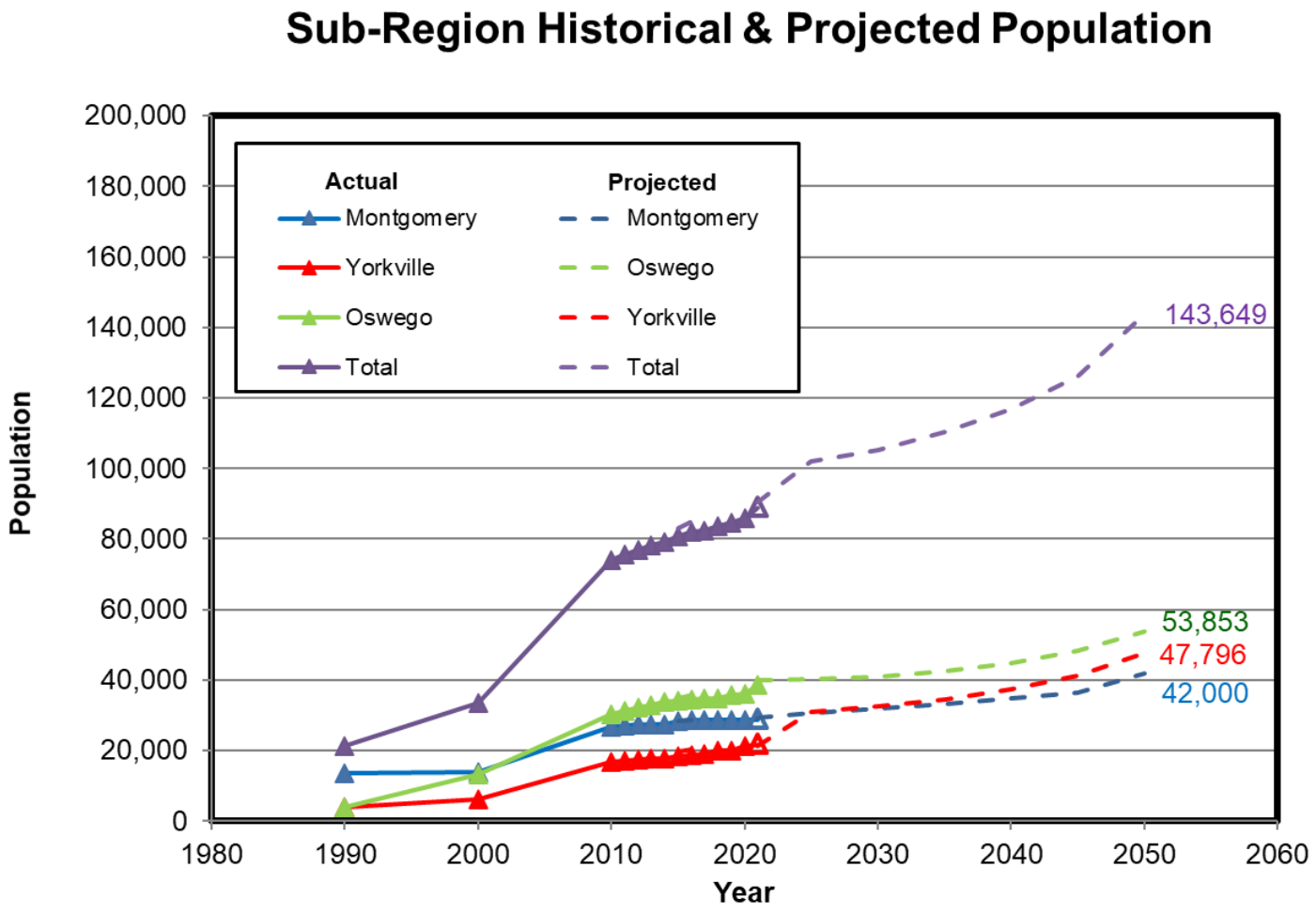


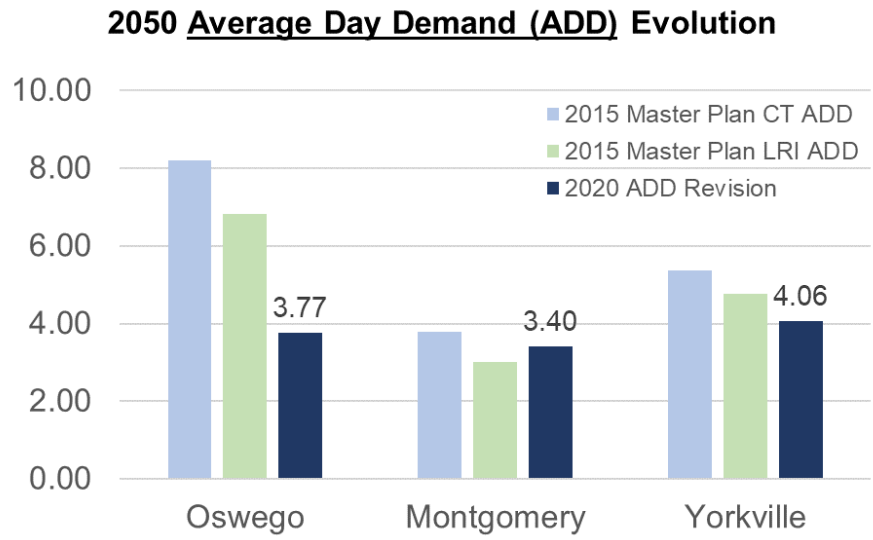
Yorkville Water Supply, Treatment, and Storage Capacity Status

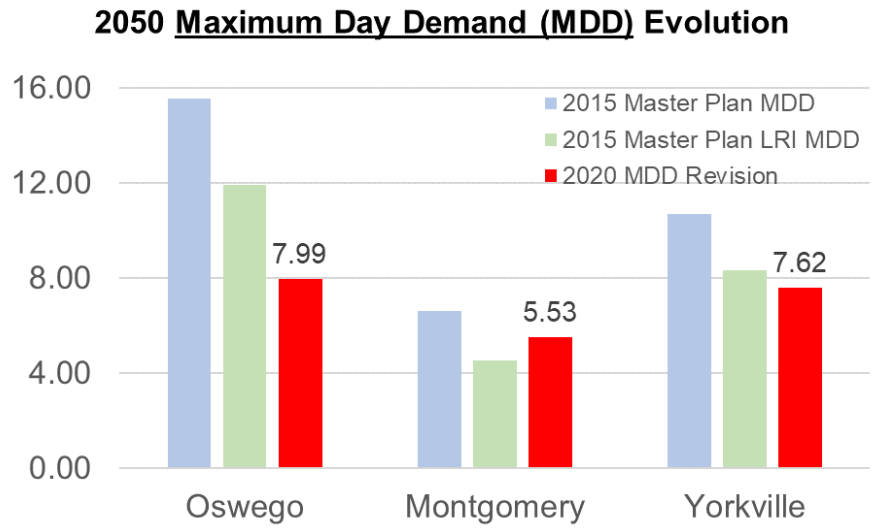




Waterlink Population and Demand Projections









KEY CONSIDERATIONS INTRODUCTION



DECISION CONSIDERATIONS

COST

RISK

WATER QUALITY

MANAGEMENT/ STAFFING

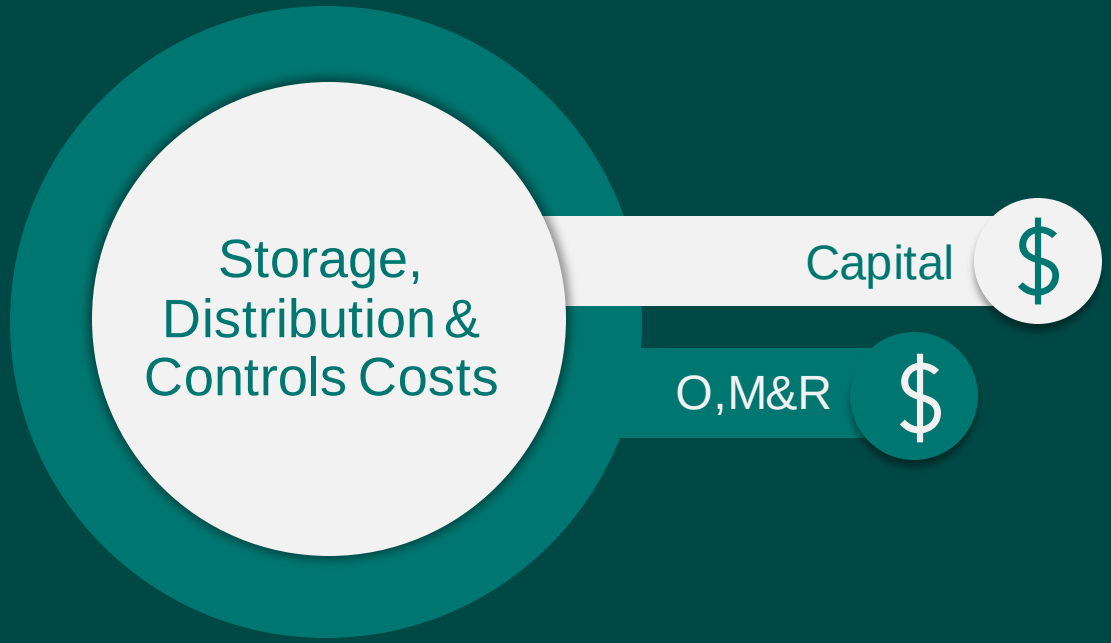
CONTROL/ GOVERNANCE

SUSTAINABILITY/ QUANTITY

$ COSTS



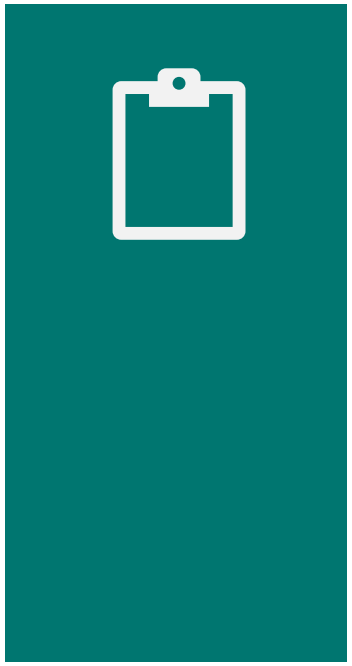
+



O,M&R = Operation, Maintenance & Replacement

RISK

DESIGN/
PERMITTING



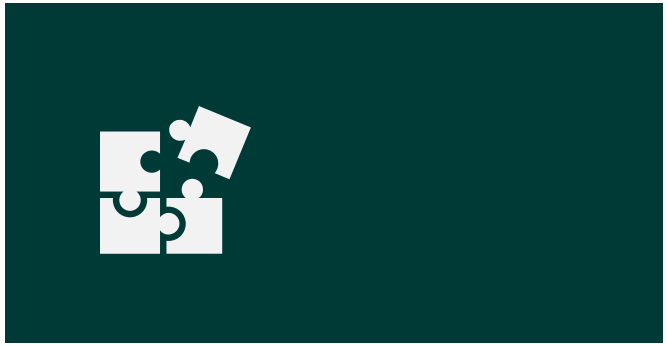


CONSTRUCTION



FINANCIAL

CAPACITY
EXPANSION



WATER QUALITY

TREATMENT SYSTEM

Surface water treatment plant vs. chlorine addition

WATER INTAKE LOCATION

Riverine bank versus offshore Lake Michigan

SEASONAL QUALITY

Seasonal water quality changes in a river versus Great Lake

REGULATORY COMPLIANCE RESPONSIBILITY

Responsibility for regulatory compliance on community or water supplier



MANAGEMENT / STAFFING

- Individual community hires/manages all staff for supply, treatment, transmission, storage and distribution facilities
- Water supplier and water commission hires/manages supply, treatment and transmission staff; Community hires/manages storage and distribution facility staff

CONTROL / GOVERNANCE





SUSTAINABILITY / QUANTITY

SEASONAL FLOW RESTRICTIONS

BACK-UP SUPPLY NEEDS

SUPPLY REDUNDANCY



SUPPLY ALTERNATIVES OVERVIEW

APPLES TO APPLES COST COMPARISON

UNIT PRICES

- Updated All Costs to 2021 $$
- Utilized Same Unit Prices Across Alternatives

CONTINGENCY

- Class 5 Cost Estimates = 30% Contingency

LEGAL & ENGINEERING

- 20% Legal & Engineering For All Alternatives

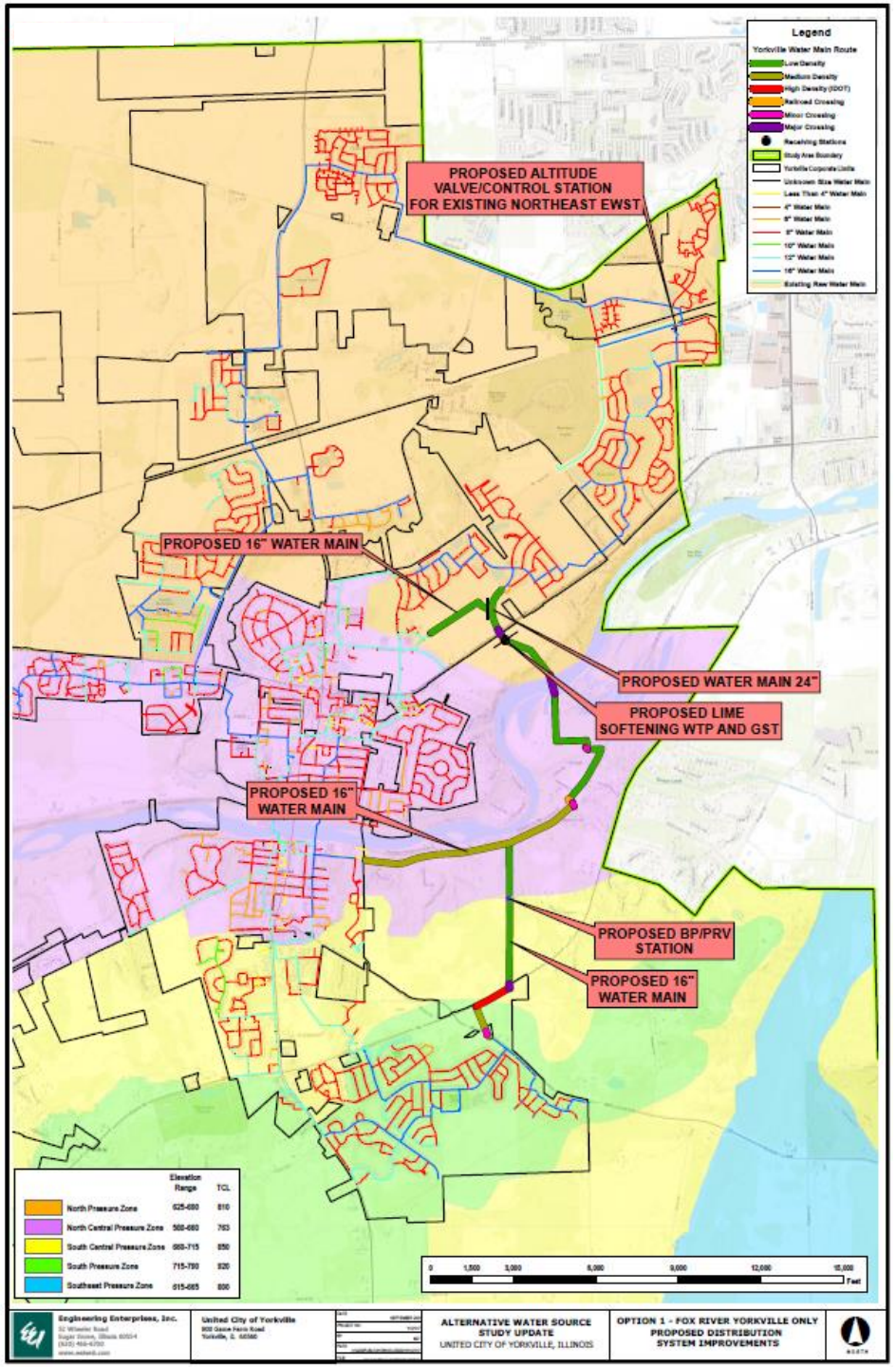


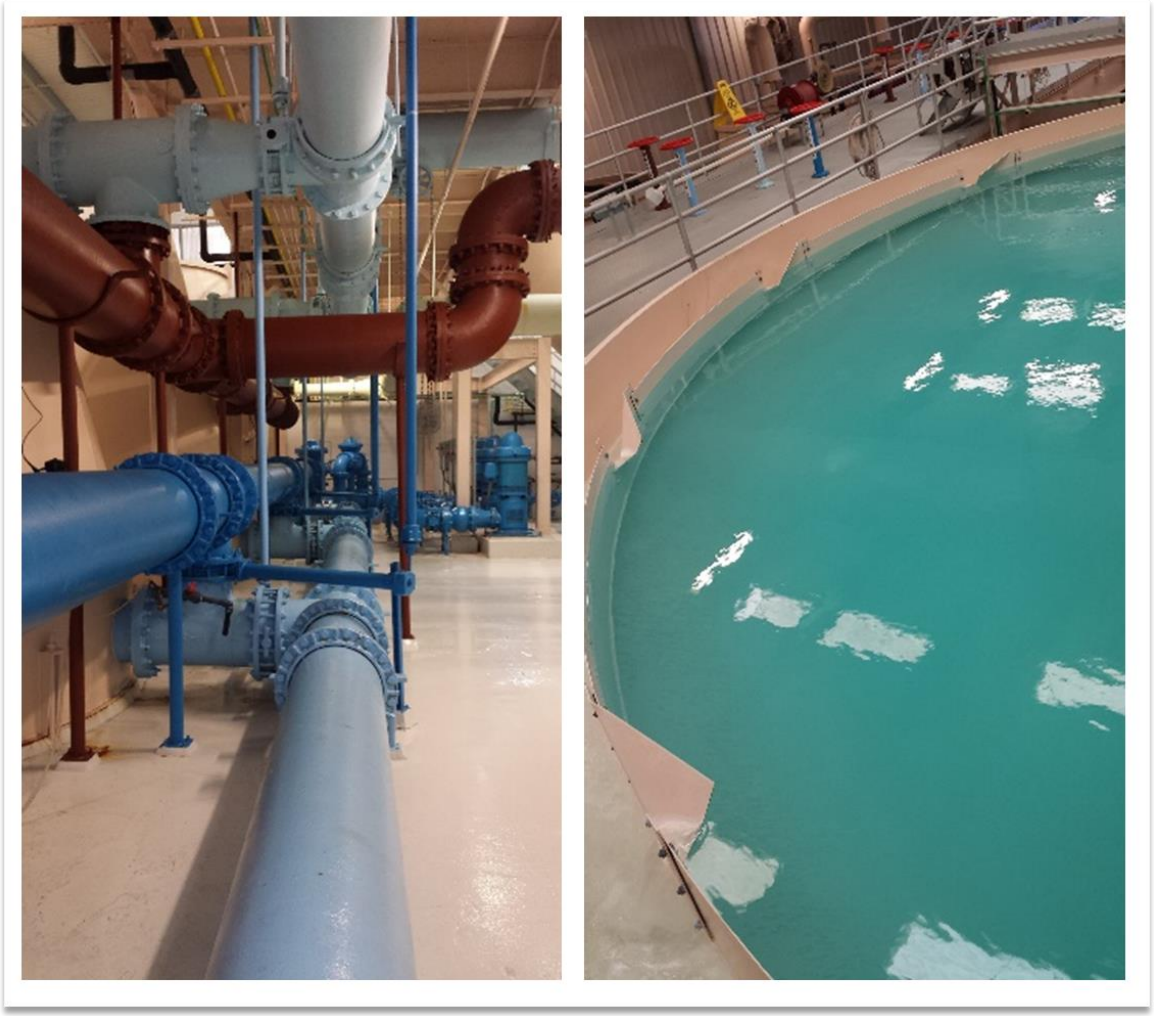
FOX RIVER SUPPLY OPTIONS

UNITED CITY
OF YORKVILLE

WATERLINK SUB-REGIONAL
SYSTEM WITH OSWEGO &
MONTGOMERY

Fox River: Yorkville Alone





Fox River: Yorkville Alone – Summary of Improvements

Supply & Treatment

- Fox River Intake & Pump Station
- Fox River Transmission Main
- Lime Softening Water Treatment Plant
- New Backup Well (Well No. 6)
- Backup Wells Transmission Main (2.7 mi)

Distribution*

- New Altitude/Control Valve Station for Northeast EWST
- New Booster Pump/Pressure Reducing Valve Station (for New Water Transmission Main from North Central to South Central Pressure Zone)
- Water Main Improvements: Hydraulics (5.5 mi)

**Note: No Storage Improvements Required for this Alternative*

Fox River: Yorkville Alone

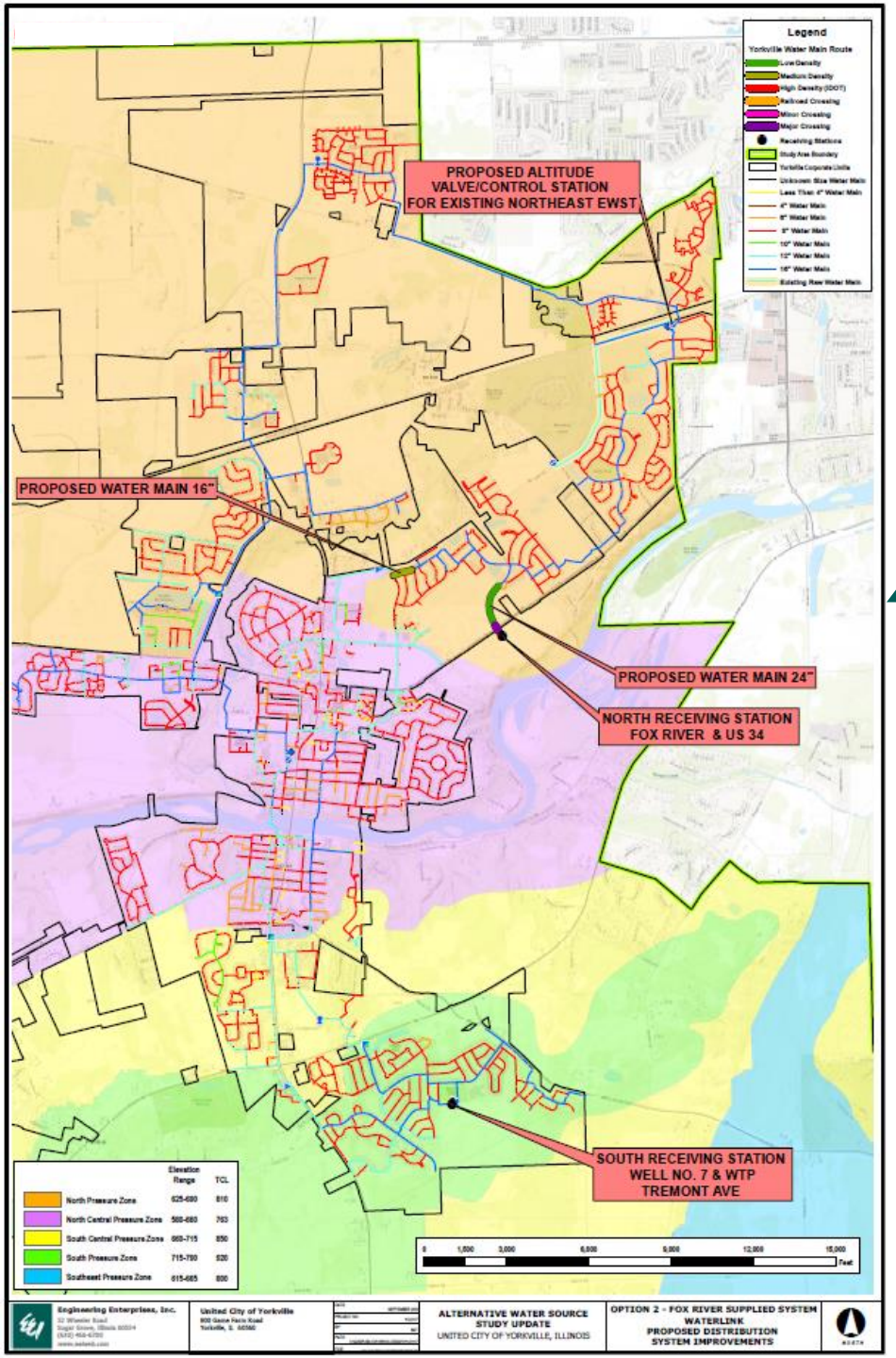
Total Capital Cost Estimate: $97,240,000

Decision Considerations Summary

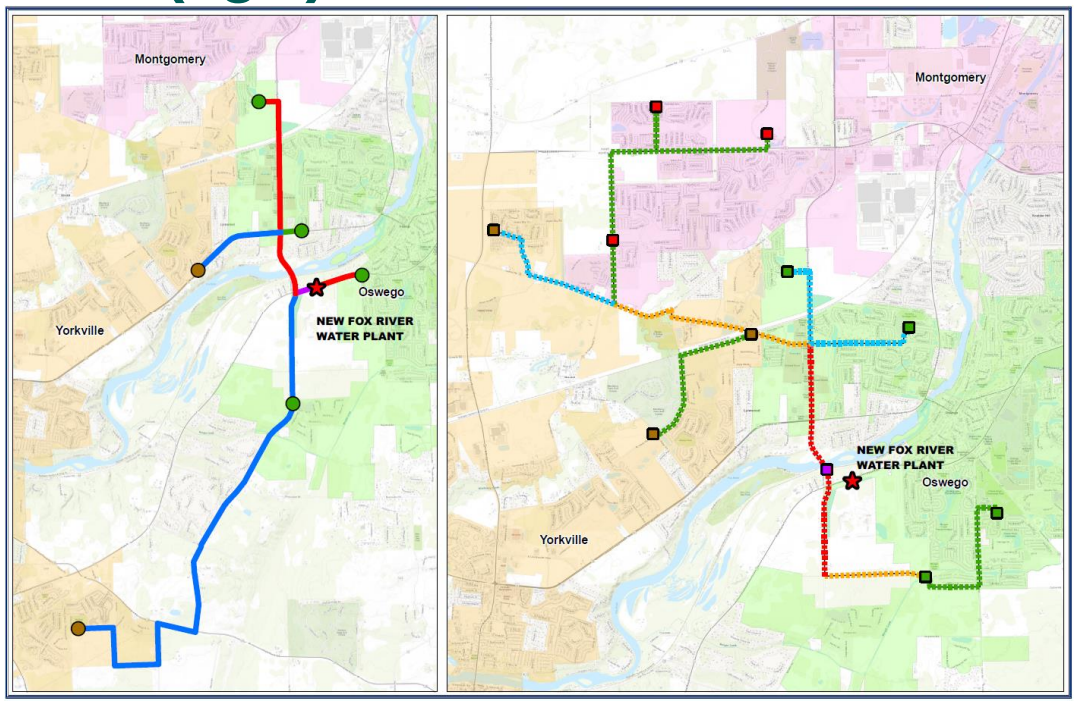
- Sustainability and Water Quality/Permitting of Source:
  - Low Flow/Seasonal Water Quality Restrictions
  - Several Miles Downstream of Fox Metro Water Reclamation Facility
  - Backup Well Network Required
- Governance, Management/Operational Responsibility, and Risk:
  - Sole Ownership/Control & Sole Assumption of Risk
- Internal System Improvements:
  - Significant Internal Improvements Required Due to Single Supply Source
- Estimated Timeline: 5-7 years

Fox River: Waterlink Sub-Regional System

Internal Distribution System Improvements



Treated Water (left) & Back-Up Well Raw Water (right) Transmission Main Networks



Fox River: Waterlink – Summary of Improvements

Sub-Regional Supply & Treatment

- Fox River Intake & Pump Station
- Fox River Raw Water Transmission Main
- Backup Well Raw Water Transmission Main (Total Length = 13.5 mi; Yorkville Share = 36.2%)
- Lime Softening Water Treatment Plant
- New Backup Well (Well No. SR-1)
- Treated Water Transmission Mains (Total Length = 18.0 mi; Yorkville Share = 45.4%)

Internal Distribution System*

- North and South Receiving Stations
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: No Storage Improvements Required for this Alternative*

Fox River: Waterlink Sub-Regional System

Total Capital Cost Estimate*: $98,520,000

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - Low Flow/Seasonal Water Quality Restrictions
  - Several Miles Downstream of Fox Metro Water Reclamation Facility
  - Backup Well Network Required
- Governance, Management/Operational Responsibility, and Risk:
  - Intergovernmental Agreement/New Governmental Unit Required
  - Shared Ownership/Control & Diversification of Risk, Staffing
- Internal System Improvements:
  - Reduction in Internal Improvements Due to Dual Supply Sources
- Estimated Timeline: 9-11 years

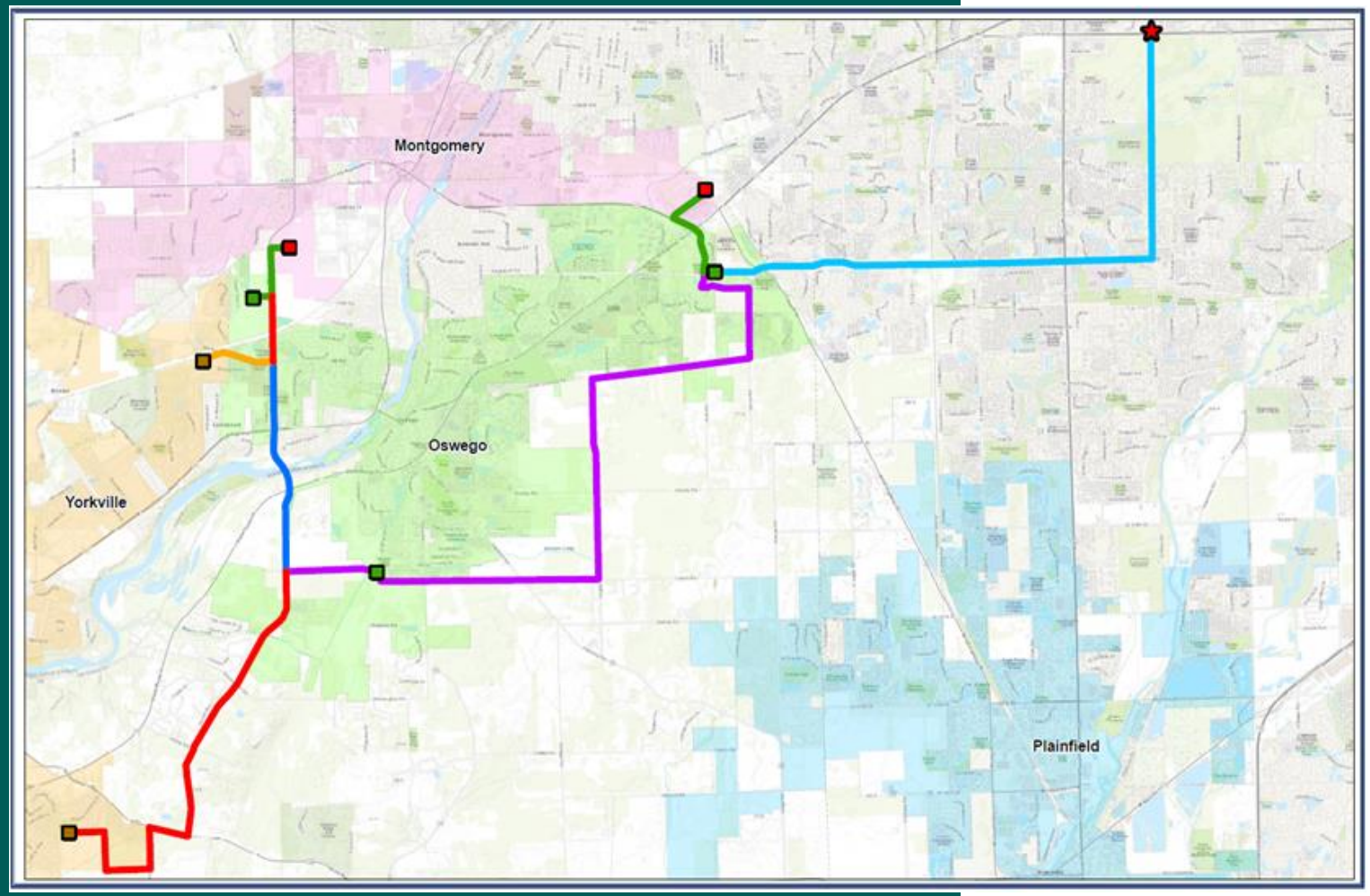


LAKE MICHIGAN SUPPLY OPTIONS

JOLIET AREA WATER COMMISSION

DuPAGE WATER COMMISSION

ILLINOIS LAKE WATER COMPANY/ PLAINFIELD



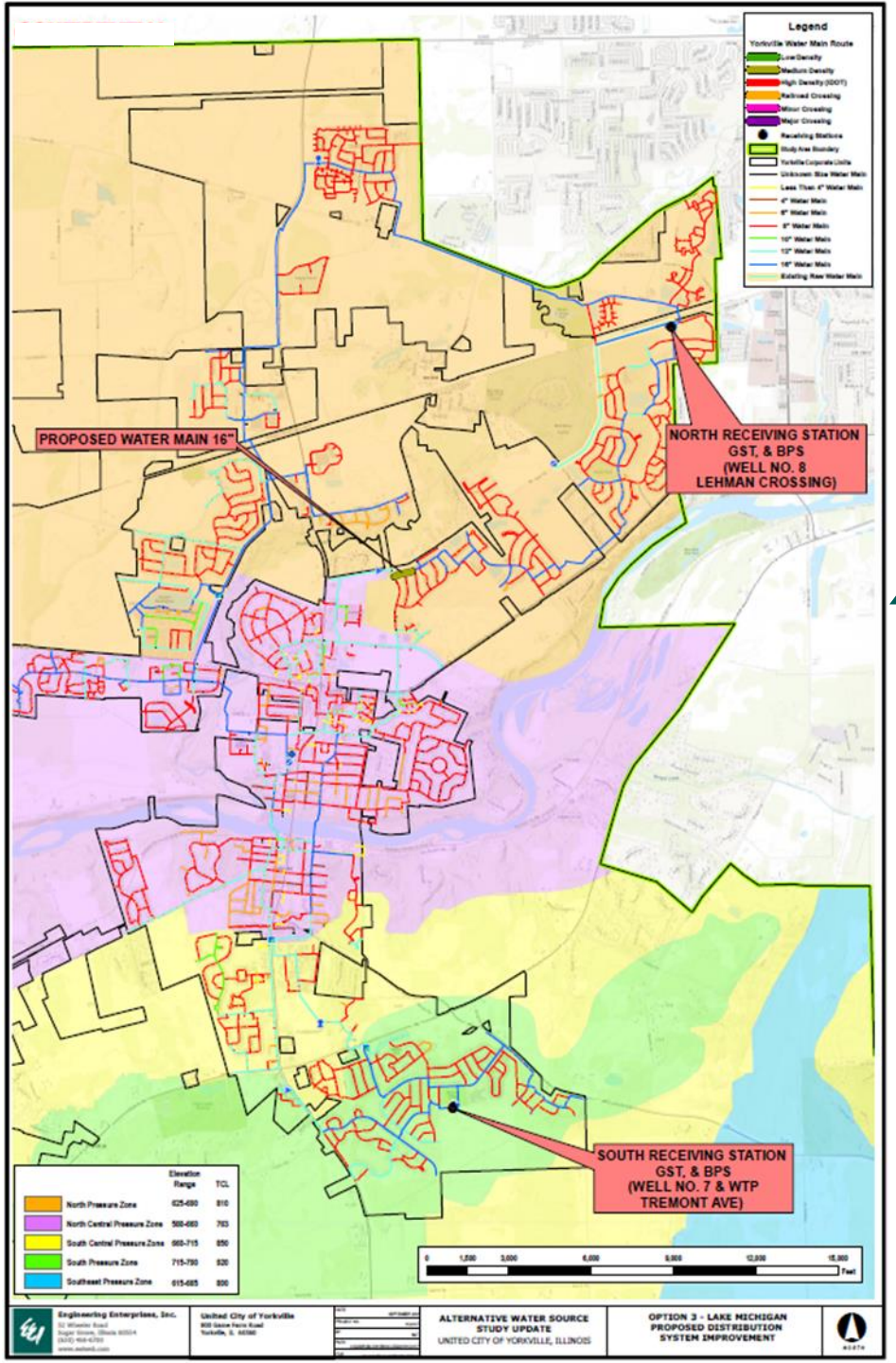
Proposed Treated Water Transmission Main Network

DUPAGE WATER COMMISSION (DWC)

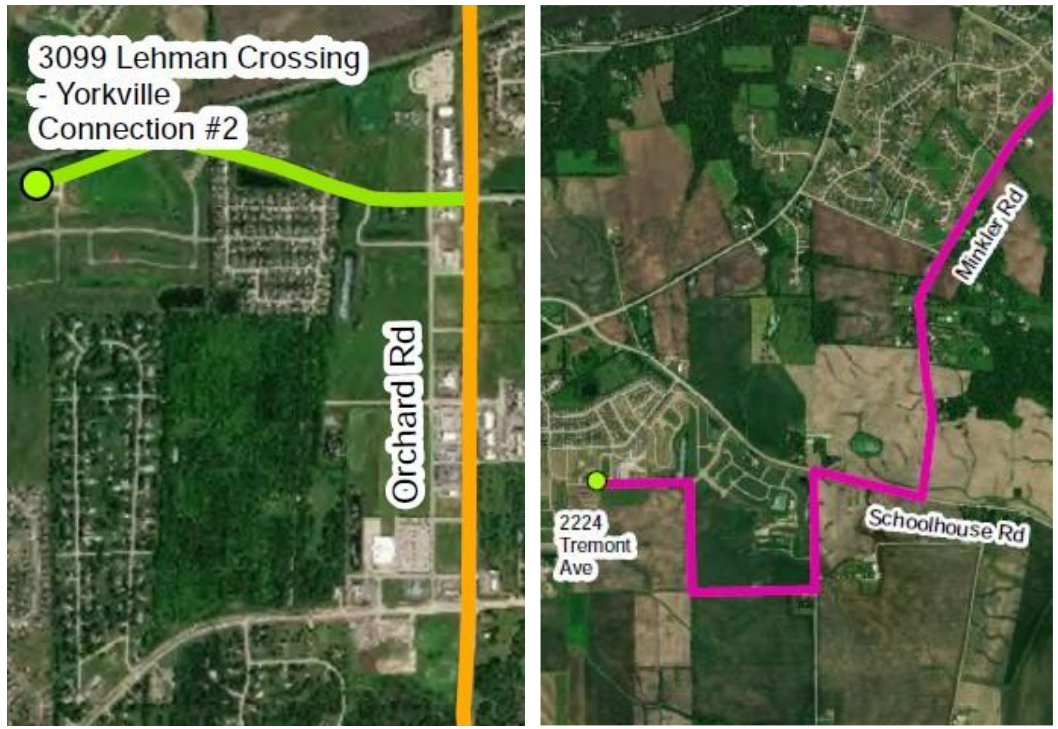
- 23 Charter Communities & Six (6) Subsequent Communities
- 40 Year Water Supply Contracts With City of Chicago & All Commission Members Expires In 2024
- New Rate Model Expected in 2024 Contract
- 13 Member (Six – Municipalities; Seven – County Board Chair) Water Commission Board

Lake Michigan: DuPage Water Commission

Internal Distribution System Improvements



Connection Points (Receiving Stations)



DuPage Water Commission – Summary of Improvements

Supply

- Treated Water Transmission Mains (Total Length = 29.1 mi; Yorkville Share = 46.0%)

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

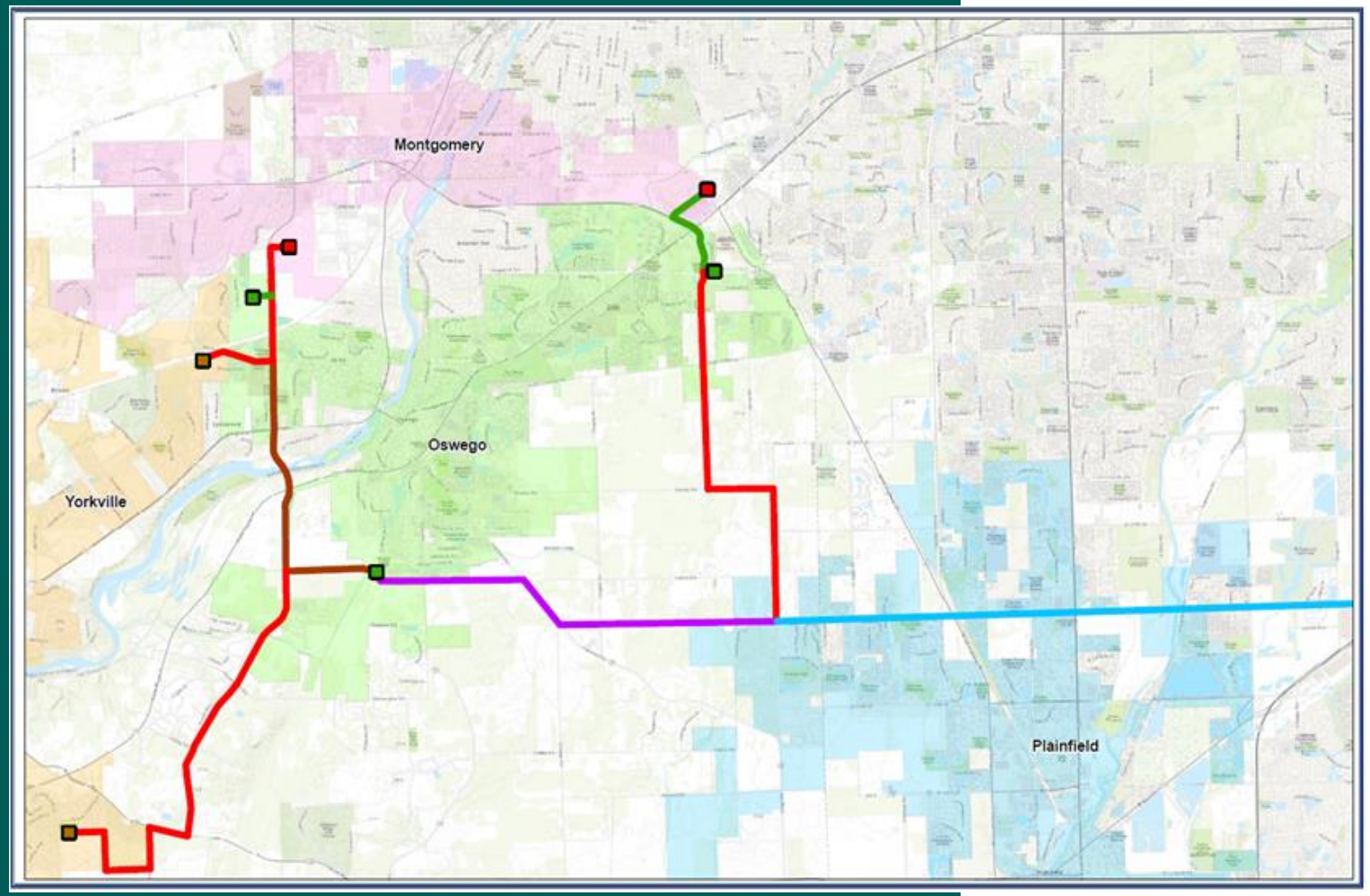
Lake Michigan: DuPage Water Commission

Total Capital Cost Estimate*: $94,180,000

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Buy-In Costs
- Estimated Timeline: 4-5 years



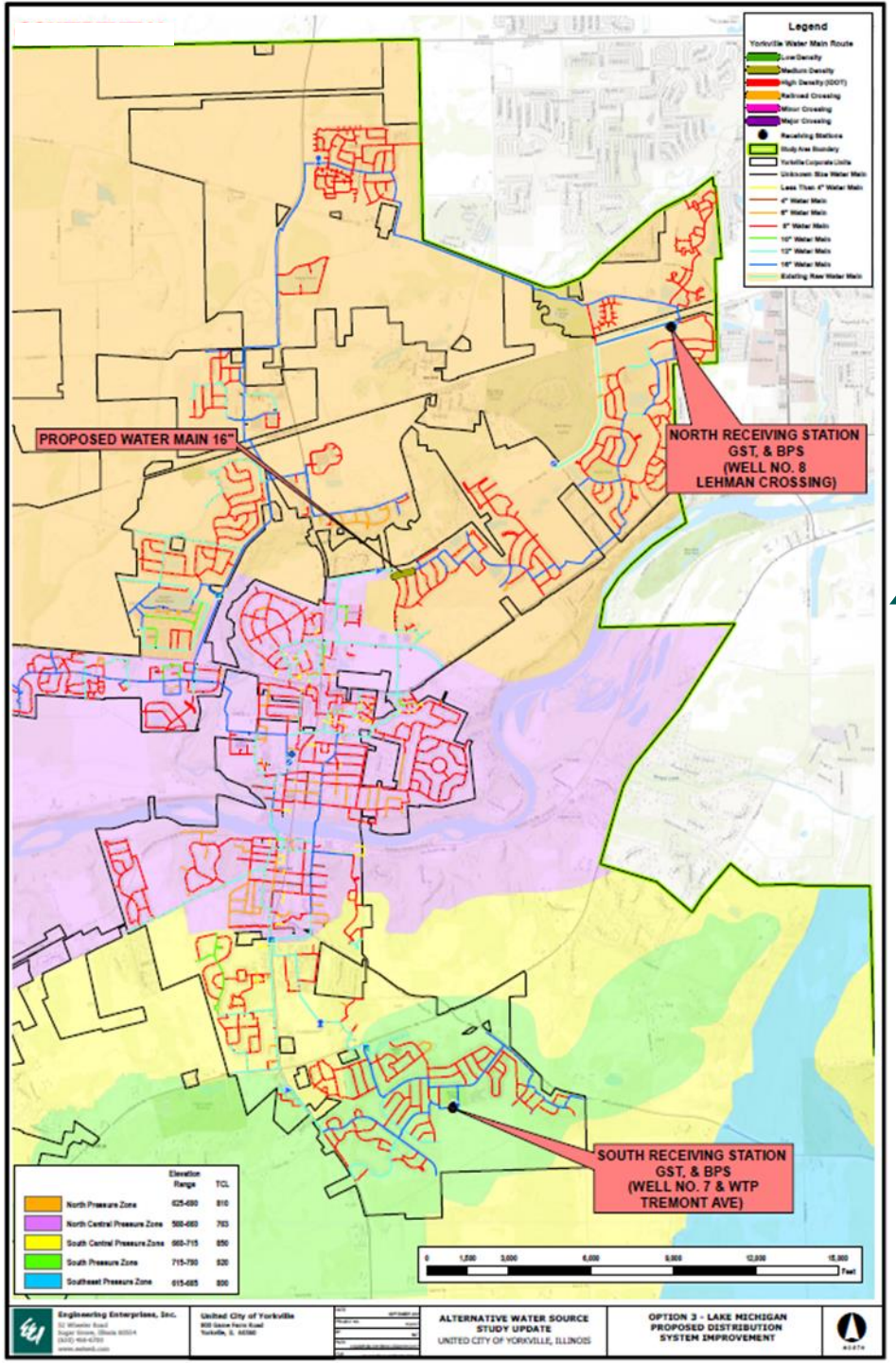
Proposed Treated Water Transmission Main Network

JOLIET AREA WATER COMMISSION

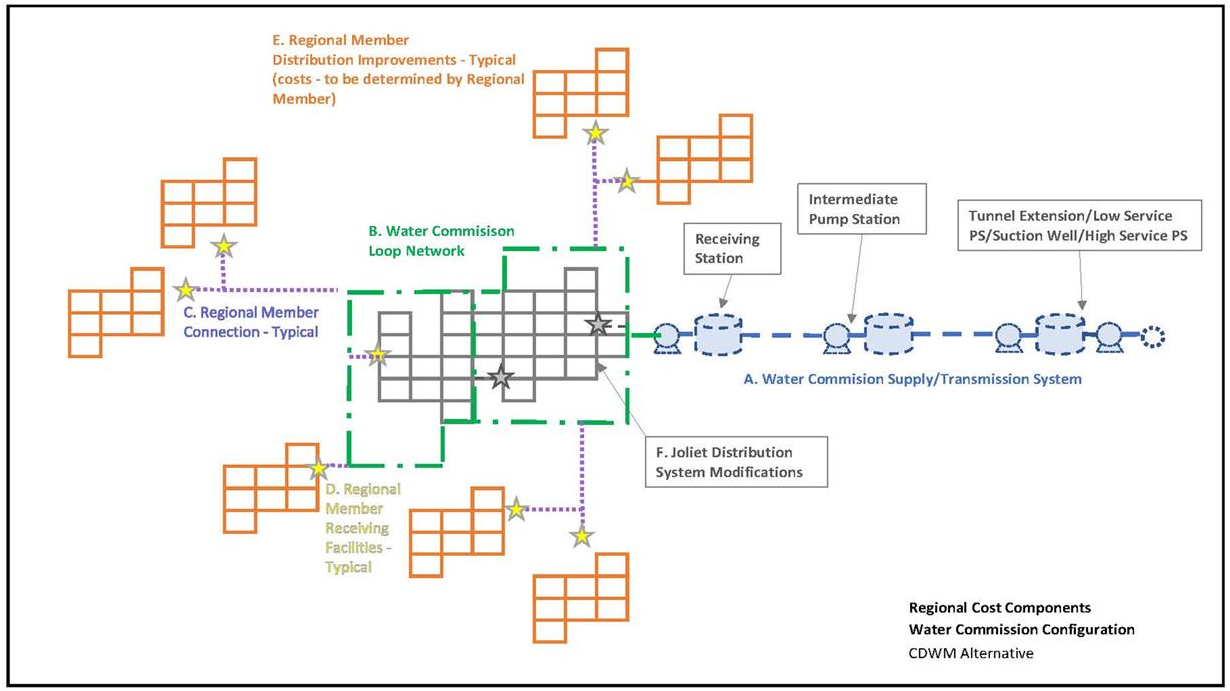
- New System With Twelve (12) Communities Currently Considering Joining
- Purchase Water From City of Chicago (100 Year Term With Post 50 Year Opt Out Option) Through New Rate Model
- Opportunity To Be Charter Member

Lake Michigan: Joliet Water Commission

Internal Distribution System Improvements



Joliet Water Commission Schematic



Joliet Water Commission – Summary of Improvements

Supply

- Treated Water Transmission Mains

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

Lake Michigan: Joliet Water Commission

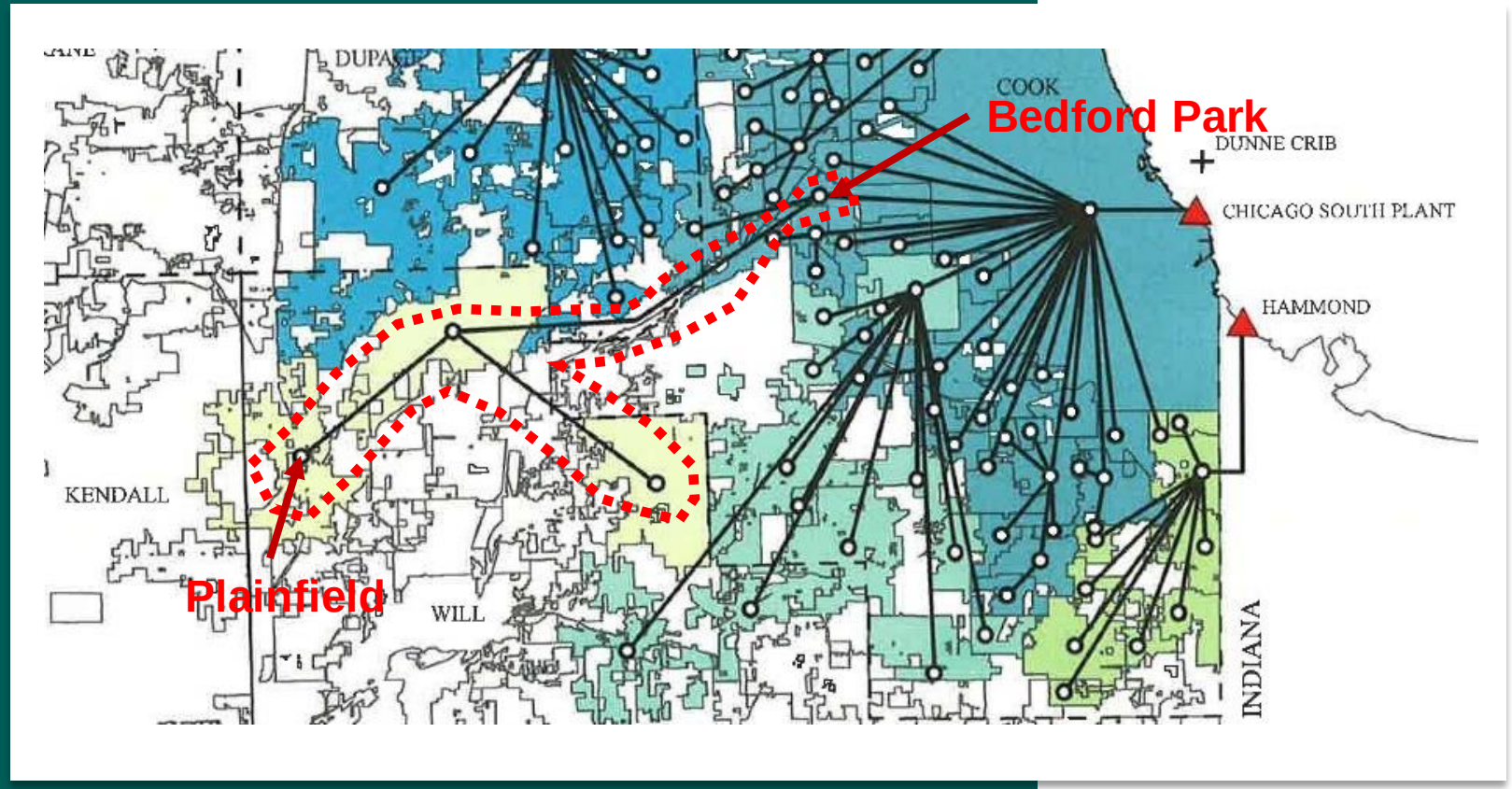
Total Capital Cost Estimate*: $106,640,000

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - Joliet Water Commission Still Being Formed
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Estimated Timeline: 9 Years (No Earlier Than 2030)

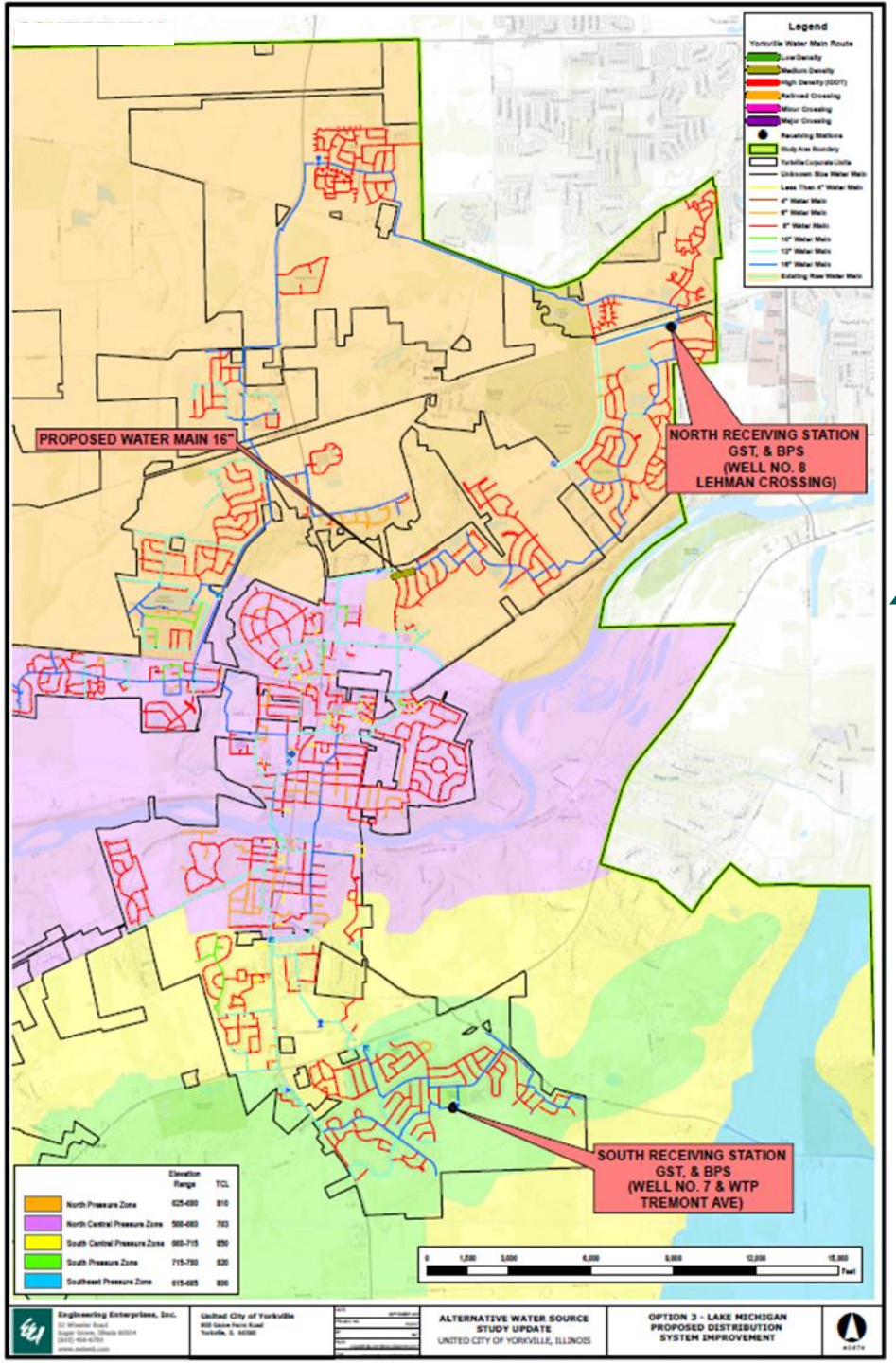
ILLINOIS LAKE WATER/ PLAINFIELD



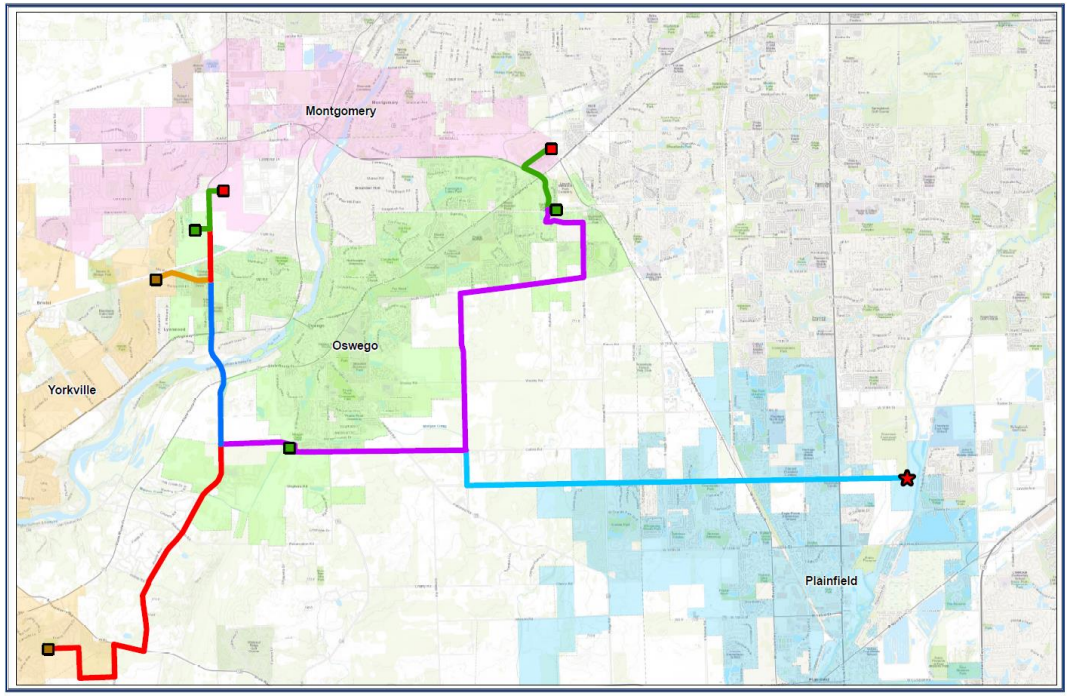
- Private Utility
- Receive Water From Bedford Park Who Receives Water From Chicago
- Currently Serving Bolingbrook, Homer Glen, Plainfield & Small Portions of Romeoville and Lemont

Lake Michigan: Illinois Lake Water Option

Internal Distribution System Improvements



Treated Water Transmission Main Network



Illinois Lake Water – Summary of Improvements

Supply

- Treated Water Transmission Mains

Internal Distribution System & Storage*

- North Receiving Station, Including:
  - 2.0 MG Ground Storage Tank
  - Booster Pump Station
- South Receiving Station, Including:
  - 1.6 MG Ground Storage Tank
  - Booster Pump Station
- New Altitude/Control Valve Station for Northeast EWST
- Water Main Improvements: Hydraulics

**Note: Total Storage Required for Lake Michigan Suppliers is two times Average Day Demand*

Lake Michigan: Illinois Lake Water

Total Capital Cost Estimate*: TBD

**Includes Yorkville's portion of total shared sub-regional costs*

Decision Considerations Summary

- Sustainability and Water Quality/Permitting of Source:
  - No Seasonal Restrictions & Seasonally Consistent WQ
  - Chicago/DWC Responsible for Treatment/Transmission Mains
  - Existing Wells Maintained for Emergency Only
- Governance, Management/Operational Responsibility, and Risk:
  - Illinois American Water is a Private Utility
  - No Direct Ownership/Control of Source Water or Transmission Mains
- Internal System Improvements:
  - New Receiving Stations Required Including Additional Storage/BPS
- Estimated Timeline: 4-5 Years

Non-Revenue Water Reduction Plan

Non-Revenue Water (NRW) is the difference between system input volume (water produced or purchased) and billed authorized consumption[1]. NRW includes the following:

Unbilled Authorized Consumption

- Examples: Fire hydrant flushing, water treatment plant process water, municipal buildings whose water is not metered, etc.

Apparent Losses

- Non-physical losses such as unauthorized consumption (water theft), meter inaccuracies, systematic data handling errors, etc.

Real Losses

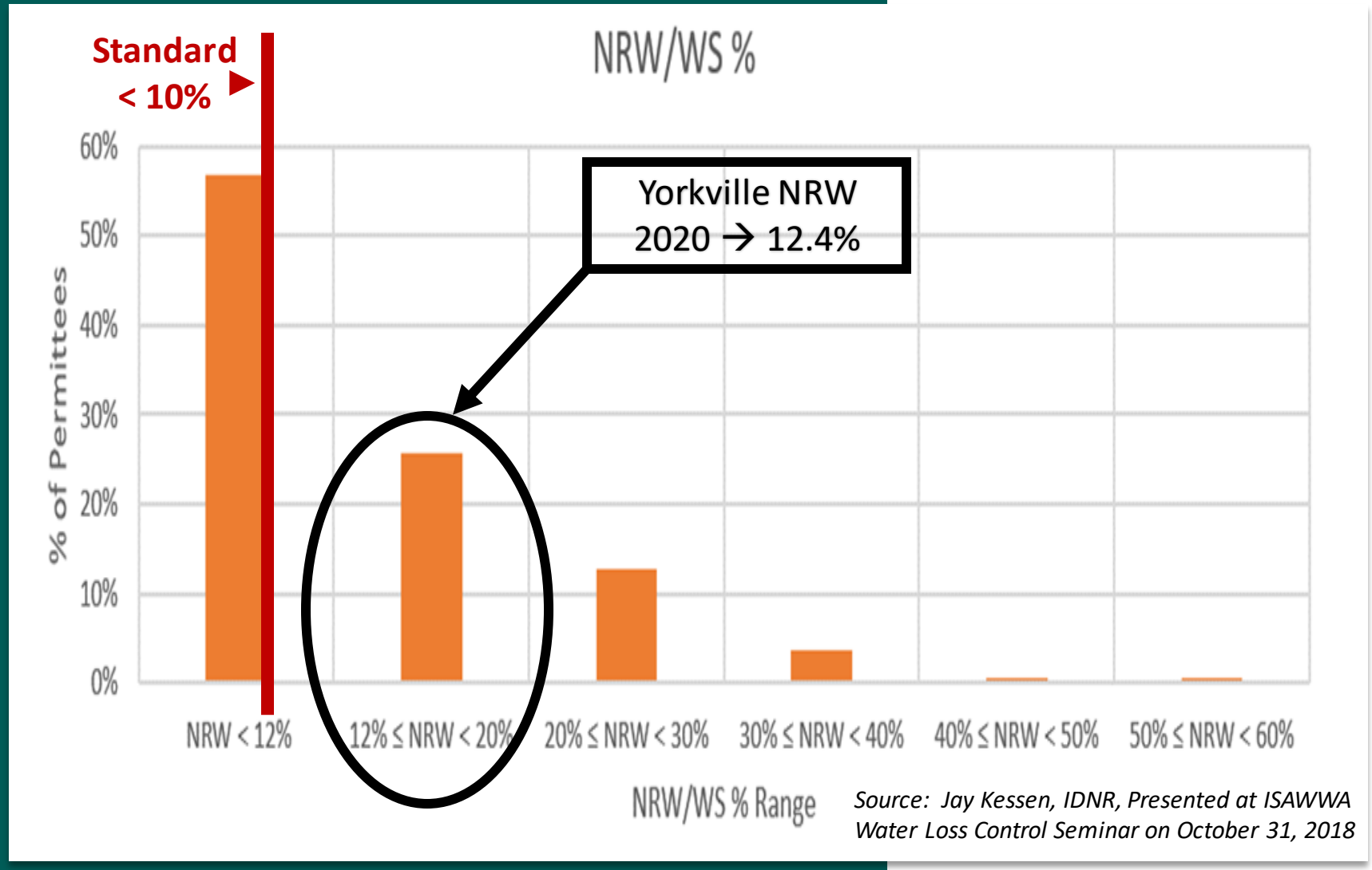
- Physical losses from the distribution system and storage tanks up to the point of connection to the customer meter

[1]From AWWA Manual M36: Water Audits and Loss Control, 4th Edition (2016)

Non-Revenue Water Reduction Plan

- Water Audits can be used to identify, manage, and minimize sources of water loss. A Water Audit was completed for the 2020 Water Year (October 1, 2019 – September 30, 2020).
- Maximum NRW (water loss) required for Lake Michigan-supplied systems is 10%.
  - Current NRW in Yorkville is approximately 12.4%.
- NRW Reduction Plan for Yorkville includes:
  - Completion of Annual Water Loss Audit
  - Leak Detection
  - Water Main Replacement
  - Water Meter Replacement

Total NRW Reduction Plan Cost Estimate*: $4,050,000



Source: Jay Kessen, IDNR, Presented at ISAWWA Water Loss Control Seminar on October 31, 2018

Lake Michigan Supplied System 2017 Non-Revenue Water Percentiles



COST ESTIMATES SUMMARY & FINANCIAL ANALYSIS

AWSS Alternatives Capital Cost Summary

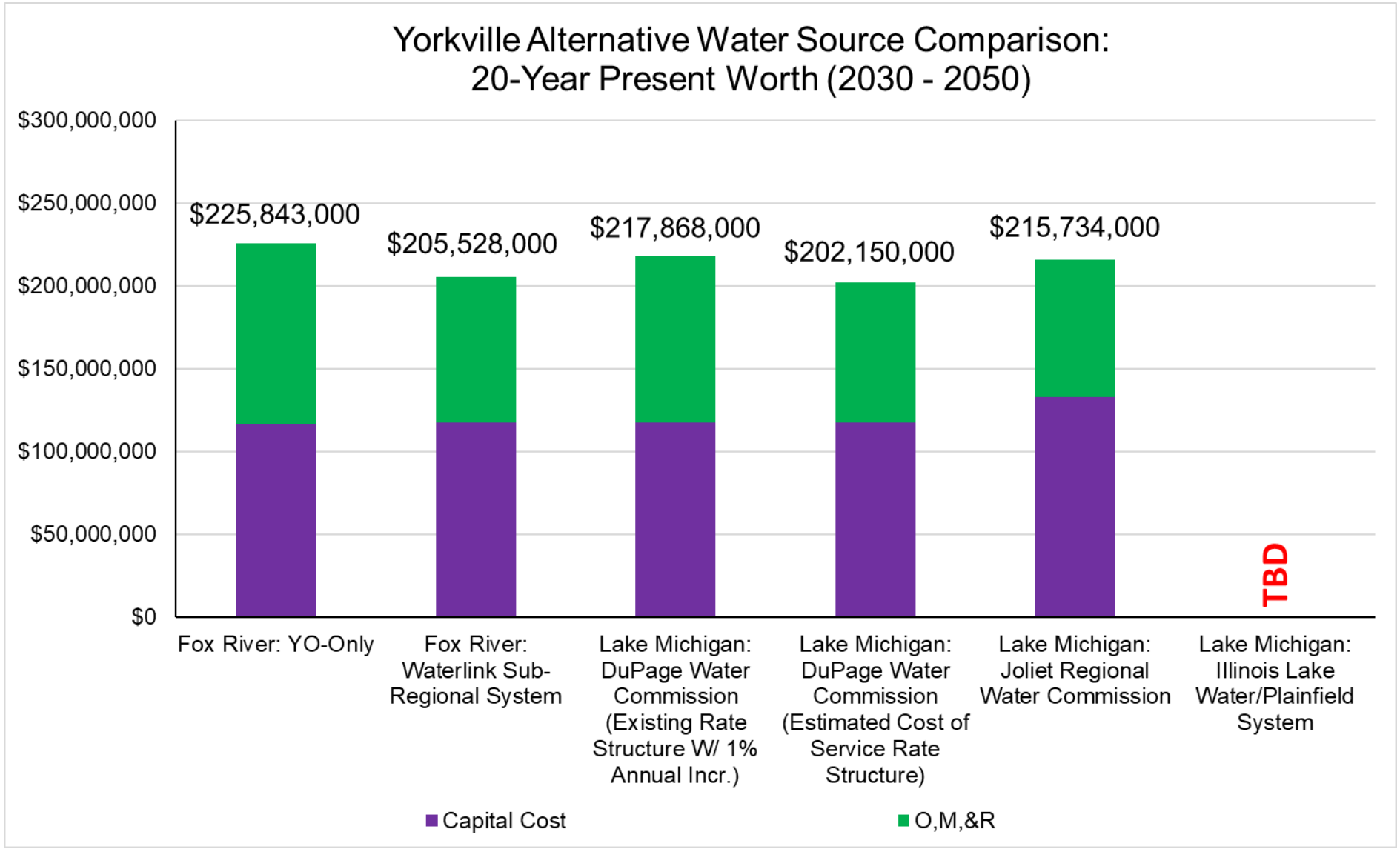
Fox River: YO Alone.....	$97,240,000
Fox River: Waterlink Sub-Regional System.....	$98,520,000
Lake Michigan: DuPage Water Commission.....	$98,230,000*
Lake Michigan: Joliet Area Water Commission...	$111,010,000*
Lake Michigan: Illinois American Water.....	TBD*

**Includes NRW Reduction Capital Costs Over Next 10 Years*

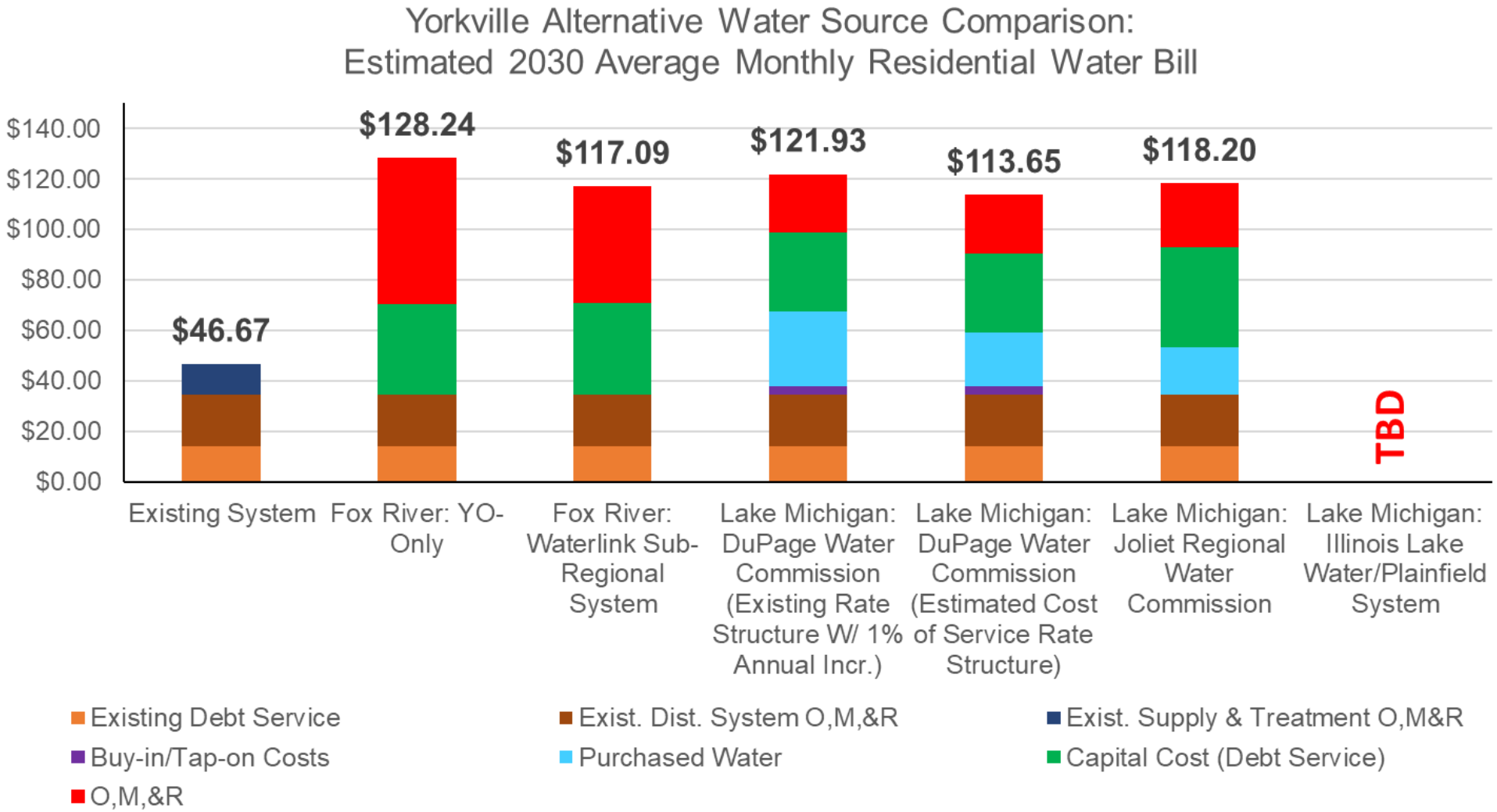
Funding Summary for Each Alternative

Alternative(s)	Estimated Construction Year	2021 Estimated Costs				Total Costs Inflated To Construction Year
		IEPA SRF	EPA WIFIA	Bonds/Other	DWC - Buy In	
Loan Period (Years):		20	35	20	20	
Annual Interest Rate:		2.0%	2.0%	3.5%	0.0%	
Fox River: YO-Only	2027	$62,500,000	$53,602,698	$0	$0	**$116,102,698**
Fox River: Waterlink Sub-Regional System	2027	$62,500,000	$55,130,176	$0	$0	**$117,630,176**
Lake Michigan: DuPage Water Commission	2024	$62,500,000	$34,460,372	$0	$10,373,000	**$107,333,372**
Lake Michigan: Joliet Regional Water Commission	2027	$62,500,000	$70,048,450	$0	$0	**$132,548,450**
Lake Michigan: Illinois Lake Water/Plainfield System	2024	TBD				

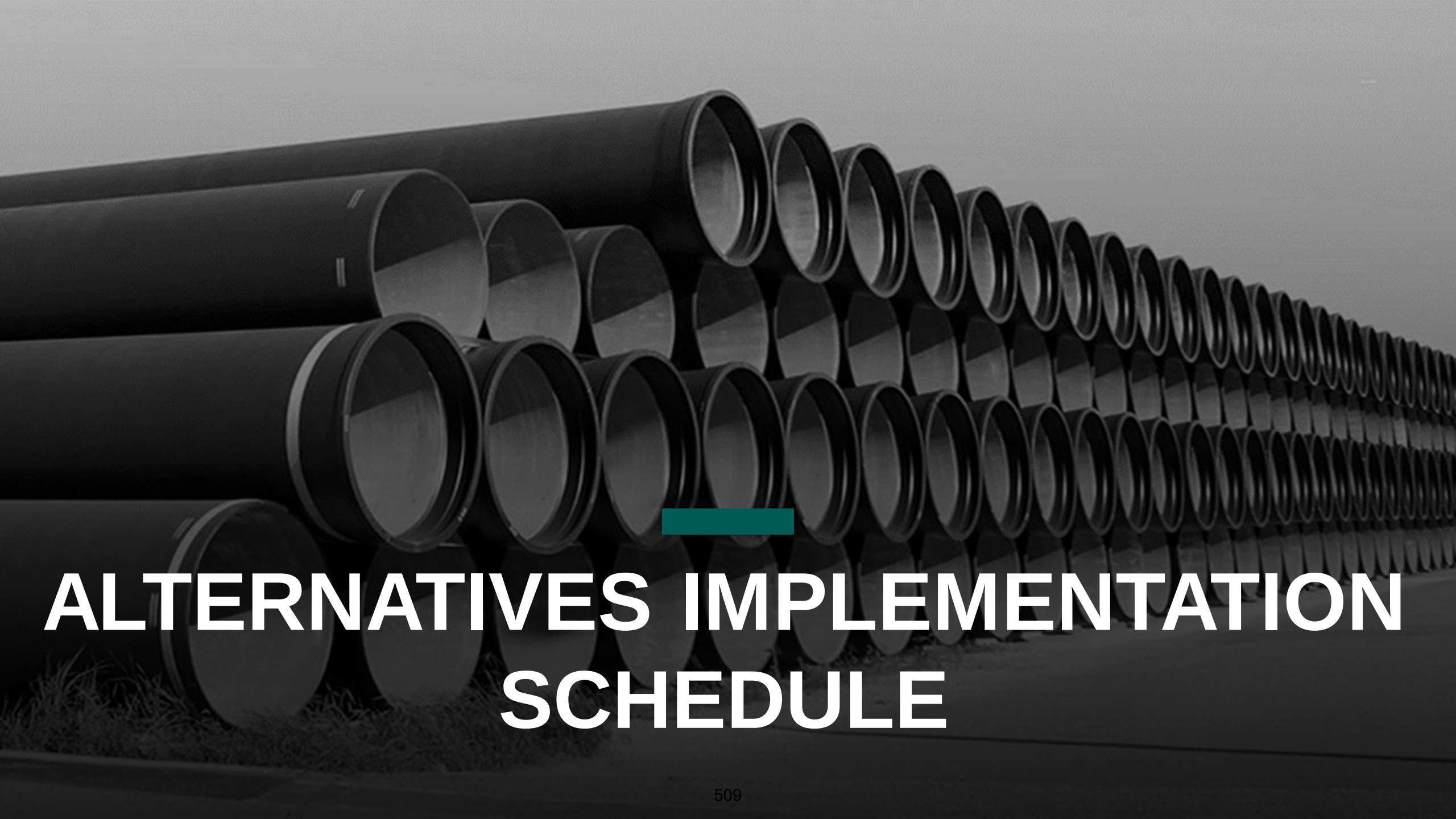
AWSS Alternatives Net Present Value Summary



Estimated 2030 Residential Water Bill Comparison

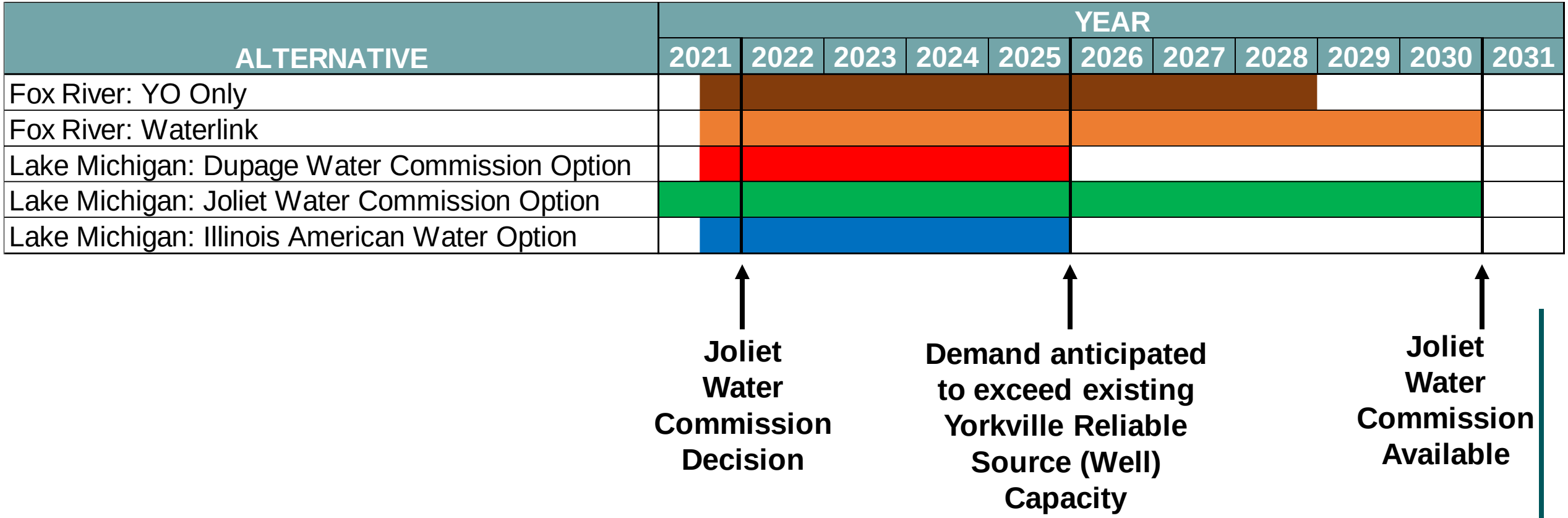


Note: Typical water use per month: 5,500 gallons



ALTERNATIVES IMPLEMENTATION SCHEDULE

AWSS Alternatives Estimated Implementation Schedule Comparison



Cost Savings for Delay

- Projected 2030 Cost To Run Existing System $5,167,000
- Projected 2030 Cost For Least Cost Alt. Water Source System $12,570,000

Savings Per Year: $7,403,000

- Estimated Cost For a New Well & Cation Exchange WTP $8M - $9M

Therefore, the cost of a new well and WTP is saved in a little over one year in delay in implementation of the Alternative Water Source Program



KEY CONSIDERATIONS SUMMARY

Alternatives Summary

Fox River

- United City of Yorkville
- Waterlink Sub-Regional System with Oswego & Montgomery

Lake Michigan

- DuPage Water Commission
- Joliet Area Water Commission
- Illinois Lake Water Company/Plainfield

DECISION CONSIDERATIONS REVIEW

COST

WATER QUALITY

RISK

CONTROL/ GOVERNANCE

SUSTAINABILITY/ QUANTITY

MANAGEMENT/ STAFFING

Fox River – Yorkville Alone

Cost

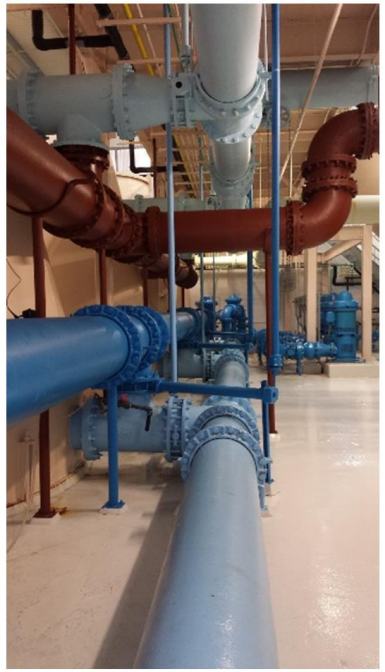
Highest cost alternative, although comparable to the other alternatives

Control/Governance

The City will maintain 100% control of the system

Water Quality

Potential seasonal raw water quality considerations, although advanced water treatment process assumed for the alternative





Sustainability/Quantity

The Fox River is a sustainable source of supply, although backup wells will be needed for water quantity and quality purposes at times

Risk

The City will be 100% responsible for the implementation of all of the improvements and long-term operation of the system

Management/Staffing

City Staff will own, operate and maintain the entire system

Fox River – Waterlink Sub-Regional System

Cost

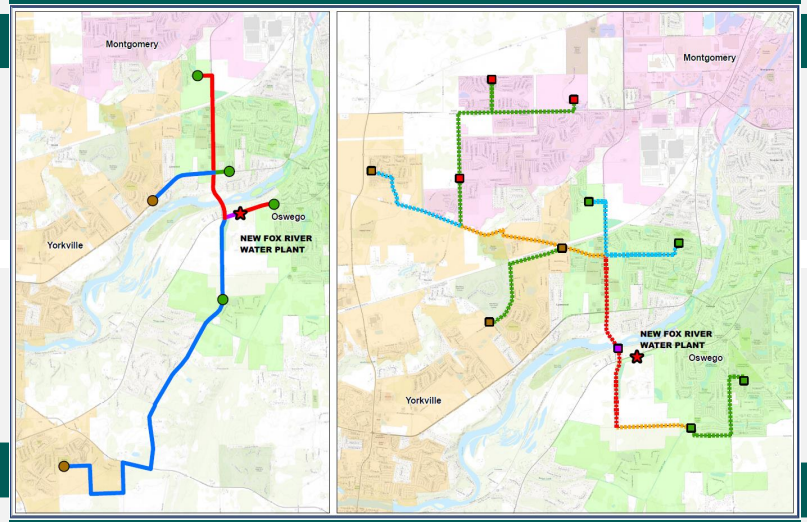
Lower cost than Fox River – Yorkville Alone alternative, although comparable to the other alternatives

Control/Governance

The system will be governed through an IGA or a new unit of local government (Commission or JAWA)

Water Quality

Potential seasonal raw water quality considerations, although advanced water treatment process assumed for the alternative



Sustainability/Quantity

The Fox River is a sustainable source of supply, although backup wells will be needed for water quantity and quality purposes at times

Risk

The City, along with the Villages of Oswego and Montgomery, will be responsible for the implementation of all of the improvements and long-term operation of the system

Management/Staffing

The Waterlink communities, or the new unit of local government will own, operate and maintain the entire system

Lake Michigan – DuPage Water Commission

Cost

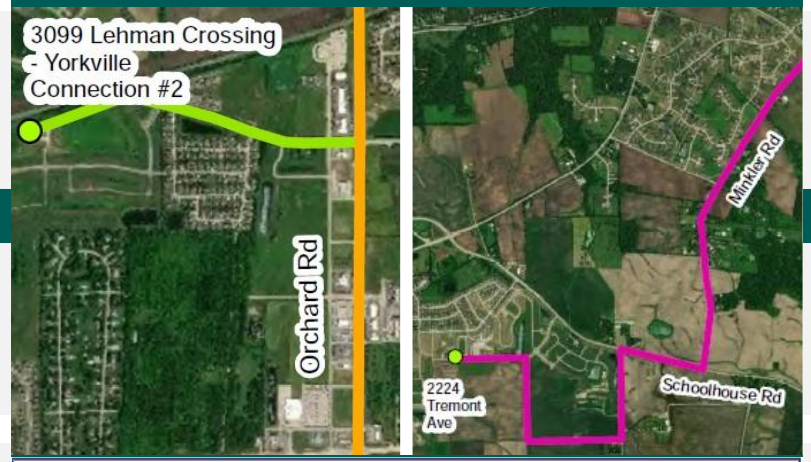
Costs will be dependent on the DWC rate, although costs likely comparable to the other alternatives

Control/Governance

The City of Yorkville would become a member of the DWC; Potentially a new District for the Waterlink Communities could be formed

Water Quality

City of Chicago treated water that is consistently of high quality

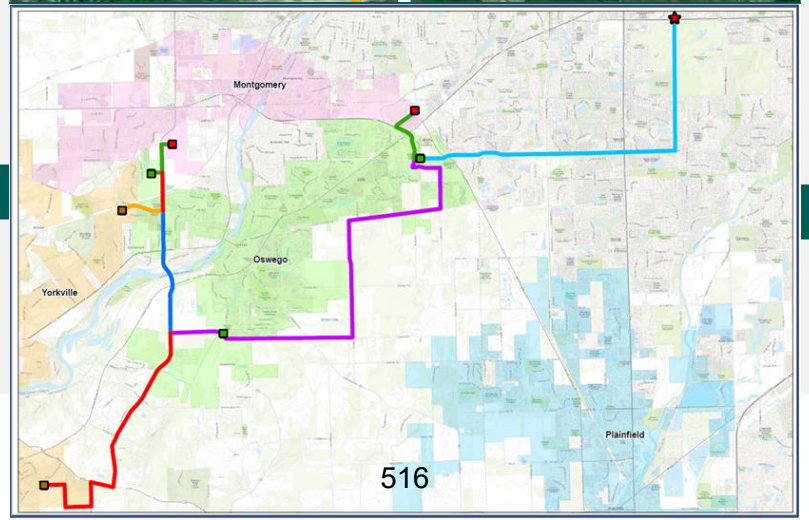


Sustainability/Quantity

An allocation for Lake Michigan water would be needed; The City's existing wells will be kept on-line for emergencies

Risk

DWC to construct the transmission main to the City; The City would construct the internal distribution system improvements



Management/Staffing

The DWC would own, operate and maintain the transmission main through the delivery structure; The City would own, operate and maintain the distribution system

Lake Michigan – Joliet Regional Water Commission

Cost

Costs comparable to the other alternatives

Control/Governance

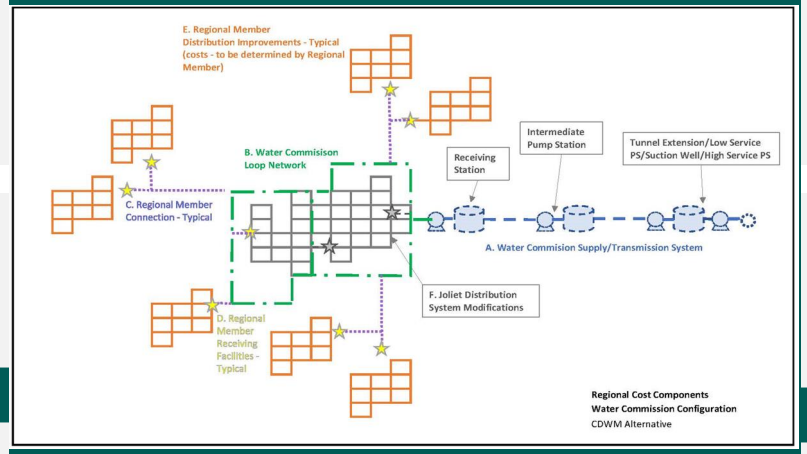
The City of Yorkville would become a voting member of the new Commission

Water Quality

City of Chicago treated water that is consistently of high quality

Sustainability/Quantity

An allocation for Lake Michigan water would be needed; The City's existing wells will be kept on-line for emergencies



Risk

Commission to construct the transmission main to the City; The City would construct the internal distribution system improvements

Management/Staffing

The Commission would own, operate and maintain the transmission main through the delivery structure; The City would own, operate and maintain the distribution system

Lake Michigan – Illinois Lake Water System

Cost

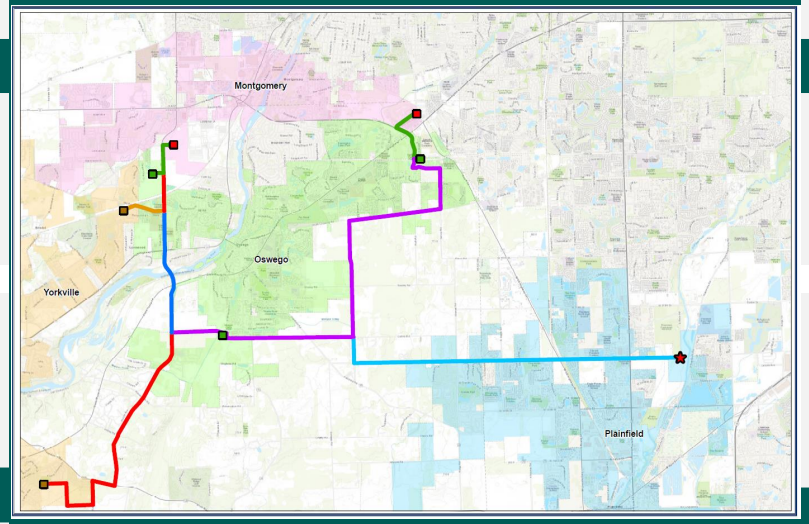
Costs are undetermined at this time

Water Quality

City of Chicago treated water that is consistently of high quality

Risk

Illinois Lake Water to construct the transmission main to the City; The City would construct the internal distribution system improvements



Control/Governance

The City of Yorkville would purchase water from the Illinois Lake Water System, which is operated by a private water utility

Sustainability/Quantity

An allocation for Lake Michigan water would be needed; The City's existing wells will be kept on-line for emergencies

Management/Staffing

Illinois Lake Water would own, operate and maintain the transmission main through the delivery structure; The City would own, operate and maintain the distribution system

Weighted Decision Matrix

Ranking Criteria	Cost		Water Quality		Risk		Control / Governance		Sustainability/Quantity		Management/Staffing		
	Capital (implementation) Costs?		What is quality and variability of the finished water for this alternative?		Does the alternative provide for the most reliable, long term solution.		For this alternative, does the Village maintain complete control of their water source?		Does the alternative provide a long-term sustainable solution?		Will the City, or another entity, be responsible for managing and staffing the system?		
Highest	1 - Highest Cost		1 - Finished water quality is variable and/or reduced from present standard.		1 - This alternative is only a short term solution with potential long term risk and consequences.		1 - The City does not retain significant control of the water supply system.		1 - This alternative has long term sustainability concerns.		1 - The City will need to manage and staff the entire system.		
Lowest	5 - Lowest Cost		5 - Finished water quality is more consistent and/higher than present standard.		5 - This alternative provides for a long term (exceeding 50 year) solution with manageable long term risks.		5 - The City maintains complete control of the water supply system.		5 - This alternative provides for a long term (exceeding 50 year) sustainable solution.		5 - Another entity is contractually responsible to manage and staff the water supply system.		
	Weight	0%	Weight	0%	Weight	0%	Weight	0%	Weight	0%	Weight	0%	
Alternative	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Weighted Total Value**
Fox River - Yorkville Alone	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Fox River - Waterlink Sub-Regional System	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - DuPage Water Commission	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - Joliet Regional Water Commission	0	0	0	0	0	0	0	0	0	0	0	0	#REF!
Lake Michigan - Illinois Lake Water System	0	0	0	0	0	0	0	0	0	0	0	0	#REF!

Blue Columns To Be Completed By Project Team



NEXT STEPS



NEXT STEPS

- Public Meeting / Open House on Tuesday, October 19th
- Further Council Discussion and Joliet Decision in November / December

Questions or Comments?



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Chief Executive Officer
jfreeman@eeiweb.com
(630) 466-6718



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL

File Name:
B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL

Description:
Project Plan Lake Michigan Connection – Preliminary Engineering United City of Yorkville, Kendall Co., IL August 2023.

August 2024

Project Plan
Lake Michigan Connection – Preliminary Engineering

United City of Yorkville, Kendall Co., IL

August 2023

LAKE MICHIGAN CONNECTION-PRELIMINARY ENGINEERING PROJECT PLAN

United City of Yorkville, IL

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1. INTRODUCTION

The United City of Yorkville is a growing community located in north central Kendall County, Illinois. The City is approximately 45 miles southwest of Chicago and shares municipal borders with the Villages of Montgomery and Oswego as well as the City of Plano. The City is comprised of a mix of residential, commercial, and industrial land uses, and has experienced steady growth for the past several decades. There are currently 17 active residential subdivisions in Yorkville, and the City has additional land available for future growth and continues to attract residential, commercial, and industrial development.

The City currently relies on groundwater from the Cambrian-Ordovician aquifer system. Various groundwater modeling studies completed by the Illinois State Water Survey (ISWS) of the deep aquifers in Northeastern Illinois from 2015-2020 have projected that the deep aquifer system in the region, including the municipal wells utilized by the United City of Yorkville, are not a long-term sustainable supply source.

Because of this, the City conducted multiple studies to evaluate alternative water sources. In the most recent study, the City evaluated five water supply alternatives, including two that would utilize the Fox River as a supply source and three Lake Michigan supplied systems. After detailed analysis of the alternatives, in December 2021 the Yorkville City Council unanimously voted in favor of the Lake Michigan option through the DuPage Water Commission (DWC) as the best water supply option for the City that will ensure a long-term sustainable supply for the City.

This report outlines the preliminary engineering for the City's connection to DWC. The report includes background information on the City and the current population projections and needs assessment, proposed Lake Michigan receiving station concept plans and site layouts, and preliminary cost estimates for all of the associated improvements including the receiving stations, transmission mains, and internal water distribution system improvements necessary for the City to connect to Lake Michigan supply. It also includes

an analysis of the estimated IEPA loan funding, financial strategy, and record of the applicable environmental signoffs that have been submitted for review and approval.

1.1. POPULATION

The City offers opportunities for additional growth with a fairly significant amount of undeveloped land in various portions of the City's planning area, and infill growth within the existing City limits. These areas will one day provide homes to new City residents as well as contribute to the local economy with new commercial, industrial, and institutional land uses. The City continues to attract commercial and industrial development and has land available for future population growth.

In 2020, the total population of the City that the water utility serves was estimated to be 23,143. According to ON TO 2050, the Chicago Metropolitan Agency for Planning (CMAP) regional document (2018), the Yorkville water service area is projected to have a population of 47,796 in 2050. Based on the 2016 Water Works System (WWS) Master Plan completed for the City, the ultimate buildout population of the City is estimated to be 95,727 people by 2100. Table 1 provides a summary of the recent historical and projected population for the United City of Yorkville.

Table 1: Population Projection

United City of Yorkville, IL

Year	Population	Annual % Increase
2010	16,921	-
2020	21,533	2.4%
2025	30,878	7.5%
2030	32,595	1.1%
2035	34,602	1.2%
2040	37,267	1.5%
2045	41,354	2.1%
2050	47,796	2.9%
2100 (Build-Out)	95,727	1.4%

2. EXISTING WATER SYSTEM

The initial water supply for Yorkville was constructed in 1886 and was obtained from springs. Since that time, the City has constructed deep sandstone wells to continue meeting the growing water demands of the City as the population has increased. The City's existing WWS is comprised of various supply, treatment, storage, distribution, and control components. Exhibit A depicts the existing Water Works System map. The existing supply consists of four deep wells including Wells No. 4, 7, 8 and 9. Of the deep wells, three were constructed into and cased through to the Ironton-Galesville aquifer, and one is open to both the St. Peter (Ancell) and Ironton-Galesville deep sandstone formations. All of the deep wells exceed the water quality standard, and receive treatment, for combined radium.

Water from all of the wells is treated at cation exchange water treatment plants (CEWTP) and discharged directly to the distribution system. Water from all of the wells is treated to successfully meet or exceed the requirements set forth by acceptable drinking water standards and to maintain compliance with all applicable laws. Well No. 4 is located in the central part of town and is treated at its own CEWTP. The well was constructed in 1976 and the current treatment plant was constructed and placed into service in 2006. Well No. 7 is located on the south side of the City and is also treated at its own CEWTP. The well and WTP were placed into service in 2005. Wells No. 8 and 9, located in the northeastern area of the City, are tributary to the same CEWTP that provides treatment for both wells. Both wells and the WTP were constructed and placed into service in 2004.

The City's WWS contains five Elevated Water Storage Tanks (EWSTs), providing a total combined water storage of 4.55 million gallons (MG), that are located throughout the City across the various pressure zones. The WWS is split into different pressure zones including the North, North Central, South Central and South Pressure Zones, plus the future Southeast Pressure Zone. The City has three Booster Pump/Pressure Reducing Valve (PRV) Stations and two PRV Vaults for the transfer of water between zones. The City utilizes a Supervisory Control and Data Acquisition (SCADA) system to monitor all

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Study Area Boundary
- Yorkville Corporate Limits
- Elevated Water Storage Tank (EWST)
- Water Treatment Plant
- BP/PRV Station
- PRV Station
- Well
- Less Than 4" Water Main
- 4" Water Main
- 6" Water Main
- 8" Water Main
- 10" Water Main
- 12" Water Main
- 16" Water Main

1.0 MG NORTH EWST

1.5 MG NORTHEAST EWST
WELL NO. 8, WELLS NO. 8 & 9
WATER TREATMENT PLANT

WELL NO. 9

NORTH BP/PRV STATION

NORTH CENTRAL
PRV STATION

300,000 GAL NORTH
CENTRAL EWST

WELL NO. 4
WATER TREATMENT PLANT

WELL NO. 4

SOUTH BP/PRV STATION

SOUTH CENTRAL
BP/PRV STATION

500,000 GAL SOUTH
CENTRAL EWST

1.25 MG SOUTH EWST
WELL NO. 7, AND WELL NO. 7
WATER TREATMENT PLANT

SOUTH CENTRAL
PRV STATION

0 1,250 2,500 5,000 7,500 10,000 12,500 Feet

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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PROJECT NO.:	YO2150
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PATH:	H:\GIS\PUBLIC\YORKVILLE\2021\YO2021
FILE:	YO2150_EXHIBIT A.MXD

LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT A
EXISTING WATER WORKS SYSTEM

NORTH

components of the WWS. With a continual focus on system maintenance by City Staff, the WWS components are currently in good condition.

The City has approximately 150 miles of water main (without fire hydrant leads). All of the water users in the United City of Yorkville are fully metered. The City is in the process of converting to an advanced metering infrastructure (AMI) system, and currently anticipates completing this upgrade program by 2026.

2.1. HISTORICAL WATER USE

The United City of Yorkville Water Department tracks water production in daily, monthly, and yearly increments. Water use by all of the City residents, businesses, industrial users, and government/institutions is tracked through bimonthly meter readings. Table 2 summarizes the annual average daily pumpage, maximum daily pumpage, and typical water use metrics for the calendar years 2017 through 2021.

Table 2: United City of Yorkville Historical Water Production

YEAR	2017	2018	2019	2020	2021	AVERAGE
POPULATION	19,000	20,000	20,119	21,533	23,143	-
AVERAGE DAILY PUMPAGE	1,535,800 GAL	1,572,800 GAL	1,509,000 GAL	1,660,200 GAL	1,748,000 GAL	1,605,160 GAL
MAXIMUM DAILY PUMPAGE	1,924,500 GAL	3,756,400 GAL	2,896,800 GAL	3,318,000 GAL	3,330,000 GAL	3,045,140 GAL
AVG. GAL./PERSON/DAY	81 GPCD	79 GPCD	75 GPCD	77 GPCD	76 GPCD	77 GPCD
RATIO OF MAX. DAY TO AVG. DAY	1.25	2.39	1.92	2.00	1.91	1.89

The City's water use characteristics and metrics are consistent with many Northeastern Illinois communities during the same period summarized in Table 2, although the City has achieved a higher level of water conservation throughout the community in recent years. For instance, Yorkville's maximum day demand to average day demand ratio (MDD:ADD) has averaged 1.89 for the past five (5) years. The significance of the MDD:ADD ratio is that it is proportional to the amount of supply, treatment, and storage required for a municipality. A greater ratio results in greater supply, treatment, and storage requirements. The system must be designed to meet demands for every day of every

year, while the increased demand may be limited to just a few days of each year. Therefore, to avoid this need, the increase in demand over the ADD, or essentially the MDD:ADD ratio, should be minimized as much as possible. In addition to climate, the rate of development can also impact the MDD:ADD ratio because seasonal construction water use for activities such as watering newly placed sod increases the maximum day use.

Another significant water use parameter to take into consideration is the average gallons (of water production) per person per day (gpcd). A population equivalent (P.E.) is a unit of measure often utilized to determine the impacts of existing and additional water consumers to the system. For many Northeastern Illinois communities, one P.E. is typically in the range of 75 to 120 GPD. Lower values are often associated with established, mainly residential communities that practice water conservation. Larger values are typically observed in communities that have high water use commercial and industrial customers. Table 2 shows that the historical average water use in Yorkville is approximately 77 gpcd, which is in the range of expected values for a community similar in size and land use distribution. Being that it is on the low end of the typical range, it can be inferred that the community as a whole is accomplishing water conservation. It should be noted that this water use per P.E. accounts for all consumer types including residential, commercial, industrial, governmental/institutional, etc. Similar to the MDD:ADD ratio, this value has a direct impact on the water system infrastructure and, therefore, should be minimized when possible. Lower water use per person will result in lower costs to produce water per person.

2.2. WATER DEMAND PROJECTION

The next step is to equate the population to a water demand using the water use per capita metric. As stated above, the estimated historical average water use per person per day in the City was 77 gpcd. Therefore, a water use of 77 gpcd was used to project the average day demand to 2050. This projection assumes the proportion of the residential water use to all other types of water users will remain the same into the future. The average historical ratio of maximum day demand to average day demand

(MDD:ADD) was determined to be 1.89, and the maximum hourly demand (MHD) was determined assuming an MHD:MDD ratio of 2.0.

From 2012 through 2021, the City has experienced NRW percentages ranging from 5.4% to 19.6% as determined based on the American Water Works Association (AWWA) methodology found in AWWA Manual M36 – Water Audits and Loss Control and associated software. The NRW% for Water Year 2021 was 12.7%. The City is committed to achieving a NRW percentage of less than 10% before completion of the Lake Michigan Supply connection and improvements. It is anticipated that by implementing the Water System Improvement Plan identified to reduce NRW loss, the City can conserve more water and reduce the NRW percentage.

Table 3 provides a summary of the recent historical water demand and projections for the City through 2050, and also provides the projection for 2100 which has been identified as the estimated buildout year for the City. The overall projection is built based on the recent past water use metrics and an adjustment for future projected non-revenue water (NRW) reductions. The projected population for 2050 is 47,796 with a projected ADD of 3.566 MGD and a projected MDD of 6.06 MGD. The projected buildout population for 2100 is 95,727 with a projected ADD of 7.141 MGD and a projected MDD of 12.14 MGD.

Table 3. United City of Yorkville Historical and Projected Water Use

Water Demand Category	Water Demand Component	Unit	Actual 2021	Average 2017-2021	2025	2026	2030	2035	2040	2045	2050	2100
Population	Projected CMAP Population	-	23,143	20,733	30,878	31,554	32,595	34,602	37,267	41,354	47,796	95,727
CMAP Population Based 2050 Projections	Water Demand Projection	MGD	1.75	1.61	2.38	2.43	2.51	2.66	2.87	3.18	3.68	7.37
	Water Use Per Capita:	gpcd	76	77	77	77	77	77	77	77	77	77
Nonrevenue Water (NRW)	Total Non-Revenue Water Adjustment	MGD			(0.07)	(0.08)	(0.08)	(0.08)	(0.09)	(0.10)	(0.11)	(0.23)
	Total Exported Water Adjustment	MGD	0	0	0	0	0	0	0	0	0	0
	Total Projected United City of Yorkville ADD Projection:	**MGD**	**1.75**	**1.61**	**2.304**	**2.354**	**2.432**	**2.581**	**2.780**	**3.085**	**3.566**	**7.141**
	Water Use Per Capita (ADD Projection):	gpcd	76	77	75	75	75	75	75	75	75	75
	Total Projected United City of Yorkville MDD Projection:	**MGD**	**3.33**	**2.73**	**3.92**	**4.00**	**4.13**	**4.39**	**4.73**	**5.24**	**6.06**	**12.14**
	Water Use Per Capita (MDD Projection):	gpcd	144	132	127	127	127	127	127	127	127	127
Total Projected Maximum Day Demand	**Projected Maximum Day Demands**	**MGD**	**3.3**	**2.7**	**3.9**	**4.0**	**4.1**	**4.4**	**4.7**	**5.2**	**6.1**	**12.1**
2030 - 2100 Estimated NRW Values	Estimated Total Nonrevenue Water %	%	Allocation anticipated on 10/1/2027 (WY2028)			9.9%	9.9%	9.9%	9.9%	9.9%	9.9%	9.9%
	Estimated Total Nonrevenue Water Volume	MGD				0.234	0.242	0.256	0.276	0.307	0.354	0.710
	Unbilled Authorized Use Portion of NRW %	%				1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Unbilled Authorized Use Portion of NRW Volume	MGD				0.025	0.025	0.027	0.029	0.031	0.036	0.072
	Apparent Loss Portion of NRW %	%				1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
	Apparent Loss Portion of NRW Volume	MGD				0.04	0.04	0.04	0.05	0.05	0.06	0.12
	Real Loss Portion of NRW %	%				7.2%	7.2%	7.2%	7.2%	7.2%	7.2%	7.2%
	Real Loss Portion of NRW Volume	MGD				0.17	0.17	0.18	0.20	0.22	0.26	0.51

Notes:

ADD = Average Day Demand; MDD = Maximum Day Demand

MDD:ADD = 1.70

The NRW volume for the average of 2017-2021 was determined based on 12.7%, the performance indicator for WY2021, which equated to 74.29 MG.

No additional volume of NRW is being assumed because the the measures utilized in the Water System Improvement Plan will result in a reduction of NRW, but this reduction will be negated due to the increase in population. Additional NRW occurs as a result of water mains and meter inaccuracies resulting from the new population and are inherent with any system additions.

The ultimate buildout population is estimated to be 95,727 people by 2100.

3. PROPOSED PROJECT

3.1 LAKE MICHIGAN SUPPLY CONNECTION AND RECEIVING STATIONS

As discussed previously, the City determined that the existing deep aquifer supply source is not a sustainable long-term supply option for the City due to the declining aquifer levels and groundwater modeling and analysis completed by ISWS. After extensive study of various supply alternatives, it was determined that connection to Lake Michigan supply via the DuPage Water Commission (DWC) was the preferred and most sustainable alternative to consistently meet the City's water needs long-term. The City plans to obtain Lake Michigan supply from DWC via the construction of a transmission main network that will be utilized together with the Villages of Montgomery and Oswego, construction of two Receiving Stations, and associated internal distribution system improvements including water main replacement and non-revenue water reduction discussed further in later sections. This section discusses the decision-making process and basis for the selected alternative, and summarizes the improvements associated with the Lake Michigan supply and receiving stations.

Two receiving stations were identified for the City. The North Receiving Station will be located at the existing Well 8, Wells 8 & 9 WTP, and Northeast EWST site at Grande Reserve (Lehmann Crossing). The South Receiving Station will be located across from (south of) existing Well 7 & WTP and the South EWST site at Raintree Village (Tremont Avenue). The incoming water supply will be split between both Receiving Stations; however, each shall be capable of supplying 100% of Average Day Demand in case the other Connection Point/Receiving Station is unavailable.

The United City of Yorkville currently relies on groundwater from the Cambrian-Ordovician aquifer. Various groundwater modeling studies completed by the Illinois State Water Survey (ISWS) of the deep aquifers in Northeastern Illinois from 2015-2020 have projected that the deep aquifer system in the region, including the municipal wells utilized by the United City of Yorkville, are not a long-term sustainable supply source.

Because of this, the City conducted multiple studies to evaluate alternative water sources. In the most recent study, the City has conducted multiple studies to evaluate alternative sources. The most recent study evaluated source alternatives from the Fox River and Lake Michigan as part of the Alternative Water Source Study Update (AWSS Update). Five total water supply alternatives were evaluated as part of the AWSS Update, including two utilizing the Fox River and three utilizing Lake Michigan. The Fox River alternatives included the following: Fox River – Yorkville Alone and Fox River – WaterLink Sub-Regional System with the Villages of Montgomery and Oswego.

The Lake Michigan alternatives the City further evaluated included the following: purchasing treated water from the DuPage Water Commission (DWC), connecting to the newly formed Joliet Regional Water Commission, and purchasing water from the Illinois Lake Water/Plainfield System. After detailed analysis of the alternatives including , the City Council determined the best long term water supply option for the community would be connection to Lake Michigan.

The United City of Yorkville, along with its WaterLink partners (Villages of Montgomery and Oswego), therefore selected Lake Michigan as their long-term sustainable water source and intend to connect to DWC. As a part of preliminary engineering for the Lake Michigan connection, a more detailed analysis of the proposed improvements and cost estimates was completed and is summarized in this report. Additionally, a preliminary phasing and implementation plan was developed to identify the schedule for planning, design, and construction of the various improvements and timeline for switching over to Lake Michigan supply. It is currently anticipated that the final stages of the City's Lake Michigan connection will be completed in 2028.

The proposed improvements identified for connecting to DWC are summarized as follows:

- Two (2) receiving stations including the following components are proposed at each site: DWC-owned delivery station, receiving station structures (ground storage tank (GST), booster pump station (BPS), and associated piping, controls, and other appurtenances including Generator)

- New DWC transmission main (shared between the WaterLink communities to connect from the nearest DWC supply point to the individual Receiving Stations in each community
- New altitude control valve station for the existing elevated water storage tank (EWST) at the North Receiving Station
- Blue Stem Drive Water Main (WM) Improvements: Replace approx. 725 LF of 8" WM with 16" WM on Bluestem Dr. between McHugh Rd. and Prairie Rose Ln. for improved system hydraulics to convey supply water from the Receiving Station
- Non-Revenue Water Reduction including WM Replacement

Assumptions:

- DWC requires storage equivalent to two times (2x) ADD. The Receiving Station GSTs are planned to be sized to allow the City to meet the 2050 storage requirement, when combined with the City's existing storage based on the more conservative Current Trends (CT) projected ADD water usage.
- Based upon the needs assessment calculation for 2050, a total storage of 7.6 MG is required. The City's existing storage capacity is 4.55 MG. The City will need approximately 3.05 MG of additional storage.
- Proposed receiving station GSTs are currently assumed to be 2.0 MG each for preliminary site layouts, to be conservative in evaluating required sizing, costs, and available space, and to provide additional capacity/flexibility in operations.
- It is assumed that any additional future storage required would be via new EWSTs (note no additional storage required by 2050 beyond additional capacity added via new Receiving Station GSTs based on current projections).
- Each BPS shall be sized according to the final North/South demand split, but each shall be capable of supplying 100% of Average Day Demand in case the other Connection Point/Receiving Station is unavailable, regardless of the demand split, and with consideration for future BPS expansion.

Water shall be supplied to the City's Receiving Stations via a new transmission main network to be constructed from DWC to convey water to each Receiving Station. DWC completed preliminary hydraulic modeling to identify the expected range of delivery pressures for each Receiving Station in the United City of Yorkville, as summarized in Tables 4 and 5. These pressures shall be utilized for designing the Receiving Station Tanks that will be filled off the incoming transmission main supplied head.

Table 4: Preliminary Supply Pressures – DWC (Yorkville Connection Point #1 – South Receiving Station)

United City of Yorkville, IL

Scenario	Location	Approximate USGS Ground Elevation	Minimum Pressure, psi	Maximum Pressure, psi	Average Pressure, psi
2042 ADD	Oswego Connection Point #1	743.4'	52.2	68.4	59.6
2042 MDD			56.8	62.2	59.1
2042 ADD	Yorkville Connection Point #1	766.0'	34.3	84.1	42.7
2042 MDD			33.8	77.4	39.5
2042 ADD	Montgomery Connection Point #1	704.0'	67.2	84.1	74.8
2042 MDD			70.7	77.4	73.7

Table 5: Preliminary Supply Pressures – DWC (Yorkville Connection Point #2 – North Receiving Station)

United City of Yorkville, IL

Scenario	Location	Approximate USGS Ground Elevation	Minimum Pressure, psi	Maximum Pressure, psi	Average Pressure, psi
2042 ADD	Oswego Connection Point	743.4'	43.3	54.0	49.3
2042 MDD			31.5	47.9	39.4
2042 ADD	Yorkville Connection Point #2	652.0'	77.1	88.5	83.8
2042 MDD			44.3	72.1	57.5
2042 ADD	Montgomery Connection Point #2	656.0'	64.8	77.4	72.6
2042 MDD			36.7	66.9	51.0

Table 6 summarizes the estimated delivery pressures to be provided by DWC and compares them to the receiving station pressure zone hydraulic grade lines and existing elevated water storage tanks for the City. Water shall flow through a Delivery and Metering Station owned by DWC and into the Receiving Ground Storage Tank. The GST shall be designed and the tank overflow shall be set according to the incoming pressure from the transmission main. Because it is assumed that the delivery pressure will be less

than the system hydraulic grade (elevated tank overflow), a Booster Pump Station is planned at both Receiving Stations to transfer water from the GST and into the distribution system. The use of a GST with BPS will provide operational flexibility for the City during periods of variable demand.

Table 6: Receiving Station Hydraulic Grade Line Comparison

United City of Yorkville, IL

Pressure Zone	Ground Elevation at Receiving Station (ft)	DWC Receiving Station HGL			City Tank		Notes
		Minimum 2042 Pressure (psi)	Hydraulic Grade Line (ft above grade)	Equivalent GST TCL (ft above grade)	TCL (psi)	TCL (ft of water above grade)	
North Pressure Zone	652	44.3	102.3	102.3	68.2	157.5	Grande Reserve EWST
					64.5	149.0	North EWST
South Pressure Zone	766	39.5	91.2	91.2	65.8	152.0	Raintree EWST

Notes:

The table does not account for any pipe losses.

The estimated maximum TCL of the new Receiving Station Tanks do not take into account the ratio of tank height to width for the required volume and any limits on GST or Standpipe height.

The pressure zone at the North Receiving Station includes two elevated water storage tanks, including one existing EWST located adjacent to the future Receiving Station. An altitude valve is proposed for this EWST to control the filling of both EWSTs in that zone.

The Preliminary site plans for the North and South Receiving Stations have been developed and are included in this report. The location map and preliminary site plan for the North Receiving Station are illustrated in Exhibits B and C, respectively. The location map and preliminary site plan for the South Receiving Station are shown in Exhibits D and E, respectively.

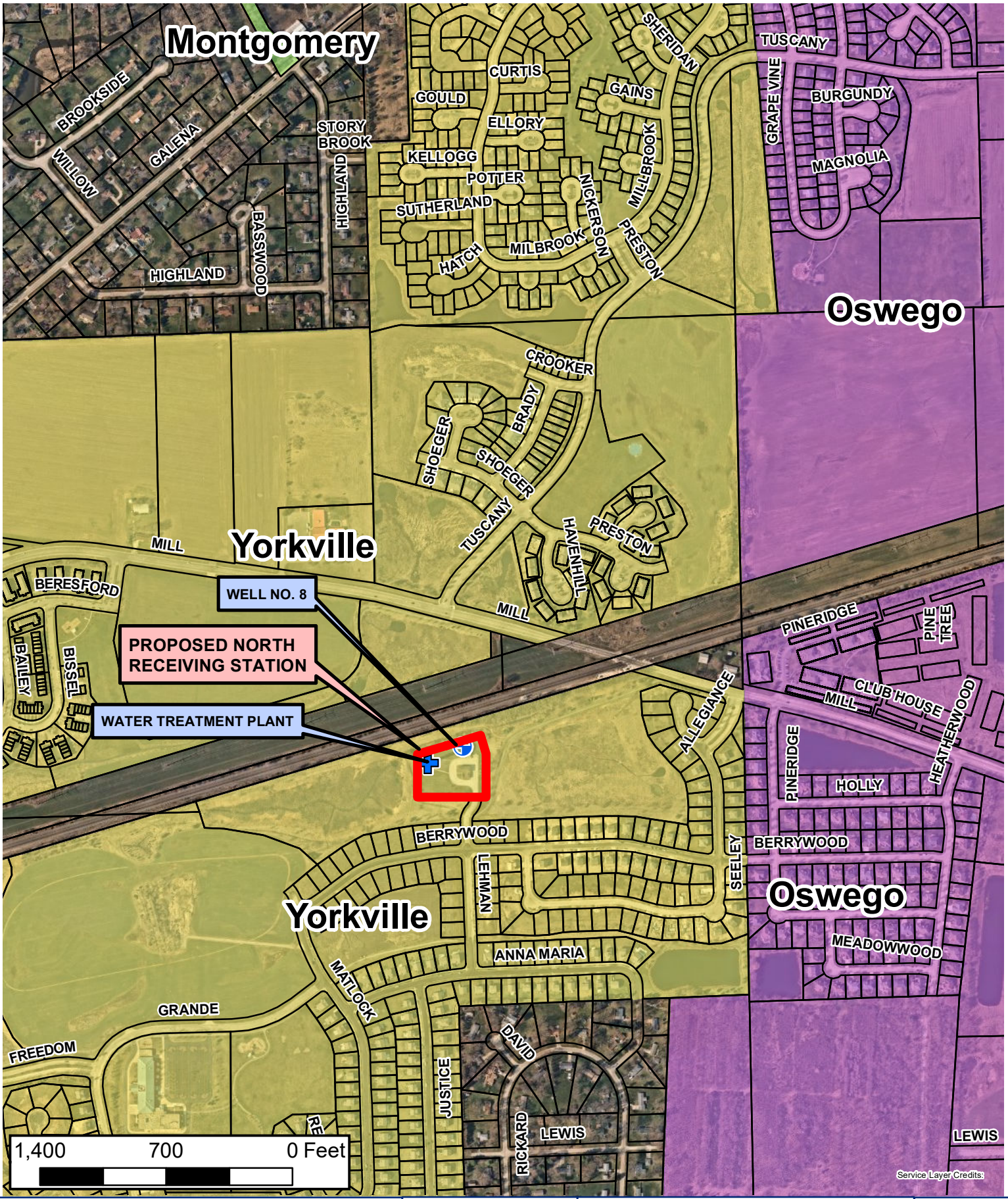
The preliminary site plans currently depict separate structures for the DWC-owned Delivery Station and the City's BPS. It may be possible to combine both into one building/structure which would result in some slight construction cost savings compared to constructing separate structures. Coordination with DWC on the details is currently underway. For both receiving stations, a recessed/sunken floor plan with a smaller footprint and lower construction cost is planned. Exhibit F depicts a preliminary concept floor plan for the BPS at each Receiving Station site.

The City is seeking funding from a variety of sources including through the Water Infrastructure Finance and Innovation Act (WIFIA), revenue bonds, and IEPA SRF (low interest loan) funding. The City is seeking IEPA SRF loan funding for both Receiving Stations including the above improvements, as well as for part of the planned water main replacement program as described later in this report.

3.2. Back-Up Supply Plan

The existing Water Works System consists of four deep wells (Wells No. 4, 7, 8 and 9). Each well has a design utilization of 1,200 gpm (in total approximately 4,800 gpm can be produced with all the wells running). The City is also planning to construct a new deep Well No. 10 to be able to meet near-future water demand prior to switching to Lake Michigan Water, as well as an emergency interconnect with the Village of Montgomery.

The water treatment facilities for each well will be decommissioned once the switchover to Lake Michigan supply is completed. However, the City plans to maintain its existing deep wells to provide emergency backup supply if ever needed. The wells would be intended to meet Average Day Demands until the normal supply can be restored. The future buildout projected ADD in Table 3 is 7.141 MGD which is equivalent to approximately 4,959 gpm. A minimum of four of the wells will be maintained as backup supply. These wells will be placed on standby and tested monthly for performance and water quality, and would be disinfected if ever placed online and pumped to the system. Exhibit G depicts the proposed future improvements including the Receiving Stations and additional backup supply.

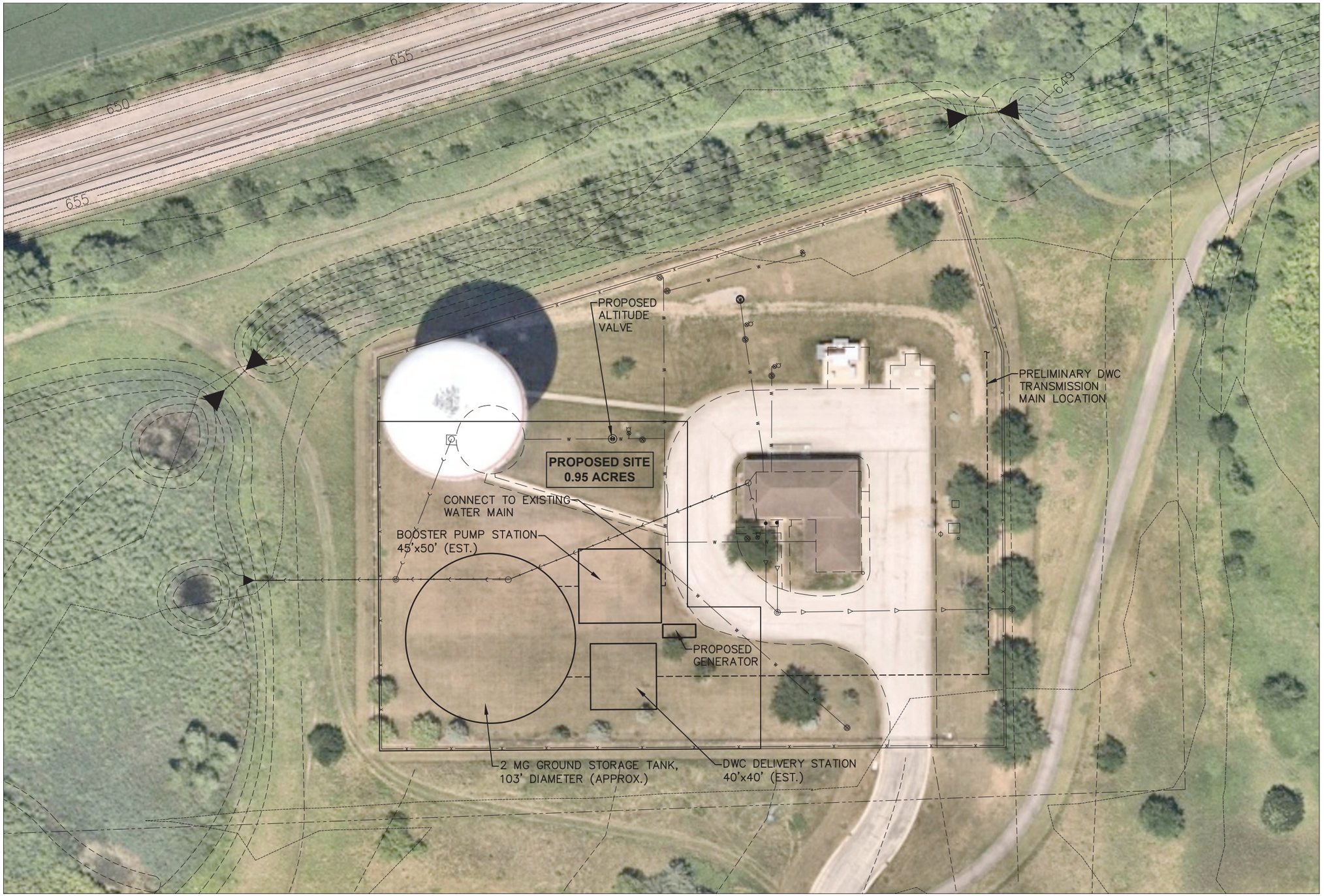


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DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed North Receiving Station Overall

EXHIBIT B: PROPOSED NORTH RECEIVING STATION LOCATION MAP

N



0 30' 60'
SCALE FEET

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KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

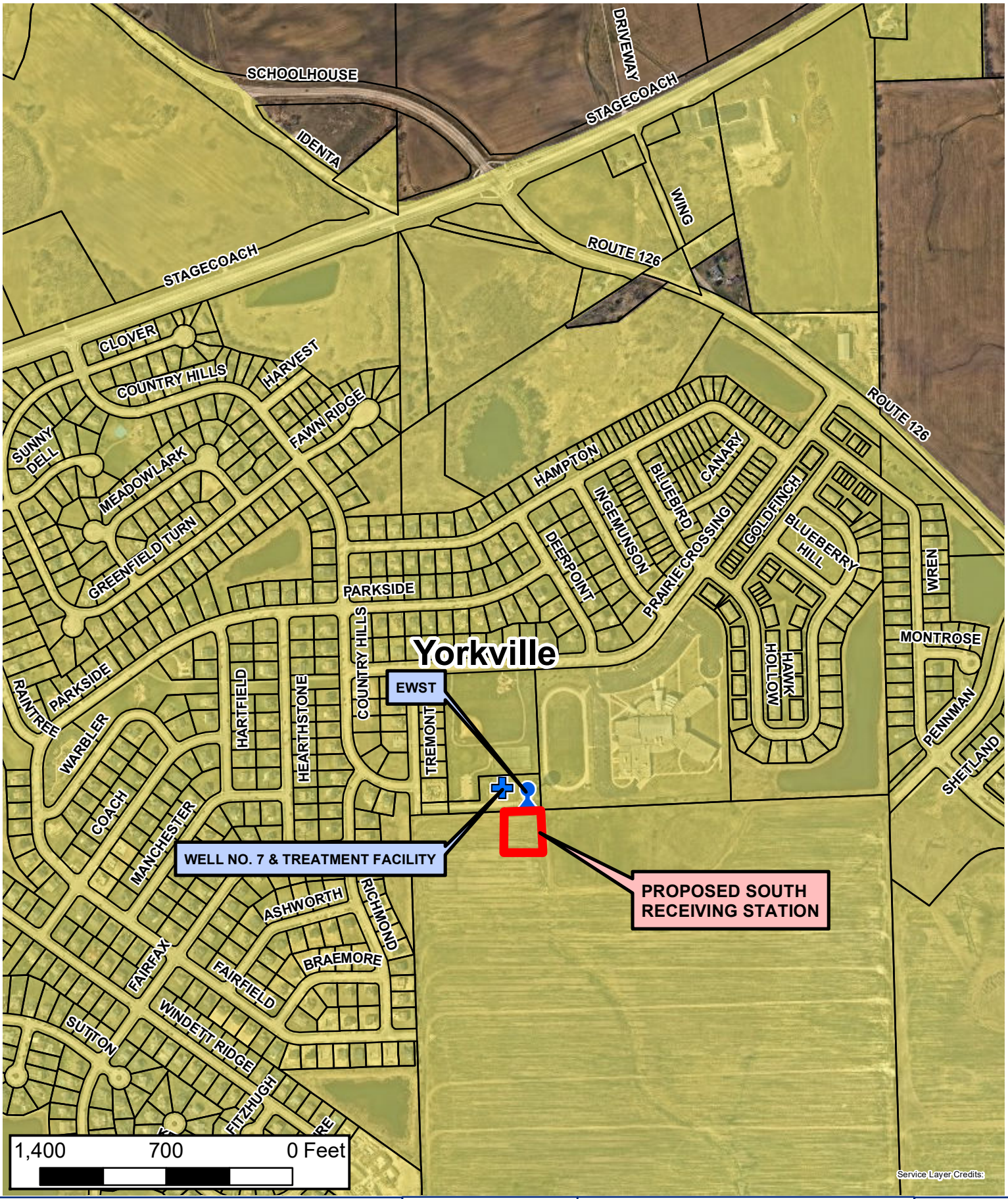
LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

EXHIBIT C: PROPOSED NORTH DELIVERY STATION SITE PLAN (PRELIMINARY)

DATE:	AUGUST 2023
PROJECT NO:	YO2230
FILE:	YO2230-SITES
SHEET	1 OF 2

Plotted: August 15, 2023 @ 9:10 AM By: Matt Taylor – Tab: North Site – 22x34

Path: H:\SDSKPROJ\YO_-YORKVILLE\2022\YO2230\DWG EXHIBIT\YO2230-SITES

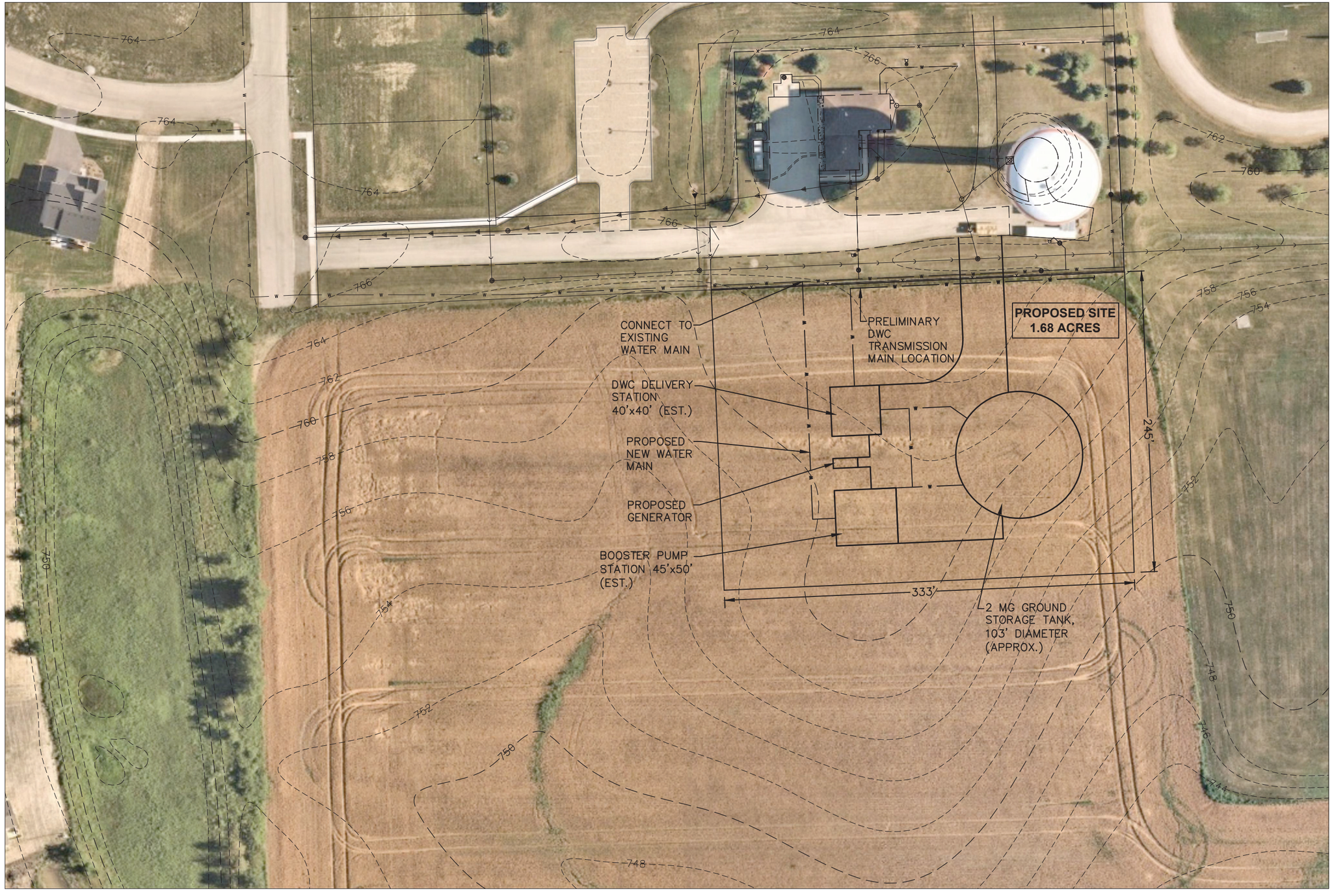


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DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed South Receiving Station Overall

EXHIBIT D: PROPOSED SOUTH RECEIVING STATION LOCATION MAP

N



0 40' 80'
SCALE FEET

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KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

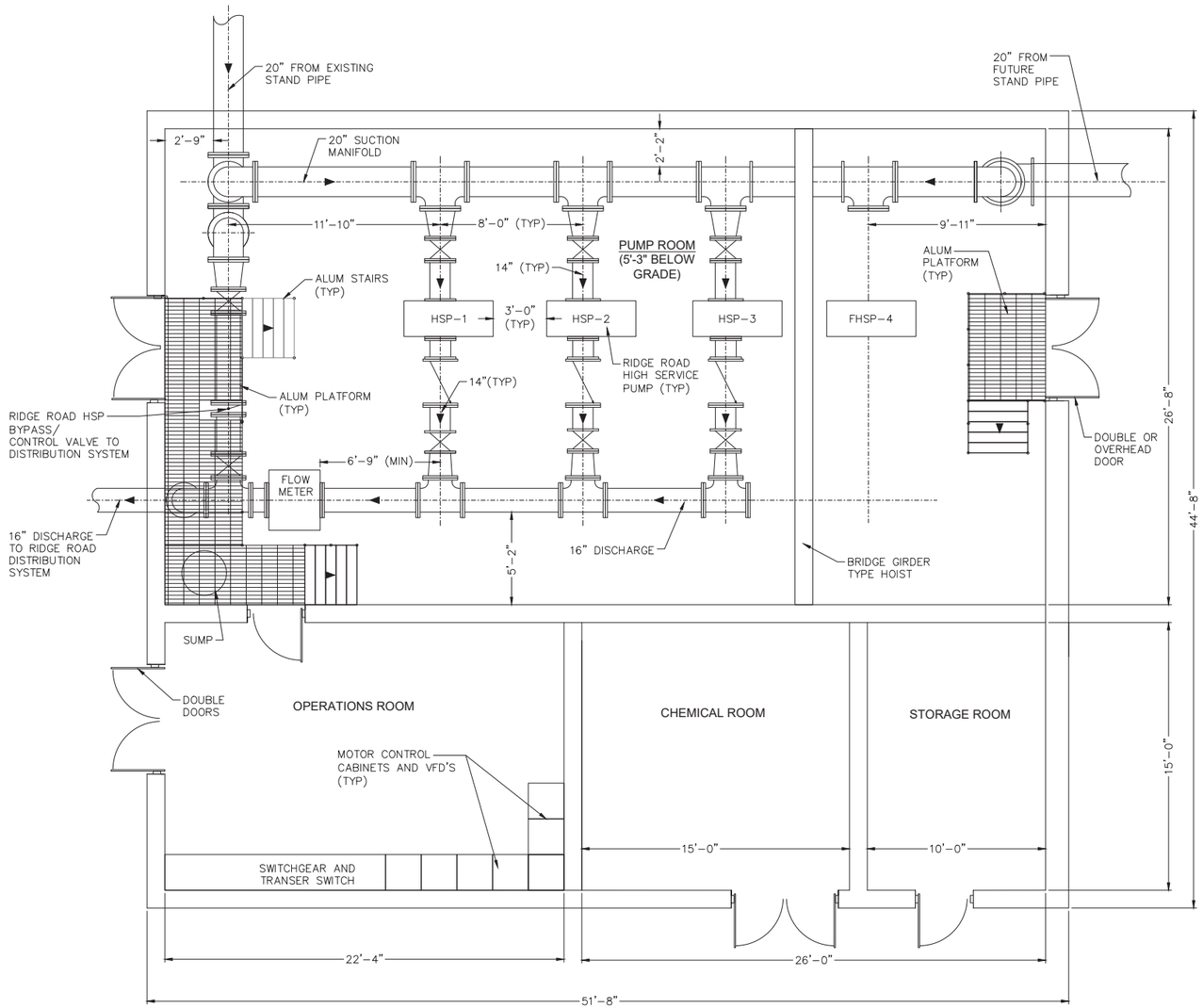
LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

EXHIBIT E: PROPOSED SOUTH DELIVERY STATION SITE PLAN (PRELIMINARY)

DATE: AUGUST 2022
PROJECT NO: Y02230
FILE: Y02230-SITES
SHEET 2 OF 2

Plotted: October 28, 2022 @ 11:46 AM By: Mike Agate – Tab: South Site – 22x34

Path: H:\SDSKPROJ\YO_-_YORKVILLE\2022\Y02230\DWG EXHIBIT\Y02230-SITES



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0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

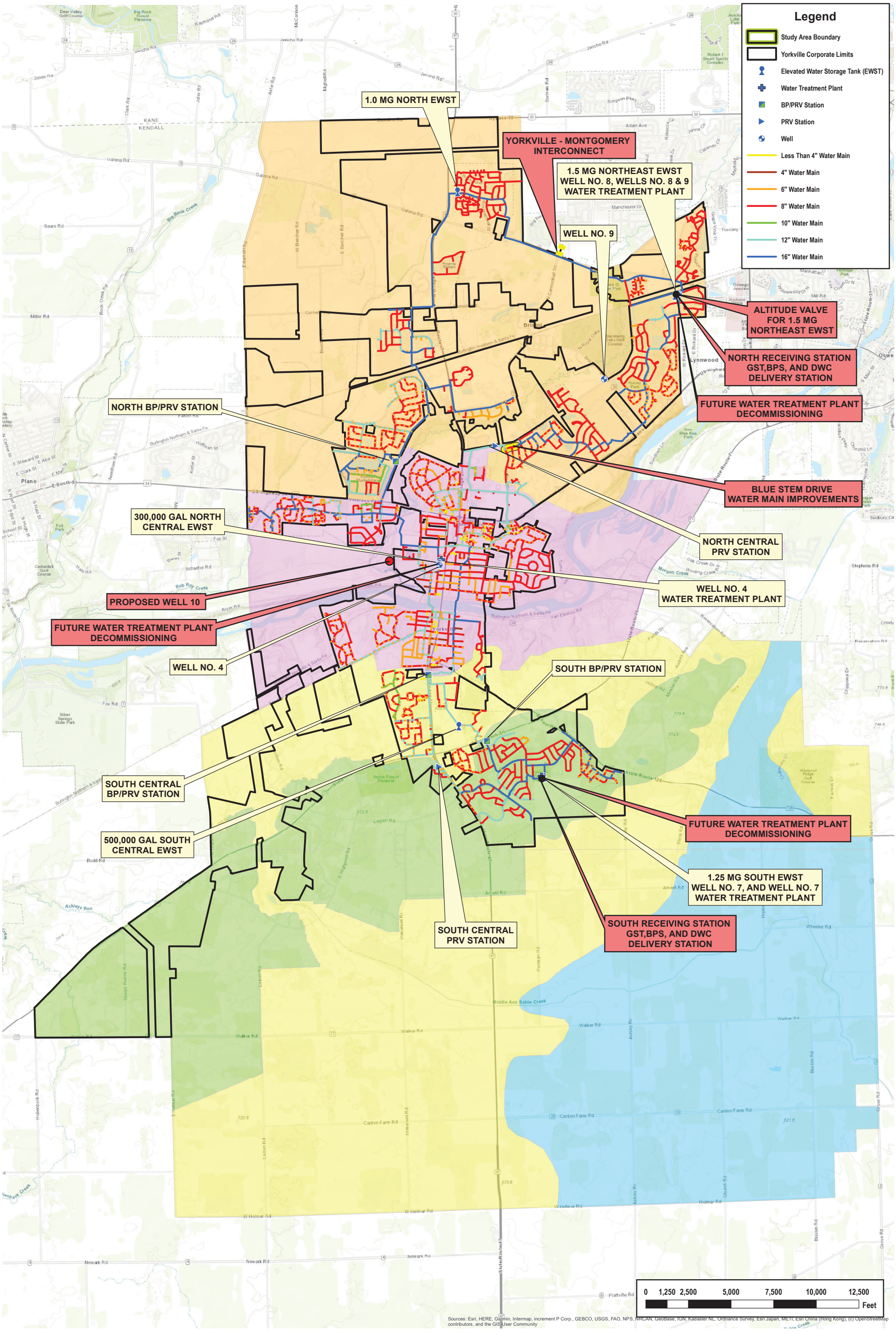
LAKE MICHIGAN CONNECTION PRELIMINARY ENGINEERING

EXHIBIT F: PRELIMINARY FLOOR PLAN LAYOUT

DATE:	AUGUST 2022
PROJECT NO:	Y02230
FILE:	Y02230-BPS
SHEET	1 OF 1

Plotted: September 12, 2022 @ 10:58 AM By: Kris Pung – Tab: BPS Floorplan – 22x34

Path: H:\SDSKPROJ\YO_YORKVILLE\2022\Y02230\DWG EXHIBIT\Y02230-BPS



Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 *www.eeiweb.com*	**United City of Yorkville** 800 Game Farm Road Yorkville, IL 60560	DATE: AUGUST 2023 PROJECT NO.: YO2230 BY: MJT PATH: H:\GIS\PUBLIC\YORKVILLE\2022\YO2230 FILE:	**LAKE MICHIGAN CONNECTION PRELIMINARY ENGINEERING** UNITED CITY OF YORKVILLE, ILLINOIS	**EXHIBIT G** **PROPOSED IMPROVEMENTS**

NORTH

3.3. WATER MAIN REPLACEMENT / NON-REVENUE WATER REDUCTION PROGRAM

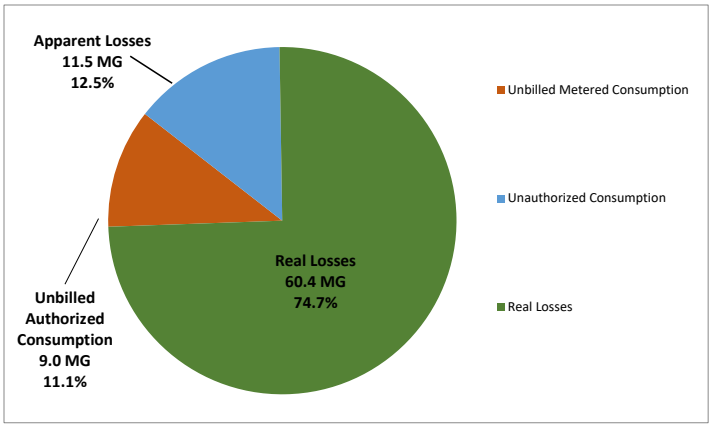
Part of the City's plan to connect to Lake Michigan supply involves a reduction of its non-revenue water (NRW) loss to less than 10% which is a requirement for all Lake Michigan supplied water systems.

When a City or utility receives a Lake Michigan Allocation Permit, a loss of autonomy is experienced. Per Title 17, Chapter I, Section 3730.307, Subtitle C of the Illinois Administrative Code, this loss of autonomy is associated with: 1) annual data collection and testing, Annual Water Audit Preparation (and Water System Improvement Plan if NRW > 10%), 3) Coordination, Implementation, and Management of Conservation Program Activities, and 4) Ongoing Infrastructure Improvements Required to Achieve and Remain in Compliance with Non-Revenue Water (NRW) < 10%.

In Water Year (WY) 2021, the United City of Yorkville experienced NRW in the amount of 12.7% based on the American Water Works Association (AWWA) methodology found in AWWA Manual M36 – Water Audits and Loss Control and associated software. Therefore, prior to connecting to a Lake Michigan water source in 2032, the City must reduce the NRW to below 10% to adhere to their permit requirements (See 17 ILL. ADM. CODE CH I, SEC. 3730.307 Conservation Practices and Other Permit Conditions). The City has subsequently developed several strategies to reduce its NRW percentage. This section summarizes the City's NRW reduction plan.

Non-revenue water consists of: 1) Unbilled Authorized Consumption (which includes both unbilled metered and unbilled unmetered water use), 2) Apparent Losses, and 3) Real Losses. A breakdown of the various components by volume and percentage for the City in WY2021 is provided in Exhibit H. To reach a NRW level of less than 10%, the City will need to address all three (3) categories simultaneously.

Exhibit H. Water Year 2021 – Yorkville Non-Revenue Water by Volume



Based on Figure 3-1, real losses are the largest contributor by volume to the City's non-revenue water. Real losses include leakage on distribution/transmission water mains, leakage and overflows at storage facilities, and leakage on service connections. The City understands that it is important to maintain the health of the distribution network by continually investing in reducing their real losses. Therefore, the City has developed an approach to reduce real losses through leak detection and water main replacement.

In January of 2022, the City performed a systemwide leak detection across all water mains. The total number of leaks found was 24, and the estimated leakage total is 120,960 GPD. After observing the successes of the leak detection, the City has committed to the Illinois Department of Natural Resources to perform annual leak detection across the entire approximate 150 miles of water main within the City's distribution system. The City is seeking funding for five (5) years of annual leak detection.

In addition to leak detection, the City has replaced 5.1 miles of water main over the last 8 years. However, given the requirement to have NRW not exceed 10% prior to connecting to a Lake Michigan Water Source in 2028, the City has increased their water main replacement program within their current 5-year CIP to target replacement of all pre-1970 water main as well as other water main experiencing frequent breaks. The City will be replacing an average of 7.7 miles of water main prior to WY2028. This program is outlined in Exhibit I which depicts the locations of all WM proposed to be replaced from 2024-

2027. The City's plan is anticipated to cost approximately $17.2 million total through WY2027, a portion for which the City is requesting SRF funding.

Furthermore, to better understand the sources of real losses into the future, the City is also seeking funding to develop district metered areas with installation of bi-directional meters at its existing booster pump and pressure reducing valve stations.

To address apparent losses which consist of unauthorized water use, meter inaccuracies, and systematic data handling error, the City is in the process of a full customer meter change-out program that will convert the City's radio, fixed based system to Advanced Metering Infrastructure (AMI) technology to allow for full conversion to AMI technology by April 2026.

In addition to the real and apparent loss strategies, the City is also seeking funding for the preparation of the annual water audit and associated Water System Improvement Plan for the next five (5) years. As stated earlier, based on the Lake Michigan Allocation Permit requirements, those utilities whose NRW exceeds the 10% threshold must annually submit a water audit and Water System Improvement Plan that outlines the actions the applicant plans to undertake, along with a timeframe, to reduce non-revenue water to less than the threshold. Therefore, the City is required to annually submit a water audit. Additionally, the City is required to annually submit a water system improvement plan until the NRW percentage becomes less than the current allowable threshold (10%).

To summarize, the internal infrastructure improvements and engineering assistance for the City's water system necessary to connect to and receive Lake Michigan supply with regards to non-revenue water (NRW) reduction program include:

- Annual Water Audit / Non-Revenue Water Reduction Plan
- Annual Leak Detection
- Meter Retrofit Program
- Bi-Directional Flow Meters – BP/PRV Stations
- NRW - Water Main Replacement

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

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DATE:	JULY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:/GIS/PUBLIC/YORKVILLE/2022
FILE:	YO2230- OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

EXHIBIT I: 2024 -2027 WATER MAIN REPLACEMENT PROJECTS

N W E S

The preliminary cost estimates for the NRW reduction strategies including the above components are included in the Financial Analysis in Appendix A.

The City is committed to the implementation of these strategies in support of its mission to provide a sustainable, reliable and high-quality water supply for the community by 2028 and comply with the requirements after receipt of an allocation permit. The investment to reduce the NRW below 10% is significant, and it is critical that the City acquire funding to implement these NRW reduction strategies.

4. SYSTEM'S COMPLIANCE

Currently there are no violations of State or federal laws and the City maintains compliance with all applicable Clean Water and Safe Drinking Water Act requirements. There was one occasion that the combined radium concentration exceeded the standard at one of the City's Water Treatment Plants. The City has taken steps to address these issues by adjustments in the treatment works to reestablish compliance with the standards, and continues to diligently monitor the WTPs and their performance. Since then, the combined radium concentration has remained below the standard and the City maintains compliance.

5. FINANCIAL ANALYSIS

The City is planning to utilize a variety of funding sources to fund all of the improvements associated with the switchover to Lake Michigan supply, including SRF Loan funding, WIFIA Loan funding, Grants, Bonds, and the City's General Revenue Fund. A detailed financial analysis of the City's current and planned operating budget, existing and future debt service including the costs associated with the Lake Michigan related projects, and of the proposed funding sources was completed to determine the financial plan including necessary rate increases.

The City bills for water usage on a bimonthly basis, and includes flat base charge (for the first 350 CF of water usage), water infrastructure fee (capital improvement charge) and volumetric charge per every 100 cubic feet above the first 350 cubic feet (CF). The

average residential water usage per billing cycle (bimonthly) is estimated at 1,470 CF. The completed Existing User Charge and O, M, and R Certification Sheet is attached with the project plan submittal. The current average bimonthly residential water bill is $94.26, or approximately $0.06 per CF which includes the base charge, water infrastructure fee, and volumetric charges. Based on the proposed timeline and financial plan to complete all of the projects, rate increases will be necessary. The estimated future average monthly residential water bills as a result of the rate increases is shown in Appendix A (Schedule 10, or last page of the Financial Analysis Plan Summary).

Appendix A includes a summary of all of the projects along with the estimated schedule and total project costs by fiscal year. The total cost estimate for all of the capital improvements is shown in Table 7. Table 8 summarizes the total costs associated with the projects for which IEPA SRF funding is being applied for, and is followed by a breakdown of the costs for those projects and SRF funding including Design Engineering, Construction Engineering, Other Professional Services, and Construction and Construction Contingency. Because of the present high uncertainty in future construction and material costs at the time each of these projects are to be completed, for the preliminary engineering phase contingency is estimated at 30%. The estimates will be updated during the final design phase.

The City is seeking an IEPA State Revolving Fund (SRF) loan in the total amount of $23,811,200.00 as summarized in Table 8. The rest of the project costs are planned to be funded from other funding sources such as Water Infrastructure Finance and Innovation Act (WIFIA) and bonds. The estimated SRF loan interest rate is 2.00%, with a loan repayment period of 20 years according to the standard repayment period set forth in the current general IEPA SRF loan terms. The annual loan repayment will vary initially based on the schedule for the individual projects and as the SRF loan funding is utilized. The Financial Plan in Appendix A includes a summary of the annual loan repayments as the associated projects are completed.

Table 7. All Lake Michigan and Other Capital Projects – Total Cost Estimates

United City of Yorkville, IL

Lake Michigan			
LM01	AWSS - IDNR Allocation AWSS - IDNR Allocation AWSS - IDNR Allocation	$	50,000
LM02	AWSS - Preliminary EngineeringAWSS - Preliminary Engineering	$	150,000
LM03	Annual Water Audit/ Non-Revenue Water Reduction Plan	$	482,484
LM04	Annual Leak DetectionAnnual Leak DetectionAnnual Leak Detection	$	484,484
LM05	Meter Retrofit ProgramMeter Retrofit ProgramMeter Retrofit Program	$	2,200,000
LM06	AWSS - Corrosion Control Study / Source Water Transfer Plan	$	858,000
LM07	DWC Water Transmission Mains* DWC Water Transmission Mains*	$	89,346,000
LM08	DWC Buy-In CostsDWC Buy-In CostsDWC Buy-In CostsDWC Buy-In Costs	$	8,856,000
LM09	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve*	$	4,653,000
LM10	North Receiving Station Ground Storage Tank (2.0 MG)*	$	5,499,000
LM11	South Delivery Station and Receiving Station (BPS)*	$	4,306,000
LM12	South Receiving Station Ground Storage (2.0 MG)*	$	5,598,000
LM13	Blue Stem Drive Water Main Improvements	$	447,000
LM14	Water Treatment Plant Decommissioning	$	705,000
LM15	Bi-Directional Flow Meters - BPS's PRV's	$	140,000
LM16	Montgomery Interconnect*Montgomery Interconnect*	$	905,000
Other Capital Projects			
WM01	Well 10 & Raw Main*Well 10 & Raw Main*Well 10 & Raw Main*	$	6,668,000
WM02	Well No.7 and Rehabilitation Well No.7 and Rehabilitation	$	53,500
WM03	Well No. 7 Standby Generator*Well No. 7 Standby Generator*	$	1,280,000
WM04	WTP No. 7 Cation Exchange Media Repalcement		-
WM05	WTP No. 4 Cation Exchange Media Replacment		-
WM06	South Central EWST Rehabilitation South Central EWST Rehabilitation	$	990,000
WM07	North Central EWST Re-PaintNorth Central EWST Re-Paint	$	700,000
WM08	E. Main St. Water Main Replacement E. Main St. Water Main Replacement	$	17,000
WM09	2023 Water Main Replacement 2023 Water Main Replacement	$	3,343,500
WM10	2024 Water Main Replacement* 2024 Water Main Replacement*	$	4,521,500
WM11	W. Central and YBSD Water MainW. Central and YBSD Water Main	$	1,104,000
WM12	2025 Water Main Replacement*2025 Water Main Replacement*	$	3,643,500
WM13	2026 Water Main Replacement* 2026 Water Main Replacement*	$	2,527,500
WM14	2027 Water Main Replcement*2027 Water Main Replcement*	$	2,747,500
WM15	Rt 34 Water Main Improvments (East)Rt 34 Water Main Improvments (East)	$	23,000
WM16	Rt 71 Water Main Replacement - Phase 1 (East)	$	12,025
WM17	Rt 71 Water Main Replacement - Phase 2 (West)	$	680,000
WM18	Rate StudyRate StudyRate StudyRate StudyRate StudyRate StudyRate Study	$	50,000
WM19	Source Water Assessment Protection Program	$	7,500
	Total CIP Budget (in Future Dollars)	**$**	**153,048,493**

Table 8: SRF Funding Project Costs
United City of Yorkville, IL

NO.	ITEM	AMOUNT
1	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	$4,653,000
2	North Receiving Station Ground Storage Tank	$5,299,000
3	South Delivery Station and Receiving Station (BPS)	$4,306,000
4	South Receiving Station Ground Storage Tank	$5,298,000
5	2025 Water Main Replacement	$3,340,500
6	2026 Water Main Replacement	$914,700
	TOTAL PROJECT COSTS – REQUESTED SRF FUNDING	**$23,811,200**

The total SRF funding project costs are generally categorized as follows:

1) Design Engineering (including planning and form preparation)	$1,005,000
2) Construction Engineering (including bidding)	$1,403,000
3) Other Professional Services (separate legal, loan admin, land acquisition, etc.)	$59,800
4) Construction	$16,418,000
5) Contingency (at 30% of estimated construction costs)	$4,925,400
6) Total Estimated Project Costs	**$23,811,200**

The City is seeking an IEPA State Revolving Fund (SRF) loan in the amount of $23,811,200.00. The rest of the project will be funded from other funding sources such as Water Infrastructure Finance and Innovation Act (WIFIA) and bonds. The estimated loan interest rate, which is the established IEPA base interest rate for FY 2023, is 2.00%, with a loan repayment period of 20 years according to the standard repayment period set forth in the general IEPA SRF loan terms. The annual loan payment, therefore, is estimated to be $3,806,950.00 over the loan period.

6. ENVIRONMENTAL CHECKLIST

6.1 General

As part of this assessment, the City has submitted the proposed projects for which SRF Funding is being sought described herein and requested consultation and review from various permitting and regulatory agencies. Appendix B includes the following documentation and correspondence

associated with the loan application and environmental checklist and evaluation of potential environmental impacts, which are discussed more in this section. It is noted that some of these consultations are currently under review, and others are pending submittal until termination of present consultation by other agencies:

- B.1: IEPA Loan Applicant Environmental Checklist and Certification Form
- B.2: IDNR, State Historic Preservation Office Consultation Records
- B.3: IDNR Impact Assessment Section (EcoCAT) Consultation Records:
    - North Receiving Station EcoCAT Submittal and Consultation Termination
    - South Receiving Station EcoCAT Submittal and Consultation Termination
    - 2024-2027 Water Main Replacement EcoCAT Submittal and Consultation Termination
- B.4: National Wetlands Inventory Maps – North and South Receiving Stations
- B.5: USGS-FEMA Floodway Location Maps – North and South Receiving Stations
- B.6: Illinois Department of Agriculture Consultation Records – South Receiving Station **– to be provided separately after completion of consultation**
- B.7: TDAT List of Tribes with Interests in Kendall County, IL, Example Tribal Consultation Letter, and Consultation Results **– to be provided separately after completion of consultation**

6.2 IEPA Loan Applicant Environmental Checklist

The completed IEPA Loan Applicant Environmental Checklist and Certification Form is included in Appendix B. Consultations for which the United City of Yorkville is currently awaiting feedback are identified on the checklist for the noted entities. The results of those consultations will be provided to the IEPA to supplement this project plan submittal as soon as available.

6.3 Archeological and Historic Preservation

There are no known historic or cultural areas of importance within the proposed project area. The City requested a review of the projects by the Illinois State Historic Preservation Office (SHPO) for the National Historic Preservation Act, Section 106 sign-off. Records of the consultation request submittals are included in Appendix B. The results of the consultation will be provided to the IEPA as soon as available.

6.4 Wetland Impacts

Appendix B includes National Wetlands Inventory (NWI) maps identifying areas classified as wetlands near the North and South Receiving Station project locations that will entail more extensive construction relative to the existing water main replacement projects. Appendix B also includes copies of the project submittals to IDNR EcoCAT and their responses, including the North and South Receiving Stations and the proposed 2024-2027 Water Main Replacement program. terminating consultation. For all projects, EcoCAT identified that protected resources may be in the vicinity of the proposed projects, but the Department concluded that adverse impacts are unlikely and consultation under 17 Ill. Adm. Code Part 1075 and 1090 was terminated.

Construction of the North Receiving Station improvements will be confined to the southeast corner of the existing municipal water treatment site, which has been previously disturbed for the original construction of the facility, and all work shall be kept outside of the floodway and wetland areas. The South Receiving Station shall be constructed adjacent to the existing municipal water treatment site and is located in an area that has been previously disturbed for residential and other development activity. Appropriate precautions (e.g. soil erosion and sedimentation control) will be implemented during construction to ensure the surrounding areas are not detrimentally impacted. However, as stated and as concluded by IDNR, adverse effects to wetlands are not anticipated.

6.5 Floodway and Floodplain Impacts

The North and South Receiving Station sites are separated from floodway areas (see USGS-FEMA floodway location maps of the North and South Receiving Station sites included in Appendix B). Because of this and the findings of the IDNR EcoCAT submittal determining that adverse impacts are unlikely and terminating consultation, submittal of the proposed projects to the U.S. Army Corps of Engineers (USACE) and IDNR Office of Water Resources was determined to not be required.

6.6 Temporary Impacts

There will be some temporary impacts to the environment during construction (e.g. dust, noise emissions due to construction equipment, minor soil erosion and sedimentation, and some minor traffic disruptions), but these impacts will be relatively short in duration, will create no long-term environmental effects, and would be virtually impossible to completely eliminate. The temporary impacts during construction will be minimized through provisions defined in the plans and

specifications (e.g. implementation of soil erosion and sedimentation controls, proper traffic control, set construction hours, etc.).

6.7 Rare and Endangered Species Impacts

As previously stated, the projects were submitted for review of potential environmental impacts by the IDNR through their online Ecological Compliance Assessment Tool (EcoCAT). The IDNR provided a response concluding that adverse effects to natural resources are unlikely due to this project (see Appendix B).

6.8 Agricultural Land and Open Space Impacts

The South Receiving Station project involves construction on land adjacent to the City's existing Well 7 and WTP municipal site, for which the City is in the process of land acquisition and negotiation with the property owner. Although surrounded by heavily developed residential and other land uses, because of the nature of the existing site, the City is submitting this project for review and comment by the Illinois Department of Agriculture. The other projects including the North Receiving Station and existing Water Main Replacements are not applicable in terms of impact to agricultural land and open space because of the locations and scope.

6.9 Tribal Consultations

Because the project includes excavation and ground disturbance for construction of new structures and processes associated with the North and South Receiving Stations, consultation will be performed with all potentially interested, federally recognized Native American tribes in accordance with Section 106 of the National Historic Preservation Act of 1966. The U.S. Department of Housing & Urban Development's Office of Environment and Energy's online Tribal Directory Assessment Tool (TDAT) identified the following tribes with potential cultural or historical interest in the project sites:

- Citizen Potawatomi Nation, Oklahoma
- Forest County Potawatomi Community of Wisconsin
- Hannahville Indian Community, Michigan
- Kickapoo Tribe of Oklahoma
- Little Traverse Bay Bands of Odawa Indians, Michigan

- Menominee Indian Tribe of Wisconsin
- Miami Tribe of Oklahoma
- Prairie Band Potawatomi Nation

The IEPA recently recommended that for all projects requiring tribal consultations, consultation with SHPO should be completed first and the comments of SHPO submitted to the potentially interested tribes. As stated previously, the City is awaiting comments and consultation termination from SHPO, after which the City will submit on these projects for 30-day comment by the potentially interested tribes. The results of these consultations will be submitted to the IEPA separately as soon as possible.

6.10 Stream Crossings

No stream crossings will be impacted as a part of the construction of the improvements,

6.11 Air Quality Impacts

It is not anticipated that the proposed improvements will have an adverse effect on the air quality. It can be expected that there will be an insignificant amount of air quality degradation during construction due to operation of construction equipment. However, the degradation of the air quality will be temporary and have minimal effect on the environment. Dust control measures and maintained construction equipment should reduce the short-term impacts.

6.12 Additional Discussion

The proposed projects are associated with the City switching its water supply to Lake Michigan water. Although DWC is sizing the transmission main for future water needs, the submitted projects do not include increasing or changing the capacity of the Water Works System. Additionally, no secondary impacts have been identified and consultation with a Designated Water Quality Management Agency was determined to be not applicable for the proposed project.

7. PROJECT SCHEDULE

The United City of Yorkville is targeting to complete all improvements including the above projects to begin receiving Lake Michigan supply by the end of 2028.

Preliminary Engineering is completed for these projects and design is currently underway. Based on the anticipation of receiving IEPA SRF funding beginning July 2024 (or January 2025 if assuming bypass dollars), the general schedule for the projects is as follows. The schedule will be adapted as necessary to satisfy requirements related to securing the SRF funding allocation:

- 2025 Water Main Replacement: Design May 2024-Jan 2025, Bidding and Contracting Feb-Apr 2025, Construction May 2025-Apr 2026
- 2026 Water Main Replacement: Design May 2025-Jan 2026, Bidding and Contracting Feb-Apr 2026, Construction May 2026-Apr 2027
- North Receiving Station (including Delivery Station BPS, and Tank): Design Oct 2023-Jan 2025, Bidding and Contracting Aug-Oct 2024 and Jan-Apr 2025, Construction Nov 2024-Dec 2027
- South Receiving Station (including Delivery Station BPS, and Tank): Design Oct 2023-Jan 2025, Bidding and Contracting Aug-Oct 2024 and Jan-Apr 2025, Construction Nov 2024-Dec 2027

8. NEWSPAPER

The local newspaper is the Kendall County Record. The contact information for the newspaper is as follows:

Website: https://www.shawlocal.com/kendall-county-now/contact/

Email: news@kendallcountynow.com

Phone number: (833) 584-6397

Appendix A

Financial Analysis, Proposed Financial Management Plan, and Projected Average Monthly Residential Bills for the United City of Yorkville, IL

United City of Yorkville, IL

FY 2023 Financial Analysis

Assumptions & Results Workbook

Stantec

Prepared by Stantec Consulting Services Inc. on 8/22/2023

Assumptions

Schedule 1

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Rate Increase Adoption Date	5/1/2022	5/1/2023	5/1/2024	5/1/2025	5/1/2026	5/1/2027	5/1/2028	5/1/2029	5/1/2030	5/1/2031	5/1/2032
Annual Growth											
Water											
Ending # of Accounts	8,070	8,312	8,478	8,648	8,821	8,997	9,177	9,361	9,548	9,739	9,934
Account Growth	N/A	242	166	170	173	176	180	184	187	191	195
% Change in Accounts	*N/A*	*3.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*	*2.0%*
Operating Budget Reserve											
Target (Number of Months of Reserve)	3	3	3	3	3	3	3	3	3	3	3
Operating Budget Execution Percentage											
Personal Services	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Variable Operations and Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Fixed Operations and Maintenance	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Capital Outlay	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

FY 2023 Beginning Balances as of 5/1/2022 — Schedule 2

	Revenue Fund
Current Unrestricted Assets	
Cash and Cash Equivalents	$ 3,221,095
Account Receivables	856,715
Prepaid Items	23,245
Total Assets	**$ 4,101,055**
Current Liabilities	
Accounts Payable	$ (286,512)
Accrued Payroll	(17,984)
Other Payables	(5,363)
Calculated Fund Balance (Assets - Liabilities)	**$ 3,791,196**
Available Fund Balance	**$ 3,791,196**

Projection of Cash Inflows

Schedule 3

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
	Assumed Rate Revenue Increases											
1	Assumed Water Rate Increase	N/A	0.00%	8.00%	10.00%	11.00%	12.50%	12.50%	12.50%	12.50%	12.50%	12.50%
	Water Rate Revenue											
2	Rate Revenue - Water Sales	$ 3,900,000	$ 4,084,416	$ 4,499,265	$ 5,048,432	$ 5,715,861	$ 6,558,644	$ 7,526,094	$ 8,636,617	$ 9,910,289	$ 11,372,104	$ 13,049,778
3	**Total Water Rate Revenue**	**$ 3,900,000**	**$ 4,084,416**	**$ 4,499,265**	**$ 5,048,432**	**$ 5,715,861**	**$ 6,558,644**	**$ 7,526,094**	**$ 8,636,617**	**$ 9,910,289**	**$ 11,372,104**	**$ 13,049,778**
	Water Fund											
	Intergovernmental											
6	Dceo-General Infra Grant	$ 100,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	Places of Eating Tax	-	350,000	714,000	728,280	742,846	757,703	772,857	788,314	804,080	820,162	836,565
	Charges For Service											
8	Bulk Water Sales	-	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
9	Late Penalties - Water	164,000	168,920	172,298	175,744	179,259	182,844	186,501	190,231	194,036	197,917	201,875
10	Water Meter Sales	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
11	Water Infrastructure Fee	896,000	919,790	938,186	956,950	976,089	995,610	1,015,522	1,035,833	1,056,550	1,077,681	1,099,234
12	Water Connection Fee	595,000	300,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000
13	Recapture Fees	-	-	-	-	-	-	-	-	-	-	-
14	**Miscellaneous**											
15	Rental Income	$ 105,351	$ 108,134	$ 110,297	$ 112,503	$ 114,753	$ 117,048	$ 119,389	$ 121,776	$ 124,212	$ 126,696	$ 129,230
16	Miscellaneous Income	2,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
	Total Other Revenue	**$ 2,062,351**	**$ 1,952,844**	**$ 2,270,781**	**$ 2,309,476**	**$ 2,348,946**	**$ 2,389,205**	**$ 2,430,269**	**$ 2,472,154**	**$ 2,514,878**	**$ 2,558,455**	**$ 2,602,904**
	Transfers In											
17	Anticipated Grant Funding	$ -	$ 335,000	$ 265,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	Reimbursement from YBSD for Project WM11	-	48,500	503,500	-	-	-	-	-	-	-	-
19	Projected 2023 GO Bond Proceeds	-	10,011,500	-	-	-	-	-	-	-	-	-
20	Transfer From Cw Capital	104,209	104,627	104,034	55,366	54,738	54,948	55,087	55,157	55,157	55,087	54,948
21	Transfer From Sewer	73,650	74,125	74,125	-	-	-	-	-	-	-	-
20	**Total Transfers In**	**$ 177,859**	**$ 10,573,752**	**$ 946,659**	**$ 55,366**	**$ 54,738**	**$ 54,948**	**$ 55,087**	**$ 55,157**	**$ 55,157**	**$ 55,087**	**$ 54,948**
	Interest Income											
22	Unrestricted	$ 44,000	$ 13,314	$ 13,221	$ 14,006	$ 21,065	$ 25,705	$ 27,694	$ 30,717	$ 36,763	$ 46,196	$ 52,554
23	**Total Interest Income**	**$ 44,000**	**$ 13,314**	**$ 13,221**	**$ 14,006**	**$ 21,065**	**$ 25,705**	**$ 27,694**	**$ 30,717**	**$ 36,763**	**$ 46,196**	**$ 52,554**
24	**Total Cash Inflows**	**$ 6,184,210**	**$ 16,624,325**	**$ 7,729,926**	**$ 7,427,281**	**$ 8,140,610**	**$ 9,028,502**	**$ 10,039,144**	**$ 11,194,645**	**$ 12,517,087**	**$ 14,031,842**	**$ 15,760,184**

Projection of Cash Outflows **Schedule 4**

	Expense Line Item	Account Number	Escalation Factor*	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
	Water Fund													
	Personal Services													
1	Salaries & Wages	51-510-50-00-5010	5%	$ 510,785	$ 576,000	$ 593,280	$ 611,078	$ 629,410	$ 648,292	$ 680,707	$ 714,742	$ 750,479	$ 788,003	$ 827,403
2	Part-Time Salaries	51-510-50-00-5015	3%	-	15,000	15,000	15,000	15,000	15,000	15,450	15,914	16,391	16,883	17,389
3	Overtime	51-510-50-00-5020	3%	11,000	22,000	22,000	12,000	12,000	12,000	12,360	12,731	13,113	13,506	13,911
4	Retirement Plan Contribution	51-510-52-00-5212	5%	43,500	40,209	44,362	46,295	49,068	52,031	54,633	57,364	60,232	63,244	66,406
5	Fica Contribution	51-510-52-00-5214	5%	39,500	45,058	46,410	47,802	49,236	50,713	53,249	55,911	58,707	61,642	64,724
6	Group Health Insurance	51-510-52-00-5216	8%	148,855	174,548	196,855	212,603	229,611	247,980	267,818	289,244	312,383	337,374	364,364
7	Group Life Insurance	51-510-52-00-5222	3%	722	909	909	918	927	936	964	993	1,023	1,053	1,085
8	Dental Insurance	51-510-52-00-5223	5%	11,677	12,759	13,397	14,067	14,770	15,509	16,284	17,099	17,954	18,851	19,794
9	Vision Insurance	51-510-52-00-5224	3%	1,410	1,705	1,705	1,756	1,809	1,863	1,919	1,976	2,036	2,097	2,160
10	Unemployment Insurance	51-510-52-00-5230	3%	1,453	2,000	2,000	2,000	2,000	2,000	2,060	2,122	2,185	2,251	2,319
11	Liability Insurance	51-510-52-00-5231	6%	35,128	38,641	40,959	43,417	46,022	48,783	51,710	54,813	58,101	61,587	65,283
	Operations & Maintenance													
12	Administrative Chargeback	51-510-54-00-5401	3%	$ 133,075	$ 138,174	$ 142,319	$ 146,589	$ 150,987	$ 155,517	$ 160,183	$ 164,988	$ 169,938	$ 175,036	$ 180,287
13	Training & Conferences	51-510-54-00-5412	3%	3,000	9,200	9,200	9,200	9,200	9,200	9,476	9,760	10,053	10,355	10,665
14	Travel & Lodging	51-510-54-00-5415	3%	2,000	4,000	4,000	4,000	4,000	4,000	4,120	4,244	4,371	4,502	4,637
15	Computer Replacement Chrgbck	51-510-54-00-5424	3%	10,967	1,112	-	11,635	1,215	-	-	-	-	-	-
16	Publishing & Advertising	51-510-54-00-5426	3%	500	500	500	500	500	500	515	530	546	563	580
17	Water Samples	51-510-54-00-5429	3%	8,000	8,500	8,500	10,000	8,500	8,500	8,755	9,018	9,288	9,567	9,854
18	Printing & Duplicating	51-510-54-00-5430	3%	3,250	3,250	3,250	3,250	3,250	3,250	3,348	3,448	3,551	3,658	3,768
19	Telecommunications	51-510-54-00-5440	3%	50,000	50,000	50,000	50,000	50,000	50,000	51,500	53,045	54,636	56,275	57,964
20	Treatment Facility Services	51-510-54-00-5445	3%	335,000	360,000	260,000	260,000	260,000	260,000	267,800	275,834	284,109	292,632	301,411
21	Filing Fees	51-510-54-00-5448	3%	1,100	2,500	2,500	2,500	2,500	2,500	2,575	2,652	2,732	2,814	2,898
22	Postage & Shipping	51-510-54-00-5452	3%	24,000	25,000	25,000	25,000	25,000	25,000	25,750	26,523	27,318	28,138	28,982
23	Building & Grounds Chrgbck	51-510-54-00-5453	3%	19,316	27,290	24,969	26,033	27,084	27,543	28,369	29,220	30,097	31,000	31,930
24	Dues & Subscriptions	51-510-54-00-5460	3%	2,500	2,500	2,500	2,500	2,500	2,500	2,575	2,652	2,732	2,814	2,898
25	Professional Services	51-510-54-00-5462	3%	125,000	160,000	148,750	97,500	92,500	97,500	100,425	103,438	106,541	109,737	113,029
26	Engineering Services	51-510-54-00-5465	3%	35,000	137,500	89,000	93,000	97,000	101,000	104,030	107,151	110,365	113,676	117,087
27	Utilities	51-510-54-00-5480	3%	318,526	337,638	357,896	379,370	402,132	426,260	439,048	452,219	465,786	479,759	494,152
28	Julie Services	51-510-54-00-5483	3%	4,500	4,500	4,500	4,500	4,500	4,500	4,635	4,774	4,917	5,065	5,217
29	Rental & Lease Purchase	51-510-54-00-5485	3%	2,000	2,500	2,500	2,500	2,500	2,500	2,575	2,652	2,732	2,814	2,898
30	Office Cleaning	51-510-54-00-5488	3%	1,395	1,465	1,509	1,554	1,601	1,649	1,698	1,749	1,802	1,856	1,912
31	Vehicle Maintenance Services	51-510-54-00-5490	3%	12,000	12,000	12,000	12,000	6,000	6,000	6,180	6,365	6,556	6,753	6,956
32	Outside Repair & Maintenance	51-510-54-00-5495	3%	10,000	10,000	10,000	10,000	10,000	10,000	10,300	10,609	10,927	11,255	11,593
33	Paying Agent Fees	51-510-54-00-5498	3%	1,000	900	15,900	15,400	15,400	15,400	15,862	16,338	16,828	17,333	17,853
34	Bad Debt	51-510-54-00-5499	3%	5,000	5,000	5,000	5,000	5,000	5,000	5,150	5,305	5,464	5,628	5,796
35	Wearing Apparel	51-510-56-00-5600	3%	9,000	9,000	9,000	9,000	9,000	9,000	9,270	9,548	9,835	10,130	10,433
36	Operating Supplies	51-510-56-00-5620	3%	11,000	17,000	16,000	16,000	16,000	16,000	16,480	16,974	17,484	18,008	18,548
37	Vehicle Maintenance Supplies	51-510-56-00-5628	3%	2,500	2,500	2,500	2,500	2,500	2,500	2,575	2,652	2,732	2,814	2,898
38	Small Tools & Equipment	51-510-56-00-5630	3%	4,000	4,000	4,000	4,000	4,000	4,000	4,120	4,244	4,371	4,502	4,637
39	Treatment Facility Supplies	51-510-56-00-5638	3%	190,000	199,500	209,475	219,949	230,946	242,493	249,768	257,261	264,979	272,928	281,116
40	Repair & Maintenance	51-510-56-00-5640	3%	27,500	27,500	27,500	27,500	27,500	27,500	28,325	29,175	30,050	30,951	31,880
41	Meters & Parts	51-510-56-00-5664	3%	185,000	175,000	150,000	150,000	150,000	150,000	154,500	159,135	163,909	168,826	173,891
42	Julie Supplies	51-510-56-00-5665	3%	3,000	3,000	3,000	3,000	3,000	3,000	3,090	3,183	3,278	3,377	3,478
43	Gasoline	51-510-56-00-5695	3%	30,000	32,100	34,347	36,751	39,324	42,077	43,339	44,639	45,979	47,358	48,779
44	Lake Michigan Purchased Water		3%	-	-	-	-	-	3,222,400	3,319,072	3,418,644	3,521,203	3,626,840	3,735,645

Projection of Cash Outflows **Schedule 4**

	Expense Line Item	Account Number	Escalation Factor*	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
45	Debt - No Water Pledge			439,328	441,093	438,593	233,416	230,769	231,651	232,239	232,533	232,533	232,239	231,651
	Capital Outlay - 2023													
46	Water Tower Rehabilitation	51-510-60-00-6015		$ 212,708	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
47	Well Rehabilitations	51-510-60-00-6022		538,734	-	-	-	-	-	-	-	-	-	-
48	Water Main Replacement Program	51-510-60-00-6025		1,334,294	-	-	-	-	-	-	-	-	-	-
49	Well 10 & Raw Main	51-510-60-00-6029		25,000	-	-	-	-	-	-	-	-	-	-
50	Equipment	51-510-60-00-6060		10,940	-	-	-	-	-	-	-	-	-	-
51	Beaver Street Booster Station	51-510-60-00-6065		109,099	-	-	-	-	-	-	-	-	-	-
52	Vehicles	51-510-60-00-6070		185,953	-	-	-	-	-	-	-	-	-	-
53	Route 47 Expansion	51-510-60-00-6079		18,905	-	-	-	-	-	-	-	-	-	-
54	Cation Exchange Media Replacement	51-510-60-00-6081		2,108	-	-	-	-	-	-	-	-	-	-
55	Water Sourcing - DWC	51-510-60-00-6011		181,290										
56	**Total Water Fund**			**$ 5,612,808**	**$ 3,143,051**	**$ 3,051,085**	**$ 2,881,083**	**$ 2,944,261**	**$ 6,264,047**	**$ 6,474,800**	**$ 6,693,411**	**$ 6,920,246**	**$ 7,155,693**	**$ 7,400,160**
	Total Expenses by Category													
57	Personal Services			$ 804,030	$ 928,829	$ 976,877	$ 1,006,936	$ 1,049,853	$ 1,095,107	$ 1,157,154	$ 1,222,908	$ 1,292,604	$ 1,366,492	$ 1,444,838
58	1 Operations & Maintenance			2,008,457	2,214,222	2,074,208	1,874,147	1,894,408	5,168,940	5,317,647	5,470,503	5,627,642	5,789,201	5,955,322
59	Capital Outlay			2,619,031	-	-	-	-	-	-	-	-	-	-
60	**Total Expenses**			**$ 5,431,518**	**$ 3,143,051**	**$ 3,051,085**	**$ 2,881,083**	**$ 2,944,261**	**$ 6,264,047**	**$ 6,474,800**	**$ 6,693,411**	**$ 6,920,246**	**$ 7,155,693**	**$ 7,400,160**
	Debt Service													
61	General Obligation Alternate Revenue Source Refunding Bond of 2014C			$ 147,300	$ 148,250	$ 139,050	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
62	IEPA (L17 - 156300) Loan Payable of 2007			125,030	125,030	125,030	125,030	62,516	-	-	-	-	-	-
63	GO ARS Bond 2023			-	185,758	601,844	609,344	606,094	607,594	608,594	609,094	609,094	608,594	607,594
64	WIFIA			-	-	-	-	-	-	-	-	-	-	5,218,456
65	Future Revenue Bond			-	-	-	-	-	-	-	-	-	-	-
66	Future IEPA			-	-	-	-	241,711	656,516	1,003,154	1,452,768	1,452,767	1,452,769	1,452,769
67	**Total Debt Service**			**$ 272,330**	**$ 459,038**	**$ 865,924**	**$ 734,374**	**$ 910,321**	**$ 1,264,109**	**$ 1,611,748**	**$ 2,061,861**	**$ 2,061,861**	**$ 2,061,362**	**$ 7,278,819**
	Cash-Funded Capital													
68	**Total Cash-Funded Capital**			**$ -**	**$ 10,531,025**	**$ 5,226,500**	**$ 1,001,000**	**$ 1,450,200**	**$ 624,200**	**$ 1,237,080**	**$ 737,046**	**$ 400,102**	**$ 403,249**	**$ 406,490**
69	**Total Cash Outflows**			**$ 5,703,848**	**$ 14,133,114**	**$ 9,143,509**	**$ 4,616,457**	**$ 5,304,782**	**$ 8,152,356**	**$ 9,323,628**	**$ 9,492,318**	**$ 9,382,209**	**$ 9,620,304**	**$ 15,085,469**

*Expenses are City budget based FY23-28, then escalation factors are used

1 Includes some debt service for non-pledged water revenues

Capital Improvement Program (CIP) **Schedule 5A**

	Project Number		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	Long-Term	Total Cost
		Lake Michigan												
1	LM01	AWSS - IDNR Allocation	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ 50,000
2	LM02	AWSS - Preliminary Engineering	150,000	-	-	-	-	-	-	-	-	-		$ 150,000
3	LM03	Annual Water Audit / Non-Revenue Water Reduction Plan	40,000	42,000	44,000	46,000	48,000	49,440	50,923	52,451	54,024	55,645		$ 482,484
4	LM04	Annual Leak Detection	40,000	42,000	44,000	46,000	48,000	49,440	50,923	52,451	54,024	55,645		$ 482,484
5	LM05	Meter Retrofit Program	700,000	500,000	500,000	500,000	-	-	-	-	-	-		$ 2,200,000
6	LM06	AWSS - Corrosion Control Study / Source Water Transfer Plan	335,000	345,000	178,000	-	-	-	-	-	-	-		$ 858,000
7	LM07	DWC Water Transmission Mains	801,000	31,589,000	29,135,000	27,821,000	-	-	-	-	-	-		$ 89,346,000
8	LM08	DWC Buy-In Costs	-	-	-	-	295,200	295,200	295,200	295,200	295,200	295,200	7,084,800	$ 8,856,000
9	LM09	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	-	151,000	203,000	2,117,000	2,182,000	-	-	-	-	-		$ 4,653,000
10	LM10	North Receiving Station Ground Storage Tank (2.0 MG)	200,000	2,183,000	2,058,000	1,058,000	-	-	-	-	-	-		$ 5,499,000
11	LM11	South Delivery Station and Receiving Station (BPS)	-	142,000	189,000	1,958,000	2,017,000	-	-	-	-	-		$ 4,306,000
12	LM12	South Receiving Station Ground Storage Tank (2.0 MG)	300,000	2,182,000	2,058,000	1,058,000	-	-	-	-	-	-		$ 5,598,000
13	LM13	Blue Stem Drive Water Main Improvements	34,000	413,000	-	-	-	-	-	-	-	-		$ 447,000
14	LM14	Water Treatment Plant Decommissioning	-	-	-	19,000	233,000	453,000	-	-	-	-		$ 705,000
15	LM15	Bi-Directional Flow Meters - BPS's and PRV's	-	-	25,000	115,000	-	-	-	-	-	-		$ 140,000
16	LM16	Montgomery Interconnect	-	-	80,000	825,000	-	-	-	-	-	-		$ 905,000
		Other Capital Projects												
17	WM01	Well 10 & Raw Main	3,554,000	3,114,000	-	-	-	-	-	-	-	-		$ 6,668,000
18	WM02	Well No. 7 Rehabilitation	53,500	-	-	-	-	-	-	-	-	-		$ 53,500
19	WM03	Well No. 7 Standby Generator	35,000	1,245,000	-	-	-	-	-	-	-	-		$ 1,280,000
20	WM06	South Central EWST Rehabilitation	45,000	945,000	-	-	-	-	-	-	-	-		$ 990,000
21	WM07	North Central EWST Re-Paint	700,000	-	-	-	-	-	-	-	-	-		$ 700,000
22	WM08	E. Main Street Water Main Replacement	17,000	-	-	-	-	-	-	-	-	-		$ 17,000
23	WM09	2023 Water Main Replacement	3,343,500	-	-	-	-	-	-	-	-	-		$ 3,343,500
24	WM10	2024 Water Main Replacement	377,000	4,144,500	-	-	-	-	-	-	-	-		$ 4,521,500
25	WM11	W. Center and YBSD Water Main	97,000	1,007,000	-	-	-	-	-	-	-	-		$ 1,104,000
26	WM12	2025 Water Main Replacement	-	303,000	3,340,500	-	-	-	-	-	-	-		$ 3,643,500
27	WM13	2026 Water Main Replacement	-	-	210,000	2,317,500	-	-	-	-	-	-		$ 2,527,500
28	WM14	2027 Water Main Replacement	-	-	-	230,000	2,517,500	-	-	-	-	-		$ 2,747,500
29	WM15	Rt 34 Water Main Improvements (East)	23,000	-	-	-	-	-	-	-	-	-		$ 23,000
30	WM16	Rt 71 Water Main Replacement - Phase 1 (East)	12,025	-	-	-	-	-	-	-	-	-		$ 12,025
31	WM17	Rt 71 Water Main Replacement - Phase 2 (West)	-	-	-	-	-	340,000	340,000	-	-	-		$ 680,000
32	WM18	Rate Study	-	-	-	-	-	50,000	-	-	-	-		$ 50,000
33	WM19	Source Water Assessment Protection Program	7,500	-	-	-	-	-	-	-	-	-		$ 7,500
			-	-	-	-	-	-	-	-	-	-		$ -
34		**Total CIP Budget (in current dollars)**	**$ 10,914,525**	**$ 48,347,500**	**$ 38,064,500**	**$ 38,110,500**	**$ 7,340,700**	**$ 1,237,080**	**$ 737,046**	**$ 400,102**	**$ 403,249**	**$ 406,490**	**$ 7,084,800**	**$ 153,046,492**
		Cumulative Projected Cost Escalation[1]	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
		Resulting CIP Funding Level	**$ 10,914,525**	**$ 48,347,500**	**$ 38,064,500**	**$ 38,110,500**	**$ 7,340,700**	**$ 1,237,080**	**$ 737,046**	**$ 400,102**	**$ 403,249**	**$ 406,490**	**$ 7,084,800**	**$ 153,046,492**
35		Annual CIP Execution Percentage	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
36		**Final CIP Funding Level**	**$ 10,914,525**	**$ 48,347,500**	**$ 38,064,500**	**$ 38,110,500**	**$ 7,340,700**	**$ 1,237,080**	**$ 737,046**	**$ 400,102**	**$ 403,249**	**$ 406,490**	**$ 7,084,800**	**$ 153,046,492**

Capital Improvement Program (CIP) **Schedule 5A**

	Project Number		FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	Long-Term	Total Cost
		Sources of Funds												
37		Grants & Reimbursements	$ 383,500	$ 768,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -		$ 1,152,000
38		Revenue Bonds	10,011,500	-	-	-	-	-	-	-	-	-		$ 10,011,500
39		WIFIA	-	37,694,500	29,215,000	29,554,600	2,517,500	-	-	-	-	-		$ 98,981,600
40		IEPA - SRF	-	4,658,000	7,848,500	7,105,700	4,199,000	-	-	-	-	-		$ 23,811,200
41		Cash	519,525	5,226,500	1,001,000	1,450,200	624,200	1,237,080	737,046	400,102	403,249	406,490	7,084,800	$ 19,090,192
42		**Total CIP Budget (in current dollars)**	**$ 10,914,525**	**$ 48,347,500**	**$ 38,064,500**	**$ 38,110,500**	**$ 7,340,700**	**$ 1,237,080**	**$ 737,046**	**$ 400,102**	**$ 403,249**	**$ 406,490**	**$ 7,084,800**	**$ 153,046,492**

CIP Detailed Funding Summary

Schedule 5B

Project Number		Total Cost (Future Dollars)	Grants/Reimbursement	Revenue Fund	Revenue Bond	WIFIA	IEPA - SRF
	Lake Michigan						
LM01	AWSS - IDNR Allocation	$ 50,000	$ -	$ 50,000	$ -	$ -	$ -
LM02	AWSS - Preliminary Engineering	150,000	-	150,000	-	-	-
LM03	Annual Water Audit / Non-Revenue Water Reduction Plan	482,484	-	482,484	-	-	-
LM04	Annual Leak Detection	482,484	-	482,484	-	-	-
LM05	Meter Retrofit Program	2,200,000	-	2,200,000	-	-	-
LM06	AWSS - Corrosion Control Study / Source Water Transfer Plan	858,000	600,000	258,000	-	-	-
LM07	DWC Water Transmission Mains*	89,346,000	-	801,000	-	88,545,000	-
LM08	DWC Buy-In Costs [1]	8,856,000	-	8,856,000	-	-	-
LM09	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve*	4,653,000	-	-	-	-	4,653,000
LM10	North Receiving Station Ground Storage Tank (2.0 MG)*	5,499,000	-	200,000	-	-	5,299,000
LM11	South Delivery Station and Receiving Station (BPS)*	4,306,000	-	-	-	-	4,306,000
LM12	South Receiving Station Ground Storage Tank (2.0 MG)*	5,598,000	-	300,000	-	-	5,298,000
LM13	Blue Stem Drive Water Main Improvements*	447,000	-	34,000	-	413,000	-
LM14	Water Treatment Plant Decommissioning	705,000	-	705,000	-	-	-
LM15	Bi-Directional Flow Meters - BPS's and PRV's	140,000	-	140,000	-	-	-
LM16	Montgomery Interconnect*	905,000	-	-	-	905,000	-

CIP Detailed Funding Summary

Schedule 5B

Project Number		Total Cost (Future Dollars)	Grants/Reimbursement	Revenue Fund	Revenue Bond	WIFIA	IEPA - SRF
	Other Capital Projects				-		
WM01	Well 10 & Raw Main	6,668,000	-	-	6,668,000	-	-
WM02	Well No. 7 Rehabilitation	53,500	-	53,500	-	-	-
WM03	Well No. 7 Standby Generator*	1,280,000	-	35,000	-	1,245,000	-
WM04	WTP No. 7 Cation Exchange Media Replacement	-	-	-	-	-	-
WM05	WTP No. 4 Cation Exchange Media Replacement	-	-	-	-	-	-
WM06	South Central EWST Rehabilitation	990,000	-	990,000	-	-	-
WM07	North Central EWST Re-Paint	700,000	-	700,000	-	-	-
WM08	E. Main Street Water Main Replacement	17,000	-	17,000	-	-	-
WM09	2023 Water Main Replacement	3,343,500	-	-	3,343,500	-	-
WM10	2024 Water Main Replacement*	4,521,500	-	377,000	-	4,144,500	-
WM11	W. Center and YBSD Water Main	1,104,000	552,000	552,000	-	-	-
WM12	2025 Water Main Replacement*	3,643,500	-	-	-	303,000	3,340,500
WM13	2026 Water Main Replacement*	2,527,500	-	934,200	-	678,600	914,700
WM14	2027 Water Main Replacement*	2,747,500	-	-	-	2,747,500	-
WM15	Rt 34 Water Main Improvements (East)	23,000	-	23,000	-	-	-
WM16	Rt 71 Water Main Replacement - Phase 1 (East)	12,025	-	12,025	-	-	-
WM17	Rt 71 Water Main Replacement - Phase 2 (West)	680,000	-	680,000	-	-	-
WM18	Rate Study	50,000	-	50,000	-	-	-
WM19	Source Water Assessment Protection Program	7,500	-	7,500	-	-	-
WX01	Unspecified Future Capital Spend	-	-	-	-	-	-
	Total CIP Budget (in Future Dollars)	**$ 153,046,492**	**$ 1,152,000**	**$ 19,090,192**	**$ 10,011,500**	**$ 98,981,600**	**$ 23,811,200**

Sources and Uses Federalized Projects (excluding 2024 costs)	Total Cost (Future Dollars)	Grants/Reimbursement	Revenue Fund	Revenue Bond	WIFIA	IEPA - SRF
	$ 125,474,000	**$ -**	**$ 2,681,200**	**$ -**	**$ 98,981,600**	**$ 23,811,200**

* Indicates federalized project

1. Total DWC buy-in costs financed over 30 years

Funding Summary by Fund **Schedule 7**

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Revenue Fund											
Beginning Water Fund Balance Equivalent	$ 3,791,196	$ 4,271,558	$ 6,379,269	$ 4,197,186	$ 7,008,011	$ 9,843,839	$ 10,719,984	$ 11,435,501	$ 13,137,827	$ 16,272,706	$ 20,684,243
Net Cash Flow	480,362	12,638,736	3,044,417	3,811,825	4,286,028	1,500,346	1,952,596	2,439,373	3,534,980	4,814,787	1,081,206
Subtotal	$ 4,271,558	$ 16,910,294	$ 9,423,686	$ 7,799,011	$ 10,569,839	$ 11,048,984	$ 12,377,381	$ 13,579,673	$ 16,377,607	$ 20,792,292	$ 21,470,249
Less: Restricted Funds	(593,290)	(675,490)	(653,123)	(661,917)	(678,373)	(1,508,099)	(1,560,640)	(1,615,219)	(1,671,928)	(1,730,864)	(1,792,127)
Total Amount Available For Projects	$ 3,678,268	$ 16,234,805	$ 8,770,563	$ 7,137,094	$ 9,891,466	$ 9,540,885	$ 10,816,740	$ 11,964,454	$ 14,705,679	$ 19,061,429	$ 19,678,122
Amount Paid For Projects	-	(10,531,025)	(5,226,500)	(791,000)	(726,000)	(329,000)	(941,880)	(441,846)	(104,902)	(108,049)	(111,290)
Subtotal	$ 3,678,268	$ 5,703,780	$ 3,544,063	$ 6,346,094	$ 9,165,466	$ 9,211,885	$ 9,874,860	$ 11,522,608	$ 14,600,777	$ 18,953,380	$ 19,566,831
Add Back: Restricted Funds	593,290	675,490	653,123	661,917	678,373	1,508,099	1,560,640	1,615,219	1,671,928	1,730,864	1,792,127
Plus: Interest Earnings	10,078	13,314	13,221	14,006	21,065	25,705	27,694	30,717	36,763	46,196	52,554
Less: Interest Allocated To Cash Flow	(10,078)	(13,314)	(13,221)	(14,006)	(21,065)	(25,705)	(27,694)	(30,717)	(36,763)	(46,196)	(52,554)
Balance At End Of Fiscal Year	**$ 4,271,558**	**$ 6,379,269**	**$ 4,197,186**	**$ 7,008,011**	**$ 9,843,839**	**$ 10,719,984**	**$ 11,435,501**	**$ 13,137,827**	**$ 16,272,706**	**$ 20,684,243**	**$ 21,358,959**

Senior Lien Borrowing Projections

Schedule 8

			FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Term (Years)			30	30	30	30	30	30	30	30	30	30	30
Interest Rate			4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%
Sources of Funds													
Par Amount			$ 10,011,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Uses of Funds													
Proceeds			$ 10,011,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cost of Issuance	0.00%	of Par	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve	0	Year(s) of Debt Service	-	-	-	-	-	-	-	-	-	-	-
Total Uses			$ 10,011,500	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1 Year Interest			-	-	-	-	-	-	-	-	-	-	-
Annual Debt Service			$ -	$ 185,758	$ 601,844	$ 609,344	$ 606,094	$ 607,594	$ 608,594	$ 609,094	$ 609,094	$ 608,594	$ 607,594
Total Debt Service			-	185,758	601,844	609,344	606,094	607,594	608,594	609,094	609,094	608,594	607,594
Annual Senior Lien Debt Service			**$ -**	**$ 185,758**	**$ 601,844**	**$ 609,344**	**$ 606,094**	**$ 607,594**	**$ 608,594**	**$ 609,094**	**$ 609,094**	**$ 608,594**	**$ 607,594**

WIFIA Borrowing Projections

Schedule 9

			FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Term (Years)			35	35	35	35	35	35	35	35	35	35	35
Interest Rate			3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%
Sources of Funds													
Par Amount			$ -	$ -	$ 39,946,379	$ 30,960,312	$ 31,320,199	$ 2,667,896	$ -	$ -	$ -	$ -	$ -
Uses of Funds													
Proceeds			$ -	$ -	$ 37,694,500	$ 29,215,000	$ 29,554,600	$ 2,517,500	$ -	$ -	$ -	$ -	$ -
Cost of Issuance	0.00%	of Par	-	-	-	-	-	-	-	-	-	-	-
Loan Repayment Res.	0.00%	of Capital Cost	-	-	-	-	-	-	-	-	-	-	-
Loan Service Fee	2.00%	of Capital Cost	-	-	753,890	584,300	591,092	50,350	-	-	-	-	-
Capitalized Interest	1	Years Interest	-	-	1,497,989	1,161,012	1,174,507	100,046	-	-	-	-	-
Debt Service Reserve	0	Year(s) of Debt Service	-	-	-	-	-	-	-	-	-	-	-
Other Costs			-	-	-	-	-	-	-	-	-	-	-
Total Uses			$ -	$ -	$ 39,946,379	$ 30,960,312	$ 31,320,199	$ 2,667,896	$ -	$ -	$ -	$ -	$ -
Annual Subordinate Debt Service			**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 5,218,456**

IEPA Borrowing Projections

Schedule 9

			FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
Term (Years)			20	20	20	20	20	20	20	20	20	20	20
Interest Rate			1.75%	1.75%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Sources of Funds													
Par Amount			$ -	$ -	$ 4,751,160	$ 8,005,470	$ 7,247,814	$ 4,282,980	$ -	$ -	$ -	$ -	$ -
Uses of Funds													
Proceeds			$ -	$ -	$ 4,658,000	$ 7,848,500	$ 7,105,700	$ 4,199,000	$ -	$ -	$ -	$ -	$ -
Cost of Issuance	0.00%	of Par	-	-	-	-	-	-	-	-	-	-	-
Loan Repayment Res.	0.00%	of Capital Cost	-	-	-	-	-	-	-	-	-	-	-
Loan Service Fee	2.00%	of Capital Cost	-	-	93,160	156,970	142,114	83,980	-	-	-	-	-
Capitalized Interest	0	Years Interest	-	-	-	-	-	-	-	-	-	-	-
Debt Service Reserve	0	Year(s) of Debt Service	-	-	-	-	-	-	-	-	-	-	-
Other Costs			-	-	-	-	-	-	-	-	-	-	-
Total Uses			$ -	$ -	$ 4,751,160	$ 8,005,470	$ 7,247,814	$ 4,282,980	$ -	$ -	$ -	$ -	$ -
Annual SRF Debt Service			**$ -**	**$ -**	**$ -**	**$ -**	**$ 241,711**	**$ 656,516**	**$ 1,003,154**	**$ 1,452,768**	**$ 1,452,767**	**$ 1,452,769**	**$ 1,452,769**

Bi-Monthly Residential Water Bill - FY 2023 Rates

	Residential Bill at 1,470 cubic feet (CF) *1*
Usage 0-350 CF	350
Rate per CF	$0.00
Volume Charge 0-350 CF	$0.00
Usage over 350 CF	1,120
Rate per CF over 350 CF	$0.048
Volume Charge over 350 CF	$53.76
Total Volumetric Charge	$53.76
Base Charge	$24.00
Water Infrastructure Fee	$16.50
Total Bill	$94.26

	Residential Bill at 1,470 CF	Total Bill/CF 2
FY 2023	$94.26	$0.06
FY 2024	$94.26	$0.06
FY 2025	$100.44	$0.07
FY 2026	$108.85	$0.07
FY 2027	$119.05	$0.08
FY 2028	$131.85	$0.09
FY 2029	$146.27	$0.10
FY 2030	$162.48	$0.11
FY 2031	$180.77	$0.12
FY 2032	$201.33	$0.14
FY 2033	$224.48	$0.15
FY 2035	$278.76	$0.19
FY 2040	$303.30	$0.21
FY 2045	$333.15	$0.23
FY 2050	$359.25	$0.24
FY 2055	$359.25	$0.24
FY 2060	$453.94	$0.31

1. 1,470 CF is average use for a residential user

2. Price paid per CF used, includes base charge and infrastructure fee

Financial Pro Forma - Water Fund

				FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033
1	**Income Statement Items**													
2	**Rate Revenue Subject to Growth & Rate Adjustments**													
3	**WATER**													
4	Water Rate Revenue			$ 3,900,000	$ 3,965,500	$ 4,084,416	$ 4,499,265	$ 5,048,432	$ 5,715,861	$ 6,558,644	$ 7,526,094	$ 8,636,617	$ 9,910,289	$ 11,372,104
5	Additional Rate Revenue From Growth			-	118,916	81,570	90,219	100,992	114,045	131,217	150,899	172,529	198,247	227,699
6	Water Rate Adjustments (Weighted Avg.)			*0.00%*	*0.00%*	*8.00%*	*10.00%*	*11.00%*	*12.50%*	*12.50%*	*12.50%*	*12.50%*	*12.50%*	*12.50%*
7	Additional Rate Revenue From Rate Adjustment			-	-	333,279	458,948	566,437	728,738	836,233	959,624	1,101,143	1,263,567	1,449,975
8	Revenue Adjustment			-	-	-	-	-	-	-	-	-	-	-
9	**Total Water Rate Revenues**			**3,900,000**	**4,084,416**	**4,499,265**	**5,048,432**	**5,715,861**	**6,558,644**	**7,526,094**	**8,636,617**	**9,910,289**	**11,372,104**	**13,049,778**
10	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**3,900,000**	**4,084,416**	**4,499,265**	**5,048,432**	**5,715,861**	**6,558,644**	**7,526,094**	**8,636,617**	**9,910,289**	**11,372,104**	**13,049,778**
11	**Plus: Other Operating Revenues**													
12	Other Operating Revenues			2,032,859	1,672,462	1,623,643	1,523,060	1,545,086	1,568,403	1,592,111	1,616,221	1,640,743	1,665,684	1,691,057
13	**Equals: Total Operating Revenue**			**5,932,859**	**5,756,878**	**6,122,908**	**6,571,492**	**7,260,947**	**8,127,047**	**9,118,204**	**10,252,838**	**11,551,032**	**13,037,788**	**14,740,835**
14	**Plus: Non-Operating Revenues/(Expense)**													
15	Non-Operating Revenue			$ 207,351	$ 459,134	$ 825,297	$ 841,783	$ 858,598	$ 875,750	$ 893,245	$ 911,090	$ 929,292	$ 947,858	$ 966,795
16	Bond Proceeds			-	10,011,500	-	-	-	-	-	-	-	-	-
17	Interest Income			$ 44,000	$ 13,314	$ 13,221	$ 14,006	$ 21,065	$ 25,705	$ 27,694	$ 30,717	$ 36,763	$ 46,196	$ 52,554
18	**Equals: Total Non-Operating Revenues**			**251,351**	**10,483,948**	**838,517**	**855,789**	**879,663**	**901,455**	**920,940**	**941,807**	**966,055**	**994,054**	**1,019,349**
19	**Less: Revenues Excluded From Coverage Test**													
20	Bond Proceeds			-	(10,011,500)	-	-	-	-	-	-	-	-	-
21	Other Excluded Revenues			-	-	-	-	-	-	-	-	-	-	-
22	**Total Excluded Revenues**			**-**	**(10,011,500)**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
23	**Less: Operating Expenses**													
24	Personal Services			$ (804,030)	$ (928,829)	$ (976,877)	$ (1,006,936)	$ (1,049,853)	$ (1,095,107)	$ (1,157,154)	$ (1,222,908)	$ (1,292,604)	$ (1,366,492)	$ (1,444,838)
25	Fixed O&M Expenses			(1,569,129)	(1,773,129)	(1,635,615)	(1,640,731)	(1,663,639)	(4,937,289)	(5,085,408)	(5,237,970)	(5,395,109)	(5,556,962)	(5,723,671)
26	**Total Expenses**			**(2,373,159)**	**(2,701,958)**	**(2,612,492)**	**(2,647,667)**	**(2,713,492)**	**(6,032,396)**	**(6,242,561)**	**(6,460,878)**	**(6,687,713)**	**(6,923,454)**	**(7,168,509)**
27	**Equals: Net Income Available For Debt Service**			**$ 3,811,051**	**$ 3,527,367**	**$ 4,348,934**	**$ 4,779,614**	**$ 5,427,118**	**$ 2,996,106**	**$ 3,796,583**	**$ 4,733,767**	**$ 5,829,374**	**$ 7,108,388**	**$ 8,591,676**
28	**Cash Flow Statement Items**													
29	Net Income Available For Debt Service			$ 3,811,051	$ 3,527,367	$ 4,348,934	$ 4,779,614	$ 5,427,118	$ 2,996,106	$ 3,796,583	$ 4,733,767	$ 5,829,374	$ 7,108,388	$ 8,591,676
30	Total Debt Service			(272,330)	(459,038)	(865,924)	(734,374)	(910,321)	(1,264,109)	(1,611,748)	(2,061,861)	(2,061,861)	(2,061,362)	(7,278,819)
31	Funds from Operations (FFO)			3,538,721	3,068,329	3,483,010	4,045,241	4,516,797	1,731,997	2,184,835	2,671,906	3,767,513	5,047,026	1,312,857
32	Projects Designated to be Paid with Cash			-	-	-	(210,000)	(724,200)	(295,200)	(295,200)	(295,200)	(295,200)	(295,200)	(295,200)
33	Other Below the Line Expenses			(439,328)	(441,093)	(438,593)	(233,416)	(230,769)	(231,651)	(232,239)	(232,533)	(232,533)	(232,239)	(231,651)
34	Capital Outlay			(2,619,031)	-	-	-	-	-	-	-	-	-	-
35	**Free Cash Flow (FCF)**			**480,362**	**2,627,236**	**3,044,417**	**3,601,825**	**3,561,828**	**1,205,146**	**1,657,396**	**2,144,173**	**3,239,780**	**4,519,587**	**786,006**
36	**Calculation of Debt Service Coverage**													
37	Existing Debt Service			272,330	273,280	264,080	125,030	62,516	-	-	-	-	-	-
38	GO ARS Bond 2023			-	185,758	601,844	609,344	606,094	607,594	608,594	609,094	609,094	608,594	607,594
39	WIFIA			-	-	-	-	-	-	-	-	-	-	5,218,456
40	Revenue Bonds in Support of WIFIA Loan			-	-	-	-	-	-	-	-	-	-	-
	IEPA			-	-	-	-	241,711	656,516	1,003,154	1,452,768	1,452,767	1,452,769	1,452,769
41	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-	-
42	**Total Debt Service**			**272,330**	**459,038**	**865,924**	**734,374**	**910,321**	**1,264,109**	**1,611,748**	**2,061,861**	**2,061,861**	**2,061,362**	**7,278,819**
43	**Calculated All In Debt Service Coverage**	1.25	Req.	**13.99**	**7.68**	**5.02**	**6.51**	**5.96**	**2.37**	**2.36**	**2.30**	**2.83**	**3.45**	**1.18**
44	**Calculated Senior Debt Service Coverage**	1.25	Req.	**13.99**	**7.68**	**5.02**	**6.51**	**8.12**	**4.93**	**6.24**	**7.77**	**9.57**	**11.68**	**14.14**
45	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.25**
	Unrestricted Working Capital Reserve Fund Test													
46	Balance At Beginning Of Fiscal Year			$ 3,791,196	$ 4,271,558	$ 6,379,269	$ 4,197,186	$ 7,008,011	$ 9,843,839	$ 10,719,984	$ 11,435,501	$ 13,137,827	$ 16,272,706	$ 20,684,243
47	Cash Flow Surplus/Deficit			480,362	2,627,236	3,044,417	3,601,825	3,561,828	1,205,146	1,657,396	2,144,173	3,239,780	4,519,587	786,006
48	Add Back: Bond Proceeds			-	10,011,500	-	-	-	-	-	-	-	-	-
49	Reserve Fund Balance Used For Cash Flow Deficit			-	-	-	-	-	-	-	-	-	-	-
50	Projects Paid with Operating Reserve Balance			-	(10,531,025)	(5,226,500)	(791,000)	(726,000)	(329,000)	(941,880)	(441,846)	(104,902)	(108,049)	(111,290)
51	**Balance At End Of Fiscal Year**			**$ 4,271,558**	**$ 6,379,269**	**$ 4,197,186**	**$ 7,008,011**	**$ 9,843,839**	**$ 10,719,984**	**$ 11,435,501**	**$ 13,137,827**	**$ 16,272,706**	**$ 20,684,243**	**$ 21,358,959**
52	Minimum Working Capital Reserve Target			593,290	675,490	653,123	661,917	678,373	1,508,099	1,560,640	1,615,219	1,671,928	1,730,864	1,792,127
53	**Excess Working Capital Above Target**			**$ 3,678,268**	**$ 5,703,780**	**$ 3,544,063**	**$ 6,346,094**	**$ 9,165,466**	**$ 9,211,885**	**$ 9,874,860**	**$ 11,522,608**	**$ 14,600,777**	**$ 18,953,380**	**$ 19,566,831**
54	**Other Ratios**													
55	Days Cash on Hand			657	862	586	966	1,324	649	669	742	888	1,090	1,088
56	Target			91	91	91	91	91	91	91	91	91	91	91

Financial Pro Forma - Water Fund

				FY 2034	FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043
1	**Income Statement Items**												
2	**Rate Revenue Subject to Growth & Rate Adjustments**												
3	**WATER**												
4	Water Rate Revenue			$ 13,049,778	$ 13,924,763	$ 16,463,634	$ 16,996,809	$ 17,231,385	$ 17,471,678	$ 17,731,218	$ 18,003,928	$ 18,364,006	$ 18,731,286
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-	-	-
6	Water Rate Adjustments (Weighted Avg.)			6.70%	18.23%	3.24%	1.38%	1.39%	1.49%	1.54%	2.00%	2.00%	2.00%
7	Additional Rate Revenue From Rate Adjustment			874,985	2,538,871	533,174	234,577	240,293	259,540	272,709	360,079	367,280	374,626
8	Revenue Adjustment			-	-	-	-	-	-	-	-	-	-
9	**Total Water Rate Revenues**			**13,924,763**	**16,463,634**	**16,996,809**	**17,231,385**	**17,471,678**	**17,731,218**	**18,003,928**	**18,364,006**	**18,731,286**	**19,105,912**
10	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**13,924,763**	**16,463,634**	**16,996,809**	**17,231,385**	**17,471,678**	**17,731,218**	**18,003,928**	**18,364,006**	**18,731,286**	**19,105,912**
11	**Plus: Other Operating Revenues**												
12	Other Operating Revenues			1,717,079	1,743,622	1,770,696	1,798,310	1,826,478	1,855,208	1,884,514	1,903,359	1,922,392	1,941,616
13	**Equals: Total Operating Revenue**			**15,641,843**	**18,207,257**	**18,767,504**	**19,029,696**	**19,298,156**	**19,586,426**	**19,888,441**	**20,267,365**	**20,653,679**	**21,047,528**
14	**Plus: Non-Operating Revenues/(Expense)**												
15	Non-Operating Revenue			986,111	1,005,813	1,025,909	1,046,408	1,067,316	1,088,642	1,110,395	1,121,499	1,132,714	1,144,041
16	Bond Proceeds			-	-	-	-	-	-	-			
17	Interest Income			52,802	52,230	52,655	53,463	54,278	55,101	55,937	56,496	57,061	57,632
18	**Equals: Total Non-Operating Revenues**			**1,038,912**	**1,058,043**	**1,078,565**	**1,099,870**	**1,121,594**	**1,143,743**	**1,166,331**	**1,177,995**	**1,189,775**	**1,201,672**
19	**Less: Revenues Excluded From Coverage Test**												
20	Bond Proceeds			-	-	-	-	-	-	-	-	-	-
21	Other Excluded Revenues			-	-	-	-	-	-	-	-	-	-
22	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
23	**Less: Operating Expenses**												
24	Personal Services			(1,458,726)	(1,542,709)	(1,631,812)	(1,726,367)	(1,826,726)	(1,933,269)	(2,046,398)	(2,128,254)	(2,213,384)	(2,301,920)
25	Fixed O&M Expenses			(5,895,381)	(6,072,243)	(6,254,410)	(6,442,042)	(6,635,304)	(6,834,363)	(7,039,394)	(7,320,969)	(7,613,808)	(7,918,360)
26	**Total Expenses**			**(7,354,108)**	**(7,614,951)**	**(7,886,222)**	**(8,168,409)**	**(8,462,030)**	**(8,767,632)**	**(9,085,792)**	**(9,449,223)**	**(9,827,192)**	**(10,220,280)**
27	**Equals: Net Income Available For Debt Service**			**$ 9,326,647**	**$ 11,650,348**	**$ 11,959,847**	**$ 11,961,157**	**$ 11,957,720**	**$ 11,962,538**	**$ 11,968,981**	**$ 11,996,136**	**$ 12,016,261**	**$ 12,028,920**
28	**Cash Flow Statement Items**												
29	Net Income Available For Debt Service			$ 9,326,647	$ 11,650,348	$ 11,959,847	$ 11,961,157	$ 11,957,720	$ 11,962,538	$ 11,968,981	$ 11,996,136	$ 12,016,261	$ 12,028,920
30	Total Debt Service			(7,277,317)	(9,102,728)	(9,343,282)	(9,341,231)	(9,335,305)	(9,335,731)	(9,337,281)	(9,334,956)	(9,333,981)	(9,339,358)
31	Funds from Operations (FFO)			2,049,331	2,547,620	2,616,565	2,619,926	2,622,414	2,626,807	2,631,700	2,661,180	2,682,279	2,689,562
32	Projects Designated to be Paid with Cash			(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)
33	Other Below the Line Expenses			(230,769)	(233,269)	-	-	-	-	-	-	-	-
34	Capital Outlay			-	-	-	-	-	-	-	-	-	-
35	**Free Cash Flow (FCF)**			**(476,638)**	**19,151**	**321,365**	**324,726**	**327,214**	**331,607**	**336,500**	**365,980**	**387,079**	**394,362**
36	**Calculation of Debt Service Coverage**												
37	Existing Debt Service			-	-	-	-	-	-	-	-	-	-
38	GO ARS Bond 2023			606,094	614,094	611,094	607,594	608,594	603,844	608,594	610,594	606,994	606,944
39	WIFIA			5,218,456	7,035,867	7,279,419	7,280,869	7,273,945	7,279,119	7,275,919	7,271,594	7,274,219	7,279,645
40	Revenue Bonds in Support of WIFIA Loan			-	-	-	-	-	-	-	-	-	-
	IEPA			1,452,767	1,452,768	1,452,769	1,452,768	1,452,767	1,452,768	1,452,768	1,452,768	1,452,769	1,452,770
41	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-
42	**Total Debt Service**			**7,277,317**	**9,102,728**	**9,343,282**	**9,341,231**	**9,335,305**	**9,335,731**	**9,337,281**	**9,334,956**	**9,333,981**	**9,339,358**
43	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.28**	**1.28**	**1.28**	**1.28**	**1.28**	**1.28**	**1.28**	**1.29**	**1.29**	**1.29**
44	**Calculated Senior Debt Service Coverage**	1.25	Req.	**15.39**	**18.97**	**19.57**	**19.69**	**19.65**	**19.81**	**19.67**	**19.65**	**19.80**	**19.82**
45	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.39**	**1.36**	**1.36**	**1.36**	**1.36**	**1.36**	**1.36**	**1.65**	**1.65**	**1.65**
	Unrestricted Working Capital Reserve Fund Test												
46	Balance At Beginning Of Fiscal Year			21,358,959	20,882,321	20,901,471	21,222,836	21,547,562	21,874,776	22,206,384	22,542,883	22,908,864	23,295,943
47	Cash Flow Surplus/Deficit			(476,638)	19,151	321,365	324,726	327,214	331,607	336,500	365,980	387,079	394,362
48	Add Back: Bond Proceeds			-	-	-	-	-	-	-	-	-	-
49	Reserve Fund Balance Used For Cash Flow Deficit			-	-	-	-	-	-	-	-	-	-
50	Projects Paid with Operating Reserve Balance			-	-	-	-	-	-	-	-	-	-
51	**Balance At End Of Fiscal Year**			**20,882,321**	**20,901,471**	**21,222,836**	**21,547,562**	**21,874,776**	**22,206,384**	**22,542,883**	**22,908,864**	**23,295,943**	**23,690,305**
52	Minimum Working Capital Reserve Target			1,838,527	1,903,738	1,971,555	2,042,102	2,115,508	2,191,908	2,271,448	2,362,306	2,456,798	2,555,070
53	**Excess Working Capital Above Target**			**$ 19,043,794**	**$ 18,997,733**	**$ 19,251,280**	**$ 19,505,460**	**$ 19,759,269**	**$ 20,014,476**	**$ 20,271,435**	**$ 20,546,558**	**$ 20,839,145**	**$ 21,135,235**
54	**Other Ratios**												
55	Days Cash on Hand			1,036	1,002	982	963	944	924	906	885	865	846
56	Target			91	91	91	91	91	91	91	91	91	91

Financial Pro Forma - Water Fund

				FY 2044	FY 2045	FY 2046	FY 2047	FY 2048	FY 2049	FY 2050	FY 2051	FY 2052	FY 2053	FY 2054	FY 2055
1	**Income Statement Items**														
2	**Rate Revenue Subject to Growth & Rate Adjustments**														
3	**WATER**														
4	Water Rate Revenue			$ 19,105,912	$ 19,488,030	$ 19,877,791	$ 20,275,347	$ 20,680,854	$ 21,094,471	$ 21,516,360	$ 21,516,360	$ 21,516,360	$ 21,516,360	$ 21,516,360	$ 21,516,360
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-	-	-	-	-
6	Water Rate Adjustments (Weighted Avg.)			2.00%	2.00%	2.00%	2.00%	2.00%	2.00%						
7	Additional Rate Revenue From Rate Adjustment			382,118	389,761	397,556	405,507	413,617	421,889	-	-	-	-	-	-
8	Revenue Adjustment			-	-	-	-	-	-	-	-	-	-	-	-
9	**Total Water Rate Revenues**			**19,488,030**	**19,877,791**	**20,275,347**	**20,680,854**	**21,094,471**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**
10	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**19,488,030**	**19,877,791**	**20,275,347**	**20,680,854**	**21,094,471**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**	**21,516,360**
11	**Plus: Other Operating Revenues**														
12	Other Operating Revenues			1,961,032	1,980,643	2,000,449	2,020,454	2,040,658	2,061,065	2,081,675	2,102,492	2,123,517	2,144,752	2,166,200	2,187,862
13	**Equals: Total Operating Revenue**			**21,449,063**	**21,858,433**	**22,275,796**	**22,701,307**	**23,135,129**	**23,577,425**	**23,598,035**	**23,618,852**	**23,639,877**	**23,661,112**	**23,682,560**	**23,704,222**
14	**Plus: Non-Operating Revenues/(Expense)**														
15	Non-Operating Revenue			1,155,481	1,167,036	1,178,706	1,190,494	1,202,398	1,214,422	1,226,567	1,238,832	1,251,221	1,263,733	1,276,370	1,289,134
16	Bond Proceeds														
17	Interest Income			58,208	58,790	59,378	59,972	60,571	61,177	61,789	62,407	63,031	63,661	64,298	64,941
18	**Equals: Total Non-Operating Revenues**			**1,213,689**	**1,225,826**	**1,238,084**	**1,250,465**	**1,262,970**	**1,275,599**	**1,288,355**	**1,301,239**	**1,314,251**	**1,327,394**	**1,340,668**	**1,354,075**
19	**Less: Revenues Excluded From Coverage Test**														
20	Bond Proceeds			-	-	-	-	-	-	-	-	-	-	-	-
21	Other Excluded Revenues			-	-	-	-	-	-	-	-	-	-	-	-
22	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
23	**Less: Operating Expenses**														
24	Personal Services			(2,393,997)	(2,489,756)	(2,589,347)	(2,692,921)	(2,800,637)	(2,912,663)	(3,029,169)	(3,150,336)	(3,276,350)	(3,407,404)	(3,543,700)	(3,685,448)
25	Fixed O&M Expenses			(8,235,095)	(8,564,499)	(8,907,079)	(9,263,362)	(9,633,896)	(10,019,252)	(10,420,022)	(10,836,823)	(11,270,296)	(11,721,108)	(12,189,952)	(12,677,550)
26	**Total Expenses**			**(10,629,091)**	**(11,054,255)**	**(11,496,425)**	**(11,956,282)**	**(12,434,533)**	**(12,931,915)**	**(13,449,191)**	**(13,987,159)**	**(14,546,645)**	**(15,128,511)**	**(15,733,652)**	**(16,362,998)**
27	**Equals: Net Income Available For Debt Service**			**$ 12,033,660**	**$ 12,030,005**	**$ 12,017,455**	**$ 11,995,490**	**$ 11,963,565**	**$ 11,921,109**	**$ 11,437,199**	**$ 10,932,932**	**$ 10,407,483**	**$ 9,859,995**	**$ 9,289,576**	**$ 8,695,299**
28	**Cash Flow Statement Items**														
29	Net Income Available For Debt Service			$ 12,033,660	$ 12,030,005	$ 12,017,455	$ 11,995,490	$ 11,963,565	$ 11,921,109	$ 11,437,199	$ 10,932,932	$ 10,407,483	$ 9,859,995	$ 9,289,576	$ 8,695,299
30	Total Debt Service			(9,335,857)	(9,338,931)	(9,338,357)	(9,097,646)	(8,680,415)	(8,333,152)	(7,884,713)	(7,887,689)	(7,882,463)	(7,884,488)	(7,883,538)	(7,884,838)
31	Funds from Operations (FFO)			2,697,803	2,691,073	2,679,098	2,897,844	3,283,150	3,587,957	3,552,487	3,045,244	2,525,020	1,975,507	1,406,038	810,461
32	Projects Designated to be Paid with Cash			(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)	(2,295,200)
33	Other Below the Line Expenses			-	-	-	-	-	-	-	-	-	-	-	-
34	Capital Outlay			-	-	-	-	-	-	-	-	-	-	-	-
35	**Free Cash Flow (FCF)**			**402,603**	**395,873**	**383,898**	**602,644**	**987,950**	**1,292,757**	**1,257,287**	**750,044**	**229,820**	**(319,693)**	**(889,162)**	**(1,484,739)**
36	**Calculation of Debt Service Coverage**														
37	Existing Debt Service			-	-	-	-	-	-	-	-	-	-	-	-
38	GO ARS Bond 2023			611,249	609,694	607,694	610,056	606,569	607,444	607,469	611,031	608,500	610,094	610,594	-
39	WIFIA			7,271,839	7,276,469	7,277,895	7,276,532	7,277,594	7,276,094	7,277,244	7,276,657	7,273,963	7,274,394	7,272,944	7,884,838
40	Revenue Bonds in Support of WIFIA Loan			-	-	-	-	-	-	-	-	-	-	-	-
	IEPA			1,452,770	1,452,768	1,452,769	1,211,058	796,253	449,614	-	-	-	-	-	-
41	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-	-	-
42	**Total Debt Service**			**9,335,857**	**9,338,931**	**9,338,357**	**9,097,646**	**8,680,415**	**8,333,152**	**7,884,713**	**7,887,689**	**7,882,463**	**7,884,488**	**7,883,538**	**7,884,838**
43	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.29**	**1.29**	**1.29**	**1.32**	**1.38**	**1.43**	**1.45**	**1.39**	**1.32**	**1.25**	**1.18**	**1.10**
44	**Calculated Senior Debt Service Coverage**	1.25	Req.	**19.69**	**19.73**	**19.78**	**19.66**	**19.72**	**19.63**	**18.83**	**17.89**	**17.10**	**16.16**	**15.21**	**0.00**
45	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.65**	**1.65**	**1.65**	**1.65**	**1.64**	**1.64**	**1.57**	**1.50**	**1.43**	**1.36**	**1.28**	**1.10**
	Unrestricted Working Capital Reserve Fund Test														
46	Balance At Beginning Of Fiscal Year			23,690,305	24,092,908	24,488,782	24,872,679	25,475,324	26,463,274	27,756,031	29,013,317	29,763,361	29,993,181	29,673,488	28,784,326
47	Cash Flow Surplus/Deficit			402,603	395,873	383,898	602,644	987,950	1,292,757	1,257,287	750,044	229,820	(319,693)	(889,162)	(1,484,739)
48	Add Back: Bond Proceeds			-	-	-	-	-	-	-	-	-	-	-	-
49	Reserve Fund Balance Used For Cash Flow Deficit			-	-	-	-	-	-	-	-	-	-	-	-
50	Projects Paid with Operating Reserve Balance			-	-	-	-	-	-	-	-	-	-	-	-
51	**Balance At End Of Fiscal Year**			**24,092,908**	**24,488,782**	**24,872,679**	**25,475,324**	**26,463,274**	**27,756,031**	**29,013,317**	**29,763,361**	**29,993,181**	**29,673,488**	**28,784,326**	**27,299,587**
52	Minimum Working Capital Reserve Target			2,657,273	2,763,564	2,874,106	2,989,071	3,108,633	3,232,979	3,362,298	3,496,790	3,636,661	3,782,128	3,933,413	4,090,749
53	**Excess Working Capital Above Target**			**$ 21,435,636**	**$ 21,725,218**	**$ 21,998,573**	**$ 22,486,253**	**$ 23,354,640**	**$ 24,523,052**	**$ 25,651,019**	**$ 26,266,571**	**$ 26,356,520**	**$ 25,891,360**	**$ 24,850,913**	**$ 23,208,837**
54	**Other Ratios**														
55	Days Cash on Hand			827	809	790	778	777	783	787	777	753	716	668	609
56	Target			91	91	91	91	91	91	91	91	91	91	91	91

Financial Pro Forma - Water Fund

				FY 2056	FY 2057	FY 2058	FY 2059	FY 2060	FY 2061	FY 2062	FY 2063	FY 2064
1	**Income Statement Items**											
2	**Rate Revenue Subject to Growth & Rate Adjustments**											
3	**WATER**											
4	Water Rate Revenue			$ 21,516,360	$ 22,592,178	$ 23,721,787	$ 24,907,876	$ 26,153,270	$ 27,460,934	$ 28,833,980	$ 30,275,679	$ 31,789,463
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-	-
6	Water Rate Adjustments (Weighted Avg.)			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
7	Additional Rate Revenue From Rate Adjustment			1,075,818	1,129,609	1,186,089	1,245,394	1,307,664	1,373,047	1,441,699	1,513,784	1,589,473
8	Revenue Adjustment			-	-	-	-	-	-	-	-	-
9	**Total Water Rate Revenues**			**22,592,178**	**23,721,787**	**24,907,876**	**26,153,270**	**27,460,934**	**28,833,980**	**30,275,679**	**31,789,463**	**33,378,936**
10	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**22,592,178**	**23,721,787**	**24,907,876**	**26,153,270**	**27,460,934**	**28,833,980**	**30,275,679**	**31,789,463**	**33,378,936**
11	**Plus: Other Operating Revenues**											
12	Other Operating Revenues			2,209,740	2,231,838	2,254,156	2,276,698	2,299,465	2,322,459	2,345,684	2,369,141	2,392,832
13	**Equals: Total Operating Revenue**			**24,801,918**	**25,953,625**	**27,162,032**	**28,429,968**	**29,760,398**	**31,156,440**	**32,621,363**	**34,158,604**	**35,771,769**
14	**Plus: Non-Operating Revenues/(Expense)**											
15	Non-Operating Revenue			1,302,025	1,315,045	1,328,196	1,341,478	1,354,893	1,368,442	1,382,126	1,395,947	1,409,907
16	Bond Proceeds											
17	Interest Income			65,590	66,246	66,908	67,577	68,253	68,936	69,625	70,321	71,025
18	**Equals: Total Non-Operating Revenues**			**1,367,615**	**1,381,291**	**1,395,104**	**1,409,055**	**1,423,146**	**1,437,377**	**1,451,751**	**1,466,269**	**1,480,931**
19	**Less: Revenues Excluded From Coverage Test**											
20	Bond Proceeds			-	-	-	-	-	-	-	-	-
21	Other Excluded Revenues			-	-	-	-	-	-	-	-	-
22	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
23	**Less: Operating Expenses**											
24	Personal Services			(3,832,866)	(3,986,180)	(4,145,627)	(4,311,453)	(4,483,911)	(4,663,267)	(4,849,798)	(5,043,790)	(5,245,541)
25	Fixed O&M Expenses			(13,184,652)	(13,712,038)	(14,260,520)	(14,830,940)	(15,424,178)	(16,041,145)	(16,682,791)	(17,350,103)	(18,044,107)
26	**Total Expenses**			**(17,017,518)**	**(17,698,218)**	**(18,406,147)**	**(19,142,393)**	**(19,908,089)**	**(20,704,412)**	**(21,532,589)**	**(22,393,892)**	**(23,289,648)**
27	**Equals: Net Income Available For Debt Service**			**$ 9,152,016**	**$ 9,636,698**	**$ 10,150,990**	**$ 10,696,630**	**$ 11,275,455**	**$ 11,889,405**	**$ 12,540,526**	**$ 13,230,980**	**$ 13,963,052**
28	**Cash Flow Statement Items**											
29	Net Income Available For Debt Service			$ 9,152,016	$ 9,636,698	$ 10,150,990	$ 10,696,630	$ 11,275,455	$ 11,889,405	$ 12,540,526	$ 13,230,980	$ 13,963,052
30	Total Debt Service			(7,883,388)	(7,884,413)	(8,127,914)	(8,543,088)	(8,891,838)	(9,346,413)	(9,346,413)	(9,346,413)	(9,346,413)
31	Funds from Operations (FFO)			1,268,628	1,752,285	2,023,076	2,153,542	2,383,617	2,542,992	3,194,113	3,884,568	4,616,639
32	Projects Designated to be Paid with Cash			(2,295,200)	(2,295,200)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)	(2,000,000)
33	Other Below the Line Expenses			-	-	-	-	-	-	-	-	-
34	Capital Outlay			-	-	-	-	-	-	-	-	-
35	**Free Cash Flow (FCF)**			**(1,026,572)**	**(542,915)**	**23,076**	**153,542**	**383,617**	**542,992**	**1,194,113**	**1,884,568**	**2,616,639**
36	**Calculation of Debt Service Coverage**											
37	Existing Debt Service			-	-	-	-	-	-	-	-	-
38	GO ARS Bond 2023			-	-	-	-	-	-	-	-	-
39	WIFIA			7,883,388	7,884,413	8,127,914	8,543,088	8,891,838	9,346,413	9,346,413	9,346,413	9,346,413
40	Revenue Bonds in Support of WIFIA Loan			-	-	-	-	-	-	-	-	-
	IEPA			-	-	-	-	-	-	-	-	-
41	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-
42	**Total Debt Service**			**7,883,388**	**7,884,413**	**8,127,914**	**8,543,088**	**8,891,838**	**9,346,413**	**9,346,413**	**9,346,413**	**9,346,413**
43	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.16**	**1.22**	**1.25**	**1.25**	**1.27**	**1.27**	**1.34**	**1.42**	**1.49**
44	**Calculated Senior Debt Service Coverage**	1.25	Req.	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
45	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.16**	**1.22**	**1.25**	**1.25**	**1.27**	**1.27**	**1.34**	**1.42**	**1.49**
	Unrestricted Working Capital Reserve Fund Test											
46	Balance At Beginning Of Fiscal Year			27,299,587	26,273,015	25,730,100	25,753,176	25,906,718	26,290,336	26,833,327	28,027,440	29,912,008
47	Cash Flow Surplus/Deficit			(1,026,572)	(542,915)	23,076	153,542	383,617	542,992	1,194,113	1,884,568	2,616,639
48	Add Back: Bond Proceeds			-	-	-	-	-	-	-	-	-
49	Reserve Fund Balance Used For Cash Flow Deficit			-	-	-	-	-	-	-	-	-
50	Projects Paid with Operating Reserve Balance			-	-	-	-	-	-	-	-	-
51	**Balance At End Of Fiscal Year**			**26,273,015**	**25,730,100**	**25,753,176**	**25,906,718**	**26,290,336**	**26,833,327**	**28,027,440**	**29,912,008**	**32,528,646**
52	Minimum Working Capital Reserve Target			4,254,379	4,424,555	4,601,537	4,785,598	4,977,022	5,176,103	5,383,147	5,598,473	5,822,412
53	**Excess Working Capital Above Target**			**$ 22,018,636**	**$ 21,305,545**	**$ 21,151,639**	**$ 21,121,120**	**$ 21,313,314**	**$ 21,657,224**	**$ 22,644,293**	**$ 24,313,535**	**$ 26,706,234**
54	**Other Ratios**											
55	Days Cash on Hand			564	531	511	494	482	473	475	488	510
56	Target			91	91	91	91	91	91	91	91	91

Appendix B-1

IEPA Loan Applicant Environmental Checklist and Certification Form

IEPA Loan Applicant Environmental Checklist and Certification Form

Loan Applicant: United City of Yorkville L17#: TBD

This form must be signed by the loan applicant's Authorized Representative. All loan applicants must provide items 1 and 2 below. The information that must be provided for items 3-8 are specific to conditions of the project. See the attached instructions that explain the requirements and provide contact information. If you believe an item is not required for your project, enter N/A and provide an explanation. For checklist items marked as N/A, also indicate the page number of the planning report where the explanation is located.

Provide records of consultation with Illinois Department of Natural Resources (IDNR), State Historic Preservation Office (SHPO) for the National Historic Preservation Act, Section 106 sign-off.

1) **Date of IDNR, SHPO response:** Projects submitted 7/18/23 and 8/2/23; awaiting response from SHPO

Provide records of consultation with IDNR's Impact Assessment Section for evaluation pursuant to the Illinois Endangered Species Protection Act [520 ILCS 10/11], the Illinois Natural Areas Preservation Act [525 ILCS 30/17], Title 17 Illinois Administrative Code, Part 1075, and Interagency Wetlands Policy Act of 1989 (Illinois Administrative Code, Part 1090).

2) **Date of EcoCAT printout**: 7/19/23 (Receiving Stations); 8/3/23 (Water Main Replacement)

Date of IDNR follow-up letter (when protected resources are identified): 7/19/23 and 8/4/23

For projects located within any wetland, river, stream, flood plain, floodway, waterway, any body of water, or construction located within 250 feet of a wetland; provide records of consultation from:

3) U.S. Army Corps of Engineers (USACE). **Date of USACE response:** N/A - Refer to Section 6 of Report

For projects located within a flood plain or floodway, or along a jurisdictional river, lake, or stream without a mapped floodway or flood plain, provide records of consultation from:

4) IDNR Office of Water Resources (OWR). **Date of IDNR OWR response**: N/A - Refer to Section 6 of Report

If the project involves conversion of prime agricultural land to other uses, provide records of consultation from:

5) Illinois Department of Agriculture (IDOA). **Date of IDOA response:** South Receiving Station consultation request submitted 8/17/23; awaiting response from IDOA

If the project includes 30% or more reserve capacity for future growth in the existing or proposed service areas, provide records of consultation from all applicable environmental regulatory entities listed on this form for the known growth/development areas associated with the identified secondary/indirect environmental impacts.

6) **Secondary impacts list of applicable regulatory entities and date of their responses:**
N/A - Refer to Section 6 of Report

If any project with secondary impacts is in a county under the jurisdiction of a Designated Water Quality Management Agency (DWQMA), which are the Greater Egypt Regional Planning & Development Commission (GERPDC), the Southwestern Illinois Metropolitan and Regional Planning Commission (SIMAPC), and the Chicago Metropolitan Agency for Planning (CMAP), provide records of consultation from:

7) Date of DWQMA response: N/A - Refer to Section 6 of Report

For certain projects, Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires consultation with all interested, federally recognized Indian tribes. Consultation is required if construction has the potential to affect properties that have religious or cultural significance to Indian tribes previously residing in Illinois. Check all boxes below that apply to this project. If applicable, consultation is required with the Tribal Historic Preservation Office of each interested tribe. If a response is not received in 30 days, consider consultation closed.

☒ **Significant ground disturbance**
Does NOT apply to sewer lining; in-place sewer or water main replacements without an increase to the trench size; re-building any previously existing well or building within the same footprint. **Examples of significant ground disturbance include new sewers; new foundations or footings; grading; or new access roads.**

☐ **New construction in undeveloped natural areas**
Examples: treatment plants, pipelines, or other new facilities in undeveloped natural areas such as forests, etc.

☐ **Visual changes and/or audible changes**
Examples: construction of a focal point that is out of character with the surrounding natural area, impairment of the view from an observation point in the natural landscape, impairment of the historic scenic qualities of an area, or an increase in noise levels above an acceptable standard in areas known and appreciated for their quietness.

☐ **Atmospheric changes**
Example: introduction of lights that create skyglow in an area with a dark night sky.

☐ **Work on a building with significant tribal association**
Examples: rehabilitation, demolition, or removal of a surviving ancient tribal structure(s), or a structure that is believed to be the location of a significant tribal event or that served as a tribal school or community hall.

☐ **Transfer, lease, or sale of a historic property of religious and cultural significance**
Examples: Involves properties that contain archaeological sites, burial grounds, sacred landscapes or features, ceremonial areas, or structures with significant tribal association.

☐ **None of the above apply or not applying for loan funding – Tribal Consultation is Not Applicable**

8) Date Submitted to Interested Tribes TBD (see below comments) **List tribes contacted below or attach a list. Indicate contact date and if a response was received. Copies of all responses must be submitted to IEPA.**

Tribal Consultations assumed to be required for North and South Receiving Station improvements due to "significant ground disturbance" associated with construction of new structures and foundations. Per updated guidance from IEPA, the City is awaiting clearance from Illinois State Historic Preservation Office prior to initiating tribal consultation. The dates and results of these consultations will be submitted separately when completed, along with other outstanding environmental checklist consultation items in progress.

Certification: By signing this form, the Loan Applicant certifies that the applicable environmental evaluations were conducted for the proposed project locations, and if the review results for any of these environmental evaluations include recommendations, conditions, certifications, and/or permits, the Loan Applicant agrees to comply.

Signed: _____ Date: 8/16/2023

Loan Applicant's Authorized Representative

Appendix B-2

IDNR, State Historic Preservation Office Consultation Records

July 18, 2023

Illinois State Historic Preservation Office
Attn: Cultural Resource Protection
One Natural Resources Way
Springfield, IL 62702

Re: Request for Proposed Project Review – Federal Section 106 Sign-Off
United City of Yorkville, Kendall County, Illinois

To Whom It May Concern:

The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include construction of two receiving stations (North and South Receiving Stations) including the associated components as described hereunder.

The City is seeking funding for these improvements through the Illinois Environmental Protection Agency (IEPA) Public Water Supply Loan Program, as well as funding through the Water Infrastructure Finance and Innovation Act (WIFIA) Program administered by the United States Environmental Protection Agency (USEPA). In accordance with the program requirements, the project will require a Federal Section 106 Sign-Off, and on behalf of the City we are requesting a review by the State Historic Preservation Office concerning possible effects on cultural resources.

Both the North and South Receiving Stations will consist of the same scope of work and improvements including construction of a DWC Delivery and Metering Structure/Building, Receiving Ground Storage Tank (GST), Booster Pump Station (BPS), and associated underground piping and site improvements that will receive the incoming water supply and pump into the distribution system. Construction of the improvements will include site excavation for the purposes of constructing the new building structure and tank foundations, as well as for completing associated underground piping and utility construction.

Both sites are located within the United City of Yorkville in Kendall County. Each site is described in more detail in the following sections and on the exhibits attached hereto.

<u>North Receiving Station</u>

The North Receiving Station improvements are located entirely within the property of an existing previously developed municipal water treatment site which is owned and maintained by the United City of Yorkville, and which is comprised of an existing water treatment plant building and elevated water storage tank. The site is located at 3099 Lehman Crossing, Yorkville, IL 60560.

The total acreage associated with the improvements at this site is approximately 0.95 acres. As noted, the site was previously developed for the construction of a City water treatment plant and an elevated storage tank, both of which were constructed between 2004-2005. No existing structures will be impacted due to the construction of the proposed improvements.

Enclosed with this submittal are the following supporting documents:

- Proposed North Receiving Station Aerial Location Map
- Preliminary Proposed North Receiving Station Site Plan
- USGS 7.5-minute Topographic Map w/ Location of Proposed North Receiving Station
- Photo of Existing City Water Treatment Plant and Elevated Water Storage Tank

South Receiving Station

The South Receiving Station improvements will be directly adjacent to an existing municipal water treatment site which is owned and maintained by the United City of Yorkville, and which includes an existing water treatment facility and an elevated water storage tank. The approximate site address of the South Receiving Station is 2224 Tremont Ave, Yorkville, IL 60560.

The total acreage associated with the improvements at this site is approximately 1.68 acres. As noted, the location of the improvements is adjacent to a site that was previously developed for the construction of a City water treatment plant and an elevated storage tank, both of which were also constructed between 2004-2005. No existing structures will be impacted due to the construction of the proposed improvements.

Enclosed with this submittal are the following supporting documents:

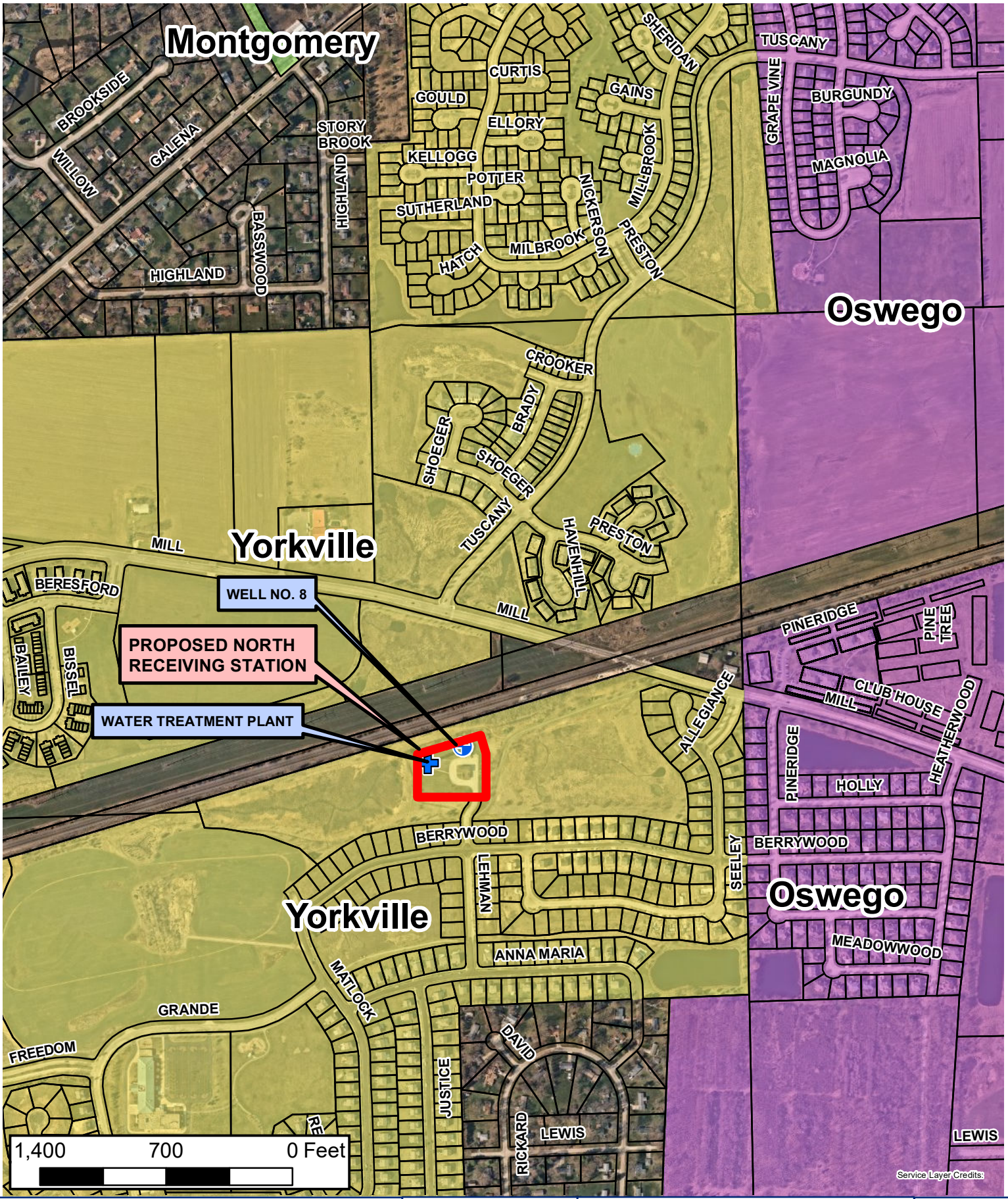
- Proposed South Receiving Station Aerial Location Map
- Preliminary Proposed South Receiving Station Site Plan
- USGS 7.5-minute Topographic Map w/ Location of Proposed South Receiving Station
- Photos of Existing City Water Treatment Plant and Elevated Water Storage Tank

If you have any questions or need additional information, please do not hesitate to contact me at cwalton@eeiweb.com or at 630-466-6771.

Respectfully submitted,
ENGINEERING ENTERPRISES, INC.

Christopher Walton

Christopher R. Walton, P.E.
Project Manager

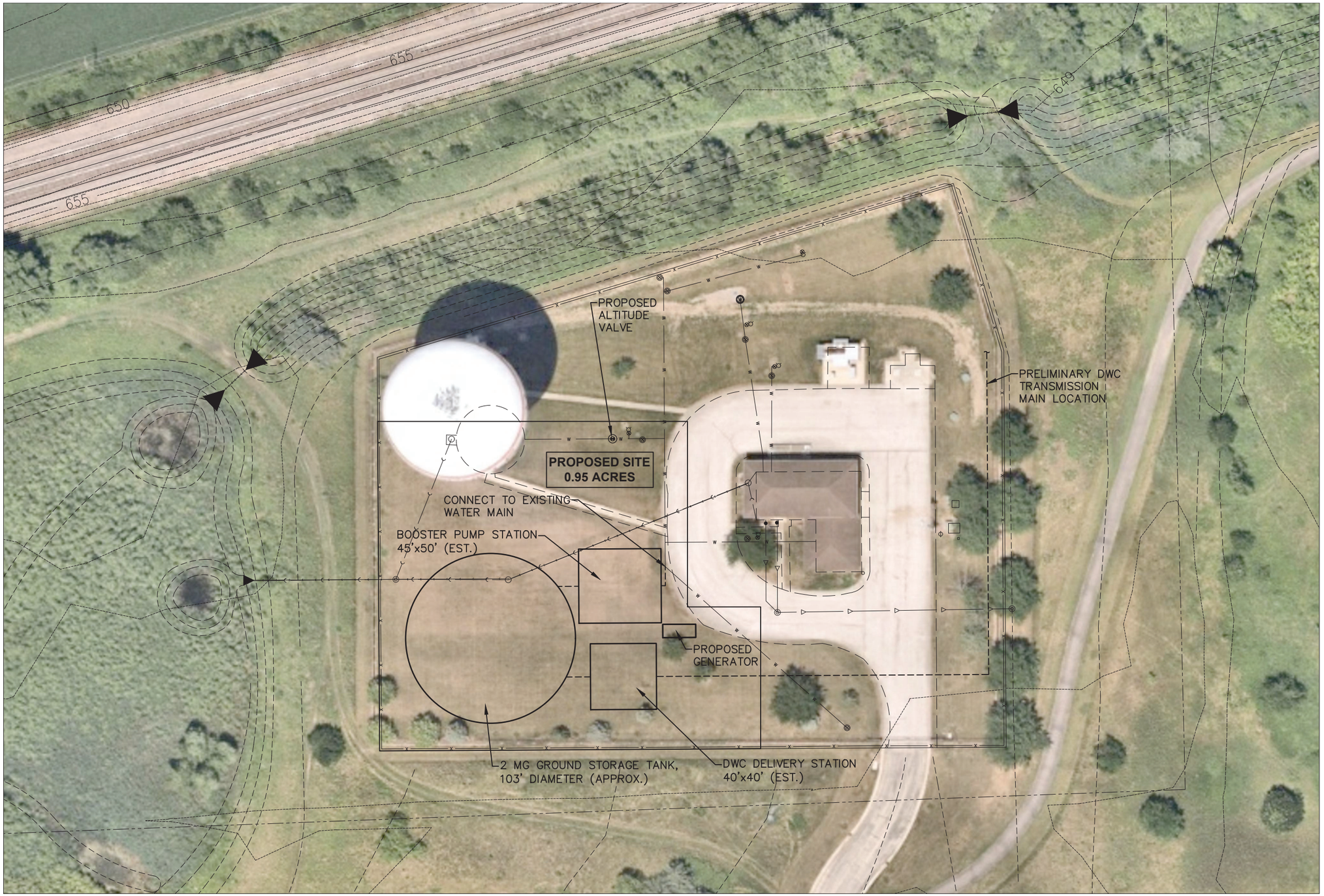


Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed_North_Receiving Station Overall

EXHIBIT B: PROPOSED NORTH RECEIVING STATION LOCATION MAP

N



0 30' 60'
SCALE FEET

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Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Road
Sugar Grove, Illinois 60554
630.466.6700 / www.eeiweb.com

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

EXHIBIT C: PROPOSED NORTH DELIVERY STATION SITE PLAN (PRELIMINARY)

DATE:	AUGUST 2023
PROJECT NO:	Y02230
FILE:	Y02230-SITES
SHEET	1 OF 2

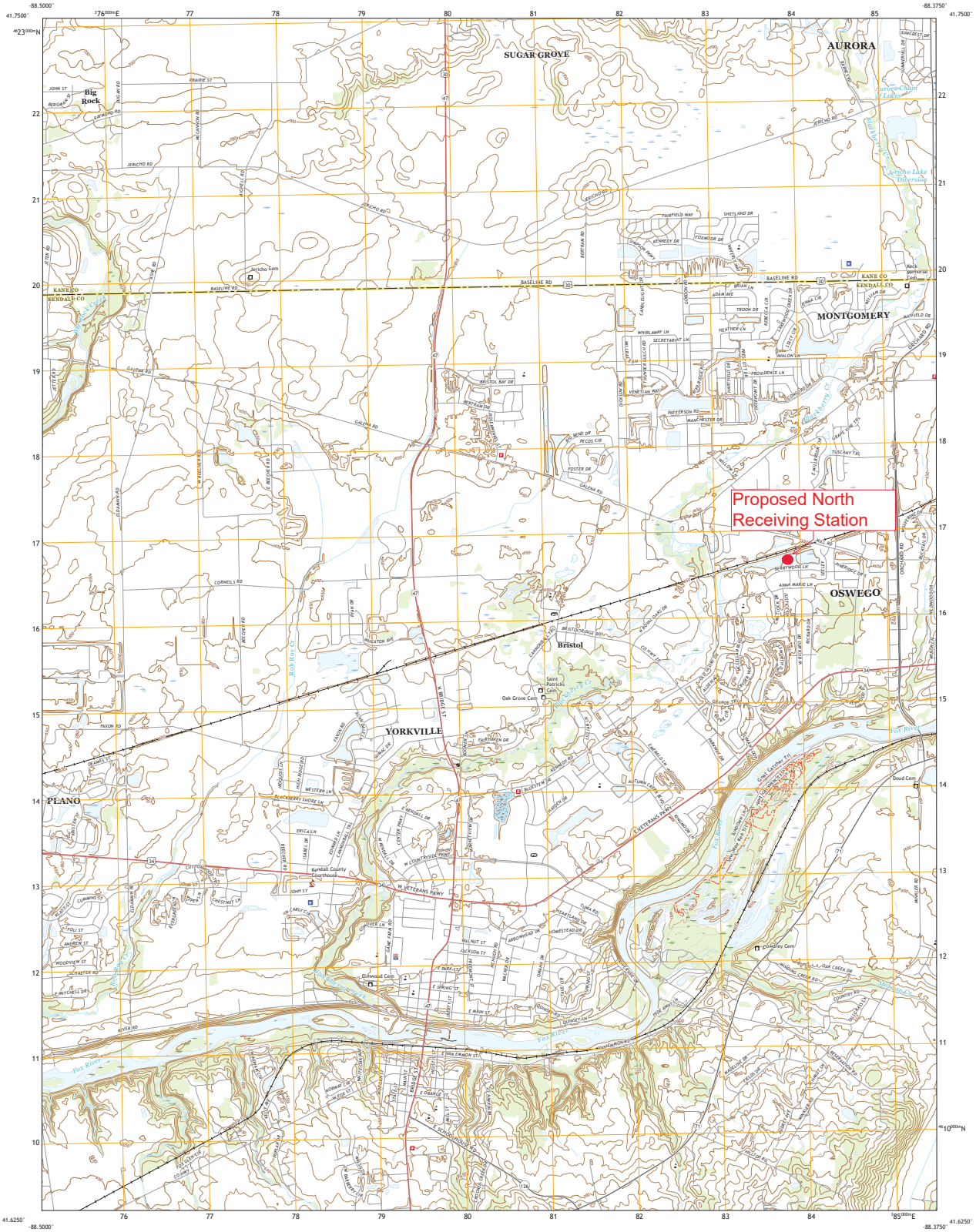
Plotted: August 15, 2023 @ 9:10 AM By: Matt Taylor – Tab: North Site – 22x34

Path: H:\SDSKPROJ\Y0_YORKVILLE\2022\Y02230\DWG EXHIBIT\Y02230-SITES

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

YORKVILLE QUADRANGLE
ILLINOIS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid Universal Transverse Mercator, Zone 16T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, August 2019 - August 2019
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2021
Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2018 - 2019
Public Land Survey System.....BLM, 2020
Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
CM
Grid Zone Designation
16T

SCALE 1:24 000
1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 MILES 1
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard.

ILLINOIS
QUADRANGLE LOCATION

1 Big Rock
2 Sugar Grove
3 Aurora North
4 Plano
5 Aurora South
6 Newark
7 Plattville
8 Yorkville SE
ADJOINING QUADRANGLES

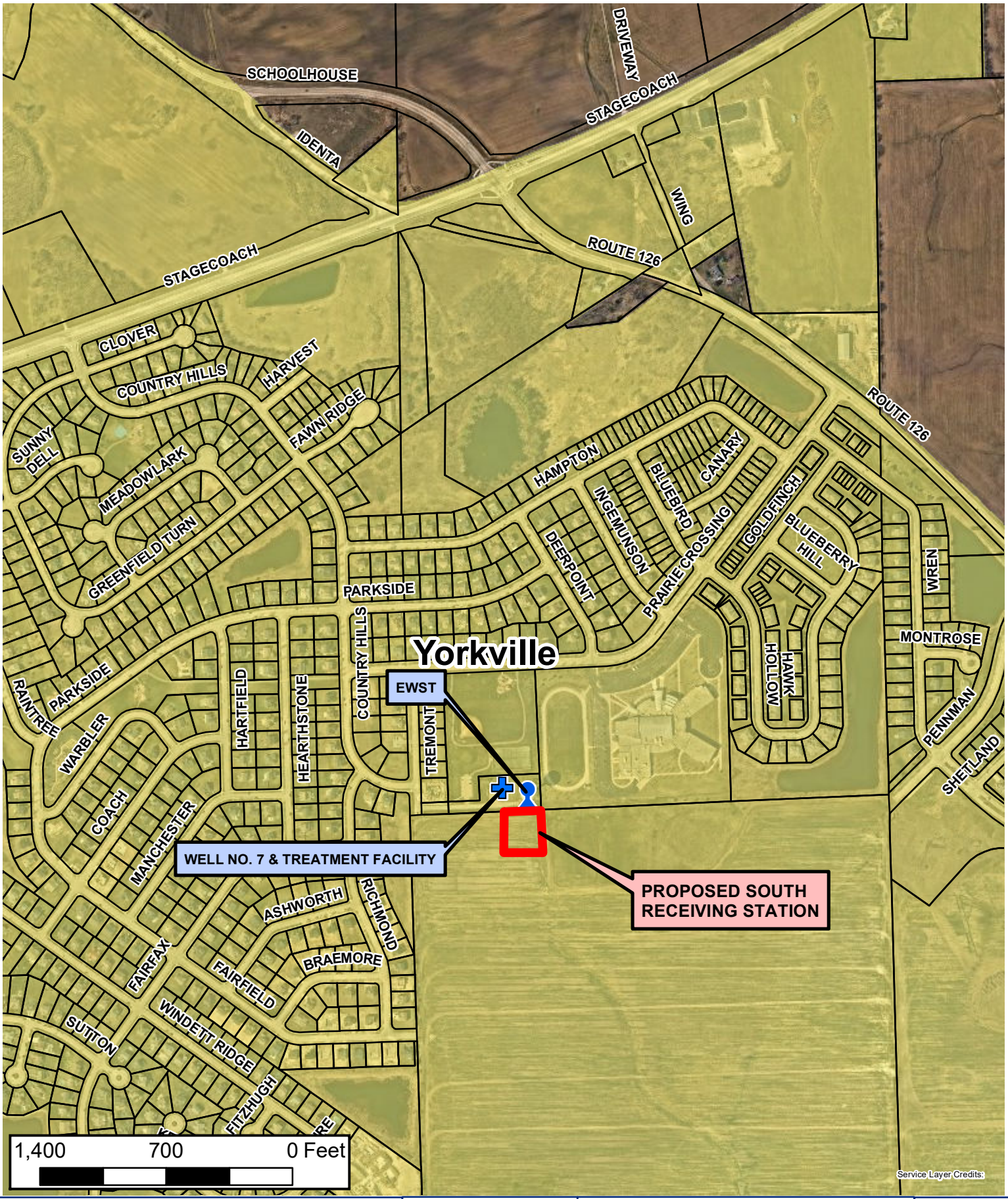
ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

YORKVILLE, IL
2021

MSN 7 0 4 1 0 0 1 0 8 0 5 9 4 4 2
NGA REF NO. USGS X2 4K 0 1 4 4

North Receiving Station – Photo of Existing City Water Treatment Plant and Elevated Water Storage Tank



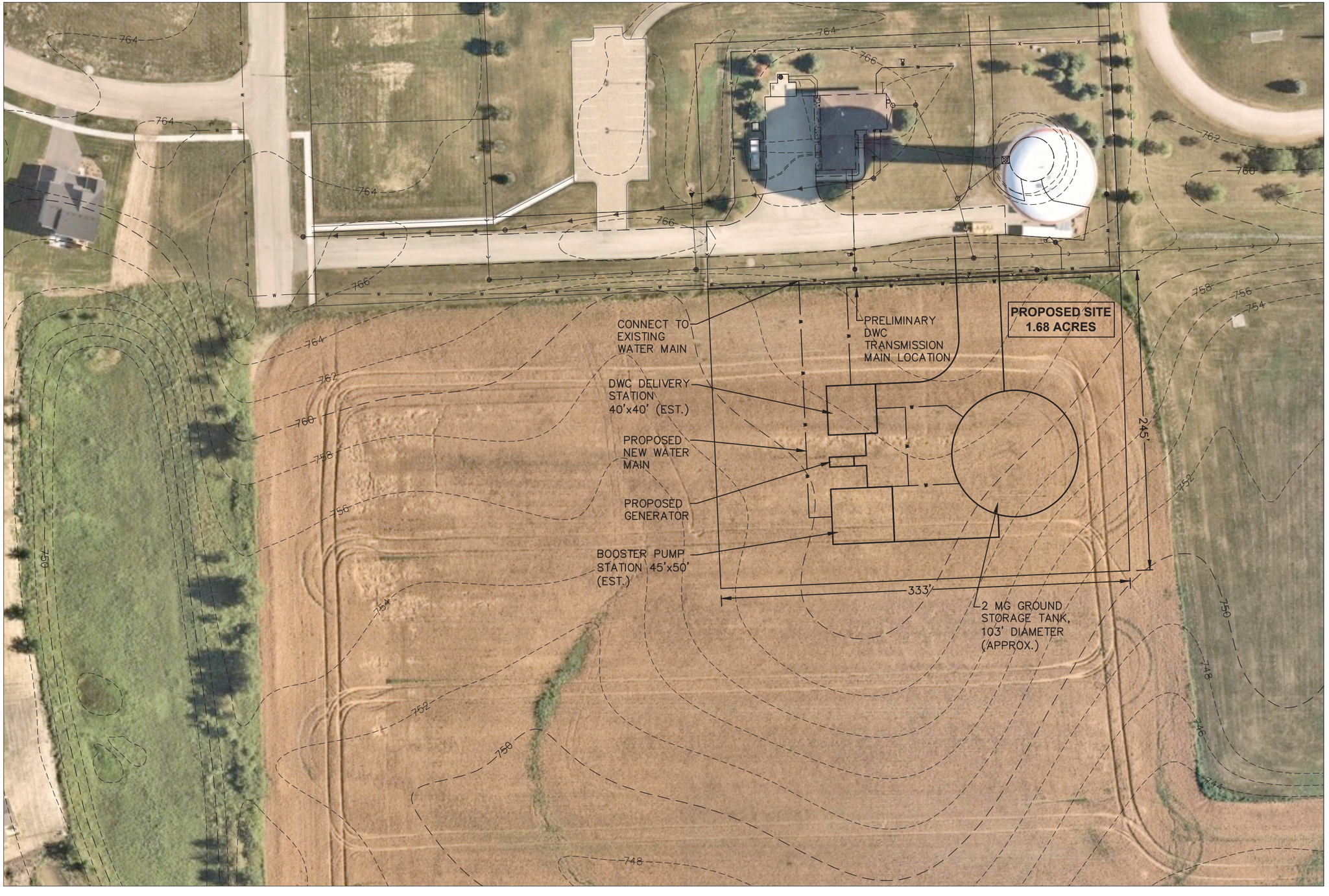


Engineering Enterprises, Inc.
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www.eeiweb.com

DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed South Receiving Station Overall

EXHIBIT C: PROPOSED SOUTH RECEIVING STATION LOCATION MAP

N



0 40' 80'
SCALE FEET

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Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Road
Sugar Grove, Illinois 60554
630.466.6700 / www.eeiweb.com

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

PROPOSED SOUTH RECEIVING STATION
SITE PLAN (PRELIMINARY)

DATE: AUGUST 2022
PROJECT NO: Y02230
FILE: Y02230-SITES
SHEET 2 OF 2

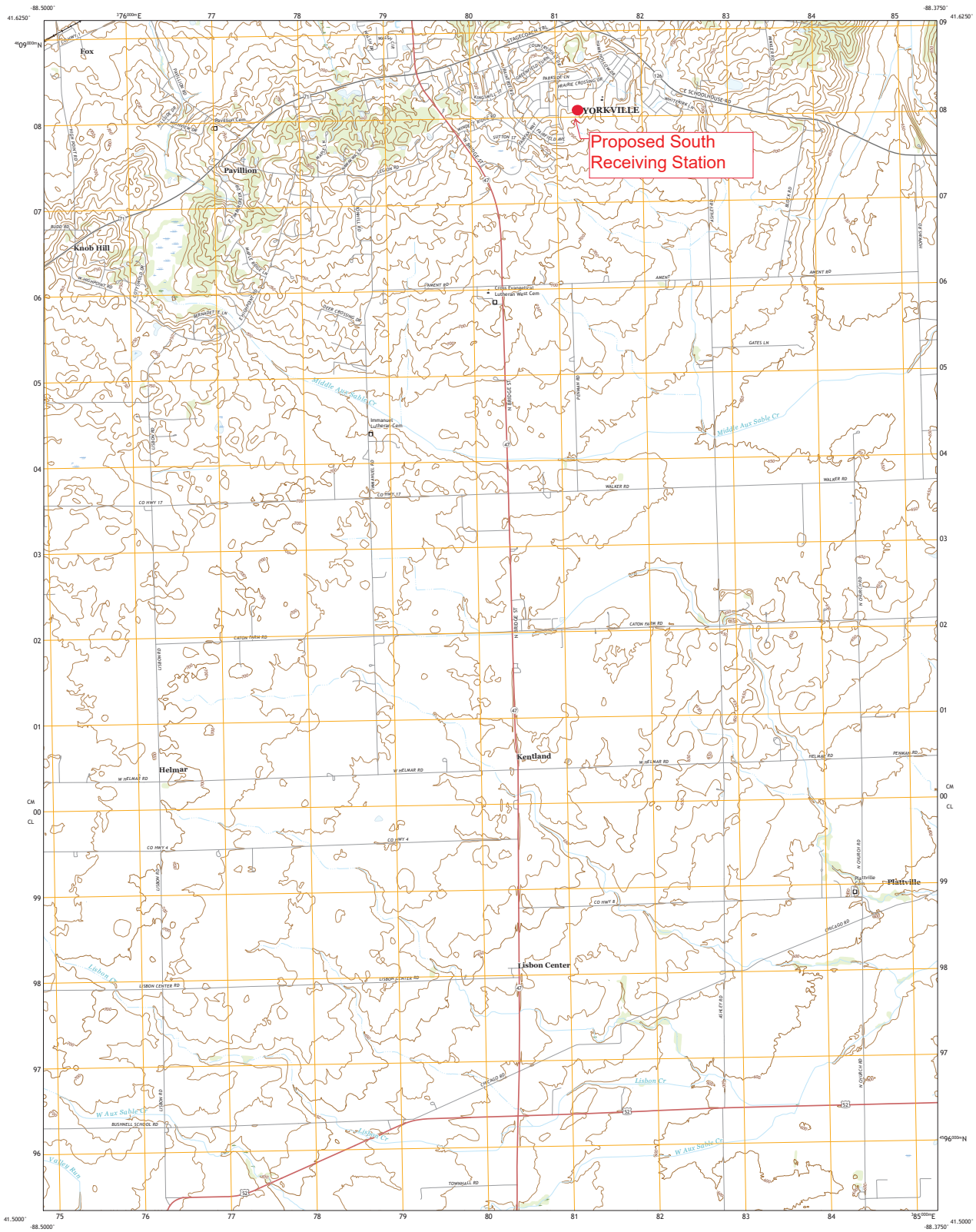
Plotted: October 28, 2022 @ 11:46 AM By: Mike Agate – Tab: South Site – 22x34

Path: H:\SDSKPROJ\YO_-_YORKVILLE\2022\Y02230\DWG EXHIBIT\Y02230-SITES

USGS science for a changing world
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

PLATTVILLE QUADRANGLE
ILLINOIS - KENDALL COUNTY
7.5-MINUTE SERIES



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 16T
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, August 2019 - August 2019
Roads.....U.S. Census Bureau, 2017
Names.....GNIS, 1980 - 2020
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2018 - 2019
Public Land Survey System.....BLM, 2020
Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
CM
CL
Grid Zone Designation
16T

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 MILES 1
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard.

ILLINOIS
QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Plano
2 Yorkville
3 Aurora South
4 Newark
5 Yorkville SE
6 Stavanger
7 Lisbon
8 Minooka

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

PLATTVILLE, IL
2021

MAP ID 1047010803902
USGS-X24K3500
NGA REF NO.

South Receiving Station – Photo of Existing City Water Treatment Plant and Elevated Water Storage Tank





August 2, 2023

Illinois State Historic Preservation Office
Attn: Cultural Resource Protection
One Natural Resources Way
Springfield, IL 62702

Re: Request for Proposed Project Review – Federal Section 106 Sign-Off
United City of Yorkville, Kendall County, Illinois

To Whom It May Concern:

The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include various water main improvements, including replacement of existing water main that consists of older, leaking pipes to reduce water loss in the distribution system. The water main improvements include several projects planned to be completed between 2024-2027 as described hereunder.

The City is seeking funding for these improvements through the Illinois Environmental Protection Agency (IEPA) Public Water Supply Loan Program, as well as funding through the Water Infrastructure Finance and Innovation Act (WIFIA) Program administered by the United States Environmental Protection Agency (USEPA). In accordance with the program requirements, the project will require a Federal Section 106 Sign-Off, and on behalf of the City we are requesting a review by the State Historic Preservation Office concerning possible effects on cultural resources.

The proposed water main improvements include replacement of existing water main with new piping of the same pipe size in various locations for reduced water loss, replacement of a section of existing 8” water main with new larger (16”) water main for improved system hydraulics, and construction of a water main interconnect with pressure reducing station between the United City of Yorkville and adjacent Village of Montgomery as a backup supply connection between both communities.

All projects will consist of the same general scope of work and improvements including completing associated underground piping removal and replacement for the water main. Please note that the location of the new water main construction for the system interconnect aligns with planned new road construction and realignment that is already in the process of being completed, separate from the proposed water main improvements, for improved traffic safety.

All sites are located within the United City of Yorkville in Kendall County. Enclosed is a USGS 7.5-minute Topographic Map with the locations of the proposed water main improvements identified. Each site is illustrated in more detail in the following sections and on the additional exhibits attached hereto.

2024 – 2027 Water Main Replacement

Enclosed please find an aerial location map of the proposed 2024 – 2027 Water Main Replacement Program. The 2024 – 2027 water main replacement includes replacing existing older mains in the downtown area of the United City of Yorkville. The locations of the proposed water main replacement are in previously developed areas in and around central Yorkville previously disturbed for original construction of the existing water main. Temporary localized impacts to the water distribution system are anticipated due to the water main replacement work but will be kept at a minimum and no existing structures will be impacted due to the construction of the proposed improvements.

Blue Stem Drive Water Main Improvements

Enclosed please find an aerial location map of the proposed Blue Stem Drive water main improvements, which consist of replacing a section of existing 8" water main with 16" water main necessary to improve water distribution system hydraulics. The location of the proposed water main replacement is in a previously developed residential area previously disturbed for original construction of the existing water main. Temporary localized impacts to the water distribution system are anticipated due to the water main replacement work but will be kept at a minimum and no existing structures will be impacted due to the construction of the proposed improvements.

United City of Yorkville and Village of Montgomery Interconnect

Enclosed please find an aerial location map of the proposed water main system interconnect between the United City of Yorkville and Village of Montgomery. The proposed interconnect will consist of new water main and a pressure reducing station to connect between existing Yorkville and Montgomery water mains, and will provide a backup water supply connection between both communities in the event of an emergency.

The location of the water main is adjacent to previously developed areas including a residential subdivision and roadways, as well as along a road realignment currently being completed to improve the intersection of Galena Road, Cannonball Trail and Dickson Road for improved traffic safety. Also enclosed is a detailed exhibit depicting the location of the water main and the road realignment project currently underway. No existing structures will be impacted due to the construction of the proposed improvements.

If you have any questions or need additional information, please do not hesitate to contact me at cwalton@eeiweb.com or at 630-466-6771.

Respectfully submitted,
ENGINEERING ENTERPRISES, INC.

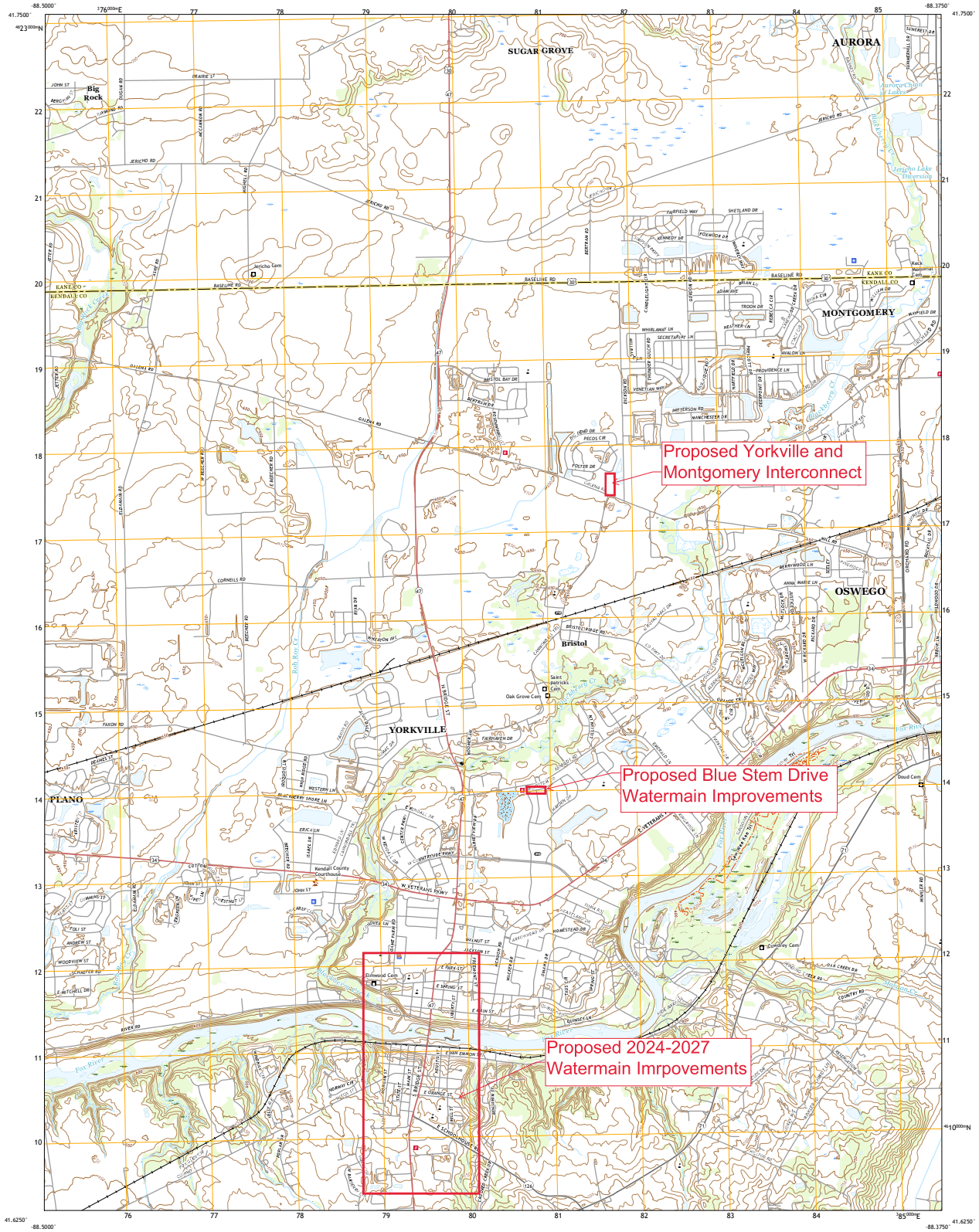
Christopher Walton

Christopher R. Walton, P.E.
Project Manager

USGS science for a changing world
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

The National Map US Topo

YORKVILLE QUADRANGLE
ILLINOIS
7.5-MINUTE SERIES



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 16T
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Hydrography.....National Hydrography Dataset, 2003 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2018 - 2019
Public Land Survey System.....BLM, 2020
Wetlands.....FWS National Wetlands Inventory Not Available

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000
KILOMETERS
METERS
MILES
FEET

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard.

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

ILLINOIS
QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Big Rock
2 Sugar Grove
3 Aurora North
4 Plano
5 Aurora South
6 Newark
7 Plattville
8 Yorkville SE

YORKVILLE, IL
2021

MN OF 4600180559442
NGA REF NO. USGSX24K014.4

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL, 60560
(630) 553-7575
www.yorkville.il.us

DATE: JULY 2023
PROJECT NO.: YO2230
BY: MJT
PATH: H:/GIS/PUBLIC/YORKVILLE/2022
FILE: YO2230 - OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

2024 -2027 WATER MAIN REPLACEMENT PROJECTS

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

PROPOSED WATER MAIN 16"

CANNONBALL
CHESHIRE
ANDREA
OVERLOOK
LILLIAN
LAKEVIEW
NEWBURY
ESSEX
DOVER
FAIRHAVEN
BOOMER
SWANSON
CHRISTY
KENNEDY
LEXINGTON
PRIVATE DRIVE
ROUTE 47
CONCORD
PRAIRIE MEADOWS
SWITCHGRASS
HAYDEN
MIDNIGHT
OLIVE
PRAIRIE GRASS
KENNEDY
BLUESTEM
BRIDGE
MARKETVIEW
MCHUGH
WILD INDIGO
PRAIRIE ROSE
CONEFLOWER
PRAIRIE CLOVER
CARPENTER
MENARD
PRAIRIE POINTE
CRIMSON

Legend

Existing Water Main

Blue Stem Drive Water Main Replacement

0 1,000 2,000 Feet

N W E S

Engineering Enterprises, Inc. 52 Wheeler Road Sugar Grove, Illinois 60554 (630) 466-6700 *www.eeiweb.com*	**United City of Yorkville** 800 Game Farm Road Yorkville, IL, 60560 (630) 553-7575 *www.yorkville.il.us*	DATE: JULY 2023 PROJECT NO.: YO2230 BY: MJT PATH: H:/GIS/PUBLIC/YORKVILLE/2022 FILE: YO2230- OPTION 3 WATER MAIN REPLACEMENT.MXD	**ALTERNATIVE WATER SOURCE STUDY UPDATE** YORKVILLE, ILLINOIS	**BLUE STEM DRIVE WATER MAIN IMPROVEMENT PROJECTS**



Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560
630-553-4350
www.yorkville.il.us

NO.	DATE	REVISIONS

DATE: SEPTEMBER 2022
PROJECT NO.: YO2230
BY: MJT
PATH: H:\GIS\PUBLIC\YORKVILLE\2022\
FILE: YO2230_Water Main MO Interconnect

400 200 0 400 Feet

UNITED CITY OF YORKVILLE & VILLAGE OF MONTGOMERY PROPOSED WATER MAIN INTERCONNECTION

N

PECOS CIRCLE

8 W

16 W

0' 100'
SCALE FEET

CONNECT TO EXISTING WATER MAIN

PROPOSED 16" VALVE IN VAULT

PROPOSED 12" VALVE IN VAULT

PROPOSED FIRE HYDRANT

2–12" 45° BENDS (MJ)

PROPOSED PRESSURE REDUCING STATION

16"X12" TEE (MJ)

PROPOSED 16" VALVE IN VAULT

2–12" 45° BENDS (MJ)

PROPOSED 12" VALVE IN VAULT

16"X12" TEE (MJ)

EXISTING VILLAGE OF MONTGOMERY 16" WATER MAIN

PROPOSED FIRE HYDRANT

EXISTING DICKSON ROAD CENTERLINE (DICKSON ROAD TO BE REMOVED)

PROPOSED 30" STEEL CASING PIPE

CONNECT TO EXISTING WATER MAIN

PROPOSED 16" VALVE IN VAULT

CANNONBALL TRAIL

PROPOSED FIRE HYDRANT

GALENA ROAD

EXISTING CITY OF YORKVILLE 16" WATER MAIN

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CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

UNITED CITY OF YORKVILLE & VILLAGE OF MONTGOMERY
PROPOSED WATER MAIN INTERCONNECTION

DATE OCTOBER 2022
PROJ. NO. YO2251
FILE NO. YO2251–Exhibit

EXHIBIT

Plotted: October 14, 2022 @ 10:56 AM By: Jim Schmidt – Tab: Exhibit B (11x17)

Path: H:\SDSKPROJ\YO_YORKVILLE\2022\YO2251\DWG EXHIBIT\YO2251–EXHIBIT

Appendix B-3

IDNR Impact Assessment Section (EcoCAT) Consultation Records

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2400984
Date: 07/19/2023

Project: North Lake Michigan Receiving Station
Address: 3099 Lehman Crossing, Yorkville

Description: The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include construction of two receiving stations (North and South Receiving Stations) including the associated components. This review request is for the North Receiving Station. The EcoCAT review request for the South Receiving Station will be submitted in a separate submittal.

The North Receiving Station improvements are located entirely within the property of an existing previously developed municipal water treatment site which is owned and maintained by the United City of Yorkville, and which is comprised of an existing water treatment plant building and elevated water storage tank. The site is located at 3099 Lehman Crossing, Yorkville, IL 60560.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Rusty Patched Bumble Bee *(Bombus affinis)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

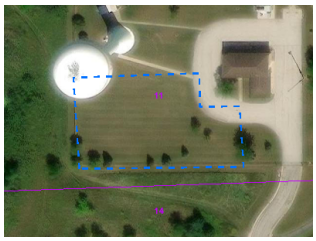
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
37N, 7E, 11



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor
Natalie Phelps Finnie, Director

July 19, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: North Lake Michigan Receiving Station
Project Number(s): 2400984
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2400985
Date: 07/19/2023

Project: South Lake Michigan Receiving Station
Address: 2224 Tremont Ave, Yorkville

Description: The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include construction of two receiving stations (North and South Receiving Stations) including the associated components. This review request is for the South Receiving Station. The EcoCAT review request for the North Receiving Station was submitted today (7/19/2023) as well and the IDNR project number for North Receiving Station is 2400984.

The South Receiving Station improvements will be directly adjacent to an existing municipal water treatment site which is owned and maintained by the United City of Yorkville, and which includes an existing water treatment facility and an elevated water storage tank. The approximate site address of the South Receiving Station is 2224 Tremont Ave, Yorkville, IL 60560.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. **Therefore, consultation under part 1075 is terminated.**

Wetland Review (Part 1090)

The Illinois Wetlands Inventory does not show wetlands within 250 feet of the project location. **Therefore, the wetland review under Part 1090 is terminated.**

This review is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, Natural Areas, or wetlands are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
36N, 7E, 10



IL Department of Natural Resources
Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

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EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2402237
Date: 08/03/2023

Project: 2024 Water Main Replacement Part 1
Address: In and around central Yorkville, Yorkville

Description: The 2024 water main replacement includes replacing existing older mains in the downtown area of the United City of Yorkville. The locations of the proposed water main replacement are in previously developed areas in and around central Yorkville previously disturbed for original construction of the existing water main.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Fox River INAI Site
Yorkville Seep INAI Site
Mottled Sculpin *(Cottus bairdii)*
River Redhorse *(Moxostoma carinatum)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

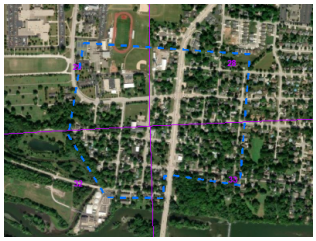
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Location

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County: Kendall

Township, Range, Section:
37N, 7E, 28
37N, 7E, 29
37N, 7E, 32
37N, 7E, 33



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor

Natalie Phelps Finnie, Director

August 04, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: 2024 Water Main Replacement Part 1
Project Number(s): 2402237
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2402240
Date: 08/03/2023

Project: 2024-2027 Water Main Replacement
Address: In and around central Yorkville, Yorkville

Description: The 2024 (Part 2) and 2025-2027 Water Main Replacements includes replacing existing older mains in the downtown area of the United City of Yorkville. The locations of the proposed water main replacement are in previously developed areas in and around central Yorkville previously disturbed for original construction of the existing water main.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Fox River INAI Site
Yorkville Seep INAI Site
Mottled Sculpin *(Cottus bairdii)*
River Redhorse *(Moxostoma carinatum)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
36N, 7E, 4
36N, 7E, 5
37N, 7E, 32
37N, 7E, 33



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor

Natalie Phelps Finnie, Director

August 04, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: 2024-2027 Water Main Replacement
Project Number(s): 2402240
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500

Appendix B-4

National Wetlands Inventory Maps

U.S. Fish and Wildlife Service
National Wetlands Inventory

North Receiving Station National Wetlands



August 18, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

South Receiving Station National Wetlands



August 18, 2023

Wetlands

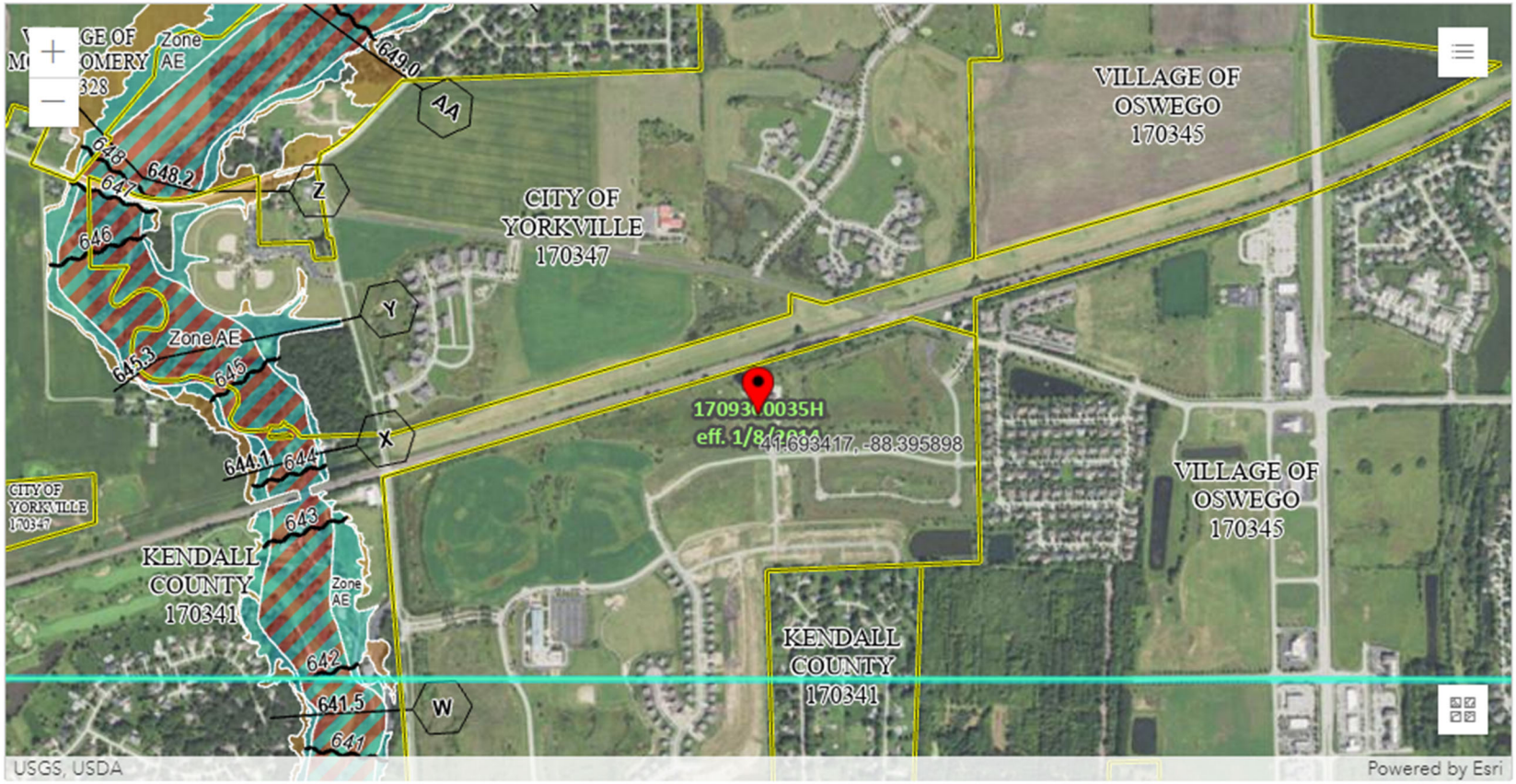
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Appendix B-5

USGS-FEMA Floodway Location Maps



PIN
- Approximate location based on user input and does not represent an authoritative property location

MAP PANELS
- Selected FloodMap Boundary
- Digital Data Available
- No Digital Data Available
- Unmapped

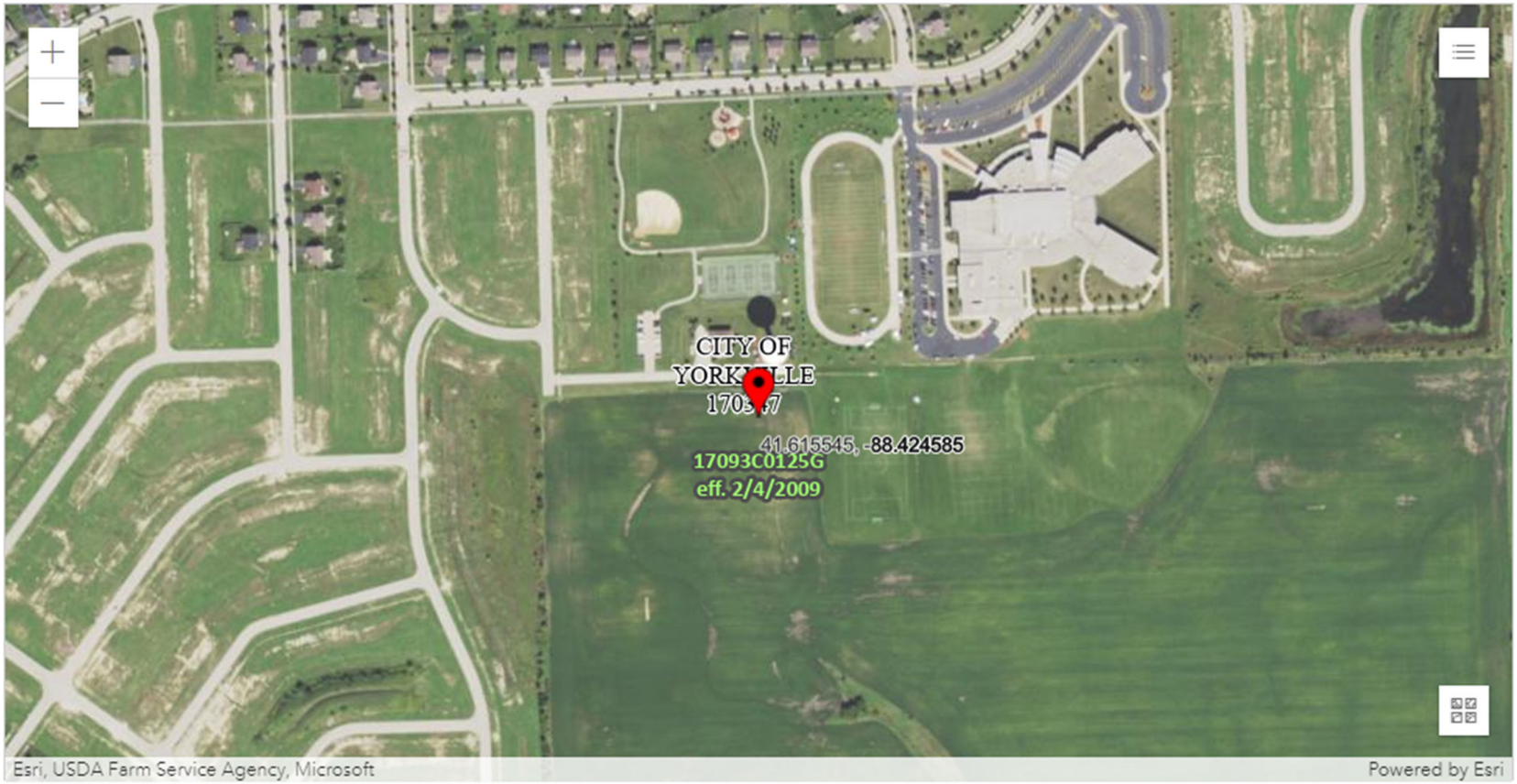
OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs
- Area of Undetermined Flood Hazard Zone D
- Otherwise Protected Area
- Coastal Barrier Resource System Area

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) Zone A, V, A99
- With BFE or Depth
- Regulatory Floodway Zone AE, AO, AH, VE, AR

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall


CITY OF
YORK
41.615545, -88.424585
17093C0125G
eff. 2/4/2009
Esri, USDA Farm Service Agency, Microsoft
Powered by Esri
PIN
Approximate location based on user input and does not represent an authoritative property location
MAP PANELS
Selected FloodMap Boundary
Digital Data Available
No Digital Data Available
Unmapped
NO SCREEN
Area of Minimal Flood Hazard Zone X
Effective LOMRs
Area of Undetermined Flood Hazard Zone D
Otherwise Protected Area
OTHER AREAS
Coastal Barrier Resource System Area
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A, V, A99
With BFE or Depth
Regulatory Floodway Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD
0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee. See Notes. Zone X
Area with Flood Risk due to Levee Zone D
OTHER FEATURES
20.2
17.5
Cross Sections with 1% Annual Chance
Water Surface Elevation
Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline
Profile Baseline
Hydrographic Feature
GENERAL STRUCTURES
Channel, Culvert, or Storm Sewer
Levee, Dike, or Floodwall

Appendix B-6

TDAT List of Tribes with Interests in Kendall County, IL, Example Tribal Consultation Letter, and Consultation Results

(to be provided separately upon consultation completion)



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Water Weighted Decision Matrix Example

File Name:
B.9a_Yorkville Water Weighted Decision Matrix Example

Description:
Comparison of Water Source Alternatives Weighted Descision Matrix - October 2021

August 2024

United City of Yorkville
ALTERNATIVE WATER SOURCE STUDY

COMPARISON OF WATER SOURCE ALTERNATIVES
Weighted Descision Matrix
October 2021

Ranking Criteria	**Cost**		**Water Quality**		**Risk**		**Control / Governance**		**Sustainability/Quantity**		**Management/Staffing**		
	Capital (implementation) Costs?		What is quality and variability of the finished water for this alternative?		Does the alternative provide for the most reliable, long term solution.		For this alternative, does the City maintain complete control of their water source?		Does the alternative provide a long-term sustainable solution?		Will the City, or another entity, be responsible for managing and staffing the system?		
Highest	1 - Highest Cost		1 - Finished water quality is variable and/or reduced from present standard.		1 - This alternative is only a short term solution with potential long term risk and consequences.		1 - The City does not retain significant control of the water supply system.		1 - This alternative has long term sustainability concerns.		1 - The City will need to manage and staff the entire system.		
Lowest	5 - Lowest Cost		5 - Finished water quality is more consistent and/higher than present standard.		5 - This alternative provides for a long term (exceeding 50 year) solution with manageable long term risks.		5 - The City maintains complete control of the water supply system.		5 - This alternative provides for a long term (exceeding 50 year) sustainable solution.		5 - Another entity is contractually responsible to manage and staff the water supply system.		
	Weight	**0%**	**Weight**	**0%**	**Weight**	**0%**	**Weight**	**0%**	**Weight**	**0%**	**Weight**	**0%**	
Alternative	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Value**	**Weighted Value**	**Weighted Total Value**
Fox River - Yorkville Alone	5	0	4	0	4.5	0	5	0	4.5	0	1	0	**0**
Fox River - Waterlink Sub-Regional System	5	0	4	0	4.5	0	4	0	4.5	0	2	0	**0**
Lake Michigan - DuPage Water Commission	5	0	5	0	5	0	2	0	5	0	5	0	**0**
Lake Michigan - Joliet Regional Water Commission	4	0	5	0	5	0	3	0	5	0	5	0	**0**
Lake Michigan - Illinois Lake Water System	NOT APPLICABLE												



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
PRESS RELEASE December 6, 2021 WaterLink Announces Water Source Decision

File Name:
B.9b_PRESS RELEASE December 6, 2021 WaterLink Announces Water Source Decision

Description:
WaterLink Announces a Recommendation on the Region's Future Water Source.

August 2024

MEDIA CONTACT
Kristina Nemetz, *Communications Manager*
(630) 896-8080 x 9010 | communications@montgomeryil.org

PRESS RELEASE

WaterLink Announces a Recommendation on the Region's Future Water Source

Officials from Montgomery, Oswego, and Yorkville are set to consider formally selecting Lake Michigan as the best sustainable option for drinking water.

December 6, 2021— Water will, in fact, link the communities of Montgomery, Oswego, and Yorkville. For more than a year, elected officials and staff from each municipality have researched and reviewed future alternate water source options individually and collectively as a regional team aptly named WaterLink.

After months of meetings, presentations, conservation education, cost analysis, open houses, and public input, officials and staff from the three communities will recommend the DuPage Water Commission at their respective December Board Meetings as the plan of action for sourcing water to the region. The DuPage Water Commission is a well-established organization that has reliably provided Lake Michigan water to its customers since 1992. WaterLink recommends connecting to Lake Michigan through the DuPage Water Commission based on the quality and sustainability of Lake Michigan water and the proximity to the existing DuPage Water Commission system, providing the lowest combined total cost of a new water source for the three communities.

"By far, this is the single most important decision any of us will make in our times of service," said Village President of Montgomery, Matt Brolley. On Monday, December 13, the Village of Montgomery Board will formally consider selecting Lake Michigan water via the DuPage Water Commission. The Village of Oswego and the United City of Yorkville will follow suit at their meetings Tuesday, December 14.

As early as 2014, engineering consultants working with the communities discussed the long-term water source sustainability issue the region would face in the imminent future. The deep sandstone aquifer that the area depends on for its water is being used beyond sustainable capacity, declining water levels. No amount of conservation efforts will change the aquifer's long-term outlook, especially when considering current demand and the Chicago Metropolitan Agency for Planning projection for the region's population growth by 2050.

With the underground pool of freshwater that supplies water to the WaterLink communities and several others in the Chicagoland region slowly draining, officials came together as a region to create a long-term strategic plan and solution. The Illinois State Water Survey, which studies water access and availability throughout the state, projects that the current aquifer will not meet regional demand as early as 2030.

"This partnership between Oswego, Yorkville, and Montgomery allowed us the opportunity to pool collective resources and expertise to find the best long-term solution for our residents and businesses. The goal is a safe, reliable water source for generations to come," Oswego Village President Troy Parlier said.

"We knew our proximity to each other meant what source each community chose would impact the others, so working together throughout the process was vital," said John Purcell, Mayor of Yorkville. "The Village and City Administrators, Public Works Directors, and Village Presidents and Mayors from each of the communities were dedicated to supporting each other in making the best decision for their towns."

"If the Boards vote to make the decision official, the real work will begin so that as a group, WaterLink can begin formal negotiations and agreements for the terms of the water sourcing," said Brolley. "Staff will work internally to plan for the infrastructure build-out required and create a unified timeline that will work for each community as we move towards this transition."

An official decision on each community's future water source selection is on the agendas for consideration at next week's board meetings in Montgomery (December 13), Oswego (December 14), and Yorkville (December 14). The WaterLink group will release more information as it is available, but officials expect terms and formal agreements to take approximately a year to solidify. In some communities, the switch to Lake Michigan water could occur as early as 2027. However, officials forecast that the region may not rely entirely on Lake Michigan to source water until closer to 2030.

For more information, residents are encouraged to visit their respective websites, follow social media, and sign-up for community newsletters and notifications.

Residents can find community-specific information about the alternative water source decision making process online:

- Montgomery | ALTERNATIVE Water Source | Montgomery, IL - Official Website (montgomeryil.org)
- Oswego | New Water Source | Village of Oswego, Illinois (oswegoil.org)
- Yorkville | New Water Source | Yorkville, IL - Official Website

VILLAGE/CITY CONTACT

Village of Montgomery
Jeff Zoephel, Village Administrator
(331) 212-9002 | jzoephel@montgomeryil.org

Village of Oswego
Dan Di Santo, Village Administrator
(630) 551-2360 | ddisanto@oswegoil.org

United City of Yorkville
Bart Olson, City Administrator
(630) 553-8537 | bolson@yorkville.il.us



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
May 14 Yorkville City Council Agenda

File Name:
B.9c_May 14 Yorkville City Council Agenda

Description:
Agenda City Council Meeting - Tuesday, May 14, 2024

August 2024

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

AGENDA
CITY COUNCIL MEETING
Tuesday, May 14, 2024
7:00 p.m.
City Hall Council Chambers
651 Prairie Pointe Drive, Yorkville, IL

Call to Order:

Pledge of Allegiance:

Roll Call by Clerk:

WARD I	WARD II	WARD III	WARD IV
Ken Koch	Arden Joe Plocher	Chris Funkhouser	Seaver Tarulis
Dan Transier	Craig Soling	Matt Marek	Rusty Corneils

Establishment of Quorum:

Amendments to Agenda:

Presentations:

Public Hearings:

1. Kelaka, LLC – Annexation
2. Hagemann – Annexation
3. Blackberry Oaks – Annexation

Citizen Comments on Agenda Items:

Consent Agenda:

1. Minutes of the Regular City Council – April 23, 2024
2. Bill Payments for Approval
   - $ 691,670.11 (vendors – FY 24)
   - $ 172,644.62 (vendors – FY 25)
   - $ 159,263.43 (wire payments)
   - $ 375,552.13 (payroll period ending 04/26/24)
   - $ 1,399,130.29 (total)

Mayor's Report:

1. CC 2024-34 Resolution Authorizing the Execution of an Intergovernmental Agreement Providing for the Sharing of Costs and Funding for the Construction of Facilities to Transport Lake Michigan Water to the Village of Oswego, Kendall and Will Counties, Illinois, The United City of Yorkville, Kendall County, Illinois, and the Village of Montgomery, Kane and Kendall Counties, Illinois

Mayor's Report (cont'd):

2. CC 2024-35 Ordinance Amending Title 3, Chapter 3 of the Code of Ordinances Creating a New Liquor License Class and Fee (Water Parks)
3. CC 2024-36 Resolution Approving an Agreement for Land Acquisition Consulting Services with Mathewson Right of Way Company
4. CC 2024-37 Ordinance Approving a Lease Agreement for Certain Real Estate in the United City of Yorkville, Kendall County, Illinois (We are Called to Care)
5. CC 2024-38 Resolution Authorizing Participation in Progressive Energy Group (PEG) and Authorizing the Finance Director to Approve a Contract With the Lowest Cost Electricity Provider by Rate Classification for a Period Up To 48 Months
6. CC 2024-39 2024 Bond – Municipal Advisor and Bond Council Engagement Letters
7. CC 2024-40 Ordinance authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $25,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.
8. CC 2024-41 Ordinance authorizing the borrowing by the United City of Yorkville, Kendall County, Illinois of a Water Infrastructure Finance and Innovation Act loan in an aggregate principal amount of not to exceed $160,000,000 from the United States Environmental Protection Agency, pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.
9. CC 2024-42 Ordinance authorizing the issuance of general obligation alternate revenue bonds of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $40,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of the acquisition of one or more parcels of real property and the construction of a new public works facility on any portion thereof.
10. CC 2024-43 Ordinance Authorizing the Acquisition of Certain Easements for the Construction of Water Mains

Public Works Committee Report:

Economic Development Committee Report:

1. EDC 2024-30 East Village of Westbury
    a. Ordinance Repealing a Planned Unit Development Agreement for the East Village of Westbury
    b. Ordinance Approving a Memorandum of Understanding Regarding the East Village of Westbury

Public Safety Committee Report:

Administration Committee Report:

Park Board:

Planning and Zoning Commission:

1. PZC 2024-05 & EDC 2024-19 Corneils Solar Farm
    a. Ordinance Annexing Certain Territory Generally Located Immediately North of Corneils Road, East of Beecher Road, and West of IL State Route 47
    (Corneils Road Solar, LLC – Solar Farm)
    b. Ordinance Approving a Special Use for a Solar Farm with Freestanding Solar Energy Systems (Corneils Road Solar)
    c. Ordinance Approving the Rezoning to the A-1 Agricultural Zoning District of Certain Territory Generally Located Immediately North of Corneils Road, East of Beecher Road, and West of IL State Route 47
    (Corneils Road Solar, LLC –Solar Farm)
2. PZC 2024-09 & EDC 2024-32 Kendall County Petition 24-04 – 1.5 Mile Review (1520 Cannonball Trail)
3. PZC 2024-10 & EDC 2024-33 Kendall County Petition 24-05 – 1.5 Mile Review (7709 and 7731 Bentgrass Circle – Lots 223 and 224 of Whitetail Ridge)
4. PZC 2024-11 & EDC 2024-34 Kendall County Petition 24-06 – 1.5 Mile Review (7789 Route 47)
5. PZC 2024-13 Ordinance Approving an Amendment to the Yorkville Unified Development Ordinance Regarding Park and Recreation and School Site Dedication (Land Cash)

City Council Report:

City Clerk's Report:

Community and Liaison Report:

Staff Report:

Mayor's Report (cont'd):

11. CC 2021-04 City Buildings Updates
12. CC 2021-38 Water Study Update

Additional Business:

Citizen Comments:

Executive Session:

Adjournment:

COMMITTEES, MEMBERS AND RESPONSIBILITIES

ADMINISTRATION: May 15, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Marek	Finance	Library
Vice-Chairman:	Alderman Plocher	Administration	
Committee:	Alderman Koch		
Committee:	Alderman Corneils		

ECONOMIC DEVELOPMENT: June 4, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Plocher	Community Development	Planning & Zoning Commission
Vice-Chairman:	Alderman Funkhouser	Building Safety & Zoning	Kendall Co. Plan Commission
Committee:	Alderman Transier		
Committee:	Alderman Tarulis		

PUBLIC SAFETY: July 11, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Transier	Police	School District
Vice-Chairman:	Alderman Tarulis		
Committee:	Alderman Soling		
Committee:	Alderman Funkhouser		

PUBLIC WORKS: May 21, 2024 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Koch	Public Works	Park Board
Vice-Chairman:	Alderman Soling	Engineering	YBSD
Committee:	Alderman Marek	Parks and Recreation	
Committee:	Alderman Corneils		



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
WaterLink IGA Cost Share Resolution 2024-24

File Name:
B.9d_WaterLink IGA Cost Share Resolution 2024-24

Description:
RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE SHARING OF COSTS AND FUNDING FOR THE CONSTRUCTION OF FACILITIES TO TRANSPORT LAKE MICHIGAN WATER TO THE UNITED CITY OF YORKVILLE.

August 2024

Resolution No. 2024-24

RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE SHARING OF COSTS AND FUNDING FOR THE CONSTRUCTION OF FACILITIES TO TRANSPORT LAKE MICHIGAN WATER TO THE VILLAGE OF OSWEGO, KENDALL AND WILL COUNTIES, ILLINOIS, THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND THE VILLAGE OF MONTGOMERY, KANE AND KENDALL COUNTIES, ILLINOIS

WHEREAS, the United City of Yorkville, Kendall County, Illinois, the Village of Oswego and the Village of Montgomery are duly organized units of government of the State of Illinois within the meaning of Article VII, Section 10 of the 1970 Illinois Constitution (collectively, the "*Municipalities*"); and

WHEREAS, the Constitution of the State of Illinois of 1970, Article VII, Section 10, and the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq.*, authorize units of local government to contract or otherwise associate among themselves to obtain or share services and to exercise, combine, or transfer any power or function in any manner not prohibited by law; and

WHEREAS, the Intergovernmental Cooperation Act (5 ILCS 220/1 *et seq.*) provides that any power or powers, privileges, functions, or authority exercised, or which may be exercised by a public agency may be exercised, combined, transferred, and enjoyed jointly with another public agency; and

WHEREAS, in December of 2021, following public comment, the corporate authorities of the Municipalities each approved the joint pursuit of Lake Michigan water supply from the DuPage Water Commission (the "DWC"); and

WHEREAS, after good faith negotiation and careful consideration and deliberation, the Municipalities desire to enter into an Intergovernmental Agreement to share in the costs of financing the design, land acquisition, permitting, and construction of the infrastructure needed for the transmission of Lake Michigan water from the DWC to the Municipalities.

NOW, THEREFORE, BE IT RESOLVED by the Mayor and the City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. The recitals set forth above are incorporated into this Resolution as if fully restated herein.

Section 2. That the Intergovernmental Agreement between the Municipalities, attached hereto as Exhibit "1", is hereby approved and its execution is hereby authorized.

Section 3. All Resolutions or parts of Resolutions in conflict with any of the provisions of this Resolution shall be, and the same hereby repealed to the extent of the conflict.

Section 4. This Resolution and every provision thereof shall be considered severable. If any section, paragraph, clause or provision of this Resolution is declared by a court of law to be invalid or unconstitutional, the invalidity or unconstitutionality thereof shall not affect the validity of any other provisions of this Resolution.

Section 5. This Resolution shall be in full force and effect from and after its passage and approval in the manner provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 14th day of May, A.D. 2024.

CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
ARDEN JOE PLOCHER	AYE	CRAIG SOLING	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE	RUSTY CORNEILS	AYE

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois this 17th day of May, A.D. 2024.

MAYOR

Attest:

CITY CLERK

RESOLUTION NO. 2024-018

A RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE SHARING OF COSTS AND FUNDING FOR THE CONSTRUCTION OF FACILITIES TO TRANSPORT LAKE MICHIGAN WATER TO THE VILLAGE OF OSWEGO, KENDALL AND WILL COUNTIES, ILLINOIS THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND THE VILLAGE OF MONTGOMERY, KANE AND KENDALL COUNTIES, ILLINOIS

WHEREAS, the Village of Montgomery ("**Village**") is not a home rule municipality within Article VII, Section 6A of the 1970 Constitution of the State of Illinois, and therefore acts pursuant to those powers granted to it under 65 ILCS 5/1-1 *et seq.* and other applicable laws; and,

WHEREAS, the Constitution of the State of Illinois of 1970, Article VII, Section 10, provides that units of local government may contract or otherwise associate among themselves to obtain or share goods and services and to exercise, combine, or transfer any power or function in any manner not prohibited by law or by ordinance and may use their credit, revenues, and other resources to pay costs related to intergovernmental activities; and,

WHEREAS, the Village of Oswego, the Village of Montgomery, and the United City of Yorkville (collectively, the "**Municipalities**") are units of local government within the meaning of Article VII, Section 1 of the Illinois Constitution of 1970 who are authorized to enter into intergovernmental agreements pursuant to the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq*; and,

WHEREAS, the Intergovernmental Cooperation Act (5 ILCS 220/1 *et seq.*) provides that any power or powers, privileges, functions, or authority exercised, or which may be exercised by a public agency may be exercised, combined, transferred, and enjoyed jointly with another public agency; and,

WHEREAS, in December of 2021, following public comment, the corporate authorities of the Municipalities each approved the joint pursuit of Lake Michigan water supply from the DWC; and

WHEREAS, after good faith negotiation and careful consideration and deliberation, the Municipalities desire to enter into an Intergovernmental Agreement to share in the costs of financing the design, land acquisition, permitting, and construction of the infrastructure needed for the transmission of Lake Michigan water from the DuPage Water Commission to the Municipalities.

NOW, THEREFORE, BE IT RESOLVED by the Village President and Board of Trustees of the Village of Montgomery, Kane and Kendall Counties, Illinois, as follows:

SECTION 1. INCORPORATION OF RECITALS

That the foregoing recitals are incorporated as though fully set forth in the body of this Resolution.

SECTION 2. APPROVAL OF INTERGOVERNMENTAL AGREEMENT

That the Intergovernmental Agreement between the Municipalities, attached hereto and incorporated herein as **Exhibit A**, is hereby accepted and approved by the Village.

That the Village President and the Village Clerk, or their respective designees, are hereby authorized to do all things necessary to carry out the objectives of this Resolution.

SECTION 3. REPEALER

All Resolutions or parts of Resolutions in conflict with any of the provisions of this Resolution shall be, and the same hereby repealed to the extent of the conflict.

SECTION 4. SEVERABILITY

This Resolution and every provision thereof shall be considered severable. If any section, paragraph, clause or provision of this Resolution is declared by a court of law to be invalid or unconstitutional, the invalidity or unconstitutionality thereof shall not affect the validity of any other provisions of this Resolution.

SECTION 5. EFFECTIVE DATE

This Resolution shall be in full force and effect from and after its passage and approval in the manner provided by law.

PASSED AND APPROVED by the Village President and Board of Trustees of the Village of Montgomery, Kane and Kendall Counties, Illinois this 13th day of May 2024.

Matthew Brolley, President of the Board of Trustees of the Village of Montgomery

ATTEST:

Debbie Buchanan, Village Clerk of the Village of Montgomery

VILLAGE OF MONTGOMERY, ILLINOIS
VILLAGE SEAL
KANE & KENDALL COUNTIES

	Aye	Nay	Absent	Abstain
Trustee Matt Bauman	✓			
Trustee Ben Brzoska	✓			
Trustee Dan Gier	✓			
Trustee Steve Jungermann	✓			
Trustee Doug Marecek	✓			
Trustee Theresa Sperling			X	
Village President Matthew Brolley	NO VOTE CAST			

STATE OF ILLINOIS)
) SS
COUNTY OF KANE)

CLERK'S CERTIFICATE
(RESOLUTION)

I, Debbie Buchanan, the duly qualified and acting Village Clerk of the Village of Montgomery, Kane and Kendall Counties, Illinois, do hereby certify that I am the keeper of its books and records and that the attached hereto is a true and correct copy of a Resolution entitled:

RESOLUTION 2024-018 AUTHORIZING THE EXECUTION OF AN INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE SHARING OF COSTS AND FUNDING FOR THE CONSTRUCTION OF FACILITIES TO TRANSPORT LAKE MICHIGAN WATER TO THE VILLAGE OF OSWEGO, KENDALL AND WILL COUNTIES, ILLINOIS THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND THE VILLAGE OF MONTGOMERY, KANE AND KENDALL COUNTIES, ILLINOIS

which Resolution was duly adopted by said Board of Trustees at a meeting held on the 13th day of May 2024, and thereafter approved by the Village President on the 13th day of May 2024.

I do further certify, in my official capacity, that a quorum of said Board of Trustees was present at said meeting and that the Board complied with all requirements of the Illinois Open Meetings Act.

IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of May 2024.

(Seal) VILLAGE OF MONTGOMERY, ILLINOIS VILLAGE SEAL KANE & KENDALL COUNTIES

Debbie Buchanan

Debbie Buchanan, Village Clerk

EXHIBIT 1

INTERGOVERNMENTAL AGREEMENT PROVIDING FOR THE SHARING OF COSTS AND FUNDING FOR THE CONSTRUCTION OF FACILITIES TO TRANSPORT LAKE MICHIGAN WATER TO THE VILLAGE OF OSWEGO, KENDALL AND WILL COUNTIES, ILLINOIS, THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AND THE VILLAGE OF MONTGOMERY, KANE AND KENDALL COUNTIES, ILLINOIS

THIS INTERGOVERNMENTAL AGREEMENT *(the "Agreement")* by and among 1) the Village of Oswego, Kendall and Will Counties, Illinois *("Oswego")* a home rule municipal corporation of the State of Illinois, 2) the United City of Yorkville, Kendall County, Illinois *("Yorkville")* a non-home rule municipal corporation of the State of Illinois, and 3) the Village of Montgomery, Kane and Kendall Counties, Illinois *("Montgomery"),* a non-home rule municipal corporation of the State of Illinois, (individually the "*Municipality*", collectively, the *Municipalities*) entered into this 14th day of May, 2024, provides for sharing of the costs for the goods and services related to the construction of facilities to transport Lake Michigan Water to the Municipalities and to jointly select and approve architects, engineers, consultants, professional service providers, financial advisors, real estate advisors and consultants, construction and trades, and other related firms *("Vendors")* to design, acquire land, permit, and construct the infrastructure needed for the transmission of Lake Michigan water from the DuPage Water Commission to the Municipalities ("*Facilities*") and other related costs, including, but not limited to loans and other financing options. In addition, this Agreement provides for the sharing of grants, loan forgiveness, or other financial benefits the Municipalities receive individually or collectively in the furtherance of the design and construction of the Facilities as agreed to by the Municipalities.

RECITALS

WHEREAS, the Constitution of the State of Illinois of 1970, Article VII, Section 10, provides that units of local government may contract or otherwise associate among themselves to obtain or share goods and services and to exercise, combine, or transfer any power or function in any manner not prohibited by law or by ordinance and may use their credit, revenues, and other

resources to pay costs related to intergovernmental activities; *and*

WHEREAS, the Municipalities are units of local government within the meaning of Article VII, Section 1 of the Illinois Constitution of 1970 who are authorized to enter into intergovernmental agreements pursuant to the Intergovernmental Cooperation Act, 5 ILCS 220/1 *et seq*; *and*

WHEREAS, the Intergovernmental Cooperation Act (5 ILCS 220/1 *et seq.*) provides that any power or powers, privileges, functions, or authority exercised, or which may be exercised by a public agency may be exercised, combined, transferred, and enjoyed jointly with another public agency; *and*

WHEREAS, the Municipalities studied available alternative water sources (*"Study"* or *"Studies")* based upon population growth and water demand projections; *and*

WHEREAS, each Municipality's Study concluded that to minimize costs and for the mutual benefit of each municipality and the region it is mutually beneficial for the Municipalities to work together to obtain Lake Michigan water from the DuPage Water Commission *("DWC");* *and*

WHEREAS, each Municipality's Study considered the full water demand or needs when the three Municipalities are fully developed and upon each Municipality's evaluation to meet the 2050 water demands of Montgomery, Oswego, and Yorkville. Further, the alternative water sources were inclusive of the improvements and facilities required to meet 2050 water demands; *and*

WHEREAS, in December of 2021, following public comment, the corporate authority of each Municipality approved the joint pursuit of Lake Michigan water supply from the DWC; *and*

WHEREAS, the Municipalities have each obtained an Illinois Department of Natural

Resources ("IDNR") Lake Michigan Water Allocation Permit; *and*

WHEREAS, the Illinois General Assembly passed legislation amending the 1985 Water Supply Act, authorizing a 7th District to the DuPage Water Commission; *and*

WHEREAS, the Municipalities have obtained federal grant monies to conduct a corrosion control study; *and*

WHEREAS, the Municipalities continue to seek opportunities individually and collectively for additional federal, state, and local grant monies; *and*

WHEREAS, the DWC is finalizing the route for the pipeline from the DuPage Water Commission for the transmission of Lake Michigan water ("Facilities") Facilities as described in Exhibit 1, incorporated herein by reference; *and*

WHEREAS, the Municipalities are engaged in negotiations with the DWC for the cost of construction; *and*

WHEREAS, the Municipalities are engaged in negotiations with the DWC for long-term water supply agreements, including their role as members of District Seven; *and*

WHEREAS, the Municipalities have previously entered into two escrow agreements with the DWC for the initiation of engineering design services while the Municipalities finalized this Agreement; *and*

WHEREAS, the first escrow agreement entered into in 2023 provided for the cost-sharing to be equally divided among the three Municipalities; and

WHEREAS, according to the March 2024 escrow agreement, the Municipalities agreed to recalculate and reallocate the costs based on the percentages identified in Exhibit 2 after the execution of this Agreement; *and*

WHEREAS, the Municipalities are committed to share in the costs of the Facilities,

including any change orders, so that membership in the DuPage Water Commission continues to be an efficient and cost-effective option for all the Municipalities; *and*

WHEREAS, the Municipalities, after review and deliberation recognize the need to construct seven (7) metering stations and seven (7) receiving stations to bring Lake Michigan Water to the Municipalities. The Municipalities as part of this Agreement have agreed to share in the cost of the seven (7) metering stations and to consider the seven (7) receiving stations as Internal System Improvements to be absorbed by the applicable Municipality; *and*

WHEREAS, as part of their decision-making, the Municipalities took into consideration various cost allocation methodologies including use, distance, and other more nuanced and complex means to allocate the shared costs among the Municipalities; *and*

WHEREAS, the Municipalities desire to have a fully operational connection to Lake Michigan water supply on or about July 2, 2028; *and*

WHEREAS, Montgomery may elect to receive water from DWC at a later time, but no sooner than December 31, 2030; *and*

WHEREAS, each Municipality, at its costs, will make internal system improvements within its system to accommodate the receipt of Lake Michigan water and in compliance with the IDNR laws, rules, and regulations ("Internal System Improvements")[1]; *and*

WHEREAS, the Municipalities acknowledge and recognize that this Agreement is for the mutual benefit of each Municipality and the region. Further, acting together creates economies of scale and minimizes costs associated with the design and construction of the Facilities; *and*

WHEREAS, the Municipalities may enter into individual agreements, with the intent to

[1] Internal System Improvement costs include the costs to design, permit, and construct the improvements needed within each Municipality's water system to effectively move Lake Michigan water within its distribution system once received from DWC.

share in the costs (including change orders) to design and construct Facilities for the transmission of Lake Michigan water and all other related costs from the DWC within each Municipality; *and*

WHEREAS, the Municipalities may enter into individual agreements with the intent not to share in the costs (including change orders) to design and construct Facilities for the transmission of Lake Michigan water and all other related costs from the DWC within each Municipality; *and*

WHEREAS, the Municipalities seek to enter into this Agreement to share in agreed-to costs for the goods and services of Vendors necessary to design and construct the Facilities, including, but not limited to, engineering and architecture, professional services, land acquisition, financing, surveys, construction, studies related to permitting, and other activities related to the design and construction of the Facilities that will transport and distribute Lake Michigan water from the DWC to each Municipality; *and*

WHEREAS, unless otherwise agreed, the cost to construct a Municipality's Internal System Improvements that are not a part of the Facilities, will be borne by each respective Municipality; *and*

WHEREAS, unless otherwise agreed, the Municipalities seek to enter into agreements to share in the costs of financing, funding, or other forms of financing including but not limited to grants, public and private loan funds, bonds, and other similar forms and finance structures; *and*

WHEREAS, unless otherwise agreed, the Municipalities seek to enter into this Agreement to share in the costs and proceeds from grants, loan forgiveness, or other types of financial benefits the Municipalities receive individually or collectively in the furtherance of the design and construction of the Facilities and all other related costs; *and*

WHEREAS, the division of financial responsibilities of each of the Municipalities are

described in Exhibit 2, incorporated herein by reference. The Municipalities recognize certain parts of the Facilities will only serve one or two of the Municipalities and will not be shared by the third Municipality;

NOW, THEREFORE, in consideration of the mutual promises, obligations, and undertakings hereafter set forth, the Municipalities agree as follows:

Section 1. The foregoing recitals are incorporated into this Agreement as if fully restated in this Section 1.

Section 2. The Municipalities agree to continue to work with DWC on the final transmission main route of the Facilities from DWC to the Municipalities that is efficient and cost-effective; *and*

Section 3. The Municipalities agree to cooperate with DWC in value engineering the project to construct the Facilities; *and*

Section 3. The Municipalities agree to coordinate and cooperate to jointly select and approve Vendors necessary to construct the Facilities, it being understood that the selection process must be or have been in accordance with all applicable ordinances and laws of the United States and the State of Illinois, as applicable, and will be by unanimous consent of the Municipalities.

Section 3. Prior to the selection of any Vendor for the Facilities, the Municipalities will work together to determine the scopes of work or assignment, the deliverables, and the estimated costs. It is understood that all contracts or agreements with an estimated cost in excess of $25,000 to any one Municipality must be approved by the corporate authorities of each of the respective Municipalities prior to the commencement of work.

Section 4. After careful consideration and deliberation, the Municipalities, upon

execution of a construction agreement(s) with DWC for the construction of the Facilities and all other costs, excluding each Municipality's Internal System Improvement costs, agree to the cost-sharing allocation percentages as described in Exhibit 2.

Section 5. The Municipalities agree to review all invoices for goods and services rendered and to distinguish those costs which serve any single Municipality over the other Municipality, which cost will be paid by the benefitted Municipalities. Payment of all invoices must follow the Illinois Prompt Payment Act. It is further acknowledged that there are certain parts of the Facilities that will only serve one or two of the Municipalities and will not be shared by the third Municipality. The division of financial responsibilities of each of the Municipalities are described in Exhibit 2, incorporated herein by reference.

Section 6. This Agreement and the rights of the Municipalities hereunder may not be assigned without consent (except by operation of law), and the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties hereto. Nothing in this Agreement, express or implied, is intended to confer upon any party, other than the Municipalities and their respective successors; *and*

Section 7. This Agreement shall be interpreted and enforced under the laws of the State of Illinois. Any legal proceeding related to enforcement of this Agreement must be brought in the Circuit Court of Kendall County, Illinois. In case any provision of this Agreement is declared and/or found invalid, illegal or unenforceable by a court of competent jurisdiction, that provision shall, to the extent possible, be modified by the court in such manner as to be valid, legal and enforceable so as to most nearly retain the intent of the Municipalities, and, if such modification is not possible, the provision should be severed from this Agreement, and in either case the validity, legality, and enforceability of the remaining provisions of this Agreement will not be affected or impaired

thereby.

Section 8. All notices required or permitted by this Agreement must be in writing and may be given by (a) depositing the same in the United States mail, addressed to the party to be notified, postage prepaid and certified with the return receipt requested, (b) delivering the same in person, or (c) telecopying the same with electronic confirmation of receipt.

If to the Village of Oswego:	Village Administrator Village of Oswego 100 Parkers Mill Oswego, Illinois 60543
With a copy to:	David Silverman Mahoney, Silverman & Cross, LLC 822 Infantry Drive, Suite 100 Joliet, Illinois 60435
If to the City of Yorkville:	City Administrator United City of Yorkville 651 Prairie Pointe Drive Yorkville, Illinois 60560
With a copy to:	Kathleen Field Orr 2024 Hickory Road, Suite 205 Homewood, Illinois 60430
If to the Village of Montgomery:	Village Administrator Village of Montgomery 200 North River Street Montgomery, Illinois 60538
With a copy to:	Laura M. Julien Mickey, Wilson, Weiler, Renzi & Andersson 140 South Municipal Drive Sugar Grove, Illinois 60542

Or any such other person, counsel or address as any Municipality specifies pursuant to this Section.

Section 9. This Agreement may be executed in counterparts, each of which will be

deemed to be an original.

Section 10. This Agreement represents the entire agreement among the Municipalities pertaining to sharing the costs of designing, constructing, funding, and financing the Facilities and there are no other promises or conditions in any other agreement whether oral or written.

Section 11. This Agreement shall be in full force and effect upon approval by resolution adopted by the corporate authorities of their respective Municipalities; provided, however, any Municipality may terminate this Agreement by providing sixty (60) calendar days' advance written notice to the other Municipalities. In the event a Municipality terminates participation in this joint undertaking, that Municipality will be responsible for its share of all costs incurred and costs to be incurred due to written contracts or commitments. If a Municipality terminates its participation in this Agreement, this Agreement will remain in full force and effect between the remaining two Municipalities.

Section 12. This Agreement may be amended only with written consent of all Parties hereto.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, this Agreement, among the Village of Oswego, Kendall and Will Counties, Illinois, the United City of Yorkville, Kendall County, Illinois, and the Village of Montgomery, Kane and Kendall Counties, Illinois have executed this Agreement as dated below by each Mayor:

United City of Yorkville, Kendall County, Illinois, a municipal corporation

By: _____
Mayor

Attest:

_____
City Clerk

Village of Oswego, Kendall and Will Counties, Illinois, a municipal corporation

By: _____
President

Attest:

_____
Village Clerk

Village of Montgomery, Kane and Kendall Counties, Illinois, a municipal corporation

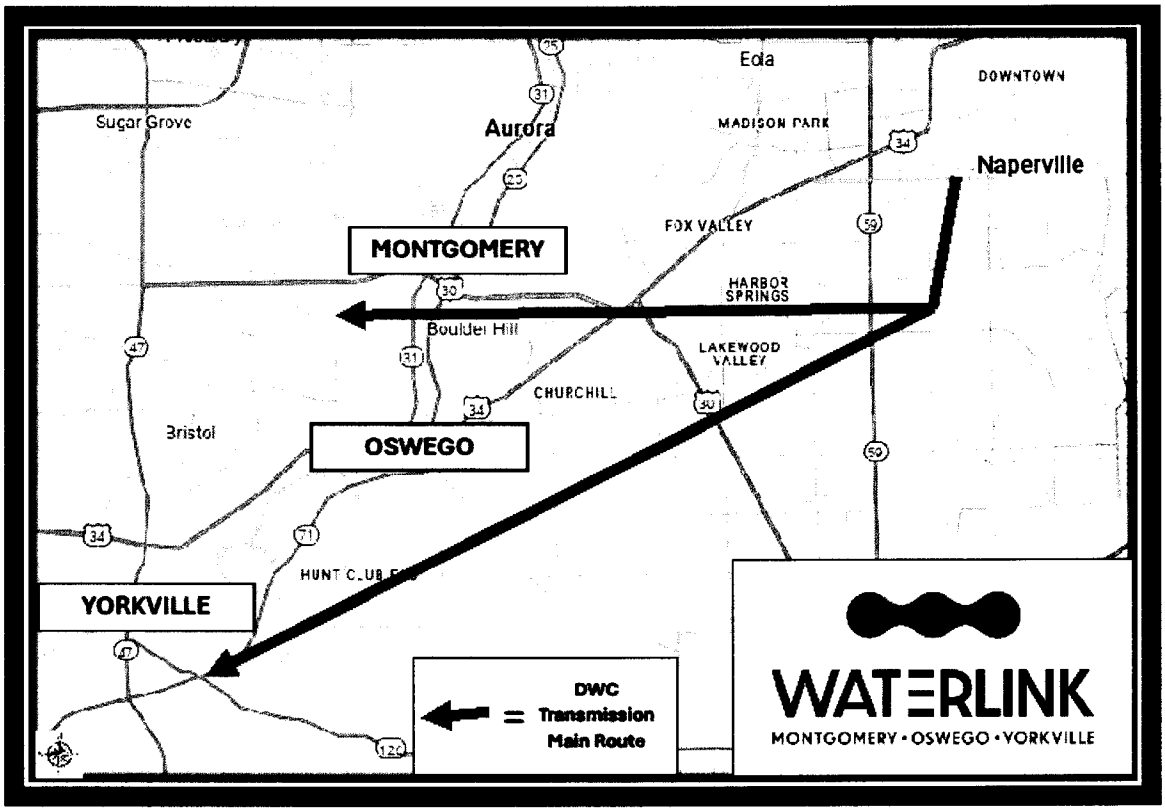
By: _____
President

Attest:

_____
Village Clerk

EXHIBIT 1
FACILITIES' ROUTE MAP

DuPage Water Commission Transmission Main Route



DRAFT - April 2024

EXHIBIT 2
DIVISION OF FINANCIAL RESPONSIBILITIES/ ALLOCATION OF COSTS

The Village of Oswego, the Village of Montgomery, and the United City of Yorkville after careful consideration and deliberation agree to the following cost-sharing percentages for the Construction Agreement with DWC for the construction of the Facilities and all other agreed to costs, excluding each Municipality's Internal System Improvement costs:

The Village of Oswego commits and agrees to pay	35.36%
The Village of Montgomery commits and agrees to pay	24.42%
The United City of Yorkville commits and agrees to pay	40.22%

[THE REMAINDER OF THIS PAGE IS BLANK]



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Economic Benefits of Investing in Water Infrastructure

File Name:
B.10a_Economic Benefits of Investing in Water Infrastructure

Description:
The Economic Benefits of Investing in Water Infrastructure: How a Failure to Act Would Affect the US Economic Recovery.

August 2024

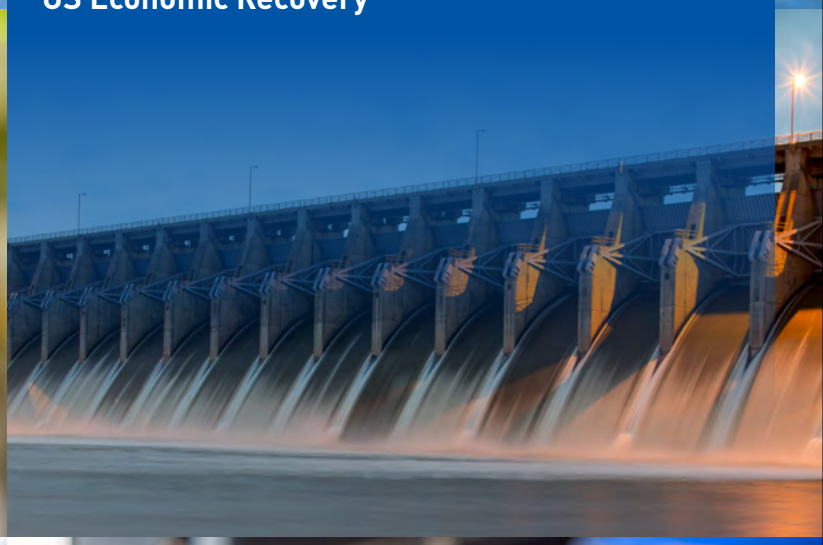
Value of Water CAMPAIGN

ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

The Economic Benefits of Investing in Water Infrastructure

How a Failure to Act Would Affect the US Economic Recovery









About this Report

The American Society of Civil Engineers (ASCE) partnered with the Value of Water Campaign to commission this study. It is part of ASCE's Failure to Act series, which began in 2011. It is one of five studies in the series that ASCE will release in 2020. Subsequent studies will address electricity, surface transportation, ocean ports, inland waterways, and airports. This study also builds on the Value of Water Campaign's 2017 study *The Economic Benefits of Investing in Water Infrastructure*.

About the American Society of Civil Engineers

The American Society of Civil Engineers represents more than 150,000 members of the civil engineering profession in 177 countries. Founded in 1852, ASCE is the nation's oldest engineering society. ASCE stands at the forefront of a profession that plans, designs, constructs, and operates society's economic and social engine—the built environment—while protecting and restoring the natural environment.

To learn more: www.asce.org

About the Value of Water Campaign

The Value of Water Campaign educates and inspires the nation about how water is essential, invaluable, and in need of investment. Spearheaded by top leaders in the water industry, and coordinated by the US Water Alliance, the Value of Water Campaign is building public and political will for investment in the United States' water and wastewater infrastructure through best-in-class communication tools, high-impact events, media activities, and robust research and publications.

To learn more: www.thevalueofwater.org

About EBP

EBP—formally Economic Development Research (EDR) Group—is a firm dedicated to advancing the state-of-the-art in economic evaluation and analysis to support planning and policy in the areas of transportation, energy resources, urban development, and economic growth strategy. Since its founding in 1996, EBP has helped state and local governments make infrastructure investment and economic development decisions that support broad-based job creation, income generation, and overall prosperity. ASCE and the Value of Water Campaign contracted with EBP to conduct this study.

To learn more: www.ebp-us.com/en

About Downstream Strategies

Downstream Strategies offers environmental consulting services that combine sound interdisciplinary skills with a core belief in the importance of protecting the environment and linking economic development with natural resource stewardship. Within the water program, the company performs economic and policy analyses, provides expert testimony and litigation support, and conducts field monitoring.

To learn more: www.downstreamstrategies.com

The Economic Benefits of Investing in Water Infrastructure

How a Failure to Act Would Affect the US Economic Recovery

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Acknowledgements

ASCE and the Value of Water Campaign are grateful to an esteemed group of Value of Water Campaign supporters and ASCE members for their expert review of the document, including:

- **Greg DiLoreto,** P.E., retired, former CEO of Tualatin Valley Water District
- **Mami Hara,** General Manager and CEO, Seattle Public Utilities
- **John Kmiec,** Deputy Water Director, Tucson Water
- **Kelley Neumann,** P.E., Deputy Director, Planning and Engineering, Aurora Water
- **Darren Olson,** P.E., Vice President, Assistant Department Head, Water Resources, Christopher B. Burke Engineering, Ltd.
- **Carolyn Peterson,** Director, Communications and Public Affairs, Association of Metropolitan Water Agencies
- **Larry Pierce,** P.E., retired, San Diego region
- **Jim Schlaman,** Director, Planning and Water Resources, Black & Veatch
- **Amit Shah,** Senior Manager, Evoqua
- **Joe Szafran,** External Affairs Manager, American Water

Thank you to US Water Alliance staff Katie Henderson and Katy Lackey and ASCE staff Anna Denecke and Christine Prouty for managing this project. Special thanks as well to Emily Feenstra and Alexa Lopez at ASCE and Radhika Fox at the US Water Alliance for their contributions to this project.

Introduction

The American Society of Civil Engineers (ASCE) and the Value of Water Campaign release this report at a time when the COVID-19 public health crisis is causing economic disruption at an unprecedented speed and scale in the United States. Workers are losing jobs by the millions as consumer confidence, retail sales, and gross domestic product plummet. It is clear that the nation's economic recovery will be long and difficult. In the coming months and years, public officials at every level of government will consider policies and investments to jumpstart economic recovery. Investment in the nation's aging water infrastructure—composed of drinking water, wastewater, and stormwater systems—can spark a new era of job creation and economic growth while protecting public health and improving the quality of life for families across the United States.

Water is essential to every aspect of household and community life and the economy. Dozens of industries, like mining, manufacturing, and health care, rely directly on water and wastewater services to function. If they lost access to clean water supplies, the economic impact would be acute. Meanwhile, the COVID-19 pandemic has shown that the public health benefits from safe drinking water and wastewater treatment are immeasurable. Much of the nation's vast water infrastructure is buried underground or out-of-sight, but it is hard to overstate how vital these systems are for people's health and the economy.

Like so much else in the US economy, water utilities have been affected by the effects of the COVID-19 pandemic. Tourism and convention activities have canceled, sports arenas have closed, hotels and schools have emptied, and many restaurants and bars have been operating at less than maximum capacity—all of which translates to reductions in water consumption and rate revenues. It is uncertain when full economic activity will return. The American Water Works Association (AWWA) and the Association of Metropolitan Water Agencies (AMWA) estimate that drinking water utilities will experience a negative aggregate financial impact of $13.9 billion—or 16.9 percent—by 2021, due to revenue losses and increased operational costs during the pandemic.[1] The National Association of Clean Water Agencies (NACWA) estimates that the resulting financial impact on wastewater utilities will be even higher, around $16.8 billion, including a 20 percent drop in sewer revenues.[2]

The financial challenges water utilities face as a result of the COVID-19 pandemic are layered onto chronic, long-term, and insufficient investment in the nation's water infrastructure. Billions of dollars are needed each year to renew and replace outdated pipes, pumps, storage facilities, and treatment plants that ensure clean water delivers to homes and businesses across the nation, carry away and safely treat sewage and stormwater, and return treated water to rivers, streams, and other water bodies. Local, state, and federal funding is meeting **a fraction** of the current need. If this trend continues, the nation's water systems will become less reliable, breaks and failures will become more common, vulnerabilities to disruptions will compound, and the nation will public health and the economy at risk.

This report details the cost to the nation's economy if current investment trends in the nation's water infrastructure continue, and it explores the massive economic benefits people would realize from fully funding the nation's water infrastructure needs. The report is organized in the following manner:

- **The US Water Infrastructure Investment Gap** section summarizes the mismatch between the current spending levels and funding needs.
- **The Costs of Inaction** section analyzes the impact on gross domestic product (GDP), businesses, households, and public health if current investment trends in water infrastructure continue for the next 20 years.
- **The Economic Benefits** section describes the economic gains that could be realized over the next 20 years if the water infrastructure investment gap were closed and spending needs fully funded.

The United States is entering what may be the deepest economic contraction since the Great Depression.[3] As such, the policy and investment decisions that public officials make will have enormous consequences on the pace of economic recovery. This analysis presents two very different futures. If **current underinvestment in water continues**, businesses will become less competitive, household costs will increase, GDP will shrink, and public health may be at greater risk. If **the United States acts boldly and closes the water infrastructure investment gap**, we will boost economic recovery, create jobs, fuel business activity across a wide range of sectors, improve public health, and protect the environment.

ASCE created the Infrastructure Report Card to assign grades for the nation's infrastructure based on condition, safety, capacity, and other factors. The most recent report card assigned drinking water and wastewater infrastructure a D and D+, respectively. Closing the investment gap would be equivalent to the nation's water infrastructure achieving at least a "B" letter grade, reaching a state of good repair and posing a minimal risk, or an "A" letter grade, a standard of resilience and capacity that is fit for the future.



D

Drinking water infrastructure grade according to ASCE's most recent Infrastructure Report Card

D+

Wastewater infrastructure grade according to ASCE's most recent Infrastructure Report Card

Value of Water Campaign / ASCE

Study Methodology

ASCE and the Value of Water Campaign worked with an economic research team that included EBP, Downstream Strategies, and the Interindustry Forecasting Project at the University of Maryland (INFORUM) to develop this analysis. The researchers relied on a model called the Long-term Interindustry Forecasting Tool (LIFT), housed at University of Maryland's INFORUM Group. LIFT is a dynamic interindustry-macro (IM) model that uses macroeconomic data to examine how changes in one industry will affect other industries and the entire economy.

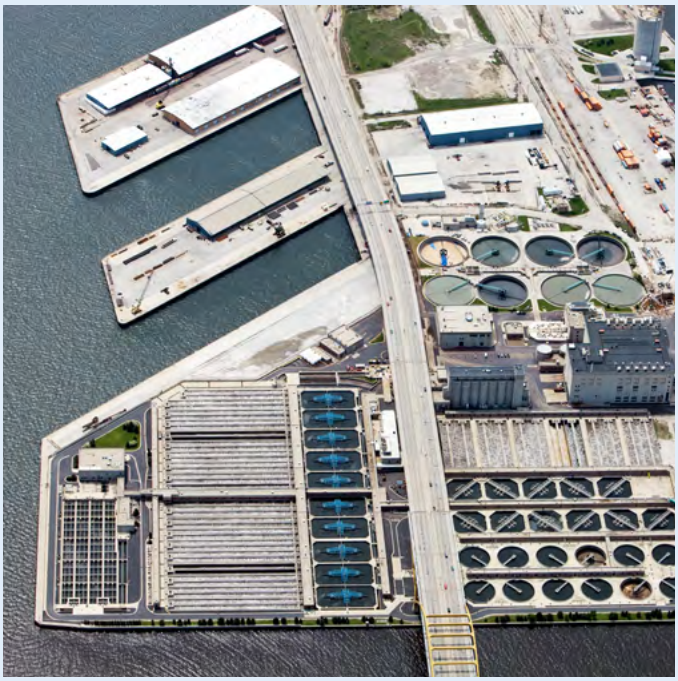
This study estimated the capital and operations and maintenance (O&M) needs of water utilities and generated 10-year and 20-year economic projections for the potential consequences of two future scenarios: the first, continuing delay and underinvestment in water infrastructure and the second, increasing investment in water infrastructure at levels that would close the chronic investment gap. The focus of this report is on the pipes, treatment plants, pumping stations, and other infrastructure that make up the nation's drinking water, wastewater, and stormwater systems. This report does not address drinking water supply infrastructure beyond treatment plants and distribution systems, such as source water structures like dams and levees.

The economic analysis included two types of infrastructure needs:

1. **Building new infrastructure to service increasing populations and expanded economic activity**
2. **Maintaining or rehabilitating existing infrastructure that needs repair or replacement**

The report includes projections for both 10-year (2029) and 20-year (2039) time horizons. It bases the economic modeling on the 2019 national economy and uses 2019 dollars, so as not to reflect the economic impacts of the COVID-19 pandemic. The study's projections also do not reflect the financial impacts from climate change, though climate change is expected to increase both the cost and the urgency of water infrastructure investments.

The full methodology can be found in this report's technical appendix, also available on the Value of Water Campaign website.



What Is US Water Infrastructure?

The vast majority of US homes and businesses receive drinking water, wastewater, and stormwater services through a network of treatment plants, pumps, pipes, storage facilities, and other assets operated by both public and investor-owned utilities. In this study, we refer to these structures and facilities as "water infrastructure."

Every day, more than 50,000 drinking water systems distribute 39 billion gallons of potable water—drinking water—to US homes, industries, and other businesses.[4] US Environmental Protection Agency (EPA) and state agencies under the Safe Drinking Water Act, which requires EPA to establish standards for contaminants that could cause negative health effects, regulate these systems. Most people living in the United States receive drinking water from a water utility, either public or investor-owned. Surface water systems, including rivers and lakes, serve approximately two-thirds of US residents, and groundwater systems serve one-third. Over 13 million households rely on private wells for drinking water, which EPA does not regulate.[5]

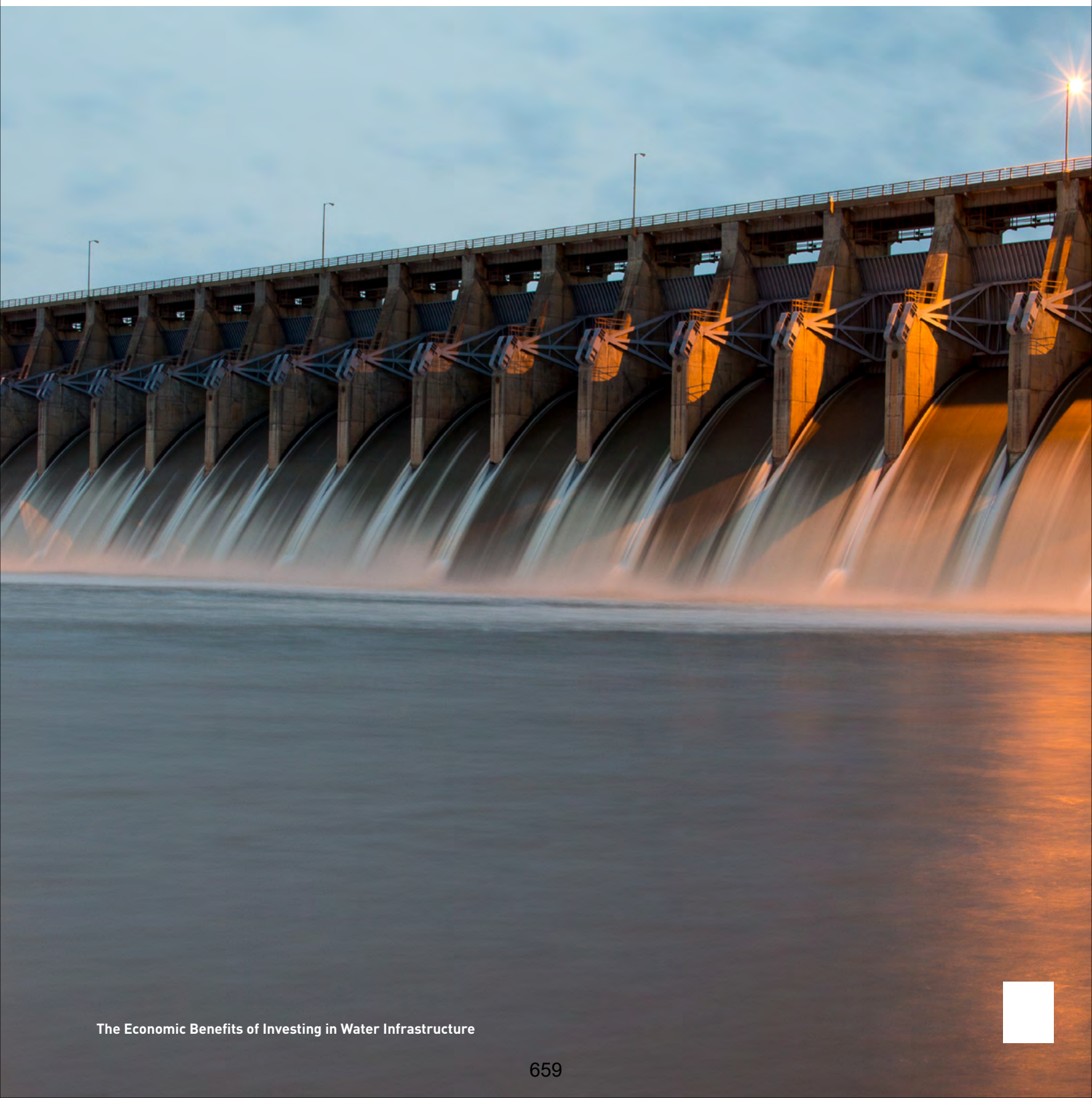


In addition, approximately 15,000 wastewater utilities serve 75 percent of the US population.[6] These systems collect and treat approximately 32 billion gallons of wastewater daily before returning it to the environment.[7] Some of these systems also manage stormwater services. EPA and state agencies under the Clean Water Act, which sets ambient water quality standards for wastewater that flows out of a treatment plant, sewer, or industrial outfall, regulate wastewater systems. Over the last few decades, the reuse of wastewater through advanced treatment has become more common.[8] Public wastewater systems do not serve about 19 percent of US households, which instead depend on septic tanks.

Large portions of US water and wastewater systems were built over a century ago. As pipes, plants, and pumps reach the end of their expected lifespan, they need to be upgraded, replaced, or fortified. In addition, many systems are not equipped to meet the new demands they face today with growing populations, increased treatment requirements, and the impacts of climate change.

While the majority of people living in the United States have access to high-quality drinking water and wastewater services, more than two million do not have access to adequate drinking water and sanitation. A report from the US Water Alliance and Dig Deep found that Native Americans are 19 times more likely than white households to lack indoor plumbing. This study analyzed data from the American Community Survey and other Census Bureau data sources and then described the water and sanitation crisis in six diverse hot spot communities across the United States.[9]

While not included in this analysis, dams are an important water infrastructure and critical for storage and supply, particularly in water-scarce regions. Capital investment in and operation and maintenance of dams can constitute a significant portion of a utility's annual budget, along with other storage facilities, like tanks, and the pipes, pumps, and treatment plants in drinking water, stormwater, and wastewater systems.





The US Water Infrastructure Gap

To secure the nation's water future, the first step is to assess where it stands today—the current condition, level of investment, and need of the systems that bring water to and from homes and businesses. What follows is a summary of the current state of the nation's water infrastructure. The analysis found that:

1. **The nation's water infrastructure is aging and deteriorating.**
2. **The nation is chronically underinvesting in water infrastructure.**
3. **Federal investment is lagging, placing added pressure on local and state governments.**
4. **New challenges and a growing demand are shaping infrastructure needs.**



The US needs to invest a total of **$109 billion per year** in water infrastructure over the next 20 years in 2019 dollars to close the water infrastructure gap.

The nation's water infrastructure is **aging and deteriorating.**

Cities across the United States constructed water systems at different times. In general, investment in new water infrastructure surged both after World War II and with the federal construction grants program that followed the passage of the Clean Water Act in 1972. Drinking water and wastewater pipes, pumps, and other components last anywhere between 15 and 100 years, depending on the component type, material, and other conditions. AWWA estimates that most of the nation's existing drinking water pipes need to be repaired or replaced before 2040, necessitating a "replacement era" that will dramatically increase costs to utilities and their customers.[10]

The implications of the nation's aging water infrastructure are becoming clear. **Between 2012 and 2018, the rate of water main breaks increased by 27 percent, reaching an estimated 250,000 to 300,000 per year.**[11] This is equivalent to a water main break every two minutes. As these systems age, leaks increase. **Drinking water systems currently lose at least six billion gallons of treated water per day, or 2.1 trillion gallons per year.**[12] The drinking water sector refers to these losses as "non-revenue water loss." Treating and pumping this water is inefficient and costly. The US lost an estimated $7.6 billion of treated water in 2019 due to leaks.

Wastewater systems face a similar challenge. In the 1970s and 1980s, the federal construction grant program enabled communities across the country to build or expand their wastewater systems—from the pipes and pumps that convey wastewater from homes and businesses to the treatment plants that process wastewater flows and safely return water to the environment. Many of these facilities need comprehensive upgrades or replacement now.

This challenge is even more acute for combined stormwater and sewer systems. These systems were designed to convey both stormwater and sewage to a treatment plant. But some storms can flood these systems, causing overflows into lakes and rivers. Combined sewer systems were constructed using models and population projections that are now outdated.[13] As the frequency and intensity of storm events increase with climate change, combined sewer overflows are likely to increase.[14] To date, combined sewer overflows have resulted in more than $32 billion in compliance costs for the nearly 60 consent decrees issued to municipalities nationwide.[15]



On average, **a water main breaks every two minutes somewhere in the US,** totalling an estimated 250,000 to 300,000 breaks per year.

Figure 1

The Useful Lives of Water Infrastructure Components[16]

Component	Useful Life (years)
Reservoirs and dams	50–80
Drinking water treatment plants (concrete structures)	60–70
Wastewater treatment plants (concrete structures)	50
Drinking water and wastewater treatment plant structures (mechanical and electrical)	15–25
Drinking water trunk mains	65–95
Drinking water pumping stations (concrete structures)	60–70
Drinking water pumping stations (mechanical and electrical)	25
Drinking water distribution	60–95
Wastewater collection	80–100
Force mains	25
Wastewater pumping stations (concrete structures)	50
Wastewater pumping stations (mechanical and electrical)	15
Interceptors	90–100





The nation is **chronically underinvesting** in water infrastructure.

There is a growing need for capital investment in the distribution lines, conveyance systems, treatment plants, and storage tanks that keep US water systems working. Investment in these systems, however, has not kept pace with the need. In 2019, the total capital spending on water infrastructure at the local, state, and federal levels was approximately $48 billion, while investment needs totaled $129 billion, creating **an $81 billion gap.**[17] The United States is drastically underinvesting in critical water infrastructure—only meeting 37 percent of the nation's total water infrastructure capital needs in 2019.

If funding needs and infrastructure investment trends continue, the annual gap will grow to $136 billion by 2039. Over 20 years, the cumulative water and wastewater capital investment need will soar to $3.27 trillion, and the cumulative capital investment gap will total $2.2 trillion—nearly $6,000 for every adult and child expected to be living in the United States in 2039.

Operation and maintenance (O&M) costs are also growing and outpacing available funding. Operating and maintaining water infrastructure become costlier as the system components near or exceed their expected lifespans.[18] The limited amount of federal and state funding assistance utilities receive today is primarily used to help fund capital projects, so local utilities primarily cover O&M costs out of their own revenue streams. These costs will rise as systems continue to age, placing smaller or less affluent communities at a relative disadvantage. While utilities historically have been able to fund O&M without major concerns, there is a growing gap between O&M needs and available funding. In 2019, 90 percent of the nation's $104 billion O&M funding need was met, leaving an annual O&M funding gap of $10.5 billion. **If trends continue, the country will face a single-year O&M shortfall of $18 billion in 2039,** and the cumulative gap in O&M funding for the 20-year 2019-2039 period will be $287 billion. Based on current practices, sustainable funding for O&M will become a more pressing issue compounded by age and other factors if it does not address the funding gap.









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Figure 2

Water Infrastructure Capital Spending Gap[19;20;21]

($ million)

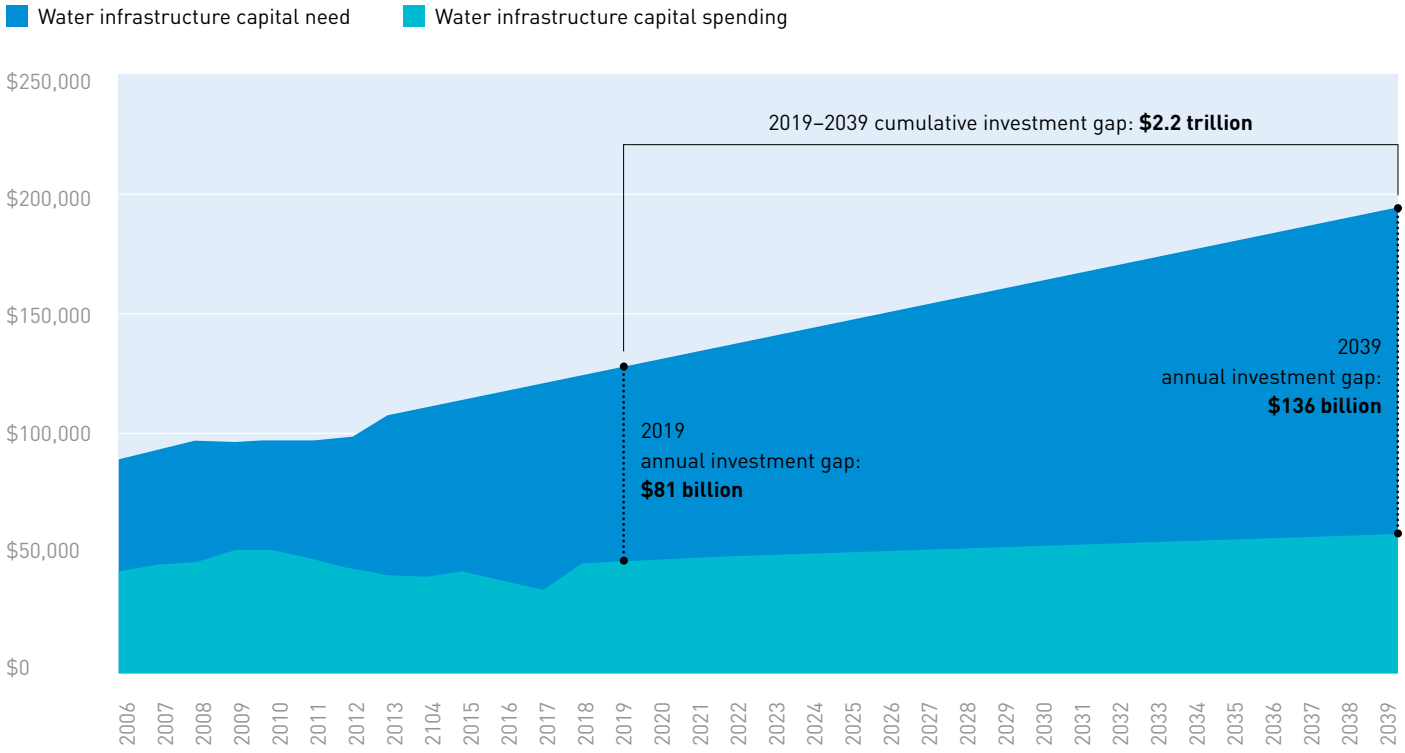
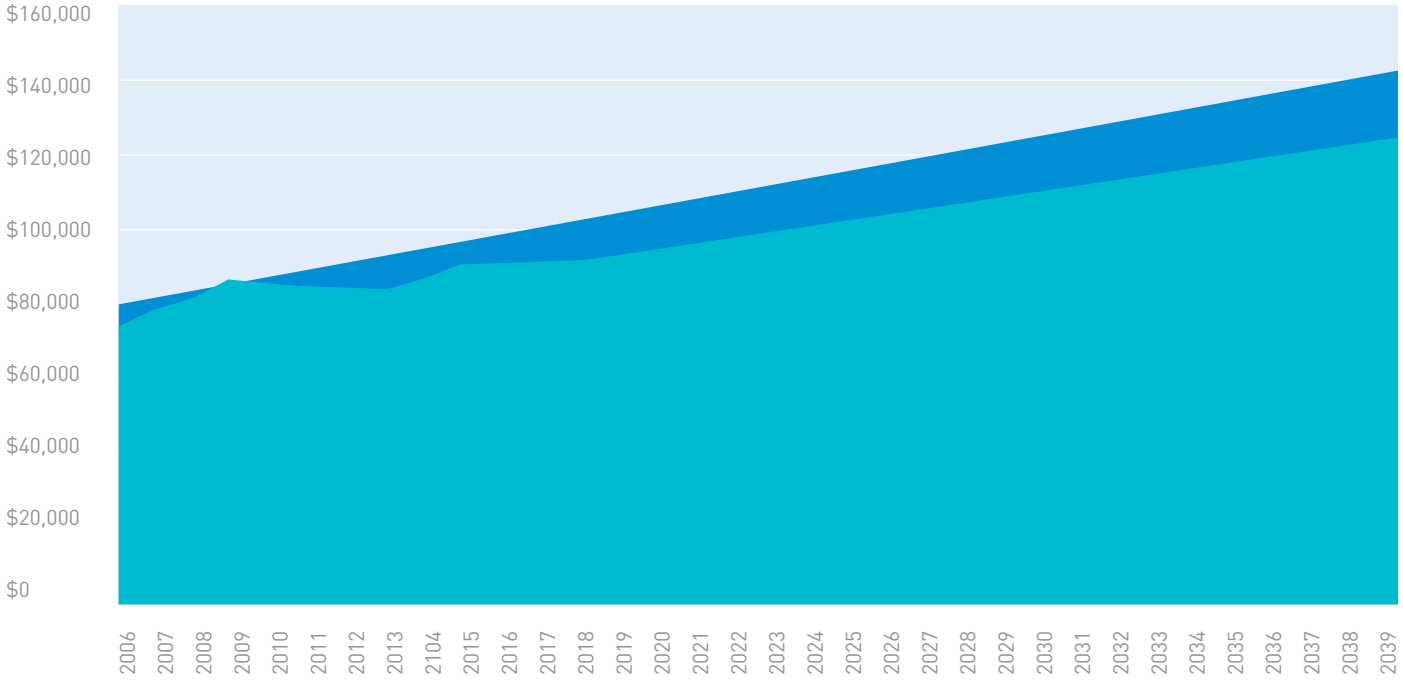


Figure 3

Water Infrastructure O&M Spending Gap[22]

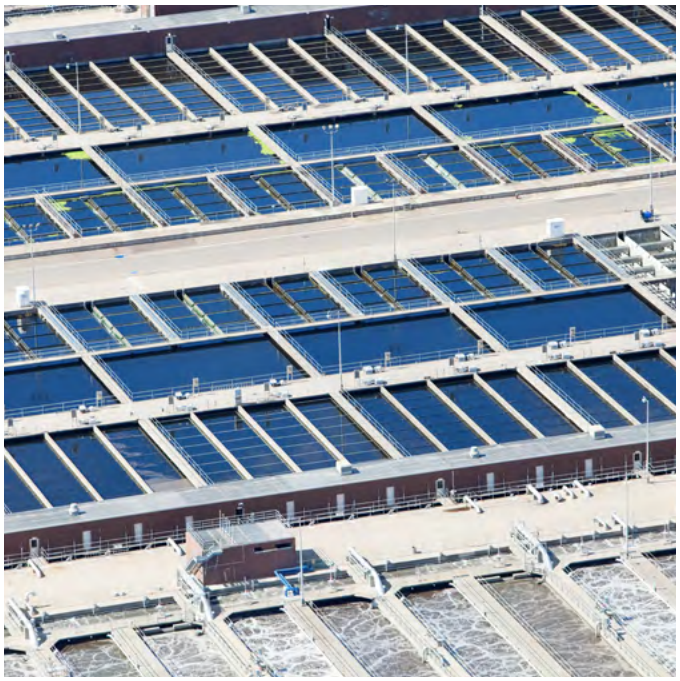
($ million)



Federal investment is lagging, **placing added pressure on local and state governments.**

Meeting the drinking water and wastewater capital needs for communities across the United States will require coordinated investment at the federal, state, and local levels. Despite the growing need for water infrastructure, the federal government's share of capital investment has fallen from 31 percent in 1977 to a mere four percent in 2017.[23] This is a far lower percentage than the federal government's share of total 2016 public spending on other infrastructure sectors like transportation. As federal support for water infrastructure capital needs has declined, local and state spending has provided a much greater share. Across the country, water rates are climbing to meet the costs of upgrading, expanding, and replacing water infrastructure. As costs, however, continue to rise, many communities will struggle to cover them through local rates and fees.





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Figure 4

Federal vs. State and Local Spending on Water Capital Investment: 1975–2017[24]

($ billion, 2017 value)

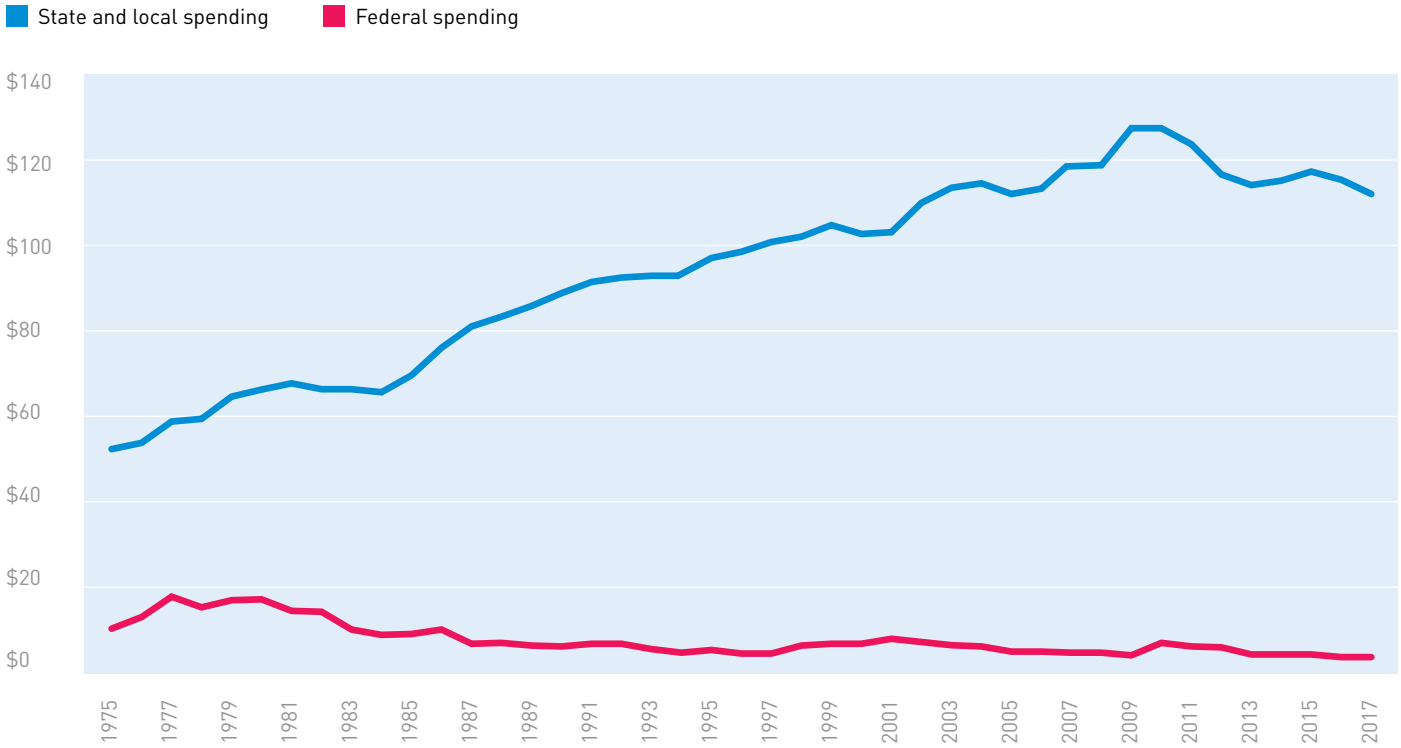
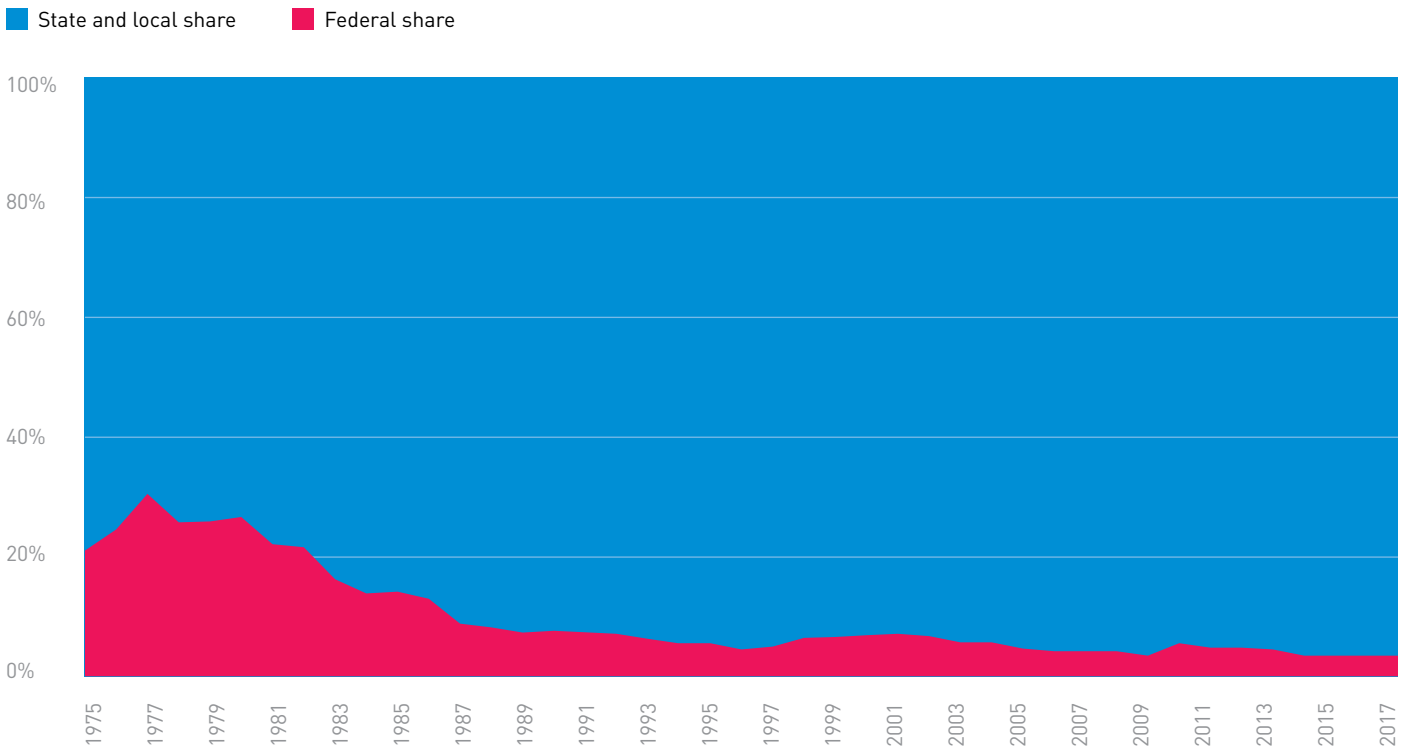


Figure 5

Federal vs. State and Local Share of Water Capital Investment: 1975–2017[25]



New challenges and a growing demand are shaping infrastructure needs.

Water utilities face a variety of constraints and challenges that were not anticipated when most water infrastructure was designed and built. There are an estimated six to 10 million lead service lines in communities across the country. Lead-related health crises like in Flint, Michigan, have increased public attention and a call to remove and replace lead service lines. Fully removing lead service lines is a complex process and can be expensive, costing between $5,000 and $7,500 per service line.[26] Micro-constituents pose another growing challenge. Advances in instrumentation and analytics have allowed scientists to detect and study microconstituents like per- and polyfluoroalkyl substances (PFAS) that were previously unknown. As the health effects of these and other constituents become more fully understood, new regulations or treatment requirements could be imposed. Regulation of wastewater effluent has become more stringent, with many utilities facing the need to build new, more advanced treatment systems.

Finally, most of the nation's water infrastructure was not designed for a changing climate. Water systems are vulnerable to impacts from declining surface water flows and aquifer recharge, sea-level rise, salt-water intrusion, flooding, drought, and wildfire.[27;28;29] Many wastewater systems are in low-lying areas near water sources and especially prone to increased flooding as the impacts of climate change accelerate.[30] The country's water infrastructure needs to be repaired, replaced, and *reimagined* for a new era so it can meet changing conditions. Water infrastructure resilient to these changes is essential for communities to grow and thrive.

For some water systems, one of the biggest stressors is population growth. Managing demand through conservation, water recycling, and addressing non-revenue water loss (leaks) can reduce the need for building new capacity.[31] Although per capita residential water demand decreased over the last two decades due to the widespread adoption of in-home, water-efficient appliances,[32] many utilities still need to develop new water supplies or construct new storage facilities to meet and effectively manage future demand. Many of the nation's fastest-growing communities are in water-scarce regions like the Southwest, elevating the need to identify and develop new supplies.









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There Is No Industry Without Water

Water is the essential ingredient that fuels industry. Thermoelectric power and irrigation are the largest users of freshwater resources in the United States.[33] The most water-intensive industry is paint manufacturing, which requires 123 gallons of water per dollar output. Other water-intensive industries include alkalis and chlorine manufacturing (38 gallons per dollar output), paper mills (36 gallons per dollar output), and wineries (34 gallons per dollar output). Most people do not associate a gallon of paint or a glass of wine with their water supplies, but virtually all consumer products rely on water to varying degrees.

Many manufacturing industries get their water supplies through a combination of direct withdrawal from water-bodies and purchase from water utilities. They use water both to produce goods and to dilute the waste products generated in manufacturing processes. Many common consumer products include a variety of components, each of which requires water for production. Smartphones, for example, are made of many smaller components. In aggregate, producing and assembling all these components requires roughly 3,000 gallons of water per phone.[34]

Reliable water service has an enormous effect on industry in indirect ways as well. For example, a disruption in the water supply to the food processing industry would not only reduce productivity in that industry, but it may also lead to a decrease in purchases of industrial machinery and trucking services. Over time, workers in food processing, trucking, and machinery sectors may face wage reductions or lose their jobs. They would then make fewer household purchases of groceries, furniture, cars, clothing, restaurant meals, and other goods and services, amplifying the economic impact of the water supply disruption.

Figure 6

The 10 most water-intensive industrial sectors (excluding agriculture, mining, and electric power generation) in terms of direct water use per dollar output[35]

#1
Paint and coating manufacturing:
123
gallons per $ output

#2
Alkalis and chlorine manufacturing:
38
gallons per $ output

#3
Paperboard mills:
36
gallons per $ output

#4
Wineries:
34
gallons per $ output

#5
Pesticide and other agricultural chemical manufacturing:
30
gallons per $ output

#6
Synthetic dye and pigment manufacturing:
27
gallons per $ output

#7
Adhesive manufacturing:
21
gallons per $ output

#8
Industrial gas manufacturing:
21
gallons per $ output

#9
Distilleries:
14
gallons per $ output

#10
Poultry processing:
14
gallons per $ output



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The Cost of Inaction

The current state of water infrastructure is precarious: systems are aging, and current levels of investment are insufficient. This section of the report analyzes what the future will be if these trends continue. This analysis generated 10- and 20-year economic projections, using 2019 baseline data, and addressed key questions: What would the economy look like? What would the effects be on households, public health, and other sectors? Four key findings emerged:

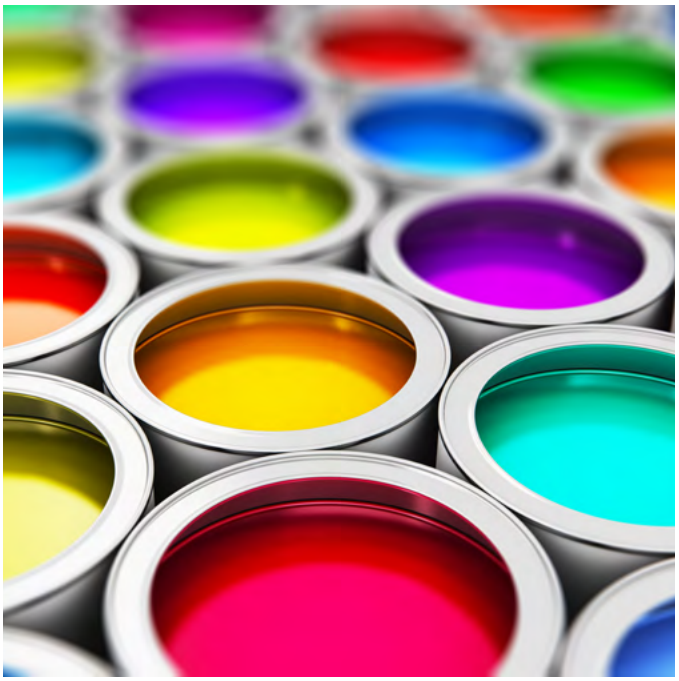
- **Service disruptions would cost water-reliant businesses $250 billion by 2039.**
- **Underinvestment would lead to a cumulative $2.9 trillion decline in the gross domestic product by 2039.**
- **Costs incurred by US households due to water and wastewater failures would be seven times higher in 20 years than they are today.**
- **Failing water infrastructure would result in $7.7 billion in cumulative healthcare costs to households over the next 20 years.**



If the water infrastructure gap is not addressed, deteriorating water infrastructure would cost water-reliant industries **$250 billion in 2039**.

Service disruptions will cost water-reliant businesses **$250 billion by 2039.**

The costs resulting from deteriorating water infrastructure would be particularly burdensome for water-reliant industries. We estimate that water service disruptions led to a $51 billion economic loss for the 11 most water-reliant industries in 2019. These industries include those that people rely on every day—education, health services, retail, construction, manufacturing, and more. Disruptions in water and wastewater service increase the price of goods and services and result in production delays, sales losses, and other effects. If the current trajectory continues, we estimate that service disruptions would cost these water-reliant businesses **$111 billion by 2029, growing to $250 billion by 2039.**



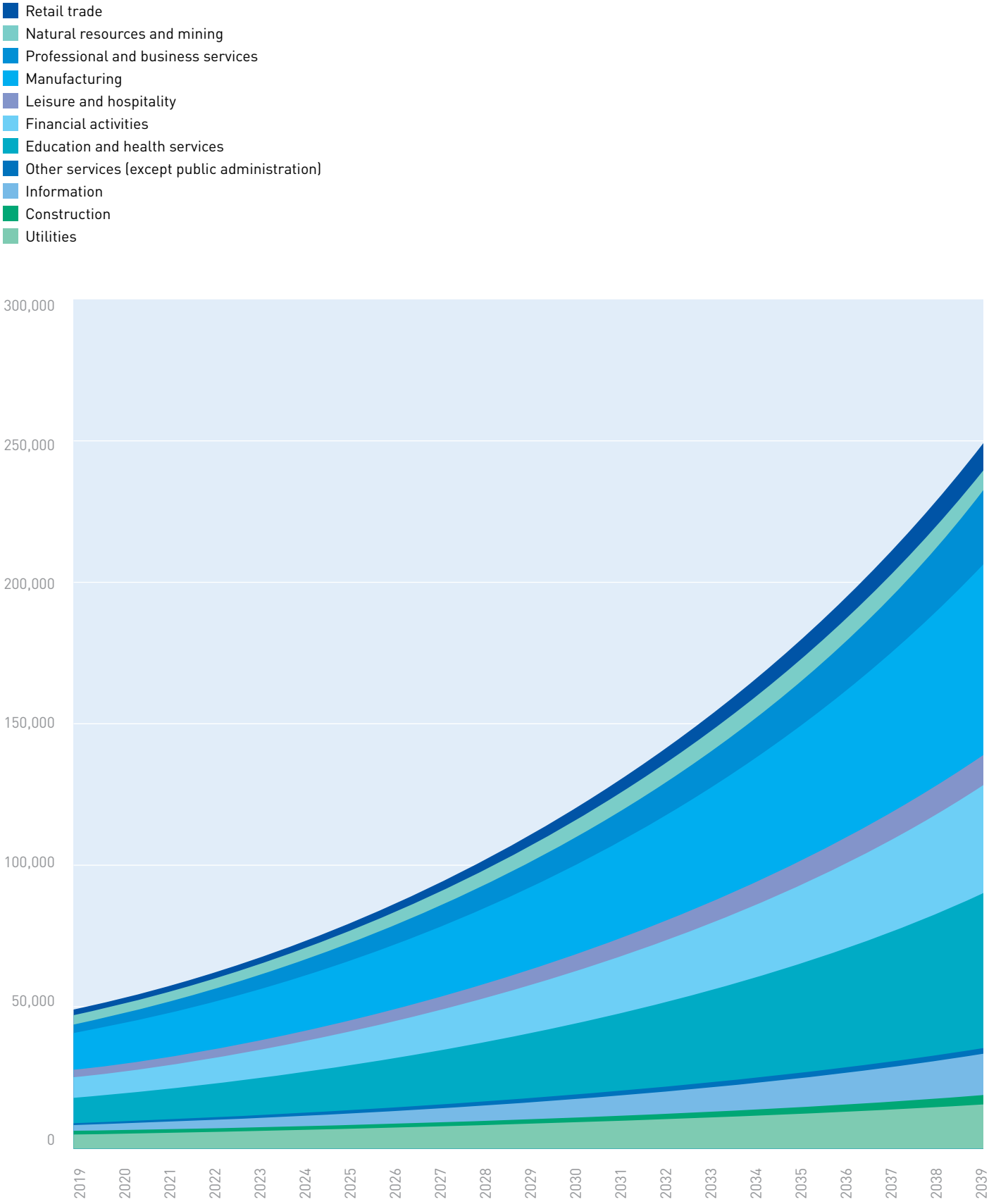


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Figure 7

Annual Losses from Water Service Disruptions on Water-Reliant Businesses[36;37]

($ million, 2019 value)



Underinvestment will lead to a **$2.9 trillion decline** in the gross domestic product (GDP) by 2039.

As water infrastructure deteriorates and ruptures, street flooding, shutdowns, and damage from storms would increase. These interruptions would increase production costs for businesses, and prices for consumers would climb. This would lead to a reduction in domestic and possibly foreign demand for manufactured products, which would reduce global competitiveness and produce a domino effect across almost every indicator of economic wellbeing in the United States. By 2039, the cumulative impact on the gross domestic product (GDP) is estimated to be a decline of 1.2 percent, translating to a loss of $2.9 trillion. **Moreover, more than $732 billion in business sales (output) would be lost over the next 10 years. By 2039, that number will exceed $4.5 trillion.**

Output is the gross production of US industries. Generally, output is made up of business sales and budget expenditures of public agencies and nonprofit businesses, along with unsold inventory produced, and the value of breakage and theft.

Gross Domestic Product (GDP) is output minus the cost of goods and services purchased from vendors (known as intermediary goods and services).

As production volumes decline, workers would see reductions in wages and disposable income. **By 2039, 636,000 jobs would be lost annually**. It is important to note that the number of jobs is not always the best indicator of industry health. In some sectors, employment levels do not directly correlate to production volumes, and they may require just as many employees for lower production. Even so, they will lose jobs, ultimately harming workers, industries, and the US economy.

Due to higher costs resulting from unreliable water services, US manufacturing is expected to lose about 89,000 jobs over the next 20 years, about half of them concentrated in fabricated metal industries, machinery, computer and electronics, and motor vehicles. Health care, construction, accommodations, and food services will lose jobs as disposable household income and disposable spending decline. These impacts would radiate through the economy, affecting both low- and high-wage jobs.

As water systems continue to age, water loss will accelerate. Leaks and pipe breaks will be more frequent, wasting more treated water. Leaking pipes lost the equivalent of $7.6 billion worth of treated water in 2019, and this loss is projected to more than double over the next 20 years, reaching $16.7 billion in 2039.






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Figure 8

Aggregated Output Impacts by Industry Sector[38]
($ billion, 2019 value)

Sector	2020–2029	2030–2039	2020–2039
Manufacturing	-$227	-$1,089	-$1,316
Finance, insurance and real estate	-$60	-$372	-$432
Professional services	-$83	-$493	-$576
Health care	-$47	-$241	-$288
Other services	-$43	-$224	-$267
Information	-$131	-$631	-$762
Logistics	-$19	-$86	-$106
Retail trade	-$20	-$103	-$122
Mining, utilities, agriculture	-$13	-$70	-$83
Construction	-$15	-$73	-$1,316
Transportation services (excluding truck transportation)	-$22	-$102	-$125
Accommodation, food, and drinking places	-$38	-$222	-$260
Entertainment	-$4	-$21	-$25
Educational services	-$5	-$27	-$32
Social assistance	-$3	-$18	-$21
Total	**-$732**	**-$3,771**	**-$4,503**

Figure 9

Potential Employment Impacts Due to Failing Water and Wastewater Infrastructure, 2029 and 2039[39]

Sector	2029	2039
Professional services	-39,000	-106,000
Manufacturing	-47,000	-89,000
Other services	-38,000	-80,000
Logistics	-34,000	-79,000
Construction	-30,000	-63,000
Health care	-26,000	-56,000
Finance, insurance, and real estate	-24,000	-50,000
Retail trade	-25,000	-31,000
Transportation services (excluding truck transportation)	-11,000	-26,000
Information	-10,000	-19,000
Mining, utilities, agriculture	-8,000	-18,000
Accommodation, food, and drinking places	-16,000	-13,000
Educational services	-10,000	-3,000
Social assistance	-11,000	-3,000
Entertainment	-4,000	-1,000
Total	**-333,000**	**-637,000**

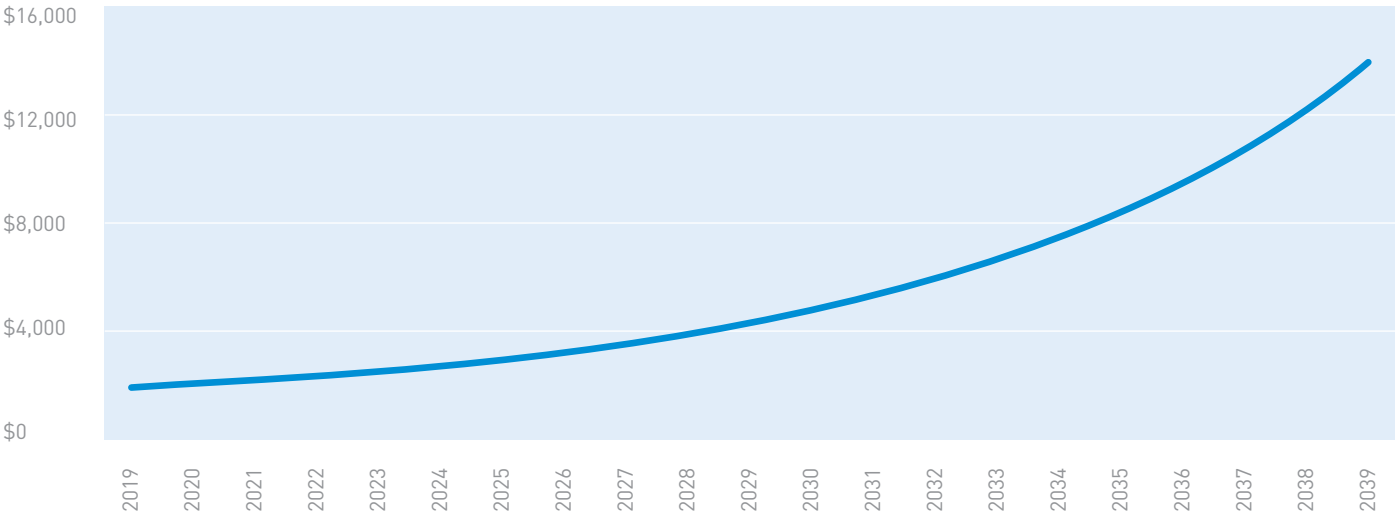
Water and wastewater infrastructure failures cost US households $2 billion in 2019. **In 2039, increasing service disruptions would cost households $14 billion.**

Water and wastewater service disruptions to US households can result in large, unexpected personal costs to individuals and families. In 2019, service disruptions and flooding (due to sewer overflows and stormwater drainage problems) cost households an estimated $2 billion. During drinking water outages, household residents need to find alternative water supplies and, in extreme situations, must relocate either temporarily or permanently. Increased climate-related flooding in some areas of the country will increase the cost burden on households from repeated cleanup, rehabilitation, and structural repair. **As infrastructure ages and the rate of infrastructure failures increases, household costs would more than double in 10 years to $4.3 billion, climbing to almost $14 billion by 2039.**



Figure 9

Annual Household Costs from Water-Service Disruptions[40;41;42]
($ million, 2019 value)



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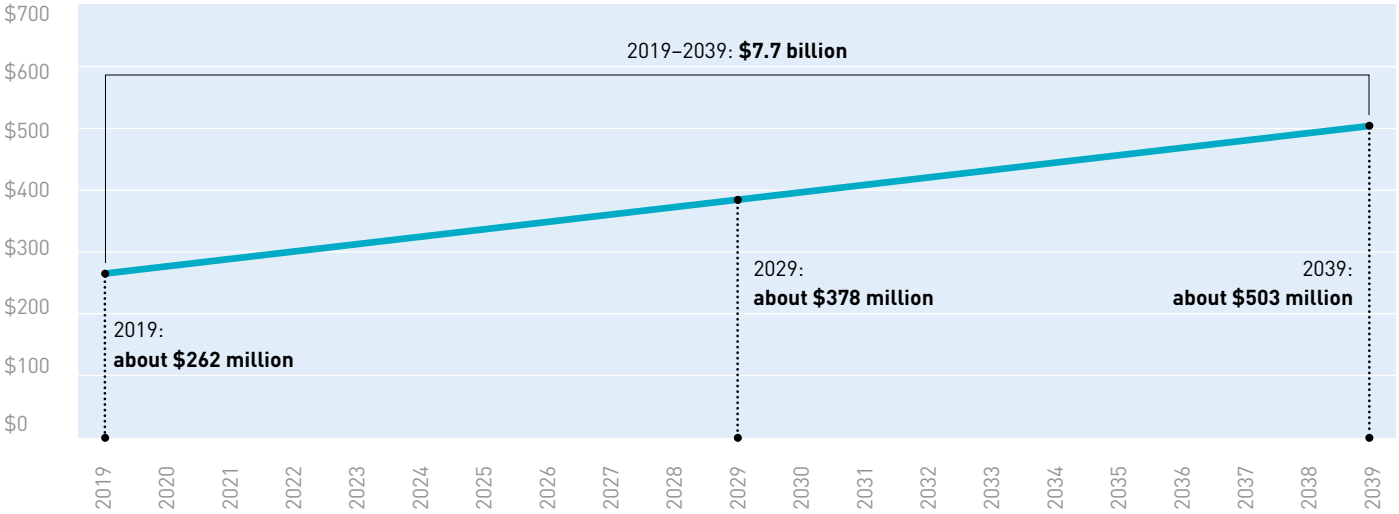
Failing water infrastructure could result in **$7.7 billion in cumulative health-care costs** to households over the next 20 years.

Households must also manage the health and medical costs that can arise when water systems fail. Sewer overflows can expose people to contaminated water, which can cause bacterial infections (e.g., giardia, cryptosporidium). Deteriorating drinking water systems can leach heavy metals into water supplies, which can lead to serious health problems, especially for children and other vulnerable populations. Without adequate investment in water systems, people could see higher incidences of illness, hospitalizations, and lost working days. US households spent an estimated $262 million on health-care costs due to water service disruptions in 2019. If trends continue, US households could spend $378 million in 2029 and $503 million in 2039. **Over the next 20 years, failing to invest in the nation's water infrastructure could lead to medical costs that exceed $7.7 billion in cumulative medical costs to US households.**



Figure 10

Annual Health Costs from Water-Service Disruptions[43;44;45]
($ million, 2019 value)











The Economic Benefits

The cost of failing to invest in water infrastructure is tremendous. But if the United States proactively invests in water infrastructure and closes the water infrastructure investment gap, the benefits to the economy, trade, and public health will be enormous.

As in the previous section, the INFORUM model was used to generate economic projections using 2019 baseline data. These projections assume that the years, starting in and following 2020, meet 100 percent of capital and O&M water infrastructure needs. It should be noted that 2019 met only 37 percent of capital investment needs. Closing the gap would require spending $2.2 trillion above the baseline projections over the next 20 years.

The study projected the impacts of a 100 percent investment scenario on employment, wages, business sales, and exports. The LIFT model is dynamic, with the ability to show how changes in one industry ripple across the entire economy. As a result, the numbers shown here are dramatically different from earlier studies that used static economic multiplier models. In assessing the benefits of closing the water infrastructure investment gap, three key findings emerged:

- **Business sales would increase, and the US GDP would grow by $4.5 trillion.**
- **The US trade balance would dramatically improve, making exports more competitive.**
- **Investment would create 800,000 jobs, and disposable income would rise by over $2,000 per household.**



The economic gains from more reliable and efficient water systems would increase business sales (gross output) to **$5.6 trillion.**

Business sales would increase, and **the US GDP would grow by $4.5 trillion.**

Under current investment levels, the nation will spend $1.067 trillion on water infrastructure over the next 20 years, but the total need over this time frame is over $3 trillion. To close the gap, the United States would need to increase its investment in water infrastructure by $2.2 trillion over the next 20 years, or roughly $109 billion per year.

Closing the investment gap would improve the condition and performance of water systems, leading to supply-side and demand-side benefits to the economy. Improved reliability and water quality would increase productivity and efficiency in other sectors and lead to higher capital investment and O&M spending. Over the next 20 years, the national economy would stand to gain **$4.5 trillion in GDP.** The economic gains from more reliable and efficient water systems would build over time; most would accrue in the second decade as households and businesses reap the benefits of improved water reliability. **By 2039, business sales (gross output) would exceed $5.6 trillion.**



Figure 11

Effects on Total US Economy due to Improved Water Delivery and Wastewater Treatment Infrastructure Systems, 2020–2039[46]
($ billion, 2019 value)

Year	Business Sales (Output)	GDP	Household Disposable Income	Jobs
Increases in the Year 2029	$204	$180	$125	444,000
Increases in the Year 2039	$670	$461	$315	798,000
Cumulative Increases 2020-2039	$5,613	$4,480	$2,833	N/A

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The US trade balance would dramatically improve, **making exports more competitive.**

As capital infrastructure projects move forward and industrial productivity rises, US businesses would gain **$225 billion in export value.** Four commodities and service industries would see an increased export value of $10 billion or more above the projected baseline: wholesale trade, motor vehicles, aerospace products and parts, and other chemicals.

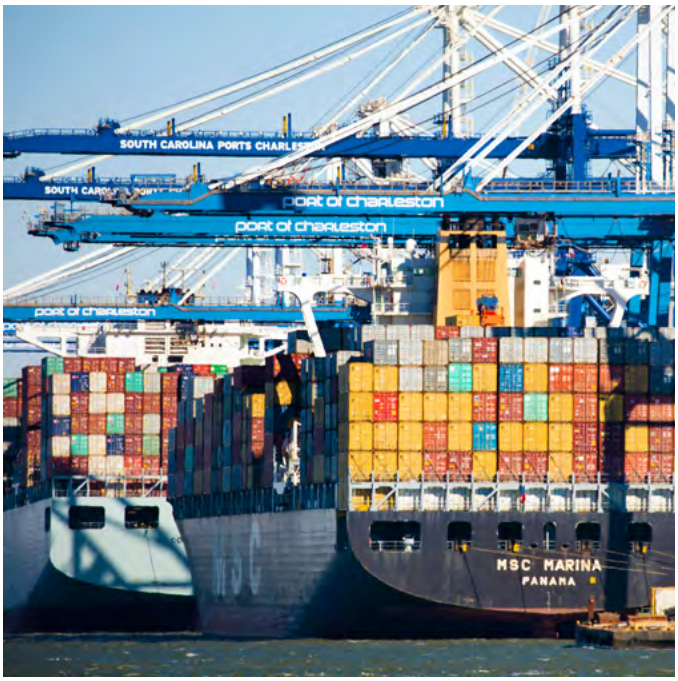


Figure 12

Value of US Exports Generated by 10 Leading Commodities and Services[47]
($ billion, 2019 value)

Commodity/Service	2020–2029	2030–2039	2020–2039
Wholesale trade	$2.2	$18.0	$20.3
Motor vehicles	$6.5	$13.5	$20.0
Other chemicals	$1.3	$12.0	$13.3
Aerospace products and parts	$0.8	$11.5	$12.3
Royalties	$1.0	$8.5	$9.5
Architectural, engineering, and related services	$0.8	$7.8	$8.7
Software	$0.8	$7.6	$8.4
Resin, synthetic rubber, and fibers	$2.5	$4.7	$7.1
Other financial investment activities	$0.7	$6.2	$7.0
Scientific research and development services	$0.7	$6.1	$6.8

Investment would create 800,000 jobs, and **disposable income would rise by $2,000 per household.**

Full funding of water infrastructure needs would create nearly 800,000 new jobs by 2039. Of these new jobs, 61 percent would be in construction and professional services stimulated by the boost in infrastructure spending. Increased reliability and water quality would also increase productivity and efficiency in other sectors like manufacturing, leading to job gains. And wages would rise: US workers would earn more than **$2.8 trillion** in additional disposable household income over 20 years, leading to an increase of over $2,000 per household.

More reliable water services would also help US households avoid up to $7.7 billion in cumulative medical costs over 20 years, $2.6 trillion in cumulative losses incurred from service disruptions and overflows, and $1.4 trillion in cumulative disposable income loss.

While this model cannot generate public health predictions, wages and disposable income are part of a web of interrelated factors that affect health over a lifetime.[48] People with lower incomes tend to have a higher risk of heart disease, diabetes, stroke, and other chronic disorders.[49] Other studies have shown that as jobs, wages, and other indicators of economic prosperity improve, so does public health.[50] The model shows that investing in water infrastructure has a positive effect on the economic conditions of people at many income levels. Adequate investment in water infrastructure protects public health directly by maintaining safe water quality and indirectly by creating economic conditions that enable people to thrive.

Direct, Indirect, and Induced Impacts

Both visions for the future evaluated in this study account for direct, indirect, and induced impacts on the economy.

- **Direct impacts** include the economic implications for companies directly involved in designing, engineering, and constructing water infrastructure.
- **Indirect impacts** include the additional economic implications created by the actions of firms directly involved in water infrastructure. Business to business purchases of goods and services, like machinery for construction of a water infrastructure project, is an indirect impact.
- **Induced impacts** include the purchases in retail, medical, leisure, and other sectors dependent on the income earned by workers in all sectors of the economy that are affected by infrastructure investments. The implications of water infrastructure investment ripple through the US economy through induced impacts.





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Figure 13

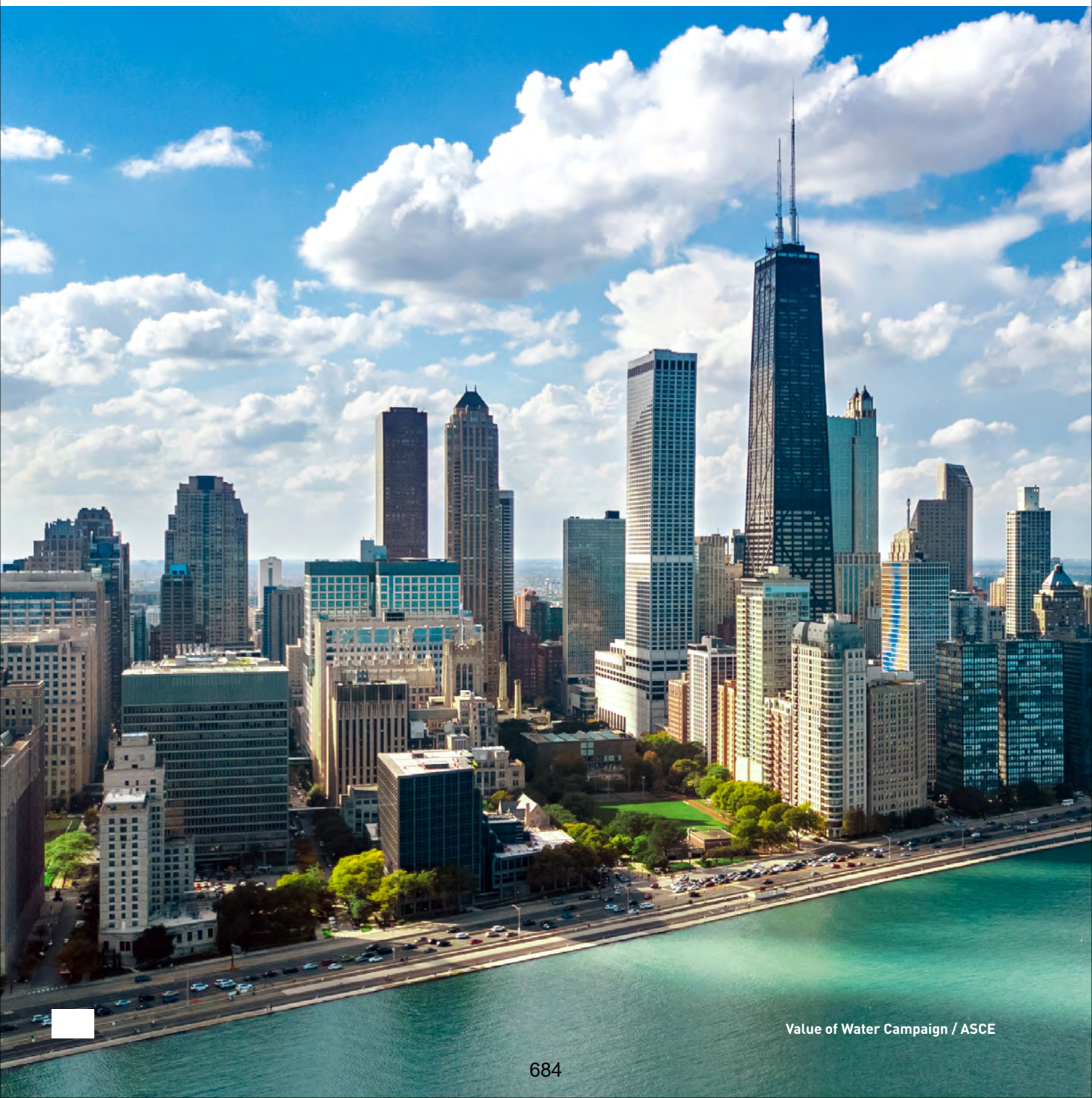
Potential Employment Impacts Due to Improved Water and Wastewater Infrastructure, 2029 and 2039[51]

Sector	2029	2039
Construction	377,000	442,000
Manufacturing	(17,000)	58,000
Professional services	3,000	52,000
Health care	(6,000)	8,000
Logistics	12,000	38,000
Other services	9,000	37,000
Finance, insurance, and real estate	10,000	31,000
Retail trade	11,000	30,000
Transportation services (excluding truck transportation)	5,000	20,000
Information	7,000	15,000
Accommodation, food, and drinking places	8,000	12,000
Mining, utilities, agriculture	(5,000)	11,000
Educational services	5,000	6,000
Entertainment	(1,000)	4,000
Social assistance	7,000	4,000
Total	**444,000**	**798,000**

Figure 14

Estimated Direct and Multiplier Effects for Scenario Outcomes in 2029 and 2039[52;53]
($ billion, 2019 value)

Failure to Act Scenario 2039				
	Jobs	**Disposable Income**	**GDP**	**Output**
Direct	-240,000	-$67	-$140	-$179
Indirect	-144,000	-$40	-$96	-$144
Induced	-252,000	-$69	-$133	-$193
Total	**-636,000**	**-$175**	**-$369**	**-$516**
100 Percent Scenario 2039				
	Jobs	**Disposable Income**	**GDP**	**Output**
Direct	330,000	$140	$189	$264
Indirect	167,000	$70	$111	$172
Induced	301,000	$104	$162	$233
Total	**798,000**	**$315**	**$461**	**$670**



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Conclusion

Water and wastewater infrastructure are interwoven into every aspect of the US economy. Reliable water service is an enabling force for economic growth and prosperity. Unreliable water service and deteriorating infrastructure, on the other hand, will put the nation's communities and economy at risk.

As the United States confronts a widening gap between capital and O&M spending and investment needs, it faces two possible directions. If chronic underinvestment in the water infrastructure continues, the overall economy will suffer; by 2039, GDP will decline by $2.9 trillion. Families would pay for deferred maintenance—costs incurred by households would be seven times higher in 2040 than they are today. Inaction is a threat to a safe and secure water future. The COVID-19 pandemic only intensifies the need to act and invest across all levels of government. Failing to act now will lead the country into a prolonged era of economic and public health vulnerability.

Conversely, if the United States closes the spending gap, the national economy will stand to gain **$4.5 trillion in GDP by 2039.** All can rise to the challenge. In the 20th century, large investments in water infrastructure spurred economic growth and led to tremendous gains in public health, setting the stage for generations of prosperity. Leaders at all levels must step up and explore policy and funding solutions that will move the nation in the right direction. Local, state, and federal action to increase investment in these critical systems today will lead to a resilient, efficient, and reliable water future and protect the public health of generations to come.

This report, along with the technical appendix, can be found at **TheValueofWater.org/resources.**

Please note: Columns may not total due to rounding. Losses and increases reflect impacts in a given year against total national export projections.

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United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville WaterLink Project Benefits

File Name:
B.10b_Yorkville WaterLink Project Benefits

Description:
Description of Yorkville WaterLink Project Benefits.

August 2024

Description of Yorkville WaterLink Project Benefits

The WaterLink project will greatly benefits the residents of Yorkville, the local community, local and regional economy, and the environment. Below is a description of some of the benefits of taking on the WaterLink project.

Environmental

This project will immediately and meaningfully benefit the Cambrian-Ordovician Aquifer system, specifically the Ironton-Galesville aquifer and Ironton-Galesville deep sandstone formations. Water levels in these aquifers have declined more than 600 feet in the past 120 years. The most recent Illinois State Water Survey (ISWS) modeling shows the aquifers supplying Yorkville's wells will likely not be able to support pumping to meet maximum day demands by 2050. Illinois State Water Survey projects that the area in and around Yorkville, Montgomery, and Oswego will be at severe risk of declining well performance—and well inoperability in some areas—as early as 2040. Large swaths of the southwestern Chicago suburb area will not be able to meet daily demand with existing wells by 2070 if current trends continue (See Attachment B.10c_ISWS Sandstone Water Supply in Southwest Suburb).

The Program is being designed to protect Lake Michigan as well, a water resource with exceptional recreational value and ecological importance. Lake Michigan is Illinois' largest recreational resource and one of its biggest economic assets. Annually, Lake Michigan attracts an estimated 20 million tourists and recreation opportunities, such as boating fishing, and swimming, support 33,000 jobs and generate $3.2 billion for Illinois' economy. The largest body of fresh water entirely within the boundaries of the United States, Lake Michigan provides drinking water to 6.6 million Illinois residents.

This project will also reduce greenhouse gas emissions. Shutting down pumps at all 4 deep sandstone water wells will reduce electricity demand on the Illinois Grid. Currently, Yorkville draws water from the Ironton Galesville Aquifer and St Peter and Ironton-Galesville deep sandstone formations using 4 deep wells, each with a pump that must draw water up from as deep as 250 feet. The Project will result in these wells ceasing operation as the City's primary source of water. Instead, two booster pumps at the cities receiving stations will maintain pressure in the local water system, a dramatic increase the local systems energy efficiency. The addition of new transmission lines serving the WaterLink communities will increase load on DuPage Water Commission pumping stations, however the change will be minimal due to economies of scale and will be more than compensated by efficiency gains in the local systems.

Quality of Life/Social

This project is designed to meet the WaterLink communities 2050 projected population of 146,000 inhabitants and their impending need for a new water supply in the most sustainable, feasible, manageable, and cost-effective way. When compared to multiple alternatives, sourcing water from Lake Michigan through the DuPage Water Commission outperformed alternatives by the above metrics (See Attachment A.4_Alternative Water Source Study Technical Memorandum Update).

This project will protect human health by ensuring long term reliable access to clean drinking water for the WaterLink communities. The project will also protect the environment by preventing the depletion of a critical natural source of water and limiting the introduction of toxins into the environment. Yorkville currently relies exclusively on groundwater form the Cambrian-Ordovician Aquifer system. Multiple studies completed by the Illinois State Water Survey (ISWS) have confirmed

that this aquifer system does not possess a sustainable long-term supply of water. ISWS suggests that the WaterLink Communities and other municipalities reliant on the Cambrian-Ordovician Aquifer system may be at risk of water shortage and well inoperability within the next few decades (See Attachment B.10c_ISWS Sandstone Water Supply in Southwest Suburb). The Chicago Metropolitan Agency for Planning (CMAP) has projected that Yorkville water service area population will more than double from 21,533 to 47,796 by 2050.[1] A reliable water supply is vital to ensure the human health of the growing Yorkville population and the current water source will not be able to sustainably meet rapidly expanding demand. Deferring action to address this could have severe public health, ecological, and hydrological consequences.

In addition to addressing water supply depletion, the Program has been designed to address current and future water quality concerns. The United City of Yorkville's four deep sandstone wells withdraw water from the Cambrian-Ordovician multi-state aquifer. Water withdrawn from the Cambrian-Ordovician aquifer within the United City of Yorkville service area contains radium in an amount that exceeds the federal maximum contaminant level (MCL). When the City switches to Lake Michigan water as its primary water source and only utilizes the wells on an emergency basis, the introduction of radium into the environment will be reduced to negligible levels.

Economic

The Project is estimated to create 2,258 jobs, (Approximately $145 million eligible project costs/ $1 million x 15.5 = 2,258). Approximately 888 of those jobs will be created directly through construction and design over the course of the construction period. The remaining 1,369 jobs will be induced through local economic stimulus and the purchase of materials and equipment. After construction, the maintenance and operation of the WaterLink transmission main will continue to support and increase the number of full-time quality jobs DWC.

While construction and operation of the system will have economic benefit, the project will also help prevent impending economic harm. The US Water Alliance estimates that aging water infrastructure coupled with the effects of climate change on historical water supplies (decreased surface water flows and depleted aquifers) will result in $250 billion in costs to water reliant businesses by 2039, a reduction in National GDP of $2.9 trillion, and the loss of more than 630,000 jobs annually, nationwide (See attachment B.10a_Economic Benefits of Investing in Water Infrastructure). Some of the major employers in Yorkville are in water reliant industries including manufacturers like Wrigley Manufacturing Co., textile producers like Boombah, Inc, and recreation like Raging Waves. Collectively these three employers alone employ more than 900 people in Yorkville, 4.1% of all employment in the City. Without this project Yorkville will be of risk of economic stagnation resulting from increasingly unreliable water sources and crumbling water infrastructure.

Resilience

As a part of the project, Yorkville will update and strengthen key features of the City's existing water system. First, the new source will provide Yorkville with a reliable, long-term source of supply with limited vulnerability to seasonal drought. Second, upgrades and repairs to the existing water pumping and distribution system in Yorkville will be required maintain compliance with IDNR and DWC requirements. The new infrastructure will increase overall system reliability and resiliency. And third,

water system storage will be added to increase service reliability in the event of extreme weather events that might impact the Lake Michigan water source or DWC's transmission service.

In addition, Yorkville plans to maintain existing wells and incorporate backup generators at essential pump stations, which will increase system reliability in the event of electrical outage, loss of service from DWC, or water supply constraints at Lake Michigan caused by disaster or inclement weather. Building redundancy into the water system will ensure that any time Yorkville's residents turn on their faucet there will be safe, reliable water there to meet demand.

Finally, Various upgrades to the Supervisory Control and Data Acquisition (SCADA) are also included in the project plans. Upgrades to the SCADA system will improve SCADA cybersecurity by providing hardware and software updated, updating older SCADA equipment, and strengthening SCADA backups and firewalls. Intrusion protection will also be provided with camera monitoring and access control. Yorkville is committed to investing in cyber security and plans to update those systems to meet security objectives.



United City of Yorkville, Illinois
WIFIA Application Attachment

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Analysis of Risk to Sandstone Water Supply in the Southwest Suburbs of Chicago

File Name:
B.10c_Analysis of Risk to Sandstone Water Supply in the Southwest Suburbs of Chicago

Description:
Analysis of Risk to Sandstone Water Supply in the Southwest Suburbs of Chicago from the Prairie Research Institute at the University of Illinois Urbana-Champaign campus.

August 2024

CONTRACT REPORT 2020-04

Analysis of Risk to Sandstone Water Supply in the Southwest Suburbs of Chicago

Daniel B. Abrams and Cecilia Cullen

Illinois State Water Survey

December 2020



Analysis of Risk to Sandstone Water Supply in the Southwest Suburbs of Chicago

A Report to the Southwest Water Planning Group (SWPG),
December 2020

Daniel B. Abrams, Ph.D. (Principal Investigator)
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Abstract

In 2018, the City of Joliet assessed its long-term water supply and found that the city should change its water supply source, the deep Cambrian-Ordovician Sandstone aquifer, by 2030. A three-year follow-up study has been initiated with a collaboration among scientists from the Illinois State Water Survey and multiple communities and industries in the southwest suburbs of Chicago. This contract report summarizes the Year 1 findings.

Withdrawals from the deep Cambrian-Ordovician aquifer system in northeastern Illinois have been unsustainable since the early 1900s. The sandstone aquifer system that supplies water to Will County contains the uppermost St. Peter Sandstone and the Ironton-Galesville Sandstone; this study frequently uses the terms "Cambrian-Ordovician Sandstone aquifers," "sandstone aquifers," or "sandstone" when referring to the St. Peter and Ironton-Galesville collectively. In the study area, sustainable withdrawals are estimated to range from 2 to 7 million gallons per day (mgd), while recent sandstone demands range from 35 to 38 mgd. As a result, sandstone water levels have been declining for over a century. In some areas, the uppermost St. Peter Sandstone is currently dewatered, while the lowermost freshwater aquifer, the Ironton-Galesville Sandstone, is at-risk of dewatering in localized areas. Further declines will increase the risk to both aquifers.

With Joliet planning to switch off the sandstone aquifers by 2030 and communities in Kendall County considering leaving the aquifer shortly after, updated groundwater flow models have assessed the regional impact of this reduction on sandstone water use. This report focuses on a single model scenario, referred to as the Current Trend, and outlines its underlying assumptions. A sensitivity analysis was conducted to demonstrate the impact of pumping assumptions in different portions of the region.

Joliet and Kendall County communities switching from the sandstone aquifer will not alleviate the regional risk to the sandstone supply. The impact of alternate demands from new and existing industries, which were assumed to remain unchanged in the future, may still pose a risk to the regional sandstone supply. Regional action is needed to ensure a sustainable future water supply and to preserve the sandstone aquifer as an option for future back-up supply needs.

Acknowledgments

This work was funded by several communities in the southwest suburbs: Channahon, Crest Hill, Elwood, Frankfort, Joliet, Lemont, Lockport, Minooka, New Lenox, Plainfield, Romeoville, and Shorewood. In addition, the following industries contributed to this study: Exxon Mobile, INEOS (Flint Hills), and LyondellBasell. Will County also contributed funding to make this work possible. The Lower Des Plaines Watershed Group assisted in the management of this project.

In addition to funding the work of the Illinois State Water Survey, members of the Southwest Water Planning Group (SWPG) have held monthly meetings over the past year to discuss the future demand scenarios for the model and the inputs and uncertainties involved. This participatory effort remains critical to building confidence in the modeling results, and the feedback received is greatly appreciated by the principal investigators of this project.

We also thank Devin Mannix, Allan Jones, and Walton Kelly at the Illinois State Water Survey (ISWS) for their constructive peer reviews of the technical content of this report. Finally, we thank Lisa Sheppard (ISWS), who edited the text.

Introduction

Residents in the southwest suburbs of Chicago rely on multiple water sources to meet their demands. One important source is the deep Cambrian-Ordovician Sandstone aquifer system, from which regional withdrawals have been unsustainable for nearly a century. As a result, water levels have declined and wells in the region are at risk of not meeting current demand in localized areas and regional demand in at least some future scenarios.

In 2018, the City of Joliet initiated Phase 1 to investigate the status of their regional water supply and found that the sandstone aquifer, specifically water from the two major sandstone units (the uppermost St. Peter and the lower Ironton-Galesville), would no longer meet their needs by 2030. As the city plans to transition away from the aquifer, the surrounding communities and industries formed the Southwest Water Planning Group (SWPG) to assess risk to their own sandstone supplies. This group is made up of entities that rely on the sandstone aquifer for some or all of their primary water supply (communities of Elwood, Channahon, Joliet, Lemont, Lockport, Minooka, Romeoville, and Shorewood and Exxon Mobile, INEOS-Flint Hills, and LyondellBasell). The SWPG also includes some communities that currently rely solely on shallow dolomite aquifers in the region (Crest Hill and Frankfort), as well as two Lake Michigan users (New Lenox and Plainfield).

The SWPG contracted with the Illinois State Water Survey (ISWS) to update the groundwater flow models developed in the 2018 study with additional local feedback. This report details:

1) the unsustainability of withdrawals in the sandstone aquifer,
2) assumptions used to develop model scenarios and assign at-risk regions,
3) the impact of uncertainty in these assumptions, and
4) conclusions from the first year of this investigation.

This report focuses on the status of the regional sandstone aquifer system in the southwest suburb region of Chicago. This work remains ongoing and any changes will be reflected in a final report at the end of this three-year study.

Per request of the SWPG, a community-by-community assessment for existing sandstone users was also developed to complement this report. Each assessment has been reviewed by the respective community. Industries also received personalized assessments of their water supply. These individual assessments remain in draft form and are continuously updated as this three-year research project continues.

Background

Geologic and Hydrogeologic Setting

The deep sandstone aquifers are an important source of water in the northern half of Illinois. Sandstone is a sedimentary rock composed of sand-sized grains with significant primary intergranular porosity. In other words, the pore spaces between grains in sandstone are comparatively large and generally interconnected. Sandstone can also develop secondary fractures that can further increase permeability. Well treatment often attempts to enhance these fractures to boost local permeability and reduce drawdown in an actively pumping well.

The sandstone aquifers are contained within a sequence of bedrock layers in Illinois. The intervening layers, referred to as aquitards, are generally composed of shale, siltstone, and unweathered carbonates. The aquitards separating the individual sandstone aquifers generally have lower permeability and impede the vertical flow of groundwater. Recent studies at the ISWS hypothesized that some of these layers may provide considerable water from storage, although this is still under investigation (Mannix et al. 2018). A generalized cutaway of the geology is depicted in Figure 1. The cutaway runs through McHenry, Kane, and Kendall Counties on the left (west) and Kendall, Will, and Cook Counties on the right (south). Note that this diagram refers to hydrostratigraphic units, each lumping similar geologic material into a single layer. This is primarily done to simplify the geologic framework of groundwater flow models.

Since the major sandstone aquifers in northern Illinois are Cambrian or Ordovician in age, they are collectively referred to as the Cambrian-Ordovician Sandstone aquifers. For simplicity, this report often refers to this collective aquifer simply as the "sandstone" or "sandstone aquifers." Two Cambrian-Ordovician Sandstone aquifers are of interest in the SWPG region, the uppermost St. Peter and the lower Ironton-Galesville.

The St. Peter Sandstone consists mostly of well-sorted and well-rounded quartz sand and is at the bedrock surface in portions of north-central Illinois (Figure 2). Where it is not overlain by shale units, the sustainable yield of the sandstone aquifer is much higher because of increased vertical leakage. In most of the SWPG region, shale layers (mostly the Maquoketa Formation) overly the sandstone (Figure 1), greatly impeding vertical infiltration to the St. Peter Sandstone.

The Ironton-Galesville Sandstone consists of well-rounded quartz sand grains like the St. Peter. In the study area, the Ironton-Galesville is separated from the St. Peter Sandstone by two predominantly (unweathered) carbonate units, the Prairie du Chien-Eminence and Potosi-Franconia. Under natural conditions, these units greatly impede flow between the St. Peter and Ironton-Galesville. However, the increasing prevalence of artificial connections from multi-aquifer wells (MAWs) promote rapid flow between the St. Peter and Ironton-Galesville. The Ironton-Galesville does not approach the bedrock surface in Illinois. As a result, vertical leakage is limited everywhere in the state, so high-capacity wells open to only the Ironton-Galesville generally pump in excess of the sustainable yield, regardless of location in the state.

A third, deeper sandstone, the Mt. Simon, is present in the southwest suburbs, but is highly saline. The Mt. Simon has been used as a water supply as far south as Aurora, but issues with salinity in Will, Kendall, and Grundy Counties have resulted in modern wells being drilled no farther than the Ironton-Galesville. Paper records at the ISWS indicate that previous attempts at drilling wells into the Mt. Simon aquifer in Will County failed; the flowing water was highly saline and formed salt crystals around the base of the well.

The Sandwich Fault Zone is an important geologic feature that affects flow in northeastern and north-central Illinois, vertically displacing the Cambrian-Ordovician Sandstone aquifers in Kendall and Will Counties. The Sandwich Fault Zone appears to limit horizontal flow because of the potential development of deformation bands, increased cementation, and the offset of high permeability zones (Kolata et al. 1978; Abrams et al. 2015). Hadley et al. (2019) conceptualized that the fault zone has the lowest permeability along the linear feature in Figure 1 and Figure 2, but also noted that it has substantial width, potentially as wide as 2 miles. The most at-risk wells in the southwest suburbs have been observed to occur within this 2-mile faulted area.

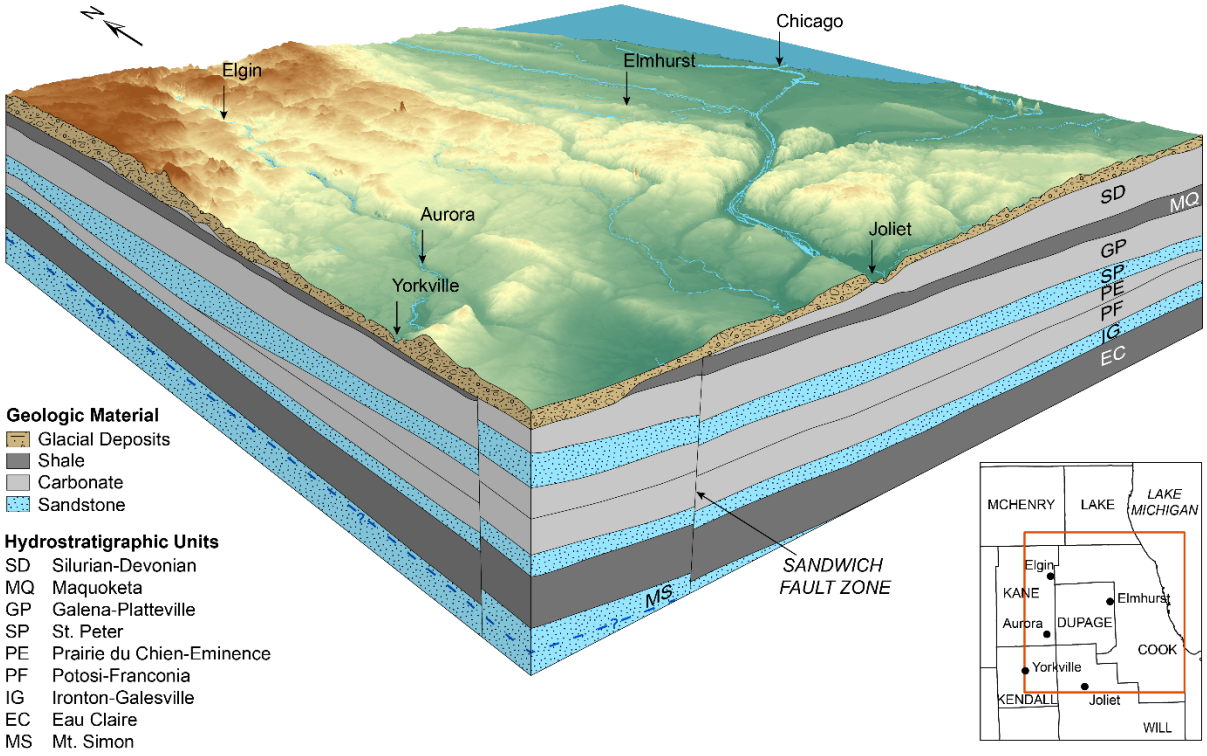


Figure 1: Generalized cutaway of the geology in the southwest suburbs of Chicago. Image modified from Abrams et al. (2015).

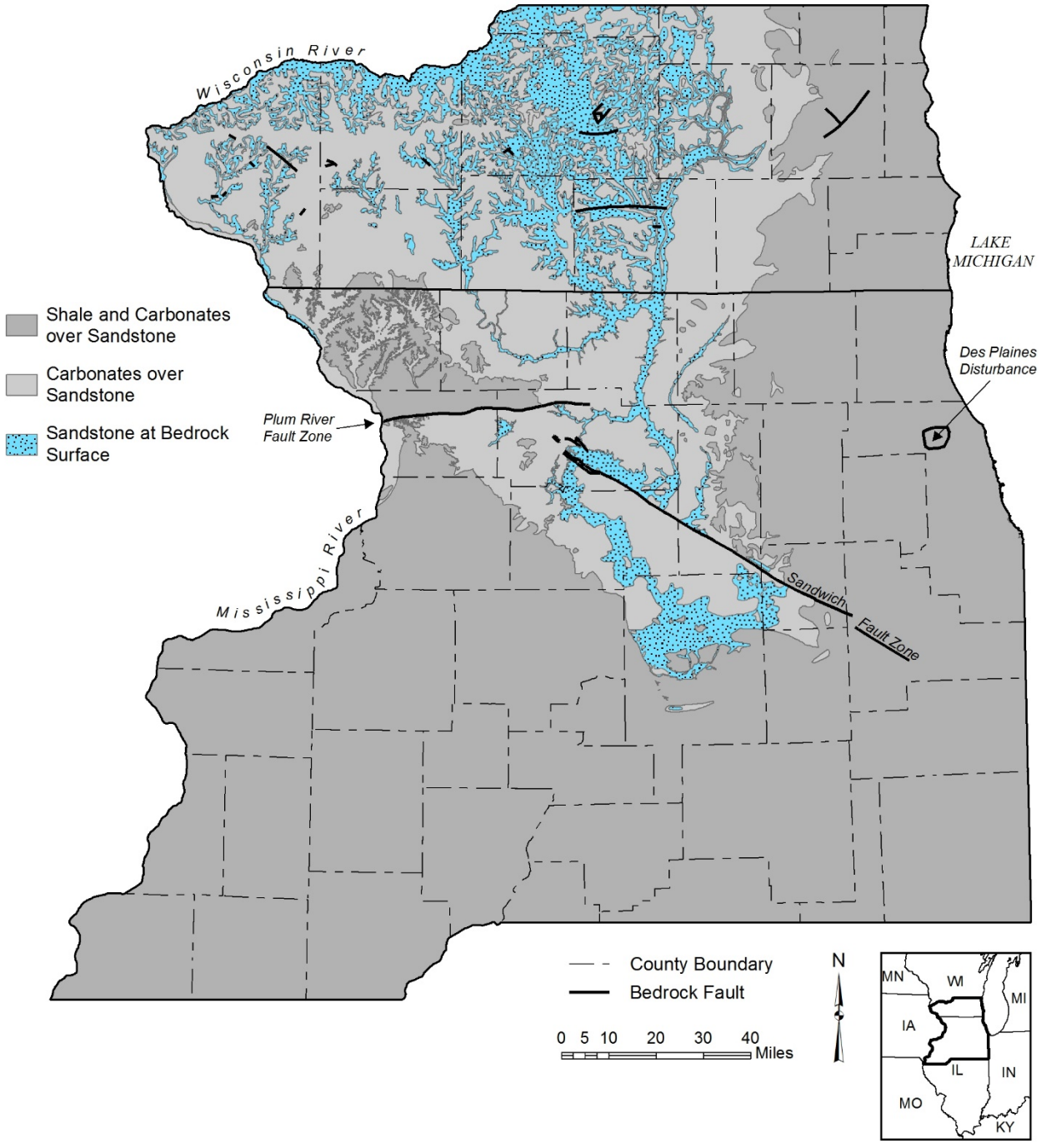


Figure 2: Lithology of bedrock material overlying the Cambrian-Ordovician Sandstone aquifers. Image from Abrams et al. (2015).

Leakage and Sustainability

Sustainability of the sandstone is defined as the maximum leakage that can occur vertically over an area. The ISWS has been investigating approaches to determine this leakage rate, with current approximations shown in an interactive web map: https://univofillinois.maps.arcgis.com/apps/webappviewer/index.html?id=0e2da1792bc64d3284a7b6b435d25efe. Details on the analysis and resulting estimates can be found in Mannix et al. (2018).

The current best estimates for wells open to both the St. Peter and Ironton-Galesville are that sustainable withdrawals are generally less than 0.001 million gallons per day per square mile (mgd/mi^2) for most of the southwest suburbs. Leakage rates increase in central Grundy County, around Morris, IL, to approximately 0.1 mgd for each square mile. The sandstone is not overlain by shale for a considerable area in Grundy County, enabling greater leakage rates (Figure 2).

Most new wells in the southwest suburbs are open only to the deeper Ironton-Galesville Sandstone, so the above sustainable withdrawal metric does not apply. For these wells, in areas of new development where multi-aquifer wells are absent, the sustainable withdrawal rate is generally less than 0.0001 mgd/mi^2. Recent modeling at the ISWS indicates that the transition in well installation practice from wells open to multiple sandstone layers to only the Ironton-Galesville has had an important role in the accelerated decline in water levels in the region (Abrams et al. 2018; Mannix et al. 2018).

In Will County, where the preponderance of demands are located, the current best estimate of sustainable yield from the sandstone is 2.5 mgd if the St. Peter and Ironton-Galesville are both used, and less than 0.1 mgd if only the Ironton-Galesville is used (which is currently the most common situation). When considering both aquifers, Grundy (12.0 mgd) and Kendall (9.2 mgd) Counties experience increased sustainable yields. However, these yields may be misleading. Most demands are in the eastern portion of the counties where the sandstone is overlain by shale (i.e., small local leakage and sustainable yield), while the greatest aquifer sustainable yields are in the western, less populated, portions of those counties. Furthermore, these sustainable yields characterize the combined yield of both aquifers; however, most newly constructed wells are open only to the Ironton-Galesville Sandstone, which alone has a sustainable yield of < 0.1 mgd in both Grundy and Kendall Counties.

Unpublished work by the ISWS has attempted to define a range of realistic, sustainable yield estimates for the southwest suburbs, modifying both the parameters and methodology for calculating the metric. The latest results of this study indicate a worst-case estimate of 2 mgd and best-case of 7 mgd. Regardless of the approach, the calculated sustainable withdrawals are clearly less than current withdrawals in the region.

It is important to understand how sustainability is defined here. Pumping in excess of sustainable withdrawals will result in an overall regional decline in water levels, but the value does not necessarily consider **when** the needed supply will no longer be available. In Will County, withdrawals have been unsustainable for approximately a century, but supply issues for high-capacity wells are only now manifesting.

Water Use in the Southwest Suburbs

Communities withdrawing from the deep aquifers in the southwest suburbs include Aurora, Channahon, Elwood, Joliet, Lemont, Lockport, Manhattan, Minooka, Montgomery, Morris, Oswego, Rockdale, Romeoville, Shorewood, and Yorkville. Several industries also use the sandstone aquifer in the region, particularly where the Des Plaines River passes underneath I-55 (Figure 3). Total sandstone demands in the southwest suburbs were 51.5 mgd in 2018.

Total demands in the southwest suburbs in 1990 (55.5 mgd) were similar to current pumping from the sandstone. However, the distribution of pumping has changed considerably, as shown in Figure 4. In 1990, demands in Aurora and Naperville were much greater, while Joliet's demands were more focused on the eastern part of the city. Industrial demands along the Des Plaines River were also much smaller along I-55, but greater between I-355 and I-80 in 1990, while Kendall County had virtually no demands at all, with only one well exceeding 0.25 mgd. The most important difference between the 1990 and current demands is the growth and increased withdrawals along I-80 in western Will County, southeastern Kendall County, and northeastern Grundy County. This area anticipates future growth that is particularly problematic due to the proximity to the geologically complex Sandwich Fault Zone.

This study specifically addresses the SWPG region, whose demands are focused along the Des Plaines and Illinois Rivers. Total sandstone demands in the SWPG region, not accounting for shallow aquifer usage, were 36.7 mgd in 2018. Joliet, which plans to switch off the sandstone in 2030, accounts for 15.3 mgd. Industries account for 12.8 mgd. The current combined demand in the remaining communities (Channahon, Elwood, Lemont, Lockport, Manhattan, Minooka, Morris, Rockdale, Romeoville, and Shorewood) is 8.6 mgd.

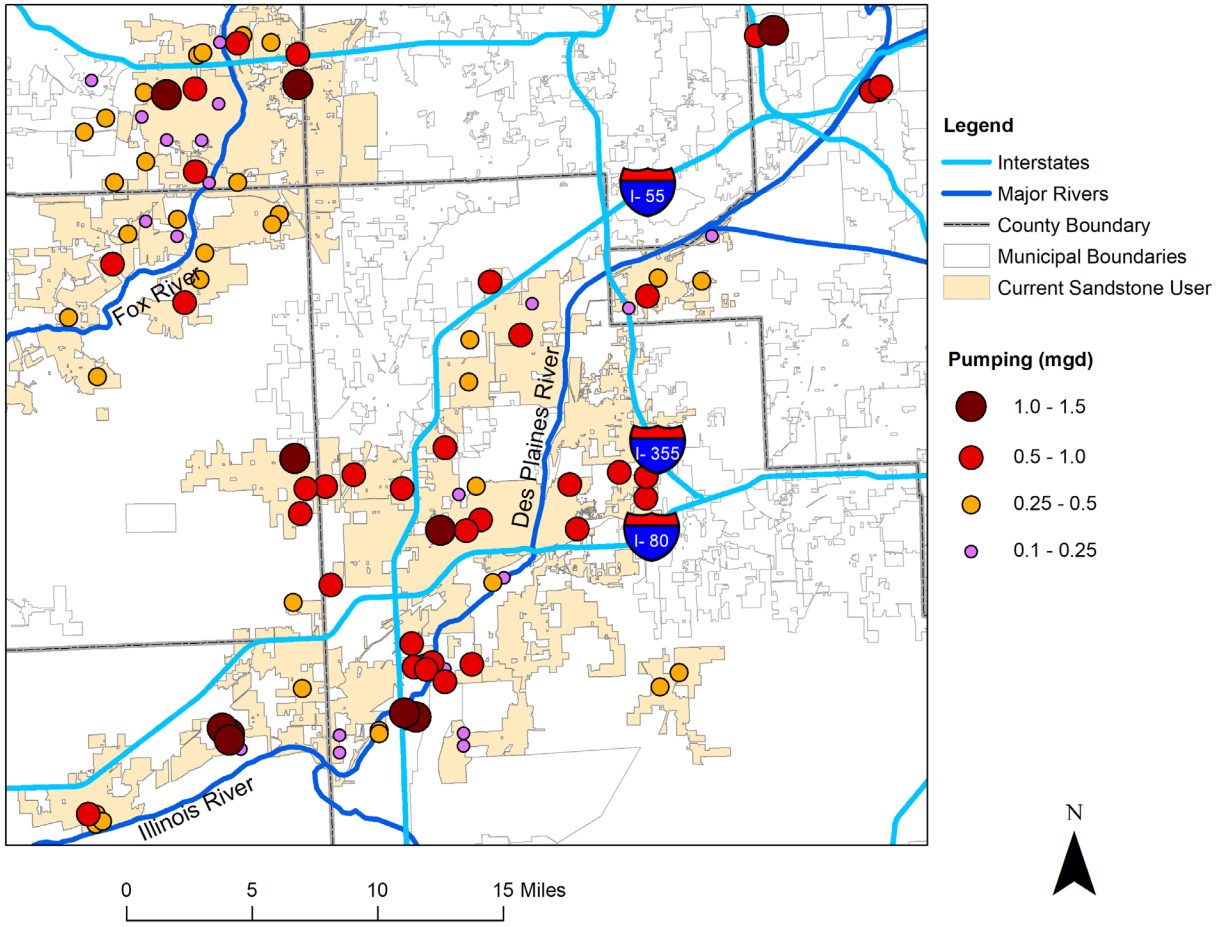


Figure 3: Current demands (2018) from the Cambrian-Ordovician Sandstone aquifer system in the southwest suburbs

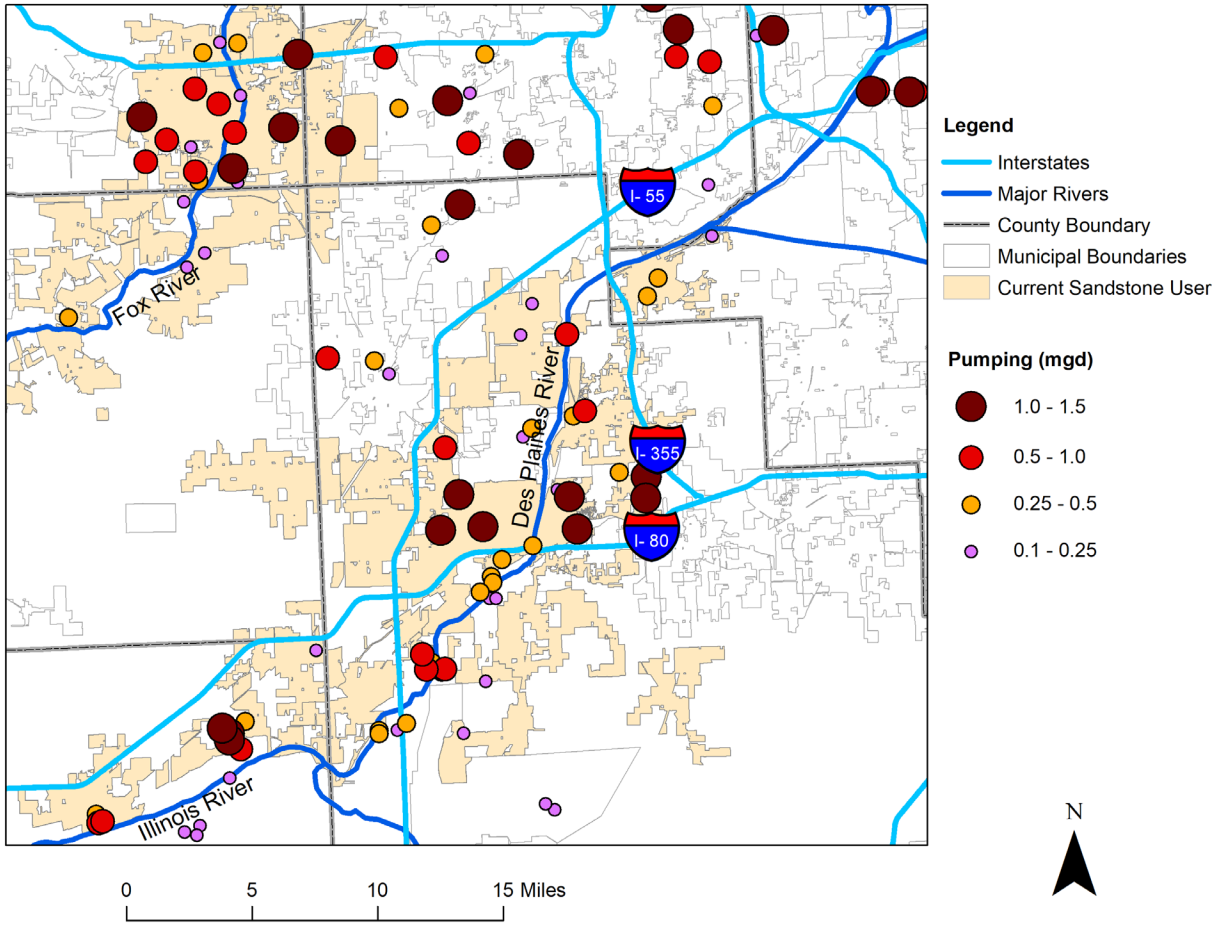


Figure 4: 1990 demands from the Cambrian-Ordovician Sandstone aquifer system in the southwest suburbs

Demands in the SWPG region began increasing before 1900 (Figure 5). Before the 2000s, the peak of reported pumping occurred in the mid-1970s with a sharp decrease following the peak, primarily from a decrease in reported industrial pumping. Water use reporting was more approximate before the Illinois Water Inventory Program (IWIP) was established in 1978. Pumping increased slightly from the mid-1980s to late 1990s. An almost 10 mgd increase occurred in the early 2000s, driven both by increased population and additional industrial demands. Those increased industrial demands appear to be due to process changes requiring improved water quality at existing facilities. This increase would have been larger if not for the departure of some industrial demands over the same period. Demands stopped increasing around 2008, coincident with the housing market crash, and remained flat for the next decade.

Any additional demands from the sandstone will result in unprecedented withdrawals in the region. Furthermore, with Joliet expected to leave the sandstone aquifer in 2030, the remaining water users, which total 58 percent of the current sandstone demands in the SWPG region, are still evaluating their future water supply. The major question being asked by communities and industries is whether the decrease in regional demands when Joliet no longer uses the aquifer will be enough to offset an increase in local demands as other communities grow in the coming decades.

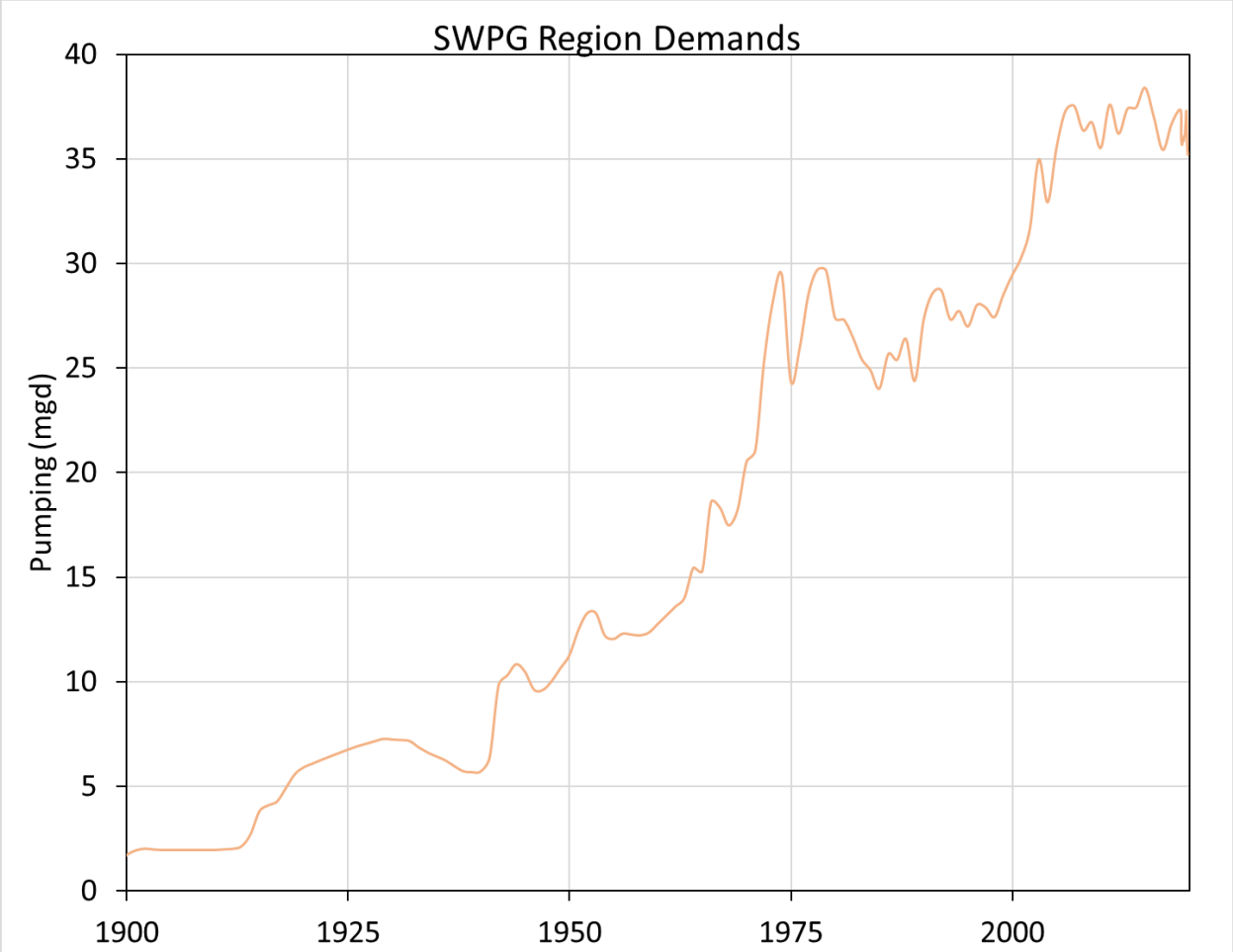


Figure 5: Changes in sandstone demands in the SWPG region

Groundwater Flow Model: Methods and Assumptions

The Illinois Groundwater Flow Model

The Illinois State Water Survey has developed a groundwater flow model that extends over the northern half of Illinois. The initial focus of this model was to assess sandstone supply throughout the state, and the model was used in the Phase 1 assessment of water supply for the City of Joliet (Crawford et al. 2019). The technical details of this model are documented in Abrams et al. (2018), covering information pertaining to the conceptualization, parameterization, inputs, and calibration of the model. This report briefly details the most important of the assumptions that go into this model and the implications of the uncertainty underlying those assumptions.

The model discretizes the geology in a 3-dimensional gridded network using the finite-difference code MODFLOW (McDonald and Harbaugh 1988). Each cell covers a 2500 ft by 2500 ft area, and has a thickness based on the hydrostratigraphic unit that it represents, resulting in layers coinciding with those shown in Figure 1. For example, the 18th layer in the model depicts the Ironton-Galesville, broken up into grid cells that are 2500 ft on each side and approximately 150–200 ft thick. Most layers have a uniform value assigned to each cell that determines how much flow moves through the aquifer (referred to as a hydraulic conductivity). Exceptions include complex hydrologic features such as the Sandwich Fault Zone, which consists of four to five cells of lowered hydraulic conductivity in the sandstone layers.

Model inputs also include boundary conditions in the form of rivers, lakes, recharge, and wells. Stages are assigned to the river and lake boundary conditions and are relatively unimportant to the model in northeastern Illinois. These surface water boundary conditions are more influential in the central part of Illinois where the sandstone is near the bedrock surface. Similarly, the sandstone model is highly insensitive to recharge rates assigned to the model, primarily because very little precipitation infiltrates to the deeper sandstone.

Wells, on the other hand, are much more important in the southwest suburbs. The time-domain of the model is broken up into annual stress periods, and wells are assigned to each stress period based on inferred or reported data. Before 1980, withdrawals are more speculative, but with the advent of the IWIP in 1978, reporting on a by-well basis has improved. Data gaps still exist, and those are generally linearly interpolated unless additional data are available. Both the rate of pumping and the open interval of wells matter, as will be further discussed in subsections titled *Assumption 1* and *Assumption 2*.

Historic Calibration

The ISWS has collected both water usage and water level data from communities and industries since the early 1900s. Abrams et al. (2018) discussed the calibration process in more depth, but briefly, both spatial and temporal calibrations are important for building confidence that the model can capture the large changes in demands that are anticipated in the coming decade in the

sandstone aquifer. In general, the water levels used for calibration are taken during non-pumping (static) conditions, consistent with what is simulated by the groundwater flow model.

Figure 6 shows the model calibration to data collected during and since the 2014 synoptic measurement of the sandstone aquifer (Abrams et al. 2015). This includes monthly data collected since the start of the SWPG project in summer 2019. The plot shows model residuals, calculated as the observed value minus the simulated value. Where the simulated value is positive, model water levels are too low, shown with red arrows. Where the simulated value is negative, model water levels are too high, shown with blue arrows.

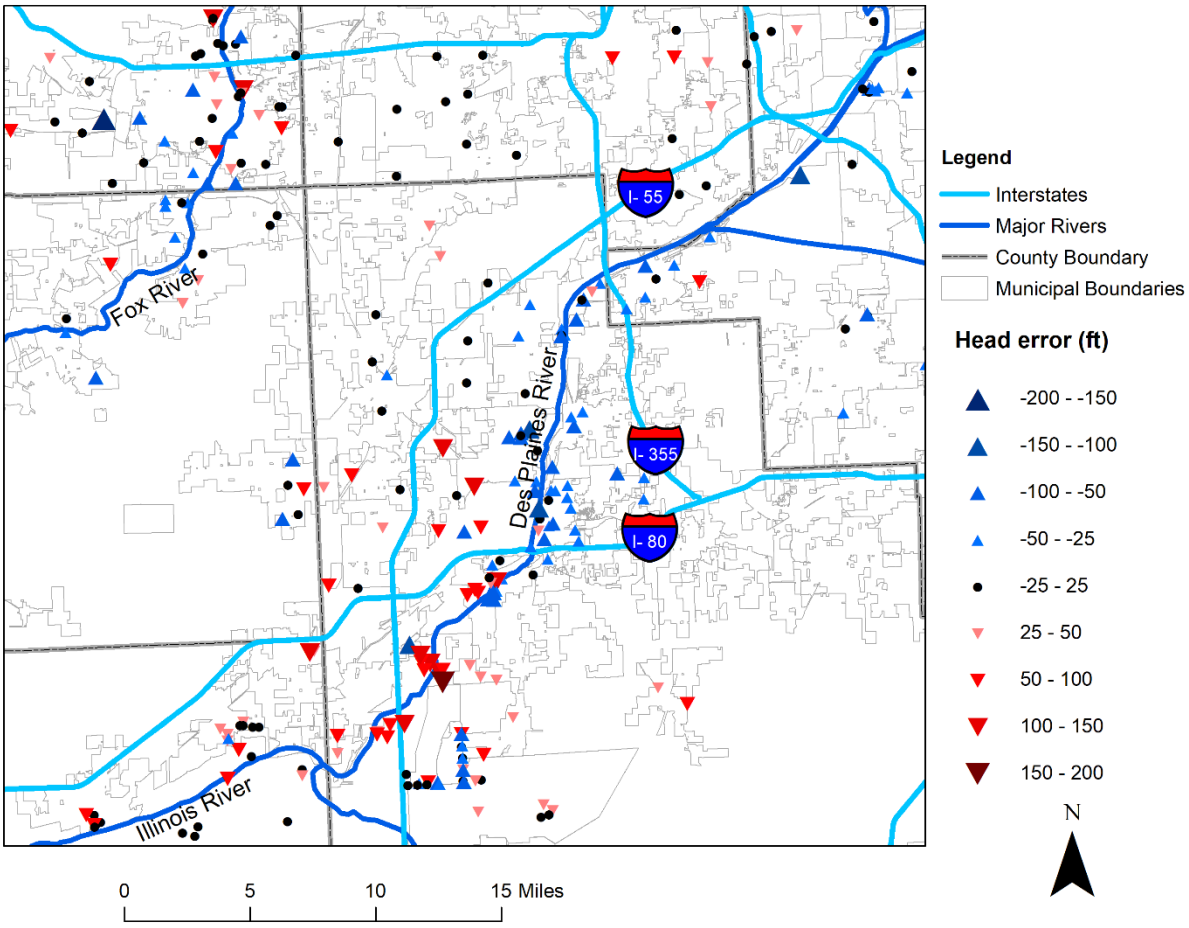


Figure 6: Calibration to water levels in the Cambrian-Ordovician Sandstone aquifer system. Blue indicates that model water levels are too high and red indicates they are too low.

Although ideally the model would have a minimal (< 25 feet) error in the water level for all observation points, there is too much noise in the data for this to be realistic. This is primarily because the model simulates annually averaged conditions, while seasonal fluctuations are present in the observed data. Recognizing this, the SWPG group has begun collecting monthly water level data to improve modeling of seasonal variability. This fine-tuned calibration is ongoing and will be discussed in more depth in a future report (2022).

Given the noise in the data, how should Figure 6 be interpreted? An area that contains a combination of red arrows, blue arrows, and black dots constitutes a "good" calibration, while an area with a disproportionate number of red or blue arrows has a bias. For example, simulated water levels along the Des Plaines River between I-355 and I-80 are generally biased too high, and the reason for this bias is currently not well understood. Water levels in the vicinity of where the Des Plaines River crosses underneath I-55 are biased too low, likely due to the presence of the Sandwich Fault Zone.

Areas with a spatial bias can still provide useful information if the trend is captured, which is the case for almost all wells. This trend in water levels through time is determined by evaluating each well's hydrograph. The simulated static water level is adjusted by offsetting all values through time by a single amount to match observations, as shown in Figure 7. The hydrograph in Figure 7 is from an industrial well with a long data history where unadjusted, simulated static water levels are biased too low by about 70 ft.

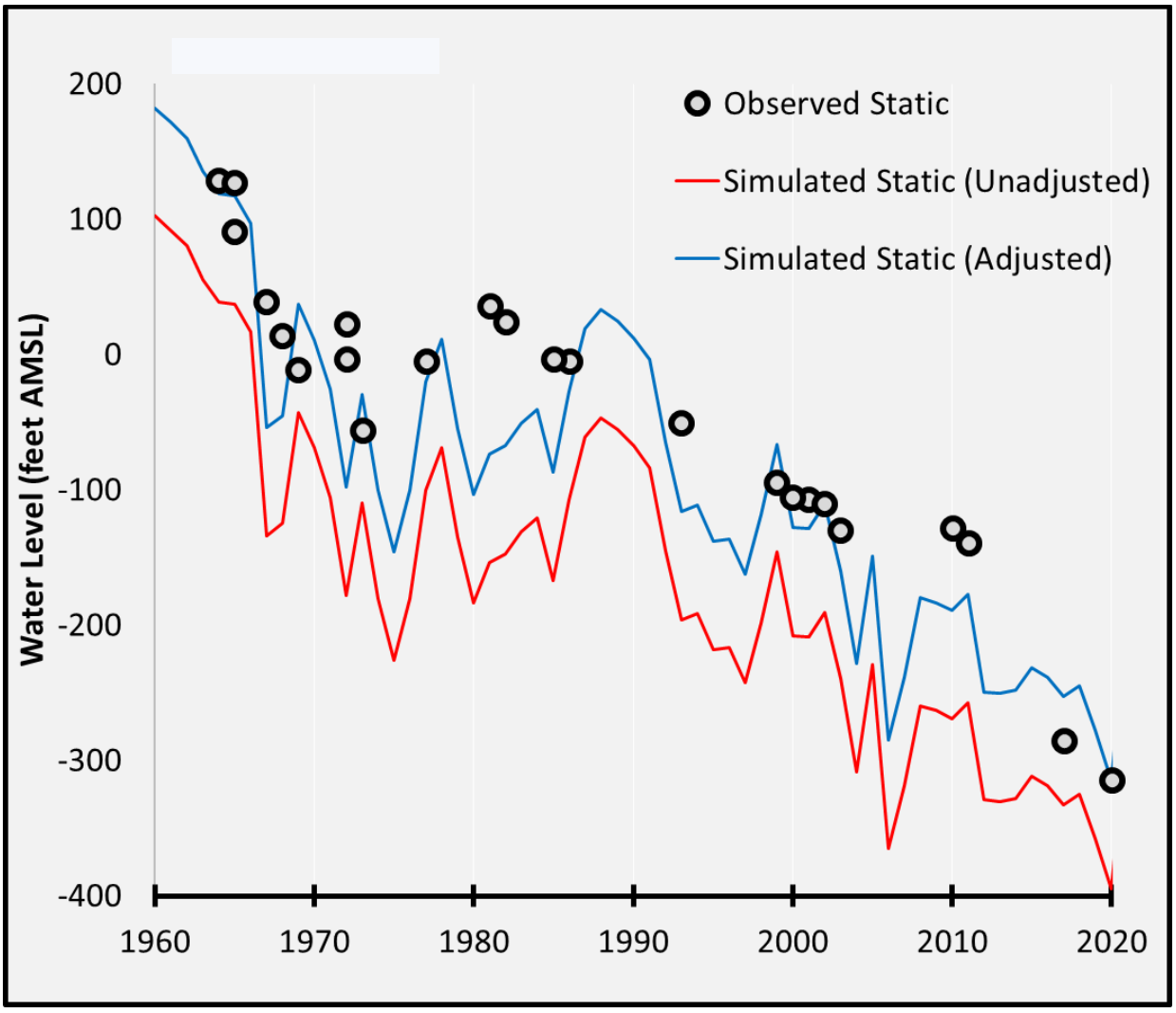


Figure 7: Adjustment of simulated static water levels to account for bias and improve assessment of risk

Due to the seasonal variability in water levels, hydrographs do not necessarily capture every observation, just the overall trend. In Figure 7, most observations are greater than the simulated value, while other monitoring locations may experience points greater and/or less than the simulated values. The monthly data collection ongoing with the SWPG effort seeks to improve this aspect of calibration and an understanding of the variability during average and peak demand conditions, which plays a major role in assessing future risk to the deep sandstone aquifer. Please refer to Abrams et al. (2018) for additional details on calibration.

Assumption 1: Current Trend Future Demand Scenario

The model results detailed in this report are based on the Current Trend future demand scenario (Figure 8). This scenario assumes growth per Chicago Metropolitan Agency for Planning's projected population, discussed in the Joliet Phase 1 report (Crawford et al. 2019). The Current Trend assumes "business as usual," while an alternative scenario, "Less Resource Intensive," assumes water conservation goals and strategies are implemented to reduce water use per capita. This report focuses on the more conservative Current Trend scenario, while the lower demand scenario is considered in the sensitivity analysis at the end of this report.

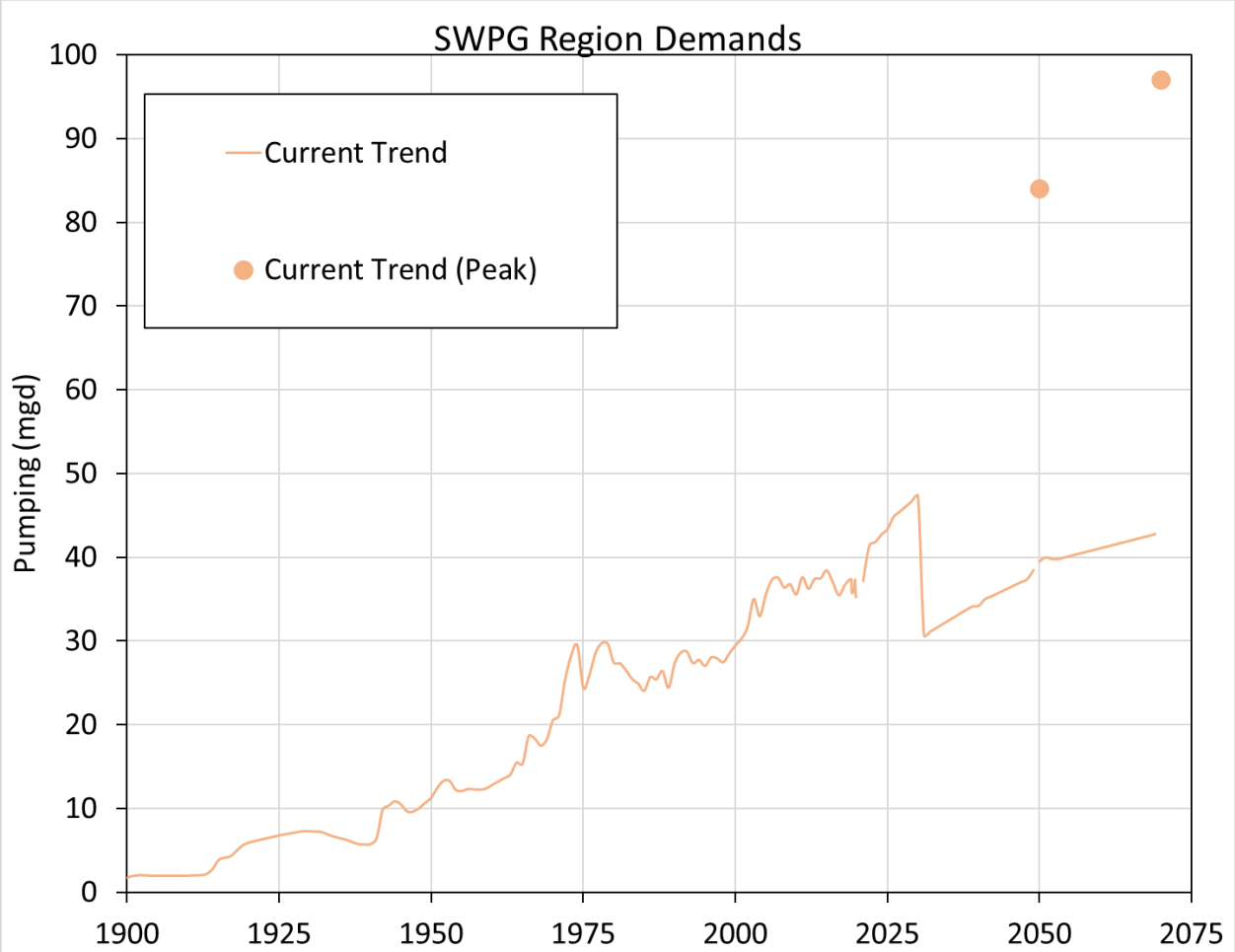


Figure 8: The Current Trend scenario analyzed in this study with the maximum daily demand shown in 2050 and 2070

The Current Trend scenario for SWPG communities, summarized in Table 1, underwent months of vetting at monthly SWPG meetings. Total sandstone water use demands of this trend for most communities remained unchanged from the Phase 1 Joliet study. Note that these pumping values are exclusively from the deep sandstone units, the St. Peter and the Ironton-Galesville, and do not include shallow aquifer pumping. Channahon and Minooka's sandstone demands grew because of previously unaccounted for growth in Grundy County compared to the Phase 1 study.

Table 1: Future sandstone demands (Current Trend) for communities participating in or falling within the SWPG study area. Industries within the SWPG region and communities in Kendall and Kane Counties are also included for comparison. Average and peak demands for 2050 are shown as mgd.

	2018	*2050 (Average)*	*2050 (Peak)*
Channahon	0.5	4.4	10.0
Elwood	0.3	1.3	3.9
Joliet	15.3	0.0	20.0
Lemont	1.6	1.8	3.8
Lockport	0.0	1.5	3.6
Manhattan	0.6	0.9	1.4
Minooka	0.8	2.5	5.0
*Morris**	1.8	2.7	4.1
Rockdale	0.1	0.8	1.0
Romeoville	2.1	3.9	5.1
Shorewood	0.8	2.5	2.8
Industries	12.8	15.0	21.8
Kendall/Kane	11.6	6.8	23.8

**Demand estimates did not exist for Morris, so average percent increases in Northeastern Illinois were applied.*

Another change from the Phase 1 Joliet study was the future proportioning of shallow aquifer versus deep sandstone demands. Some communities, such as Shorewood, Minooka, and Channahon, requested that a larger proportion of their communities' total demands be shifted from the shallow dolomite aquifers to the deep sandstone. The primary reason was the increasing chloride concentration in the shallow dolomite aquifer wells due to road salt contamination (Kelly 2020). Similarly, Lockport provided additional information about a newly drilled deep well and a potential future deep well. These prospective deep well installations are largely driven by potential impacts to the habitat of the endangered Hines Emerald Dragonfly. Previous demands added during the Phase 1 Joliet study in Crest Hill and Romeoville were removed for the same reason after receiving community feedback.

There are four distinct regions in the SWPG study area to consider. First, Joliet-proper has an approximate 15 mgd reduction in demand between the current conditions and 2050, save for a 14-day period when the sandstone wells at Joliet are used during a hypothetical service interruption from Lake Michigan. Second, demand from the combined area of Shorewood, Minooka, and Channahon increases from 2.1 mgd in 2018 to 9.4 mgd in 2050; this large increase, combined with the proximity to the Sandwich Fault Zone, has a major influence on the model results as will be discussed later in this report. Third, the demand from the combined area of Romeoville, Lockport, and Lemont experiences an increase of 3.6 to 7.3 mgd. Finally, the area of Elwood and Manhattan experienced a more modest growth from 0.9 to 2.2 mgd, although

some industrial growth was also simulated in the model in the region. A map of the 2050 demands with Joliet's switch from the aquifer is shown in Figure 9.

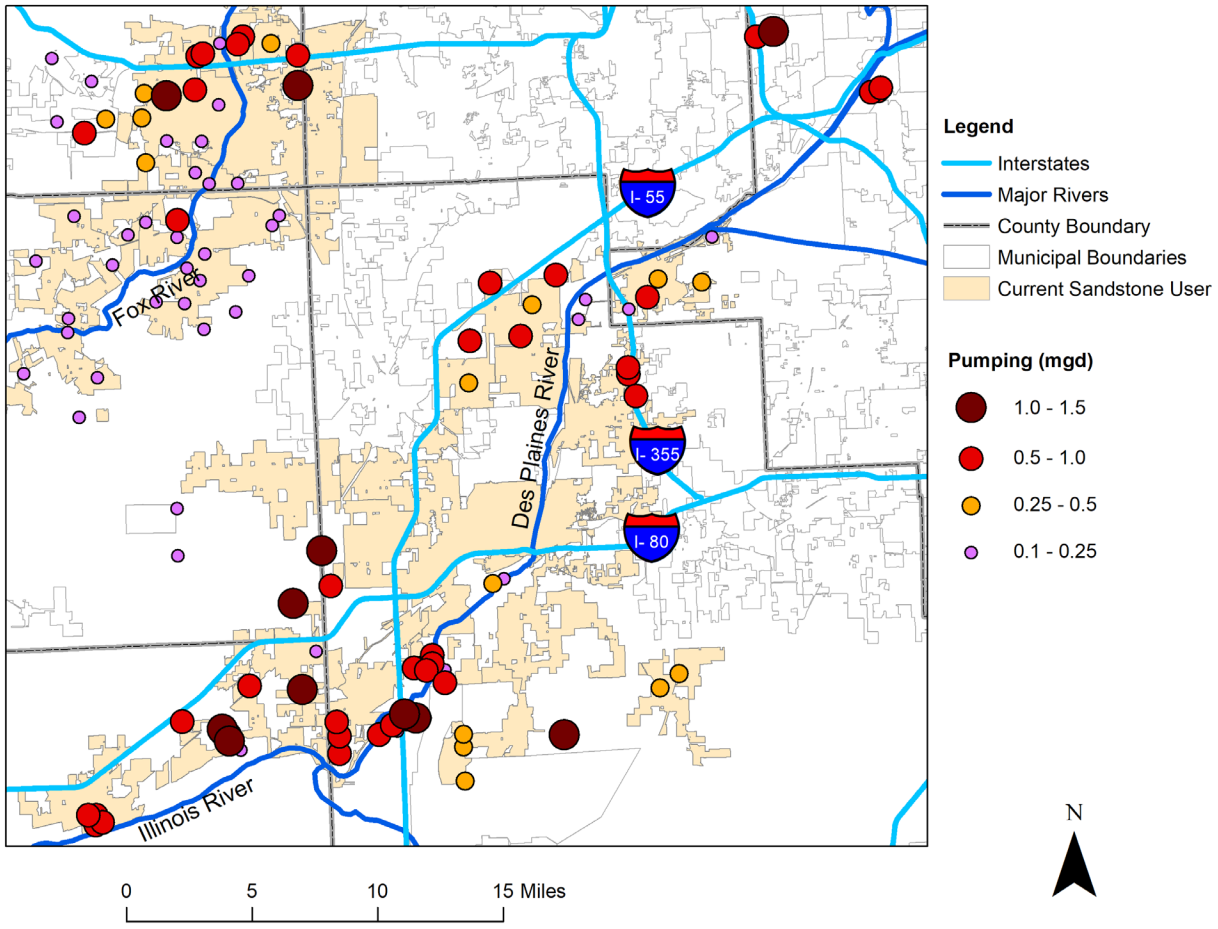


Figure 9: 2050 demands in the Current Trend simulation

A few points should be clarified about the demands in Table 1. Joliet is assumed to leave the aquifer in 2030, hence 2050 average daily demands are zero except for a 14-day period in the model, indicative of a service interruption. Average conditions are used for Joliet during this 14-day span, which coincides with peak demand for all other communities, as listed in the Table 1 2050 peak conditions column. The same treatment was applied to Oswego, Yorkville, and Montgomery (summed with Aurora and categorized as "Kendall/Kane"), which leave the aquifer but return for this 14-day period. These communities are assumed to leave the aquifer in 2035. This 14-day period of combined peak pumping/service interruption was assumed to occur in 2050 and 2070 in the groundwater flow model, although, in reality, this could occur at any point.

An advantage of the ongoing work in the SWPG region is that potential new wells can be identified and incorporated into the model based on local feedback, preventing the model from stacking demand growth in existing wells unequipped for additional pumping. Not all wells represent additional new sandstone demands, such as the newly drilled Romeoville 14, but

instead are intended to replace old or poorly performing wells. Other wells, such as the newly drilled well in Lockport, are intended to reduce demands from the shallow aquifer.

The following wells were added to the model:

- Channahon (3 wells in 2020, 2025, 2035)
- Minooka (2 wells in 2025 and 2035)
- Shorewood (2 wells in 2030 and 2050)
- Romeoville 14 (1 well to be online in 2020)
- Lockport (2 wells added in 2020 and 2030)
- Joliet (2 wells to be online in 2021 and 2025)
- One new industrial well (2020), no net increase at facility totals
- One new industrial well (2025), increase in facility totals

This report does not attempt to address the most likely year that the aquifer will be at risk, an effort that would require a suite of model simulations and a more advanced uncertainty analysis. Also, an analysis attempting to identify this answer may be misleading since the aquifer is highly responsive to changes in demands, both locally and regionally.

Assumption 2: Multi-Aquifer Wells

The open interval of wells has changed dramatically through time, particularly in the southwest suburbs. Originally, most wells constructed were open to all sandstone aquifers, but problems occurred as water levels fell. For example, the St. Peter Sandstone has had issues with caving, resulting in the need to install liners that tend to fail after a couple of decades. If the water level in a well falls below the bottom of the St. Peter Sandstone, water can cascade down, introducing oxygen and potentially biologically fouling the well bore. As a result, since the 1960s, there has been a trend to install wells open only to the deeper Ironton-Galesville Sandstone. Similarly, wells open to all sandstone aquifers have been sealed, resulting in a decline in connections.

The groundwater flow model indicates that the addition and removal of those connections, multi-aquifer wells (MAWs), play an important role in calibrating the groundwater model to observed water levels in the SWPG region. The ISWS has considered several possible explanations for the need to remove MAWs in the model:

- Unreported well sealings to the ISWS.
- Mineral-scale formation and biological fouling along the well bore due to changing chemistry with dewatering in the St. Peter, including the introduction of oxygen, resulting in a loss of productivity. This is particularly likely in the common scenario in which only the Ironton-Galesville is rehabilitated, while the St. Peter is not.
- Local dewatering of the St. Peter that is not captured in a 2500 ft by 2500 ft grid cell.

As a result, MAWs are removed from the historic and future model simulation. A common point of discussion at the SWPG meetings was that a well in a specific location in Figure 10 had either not been sealed or had no immediate plans to be sealed. Indeed, not all wells removed were sealed by a driller. However, the St. Peter could lose connection with the Ironton-Galesville if

the St. Peter is dewatered or not rehabilitated frequently. Historically, the selection of well removal was largely driven by changes in observed water levels that could not be explained by changes in pumping. Modeled multi-aquifer well locations are based on sparse open interval data in the ISWS database, which may not fully represent the extent of all connections between the St. Peter and the Ironton-Galesville aquifers.

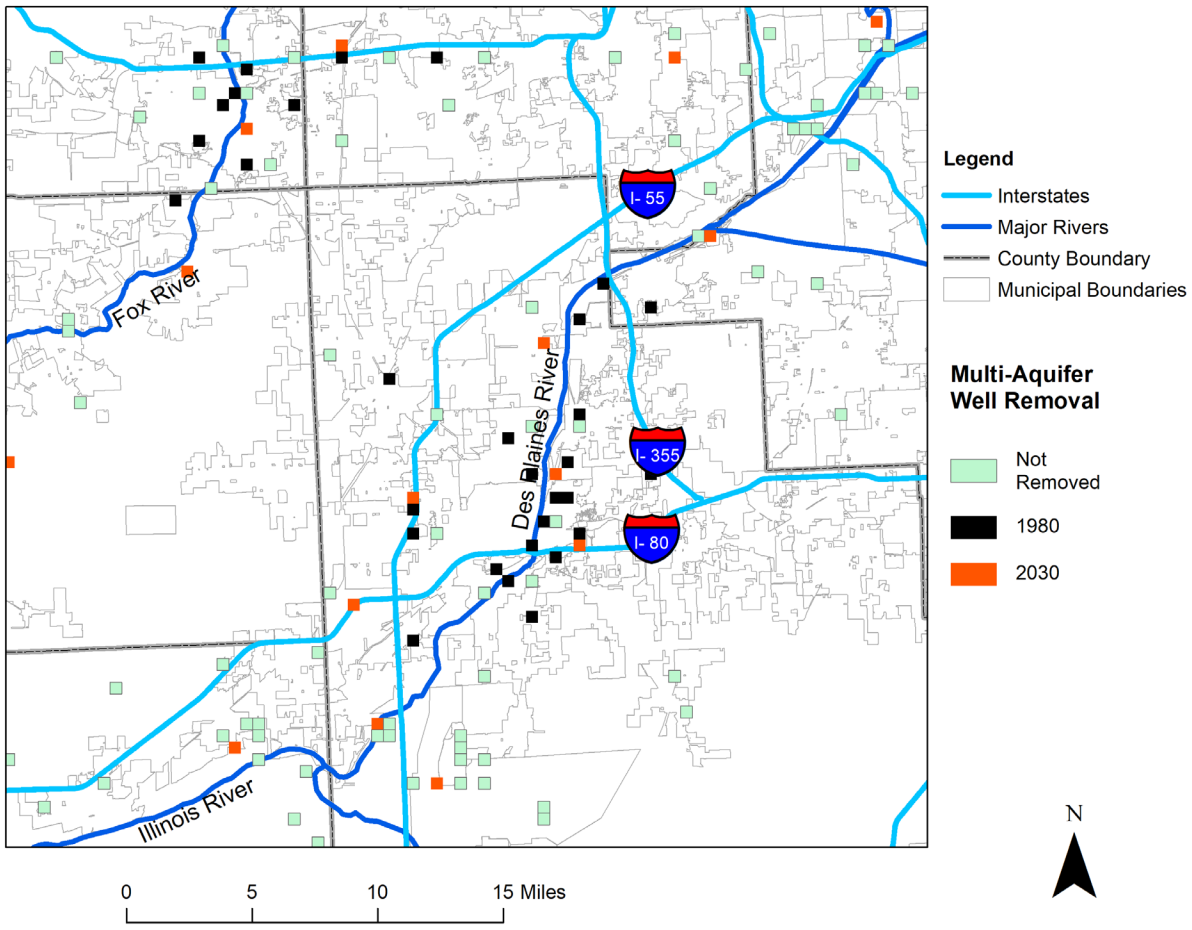


Figure 10: Location of cells simulating multi-aquifer well flow between the St. Peter and Ironton-Galesville. Green cells indicate wells that are never removed in the simulation, black represents wells that were removed in 1980 in the simulation, and orange indicates wells that are removed in the future simulation (with removal being phased from 2030 to 2050).

Defining Risk

The maps and hydrographs developed for this report determine risk by comparing simulated static water levels to the top of the Ironton-Galesville Sandstone aquifer. Static water levels that are less than 400 ft above the top of the Ironton-Galesville are referred to as having a "risk of well inoperability." Static water levels between 400 and 600 ft above the top of the Ironton-Galesville are defined as having a "risk of declining well performance." A summary of specific risks in the two zones is provided in Table 2. Specific details of how this risk is determined and should be interpreted are outlined in this section.

Perhaps the biggest uncertainty in the southwest suburbs is related to how deep a pump can be lowered, which in turn defines when a well will no longer be able to meet demands. After talking with drillers, the current hypothesis is that a pump cannot be lowered below the top of the Ironton-Galesville Sandstone, especially for existing wells. Currently, most static water levels are between 400 and 600 ft above the top of the Ironton-Galesville Sandstone with an additional 200 ft of drawdown when pumping. However, for the most at-risk wells in the region, static water levels are approaching 400 ft above the top of the Ironton-Galesville, in some cases with 400 ft of additional drawdown when pumping. In other words, the theoretical limit on how far a pump can be lowered is quickly being reached.

These most at-risk wells have shown demonstrable decreases in specific capacity through time. Specific capacity is defined as the ratio of pumping to drawdown and is generally reported in units of gallons per minute per foot (gpm/ft). Extensive datasets for specific capacity are rare, but very insightful. For example, one at-risk well had a linear decline in specific capacity from 4.5 gpm/ft in 2000 to 2.0 gpm/ft in 2020. Also, this well is in the geologically complicated Sandwich Fault Zone. As a result, an important question must be raised: is the at-risk nature of these wells purely a function of being in the fault zone or are their low water levels occurring at the center of a cone of depression? In other words, will wells currently with a 200 ft decline in water levels lose specific capacity (and experience more drawdown) as a result of water levels falling or wells getting older? With the consideration that a 200 ft decline is not enough to assess risk, we chose to use 400 ft as a conservative threshold to define the zone of risk of well inoperability.

Future demands assume a linear increase in communities' demands but no growth in industrial demands except for immediate plans shared by the SWPG group. An unsimulated demand could be due to a new industry moving in or an existing industry changing processes to require different water quality. Other possible unsimulated sources include sandstone communities having new demands from unexpected growth or shallow aquifer communities forced to use the sandstone because of water quality or quantity issues in the shallow aquifer. The aquifer is highly responsive to new demands, and these must be considered when determining risk. The proximity of a new well to a community and the pumping and actual rate of withdrawal of a new well are critical components in determining the actual risk (Figure 11, see Appendix I for details of how this graphic was developed). For example, 200 ft of drawdown could result from a new source pumping 3 mgd located 1 mile away from an existing well or a new source withdrawing 4 mgd spaced 2 miles away from an existing well. This water level sensitivity is the primary reason to define an additional risk zone from 400 to 600 ft above the top of the Ironton-Galesville, referred to as the risk of declining well performance. In addition to the risk of unsimulated demands,

there are additional risks in this zone, outlined in Table 2, including increased cost to operate the well and the potential to pump sand in multi-aquifer wells open to the St. Peter, which is prone to caving.

Table 2: Summary of risks associated with different zones. IG - Ironton-Galesville.

Risk of declining well performance (400–600 ft above the IG)	Risk of well inoperability (< 400 ft above the IG)
Risk of dry wells (domestic and industrial)	Severe risk of well inoperability
Lost well performance	Reaching a limit that pump can be dropped
Potential for pumping sand	Uncharted territory
Interference from neighboring wells	Exacerbated risks associated with declining well performance
Increased well maintenance costs	
Increased cost of lifting water	
Vulnerable to new sandstone demands	

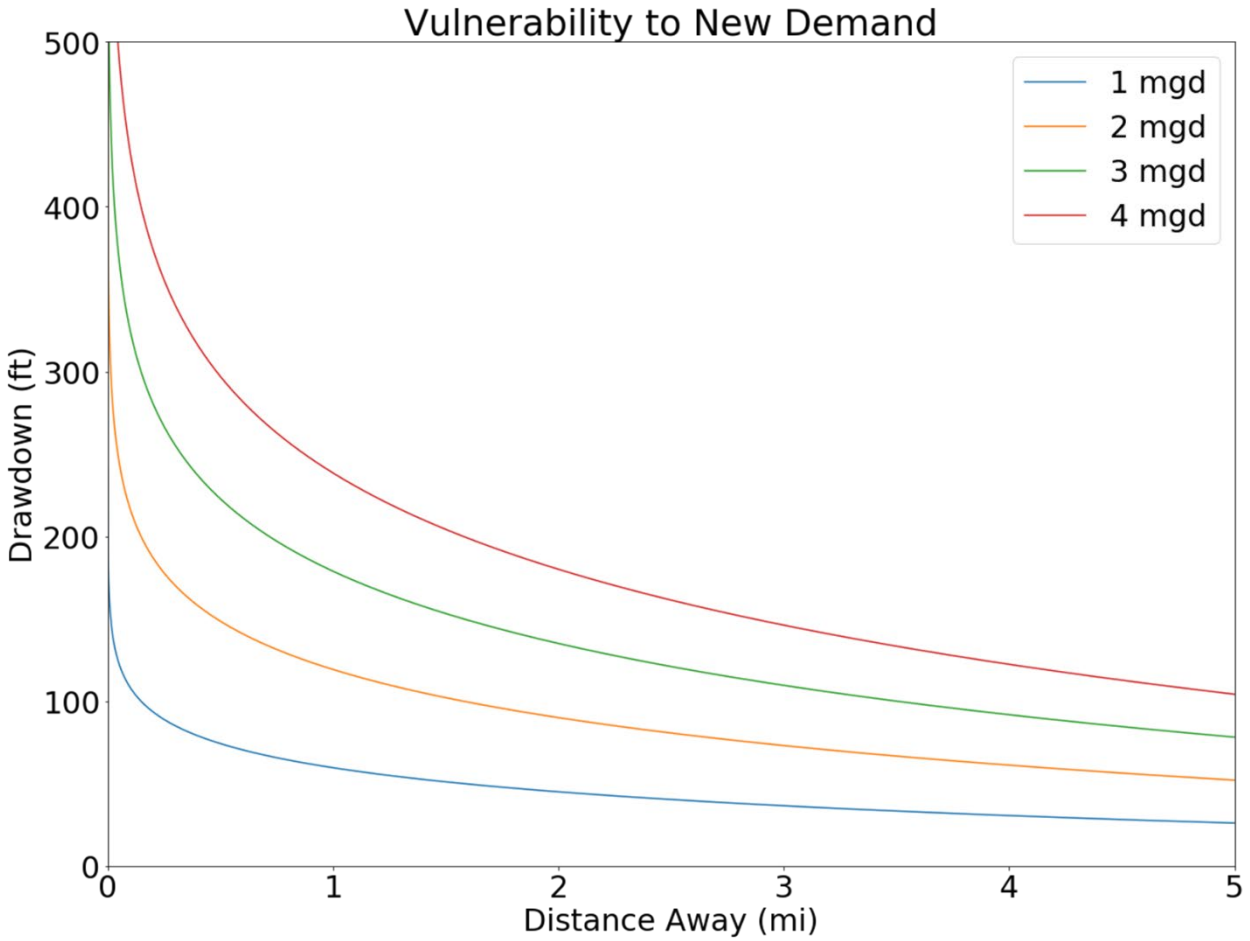


Figure 11: Drawdown in response to new demands at different pumping rates. The x-axis indicates the distance the new demand is from the current source.

This study considers risk only to high-capacity wells that can or already have sealed off the uppermost St. Peter for the preservation of the lower Ironton-Galesville (although at the possible cost of specific capacity). However, some industries and domestic wells rely exclusively on the St. Peter Sandstone aquifer in areas of Will County. These supplies are particularly vulnerable to withdrawals from MAWs open to the St. Peter and Ironton-Galesville. The management strategy of constructing connections through new MAWs to extend the life of the aquifer would exacerbate the risk for shallower industrial and domestic St. Peter Sandstone users.

Results/Discussion

Risk Maps

A series of maps developed from the groundwater flow model show the changing risk through time (see Figure 12 through Figure 20). Figure 12 indicates risk in 1990, with peak use of the sandstone immediately outside of the SWPG region. Groundwater use in southern DuPage and southeastern Kane Counties was at a maximum, primarily because of Naperville's and Aurora's heavy use of the sandstone aquifer. The Ironton-Galesville static water levels were within 400–600 ft above the top of the Ironton-Galesville, resulting in the risk of declining well performance in Central Joliet (between I-55 and the Des Plaines River) and extending north into DuPage County. In the early 1990s, Naperville switched away from the sandstone aquifer, and Aurora switched partially to the Fox River. In contrast, demands along the eastern Kendall/western Will County borders were starting to grow.

Demands in the SWPG region grew considerably over the next three decades, mostly driven by municipal and industrial growth in the early 2000s (Figure 5). In particular, demand increases were prominent in western Joliet and Shorewood and from industries along I-55/the Des Plaines River (Figure 13). Outside of the SWPG region, the communities of Oswego, Yorkville, and Montgomery in Kendall County also grew rapidly. As a result, the risk of declining well performance extended west into Kendall County, although the risk zone was no longer present in DuPage County because of the large number of communities that left the sandstone aquifer in the 1990s. For the first time in the region, a small patch of static water levels neared 400 ft above the top of the Ironton-Galesville Sandstone aquifer, located where the Des Plaines River passes over the Sandwich Fault Zone. This indicated an increased risk of well inoperability.

The Current Trend model scenario assumes an increase in regional (SWPG) pumping rates of 10.7 mgd between 2018 (most recent data at the time of this report) and 2030. The increase in demand decreases static water levels in a large area of the region below 400 ft above the Ironton-Galesville, resulting in the risk of well inoperability for multiple communities and industries (Figure 14). Communities and industries falling into the zone of risk of well inoperability are in uncharted territory, and careful monitoring of both pumping and static water levels will be necessary to manage sustainable pumping. Demands considered in the base Current Trend scenario are greater than those of the Joliet Phase 1 water supply investigation, which found that the city should switch off the sandstone aquifer by 2030 (Crawford et al. 2019). However, the Phase 1 assessment was based on several scenarios, including one higher growth scenario (Current Trend + 2 mgd) that had very similar results to the Current Trend scenario depicted in this report. As a result, this single scenario does not change the conclusion of that analysis but

does indicate that the status of the aquifer should be monitored, and the 2030 timeframe should be fully reassessed in 2022 at the end of the ISWS study or sooner if growth happens faster than anticipated.

After Joliet switches off the sandstone aquifer, modeled to occur in 2030, water levels do recover. In some communities, particularly south of the Sandwich Fault Zone, recovery from Joliet departing the sandstone aquifer is effectively offset by new demands. In other communities with a lower growth rate, such as Romeoville, only ~100 ft of recovery is observed, similar to the recovery observed when Naperville and Aurora transitioned away from the sandstone aquifer in the early 1990s. In general, the gain in water level from Joliet leaving the aquifer, while considerable, is relatively small compared to the overall drawdown of water lost from predevelopment conditions in the late 1800s when water levels were near land surface. As a result, risk zones persist. The zone of risk of well inoperability diminishes greatly after Joliet leaves the aquifer, but does not disappear (Figure 15), persisting in the same location as in 2020, along the Sandwich Fault Zone. The risk of declining well performance area after Joliet leaves the aquifer is very similar to the 2020 risk zone. This indicates that the increase in demands outside of Joliet is enough to offset the rebound in water levels from Joliet's departure. Since demands on the Cambrian-Ordovician Sandstone aquifer system are unsustainable, any reasonable projection of future demand increases will also be unsustainable. Water removed will not be replaced on a sustainable time horizon (the groundwater flow model estimates that centuries are needed to replenish the aquifer).

Modeled recovery is simulated again in 2035 when Oswego, Yorkville, and Montgomery are assumed to switch off the sandstone aquifer (Figure 16). Visually, the risk appears smaller, but the actual recovery in water level is relatively muted, and water levels are still hovering around 600 ft above the top of the Ironton-Galesville in much of the region. The risk of well inoperability remains along the Sandwich Fault Zone.

In 2050, the risk of declining well performance expands again, with the risk of well inoperability also expanding along the fault zone and in southeastern Kendall County (Figure 17). This risk is compounded when considering peak demands (Figure 18), shown as spikes in the time series plot of pumping in Figure 9. During peak demands, risk of well inoperability also appears along I-355, the first appearance of this higher risk zone in this area of Will County. This model simulation assumes that peak demands coincide with Joliet requiring the sandstone aquifer for a period of 14 days due to a hypothetical Lake Michigan service interruption.

The model scenario was simulated through 2070, where both average (Figure 19) and peak (Figure 20) conditions were simulated again. Risk continued to expand throughout this model scenario. Almost every community in the SWPG region suffers the risk of declining well performance, with many also experiencing risk of well inoperability, especially within the fault zone. Also, by 2070, more prominent areas with a risk of well inoperability occur in northern Will County.

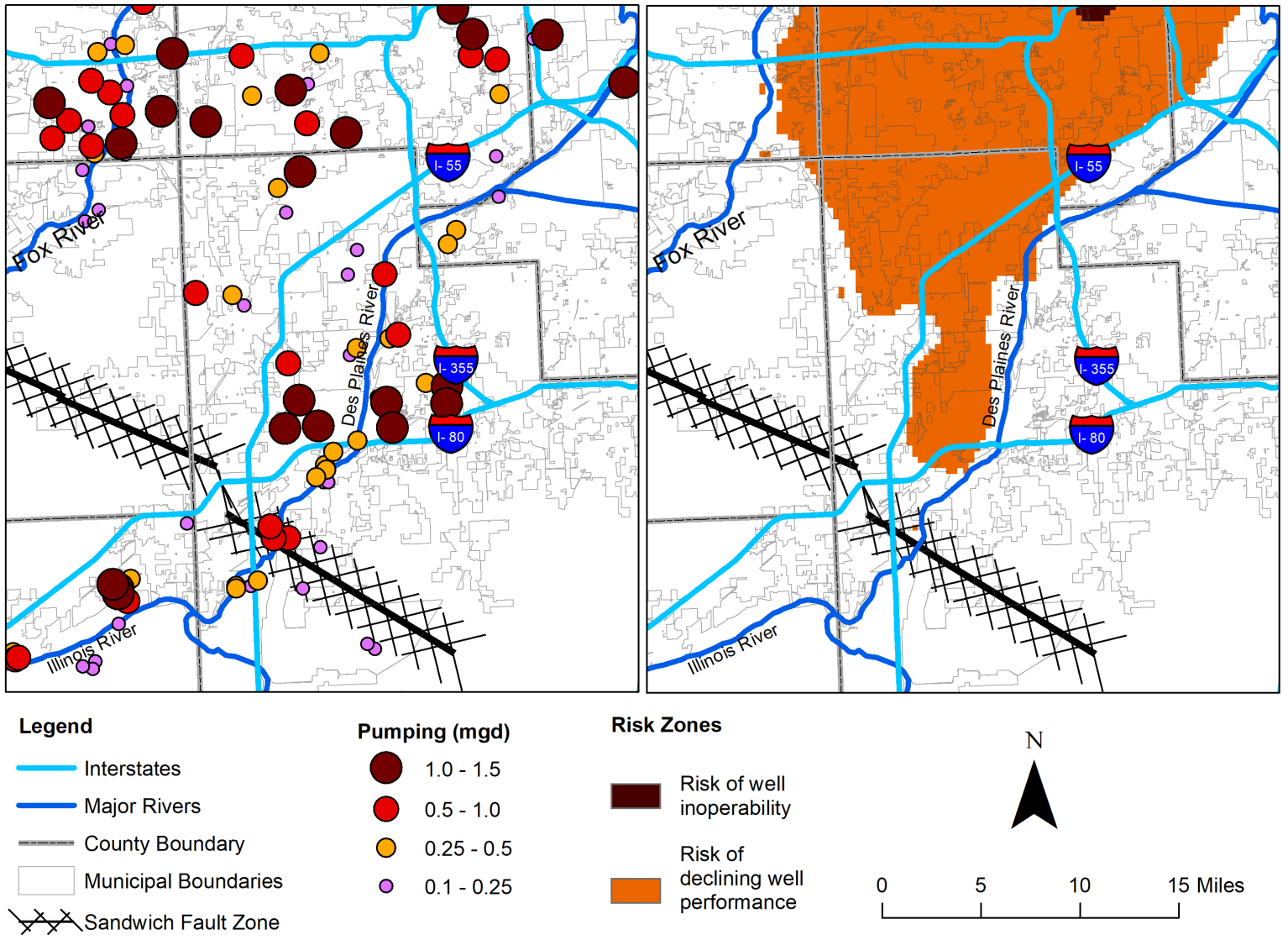


Figure 12: 1990 pumping and risk in the Ironton-Galesville Sandstone aquifer

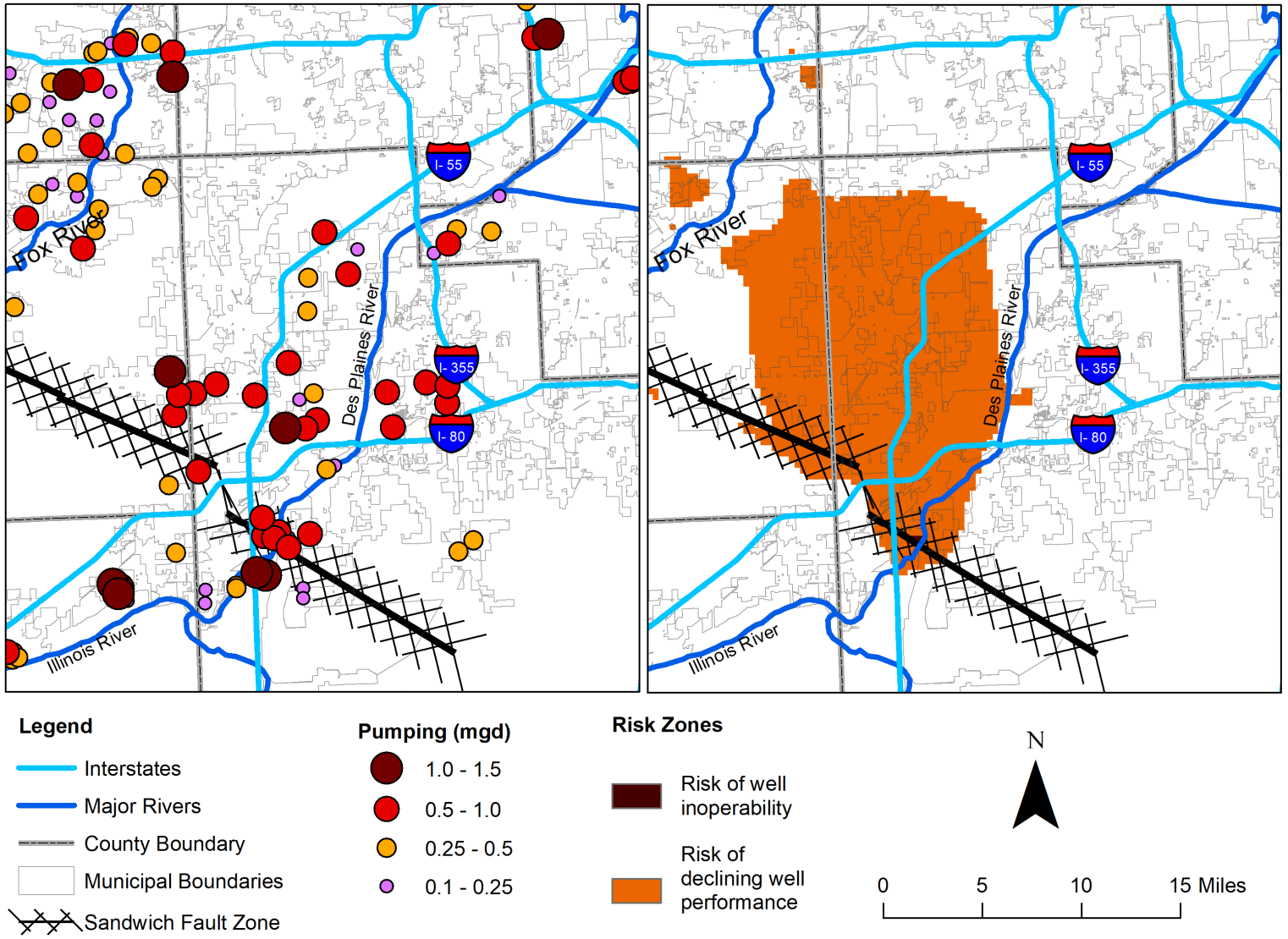


Figure 13: 2020 pumping and risk in the Ironton-Galesville Sandstone aquifer

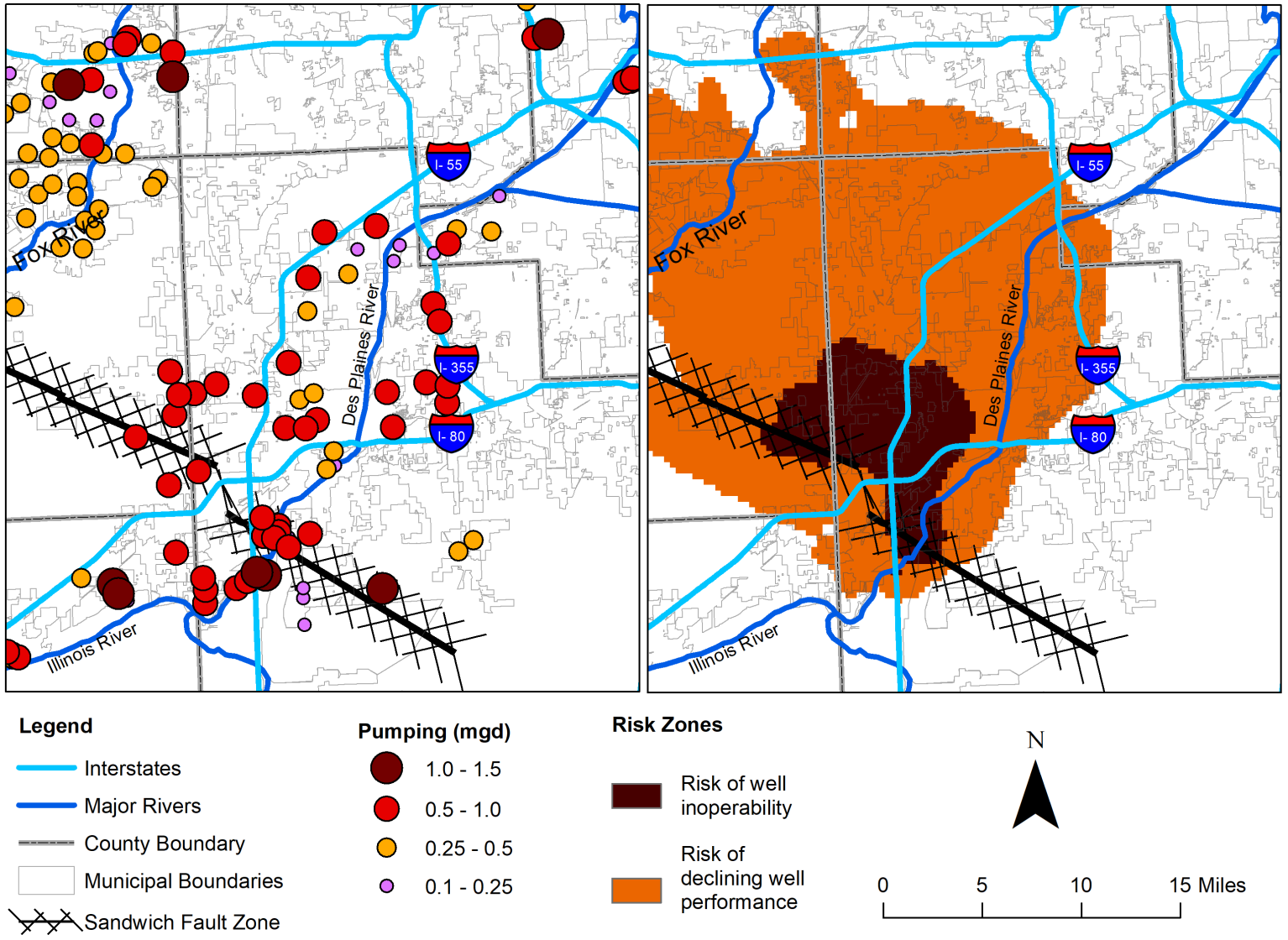


Figure 14: 2029 pumping and risk in the Ironton-Galesville Sandstone aquifer (before Joliet switches from the aquifer)

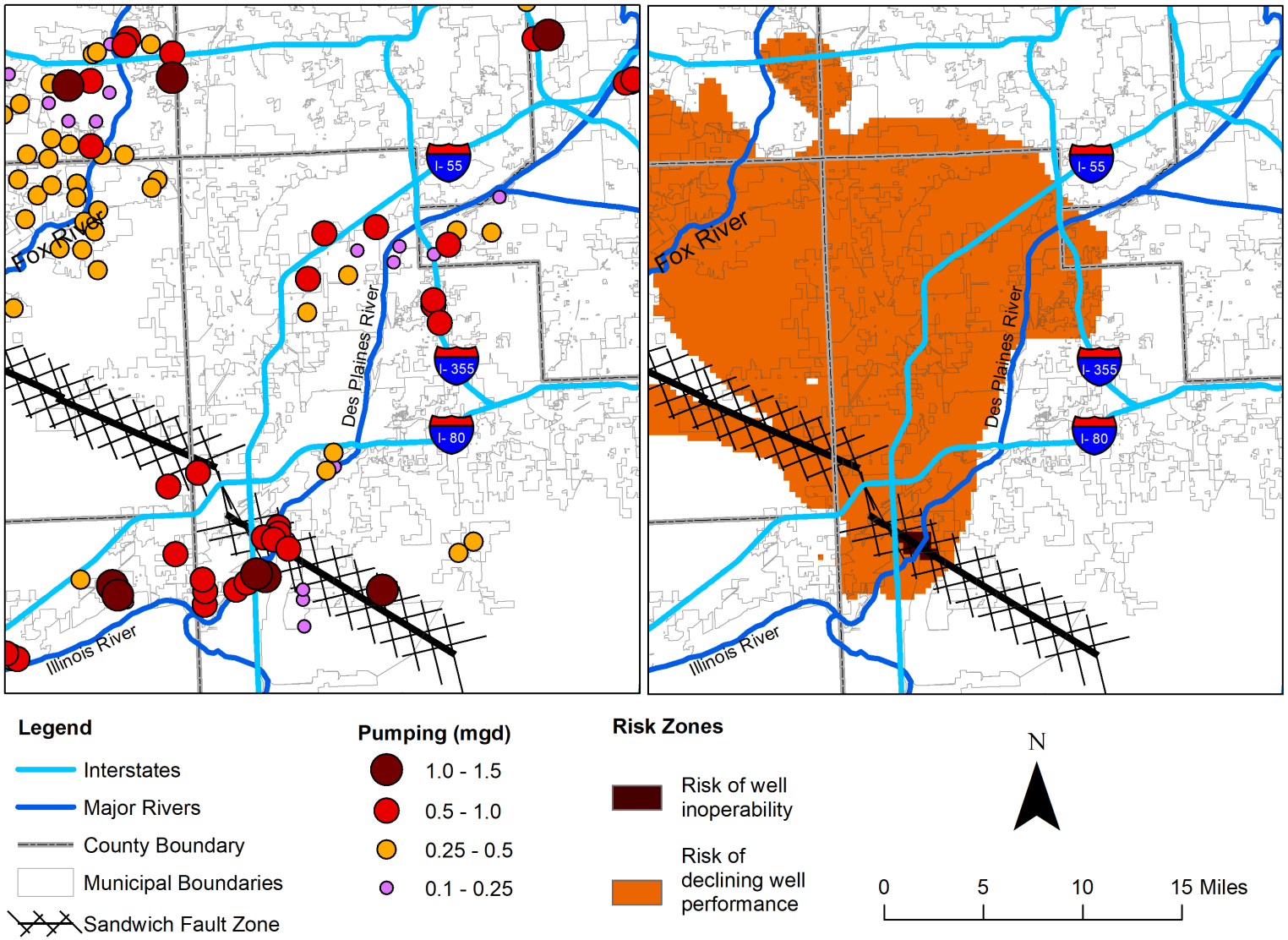


Figure 15: 2030 pumping and risk in the Ironton-Galesville Sandstone aquifer (immediately after Joliet switches from the aquifer)

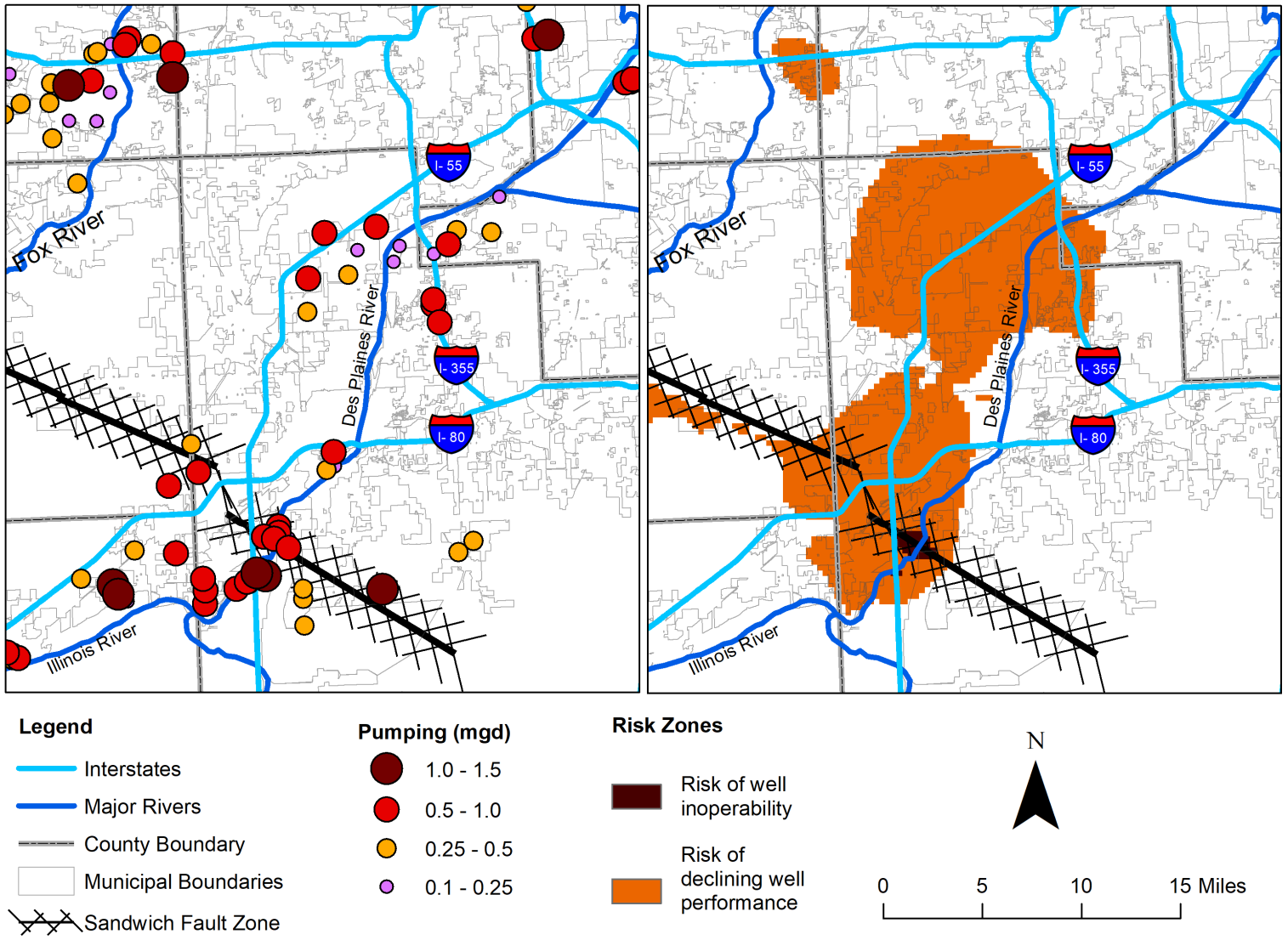


Figure 16: 2035 pumping and risk in the Ironton-Galesville Sandstone aquifer

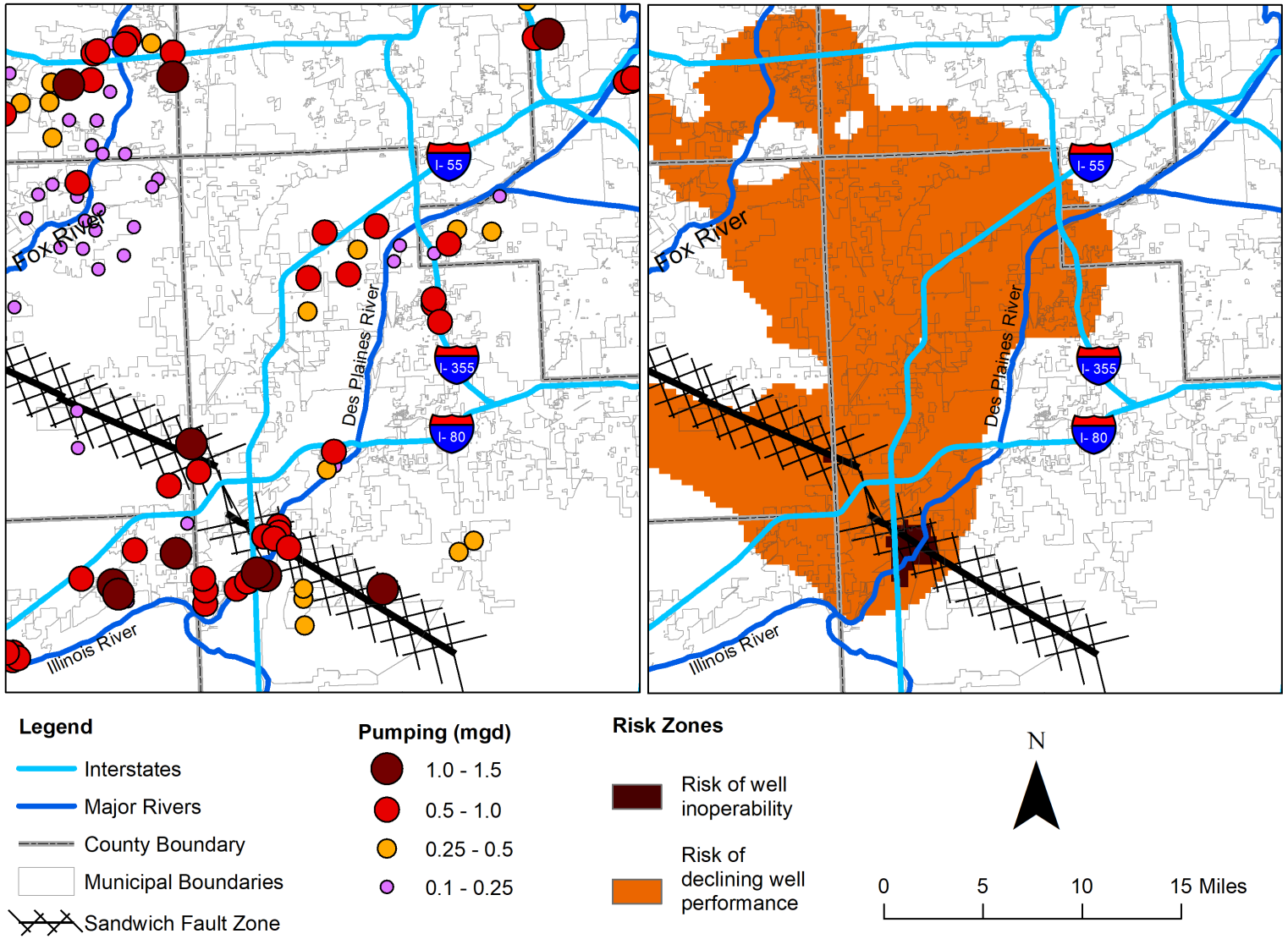


Figure 17: 2050 pumping and risk in the Ironton-Galesville Sandstone aquifer

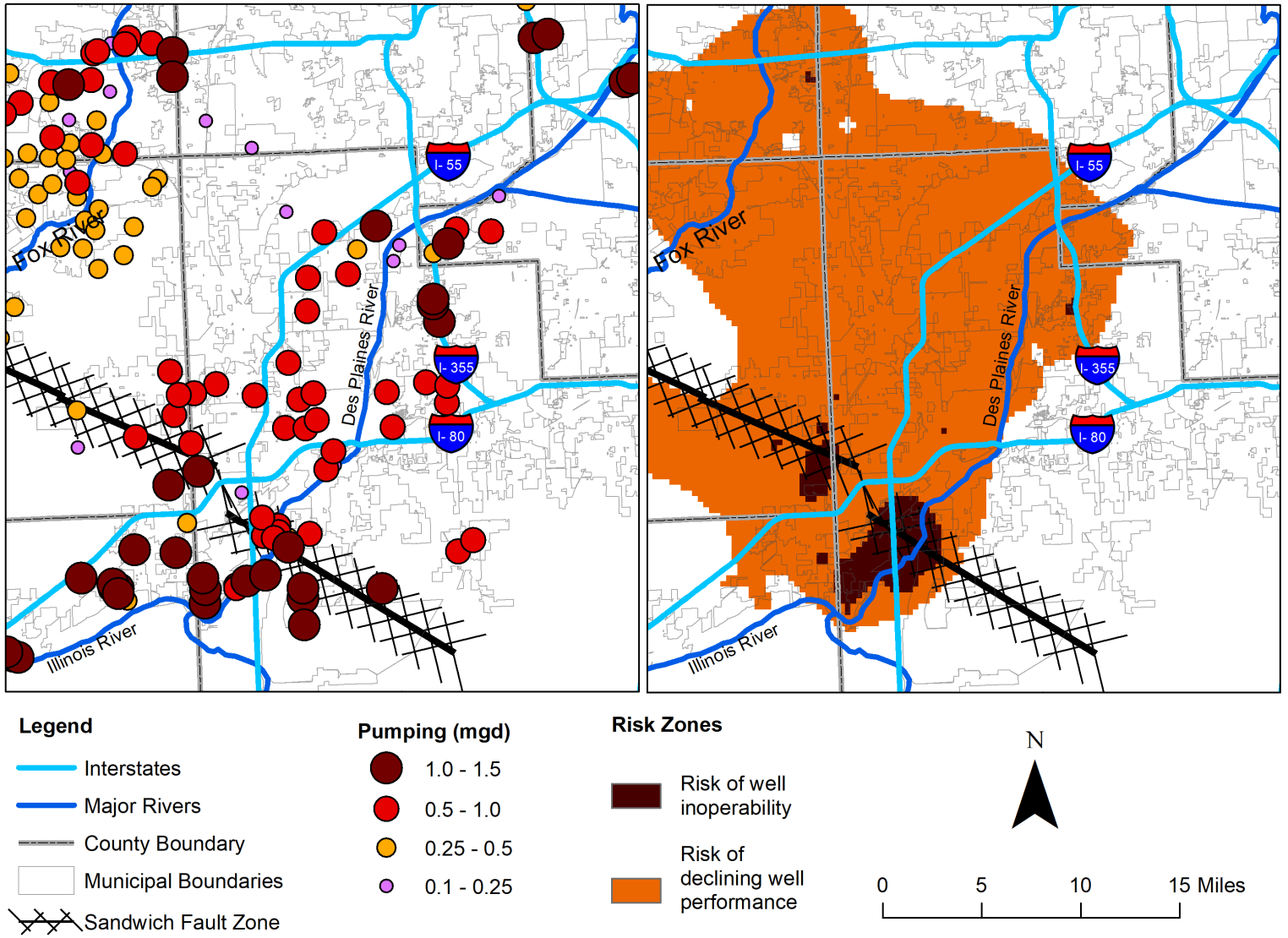


Figure 18: 2050 (peak) pumping and risk in the Ironton-Galesville Sandstone aquifer

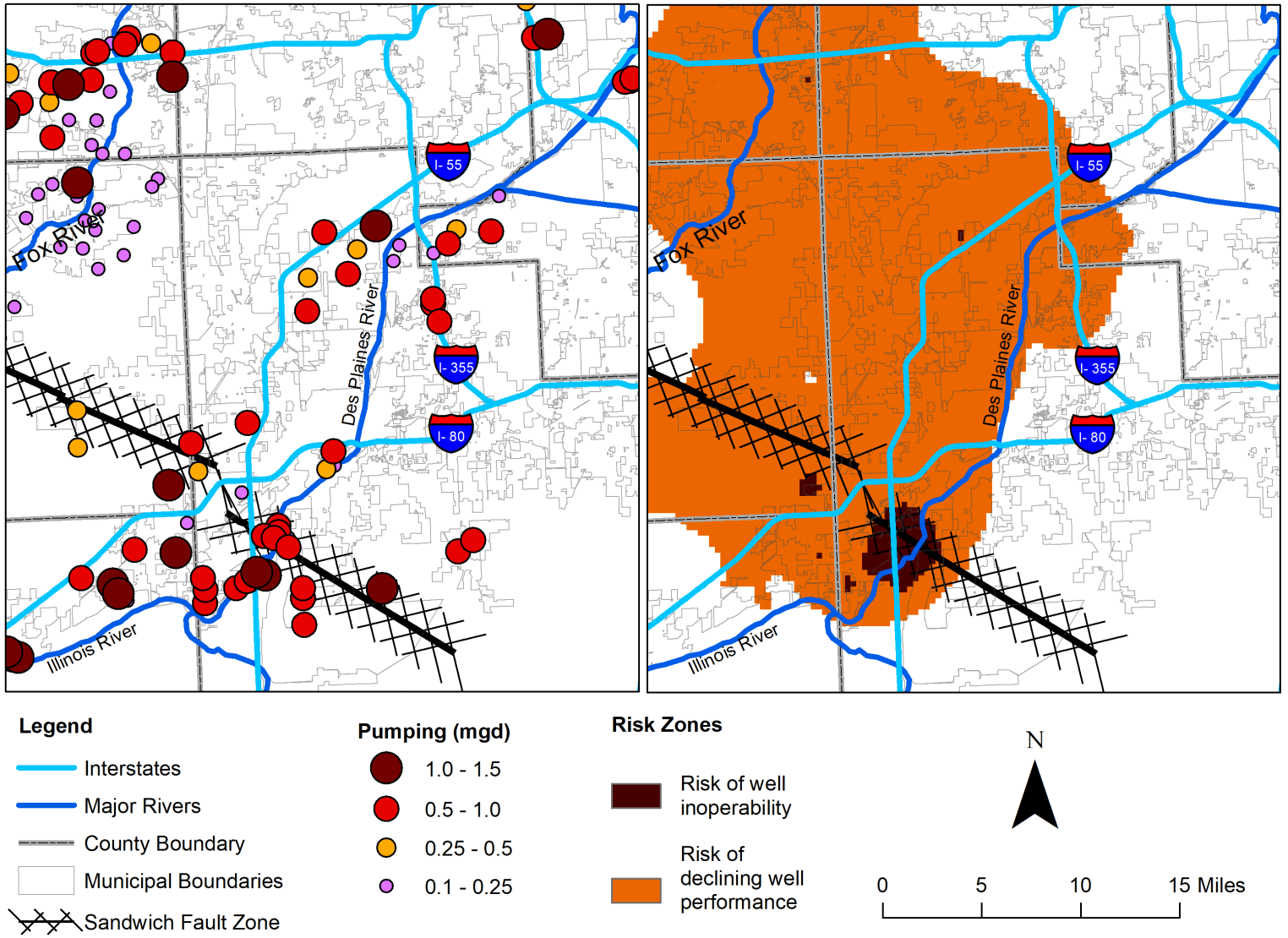


Figure 19: 2070 pumping and risk in the Ironton-Galesville Sandstone aquifer

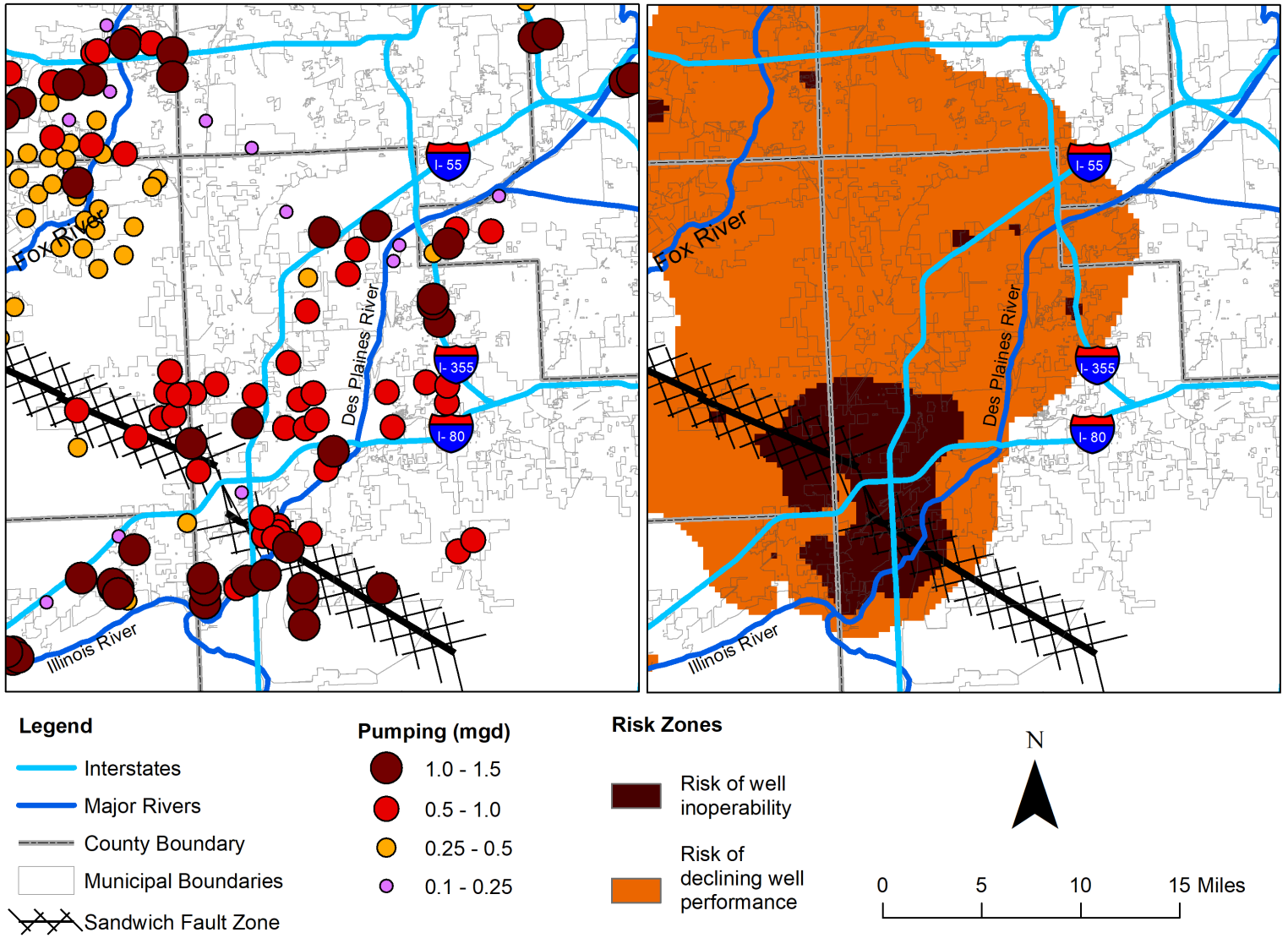


Figure 20: 2070 (peak) pumping and risk in the Ironton-Galesville Sandstone aquifer

Hydrographs (Static Water Levels)

Another way to examine risk is to plot the water level of a well through time. This plot is referred to as a "hydrograph" and is very useful for indicating when water levels reach certain risk thresholds. In this discussion, we consider four hydrographs with relatively different responses: Joliet 22, Romeoville 10, Channahon 4, and Elwood 10 (Figure 21). Here, we only consider static water levels, which are used to determine risk due to the ability to calibrate to long-term static water level records not available for pumping water levels. In addition, the current model design only allows for the simulation of static water levels.

The four wells selected for Figure 21 are intended to be representative of the region; the locations of these wells are shown in Figure 22. Elwood 10 represents the highest simulated static water levels in the region, while Joliet 22 represents the lowest (at least before the 2030 movement away from the aquifer). Most community wells (including Romeoville 10 and Channahon 4) have static water levels that fall between the two. **As a result, it is important to understand how risk is interpreted for these wells so that the individual risk can be evaluated**.

First, consider Joliet 22, where the current static water level approaches the risk of well inoperability zone and falls into it before 2030 (red shading in Figure 21). However, this well will not necessarily fail immediately when water levels enter this risk zone, and fortunately, Joliet 22's pumping water level is currently 200 ft below the static water level. This leaves an additional 200 ft of available water level above the top of the Ironton-Galesville at this location. A key exercise between now and 2030 will be ensuring that the specific capacity at this well is maintained. Recovery in water levels at Joliet 22 is ~250 ft after Joliet leaves the aquifer in 2030. When the sandstone is used as a 14-day back-up supply in 2050 and 2070, 2030 water levels are approached but not reached. The rapid decline in water levels during this 14-day period is indicative of the highly responsive nature of this aquifer.

Romeoville 10 has experienced more moderate changes in water levels through time. The single largest, short-term change occurred in the early 1990s with a precipitous recovery of approximately 100 ft in water levels as Naperville and Aurora reduced their sandstone demands. This recovery is analogous to the simulated rebound in 2030/2035 when Joliet, Oswego, Yorkville, and Montgomery switch off the sandstone aquifer (50 ft), although this recovery is somewhat muted by the regional demand increases elsewhere, as shown in Table 1. By 2050, during both average and peak demand conditions, static water levels approach the zone of risk of well inoperability and fall into the upper portion of this zone by 2070.

Average demands in the Current Trend model scenario increase by a factor of eight in Channahon. As a result, water levels continue to decline. The increased demands override any recovery in 2030 when Joliet switches off the sandstone aquifer; the lack of recovery in 2030 is further explained by the location of Channahon south of the Sandwich Fault Zone, which restricts flow and minimizes the impact of changes in Joliet on communities to the south of the fault. Peak demands also exceed 10 mgd, resulting in spikes of considerably lowered water levels during these peak conditions. Over time, water levels decline from 200 ft above any risk

threshold to falling into the risk of declining well performance during average pumping conditions and the risk of well inoperability during peak pumping conditions.

Finally, water levels at Elwood 10 declined historically to reach the zone of risk of declining well performance in 2070. The recovery from Joliet switching off the sandstone aquifer is minimal in 2030, likely due to the flow buffer provided by the Sandwich Fault Zone and the fact that the Elwood wells are relatively far away from most Joliet wells. An additional consideration for the Elwood wells is that they are currently open to both the St. Peter and Ironton-Galesville; the integrity of the St. Peter should be closely monitored as the future water level decline results in dewatering of this uppermost sandstone unit.

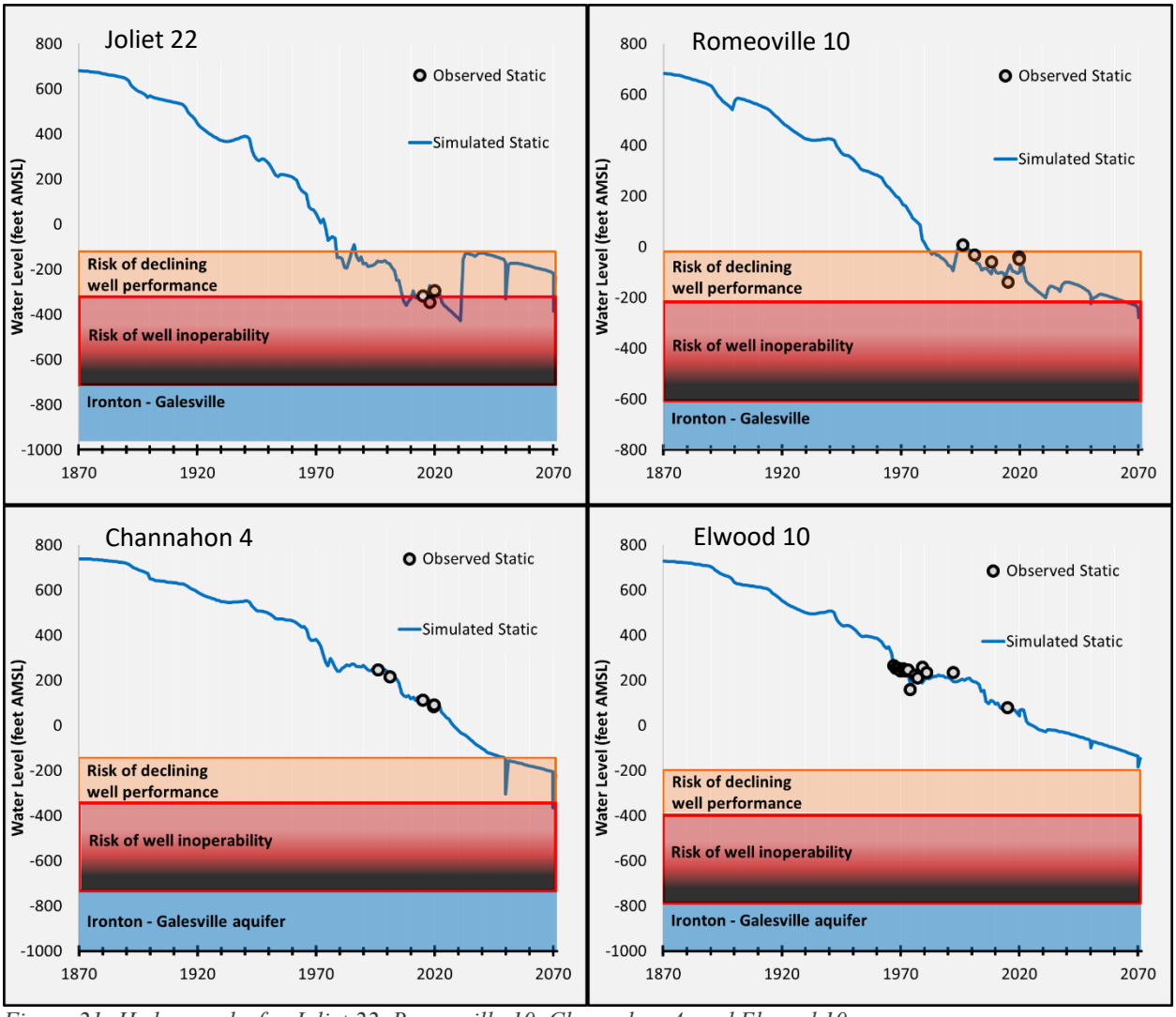


Figure 21: Hydrographs for Joliet 22, Romeoville 10, Channahon 4, and Elwood 10

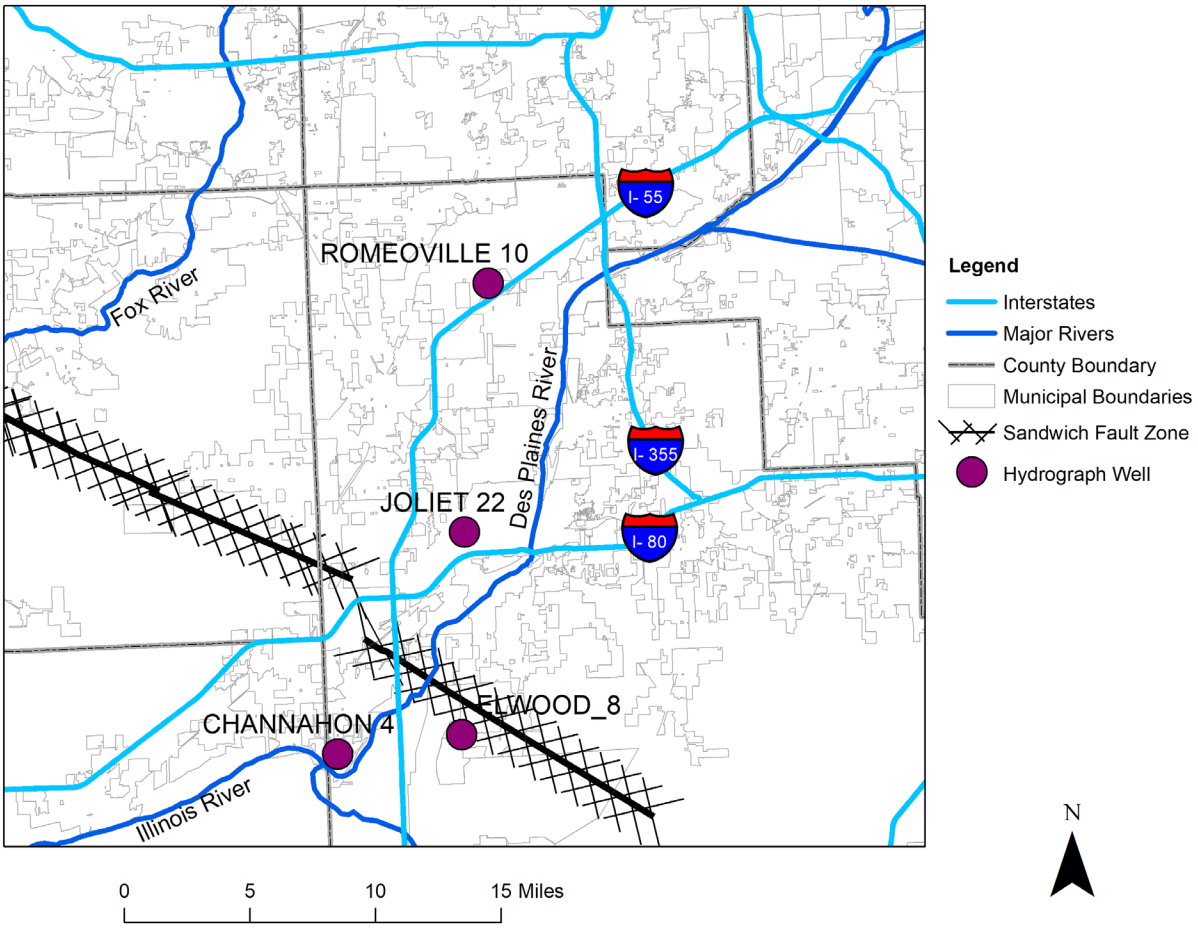


Figure 22: Location of hydrographs shown in Figure 21

Hydrographs (Pumping Water Levels)

Although static water levels are used to categorize risk, actual risk manifests under pumping conditions. Pumping levels would make a better metric for determining risk, but the ISWS has not collected pumping data historically, at least not in a controlled scientific study. In addition to a lack of long-term pumping data, there is considerable uncertainty in how pumping levels will change with respect to static water levels in the future, especially as water levels decline. Refer to the section "Defining Risk" for a discussion on the uncertainty in pumping water levels.

To help visualize where pumping levels are located in relation to the top of the Ironton-Galesville, the hydrographs in Figure 23 depict pumping water levels in addition to static water levels. Each pumping hydrograph depicts future pumping uncertainty (purple shading in Figure 23 and Figure 21) to account for a lack of data and unknown future specific capacity and pumping rates as water levels decline. The bounds are defined as follows:

- The upper bound of this pumping water level uncertainty band is assumed to be 200 ft lower than the static water level, a value observation for newly drilled wells in the region.
- The lower bound defining the uncertainty in pumping water levels is determined by the depth of the static water level.
    - Where the static level is above the risk of declining well performance zone, pumping levels are assumed to be 200 ft lower than the static levels.
    - Where the static level is within the risk of declining well performance zone, pumping levels (linearly) range from 200 to 400 ft lower.
    - Where the static level is below the risk of declining well performance zone, pumping levels are assumed to be 400 ft lower.

A few observations should be noted from the hydrographs in Figure 23. First, the observed pumping water level at Joliet 22 is 200 ft lower than the observed static water level, indicating that the upper threshold of the pumping uncertainty band is currently most accurate, despite the static level having reached the risk of well inoperability zone. This provides a buffer for this well as water levels decline in the Current Trend Scenario out to 2030. Maintaining specific capacity at this well is of utmost importance, particularly since the lower end of the pumping uncertainty band drops into the Ironton-Galesville.

Second, at Romeoville 10, the static water level is currently in the upper half of the risk of declining well performance zone. This indicates that the pumping level is likely within 400 ft of the top of the Ironton-Galesville. In the Current Trend scenario, by 2070, static water levels fall into the risk of well inoperability zone, in which case pumping water levels are at best within 200 ft of the top of the Ironton-Galesville and, depending on how the specific capacity changes as water levels decline, perhaps at the top of the deepest sandstone.

Third, at Channahon 4, the pumping water level under average conditions stays more than 200 ft above the top of the Ironton-Galesville but approaches the top during peak pumping conditions. Because the static water level under average conditions never falls far into the risk of declining well performance zone, the pumping uncertainty band is much narrower than at Joliet and

Romeoville. Although not visible on the hydrograph due to the short time frame over which peak pumping occurs, the uncertainty band widens during peak pumping conditions.

Finally, since static levels at Elwood 10 just reach the top of the zone of risk of declining well performance, there is only ever a single estimated pumping level at 200 ft below the static level. This is not to say that there is no uncertainty in the pumping level, because factors such as specific capacity and pumping rate certainly play a role in determining the actual value.

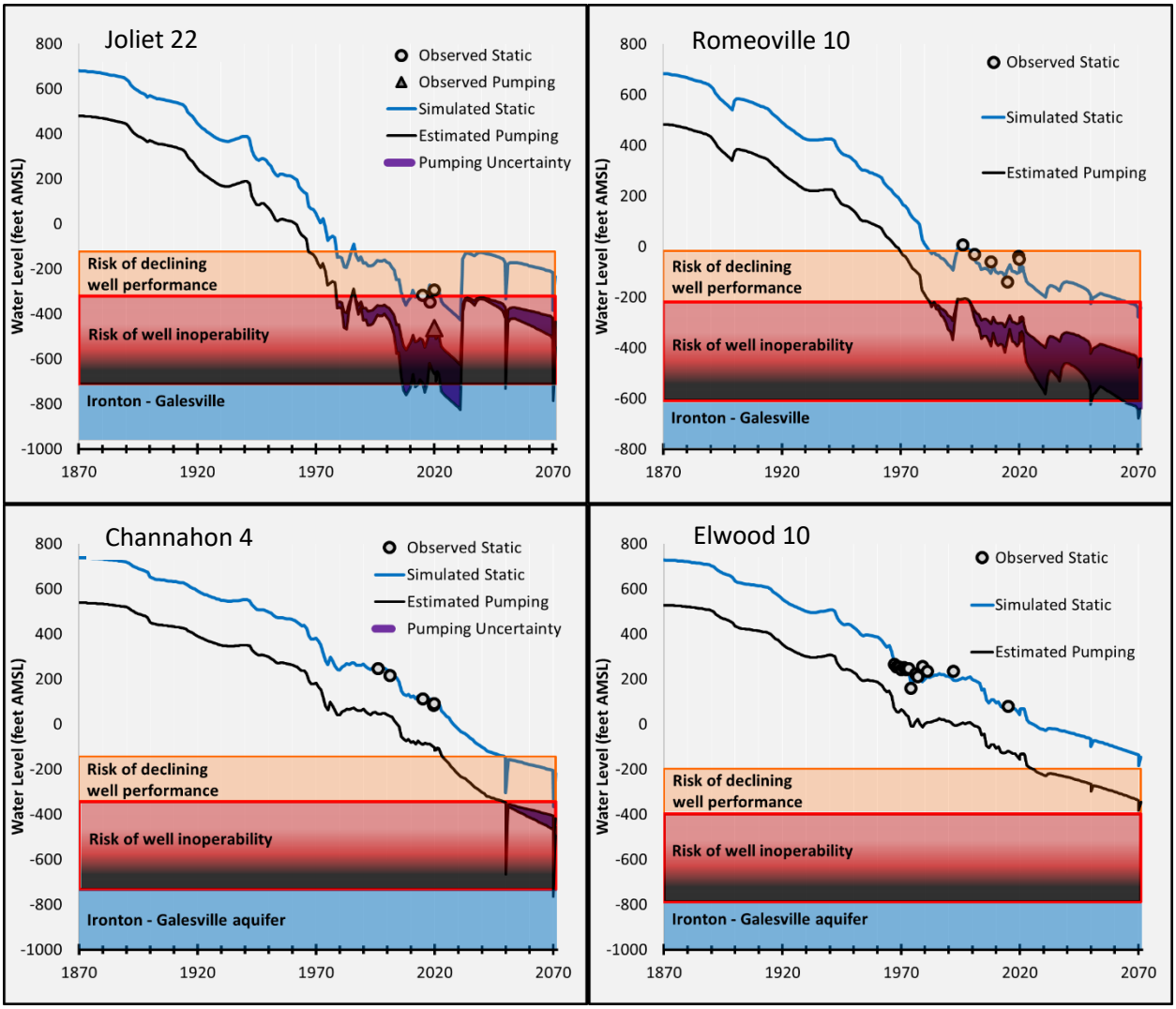


Figure 23: Hydrographs for Joliet 22, Romeoville 10, Channahon 4, and Elwood 10

Unsimulated New Water User

The hydrographs in Figure 23 clearly indicate the risk for wells like Joliet 22 and Romeoville 10, where the static head is already within the risk of declining well performance. The risk at Channahon and Elwood is not as immediately clear, particularly if only considering average conditions. Are pumping water levels that are more than 300 ft above the top of the Ironton-Galesville truly at risk? Two things should be considered. First, the model trends indicate that the aquifer will not reach steady state by 2070, meaning that water levels continue to decline beyond that. Second, the aquifer is extremely vulnerable to unsimulated demands, which could be from industries or unexpected community growth. Recall that Figure 11 depicts additional drawdown resulting from a new demand on the aquifer. Once static water levels are within 600 ft of the top of the Ironton-Galesville, a large new user could rapidly impact supply; static water levels within 400 ft of the top of the Ironton-Galesville would exacerbate this issue.

This situation is demonstrated in Figure 24, which repeats the same hydrographs for Channahon and Elwood from Figure 21, with the exception of adding a new large user (3 mgd demand located 1.5 miles away). In this case, static water levels in Channahon reach the top of the zone of risk of well inoperability; at Elwood, static water levels fall into the risk of declining well performance zone.

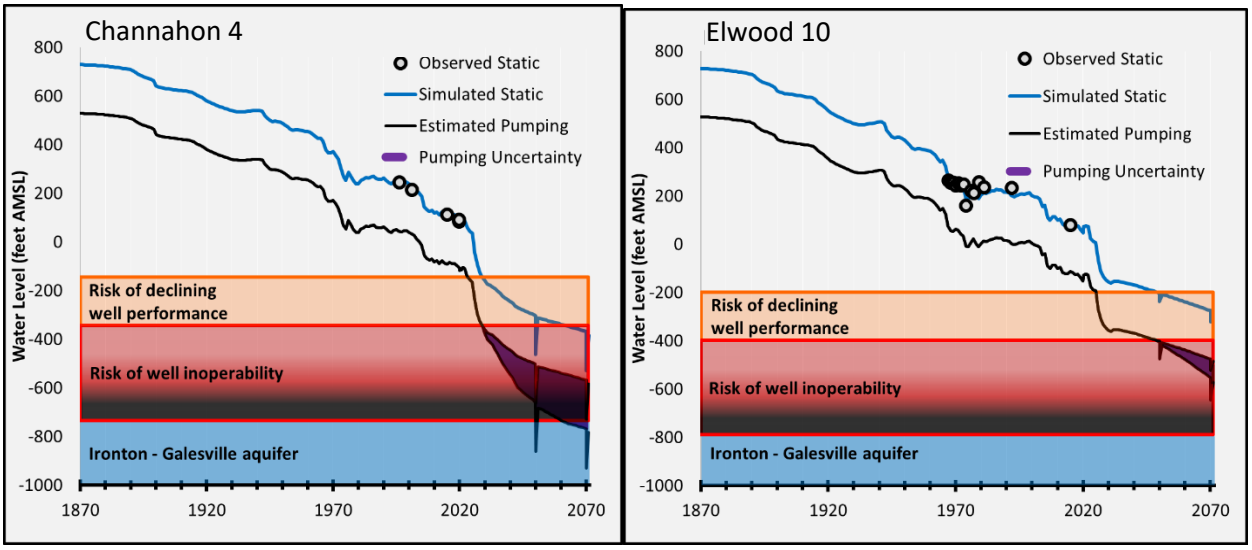


Figure 24: Hydrographs for Channahon 4 and Elwood 10, with a new water user on top of the Current Trend scenario

All communities need to be cognizant of the risk associated with new potential users that may not have been simulated in the groundwater flow model. Although Figure 11 provides an approximate impact of new water users, the ISWS encourages SWPG communities to contact us to run simulations based on potential new water users.

Aquifer Sensitivity

Alternative Demand Scenarios

A common mistake in interpreting model results is to confuse a scenario with a prediction. **The Current Trend scenario is not a prediction of future water use, but a plausible scenario of relatively high-demand growth.** It is not intended as a most likely scenario or a worst-case scenario. The important take away from the model is understanding **how the aquifer responds to changes in demands**. Using demand scenarios vetted by communities, many communities' wells have been determined to be at risk even after Joliet switches from the aquifer. This does not mean that they will fail to meet demand by 2030, 2050, or even 2070. Rather, they are at risk of not meeting demands and are vulnerable to unmodeled demands or other unforeseen circumstances as water levels fall into uncharted territory.

Many variables are incorporated in a groundwater flow model, including rates of pumping, location of pumping, and open interval of wells. To acquire a more comprehensive understanding of model behavior, we consider two additional scenarios. The first, Less Resource Intensive, was developed concurrently with the Current Trend scenario (Table 3). This scenario assumes the same population growth as the Current Trend, but improved water conservation approaches result in reduced water use per capita. The second scenario considered is Alternative Trend, which is the average of the Current Trend and Less Resource Intensive. Like the Current Trend, both additional scenarios assume that Joliet switches from the aquifer in 2030, and Oswego, Yorkville, and Montgomery switch from the aquifer in 2035. Peak demands are simulated in the years 2050 and 2070. All three scenarios are shown in Figure 25.

Table 3: Comparison of 2050 Current Trend (CT) and Less Resource Intensive (LRI) Demands (Mgd). Peak demands shown in parentheses.

	2018	*2050 CT Avg (Peak)*	*2050 LRI Avg (Peak)*
Channahon	0.5	4.4 (10.0)	3.5 (8.0)
Elwood	0.3	1.3 (3.9)	1.0 (3.1)
Joliet	15.3	0.0 (20.0)	0.0 (16.0)
Lemont	1.6	1.8 (3.8)	1.6 (3.0)
Lockport	0.0	1.5 (3.6)	1.2 (2.9)
Manhattan	0.6	0.9 (1.4)	0.7 (1.1)
Minooka	0.8	2.5 (5.0)	2.0 (4.0)
*Morris**	1.8	2.7 (4.1)	2.2 (3.3)
Rockdale	0.1	0.8 (1.0)	0.7 (0.8)
Romeoville	2.1	3.9 (5.1)	3.1 (4.1)
Shorewood	0.8	2.5 (2.8)	2.0 (2.2)
Industries	12.8	15.0 (21.8)	12.2 (17.7)
Kendall/Kane	11.6	6.8 (23.8)	5.4 (19.1)

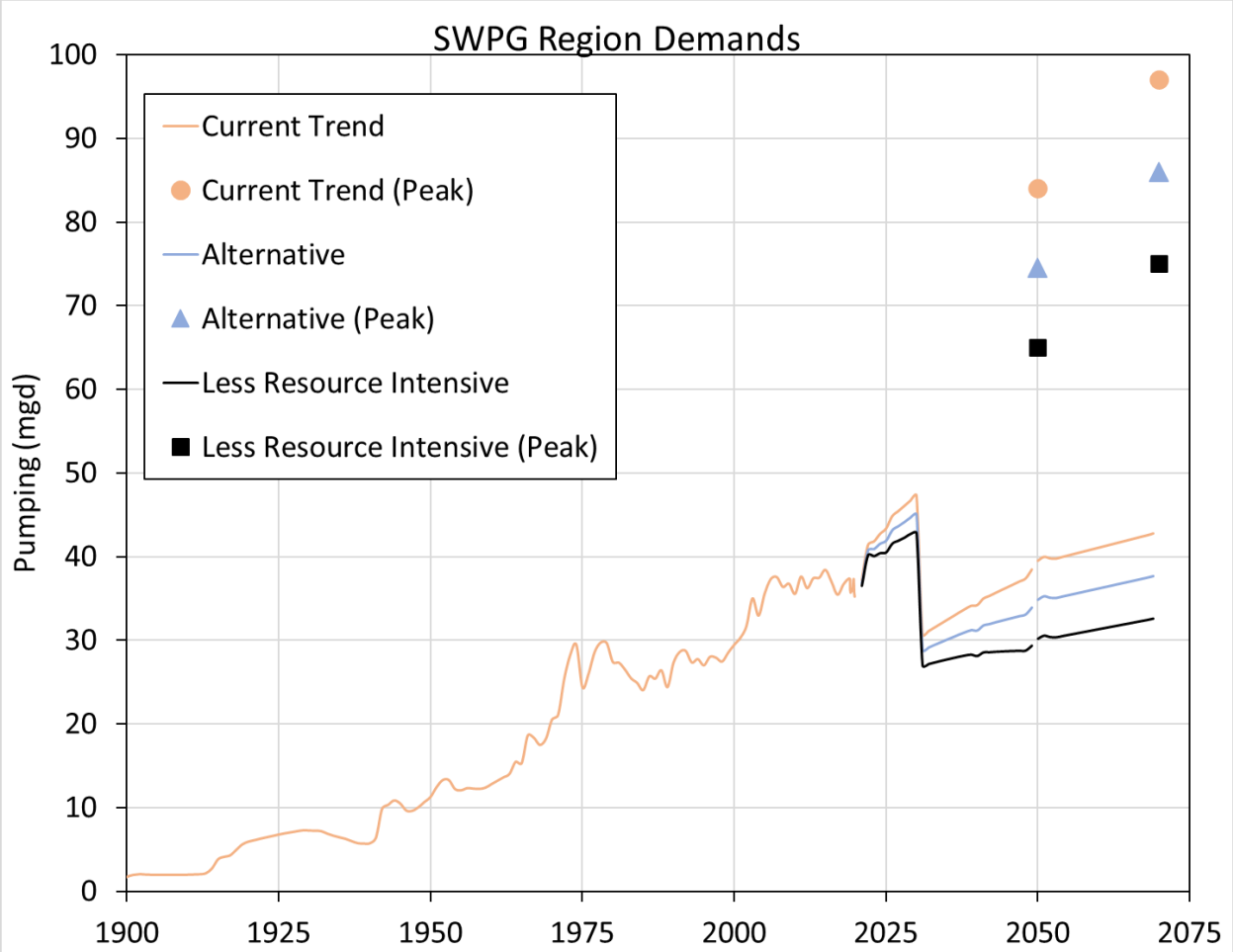


Figure 25: Current Trend, Less Resource Intensive, and Alternative Trend demand scenarios in the SWPG region from 1900 to 2070, assuming Joliet switches off the deep aquifer in 2030 and Oswego, Yorkville, and Montgomery switch off in 2035

As withdrawals in demand scenarios are reduced, future drawdown is lessened. Consequently, the spatial extent of the both risk zones is reduced, but not eliminated, in the LRI and Alternative Trend scenarios. This is true just before Joliet switches off the aquifer (Figure 26) and with 2050 average demands (Figure 27), 2050 peak demands (Figure 28), 2070 average demands (Figure 29), and 2070 peak demands (Figure 30). It is notable that the LRI peak pumping in the year 2070 (Figure 30a) looks remarkably similar to the current risk (Figure 13). However, a key difference is the presence of isolated pockets of risk of well inoperability. It is also important to note that the reduction in future demands means there is an increased probability of an unsimulated future demand in the model.

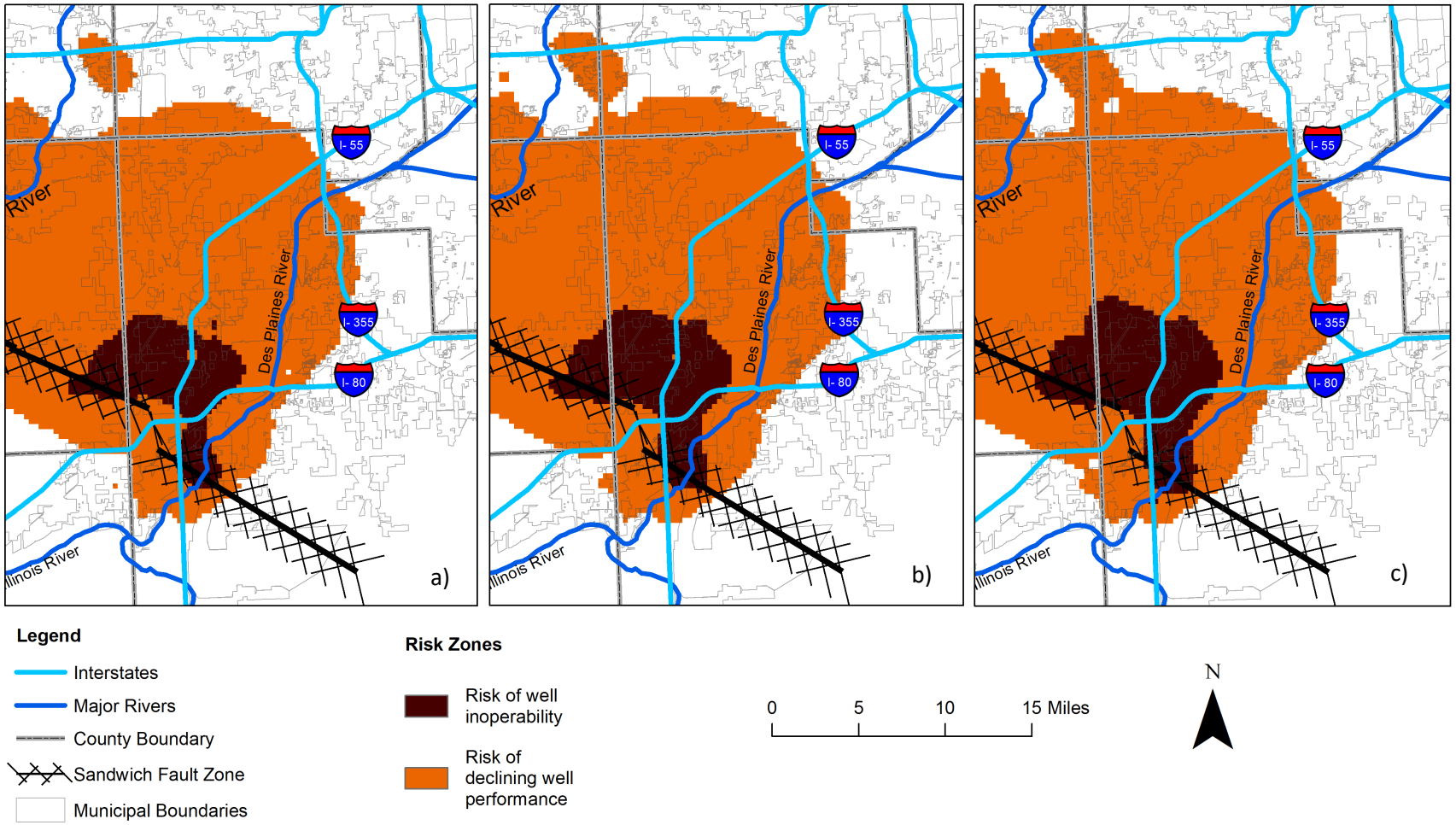


Figure 26: 2030 risk zones based on the a) LRI, b) Alternative, and c) Current Trend scenarios

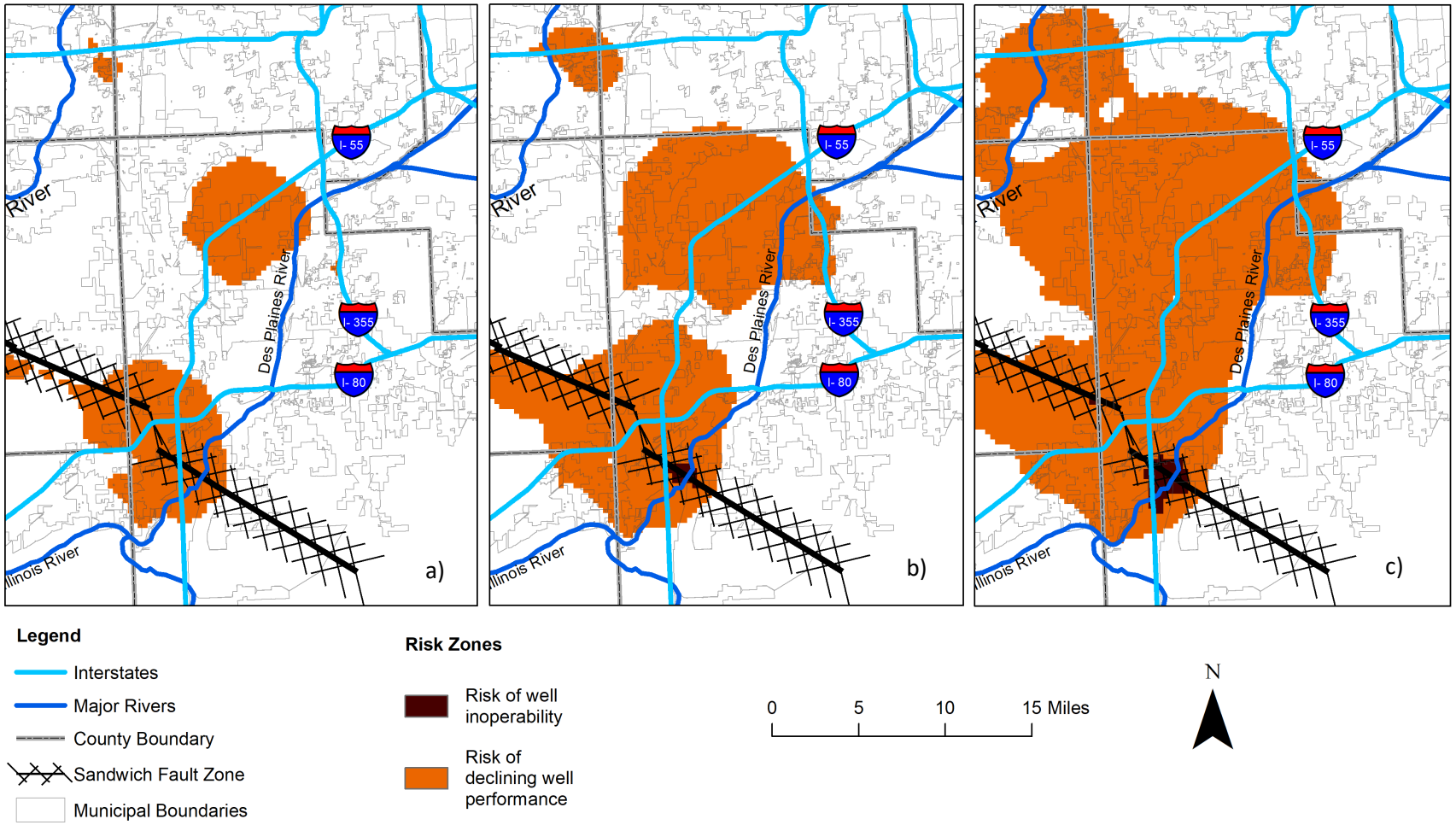


Figure 27: 2050 risk zones based on the a) LRI, b) Alternative, and c) Current Trend scenarios

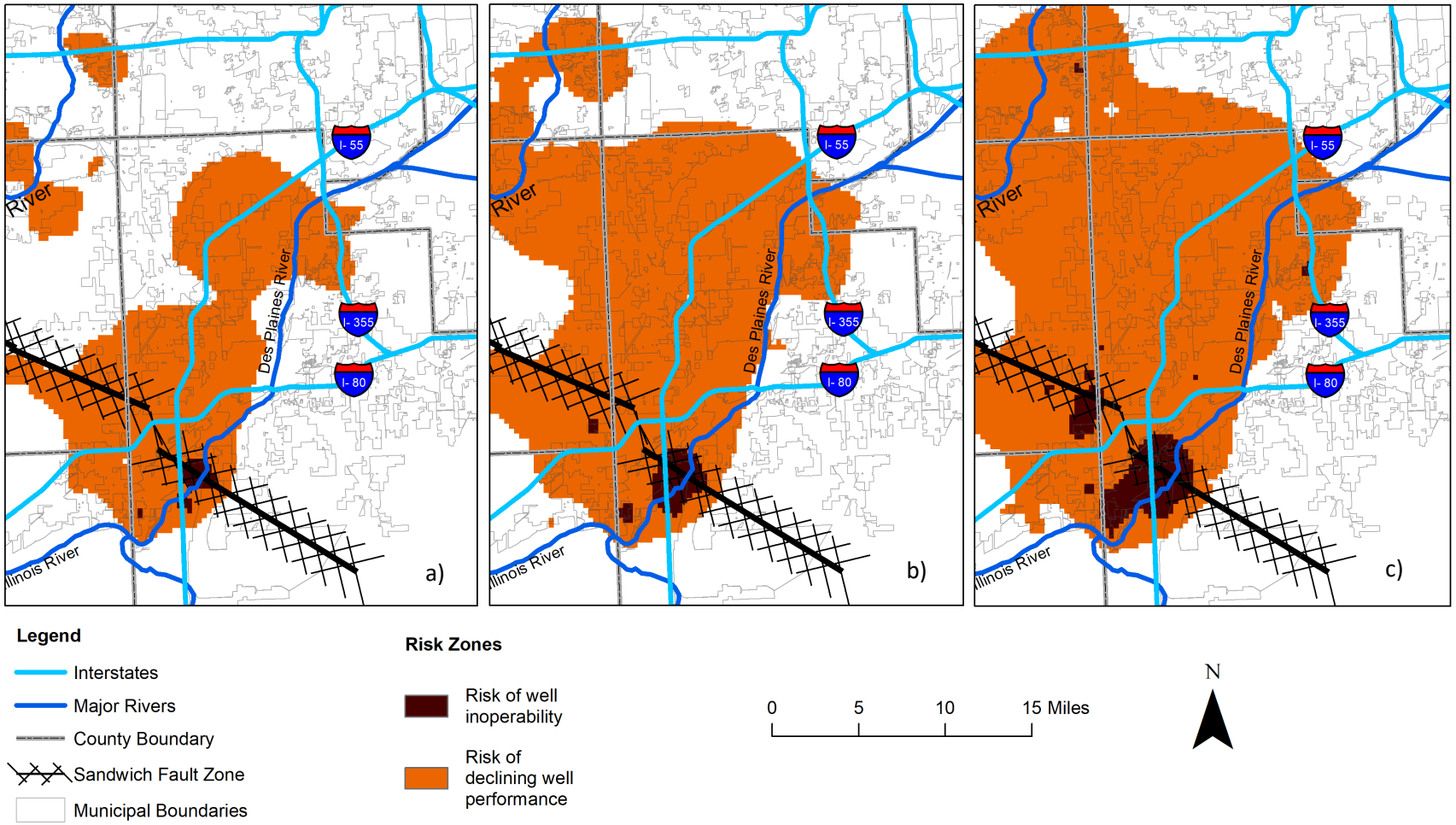


Figure 28: Peak 2050 risk zones based on the a) LRI, b) Alternative, and c) Current Trend scenarios

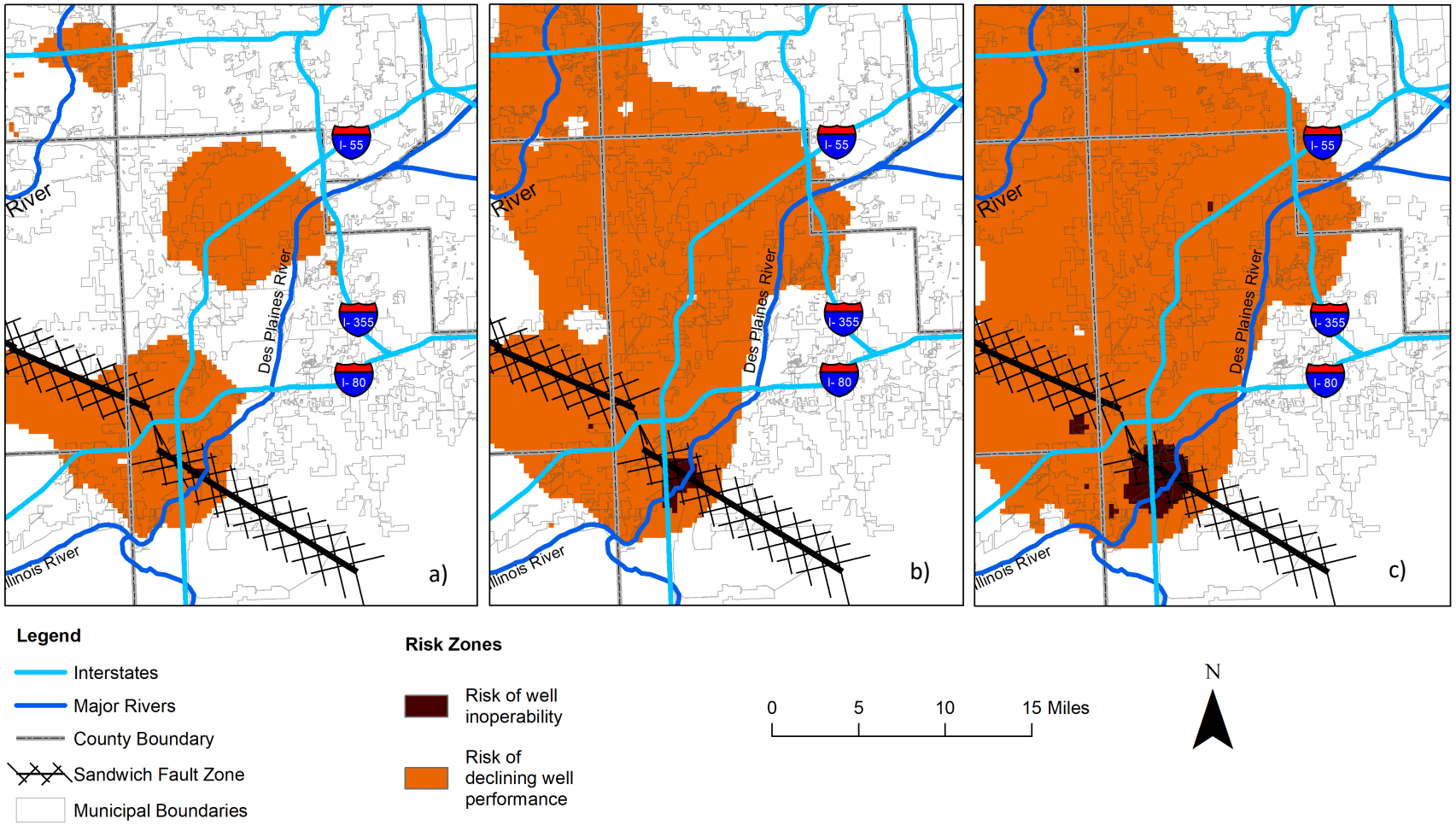


Figure 29: 2070 risk zones based on the a) LRI, b) Alternative, and c) Current Trend scenarios

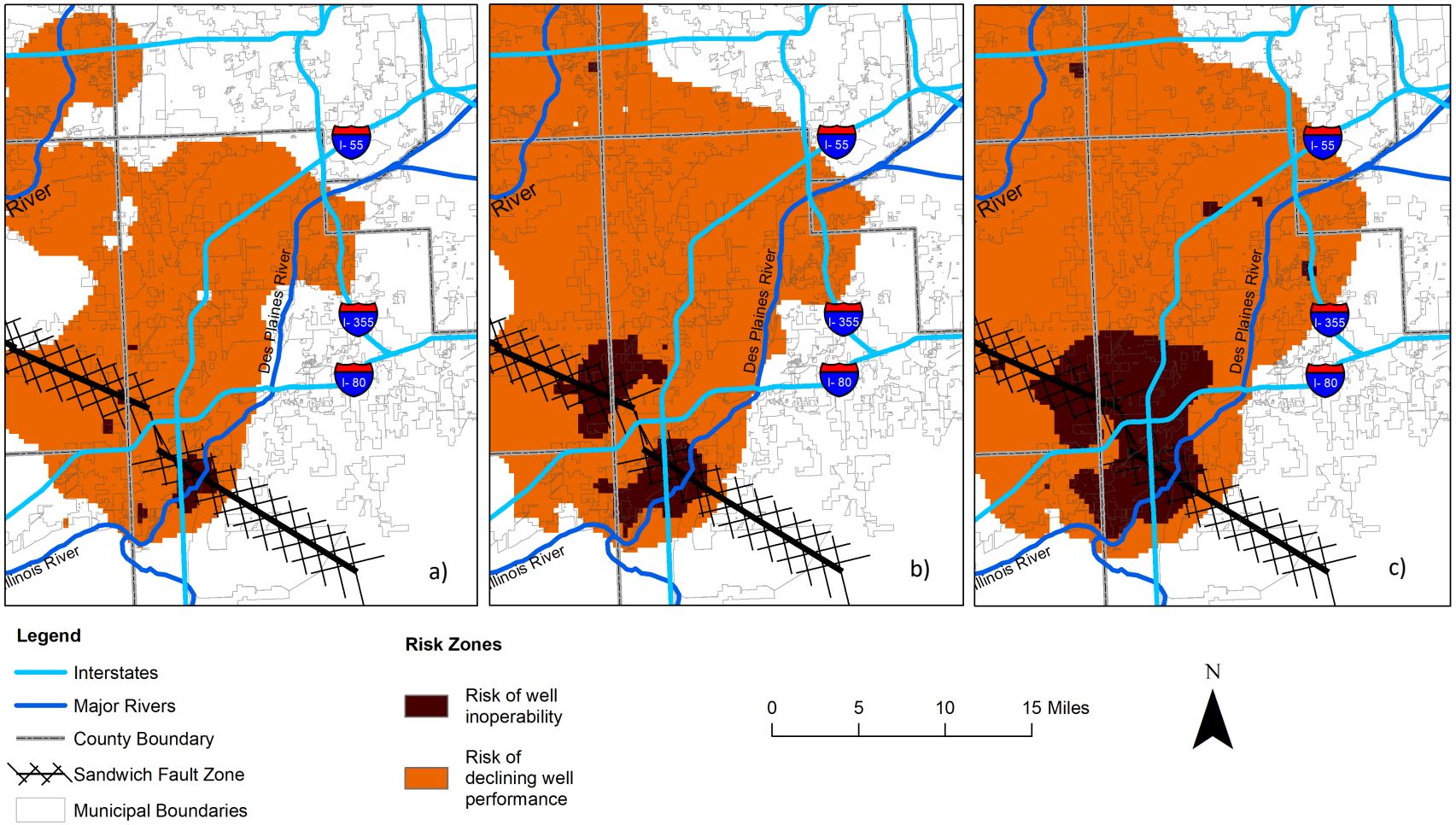


Figure 30: Peak 2070 risk zones based on the a) LRI, b) Alternative, and c) Current Trend scenarios

Hydrograph Sensitivity

A very common request regarding the reporting of model simulations in this report is to provide a best-case and worst-case scenario for the region. However, future demands might be less than the LRI or greater than the Current Trend, so this terminology is not appropriate. What can be provided are "less conservative" and "more conservative" scenarios, which are defined as follows:

- *Less conservative*: Less Resource Intensive demand scenario and assumption that all pumping levels fall on the upper bound of pumping uncertainty.
- *More conservative*: Current Trend demand scenario and assumption that all pumping levels fall on the lower bound of pumping uncertainty

The less and more conservative scenarios are shown for the same four wells in hydrograph form: Joliet 22 (Figure 31), Romeoville 10 (Figure 32), Channahon 4 (Figure 33), and Elwood 10 (Figure 34). In all four cases, the static water level in 2070 was approximately 50–100 ft higher in the less conservative scenario. This is the primary reason that the spatial extent of risk zones in the LRI scenario is smaller than that for the Current Trend zones in the preceding maps (Figure 26 through Figure 30). The variability in pumping levels are much greater due to the assumption of declining specific capacity with depth in the "More Conservative" scenario.

In terms of risk, the overarching narrative for the Joliet, Romeoville, and Channahon wells does not change considerably under either scenario, although the degree of risk is certainly lessened as future demands are decreased. For all three communities, 2070 static water levels occur in the mid-range of the risk of declining well performance zone, meaning that pumping water levels are within 400 ft of the top of the Ironton-Galesville. This is an improvement over the "more conservative scenario, in which the Joliet, Romeoville, and Channahon wells have static water levels falling into the risk of well inoperability and pumping water levels into the Ironton-Galesville, effectively reducing or eliminating the ability of this well to meet the required demands.

It should be noted that the authors of this report caution against making decisions exclusively based on a less conservative scenario due to the high degree of unknown factors that can influence a decline in water levels. Historically, factors such as dewatering of sandstone layers, reduced specific capacity, and removal of multi-aquifer wells have led to the more conservative scenarios from previous model simulations to be more accurate, even in cases where pumping is over-estimated. In addition, wells in the less conservative scenario are more vulnerable to unsimulated demands given that, in the LRI scenario, municipal water use grows at a slower rate and industrial demands decrease slightly over the region. This means that the probability that the model is missing future demands is increased compared to the more conservative scenario.

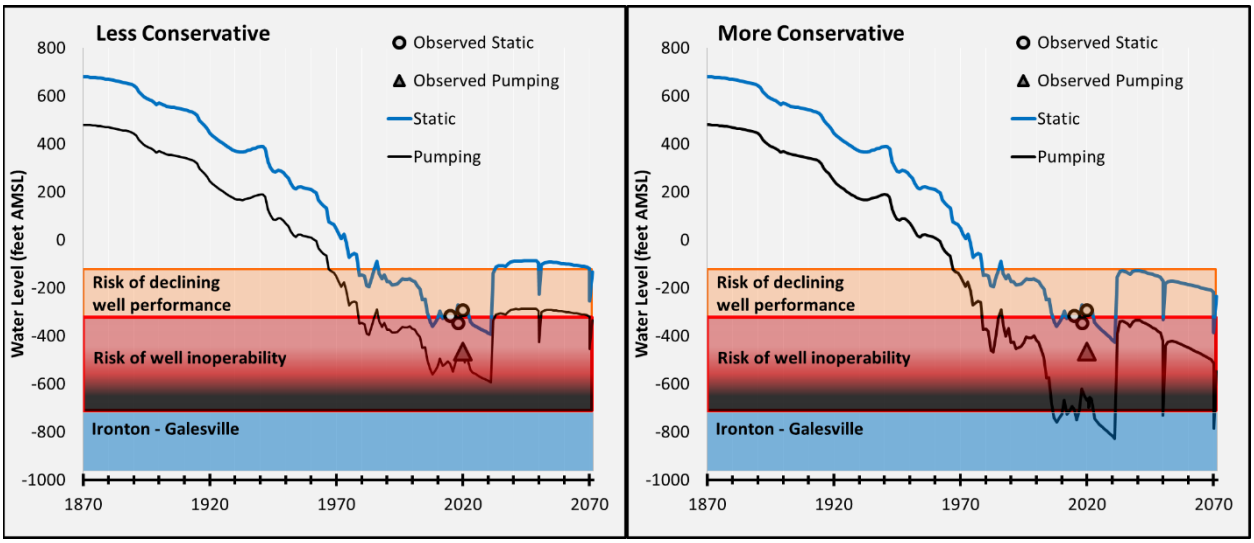


Figure 31: Comparison of the less and more conservative future pumping scenarios at Joliet 22

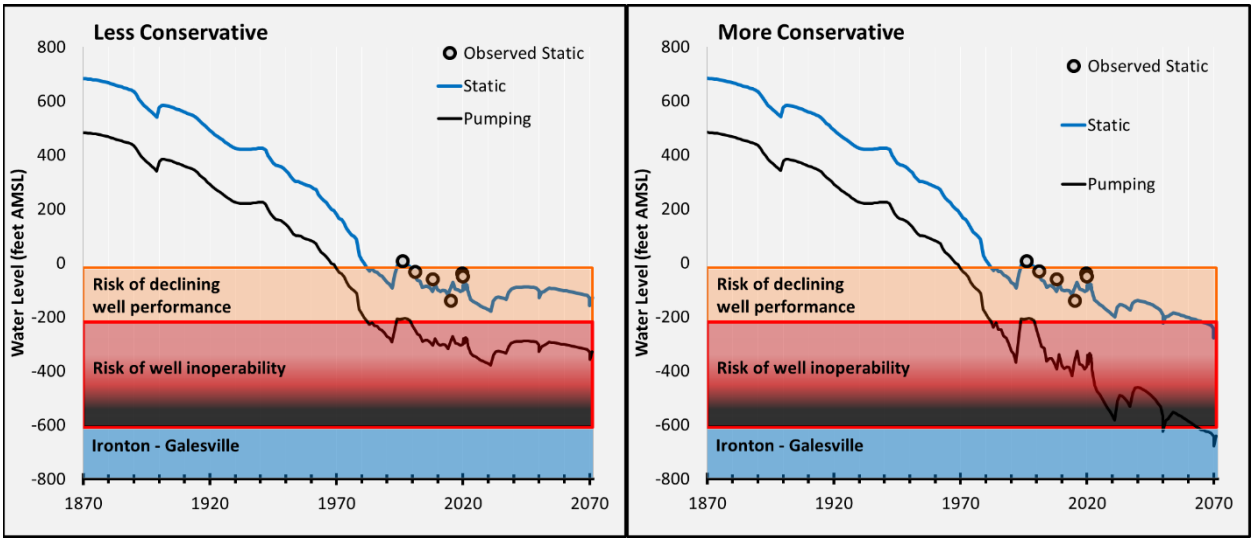


Figure 32: Comparison of the less and more conservative future pumping scenarios at Romeoville 10

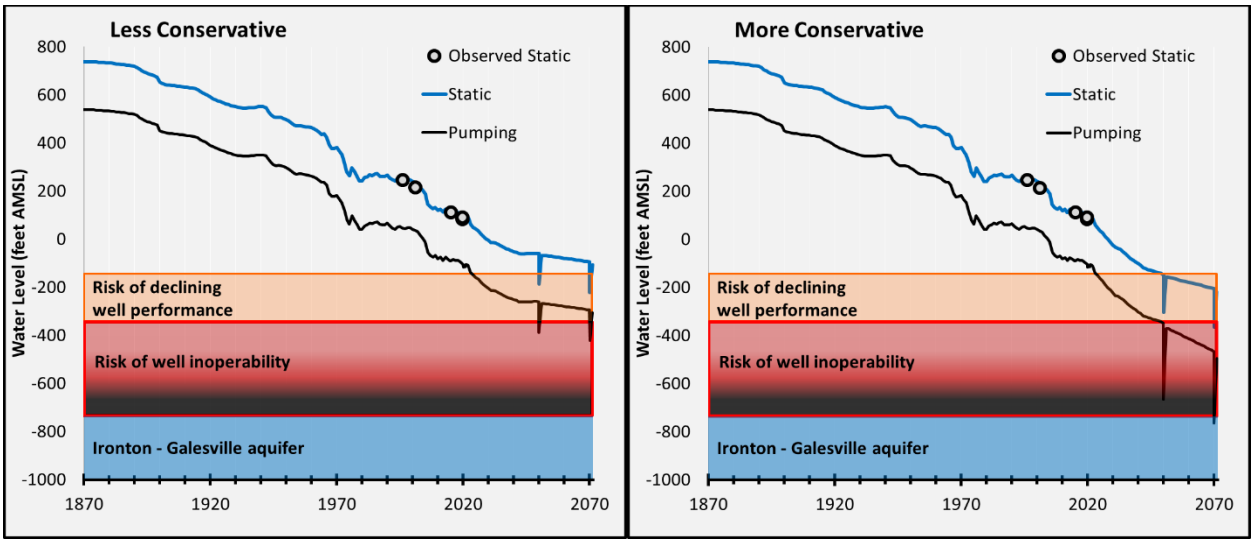


Figure 33: Comparison of the less and more conservative future pumping scenarios at Channahon 4

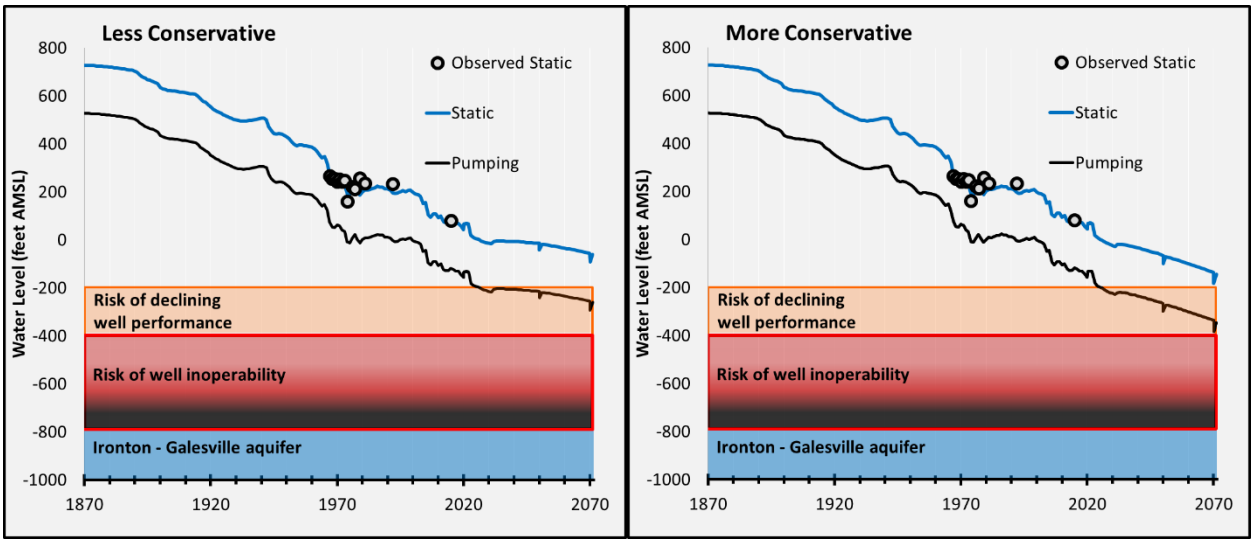


Figure 34: Comparison of the less and more conservative future pumping scenarios at Elwood 10

Sensitivity to Multi-Aquifer Well

Another assumption in the groundwater flow model was the removal of multi-aquifer wells (MAWs) throughout the future simulation. This was evaluated by holding demands constant out to 2050 and running two alternative scenarios: 1) holding MAWs as they currently are positioned and 2) removing a subset of MAWs, as shown in Figure 10. Though this certainly has some influence locally, the water level difference is generally less than 40 ft (Figure 35).

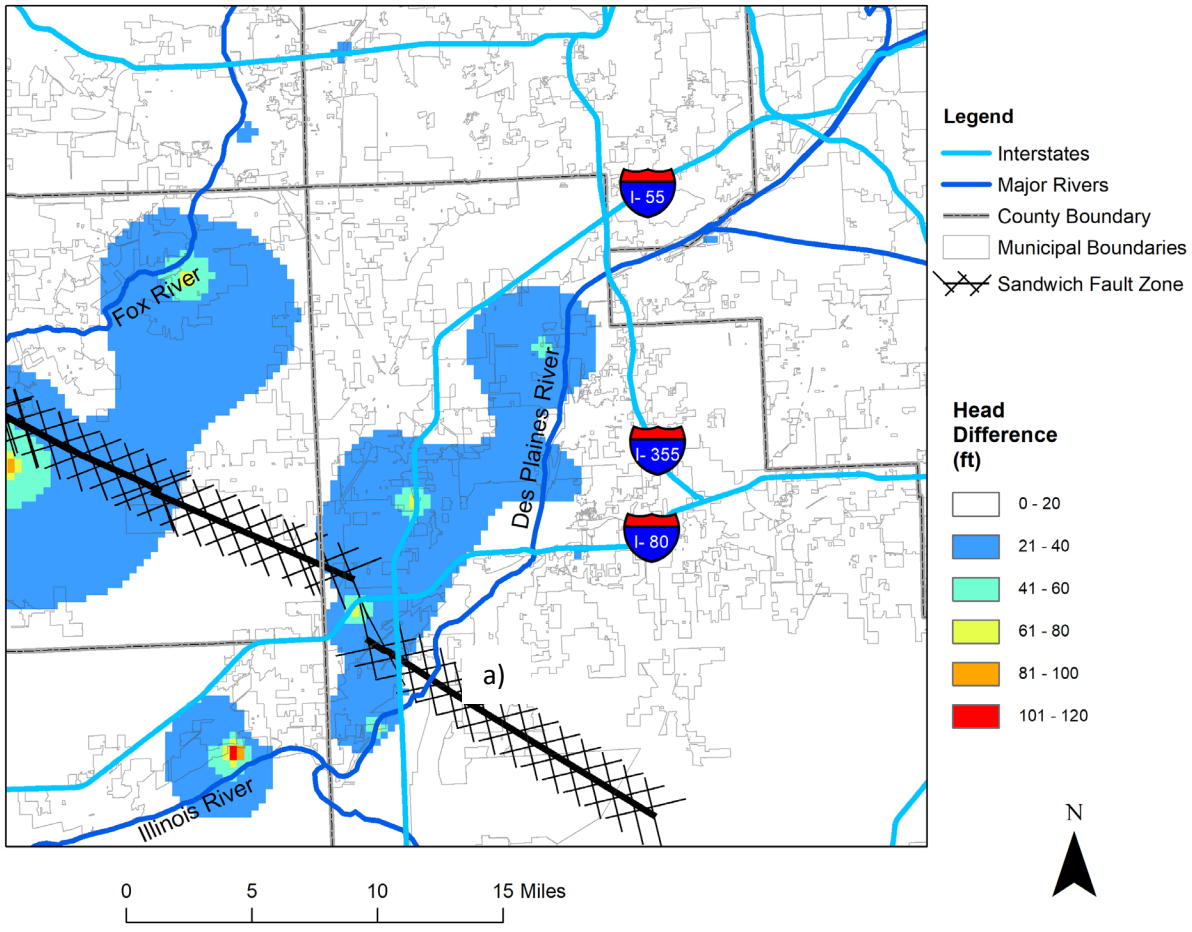


Figure 35: The water level difference map between a 2050 model simulation that included the removal of multi-aquifer wells and a similar run with no removal of multi-aquifer wells

Conclusions, Recommendations, and Future Planned Work

Conclusions: What Does All This Mean?

The modeling conducted by the Illinois State Water Survey found that, under the Current Trend scenario, the aquifer remains at risk regionally and for most communities/industries within the Southwest Water Planning Group (SWPG) region. A Phase 1 investigation of Joliet's water supply indicated that the city needs to find an alternative source by 2030, and the updated analysis in this report supports that conclusion. Other communities also received an update on their local water supply with individual summaries. **The authors conclude that most sandstone wells in the Southwest Water Planning Group (SWPG) region are at risk of not meeting supply in the future, and as water levels continue to decline, they will become increasingly vulnerable to new demands in the region. Communities must consider the impact of possible new industrial demands, or even growth in neighboring communities that might not have been simulated or that shifts from the growth's current distribution.** The results in these documents are not a **projection** by the ISWS or a definitive statement that the aquifer will run out of water by 2050 or 2070. Not enough information is available to make this assessment, nor is it likely such information will become available due to the uncertainty in future demands.

Another clear conclusion of the model and data analysis is that withdrawals from the Cambrian-Ordovician Sandstone aquifer system are unsustainable and have been for over a century. Unsustainable pumping rates do not mean that wells will immediately cease to function, but rather that water is removed far faster than water can be replenished. Current estimates are that it would take centuries to replenish the aquifer if all pumping were to cease. As a result, when a community as large as Joliet stops pumping, the recovery is relatively small (on the order of 50–100 feet for most communities and around 250 ft at the center of pumping in Joliet) compared to the over 600 ft of static water level decline (800-1200 ft pumping level decline) since the start of the 20th century.

Most communities will likely be forced off the sandstone aquifer, but whether this is by 2030, 2050, 2070, or later is entirely dependent on how fast future demands increase. The aquifer is very responsive to changes in demands, so negative impacts in response to increased demands will manifest almost instantaneously. Questions should not focus on when the aquifer will be depleted, but rather on how much demand the aquifer can withstand. Compounding community and regional demands makes this question particularly difficult to answer. **Thus, this is a regional issue that requires a regional solution with input from many communities and industries.**

Recommendations: What Next?

Although the overall conclusion is not likely to change for the region, specific communities should explore additional model scenarios if they require additional information from the single Current Trend scenario developed in this report. Additional model scenarios will help evaluate

risk under different conditions and discussing alternative scenarios with ISWS staff will lead to improved understanding of how the model (and aquifer) reacts to specific stresses.

All communities should prioritize the installation of transducers to monitor both static and pumping data. The lack of a long history of pumping data at most facilities is problematic and increases model uncertainty, particularly in relation to the threshold at which risk will manifest. At a minimum, every community in the southwest suburbs should be collecting pumping and static water level data on a monthly basis. Please contact the authors of this report if you would like to share that data with the ISWS for incorporation into the regional groundwater flow model.

Unfortunately, some wells will likely experience supply issues before 2030 if the Current Trend demand scenario occurs. This is likely in very localized areas, even if demands stay constant, especially within the Sandwich Fault Zone. These wells require constant attention to evaluate how they respond to further water level declines. What is learned there could help reduce uncertainty in the risk thresholds assigned in this report throughout the region.

Future ISWS Work

Over the next two years, the ISWS will continue to work with the SWPG to improve an understanding of the deep sandstone supply issue. This will involve several making additional modeling improvements, including:

- Conducting a refined, discrete simulation of multi-aquifer wells that accounts more robustly for construction and sealing dates. Advanced modeling packages will be used to perform this simulation.
- Applying different conceptualizations of the aquitard to evaluate whether it may be providing water from storage. This may either slow (due to the added water from aquitards) or accelerate (due to the loss in transmissivity as drawdown increases) the future decline.
- Improving calibration along the fault zone and other areas with a spatial bias.
- Examining monthly calibration results over the complete span of a year, evaluating any seasonal trends and considering consistency with the peak demand scenarios.
- Assessing the age of groundwater within the deep sandstone aquifer system.

In addition to modeling, water quality samples will be collected along the fault zone to help understand this complex feature. This will include collecting isotopic data to understand the age of water and how vertical and horizontal flow along this feature influences water supply.

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Appendix I: Calculation of Data in Figure 11

The Theis solution is a long-standing equation used to assess the impact to groundwater levels due to pumping over a specified period (Theis 1935). Due to the lack of boundary conditions, it is highly applicable for rapid, approximate assessments of groundwater conditions. The equation is defined as:

$$s = \frac{Q}{4\pi T} W\left(\frac{r^2 S}{4Tt}\right)$$

where s is drawdown [ft], Q is pumping [ft^3/d], T is transmissivity of the aquifer [ft^2/d], r is the distance to a new pumping well, S is storage [-], and t is the time that the well has been on [d]. W() is called the well function, also known as the exponential integral and is similar to other functions such as the logarithm or natural logarithm.

The Theis equation was used to develop the data in Figure 11, which shows the impact in terms of drawdown based on the pumping rate and distance to a new pumping source. Parameters used to develop Figure 11 were consistent with parameters in the model developed by Abrams et al. (2018), specifically T = 1000 ft^2/d, S = 5.2×10^{-5}, and t = 180 days. Time t was determined to be 180 days by evaluating the more detailed groundwater flow model to assess when drawdown stabilized. To develop the lines in Figure 11, four pumping rates were selected (1, 2, 3, and 4 mgd, converted to ft^3/d). The distance from pumping (r) was varied in 1 ft intervals and assigned to the x-axis. Drawdown was then calculated and assigned to the y-axis.

Theis, C. V. 1935. The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using groundwater storage. Am. Geophys. Union Trans. 16: 519–524.



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Eric Dhuse Testimony

File Name:
B.11_Eric Dhuse Testimony

Description:
WRITTEN TESTIMONY OF ERIC DHUSE (United City of Yorkville)

August 2024

WRITTEN TESTIMONY OF ERIC DHUSE
(United City of Yorkville)

My name is Eric Dhuse and I work for the United City of Yorkville as the Director of the Department of Public Works since March 1995 (27 years). I earned my Bachelor of Science in Agriculture from Southern Illinois University. My qualifications are attached to this testimony as Exhibit A. I am here to provide testimony in support of the Application for the Lake Michigan Water Allocation IB Permit on behalf of the United City of Yorkville.

As Director of Public Works for the United City of Yorkville, I oversee all public works aspects of a City with an approximate 2020 population of 21,533 (See, https://www.census.gov/search-results.html?searchType=web&cssp=SERP&q=Yorkville%20city,%20Illinois) including approximately152 miles of road, sewer, and water, 26 traffic signals, 1,000 streetlights, more than 7,400 water customers, and an annual $12M capital improvement program. In addition, I review and analyze subdivision projects to ensure compliance in all aspects of the build, developed a $12M budget roadmap for the city council that includes plans for capital improvement as well as a five-year roadmap with future projects and improvements for Yorkville, and utilizes a strategic payment structure with subdivision to ensure developer responsibility. One of the key projects that I have overseen as Director of Public Works includes the subject matter of my testimony; coordinating and collaborating to execute a five-to-six-year project worth more than $100M to obtain Lake Michigan water for Yorkville that will supply drinking water for Yorkville residents for over 100 years. In addition, I have worked with IDOT on road expansions, oversaw the design, construction, and maintenance of three Cation exchange water treatment plants, collaborated with the city administrator, a building manager, and an architect to design a $30M public works facility to be constructed in 2023, oversaw the process to approve more than 1,000 residential building permits in Yorkville without taxing existing residents, and oversaw the design, construction, and operation of seven sanitary sewer lift stations.

Currently, as part of the City's water system improvement plan to reduce non-revenue water (NRW) I

oversee the meter installation program, meter testing, and other strategies to reduce the City's NRW. In addition, I oversee a team of 18 staff and promote growth and improvement by encouraging continuous learning and improvement, collaborate with engineers to develop the five-year capital plan roadmap leading to 2027, coordinate with three foremen, the city administrator, assistant administrator, and finance administrator to ensure that all citizens' necessities are met, encourage recommendations and ideas on how to strategically use the annual City budget as well as potential projects or plans for the future, and ensure that the team has what it needs to complete their jobs by establishing clear channels of communication where requests can be made. For the last several years, I have been the champion for the various alternate water source evaluation studies, serving as the direct contact for the City and project team for the search for an alternative water source.

United City of Yorkville Waterworks and Wastewater Systems

The City's existing Water Works System (WWS) is comprised of various supply, treatment, storage, distribution, and control components. *See*, Exhibit A *to the Report in Support of Application* is the existing *WWS* map. The existing supply consists of four deep wells (Wells No. 4, 7, 8 and 9). Of the deep wells, three were constructed into the Ironton-Galesville aquifer, and one is open to the St. Peter (Ancell) and Ironton-Galesville deep sandstone formations. All of the deep wells exceed the water quality standard for combined radium.

Water from all of the wells is treated at cation exchange water treatment plants (CEWTP) and discharged directly to the distribution system. Well No. 4 is located in the central part of town and is treated at its own CEWTP. It was placed into service in 2006. Well No. 7 is located on the south side of the City and is also treated at its own CEWTP. It was placed in service in 2005. Wells No. 8 and 9, located in the northeastern area of the City, are tributary to the same CEWTP that provides treatment for both wells. These wells were placed in service in 2004.

The City's WWS contains five Elevated Water Storage Tanks (EWSTs) that provide a total combined water storage of 4.55 million gallons (MG). The City has approximately 150 miles of water main (without fire hydrant leads). The WWS is split into different pressure zones including the North, North Central, South

Central, and South Pressure Zones, plus the future Southeast Pressure Zone. The City has three Booster Pump/Pressure Reducing Valve (PRV) Stations and two PRV Vaults for the transfer of water between zones. The City utilizes a Supervisory Control and Data Acquisition (SCADA) system to monitor all components of the WWS. With a continual focus on system maintenance by City Staff, the WWS components are currently in good condition.

All City of Yorkville resident, business, industrial, and government water use data in the City of Yorkville is captured and collected from meters that are read monthly. The City is in the process of converting to an advanced metering infrastructure (AMI) system. The City anticipates to convert to AMI technology within the next 5 years.

The City of Yorkville's wastewater is treated by the Fox Metro Water Reclamation District and Yorkville Bristol Sanitary District. The maps depicting the locations of the Fox Metro Treatment Plant and Bristol Sanitary District and their discharge locations are included as Exhibit B in the Report in Support of the Application. It is anticipated that both facilities will continue to service the City and discharge in the same location following the switch to Lake Michigan water.

By 2050, the United City of Yorkville population is projected to grow to 47,796[1]. With this population growth the projected Average Day Demand and Maximum Day Demand on the Water Works System are projected to be 3.57 MGD and 6.06 MGD, respectively. See, Table 3 in Report in Support (Revised).

[1] See, E. Aleman, Executive Director of CMAP, letter dated 11/22/2022 to IDNR

United City of Yorkville's Response to the Risk to the Deep Aquifer

The City, a non-home rule community as defined by the Illinois Constitution, covers approximately 22 square miles with a population of approximately 21,533 residents in 2020. The City is located in central Kendall County, about 45 miles southwest of Chicago, Illinois. The City is primarily agricultural and residential in nature There are currently 17 active residential subdivisions in Yorkville. In 2021, the City issued 408 new housing starts. In 2022, the City issued 284 new housing starts consisting of 169 detached single family dwelling units and 115 attached townhome/duplex dwelling units. Additionally, the City approved final plats for six (6) developments which will result in approximately 383 new dwelling units for future construction. The City continues to attract commercial and industrial development and has land available for future population growth..

Yorkville is home to several large and midsized manufacturers and retailers including the Wm. Wrigley Jr. Company, Boombah, Inc., Newlywed Foods, Jewel/Osco, Target, Kohl's, Home Depot and Menards. It is also home to Raging Waves, Illinois largest water park. The Department of Public Works along with other City administrative staff, in conjunction with its economic development consultant, continue to work on attracting and retaining commercial and industrial businesses to the City.

In 2016, the City analyzed the sustainability of it's wells, continued use of the wells, and utilizing the Fox River either as an independent supply source, or with the Village of Oswego and Village of Montgomery. In 2017 & 2018, AECOM developed capital cost estimates for a DuPage Water Commission Connection to the Villages of Oswego and Montgomery and United City of Yorkville (collectively, the United City of Yorkville, the Village of Oswego, and the Village of Montgomery are referred to as the "WaterLink Communities"). In 2020, the WaterLink Communities joined together to evaluate several alternative water supply sources. The objective of the WaterLink Alternative Water Source Evaluation (Study) was to update and align the previous source water analyses completed for the Fox River Option (Engineering Enterprise, Inc., 2017) and Lake Michigan Water via DuPage Water

Commission Option (AECOM, 2018) and two new Lake Michigan Water alternatives: the proposed Joliet Water Commission Option and the Illinois American Water Option. In addition, Yorkville prepared water distribution system modeling and analysis, and evaluated a Fox River solution solely for Yorkville. The specific design recommendations from the previous Fox River and DWC studies were not altered as part of the Study.

The Illinois State Water Survey ("ISWS") has projected that the WaterLink communities, even with Joliet leaving the aquifer, will be at severe risk of well depletion and unable to meet their continued population growth and water demands through 2050 and beyond. See, Testimony of Daniel Abrams. As part of the Study, the groundwater model was updated by ISWS, and modeling scenarios showed that the existing well source will not be able to meet the City's Maximum Day Demands by the year 2050. Without a new water source, the City will have to restrict water usage and, eventually, the deep wells will run dry, and the City will not be able to keep the water system pressurized, resulting in a City without water. This is a critical resource, and the United City of Yorkville is committed to connecting to an existing Lake Michigan supplied system by 2027.

The Study analyzed each option with specific decision considerations of Cost, Risk, Water Quality, Management and Staffing, Control and Governance, and Sustainability and Quantity as follows:

1) Cost Considerations: review of the supply and treatment costs as well as storage, distribution, and controls costs.
2) Risk Considerations: design and permitting, construction, capacity and expansion, and financial risks.
3) Water Quality Considerations: treatment system, water intake location, seasonal quality, and regulatory compliance responsibility
4) Management and Staffing: both WaterLink and individual community review of staffing needs
5) Control and Governance: contractual purchaser v. member of a commission, weight of vote in decisions, and risk and financial distribution
6) Sustainability and Quality: Seasonal flow, back-up water supply, and supply redundancy

In addition, the study evaluated the City's non-revenue water (NRW) loss by conducting water audits in WY2021. The City's NRW exceeds 10%. The City, therefore, prepared a Water System Improvement Plan. See, Testimony of Jeffrey W. Freeman, PE, CFM, LEED AP. At the conclusion of the

Study, on December 14, 2021, the United City of Yorkville City Council voted unanimously in favor of the Lake Michigan option through the DuPage Water Commission (DWC). See, Resolution of the City Council of the United City of Yorkville, Kendall County, Illinois attached as Exhibit B.

Since, the passage of the December 14, 2021, resolution selecting the DuPage Water Commission (DWC) as its chosen supplier of Lake Michigan water, the City, along with its partners, has entered into discussions with the DWC. On a regular basis, the WaterLink Communities' administrators, public works directors, engineers and others have been meeting to discuss schedules, routes, studies, funding, and the like (See, Paul D. May and James Zay letter, attached as Exhibit C). To date, the City has been involved with the passage of amendments to the Water Act of 1985 which (upon approval and issuance of a Lake Michigan allocation permit) allow for the City (and Oswego and Montgomery) to become a member of the DWC's newly created Seventh District.

In addition, since its October 21, 2022, pre-hearing conference with the IDNR, the City has:

a) Continued and deepened its review of the Fox River as an alternate water source
b) Refined and revised its non-revenue water reduction improvement plan (See, Testimony of J. Freeman)
c) Attended The City's Public Works Committee Meeting to update the Committee
d) Passed a resolution reaffirming its decision to obtain Lake Michigan water through the DuPage Water Commission (See, United City of Yorkville's January 10, 2023, Resolution, attached as Exhibit E)

The City is moving forward on its water system improvement plan to reduce NRW including water main replacement, installation of additional meters on the City's system, continued AMI meter replacement for residents, preparing for a corrosion control study, and other projects and milestones to advance and prepare itself for Lake Michigan as its alternative water source. It is with the goal that upon the approval and issuance of a Lake Michigan water allocation permit the City will be positioned to further make the committed improvements so that the City will excel in the performance and upkeep of its water system and be prepared to maintain a schedule and budget for the operations and maintenance of its system including leak detection and analysis, watermain replacement or lining, testing and data collection, annual

water audit preparation and coordination, water conservation activities and other necessary ongoing improvements to comply with 10% or less of non-revenue water.

Without a new reliable, sustainable water source that meets its full needs, the City will have to restrict water usage and, eventually, the deep wells will run dry, and the City will not be able to keep the water system pressurized, resulting in a City of 47,796 people without water in 2050. This is a critical resource, and therefore, the United City of Yorkville is committed to connecting to an alternative water system that meets its full water needs. The City studied, asked probing questions, passed a conservation ordinance, held numerous public meetings to discuss the status of the Study, worked with experienced engineers and professionals to find a solution to eliminating the City's reliance on the aquifer. After more than a year of evaluating the alternatives and taking into consideration costs and key considerations, presenting at public meetings, adopting additional water conservation measures, including the passage of a new water conservation ordinance in compliance with the IDNR's requirements, the City deliberated and unanimously chose (and reaffirmed) Lake Michigan as its new water source.

United City of Yorkville's Commitment to Water Conservation and Reducing Water Loss

The United City of Yorkville understands that Lake Michigan water is a precious resource that needs to be conserved and that applying for a Lake Michigan Allocation Permit is a commitment to water conservation and being a good steward for water. The City is maintaining a focus of keeping the City's waterworks system in good repair to allow for its efficient and economical operation as well as to conserve water withdrawn from the deep wells in the Cambrian-Ordovician aquifer.

Water Conservation in the City Code

As pointed out by the Illinois State Water Survey, no amount of conservation efforts will change the risk of depletion due to the high area demand and the comparatively slow rate of recharge within the aquifer. The United City of Yorkville is committed to water conservation. As part of the selection of a Lake Michigan option, the City Council passed a revised water ordinance in September 2021 that includes the

conservation criteria and requirements of 17 Illinois Administrative Code, Part 3730, including Sections 3730.304 and 3430.307. See, Conservation Ordinance of the City Council of the United City of Yorkville, Kendall County, Illinois attached as Exhibit E. The benefits to implementing these conservation measures include:

- Lower individual water bills as people use less water
- Slowing of the drawdown in the aquifer
- Reduction in capital costs as future system improvements can be sized for a smaller demand.

The City acknowledges that the adopted conservation measures are a prerequisite for obtaining a permit to withdraw Lake Michigan water.

The United City of Yorkville is already implementing conservation measures such as conducting a leak detection program, limiting outdoor water use, and encouraging the use of rain barrels. Moreover, the City is educating and informing its residents of how they can be good stewards of water through its website and social media outlets as follows:

See, General Website information: https://www.yorkville.il.us/811/new-water-source

On February 3, 2023, the City released its 2022 Annual Report. See, https://www.yorkville.il.us/583/department-annual-reports

In addition, in the City's 2022 Yorkville Minute Newsletter it has published water articles.[2] For example, in its July 2022 newsletter the City published the following regarding water restrictions and new sod:

[2] July 1, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/175204
June 15, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/173758
May 16, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/171438
April 16, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/57275
April 1, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/56326



Water Restrictions/Sod Watering Permit Information

A friendly reminder that sod laying, lawn seeding, and the planting of other landscaping for the establishment of a new lawn or new landscaping is prohibited from July 1st through August 31st of each year, unless the source of watering for said sod, lawn seeding and/or planting of landscaping is derived from a private well, imported water source or means other than any municipal water source. For more information, including a sod watering permit, please visit: https://www.yorkville.il.us/211/Watering-Restrictions

Further, in April 2022, the City held a contest to encourage water conservation. For example, on April 30, 2022 the following was posted on the City's social media account.



Attached as Exhibit F is a sample of all the efforts the City has made to educate, notify, and encourage water conservation.

As part of the selection of a Lake Michigan option, the City will also need to ensure the ratio of the maximum day pumping to average day pumping does not exceed 1.7. This ratio will also be incorporated into the water supply contract to ensure that infrastructure is appropriately sized. If the ratio is too high, the pipes need to be sized much larger and their excess capacity is wasted much of the time, resulting in unnecessary expense.

Conclusions and Commitment

If the United City of Yorkville receives a Lake Michigan Water Allocation Permit, the Lake Michigan water supply will enable the City to provide a continuing, sustainable, and reliable source of water to replace the declining well water supply. A dependable, consistent, high-quality water source is necessary to help ensure the health and safety of those who live and work in the City and for essential

services and public safety functions, including fire protection. A Lake Michigan Water Allocation Permit will also assist the City in managing its future growth in a manner consistent with the available water supply.

For all the reasons stated herein, this completes my written testimony.

Eric Dhuse
Director of Public Works
United City of Yorkville, Kendall County, IL

Exhibit A

Resume of Eric Dhuse

Eric Dhuse

Yorkville, IL | edhuse@gmail.com

DIRECTOR OF PUBLIC WORKS

Innovative Process & Maintenance | Organizational Leadership | Public Works Operations

Leader in positioning public works projects and programs for dynamic change and expansion. A distinguished 27-year career marked by large-scale contributions by developing operational improvements. Noted throughout career for implementing innovative improvements including designs, processes, procedures, and policies that transform a community.

PROFESSIONAL EXPERIENCE

UNITED CITY OF YORKVILLE www.yorkville.il.us/171/Public-Works — Mar 1995 – Present
Director of Public Works — Yorkville, Illinois

Key Initiative: Design, install, and maintain all of the sewer, water, streets, storm sewer, snow removal, and building maintenance

Public Works Operations:

- Oversees all public works aspects of a 23,000-person city including 150 miles of road, sewer, and water, 26 traffic signals, 1,500 streetlights, and a capital improvement of $12M a year
- Reviews and analyzes subdivision projects to ensure compliance in all aspects of the build
- Develop a $12M budget roadmap for the city council that includes plans for capital improvement as well as a five-year roadmap with future projects and improvements for Yorkville
- Utilizes a strategic payment structure with subdivision to ensure that any subdivision constructed isn't paid for by the residents of Yorkville and rather the developers themselves

Key Projects:

- Coordinate with a highly collaborative team to execute a five-to-six-year project worth over $100M to obtain Lake Michigan water for Yorkville that will supply drinking water for Yorkville residents for over 100 years
- Collaborated with IDOT on their project to expand highway route 47 from two lanes to four while maintaining utilities and services to all motorists during the three-year project
- Widened six miles of US Route 34 including adding multi-use trails along the highway in collaboration with IDOT
- Oversaw design, construction, and maintenance of three Cation exchange water treatment plants
- Collaborated with a city administrator, building manager, and an architect to design a $30M public works facility to be constructed in 2023
- Recognized as the fastest-growing county in the U.S. by approving over 1,000 residential building permits in Yorkville without taxing existing residents
- Oversaw the design, construction, and operation of seven sanitary sewer lift stations

Organizational Leadership & Collaboration:

- Develops and maintains a culture of accountability and ownership with a small, but a highly productive team of 18 to promote the sharing of expertise and ideas
- Promote growth and improvement by engaging and encouraging the team to continuously learn
- Collaborate with engineers to develop the five-year capital plan roadmap leading to 2027 by leaning on their expertise for clear expectations and timelines
- Coordinates with three foremen, a city administrator, an assistant administrator, and a finance administrator to ensure that all citizens' necessities are met day-to-day
- Encourage recommendations and ideas on how to strategically use the budget as well as potential projects or plans for the future
- Ensures that the team has what it needs to complete their jobs day-to-day and in the future by establishing clear channels of communication where requests can be made

EDUCATION & PROFESSIONAL AFFILIATIONS

Southern Illinois University, Carbondale, IL — Bachelor of Science in Agriculture
APWA, American Public Works Association — 20-Year Member
AWWA, American Water Works Association — 20-Year Member
ISAWWA, Illinois Section American Water Works Association
IPWAMAN, Illinois Public Works Mutual Aid Network
IRWA, Illinois Rural Water Association

Exhibit B

United City of Yorkville Resolution Selecting the DuPage Water Commission

United City of Yorkville
800 Game Farm Road
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

CERTIFIED COPY AFFIDAVIT

I, Jori Behland, City Clerk, in and for the United City of Yorkville, Kendall County, State of Illinois, and Legal Custodian of the records, files and seal of said City do hereby certify that attached hereto is a full and complete copy of the original document identified as Resolution No. 2021-35, passed by the City Council of the United City of Yorkville on December 14, 2021, entitled:

> "RESOLUTION SELECTING LAKE MICHIGAN AS THE PREFERRED WATER SOURCE AND THE DUPAGE WATER COMMISSION AS THE PREFERRED WATER SUPPLIER FOR THE UNITED CITY OF YORKVILLE"

Dated this 4th day of March, 2022.

Jori Behland, City Clerk

SEAL

Resolution No. 2021-35

RESOLUTION SELECTING LAKE MICHIGAN AS THE PREFERRED WATER SOURCE AND THE DUPAGE WATER COMMISSION AS THE PREFERRED WATER SUPPLIER FOR THE UNITED CITY OF YORKVILLE

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, the existing water source of the Village of Montgomery, Village of Oswego, and United City of Yorkville (collectively, the "Municipalities") will be at severe risk of depletion and no longer able to meet the region's maximum daily water demand sometime between 2030 and 2050; and

WHEREAS, the Municipalities have agreed to jointly hire engineers, lawyers, and other experts to advise them on the advantages and disadvantages of potential water supply sources; and

WHEREAS, the City of Joliet is currently designing a new pipeline that will bring Lake Michigan water to the area by approximately 2030 which could be utilized by the Municipalities; and

WHEREAS, the City of Joliet notified the Municipalities that in order to connect to the new pipeline, a commitment would need to be made before January 31, 2022; and

WHEREAS, the Municipalities authorized Baxter and Woodman of Mokena, IL to conduct an Alternative Water Source Evaluation (the "Study") to evaluate the feasibility of obtaining a sustainable water supply from the City of Joliet, the DuPage Water Commission, Illinois American Water, and the Fox River; and

WHEREAS, the Municipalities evaluated key considerations of the potential water supplies, including: the sustainability of each water source, water quality, permitting, governance, responsibility, internal system improvements, project timing, and cost; and

WHEREAS, the Municipalities held a joint public open house on September 15, 2021, at the Grand Reserve Elementary School in Yorkville to present the alternatives and answer questions from the public; and

WHEREAS, the United City of Yorkville held a public open house on October 19, 2021 at the Yorkville City Hall to present the alternatives and answer questions from the public; and

WHEREAS, the Mayor and City Council of the United City of Yorkville discussed the alternative water source Study at its June 8, 2021, June 22, 2021, July 13, 2021, July 27 2021, August 10, 2021, August 24, 2021, September 14, 2021, September 28, 2021, October 12, 2021, October 26, 2021, November 9, 2021 and November 23, 2021, City Council meetings; and

WHEREAS, the United City of Yorkville regularly posted on its website (https://www.yorkville.il.us/811/New-Water-Source) the status of the alternatives; and

WHEREAS, the Municipalities are all committed to working together to share the system distribution costs so that the chosen water source is the least expensive option for each community; and

WHEREAS, the DuPage Water Commission has issued two Memoranda of Understanding dated June 30, 2021 and November 19, 2021 (collectively, the "Memoranda", attached hereto as Exhibit A and B, respectively) outlining the proposed terms of the Municipalities' connection to the Commission; and

WHEREAS, after reviewing the key considerations, including water quality, sustainability, costs, system reliability, operational record, and other key information and terms detailed in the Memoranda, the Mayor and City Council of the United City of Yorkville hereby declares that it is in the best interests of the City and its public health and safety to designate Lake Michigan as the United City of Yorkville's preferred water source, and the DuPage Water Commission System as the United City of Yorkville's preferred water supplier;

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, as follows:

SECTION 1. INCORPORATION OF RECITAL

That the recitals set forth above are incorporated by reference as legislative findings of fact as if fully set forth here.

SECTION 2. DESIGNATION OF PREFERRED WATER SOURCE

The Mayor and City Council hereby designate Lake Michigan as the preferred water source to supply the United City of Yorkville, and the DuPage Water Commission as the preferred water supplier for the United City of Yorkville. The Mayor and City Administrator are authorized and directed to take all necessary steps to facilitate the connection with DuPage Water Commission, including but not limited to:

A. Preparing an Intergovernmental Agreement between the Municipalities declaring the City's intention to continue to work with Montgomery and Oswego to minimize the collective cost for connecting to Lake Michigan water;
B. Assisting the DuPage Water Commission to expeditiously obtain legislative approval from the State of Illinois during the Spring 2022 legislative session, to allow the Municipalities to become members of the DuPage Water Commission;
C. Negotiating and drafting agreements with the DuPage Water Commission to facilitate the Municipalities' connection to the DuPage Water Commission's system;
D. Applying for and obtaining a Lake Michigan Water Allocation Permit from the Illinois Department of Natural Resources;
E. Developing a project financing plan; and
F. Completing all other tasks as necessary to effectuate the connection to Lake Michigan water through the DuPage Water Commission.

SECTION 3. REPEALER

All Resolutions or parts of Resolutions in conflict with any of the provisions of this Resolution shall be, and are hereby repealed.

SECTION 4. SEVERABILITY

This Resolution and every provision thereof shall be considered severable. In the event that any court of competent jurisdiction may find and declare any provision invalid, all provisions not ruled invalid shall continue in full force and effect.

SECTION 5. EFFECTIVE DATE

This Resolution shall be in full force and effect from and after its passage.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 14th day of December, A.D. 2021.

Jori Bernelard
CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
ARDEN JOE PLOCHER	AYE	CRAIG SOLING	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE	JASON PETERSON	ABSENT

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois this 14th day of December, A.D. 2021.

MAYOR

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

CLERK'S CERTIFICATE
(RESOLUTION)

I, Jori Behland, the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois, do hereby certify that I am the keeper of its books and records and that the attached hereto is a true and correct copy of a Resolution entitled:

RESOLUTION SELECTING LAKE MICHIGAN AS THE PREFERRED WATER SOURCE AND THE DUPAGE WATER COMMISION AS THE PREFERRED WATER SUPPLIER FOR THE UNITED CITY OF YORKVILLE

which Resolution was duly adopted by said City Council at a City Council meeting held on the 14th day of December 2021, approved by the Mayor on the 14th day of December 2021 and thereafter published in pamphlet form.

I do further certify, in my official capacity, that a quorum of said City Council was present at said meeting and that the Council complied with all requirements of the Illinois Open Meetings Act.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of December 2021.

Jori Behland

Jori Behland, City Clerk
United City of Yorkville

(Seal)

Exhibit C

Paul D. May and Jim Zay, Dupage Water Commission Letter

January 26, 2023

Mr. Bart Olson
City Administrator
United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

RE: DuPage Water Commission support for Lake Michigan water allocation, Montgomery, Oswego, and Yorkville (WaterLink Communities)

Dear Mr. Olson,

The DuPage Water Commission (DWC) is pleased to provide this document in support of the request for an IDNR Lake Michigan allocation made by the United City of Yorkville, in partnership with the Villages of Oswego and Montgomery (also referred to as the "WaterLink" communities).

The DuPage Water Commission is the largest wholesale water distributor of Lake Michigan water, and we value our role as stewards for this important natural resource endowed to the State of Illinois from the Supreme Court. DWC first began delivering water in 1992, and management of the transmission, distribution, and delivery of Lake Michigan diversion water is our sole mission. We are proud to maintain an infrastructure system which has very low water loss, high redundancy and resiliency, and sound financial management.

Importantly, it should be noted that despite population growth within the DWC service area and the addition of new customers, Lake Michigan water consumption for communities served by DWC has declined since the peak in 2006, despite adding 15 additional service areas. We believe this illustrates the shared commitment by the DWC and our customer communities to manage our resources in a sustainable manner and reduce the impact to Lake Michigan. In fact, it is possible for DWC to add the WaterLink communities, while still diverting less water from Lake Michigan than 20 years ago.

Following, please find a summary of considerations in support of the WaterLink communities' IDNR Water Allocation requests.

DWC Infrastructure & Capabilities:

Source Water Supply: The DWC is supplied with Lake Michigan source water from the City of Chicago, where it is treated at the James W. Jardine Purification Plant and conveyed into the tunnel system through the City of Chicago. DWC receives finished water at the Lexington Pumping Station at the west side of Chicago, where it is pumped from the 12'-diameter tunnel system into two 15-million-gallon reservoirs. The current pumping capacity of the Lexington Pumping Station is 220 MGD. The Lexington Pumping Station then conveys the drinking water to the DWC DuPage Pumping Station in Elmhurst through redundant 90" and 72" transmission mains, one on the north side of the I-290 Eisenhower Expressway, and one on the south side.

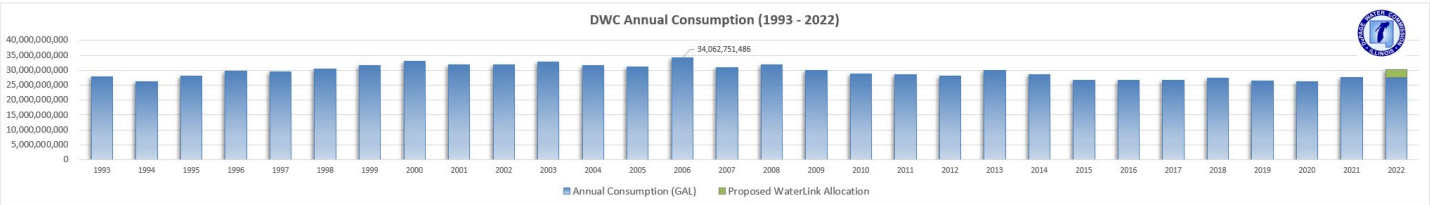
Pumping Capacity: The primary pumping operation for DuPage County is provided by the DWC DuPage Pumping Station, which includes two 15-million-gallon reservoirs and pumping capacity of 185 MGD. The station was built with the capability to add at tenth pump to increase pumping capacity to over 200 MGD. The DuPage Pumping station is powered by three Com Ed electrical feeds from independent substations and is supported by an emergency generator system capable of providing for current average day demand.

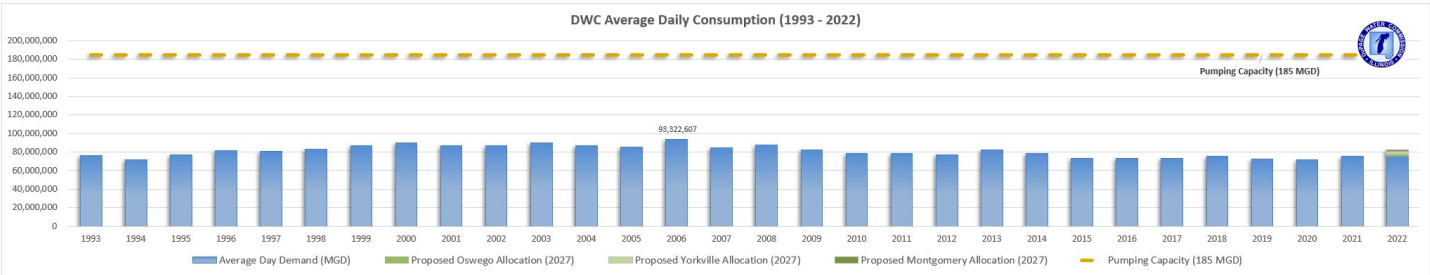
Water Storage: The DWC system has more than 90-million gallons of storage, including 60-million gallons of reservoir storage as noted above (including Lexington). Additionally, DWC maintains standpipe storage in five tanks (at four locations) throughout the County. The standpipes provide for both system storage and surge protection and 32.5 million gallons of storage is provided in the standpipes. Each DWC customer is also required to maintain storage equivalent to twice their average daily demand.

System Resiliency: The DWC pipeline infrastructure is well-designed, with significant redundancy and the ability to isolate most segments of the system without impacting service to the consumer communities. The DWC can remotely operate 34 critical valves throughout the County for this purpose. The distribution system includes 188 miles of pipeline, and 84 meter stations which contain 249 turbine meters. Each meter is tested annually, and each valve is exercised annually.

Historical Consumption & Trends: The DWC was designed and constructed based upon a forecast for growing population and increased consumption. However, during DWC's 30 years of water supply - despite growing population and an increase to the service area - total consumption has declined from a peak average day of 93 MGD in 2006 to approximately 75 MGD in recent years. Average water loss (or non-revenue water) from the DWC system has averaged less than 3% annually. It should be noted that since DWC began distributing water in 1992, the commission has increased from 23 charter customers to 29 customers, adding over 150,000 new consumers through population growth and the additional service areas.

Notably, the Village of Bartlett joined the DWC and began receiving water in 2019. As the chart below indicates, despite growth in the service area, total water delivery (diversion) has decreased and stabilized at a level of approximately 75 MGD, providing the ability to add Yorkville and the other WaterLink communities (Montgomery and Oswego), while remaining below the amount of water provided 20 years previously.





Expansion Capabilities: As noted above, the DWC is currently positioned to expand the Lake Michigan water service region without the necessity to increase water storage or pumping capabilities. Since construction of the original DWC system, several subsequent customers have been added, most recently the Village of Bartlett, which transitioned from Fox River/well water (Elgin) to Lake Michigan water in 2019 through an expansion of the DWC system. DWC continues to be considered by other communities as an alternative to surface water or well/aquifer sources.

Relative to Yorkville and the WaterLink communities, computations indicate that the existing network of DWC transmission mains are also adequate to provide the forecast 2050 flow. Therefore, the DWC infrastructure necessary to convey Lake Michigan drinking water is limited to an extension of the transmission system from the existing western DWC boundaries to the WaterLink Communities. The existing surplus pumping, storage, and conveyance capacity within the existing system reflect favorably on this alternative, as the new customers will realize the benefit of existing infrastructure which is already in service. The DWC understands that the WaterLink communities will need to address non-revenue water loss prior to receiving Lake Michigan source water; the DWC has considered this matter and is supportive of constructing the transmission main extension and allowing the WaterLink communities to commence Lake Michigan water service at different times as they come into compliance with water loss requirements.

Capital Improvement & Maintenance: DWC infrastructure is fairly new relative to long-lived infrastructure assets. Nonetheless, a multi-year Capital Improvement Plan is developed and updated annually to ensure all assets are maintained in a reliable condition, and that replacement and modification for all assets are programmed prior to the end of their expected life. DWC schedules and performs preventative maintenance on all assets in accordance with manufacturer recommendations.

Financial Position: The DWC is in an excellent financial position to support all existing activities, provide for asset maintenance and replacement, and to expand the service area in collaboration with new prospective communities. Currently, the DWC has no outstanding debt, and maintains Operating and Capital reserves greater than $200M - which meet the objectives defined by the DWC reserve policy. The current commodity cost for water from the City of Chicago is $4.33/thousand gallons, and the DWC wholesale rate to customers is $5.18, yielding a DWC operating cost of $0.85/thousand gallons. This amount funds the entire DWC operation, including funding of the Capital Program and maintenance of adequate reserves.

DWC Water Purchase and Sales Contracts:

Lake Michigan Water Purchase Contract: The DuPage Water Commission purchases commodity water from the City of Chicago in accordance with the 40-year Water Supply Contract executed on March 19, 1984, and which expires on March 19, 2024. DWC is currently engaged in negotiations with the City of Chicago to extend the contract. The Commission maintains the ability to unilaterally extend the contract under the existing terms for a period no less than 10 years, and no longer than 40 years.

DWC Water Sales Contract: The DWC Water Purchase and Sales contract was executed in 1986 and expires on February 24, 2024. Since the execution of the original contract with charter customers, several subsequent customers have been added, most recently the Village of Bartlett, which transitioned from Fox River/well water (Elgin) to Lake Michigan water in 2019 through an expansion of the DWC system. Negotiations are currently underway with the customer communities to update and extend the Water Sales Contract.

DWC & WaterLink Coordination:

DWC / Yorkville - WaterLink coordination: DWC has faithfully engaged with Yorkville and partner WaterLink communities in a productive and collaborative planning process beginning in 2017. This initiative is centered on the shared commitment to provide a more certain water future for the WaterLink communities, to ensure efficient and productive use of existing DWC infrastructure, and to maintain and enhance sustainable utilization of the Lake Michigan diversion.

Yorkville and partner WaterLink communities have earnestly considered various alternatives and have thoroughly studied and evaluated the feasibility of each. As this process has progressed, the commitment of DWC and the WaterLink communities has been formalized in several documents, including two Memoranda of Understanding issued by DWC in 2021, at which time the DWC Board of Commissioners directed DWC to engage in water supply negotiations with the WaterLink Communities. Since that time, DWC has met regularly with the WaterLink Village Managers as well as staff and consulting engineering teams to establish project milestone targets, and to discuss and prepare intergovernmental and legal documents, governance procedures, and prospective financing alternatives.

Yorkville and partner WaterLink communities will receive their full water supply from the DuPage Water Commission and will maintain storage in accordance with the City of Chicago and DWC Customer Agreement (2 days of storage). We understand that the WaterLink communities may wish to first receive water at different times and have included a staggered delivery schedule into our project planning. This approach will allow WaterLink communities to become compliant with water loss requirements.

Hydraulic Modeling: DWC has participated in water supply forecasting and hydraulic model testing for Yorkville and the WaterLink communities to determine what infrastructure is necessary to provide a reliable long-term water supply of Lake Michigan water. As noted previously, the hydraulic model indicates that existing pumping, storage, and transmission infrastructure is adequate in its current form and condition, with no additional facilities necessary to provide for 2050 forecasted flow conditions. A pipeline extension and delivery structures will be necessary to link the DWC system to Yorkville and partner communities. While a final route has not been determined, it is anticipated that a pipeline of approximately 20 miles will be necessary. Of note, CMAP 2050 forecasts indicate a generally stable water consumption forecast for existing customers, further bolstering confidence that the DWC surplus pumping and storage capacity will be more than adequate for the petitioner(s).

Construction, Agreements, and Financing: The expansion of Lake Michigan water service to Yorkville and the WaterLink communities will follow the process utilized for previous DWC Subsequent Customer Communities, most recently the Village of Bartlett in 2019. This process will include establishment of an intergovernmental agreement and funding escrow for engineering, followed by a Subsequent Customer Agreement prior to the delivery of water. Initial activities associated with drafting these agreements and establishing initial escrow requirements have commenced.

Enabling Legislation: The DuPage Water Commission operates under the IL Water Act of 1985. Our current governance structure consists of 13 commissioners, 7 of whom are appointed by the DuPage County Chairperson, and 6 of whom are appointed by the mayors of customer communities. There are 6 districts, with a County and Municipal appointee in each district, plus a chairperson appointed by the County. Since Yorkville and partner WaterLink Communities exist outside DuPage County, the IL Water Act of 1985 has been amended to permit DWC to provide water service outside of DuPage

County. This legislation provides a 7th district for areas outside the County, which will provide two additional appointees to the Board of Commissioners.

Conclusions:

The DuPage Water Commission is pleased to submit this letter in support of the United City of Yorkville's Lake Michigan water allocation request. The DWC has more than adequate capacity within our existing pumping, storage, and distribution system to provide for delivery of Lake Michigan water to the petitioner and has faithfully engaged Yorkville and partner communities to advance this project in a manner which will ensure a stable and reliable water future for their citizens. In fact, due to sound management and stewardship of water systems within DWC and existing customer communities, DWC can provide Lake Michigan water service to the WaterLink communities at a lower aggregate diversion level than existed twenty years ago. Therefore, the supply of Lake Michigan water through the DuPage Water Commission will present a favorable solution to reduce continued extraction from the Ironton-Galesville aquifer in a manner that is economically suitable, environmentally sustainable, and supports good governance among the partner organizations.

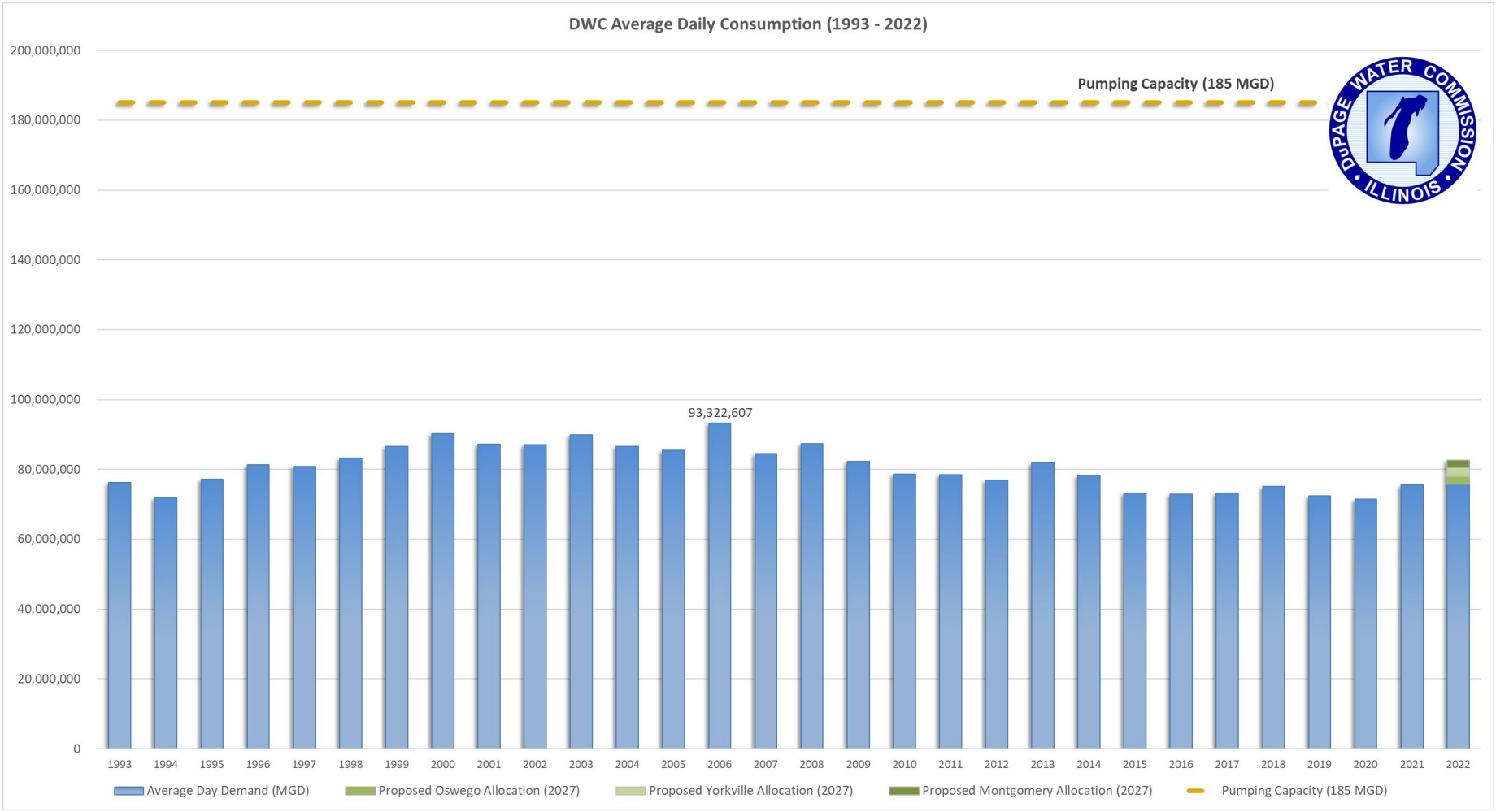
Please feel free to contact the DuPage Water Commission should you desire any additional information or have any questions.

Sincerely,

Paul D. May, P.E.
General Manager

James Zay
Chairman of the Board

CE: *Jeff Zoephel, Village of Montgomery*
Dan DiSanto, Village of Oswego
Jennifer Hughes, Village of Oswego
Eric Dhuse, United City of Yorkville
Mark Wolf, Village of Montgomery
Irene Caminer, Caminer Law
Carolyn Grieves, Baxter & Woodman
Phil Luetkehans, LBGA Law
Cheryl Peterson, DWC Financial Administrator
Chris Bostick, Manager of Water Operations
File


DWC Average Daily Consumption (1993 - 2022)
Pumping Capacity (185 MGD)
93,322,607
200,000,000
180,000,000
160,000,000
140,000,000
120,000,000
100,000,000
80,000,000
60,000,000
40,000,000
20,000,000
0
1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022
Average Day Demand (MGD)
Proposed Oswego Allocation (2027)
Proposed Yorkville Allocation (2027)
Proposed Montgomery Allocation (2027)
Pumping Capacity (185 MGD)

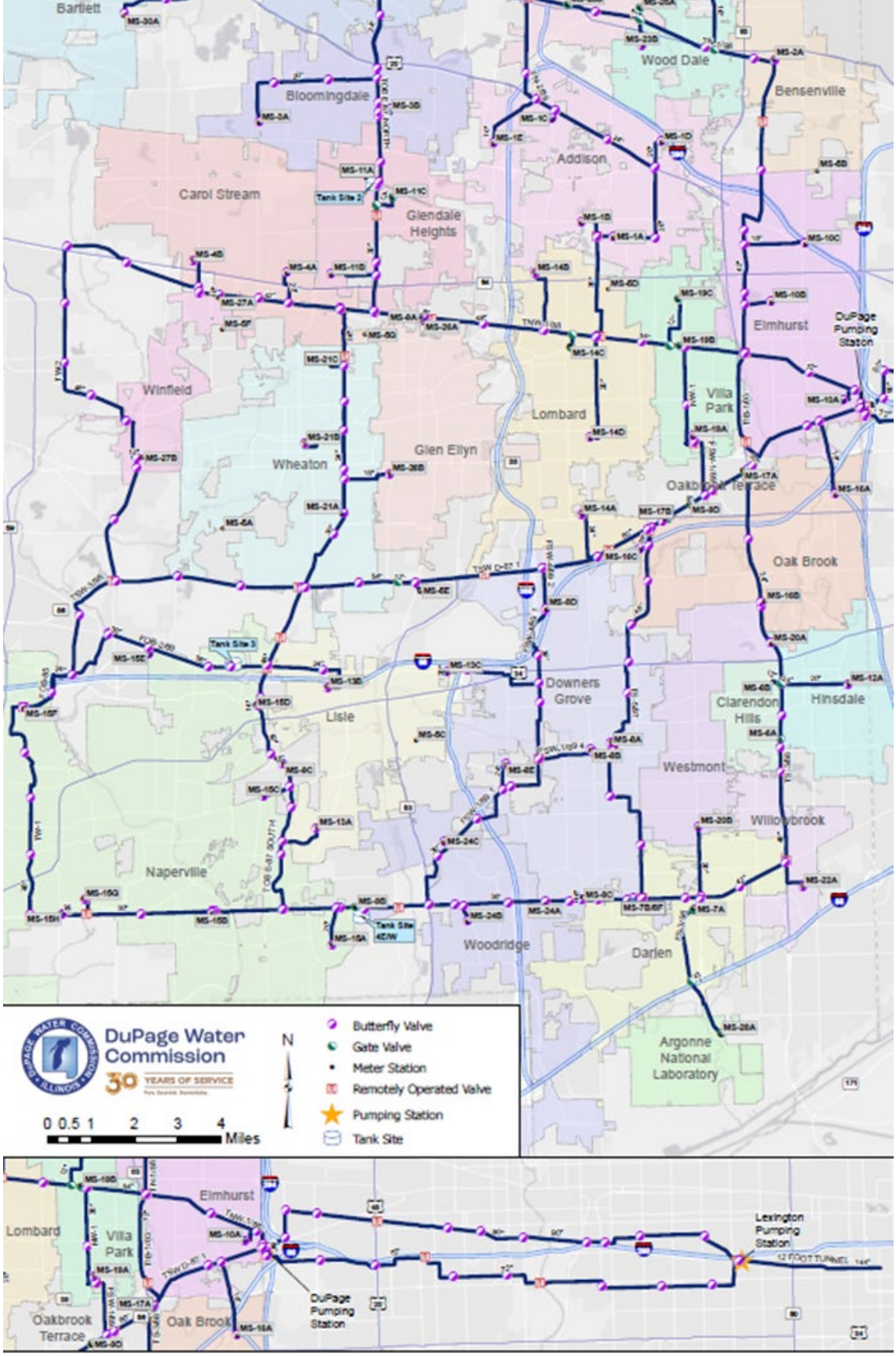

Bartlett
Bloomingdale
Carol Stream
Glendale Heights
Addison
Wood Dale
Bensenville
Elmhurst
DuPage Pumping Station
Villa Park
Lombard
Oakbrook Terrace
Oak Brook
Winfield
Wheaton
Glen Ellyn
Downers Grove
Lisle
Naperville
Clarendon Hills
Hinsdale
Westmont
Willowbrook
Woodridge
Darien
Argonne National Laboratory
Tank Site 2
Tank Site 3
Tank Site 4E/W
DuPage Water Commission
30 YEARS OF SERVICE
0 0.5 1 2 3 4 Miles
N
Butterfly Valve
Gate Valve
Meter Station
Remotely Operated Valve
Pumping Station
Tank Site
Lexington Pumping Station
12 FOOT TUNNEL

Exhibit D

Resolution Affirming The December 14, 2021 Selection Of Lake Michigan As The Preferred Water Source

Resolution No. 2023-01

RESOLUTION AFFIRMING THE DECEMBER 14, 2021 SELECTION OF LAKE MICHIGAN AS THE PREFERRED WATER SOURCE AND THE DUPAGE WATER COMMISSION AS THE PREFERRED WATER SUPPLIER FOR THE UNITED CITY OF YORKVILLE

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the "City") is a duly organized and validly existing non-home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State of Illinois; and,

WHEREAS, the United City of Yorkville, the Village of Montgomery, and the Village of Oswego, (collectively, the "Municipalities") receive their water supply from the deep aquifer; and,

WHEREAS, the Illinois State Water Survey has concluded the Deep Aquifer will be at severe risk of depletion and no longer able to meet the region's maximum daily water demand sometime between 2030 and 2050; and,

WHEREAS, since May 2021 the Municipalities by intergovernmental agreement, approved by their boards and councils, agreed to jointly work together to hire engineers, lawyers and such other professionals and experts as may be required to advise them on the advantages and disadvantages of all potential water supply sources; and,

WHEREAS, as part of the Municipalities study the alternative water supplies that were evaluated included the Key Considerations of sustainability of the water source, water quality and permitting, governance and operational responsibility, internal system improvements, timeline, and cost; and,

WHEREAS, the Municipalities jointly held a public open house on September 15, 2021 at the Grand Reserve Elementary School in Yorkville with presentation boards describing the water source alternatives and summarizing the Key Considerations for each option; and,

WHEREAS, on December 14, 2021, after thorough review and discussion, this City Council approved Resolution No. 2021-35 selecting Lake Michigan as its preferred water source supply and the DuPage Water Commission as the preferred water supplier for the United City of Yorkville (a copy of Resolution No. 2021-35 is attached and incorporated in this Resolution No. 2023-__; and,

WHEREAS, pursuant to Resolution No. 2021-35 the Mayor and City Administrator were authorized and directed to take all necessary steps to facilitate the connection with DuPage Water Commission, including but not limited to:

A. Preparing an Intergovernmental Agreement between the Municipalities declaring the City's intention to continue to work with the Village of Montgomery and the Village of Oswego to minimize the collective costs for connecting to Lake Michigan water through the DuPage Water Commission;

B. Assisting the DuPage Water Commission to expeditiously obtain legislative approval from the State of Illinois during the Spring 2022 legislative session to allow the Municipalities to become members of the DuPage Water Commission;

C. Negotiating and drafting agreements with the DuPage Water Commission to facilitate the Municipalities' connection to the DuPage Water Commission system;

D. Applying for and obtaining a Lake Michigan Water Allocation Permit from the Illinois Department of Natural Resources;

E. Developing a project financing plan;

F. Developing a plan to reduce the City's non-revenue water use;

G. Completing all other tasks as necessary to effectuate the connection to Lake Michigan water through the DuPage Water Commission.

WHEREAS, to date the Mayor and City Administrator have taken the following necessary steps to facilitate the connection with DuPage Water Commission, including but not limited to:

A. The City passed its Water Conservation Ordinance on September 28, 2021, in accordance with the requirements of the Illinois Administrative Code and the rules and regulations of the Illinois Department of Natural Resources;

B. The City along with the DuPage Water Commission, the Village of Montgomery and the Village of Oswego, obtained legislative approval from the State of Illinois during its Spring 2022 legislative session to amend The Water Commission Act of 1985, to allow the Municipalities to become members of the DuPage Water Commission;

C. The City has a pending application for a Lake Michigan Water Allocation Permit from the Illinois Department of Natural Resources;

    1) The City has attended two pre-hearing conferences with the Hearing Officer;

    2) The State of Illinois Department of Natural Resources ("IDNR") suggested to the City review and provide additional information in areas including but not limited to the following;

        i. The 2050 population projections published by the Chicago Metropolitan Agency for Planning ("CMAP") in October 2022 and its impacts on the City Non-Revenue Water Improvement Plan;

        ii. Historical Water Use

        iii. Control and Governance considerations including the City's data reporting requirements, regulation of actual water supply relative to the Lake Michigan Allocation Permit, maintaining non-revenue water below the 10% threshold, and compliance water conservation measures to reduce the impact on the Lake Michigan diversion;

iv. Further justification on the City's selection of Lake Michigan after full consideration of alternative water sources to meet and supply the City's full water needs and reduce the full reliance on the deep aquifer (except in extreme emergency)

D. The City has prepared and presented up-to-date information to the residents and businesses of the City, the Public Works Committee, and this City Council of the City's responsibilities and obligations under the IDNR laws, rules, and regulations, including the implications and modifications to the City's application for a Lake Michigan Water Allocation Permit;

E. The City continues to regularly post on its website (https://www.yorkville.il.us/811/New-Water-Source);

F. The City continues to develop a plan for internal improvements to receive water and reduce its non-revenue water use;

G. The City continues to evaluate financial options for funding internal improvements and the connection costs to the DuPage Water Commission;

H. The City is working with the Municipalities to prepare an Intergovernmental Agreement between the Municipalities to continue to work together to minimize the collective costs for connecting to Lake Michigan water;

I. The City continues negotiating and drafting agreements with the DuPage Water Commission to facilitate the Municipalities' connection to the DuPage Water Commission system;

J. The City will complete all other tasks as necessary to effectuate the connection to Lake Michigan water through the DuPage Water Commission.

WHEREAS, the Municipalities have been transparent with their residents, businesses, and elected officials and have provided and continue to provide information regarding the Key Considerations and other key information and terms; and

WHEREAS, the City further confirms and affirms its decision of December 14, 2021 in designating Lake Michigan as the preferred water source and the DuPage Water Commission System as the preferred water supplier.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. That the recitals set forth above are incorporated here by reference as findings of fact.

Section 2. The Mayor and City Council hereby continue to designate Lake Michigan as the preferred water source and the DuPage Water Commission as the preferred water supplier. The Mayor and City Administrator are authorized and directed to take all steps to implement the connection to the DuPage Water Commission:

A. Further develop plans for the internal improvements of the City's water system; and

B. Execute any Intergovernmental Agreement among the Municipalities with the intention to continue to work together to minimize the collective costs for connecting to Lake Michigan water; and

C. Work with the DuPage Water Commission to draft and approve agreements to facilitate the Municipalities' connection to the Commission's system; and

D. Obtain a Lake Michigan Water Allocation Permit from the Illinois Department of Natural Resources; and

E. Establish a project financing plan; and

F. Complete other tasks as necessary to implement and complete the connection to Lake Michigan water through the DuPage Water Commission.

Section 3. All Resolutions or parts of Resolutions in conflict with any of the provisions of this Resolution shall be and are hereby repealed.

Section 4. This Resolution and every provision thereof shall be considered severable. In the event that any court of competent jurisdiction may find and declare any provision invalid, all provisions not ruled invalid shall continue in full force and effect.

Section 5. This Resolution shall be in full force and effect from and after its passage.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 10th day of January, A.D. 2023.

CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
ARDEN JOE PLOCHER	AYE	CRAIG SOLING	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE		

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois this 12th day of January, A.D. 2023.

MAYOR

Exhibit E

Conservation Ordinance of the City Council

of the United City of Yorkville, Kendall County, Illinois

United City of Yorkville
800 Game Farm Road
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

CERTIFIED COPY AFFIDAVIT

I, Jori Behland, City Clerk, in and for the United City of Yorkville, Kendall County, State of Illinois, and Legal Custodian of the records, files and seal of said City do hereby certify that attached hereto is a full and complete copy of the original document identified as Ordinance No. 2021-18, passed by the City Council of the United City of Yorkville on September 28, 2021, entitled:

> "AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING THE YORKVILLE CITY CODE WATER USE AND SERVICE REGARDING WATER CONSERVATION PRACTICES"

Dated this 4th day of March, 2022.

Jori Behland, City Clerk

SEAL

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2021-18

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING THE YORKVILLE CITY CODE WATER USE AND SERVICE REGARDING WATER CONSERVATION PRACTICES

Passed by the City Council of the
United City of Yorkville, Kendall County, Illinois
This 28th day of September, 2021

Published in pamphlet form by the
authority of the Mayor and City Council
of the United City of Yorkville, Kendall
County, Illinois on October 7, 2021.

Ordinance No. 2021 -18

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING THE YORKVILLE CITY CODE WATER USE AND SERVICE REGARDING WATER CONSERVATION PRACTICES

WHEREAS, the United City of Yorkville (the "City") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, the City considers its long-term water supply, the importance of water conservation is critical no matter what source is utilized; and,

WHEREAS, the benefits of water conservation practices include a delayed need for infrastructure, the ability to construct smaller facilities as well as benefits to the environment.; and,

NOW THEREFORE BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1: That Title 7, Chapter 5 of the of the Yorkville City Code is hereby amended by adding Section 7-5-1, paragraph C as follows:

"*C. Repairs:*

The Public Works Department is responsible to monitor leakage and to implement corrective measures of all water storage, transmission, and distribution systems. The Director of Public Works shall cause to be repaired all breakdowns in the water treatment facilities and all breaks or leaks in the water system of the City. When breaks or leaks cannot be readily repaired by employees of the Department, the Director of Public Works shall prepare a report of the necessary repairs to be made by contract."

Section 2: That Title 7, Chapter 5 of the Yorkville City Code is hereby amended by adding the following language to Section 7-5-15 Water conservation regulations:

"*The Public Works Department is authorized to develop and implement public programs to encourage efficient water use by all customers, both residential and commercial/industrial.*"

Section 3: That Title 7, Chapter 5 of the Yorkville City Code is hereby amended by adding Section 7-5-15, paragraph J, 5. And Section7-5-15, K. as follows:

"*5. New/replacement sprinkler systems shall be equipped with a WaterSense labeled irrigation controller and shall be in compliance with section 2.5(g) if the Illinois Plumbing License Law [225 ILCS 320].*

K. Additional Conservation Regulations for Non-Residential Customers

1. Plumbing Fixture and Fixture Fittings: plumbing fixtures and fittings in all new and remodeled construction must be labeled WaterSense product, as specified by the United States Environmental Protection Agency. In all new construction and in all repairs or replacement of fixtures in lavatories intended for public use, the faucets of such lavatories located in rest rooms intended for public use shall be of metering or self-closing type.

2. Water recycling systems in commercial car wash facilities: All new and remodeled commercial car-wash installations shall be equipped with a water recycling system.

3. Air conditioning systems: All new and remodeled installations of air conditioning shall be closed system only."

Section 4: This Ordinance shall be in full force and effect upon its passage, approval, and publication as provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 28th day of September, 2021.

Jari Bernard
CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
JACKIE MILSCHEWSKI	AYE	ARDEN JOE PLOCHER	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE	JASON PETERSON	AYE

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois this 5th day of October, A.D. 2021.

MAYOR

Exhibit F

City of Yorkville's Water Conservation Public Outreach

2022 Yorkville Minute Newsletter Water Articles:
July 1, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/175204
June 15, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/173758
May 16, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/171438
April 16, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/57275
April 1, 2022: https://www.yorkville.il.us/Admin/CivicSend/ViewMessage/Message/56326
Home Spotlight News on City's Main Webpage:
April 1, 2022 – April 30, 2022:

Title:
National Mayor's Challenge for Water Conservation, April 1 - 30

Brief Description:
Mayor Purcell is joining mayors across the country in asking residents to make a long-term commitment to manage water resources more wisely by taking part in the annual Wyland National Mayor's Challenge for Water Conservation.

Link Text:
Read on...

Complete Text:
The annual challenge, April 1- 30, is a non-profit national community service campaign to see which leaders can best inspire their residents to make a series of informative and easy-to-do online pledges to use water more efficiently, reduce pollution, and save energy. To participate, residents enter online at mywaterpledge.com.

Image:
8174

Image Alt Text:
NMC Poster 1

Image Alignment:
right

Alternate Link:
https://mywaterpledge.com/

May 10, 2022 – August 31, 2022:

Title:
Water Use Restrictions May - September

Brief Description:
As a reminder during May-September, watering is only permitted between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight for landscaping watering or the filling of swimming pools.

Link Text:
Read on...

Complete Text:
In addition, even-numbered addresses may only water on even-numbered calendar days and odd-numbered addresses may only water on odd-numbered calendar days. To view the entire Water Conservation Ordinance and for more information click on "Additional Info" below.

Image:
5978

Image Alt Text:
swim-ring-84625_640

Image Alignment:
right

Alternate Link:
http://www.yorkville.il.us/211/Watering-Restrictions

June 23, 2022 – July 8, 2022:

Title:
Flash Drought - Water Restrictions IN PLACE

Brief Description:
During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight during even/odd days resectively. The Sod Ban will also start immediately.

Link Text:
Read on...

Complete Text:
Our area is experiencing a flash drought -https://www.drought.gov/drought-status-updates/drought-status-update-midwest-6-16-22. During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight as follows:

- Even-numbered addresses on even-numbered calendar days only during permitted hours of water use
- Odd-numbered addresses on odd-numbered calendar days only during permitted hours of water use

City staff will be touring the City during this flash drought to make sure residents are in compliance and the City's water supply is stable.
The following is NOT restricted as to the hours or days when water may be used:

- Landscape watering or sprinkling done by the use of a hand-held watering device
- The filling of swimming pools with a volume of 50 gallons or less of water
- The automatic watering of trees and shrubs by means of automatic root-feed or drip-irrigation systems within the drip line of the tree or shrub
- Vehicle and equipment washing

The laying of new lawns or landscaping is not permitted between Jul 1 - August 31. **However, because of the flash drought the Sod Ban will start immediately.**
For more information on the water conservation ordinance and water restrictions, including the sod ban, please visit: https://www.yorkville.il.us/211/Watering-Restrictions?fbclid=IwAR1TX22LY5WpH2rXgWXKEv7LMlZOncpsgl5go_D_VYw2X3PqPS9qPAbSeNU

City Website Information:
https://www.yorkville.il.us/826/Lead-and-Drinking-Water
https://www.yorkville.il.us/207/Water-Wastewater
https://www.yorkville.il.us/811/New-Water-Source
https://www.yorkville.il.us/DocumentCenter/View/7983/Water-Study-Presentation-September-28-2021
https://www.yorkville.il.us/181/Utility-Billing-Rates

https://www.yorkville.il.us/211/Watering-Restrictions
https://www.yorkville.il.us/184/Annual-Drinking-Water-Quality-Report
https://storymaps.arcgis.com/stories/a37ba39c82074b88ab19bbb11847ff3b
Social Media:



United City of Yorkville
Published by Erin Royer Willrett · July 25, 2022 ·

A friendly reminder that sod laying, lawn seeding, and the planting of other landscaping for the establishment of a new lawn or new landscaping is prohibited from July 1st through August 31st of each year, unless the source of watering for said sod, lawn seeding and/or planting of landscaping is derived from a private well, imported water source or means other than any municipal water source. For more information, including a sod watering permit, please visit: https://www.yorkville.il.us/211/Watering-Restrictions



United City of Yorkville
Published by Erin Royer Willrett · July 1, 2022 ·

A friendly reminder that sod laying, lawn seeding, and the planting of other landscaping for the establishment of a new lawn or new landscaping is prohibited from July 1st through August 31st of each year, unless the source of watering for said sod, lawn seeding and/or planting of landscaping is derived from a private well, imported water source or means other than any municipal water source. For more information, including a sod watering permit, please visit: https://www.yorkville.il.us/211/Watering-Restrictions



United City of Yorkville
Published by Erin Royer Willrett · June 28, 2022 ·

Our area is experiencing a flash drought - https://www.drought.gov/.../drought-status-update-midwest.... During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight as follows:
• Even-numbered addresses on even-numbered calendar days only during permitted hours of water use
• Odd-numbered addresses on odd-numbered calendar days only during permitted hours of water use
City staff will be touring the City during this flash drought to make sure residents are in compliance and the City's water supply is stable.

The following is NOT restricted as to the hours or days when water may be used:
• Landscape watering or sprinkling done by the use of a hand-held watering device
• The filling of swimming pools with a volume of 50 gallons or less of water
• The automatic watering of trees and shrubs by means of automatic root-feed or drip-irrigation systems within the drip line of the tree or

United City of Yorkville
Published by Erin Royer Willrett · June 26, 2022 ·

Our area is experiencing a flash drought - https://www.drought.gov/.../drought-status-update-midwest.... During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight as follows:
• Even-numbered addresses on even-numbered calendar days only during permitted hours of water use
• Odd-numbered addresses on odd-numbered calendar days only during ... See more



United City of Yorkville
Published by Erin Royer Willrett · June 25, 2022 ·

Our area is experiencing a flash drought - https://www.drought.gov/.../drought-status-update-midwest.... During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight as follows:
• Even-numbered addresses on even-numbered calendar days only during permitted hours of water use
• Odd-numbered addresses on odd-numbered calendar days only during ... See more



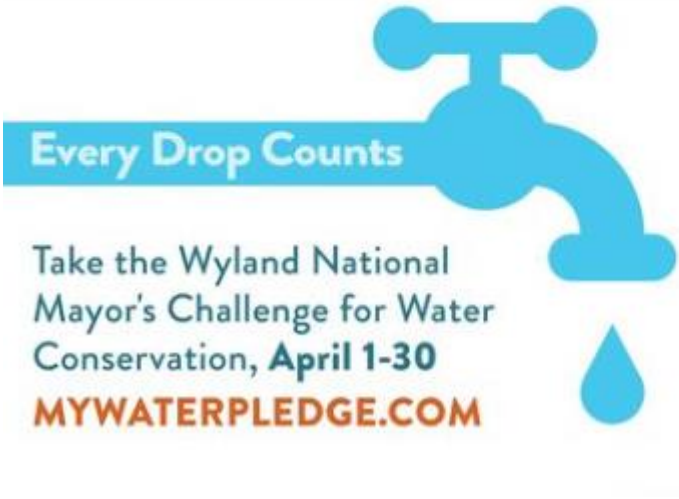
United City of Yorkville
Published by Erin Royer Willrett · June 23, 2022 ·

Our area is experiencing a flash drought - https://www.drought.gov/.../drought-status-update-midwest.... During this time, we remind all residents that automatic sprinkling or automatic watering systems is allowed ONLY between the hours of 5 and 9 a.m. and/or 9 p.m. and midnight as follows:
• Even-numbered addresses on even-numbered calendar days only during permitted hours of water use
• Odd-numbered addresses on odd-numbered calendar days only during ... See more


United City of Yorkville
Published by Erin Royer Willrett · April 30, 2022 ·
Last day to enter! It's free and only takes 1 minute. Make your pledge to conserve water and save energy during Earth Month and you can win $3,000 toward your annual utility bills, water saving fixtures, and hundreds of prizes. Enter at https://mywaterpledge.com/
Every Drop Counts
Take the Wyland National Mayor's Challenge for Water Conservation, April 1-30
MYWATERPLEDGE.COM

United City of Yorkville
Published by Erin Royer Willrett · April 26, 2022 ·

The City of Yorkville is taking part in the National Mayor's Challenge for Water Conservation. We need your help to make our city the most water wise in the nation. Take 1 minute out of your day and go to https://mywaterpledge.com/. You will not only be helping our city win but also helping us do our part in protecting our planet. @wylandfoundation



United City of Yorkville
Published by Erin Royer Willrett · April 22, 2022 ·

Happy Earth Day! It's free and only takes 1 minute. Make your pledge to conserve water and save energy during Earth Month and you can win $3,000 toward your annual utility bills, water saving fixtures, and hundreds of prizes.
https://www.mywaterpledge.com/ @wylandfoundation



United City of Yorkville
Published by Erin Royer Willrett · April 20, 2022 ·

Save water. Save the Planet! It's FREE, Take the Mayor's Challenge for Water Conservation April 1-30 at https://www.mywaterpledge.com/



United City of Yorkville
Published by Erin Royer Willrett · April 14, 2022 ·

Did you know? It takes water to make energy. Reducing energy use by just 10% could save 600 gallons of water a year- and $150 in energy bills! How will you save energy and water this month? One way is to go to https://www.mywaterpledge.com/



United City of Yorkville
Published by Erin Royer Willrett · April 11, 2022 ·

April is Earth Month! Need suggestions of what you can do? Go to https://www.mywaterpledge.com/ and start to conserve water and energy to win prizes like $3,000 toward your Home Utility Bills, home improvement gift cards, irrigation controllers, and more. Plus, one lucky charity will receive a 2022 Toyota Highlander Hybrid vehicle to serve the community. It's free and only takes a minute. The residents in the cities that have the most participation are eligible to win. Take t...
See more



United City of Yorkville
Published by Erin Royer Willrett · April 9, 2022 ·

Join Mayor Purcell in reducing Yorkville's water consumption and energy usage and help Yorkville win the title of the "Most Water Wise" in the nation. You not only help our planet but if your city wins you are entered to win great prizes.
https://www.mywaterpledge.com/



United City of Yorkville
Published by Erin Royer Willrett · April 5, 2022 ·

Join us celebrating Earth Month by taking part in the National Mayor's Challenge for Water Conservation April 1-30, and tell us ways you plan on saving water, energy, and more. It only takes a minute. Remember EVERY DROP COUNTS at https://www.mywaterpledge.com/
@wylandfoundation





Water Conservation Ordinance:

- 7-5-15: - Water conservation regulations:



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
2023 Yorkville S&P Ratings Report

File Name:
C.4_2023 Yorkville S&P Ratings Report

Description:
S&P Rating on the United City of Yorkville's 2023A Alternaticve Revenue Source Bond Issuance.

August 2024

S&P Global
Ratings

RatingsDirect®

Summary:

Yorkville, Illinois; General Obligation

Primary Credit Analyst:
Joseph Vodziak, Chicago + 1 312 233 7094; joseph.vodziak@spglobal.com

Secondary Contact:
Helen Samuelson, Chicago + 1 (312) 233 7011; helen.samuelson@spglobal.com

Table Of Contents

Credit Highlights

Outlook

Credit Opinion

Related Research

Summary:

Yorkville, Illinois; General Obligation

Credit Profile		
US$9.265 mil GO bnds (alt rev source) ser 2023A due 12/30/2053		
Long Term Rating	AA/Stable	New

Credit Highlights

- S&P Global Ratings assigned its 'AA' rating to Yorkville, Ill.'s approximately $9.3 million series 2023A general obligation (GO) alternate revenue source bonds.
- At the same time, S&P Global Ratings affirmed its 'AA' rating on the city's existing GO debt.
- The outlook is stable.

Security

The 2023A bonds are secured by the city's net water system revenue, "places for eating" sales taxes, and, to the extent these are insufficient, by its full faith and credit, unlimited-tax GO pledge. The bond ordinance requires pledged revenue be deposited to the bond fund prior to the abatement of the ad valorem property tax levy securing the bonds. Although the bonds are secured by various pledged revenues, the rating reflects our assessment of the GO pledge because the bond provisions are insufficient to rate these revenue streams pursuant to our criteria. Officials plan to use proceeds to make improvements to the city's water utility system.

Credit overview

With careful budgetary practices, Yorkville has consistently maintained balanced operating results after transferring excess revenue to capital funds for future outlays. Recent results have been very strong because of the expanding tax base and higher-than-anticipated development fees along with cyclical revenue exceeding expectations. The city projects fiscal 2023 ended with another breakeven operating result with a significant transfer to capital project funds. The fiscal 2024 budget has cyclical revenue assumptions that we believe are conservative, which combined with other budgetary flexibility built into line-items like capital outlay transfers, will allow Yorkville to maintain very strong operating results.

Credit fundamentals supporting the 'AA' rating include Yorkville's:

- Strong and expanding economy, with access to the broad and diverse Chicago metropolitan statistical area (MSA);
- Strong management, with good financial policies and practices under our Financial Management Assessment (FMA) methodology and a strong institutional framework score;
- Very strong budgetary performance, budgetary flexibility, and liquidity reflecting the city's planning efforts, expenditure control, and conservative revenue assumptions; and
- Very weak debt and contingent liability profile, because of growth-related capital needs and a poorly funded police pension plan.

Environmental, social, and governance

We view Yorkville's environmental, social, and governmental (ESG) risks as neutral within our credit rating analysis.

Outlook

The stable outlook reflects our expectations that economic growth will continue given population trends, and Yorkville will maintain at least strong operating results, stable reserves, and a manageable debt and contingent liability profile.

Downside scenario

We could consider lowering the rating if sustained budgetary performance weakness develops, particularly if planned debt requires more support from governmental funds than anticipated, or reserves are drawn down to levels no longer commensurate with the current rating.

Upside scenario

A higher rating would be warranted if the city experienced sustained improvement in its economic metrics and made progress in reducing its unfunded pension obligations.

Credit Opinion

Strong economy with one of the fastest growing populations in the state

The city is the seat of Kendall County and is located 45 miles southwest of Chicago and 18 miles southwest of Naperville. Before the 2008 recession, it experienced significant equalized assessed value (EAV) growth and after the recession, significant EAV declines. Because of the pre-2008 growth, much of the necessary infrastructure for new developments is already in place. EAV stabilized in levy year 2015 and has been rising steadily ever since, with 8% average annual growth over the past five years. Officials reports that Yorkville issued the largest number of construction permits in its history in 2021 and that 2023 is matching that pace.

Kendall County's population has been rising steadily and officials report that Yorkville's population is one of the fastest growing in the state. We believe this growth will continue due to affordable housing and the commercial, industrial, and office developments in this region of the MSA.

Strong institutional framework and good management practices and policies

The city's practices and policies that we assess under our FMA criteria include:

- Conservative budgetary assumptions with the use of historical trends and external information;
- Monthly budget to actual financial reports shared with the city council that are used to address unexpected variances;
- Inclusion in every budget of four additional years of financial projections to identify and proactively address budget pressures;
- A rolling five-year capital plan that is updated at least annually with costs and funding sources identified;
- A formal investment policy that requires quarterly investment reports shared with the council; and
- A formal fund balance policy set to hold 30% of expenditures for financial stability and cash flow purposes.

Very strong budgetary performance, budgetary flexibility, and liquidity due to growth, planning, and oversight

During the past eight fiscal years, Yorkville has maintained balanced operating results. Results have been supported by an expanding tax base and careful budgetary practices. Recently, the city has benefited from stronger-than-anticipated cyclical state-shared revenue like sales and income taxes, which have led to very strong budgetary results. Yorkville has been transferring excess surpluses to capital project funds to fund capital improvements and reduce borrowing needs. Although we expect growth in cyclical revenue to moderate, we do not expect budgetary difficulty to arise, as the city understands these revenues are cyclical and it uses conservative assumptions for them. In addition, the city has a practice of not including new revenue streams in its budget until it has established a track record of what it can expect. Even if there is some cyclical moderation, we expect sales, income, and other similar revenue will keep increasing, given the expanding population and tax base, changes to online sales taxes, and the city's new "places for eating" sales tax.

Fiscal 2023 is projected to have ended with a breakeven result after transferring out more than $7.5 million. Although some of these transfers are recurring transfers that we consider normal operating costs, a large portion of them is driven by stronger-than-anticipated results with excess reserves being moved to capital project funds. The 2024 adopted budget includes 5.7% less in revenue than what is projected for fiscal year-end 2023. Year-to-date, we believe some of the cyclical revenue that led to the very strong results in recent years has moderated but that with its tax base and population growth, the city should be able capture, if not exceed, its budgeted revenue estimates. At the same time, we expect the ongoing oversight and control on expenditures will result in very strong results.

We adjusted the city's 2022 available fund balance to reflect a $2.8 million receivable in the general fund from tax increment financing district funds, because it isn't expected to be repaid soon. Based on fiscal 2023 expected results and 2024 budget, we expect reserves will remain very strong.

The city had $30.1 million in available cash at April 30, 2022. It has a series 2022 privately placed GO alternate revenue source bond outstanding with no extraordinary events of default or remedies. There is a promissory note for vehicle and equipment purchases with a balance of $360,918 outstanding that includes an adverse change event of default and acceleration of principal and interest in the event of default. Given the size of this obligation, we do not consider it to be a liquidity risk.

Very weak debt and contingent liability profile due to growth-driven capital needs and a poorly funded pension plan

Our net direct debt figure of $26.4 million excludes $4.9 million of debt that is supported by revenue and enterprise funds. The city is discussing building a new public works facility. The estimated cost is approximately $20 million-$40 million; the city expects to fund a portion of this with bond proceeds and also has plans for street resurfacing projects that it will fund with $5 million-$10 million of bond proceeds. We included $37.5 million, the mid-amount of each estimate, of additional debt plans into the city's debt metrics. Should both projects be funded at the upper range of these estimates, we do not expect a material change to the debt profile would occur.

Yorkville has entered into an intergovernmental agreement with neighboring cities to join the DuPage Water Commission for water access. The 2023A bonds are funding improvements to the city's water system to meet commission requirements. The total cost for this project is estimated to be between $300 million and $400 million with

each city responsible for a portion of the cost. The project will mostly be funded through Water Infrastructure Finance and Innovation Act loans. With fewer than 25,000 water users, the city would be eligible for 80% of the loan to be covered by the federal government subsidies. This debt is expected to have a GO alternate revenue source backing. Considering the city proactively adjusting water rates and the federal support, we do not expect this debt will put a material strain on the city's budget.

Although not rated by S&P Global Ratings, the series 2007 sales tax revenue bonds, series 2007 business district revenue bonds, and the series 2005 special service area tax bonds missed payments to bondholders as pledged revenue fell short of forecasts. The city includes this debt in its annual financial statements and provided notices to bondholders of the missed payments. It has demonstrated active debt management by working to make payments in arrears, stay current on interest payments, and cure the default on these obligations by working with developers to increase activity and revenue in these districts. Therefore, we do not believe the missed payments on these bonds indicate management has an unwillingness to support debt obligations.

Pension and other postemployment benefits liabilities

In our opinion, a credit weakness is Yorkville's large unfunded police pension obligation, without a plan in place that we believe will sufficiently address the obligation in the near term. Although the city funds to actuarial recommendations that are more stringent than the statutory requirements, some of the assumptions used in the police plan continue to defer costs and funding progress.

Yorkville contributes to the following plans:

- The police pension plan: a single-employer plan that was 53.6% funded as of April 30, 2022, with a net pension liability of $12.5 million (calculated using a 7.0% discount rate);
- The Illinois Municipal Retirement Fund: an agent plan that is 111% funded (Dec. 31, 2021), with a net pension asset of $1.9 million; and
- A single-employer health care plan that retirees can remain on at their own cost, resulting in an implicit rate subsidy equal to $1.1 million (April 30, 2022) using a 3.4% discount rate.

Contributions to the poorly funded police plan were 86% of our minimum funding progress metric in 2022. For more information regarding our views on the plan's assumptions and methodologies, see "Pension Brief: Single-Employer Pension Plans Are Straining Illinois Municipalities' Credit Quality," published July 27, 2021, on RatingsDirect.

Yorkville, Illinois -- key credit metrics

	Most recent	Historical information		
		2022	2021	2020
Strong economy				
Projected per capita EBI % of U.S.	96			
Market value per capita ($)	97,521			
Population			21,540	20,981
County unemployment rate(%)		4.0		
Market value ($000)	2,100,594	1,884,030	1,748,088	1,660,737
Ten largest taxpayers % of taxable value	4.0			

Yorkville, Illinois -- key credit metrics (cont.)

	Most recent	Historical information		
		2022	2021	2020
Very strong budgetary performance				
Operating fund result % of expenditures		8.2	9.2	4.0
Total governmental fund result % of expenditures		13.8	9.4	1.7
Very strong budgetary flexibility				
Available reserves % of operating expenditures		42.8	35.0	29.8
Total available reserves ($000)		7,636	6,305	4,777
Very strong liquidity				
Total government cash % of governmental fund expenditures		111	61	61
Total government cash % of governmental fund debt service		1361	752	671
Strong management				
Financial Management Assessment	Good			
Very weak debt & long-term liabilities				
Debt service % of governmental fund expenditures		8.2	8.2	9.1
Net direct debt % of governmental fund revenue	86			
Overall net debt % of market value	3.4			
Direct debt 10-year amortization (%)	55			
Required pension contribution % of governmental fund expenditures		6.5		
OPEB actual contribution % of governmental fund expenditures		0.3		
Strong institutional framework				

EBI--Effective buying income. OPEB--Other postemployment benefits. Data points and ratios may reflect analytical adjustments.

Related Research

Through The ESG Lens 3.0: The Intersection Of ESG Credit Factors And U.S. Public Finance Credit Factors, March 2, 2022

Ratings Detail (As Of June 28, 2023)

United City of Yorkville GO (MBIA) (National)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
United City of Yorkville GO (SYNCORA GTY)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Yorkville GO (AGM)		
Unenhanced Rating	AA(SPUR)/Stable	Affirmed
Yorkville GO		
Long Term Rating	AA/Stable	Affirmed
Yorkville GO		
Long Term Rating	AA/Stable	Affirmed

Ratings Detail (As Of June 28, 2023) (cont.)		
Yorkville GO		
Long Term Rating	AA/Stable	Affirmed
Yorkville GO		
Long Term Rating	AA/Stable	Affirmed
Many issues are enhanced by bond insurance.		

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
FY 2023 Yorkville Annual Comprehensive Financial Report

File Name:
C.5a_FY 2023 Yorkville Annual Comprehensive Financial Report

Description:
Year-end audited financial statements for the United City of Yorkville for 2023.

August 2024

Annual Comprehensive Financial Report
Fiscal Year Ended April 30, 2023



UNITED CITY OF YORKVILLE

651 Prairie Pointe Drive
Yorkville, IL 60560
(630)553-4350

www.yorkville.il.us

UNITED CITY OF YORKVILLE,
ILLINOIS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED
APRIL 30, 2023

Prepared by:

Rob Fredrickson
Director of Finance

UNITED CITY OF YORKVILLE, ILLINOIS

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INTRODUCTORY SECTION

This section includes miscellaneous data regarding the City including: List of Principal Officials, Organization Chart, Transmittal Letter and the Certificate of Achievement for Excellence in Financial Reporting.

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Officials

Fiscal Year Ended April 30, 2023

EXECUTIVE

Mayor: John Purcell

LEGISLATIVE

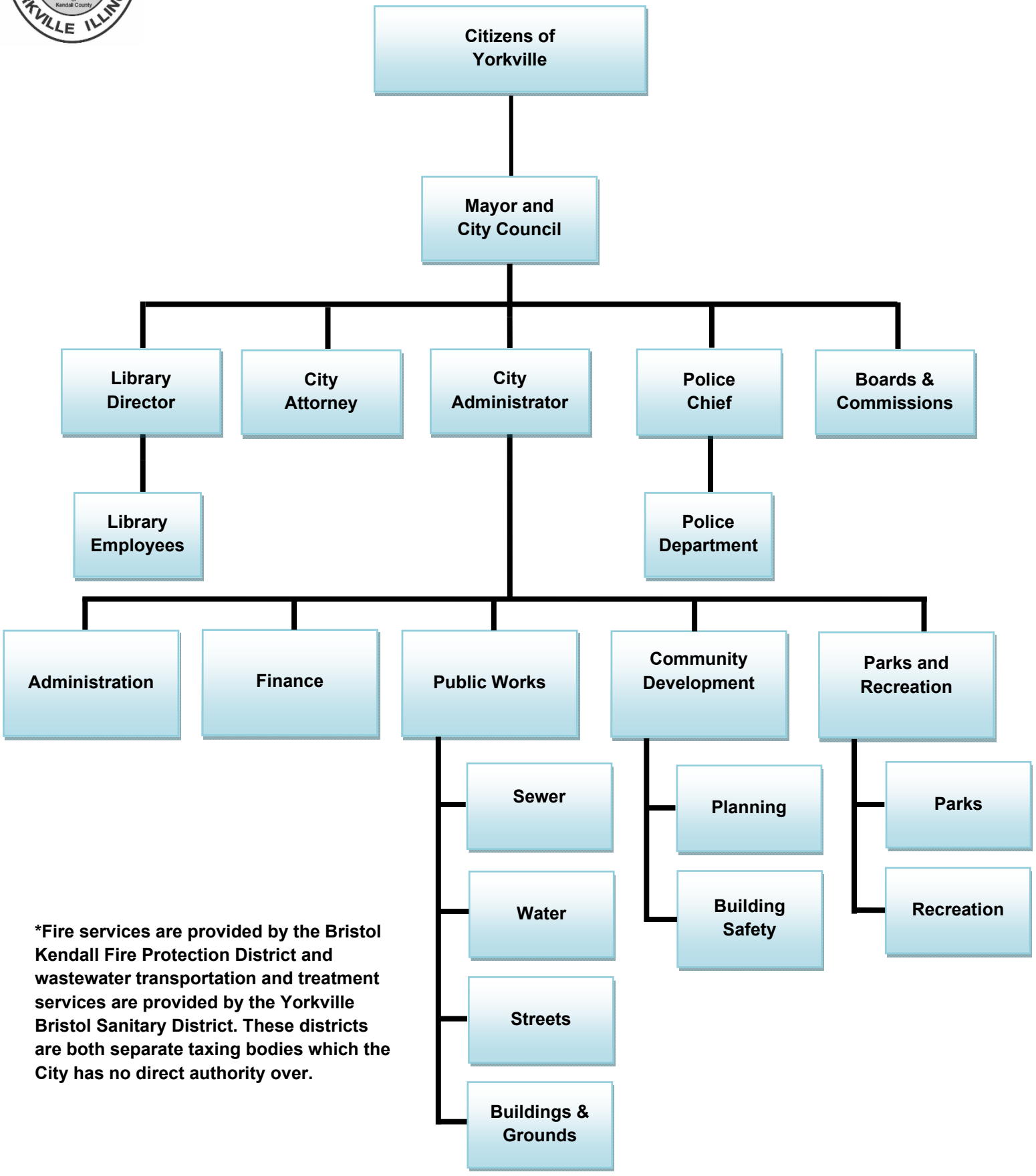
Ward 1:	Dan Transier, Alderman
Ward 1:	Ken Koch, Alderman
Ward 2:	Craig Soling, Alderman
Ward 2:	Arden Joe Plocher, Alderman
Ward 3:	Matt Marek, Alderman
Ward 3:	Chris Funkhouser, Alderman
Ward 4:	Seaver Tarulis, Alderman
Ward 4:	Rusty Corneils, Alderman

ADMINISTRATION

City Administrator:	Bart Olson
Director of Finance/Treasurer:	Rob Fredrickson
Director of Public Works:	Eric Dhuse
Chief of Police:	Jim Jensen
Director of Community Development:	Krysti Barksdale-Noble
Director of Parks & Recreation:	Tim Evans
Library Director:	Shelley Augustine
Assistant City Administrator:	Erin Willrett
City Clerk:	Jori Behland

United City of Yorkville

Fiscal Year 2023 Organization Structure



*Fire services are provided by the Bristol Kendall Fire Protection District and wastewater transportation and treatment services are provided by the Yorkville Bristol Sanitary District. These districts are both separate taxing bodies which the City has no direct authority over.

United City of Yorkville

651 Prairie Pointe Drive
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October 12, 2023

To The Honorable John Purcell, Mayor
Members of the City Council
Citizens of Yorkville, Illinois

The Annual Comprehensive Financial Report of the United City of Yorkville, Illinois, for the Fiscal Year ended April 30, 2023, is hereby submitted. The submittal of this report complies with Illinois state law which requires that the City issue a report on its financial position and activity presented in conformance with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted auditing standards (GAAS) by an independent firm of licensed certified public accountants.

This report consists of management's representations concerning the finances of the City. Consequently, responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with management. We believe the data, as presented, is accurate in all material respects; and is presented in a manner designed to fairly set forth the financial position of the United City of Yorkville. The results of operations as measured by the financial activity of its various funds; and all disclosures necessary to enable the reader to gain a reasonable understanding of the City's financial affairs have been included.

The City's financial statements have been audited by Lauterbach & Amen LLP, a firm of licensed certified public accountants. The goal of the independent audit is to provide reasonable assurance that the financial statements of the United City of Yorkville for the fiscal year ended April 30, 2023, are free of material misstatements. The independent audit involves examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluation of the overall financial statement presentation. The independent auditors concluded, based upon their audit procedures, that there was a reasonable basis for rendering an unmodified ("clean") opinion that the City's financial statements for the fiscal year ended April 30, 2023, are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

This report includes all funds of the City (primary government), including the Yorkville Public Library and Parks and Recreation Department, and its pension trust fund, the Yorkville Police Pension Fund. The Police Pension was determined to be a pension trust fund due to its fiduciary and fiscal relationship with the City, as its singular purpose is to provide retirement benefits to the City's sworn police officers. The City does not have any other reporting units that would qualify as a discretely presented component unit in the separate column of the government-wide financial statements.

Generally accepted accounting principles require that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This transmittal letter is designed to complement the MD&A and should be read in conjunction with it. The City's MD&A can be found immediately following the report of the independent auditors.

Profile of the United City of Yorkville

Yorkville was first settled in 1833 and has been the county seat of Kendall County since 1859. The Village of Yorkville was incorporated in 1874, with a population of approximately 500 people. At that time, the Village of Yorkville only encompassed land on the south side of the Fox River; another village, called Bristol, was located directly across from Yorkville on the north side of the river. In 1957 the two villages merged, via referendum, to form the United City of Yorkville. The City, a non-home rule community as defined by the Illinois Constitution, covers approximately 22 square miles with a 2020 census population of 21,533 residents. The City is located in central Kendall County, about 45 miles southwest of Chicago, Illinois. The City is primarily agricultural and residential in nature, with housing stock consisting of approximately 7,930 single family (includes townhomes, condominiums and duplexes) dwelling units.

The City operates under a Mayor/Council form of government, as defined in Illinois State Statutes. The legislative authority of the City is vested in an eight-member council, each elected from their respective wards to overlapping four-year terms. The Mayor is elected at large to a four-year term. The Mayor appoints, with Council consent, a City Administrator to manage the day-to-day operations of the City.

The City provides a full range of municipal services with 93 full-time, and 57 part-time employees working in public safety, public works (including water distribution and sewer services), community development, building and zoning, parks and recreation, library services and general administration. The City maintains approximately 140 lane miles of streets, 240 acres of green space and 155 acres of natural and wooded areas at 42 locations. Solid waste collection and recycling services are administered by the City through a contract with a private firm. Sewage treatment and fire protection services are provided by the Yorkville Bristol Sanitary District and the Bristol Kendall Fire Protection District; both of which are independent units of government.

The Yorkville Public Library is operated under an appointed board, which is separate from the City Council. Library Board positions are appointed by the Mayor and expire on a rotating basis. Library operations are administered by the Library Board; however, the City is required by state statute to include within its property tax levy and budget, the Library's requests. The Library does not have authority to issue debt and must do so through the City.

Accounting System and Budgetary Control

Management of the United City of Yorkville is responsible for establishing and maintaining an internal control structure. The internal control structure is designed to ensure that the assets of the City are protected from loss, theft or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. This structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

In addition, the United City of Yorkville maintains budgetary controls. The objective of these budgetary controls is to ensure compliance with legal provisions embodied in the annual appropriated budget approved by the City's governing body. Activities of the general fund, special revenue funds, capital project funds, debt service funds and enterprise funds are included in the annual appropriated budget. The level of budgetary control (that is, the level at which expenditures cannot legally exceed the appropriated amount) is established at the fund level for all budgeted funds. The budget process begins in the fall when department heads begin to prepare line-item budgets for their respective departments for the upcoming fiscal year, before submitting them to the City Administrator and Finance Director. Throughout the fall and winter, the proposed budgets from each department are discussed and revisions are made based on the projected financial outlook and priorities of the City. A draft budget is then prepared and presented to City Council in February or March. A public hearing is required to be held on the budget prior to formal adoption by City Council. The annual budget must be adopted before May 1st, which is the beginning of the City's fiscal year.

Local Economy

Yorkville is home to several large and midsized manufacturers and retailers including the Wm. Wrigley Jr. Company, Boombah, Inc., Newlywed Foods, Jewel/Osco, Target, Kohl's, Home Depot and Menards. It is also home to Raging Waves, Illinois largest water park. The City's administrative staff, in conjunction with its economic development consultant, continues to work on attracting and retaining commercial and industrial business to Yorkville.

Over the course of the current fiscal year, a total of 1,553 building permits were issued by the United City of Yorkville. This includes 33 new commercial buildout/construction/remodeling permits comprising such new businesses as Scooter's Coffee, a drive-through beverage and coffee shop located at the southeast corner of Illinois Route 126 and Illinois Route 47; Craft'd, a new family-styled American eatery, located at 2075 Marketplace Drive; Fox Valley Orthopedics, a medical and physical therapy clinic, which began an interior renovation of a 11,600 square foot space at 1500 Sycamore Road; and Viva La Funny, a novelty gift shop and fashion clothing retailer located at 145 East Veterans Parkway. In addition, Kendall County started construction of a new 4,500 square foot government office building annex located near the historic courthouse just off the City's downtown corridor.

Other significant developments that occurred during the fiscal year included Bright Farms, a producer of indoor-grown, pesticide free lettuce, that began vertical construction of greenhouses and the installation of subgrade mechanical, electrical and plumbing systems on a 120-acre site located at the northeast corner of Eldamain and Corneils Roads. At the end of fiscal year 2023, the foundation of the head house had been set and underground utilities were in the process of being installed. Moreover, an Illinois investment company that specializes in the management of industrial and commercial complexes, called Yorkville Nexus, put under contract an approximate 280-acre parcel located at the northeast corner of Eldamain and Faxon Roads for the purpose of developing a multi-user industrial complex in three phases. Due to the site lacking the necessary infrastructure and utilities to support the future development, Yorkville Nexus engaged the City in an economic incentive agreement. Per the agreement, the developer would finance the infrastructure improvements, estimated at $11.8 million, in order for the City to install water and sewer mains to the site, which would also prove beneficial to other undeveloped parcels in the area. Engineering for the project is on-going, with construction expected to commence in the subsequent fiscal year.

The City's three tax increment financing (TIF) districts also saw a fair amount of activity over the course of fiscal year 2023. Station One Smokehouse – a Texas styled BBQ restaurant, (located within the Countryside TIF district on the corner of US Route 34 and Illinois Route 47), is set to open in the latter half of 2023 and has applied for a building permit to construct an approximate 1,100 square foot outdoor patio addition. In the City's Downtown TIF districts, two new beverage service businesses have opened or are scheduled to open in 2023; Fox Republic Brewing Company, a craft brewery located at 101 West Hydraulic in heart of the downtown, and The Vault, a restaurant specializing in "elixirs, provisions and remedies" located at 220 South Bridge Street.

On the residential side, there was significant development in the Bristol Bay subdivision with the platting of four units (10, 11, 12 and 13) consisting of 488 units (69 single family, 240 condominiums and 179 townhomes). The developer has started construction in all four units, pulling 89 permits to date, generating permit fees in excess of $1.4 million.

Despite the many budgetary challenges facing the State of Illinois, which have marginally improved over the last year or so, the City has seen multiple signs that the local economy is continuing to remain resilient. The U.S. Census Bureau 5-year Community Survey estimates report that the City has a median household income of $105,129. This compares to $101,816 for Kendall County and $72,563 for the State of Illinois. Yorkville's average unemployment rate was 4.3% at the end of calendar year 2022, which was lower that both the State and the Chicago-Naperville-Arlington Heights Metropolitan Area (which includes Cook, DuPage, Grundy, Kendall, McHenry and Will Counties) rates of 4.6% and 4.7%, respectively. The equalized assessed valuation (EAV) of taxable property within the City continues to steadily rise, increasing by an average of approximately 7% from 2016 through 2022. In addition, the City's sales tax base continues to expand, as municipal sales tax proceeds have continued to exceed prior year amounts by an average annualized growth rate of over 6% since fiscal year 2014.

Major Initiatives

In fiscal year 2023 the City continued to pursue several major initiatives, including:

- **New City Hall and Police Station** – The renovation of the new Yorkville City Hall and Police Station, located at 651 Prairie Pointe Drive on the City's northwest side, was substantially completed in the current fiscal year, with City staff moving municipal operations to the new building in late April. This facility was initially acquired in fiscal year 2021 for $1.9 million and has since undergone significant renovations totaling an estimated $8.7 million. The first floor of Yorkville's new City Hall contains the patrol division, as well as the City and Police service desk areas adjoining the front lobby; the second-floor houses community development, building services and police administration; with administration, finance, recreation and the Council Chambers located on the third floor.

- **Road to Better Roads (RTBR) Program and Other Capital Projects** – Based on the findings of an updated road study conducted in 2018 and in an effort to address ongoing infrastructure needs, the City continued its annual capital improvement program in the current fiscal year, commonly referred to as the "Road to Better Roads" program. Construction costs in fiscal year 2023 totaled approximately $1.65 million for roadway improvements, consisting of pavement milling and overlays on several local streets. In addition, the City completed watermain improvements on East Main Street and roadway improvements within the Fox Hill subdivision; finalized preliminary engineering for the 2023 road and water main replacement programs; and concluded the multi-year reconstruction project on Mill Road. Other capital projects that were nearing completion at the end of the fiscal year included: roadway improvements at the intersection at Mill and Kennedy Roads; construction of a new sewer interceptor on Corneils Road related to the Bright Farms project; the resurfacing of Bristol Ridge Road, which is partially funded by Federal grant proceeds; and the rehabilitation of the Beaver Street booster pump station and water well #4. Notable non-infrastructure improvements comprised of a new pickle ball court at Rotary Park; and the purchase several new vehicles, including three SUV police squads, two dump trucks by the Streets Department and four full-size pick-ups by the Parks Department.

- **City Water Source Transition** – This is a multi-year project, in which the City will eventually transition away from local deep-water aquifers to Lake Michigan (via the DuPage Water Commission) in order to secure a more sustainable, long-term water source. This endeavor is projected to cost $350 million and will be done in conjunction with the Village of Oswego and the Village of Montgomery, with Yorkville's portion currently estimated at $130 million. The project is anticipated to be funded by a mix of debt financing, rate increases, and other City revenue streams, along with the potential for Federal and State assistance as well. In the current fiscal year, City Staff continued to facilitate the permitting process with the Illinois Department of Natural Resources, in order to receive the State's consent to utilize water from Lake Michigan, with completion slated for the Fall. Management also began the process of preparing a Letter of Interest (LOI) in order to participate in a loan program created in 2014 by the Water Infrastructure Finance & Innovation Act (WIFIA), The WIFIA program, which is administered by the EPA, allows for financing up to 80% of eligible project costs, an interest rate pegged to the US Treasury rate of a similar maturity and a 35-year payment term from the date of substantial completion.

- **New Public Works Facility** – The City continued with plans for a new public works facility in fiscal year 2023, wrapping up a space needs and development analysis, which identified two potential sites for the new facility. In August of 2022, the City Council authorized the acquisition of approximately 12 acres on the Boombah Boulevard site for $1.355 million. Construction on the new facility is budgeted to begin in the subsequent fiscal year, at an estimated cost between $22 and $36 million, and will likely be financed by a future bond issuance.

Long-Term Financial Planning

Management annually develops five-year financial forecasts for all budgeted funds. These forecasts serve as the basis for identifying not only future capital needs, but future operational and personnel requirements as well. Revenue and expenditure trends will be evaluated and prioritized based on the goals set forth by the City Council. It is the intent of management that this five-year financial forecast will serve as the foundation for each year's corresponding budget document.

Relevant Financial Policies

In order to ensure that the City continues to meet its immediate and long-term service goals, several financial policies and procedures have been implemented by management. Some of the more prescient policies include the following:

- Issue an Annual Comprehensive Financial Report within 180 days of the end of each fiscal year that complies with generally accepted accounting principles.

- Monthly revenue, expenditure and cash balance reporting for all funds. These financial reports ensure that the City Council is made aware of any variances from the appropriated budget. In addition, the City's budget document continues to be revised in order to enhance transparency.

- Maintain the "Information for Citizens" webpage on the City's website, which contains a wide array of financial information including budget and audit information; annual treasurer's reports; bill lists; employee salary and benefit information; tax rates and fees; and other nonfinancial information.

- A fund balance policy establishing benchmark reserve levels to be maintained in the City's various funds, in order to promote financial stability and provide adequate cash flow for operations.

- A pension funding policy which defines the manner in which the City funds the long-term cost of benefits promised to plan participants and defines the calculation of the actuarial determined contribution (ADC) to the Yorkville Police Pension and Illinois Municipal Retirement Funds.

- An investment policy which invests public funds in a manner which protects principal, maximizes return for a given level of risk and meets the daily cash flow needs of the City.

- A capital asset policy which establishes the capitalization thresholds and estimated useful lives of capital assets.

- A purchasing policy to ensure that goods and services are obtained in a timely manner at the lowest possible cost.

- A post issuance compliance policy to ensure that City remains in compliance with federal tax laws after the issuance of tax-exempt debt.

- A credit card policy for all City related credit card purchases. All City employees are required to sign a credit card policy acknowledgement form prior to receiving a City issued credit card.

Pension Trust Funds and Post-Employment Benefits

Two pension plans are established by State Statute, which cover City employees. The benefits and funding of each plan are determined by state statute, and each plan provides retirement, disability and death benefits for participants.

The Police Pension Fund is funded through an annual property tax levy, employee contributions and investment earnings. The Illinois Municipal Retirement Fund (IMRF) pension plan covers civilian full-time employees. Funding for IMRF is made through contributions from the employer (actuarially determined annually by IMRF) and employees of the City (established at 4.5% of total compensation). Employees covered under both pension plans also contribute to Social Security (6.2% of salary capped annually) and Medicare (1.45% of total compensation). The City also provides post-retirement health care benefits for retirees and their dependents, which is financed on a pay-as-you-go basis, with retirees paying 100% of their health care premiums. The notes to the financial statement provide more information pertaining to employee pensions and post-retirement health care benefits.

Awards and Acknowledgments

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the United City of Yorkville for its annual comprehensive financial report for the fiscal year ended April 30, 2022. This was the 12th year that the City has received this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive financial report. The report must also satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The preparation of the annual comprehensive financial report would not have been possible without the dedicated services of the City department heads and staff. The entire finance department staff is extended a special appreciation for all of their assistance in the completion of the annual audit.

Additionally, we would like to acknowledge the Mayor and City Council for their leadership and support in planning and conducting the financial operations of the City, which has made preparation of this report possible.

Respectfully submitted,



Bart Olson
City Administrator



Rob Fredrickson, CPA
Director of Finance

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

United City of Yorkville
Illinois

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

April 30, 2022

Christopher P. Morrill

Executive Director/CEO

INDEPENDENT AUDITORS' REPORT

This section includes the opinion of the City's independent auditing firm.

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INDEPENDENT AUDITOR'S REPORT

October 12, 2023

The Honorable City Mayor
Members of the City Council
United City of Yorkville, Illinois

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of and for the year ended April 30, 2023, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the City, as of April 30, 2023, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the budgetary comparison schedules, and required pension and other post-employment benefit (OPEB) reporting, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the United City of Yorkville, Illinois' basic financial statements. The other supplementary information and supplemental schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, other supplementary information and supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 12, 2023, on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the United City of Yorkville ("City"), we offer readers of the City's financial statements this narrative overview and analysis of the financial activities of the City for the fiscal year ended April 30, 2023. Since the Management's Discussion and Analysis ("MD&A") is designed to focus on the current year's activities, resulting changes and currently known facts, it should be read in conjunction with the Letter of Transmittal, which can be found in the introductory section of this report, and the City's financial statements, which can be found in the basic financial statements section of this report.

Financial Highlights

- The assets/deferred outflows of the United City of Yorkville exceeded its liabilities/deferred inflows at the close of the fiscal year by $184,147,280 (*net position*). Of this amount, $165,324,875 was invested in capital assets, net of related debt; $1,489,514 was restricted for specific activities such as highways and streets, special service areas, tax increment financing districts, and library operations. Remaining net position, totaling $17,332,891, was unrestricted.
- The City's aggregate net position increased by $14,007,193 or 8.2% during the fiscal year ended April 30, 2023. Of this increase, $6,223,205 is attributable to governmental activities and $7,783,988 is attributable to business-type activities.
- Total revenues increased by 13.5% from $39,077,288 to $44,358,503. Overall expenses totaled $30,351,310, which is an increase of 13.7% over the preceding fiscal year.
- At the culmination of the current fiscal year, the City's governmental funds reported combined fund balances of $18,052,971, compared to $22,607,988 as reported on April 30, 2022.
- For the fiscal year ended April 30, 2023, the City's General Fund reported an increase in fund balance of $369,507. Total ending fund balance in the General Fund was a positive $10,996,607.
- Both the City's Water and Sewer Funds reported positive changes in net position during the current fiscal year, reporting ending balances of $40,724,408 and $40,891,591, respectively.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the City's basic financial statements. The City's basic financial statements are comprised of three components: (1) government-wide financial statements, (2) fund financial statements, and (3) notes to the financial statements. The governmental-wide statements are divided between governmental activities and business-type activities. The perspective of the fund financial statements presents financial information for individual funds established by the City for specific purposes. They are categorized into three distinct groups: governmental, proprietary and fiduciary. This report also contains other supplementary information in addition to the basic financial statements.

Government-Wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business. The Statement of Net Position presents information on all of the City's assets/deferred outflows and liabilities/deferred inflows, with the difference between the two reported as net position. Over time increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The Statement of Activities presents information showing how the City's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

Both of the government-wide financial statements distinguish functions of the City that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or a significant portion of their costs through user fees and charges (business-type activities). The governmental activities of the City include general government (legislative, administration and finance), public safety (police), community development, public works (street operations, health and sanitation) and parks and recreation. Property taxes, shared state taxes and local utility taxes finance the majority of these services. Business-type activities reflect private sector type operations, where the fee for service typically covers all or most of the cost of operations, including depreciation. The business-type activities of the City include water and sewer operations.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the United City of Yorkville can be divided into three categories: governmental funds, proprietary funds and fiduciary funds.

Governmental Funds

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the City's near-term financing decisions. Both the Governmental Fund Balance Sheet and the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

The City maintains fourteen individual governmental funds. Information is presented separately in the Governmental Fund Balance Sheet and in the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances for the General Fund, Library Fund, Parks and Recreation Fund, Citywide Capital Fund and Buildings and Grounds Fund, all of which are considered to be major funds. Information from the City's other nine governmental funds are combined into a single column presentation. Individual fund information for these non-major governmental funds is provided elsewhere in the report.

The United City of Yorkville adopts annual budgets for its General Fund, Library Fund, Parks and Recreation Fund, Citywide Capital Fund and Buildings and Grounds Fund. A budgetary comparison schedule has been provided for all five funds to demonstrate compliance with this budget.

Proprietary Funds

The City maintains one type of proprietary fund (enterprise funds). Enterprise funds are used to report the same functions presented as business-type activities in the government-wide financial statements. The City uses enterprise funds to account for its water and sewer operations.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the Water Fund (major fund) and the Sewer Fund (major fund).

Fiduciary Funds
Fiduciary funds are used to account for resources held for the benefit of parties outside the City. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support the City's operations. The City maintains one fiduciary trust fund, the Police Pension Fund. The accounting used for fiduciary funds is similar to that used by proprietary funds.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the information provided in the government-wide and fund financial statements.

Other Information

In addition to the basic financial statements, this report also includes certain required supplementary information related to budgetary information and the City's progress in funding its obligation to provide pension and other post-employment benefits to its employees. Required non-major fund information can be found following the required supplementary information.

The combing statements referred to earlier in connection with non-major governmental funds are presented immediately following the required supplementary information on pensions.

GOVERNMENT-WIDE FINANCIAL ANALYSIS

Statement of Net Position

The following chart reflects the condensed Statement of Net Position (in millions):

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2023	**2022**	**2023**	**2022**	**2023**	**2022**
Assets:						
Current Assets	$ 32.4	$ 36.8	$ 10.8	$ 5.2	$ 43.2	$ 42.0
Capital Assets	114.2	105.5	73.5	70.0	187.7	175.5
Other Assets	-	1.5	11.1	11.4	11.1	12.9
Total Assets	146.6	143.8	95.4	86.6	242.0	230.4
Deferred Outflows	4.0	2.3	3.0	2.8	7.0	5.1
Total Assets/Deferred Outflows	**$ 150.6**	**$ 146.1**	**$ 98.4**	**$ 89.4**	**$ 249.0**	**$ 235.5**
Liabilities:						
Current Liabilities	9.5	10.2	4.6	3.2	14.1	13.4
Long-term Liabilities	29.8	30.2	10.7	12.0	40.5	42.2
Total Liabilities	39.3	40.4	15.3	15.2	54.6	55.6
Deferred Inflows	8.8	9.4	1.5	0.4	10.3	9.8
Total Liabilities/Deferred Inflows	**$ 48.1**	**$ 49.8**	**$ 16.8**	**$ 15.6**	**$ 64.9**	**$ 65.4**
Net Position:						
Net Investment in Capital Assets	98.2	93.9	67.1	60.8	165.3	154.8
Restricted	1.5	7.9	-	-	1.5	7.9
Unrestricted (Deficit)	2.8	(5.5)	14.6	13.0	17.4	7.5
Total Net Position	**$ 102.5**	**$ 96.3**	**$ 81.6**	**$ 73.8**	**$ 184.1**	**$ 170.1**

The City's combined net position increased by $14.0 million, from $170.1 million to $184.1 million, during the current fiscal year. This change is the result of $6.2 million and $7.8 million increases in the net position of governmental activities and business-type activities, respectively.

The increase in the net position of governmental activities was due primarily to a $8.7 million increase in capital assets, consisting of City constructed roadway improvements and unfinished infrastructure/building projects that were still being constructed at fiscal year-end. Current assets fell by $4.4 million in the current fiscal year, due to the planned spend down of bond proceeds, although this was mitigated to an extent by the positive cash flows generated from operations. Current liabilities for governmental activities decreased by approximately $0.7 million, as proceeds from prefunded capital projects were liquidated over the course of fiscal year 2023. Moreover, long-term liabilities for governmental activities declined nominally by $0.3 million, as the repayment of debt obligations was largely offset by the addition of a $1.4 million net pension liability stemming from unfavorable market fluctuations impacting the Illinois Municipal Retirement Fund (IMRF). Restricted net position for governmental activities declined by $6.5 million, as unspent bond proceeds from the previous fiscal year were expended on building renovations.

The enhanced net position of business-type activities, which increased by $7.8 million, from $73.8 million to $81.6 million, was chiefly due to better-than-expected operating results. Net position of business-type activities was further impacted in a positive manner by a $3.5 million increase in capital assets, comprised of water and sewer infrastructure improvements and related unfinished capital projects that were in progress, but not yet completed, as of April 30, 2023; and the continued amortization of long-term debt applicable to the Water and Sewer Funds.

The largest portion of the United City of Yorkville's net position, totaling $165,324,875, reflects its investment in capital assets (e.g., land, infrastructure, buildings, vehicles and equipment), less any related debt used to acquire or construct those assets that are still outstanding. The City uses its capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although Yorkville's investment in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. The final component of the City's net position (0.8%) represents resources that are subject to external restrictions on how they may be used. At fiscal year-end, total restricted net position was comprised as follows: 69.4% was for prospective library operations; 21.5% was for upcoming road maintenance and improvement projects relating to the City's motor fuel tax (MFT) program; 3.3% was restricted for special service area use; and 5.9% was restricted for tax increment financing.

As of April 30, 2023, the City was able to report positive balances in all three categories of net position, both for the government, and for its governmental and business-type activities. Unrestricted net position for governmental activities finished fiscal year 2023 at a positive $2,860,410. This was an increase of approximately $8.4 million in comparison to the prior fiscal year, as a consequence of better-than-expected operating results and the drawdown of remaining 2021 and 2022 bond proceeds. Unrestricted net position for business-type activities ended the current fiscal year at $14,560,058, an increase of $1.6 million, as the result of enhanced water and sewer connection fees directly related to the steady flow of new housing starts throughout the City over the course of the fiscal year.

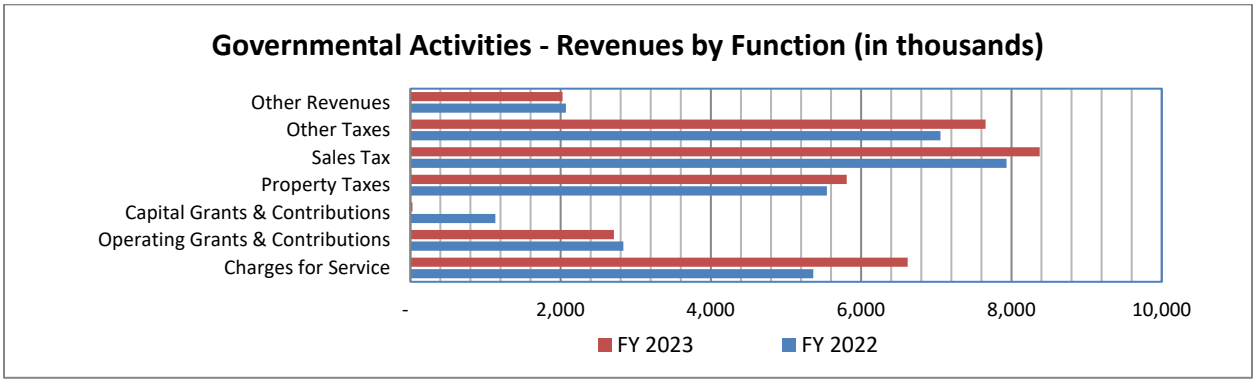
Activities

The following table reflects the revenue and expenses of the City's governmental and business-type activities (in millions).

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2023	**2022**	**2023**	**2022**	**2023**	**2022**
Revenues						
Program Revenues:						
Charges for Services	$ 6.6	$ 5.4	$ 7.8	$ 6.7	$ 14.5	$ 12.0
Operating Grants & Contributions	2.7	2.8	-	-	2.7	2.8
Capital Grants & Contributions	0.0	1.1	-	0.3	0.0	1.5
General Revenues:						
Property Taxes	5.8	5.5	-	-	5.8	5.5
Other Taxes	16.0	15.0	-	-	16.0	15.0
Other Revenue	2.0	2.1	3.3	0.1	5.3	2.2
Total Revenues	**$ 33.2**	**$ 31.9**	**$ 11.1**	**$ 7.1**	**$ 44.4**	**$ 39.1**
Expenses						
General Government	5.3	4.8	-	-	5.3	4.8
Library	1.2	1.0	-	-	1.2	1.0
Parks & Recreation	3.2	2.5	-	-	3.2	2.5
Public Safety	6.3	5.9	-	-	6.3	5.9
Community Development	1.3	1.0	-	-	1.3	1.0
Public Works	7.4	5.5	-	-	7.4	5.5
Interest Long-Term Debt	0.5	0.6	-	-	0.5	0.6
Water	-	-	3.5	3.6	3.5	3.6
Sewer	-	-	1.5	1.6	1.5	1.6
Total Expenses	**$ 25.3**	**$ 21.4**	**$ 5.1**	**$ 5.3**	**$ 30.4**	**$ 26.7**
Excess(Deficiency) before Transfers	$ 7.9	$ 10.5	$ 6.1	$ 1.9	$ 14.0	$ 12.4
Transfers	(1.7)	(0.6)	1.7	0.6	-	-
Change in Net Position	**$ 6.2**	**$ 9.9**	**$ 7.8**	**$ 2.5**	**$ 14.0**	**$ 12.4**
Net Position, Beginning	**$ 96.3**	**$ 86.4**	**$ 73.8**	**$ 71.3**	**$170.1**	**$157.7**
Net Position, Ending	**$102.5**	**$ 96.3**	**$ 81.6**	**$ 73.8**	**$184.1**	**$170.1**

Governmental Activities

Revenues

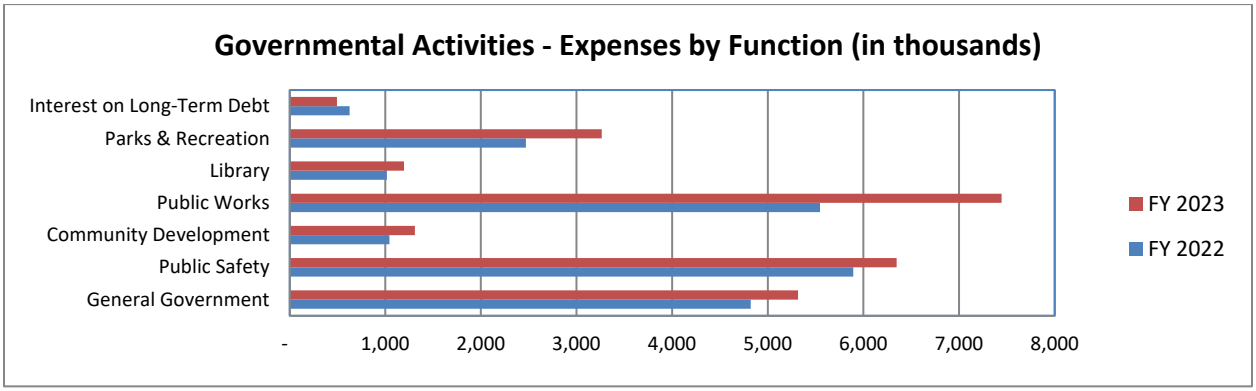


Total governmental activities revenue for the current fiscal year was $33,221,042, compared to $31,935,911 in the year prior, which is an increase of 4.0%. Property taxes, one of the City's principal revenue sources (equating to 17.5% of aggregate revenues), totaled over $5.8 million in fiscal year 2023. Property taxes support various governmental activities, including the City's annual contribution to the Yorkville Police Pension Fund. Per the decision of Council, the City held its pension contribution steady at $1,334,771, which mirrored the prior year's extension amount and exceeded the actuarial determined contribution by $14,176. Aggregate property tax revenues increased by 4.7%, as the Library increased its levy for operations by $46,265, and all three of the City's TIF districts generated incremental property tax revenues totaling $430,630. The City increased its requested levy as well, but only by the increment generated solely from new construction. This resulted in additional proceeds of approximately $135,000, which were used to finance activities related to police department operations.

Sales taxes experienced unprecedented growth over the course of the previous two fiscal years, posting year-over-year growth of 12.5% and 25.1%, respectively, in fiscal years 2022 and 2023. This extraordinary growth stemmed from the confluence of several factors including: aggressive fiscal and monetary policies in response to the pandemic, which spurred consumer demand; ongoing supply chain issues, which further drove up demand; and statutory changes implemented in fiscal year 2021 regarding how sales tax proceeds are sourced, which now require most on-line retailers to collect both State and locally imposed (including non-home rule) sales taxes on products being used or consumed within Yorkville. In the current fiscal year, sales taxes returned to more of a historical norm, posting a year-over-year gain of 5.6%, ostensibly due to the resiliency of the local economy and the sharp increase in price levels, as inflation reached its highest levels since the early 1980's during the latter half of calendar year 2022. The "other taxes" classification includes several revenue sources, including income, excise, utility, business district, video gaming and state use taxes. The other taxes classification increased by 8.5% in the current fiscal year, which is down from last year's pandemic related high of 24.5%, but nonetheless remained robust in comparison to pre-pandemic, historical norms. Most notably income and local use taxes had solid increases, posting year-over-year gains of $180,290 and $84,210, respectively.

Aggregate charges for service revenues sharply increased by 23.4% in the current fiscal year, due to enhanced garbage surcharges, chargebacks for vehicles and equipment, permit fees and recreation programming revenues. The "other revenues" classification, which is primarily made up of interest income and various reimbursements related to capital projects, slightly decreased by 2.2% in fiscal year 2023, due to the timing of developer reimbursements for road infrastructure improvements within the Grande Reserve subdivision. Operating grant and contribution revenues declined by $125,221 (4.4%) in comparison to fiscal year 2022 amounts, due to the timing of grant proceeds from the State's Rebuild Illinois program and the receipt of one-time grant revenues from FEMA reimbursing the City for personal protective equipment expenses related to the pandemic. Capital grants and contributions decreased by approximately $1.1 million, as the City received minimal grant contributions and accepted no capital contributions from developers in the current fiscal year.

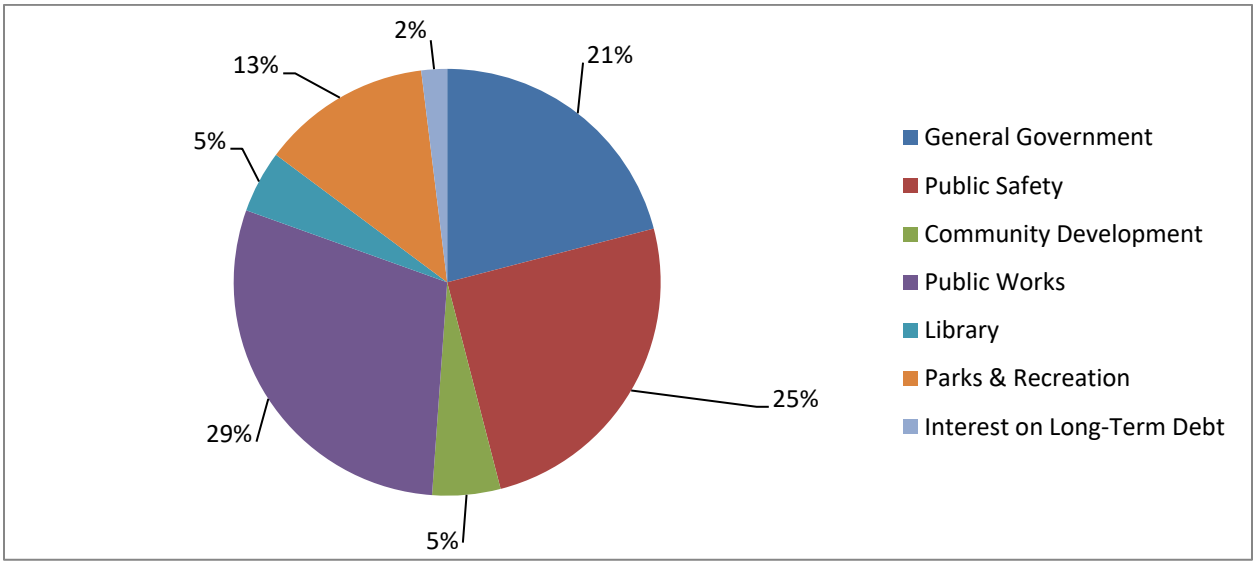
Expenses



Total expenses amounted to $25,293,272 for governmental activities at the end of fiscal year 2023. This reflected an increase of 18.1% from the prior year. The public safety and public works functions comprised the greatest proportion of governmental activities expenses, accounting for a combined 54.3% of the total. Other primary functional areas included general government and parks and recreation, which accounted for 21.0% and 12.9%, respectively, of total governmental activities expense.

Public works expenses totaled just over $7.4 million for the fiscal year ended April 30, 2023, which is a 34.3% increase over the preceding year. This increase is primarily attributable to additional expenses related to increased vehicle and equipment chargebacks and contractual increases in refuse disposal costs, which were offset on the revenue side by user fees. Public safety expenses increased by 7.7%, stemming from inflationary wage augmentations, the addition of a new patrol officer and increased pension expense. General government expenses increased by 10.3%, due to increases in IMRF pension expense, along with year-over-year increases in tax rebates, legal fees, liability insurance premiums and information technology services. Community development expenses increased by 25.5%, due to the addition of one new property maintenance inspector and increased contractual costs related to the digitalization of building, engineering and planning files. Parks and Recreation expenses were up by 32.1%, stemming from the additional costs associated with the new marketing coordinator position, in addition to enhanced recreation programming funding, vehicle and equipment chargebacks and depreciation expense. Interest on long-term debt fell by 21.1%, as the City continues to pay down debt related to governmental activities.

The following pie chart shows the breakdown of governmental activities expenses by function.



Business-Type Activities

Business-type activities increased the City's net position by $7,783,988. For the current fiscal year, 70.4% of all business-type activity revenue was generated from fees for services relating to the City's water and sewer utilities. Charges for services totaled $7.8 million in fiscal year 2023, which represents an increase of approximately $1.2 million (17.8%) in comparison to the year prior. This rise in charges for service revenue arose from increased water consumption and connection fee revenues stemming from new housing starts, together with City Council's decision to moderately increase water rates on a staggered basis during the current fiscal year. The base water rate, which covers the first 350 cubic feet of usage, was increased from $17 to $24, on September 1st; followed by a volumetric rate increase from $4.30 to $4.80 for every 100 cubic feet consumed over 350 cubic feet, on January 1st. This was the first-time water rates have increased since May 1, 2016. The incremental revenues generated from this rate increase will be used to fund much needed capital improvements to the City's underground utility system, as the Yorkville begins its water sourcing transition to Lake Michigan.

There were no capital grant and contribution revenues for business-type activities in fiscal year 2023, as the City did not accept any water or sewer infrastructure assets from developers. "Other revenues", which are comprised of rental income, reimbursements, proceeds from capital asset sales, interest income and miscellaneous items; increased by more than $3.1 million, due to developer reimbursements related to the construction of a new sanitary sewer interceptor on Corneils Road. Net transfers totaled a positive $1,704,565, which were used to fund debt service payments.

FINANCIAL ANALYSIS OF THE GOVERNMENT'S FUNDS

Governmental Funds - The focus of the United City of Yorkville's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the United City of Yorkville's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year. At the end of the current fiscal year, the United City of Yorkville's governmental funds reported combined ending fund balances of $18,052,971, a decrease of $4,555,017 over last year's totals. Approximately 99% of fund balance for the governmental funds is identified between the restricted, assigned and unassigned categories. Restricted fund balance, which accounts for 9.6% ($1,730,600) of total fund balance, includes amounts restricted for library operations, unspent 2021 bond proceeds, special service areas and the City's motor fuel tax program. The bulk of unassigned fund balance, which accounts for 44.5% of total governmental fund balance, is in the General Fund ($10.8 million); with the residual negative equity portion of $2.8 million residing in the City's three TIF Funds. Remaining fund balance for the governmental funds were allocated as follows: $223,028 (1.2%) is nonspendable (i.e., prepaids); $8,064,486 (44.7%) is assigned to various road related capital projects, parks and recreation, building improvements, vehicles and equipment.

Overall General Fund revenues increased by $1.4 million (6.1%) in fiscal year 2023, to finish at $24.5 million, led by year-over-year gains in sales taxes (+$0.4 million), income taxes (+$0.2 million) and investment income (+$0.3 million). It should also be noted that the tax revenues most impacted by the pandemic (namely hotel, video gaming, admission and amusement taxes) not only returned to, but exceeded pre-pandemic levels, resulting in an aggregate year-over-year gain of $199,637. When coupled with lower-than-expected salary and benefit expenditures, this resulted in an excess of revenues over expenditures in the amount of $8.2 million. Approximately half of this surplus was earmarked by City Council for capital purposes, as $3.7 million was transferred to the Citywide Capital and Building and Grounds Funds. Of the remaining excess of $4.5 million, $1.9 million was transferred out for debt service and $2.2 million was transferred to the Parks and Recreation Fund to subsidize operations; thus, resulting in an ending General Fund surplus of $369,507.

The Library Fund reported a positive fund balance of $1,045,518 at the end of fiscal year 2023, which represents an increase of $121,959 over last year's fund balance amount of $923,559. Property taxes used to finance library operations, which accounted for 84.6% of total library operational revenues, increased by $46,265 (6.0%). Aggregate operational expenditures increased by $179,426 (21.5%), as a result of inflationary increases in wages, along with unexpected contractual service expenditures related to a flooding incident at the Library building from frozen pipes at the end of 2022, which was subsequently reimbursed by insurance proceeds.

The Parks and Recreation Fund yielded a surplus in the amount of $261,118 in the current fiscal year, which increased fund balance from $0 to $261,118. The Parks and Recreation Fund, more so than any other Fund in the City, had been the most negatively impacted by the pandemic, due to the very social nature of its revenue generating activities. Fortunately, the Funds primary charge for service revenue streams have continued to rebound in fiscal year 2023, bolstered by athletics and fitness revenues, which reported an all-time high of $427,043. Fiscal year 2023 was also the first year in which the Recreation Department partnered with the Yorkville School District in regard to its preschool offerings by developing the Future Foxes Preschool program. This new collaboration not only provided an opportunity to positively impact and teach the preschoolers registered within the program, but also allowed high school students interested in a teaching and education as a career, the opportunity to serve and interact with preschool students inside the classroom. The program proved quite successful in its inaugural year, with over one hundred high school students participating. Looking at the expenditure side, operational costs in the Parks and Recreation Fund increased by 25.1%, due to the addition of a new full-time Recreation employee, increased program spending and enhanced chargebacks for playground, vehicle and equipment replacement.

The Citywide Capital Fund ended fiscal year 2023 with a surplus of just over $2.6 million, which increased fund balance from $2,165,601 to $4,785,053. Aggregate revenues lagged prior year amounts by approximately $250,000, due to the timing of developer reimbursements related to roadway improvements in the Grande Reserve subdivision. Other financing sources for fiscal year 2023 were comprised of a transfer in from the General Fund in the amount of $2,902,227, which will be put towards future capital projects that focus on roadway improvements. On the other side of the ledger, roadway related capital expenditures totaled $1.9 million in the current fiscal year, in addition to expenditures for sidewalk replacement totaling $171,753 and the culmination of the Kennedy Road Bike Path project in the amount of $31,909.

The Buildings and Grounds Fund was created in fiscal year 2021 for the purposes of accounting for the maintenance, acquirement and improvements of all City-owned buildings. The Fund has one full time employee, who works in conjunction with the Facilities Manager, which was a shared position between Yorkville and the Village of Oswego. This shared position was discontinued at the end of the fiscal year and was replaced with a new facilities manager position that is solely funded by the United City of Yorkville in the subsequent fiscal year. Personnel costs for the Fund are financed by permit fees and chargebacks, whereas building related maintenance and supplies are funded by a transfer from the General Fund. Major projects for the Fund include the ongoing renovation of City Hall totaling $6.84 million (funded by bond proceeds), and the acquisition of land to be used for a future municipal facility for $1.4 million.

GENERAL FUND BUDGETARY HIGHLIGHTS

The chart below compares the fiscal year 2023 final budget to the actual results of the City's General Fund.

Fiscal Year 2023 General Fund Budgetary Highlights

	Final Budget	Actual	Over (Under)	Actual as % of Budget
Revenues				
Taxes	$ 14,316,507	$ 15,255,097	$ 938,590	107%
Intergovernmental	5,282,917	5,916,027	633,110	112%
Licenses, Permits and Fees	574,500	832,248	257,748	145%
Charges for Services	1,950,962	2,067,245	116,283	106%
Fines and Forfeitures	115,350	100,782	(14,568)	87%
Investment Income	7,500	289,131	281,631	3855%
Miscellaneous	92,000	69,087	(22,913)	75%
Total Revenues	$ 22,339,736	$ 24,529,617	$ 2,189,881	110%
Expenditures				
General Government	$ 5,581,497	$ 5,448,180	$ (133,317)	98%
Public Safety	6,435,737	6,177,039	(258,698)	96%
Community Development	1,380,747	1,312,006	(68,741)	95%
Public Works	3,322,350	3,333,022	10,672	100%
Total Expenditures	$ 16,720,331	$ 16,270,247	$ (450,084)	97%
Excess of Revenues over Expenditures	$ 5,619,405	$ 8,259,370	$ 2,639,965	147%
Other Financing Sources (Uses)	(5,759,405)	(7,889,863)	2,130,458	137%
Net Change in Fund Balance	$ (140,000)	**$ 369,507**		
Fund Balance - Beginning of Year		10,627,100		
Fund Balance - End of Year		**$ 10,996,607**		

The General Fund is the City's primary operating fund and the largest source of funding for the day-to-day activities of its various departments. Actual revenues exceed budgetary amounts by $2,189,881; as taxes, intergovernmental, licenses & permits, charges for service and investment income proved to be more robust than initially anticipated. In September of 2022, the City received its second and final allotment of $1.4 million from the American Rescue Plan Act (ARPA), which was signed into law in March of 2021. Based on guidelines promulgated by the United States Treasury Department's Final Rule, these proceeds were accounted for as revenue loss within the City's General Fund and applied towards sworn police officer salary expenditures incurred over the course of the fiscal year.

Aggregate building permits totaled $1,012,856 in fiscal year 2023, of which $736,146 was retained in the General Fund to cover inspection related personnel, operating and vehicle costs within the Community Development Department. Per the City's past practice, the remaining $276,710 in building permit proceeds were allocated to the Citywide Capital Fund, to assist in the facilitation of future roadway related capital projects. Moreover, after minimal investment yield in fiscal year 2022 because of historically low interest rates, which began with the onset of the pandemic in March of 2020; rates began to rise precipitously over the course of fiscal year 2023, which in turn yielded investment earnings totaling $278,849. Although nominal, the City unrealized gain of $9,979 was ascribed to the City's investment in United States Treasury securities, which fluctuate in value as the market changes, and are accounted for under the mark-to-market basis pursuant to Generally Accepted Accounting Principles (GAAP). Any gains or losses associated with these investments will not become realized, as it's the City's policy to hold such investments to maturity.

Actual General Fund expenditures for the year were $450,084 lower than budget ($16,270,247 actual compared to $16,720,331 budgeted), as all departments within the General Fund, with the exception of the Health and Sanitation Department, were under their respective appropriated budgets. The expenditure overage of $38,038 in Health and Sanitation was due to higher than expected refuse service fees, which are passed on to municipal customers via their bi-monthly utility bill. When netted against garbage surcharge revenues, refuse fees generated a nominal surplus of $1,942, in addition to late fees, which generated and additional $33,193 in offsetting revenue. Net other financing uses (i.e., transfers out) exceeded budgetary amounts by $2.1 million, as the City Council decided to supplement transfers to the Citywide Capital Fund in order to finance roadway projects in subsequent fiscal years.

As shown in the table on the previous page, current year operating results generated a surplus amount of $369,507, which increased overall fund balance from $10,627,100 at the beginning of the year, to $10,996,607 at the end of fiscal year 2023. The surplus at fiscal year-end was primarily attributable to enhanced revenues, predominately related to the tax, intergovernmental, charges for service and investment earnings categories; and lower than expected salary, benefit and contractual expenditures, as a direct result of attrition, temporary vacancies and the deferral of a new enterprise resource planning (ERP) system into the subsequent fiscal year. Ending fund balance for the General Fund was comprised of nonspendable (i.e., prepaid) amounts totaling $171,778, with the remaining balance of $10,824,829 classified as unassigned, which can be used for any corporate purpose. At the culmination of fiscal year 2023, unassigned fund balance as a percentage of total expenditures equated to 66.5%, which is the equivalent of approximately eight to nine months of operating reserves.

Proprietary Funds - The United City of Yorkville's proprietary funds provide the same type of information found in the government-wide financial statements, but in greater detail. The net position of the City's proprietary funds at the end of the year totaled $81,615,999, allocated between the Water and Sewer Funds in the amounts of $40,724,408 and $40,891,591, respectively. Better than expected user and connection fee revenues, coupled with lower than expected operational expenses and the deferral of capital projects (primarily due to timing of expenses related to the water sourcing and water tower rehabilitation projects) into the subsequent fiscal year, accounted for the bulk of the increase.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets – The United City of Yorkville's investment in capital assets for its governmental and business-type activities as of April 30, 2023, totaled $187,726,506 (net of accumulated depreciation). Investments in capital assets include land, land improvements, construction in progress (CIP), infrastructure (roadway improvements, sanitary sewer lines, storm sewers and watermains), buildings, equipment and vehicles. The following tables summarize the changes in the City's capital assets for governmental and business-type activities.

Change in Capital Assets – Governmental Activities (in millions)

	Balance May 1, 2022	Net Additions/ (Deletions)	Balance April 30, 2023
Non-Depreciable Assets:			
Land and Construction in Progress	$ 39.1	$ 4.5	$ 43.6
Depreciable Capital Assets:			
Buildings	15.7	-	15.7
Equipment	9.4	0.3	9.7
Vehicles	3.4	0.1	3.5
Infrastructure	81.3	6.3	87.6
Leased Assets - Equipment	-	0.1	0.1
Accumulated Depreciation on Capital Assets	(43.4)	(2.6)	(46.0)
Total Capital Assets, Net	**$ 105.5**	**$ 8.7**	**$ 114.2**

Total net capital assets for the City's governmental activities increased by $8.7 million in the current fiscal year, predominately due to ongoing renovation of City Hall, the acquisition of property for future municipal building expansion, and the capitalization of infrastructure improvements stemming from the 2022 Road Program, Fox Hill Roadway improvements and the reconstruction of Mill Road. During the fiscal year depreciation expense totaling $3,317,440 was charged to the following functions: General Government ($133,068), Library ($181,757), Parks and Recreation ($313,701), Public Safety ($171,325), and Public Works ($2,517,589).

Change in Capital Assets – Business-Type Activities (in millions)

	Balance May 1, 2022	Net Additions/ Deletions	Balance April 30, 2023
Non-Depreciable Assets:			
Land and Construction in Progress	$ 4.8	$ 1.1	$ 5.9
Depreciable Capital Assets:			
Equipment	19.2	0.3	19.6
Vehicles	0.6	0.1	0.8
Infrastructure	70.1	3.8	74.0
Accumulated Depreciation on Capital Assets	(24.8)	(1.9)	(26.7)
Total Capital Assets, Net	**$ 70.0**	**$ 3.5**	**$ 73.5**

Net capital assets increased by $3.5 million in fiscal year 2023, as asset additions of $5.3 million exceeded depreciation expense of $1.9 million. Infrastructure improvements, totaling $3.8 million, accounted for the bulk of new additions and primarily consisted of water main improvements on Illinois Route 47, East Main Street, Elizabeth Street and Appletree Court. During the fiscal year depreciation expenses of $1,155,210 and $730,111 was charged to the Water and Sewer Funds functional expense categories, respectively. For more detailed information, related to capital assets, see Note 3 to the financial statements.

Debt Administration

As of April 30, 2023, the United City of Yorkville had total debt outstanding of $25,328,387, which included general obligation and alternative revenue source bonds, developer commitments and notes and leases payable. This amount is partially comprised of six alternative revenue bonds which pledge income, sales, incremental property taxes, and water/sewer revenues. In addition, these bonds would be reverted to the property tax rolls should the alternative revenue source prove to be inadequate.

	Governmental Activities	Business-Type Activities	Total
General Obligation & Alternative Revenue Source Bonds	$ 15,753,886	$ 6,048,561	$ 21,802,447
Developer Commitments	-	2,655,402	2,655,402
Notes Payable and Leases Payable	454,018	416,520	870,538
	$ 16,207,904	**$ 9,120,483**	**$ 25,328,387**

The City's general obligation debt is rated AA by Standard & Poor's and Fitch Ratings. Yorkville is a non-home rule community and as such is subject to a legal debt limit of 8.625% of the equalized assessed value (EAV) of the City, per State statute. The 2022 EAV of the City was $700,198,445, which resulted in a legal debt limit of $60,392,116. At the end of the fiscal year, the City had $1,630,000 in debt applicable to the debt limit, resulting in a debt to EAV ratio of 0.23%. For more detailed information related to long-term debt, see Note 3 to the financial statements.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

Fiscal year 2023 saw the General Fund continue to build up its reserves, as overall fund balance neared $11.0 million, eclipsing its previous apex of $10.6 million in the year prior. Despite all the uncertainty surrounding the previous two fiscal years, management is pleased to report that the anticipated negative financial effects of the COVID-19 pandemic did not come to fruition; as the City's primary locally sourced revenue streams, consisting of sales taxes, property taxes, income taxes and building permits, have thus far remained resilient and continue to strengthen. Furthermore, based on the overall operating results of fiscal year 2023 and the events that have come to pass thus far in fiscal year 2024, it would appear that the local economy has continued to remain stable and that development in Yorkville continues to carry on in a progressive manner, as the City remains committed to developing economic incentives and other measures to attract and retain businesses.

After a 11.5% increase last year, overall property values (i.e., assessed valuation) in the City are currently estimated to increase an additional 14.4% in 2023, which is a positive indicator that the local housing market continues to strengthen. Despite the increases in EAV over the last several years, the City remains mindful of its impact on residents when developing the annual property tax levy. For the 2022 levy year, the City Council once again continued its past practice of only increasing the levy by the incremental property tax proceeds generated from new construction. This resulted in the City foregoing the inflationary increment of the levy, valued at approximately $180,000.

As the City moved forward into the subsequent fiscal year, management continued its practice of conservatively projecting revenues, while looking for ways to reduce expenditures, in order to maintain adequate fund balances and cash reserves. In addition, management continues to monitor the fiscal activities of the State of Illinois, in order to ascertain the impact, if any, of how additional State budget cuts would impact Yorkville's share of State revenues.

Looking ahead at fiscal year 2024 from a financial planning standpoint, the General Fund budget is at breakeven, with continued budgetary emphasis on enhanced funding for roadway improvements and vehicle and equipment replacement. At the same time, the City remains committed to maintaining adequate reserves, should an economic downturn occur. Budgeted capital and other significant projects for the upcoming fiscal year total around $18 million (excluding City-owned building projects) and include: the continuation of the annual "Road to Better Roads" program, with approximately $3.0 million budgeted for roadway improvements, including the potential for grant funding for infrastructure improvements on Van Emmon Street; the implementation of new enterprise resource planning system; the perpetuation of the City's sidewalk replacement and pavement striping programs; a City-wide water meter replacement program; the rehabilitation of an elevated water storage tank on the City's northside; an enhanced watermain replacement program, along with a newly constructed well and raw watermain, which will be financed by debt issuance at a budgeted cost of approximately $10 million; and vehicle and equipment purchases budgeted at $2.3 million.

REQUESTS FOR INFORMATION

This financial report is designed to provide our citizens, customers, investors and creditors with a general overview of the City's finances. Questions concerning this report or requests for additional financial information should be directed to Rob Fredrickson, Director of Finance, United City of Yorkville, 651 Prairie Pointe Drive, Yorkville, Illinois.

BASIC FINANCIAL STATEMENTS

The basic financial Statements include integrated sets of financial statements as required by the GASB. The sets of statements include:

- Government-Wide Financial Statements
- Fund Financial Statements

    Governmental Funds

    Proprietary Funds

    Fiduciary Fund

In addition, the notes to the financial statements are included to provide information that is essential to a user's understanding of the basic financial statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position
April 30, 2023

	Governmental Activities	Business-Type Activities	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 21,188,797	7,835,269	29,024,066
Receivables - Net	11,056,119	2,953,331	14,009,450
Prepaids	223,028	35,561	258,589
Total Current Assets	32,467,944	10,824,161	43,292,105
Noncurrent Assets			
Capital Assets			
Nondepreciable Capital Assets	43,595,520	5,943,181	49,538,701
Depreciable Capital Assets	116,603,183	94,289,029	210,892,212
Accumulated Depreciation	(45,991,200)	(26,713,207)	(72,704,407)
Total Capital Assets	114,207,503	73,519,003	187,726,506
Other Assets			
Net Pension Asset - IMRF	-	-	-
Assets Held for Others	-	11,091,000	11,091,000
Total Other Assets	-	11,091,000	11,091,000
Total Noncurrent Assets	114,207,503	84,610,003	198,817,506
Total Assets	146,675,447	95,434,164	242,109,611
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	1,479,215	275,623	1,754,838
Deferred Items - RBP	302,157	46,788	348,945
Deferred Items - Police Pension	2,185,870	-	2,185,870
Deferred Items - ARO	-	2,671,538	2,671,538
Unamortized Loss on Refunding	28,249	2,019	30,268
Total Deferred Outflows of Resources	3,995,491	2,995,968	6,991,459
Total Assets and Deferred Outflows of Resources	150,670,938	98,430,132	249,101,070

The notes to the financial statements are an integral part of this statement.

	Governmental Activities	Business-Type Activities	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 2,146,210	2,453,098	4,599,308
Deposits Payable	4,865,727	-	4,865,727
Accrued Payroll	184,648	18,972	203,620
Accrued Interest Payable	174,988	59,854	234,842
Other Payables	157,532	439,690	597,222
Current Portion of Long-Term Debt	1,959,387	1,675,732	3,635,119
Total Current Liabilities	9,488,492	4,647,346	14,135,838
Noncurrent Liabilities			
Compensated Absences Payable	599,794	71,566	671,360
Net Pension Liability - IMRF	1,222,147	227,723	1,449,870
Net Pension Liability - Police Pension	12,864,611	-	12,864,611
Total OPEB Liability - RBP	753,612	116,692	870,304
Notes Payable	301,625	-	301,625
IEPA Loans Payable	-	301,187	301,187
General Obligation Bonds Payable - Net	14,042,170	4,540,277	18,582,447
Leases Payable	54,670	-	54,670
Developer Agreements	-	2,655,402	2,655,402
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	29,838,629	10,695,847	40,534,476
Total Liabilities	39,327,121	15,343,193	54,670,314
DEFERRED INFLOWS OF RESOURCES			
Property and State Taxes	6,649,575	-	6,649,575
Deferred Items - Leases	411,281	1,388,547	1,799,828
Deferred Items - IMRF	100,252	18,679	118,931
Deferred Items - RBP	411,470	63,714	475,184
Deferred Items - Police Pension	1,239,958	-	1,239,958
Total Deferred Inflows of Resources	8,812,536	1,470,940	10,283,476
Total Liabilities and Deferred Inflows of Resources	48,139,657	16,814,133	64,953,790
NET POSITION			
Net Investment in Capital Assets	98,268,934	67,055,941	165,324,875
Restricted			
Library Operations	1,033,277	-	1,033,277
Motor Fuel Tax	319,840	-	319,840
Special Service Areas	48,820	-	48,820
Tax Increment Financing	87,577	-	87,577
Unrestricted (Deficit)	2,772,833	14,560,058	17,332,891
Total Net Position	102,531,281	81,615,999	184,147,280

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Activities
For the Fiscal Year Ended April 30, 2023

	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants/ Contributions	Program Revenues: Capital Grants/ Contributions
Governmental Activities				
General Government	$ 5,317,707	4,053,221	-	29,777
Library	1,196,127	157,208	52,529	-
Parks and Recreation	3,264,494	695,128	6,800	-
Public Safety	6,348,333	-	-	-
Community Development	1,310,456	-	-	-
Public Works	7,360,959	1,712,703	2,650,094	-
Interest on Long-Term Debt	495,196	-	-	-
Total Governmental Activities	25,293,272	6,618,260	2,709,423	29,777
Business-Type Activities				
Sewer	1,530,640	1,919,429	-	-
Water	3,527,398	5,926,857	-	-
Total Business-Type Activities	5,058,038	7,846,286	-	-
	30,351,310	14,464,546	2,709,423	29,777

General Revenues
Taxes
Property Taxes
Utility Taxes
Business District Taxes
Admissions and Amusement Taxes
Video Gaming Taxes
Other Taxes
Intergovernmental - Unrestricted
Sales Taxes
Income Taxes
State Use Taxes
Investment Income
Miscellaneous
Transfers - Internal Activity

Change in Net Position

Net Position - Beginning

Net Position - Ending

The notes to the financial statements are an integral part of this statement.

Net (Expenses)/Revenues		
Primary Government		
Governmental Activities	Business-Type Activities	Totals
(1,234,709)	-	(1,234,709)
(986,390)	-	(986,390)
(2,562,566)	-	(2,562,566)
(6,348,333)	-	(6,348,333)
(1,310,456)	-	(1,310,456)
(2,998,162)	-	(2,998,162)
(495,196)	-	(495,196)
(15,935,812)	-	(15,935,812)
-	388,789	388,789
-	2,399,459	2,399,459
-	2,788,248	2,788,248
(15,935,812)	2,788,248	(13,147,564)
5,807,376	-	5,807,376
1,783,647	-	1,783,647
593,914	-	593,914
473,179	-	473,179
302,526	-	302,526
263,271	-	263,271
8,374,887	-	8,374,887
3,355,846	-	3,355,846
882,974	-	882,974
475,624	101,381	577,005
1,550,338	3,189,794	4,740,132
(1,704,565)	1,704,565	-
22,159,017	4,995,740	27,154,757
6,223,205	7,783,988	14,007,193
96,308,076	73,832,011	170,140,087
102,531,281	81,615,999	184,147,280

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Balance Sheet - Governmental Funds
April 30, 2023

	General
ASSETS	
Cash and Investments	$ 7,866,991
Receivables - Net of Allowances	
Property Taxes	3,737,342
Accounts	1,071,471
Grants	4,669
Other Taxes	3,628,716
Leases	-
Due from Other Funds	2,662,619
Prepaids	171,778
Total Assets	19,143,586
LIABILITIES	
Accounts Payable	994,859
Deposit Payable	2,145,567
Accrued Payroll	131,574
Due to Other Funds	-
Other Payables	-
Total Liabilities	3,272,000
DEFERRED INFLOWS OF RESOURCES	
Property and State Taxes	4,874,979
Deferred Items - Leases	-
Total Deferred Inflows of Resources	4,874,979
Total Liabilities and Deferred Inflows of Resources	8,146,979
FUND BALANCES	
Nonspendable	171,778
Restricted	-
Assigned	-
Unassigned	10,824,829
Total Fund Balances	10,996,607
Total Liabilities, Deferred Inflows of Resources and Fund Balances	19,143,586

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects			
Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
1,128,153	469,307	6,651,852	2,684,395	2,388,099	21,188,797
1,774,596	-	-	-	-	5,511,938
142	2,534	165,766	7,345	1,365	1,248,623
-	-	29,777	-	-	34,446
3,574	-	-	-	200,227	3,832,517
-	428,595	-	-	-	428,595
-	-	-	-	89,385	2,752,004
12,241	38,518	-	491	-	223,028
2,918,706	938,954	6,847,395	2,692,231	2,679,076	35,219,948
22,116	126,313	131,510	812,917	58,495	2,146,210
-	7,499	1,930,832	12,020	769,809	4,865,727
19,971	31,716	-	1,387	-	184,648
-	-	-	-	2,752,004	2,752,004
56,505	101,027	-	-	-	157,532
98,592	266,555	2,062,342	826,324	3,580,308	10,106,121
1,774,596	-	-	-	-	6,649,575
-	411,281	-	-	-	411,281
1,774,596	411,281	-	-	-	7,060,856
1,873,188	677,836	2,062,342	826,324	3,580,308	17,166,977
12,241	38,518	-	491	-	223,028
1,033,277	-	-	241,086	456,237	1,730,600
-	222,600	4,785,053	1,624,330	1,432,503	8,064,486
-	-	-	-	(2,789,972)	8,034,857
1,045,518	261,118	4,785,053	1,865,907	(901,232)	18,052,971
2,918,706	938,954	6,847,395	2,692,231	2,679,076	35,219,948

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of Total Governmental Fund Balance to Net Position of Governmental Activities
April 30, 2023

Total Governmental Fund Balances	$ 18,052,971
Amounts reported for governmental activities in the Statement of Net Position are different because:	
Capital assets used in governmental activities are not financial resources and therefore, are not reported in the funds.	114,207,503
Deferred outflows (inflows) of resources related to the pensions not reported in the funds.	
Deferred Items - IMRF	1,378,963
Deferred Items - Police Pension	945,912
Deferred Items - RBP	(109,313)
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the funds.	
Accrued Interest Payable	(174,988)
Compensated Absences Payable	(749,742)
Net Pension Liability/(Asset) - IMRF	(1,222,147)
Net Pension Liability - Police Pension	(12,864,611)
Total OPEB Liability - RBP	(753,612)
Notes Payable	(360,972)
General Obligation Bonds Payable	(15,753,886)
Unamortized Loss on Refunding	28,249
Leases Payable	(93,046)
Net Position of Governmental Activities	102,531,281

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2023

	General
Revenues	
Taxes	$ 15,255,097
Intergovernmental	5,916,027
Licenses, Permits and Fees	832,248
Charges for Services	2,067,245
Fines and Forfeitures	100,782
Grants and Donations	-
Investment Income	289,131
Miscellaneous	69,087
Total Revenues	24,529,617
Expenditures	
General Government	5,448,180
Library	-
Parks and Recreation	-
Public Safety	6,177,039
Community Development	1,312,006
Public Works	3,333,022
Capital Outlay	-
Debt Service	
Principal Retirement	-
Interest and Fiscal Charges	-
Total Expenditures	16,270,247
Excess (Deficiency) of Revenues Over (Under) Expenditures	8,259,370
Other Financing Sources (Uses)	
Sale of Capital Assets	-
Debt Issuance	-
Transfers In	-
Transfers Out	(7,889,863)
	(7,889,863)
Net Change in Fund Balances	369,507
Fund Balances - Beginning	10,627,100
Fund Balances - Ending	10,996,607

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects			
Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
1,665,847	-	-	-	473,129	17,394,073
52,529	-	29,777	-	1,177,614	7,175,947
140,950	-	465,106	168,005	164,375	1,770,684
13,825	695,128	880,006	199,586	876,986	4,732,776
2,433	-	-	-	11,585	114,800
-	6,800	-	-	-	6,800
19,533	2,309	36,964	47,977	79,710	475,624
60,725	302,483	1,014,482	55,863	47,698	1,550,338
1,955,842	1,006,720	2,426,335	471,431	2,831,097	33,221,042
-	-	-	-	167,403	5,615,583
1,014,370	-	-	-	-	1,014,370
-	2,978,143	-	-	-	2,978,143
-	-	-	-	17,321	6,194,360
-	-	-	-	-	1,312,006
-	-	152,882	367,622	143,401	3,996,927
-	-	2,132,206	8,238,317	2,193,853	12,564,376
750,000	-	210,000	570,000	531,812	2,061,812
99,002	-	109,813	235,719	121,418	565,952
1,863,372	2,978,143	2,604,901	9,411,658	3,175,208	36,303,529
92,470	(1,971,423)	(178,566)	(8,940,227)	(344,111)	(3,082,487)
-	-	-	-	100,851	100,851
-	-	-	-	131,184	131,184
29,489	2,232,541	2,902,227	803,877	355,216	6,323,350
-	-	(104,209)	-	(33,843)	(8,027,915)
29,489	2,232,541	2,798,018	803,877	553,408	(1,472,530)
121,959	261,118	2,619,452	(8,136,350)	209,297	(4,555,017)
923,559	-	2,165,601	10,002,257	(1,110,529)	22,607,988
1,045,518	261,118	4,785,053	1,865,907	(901,232)	18,052,971

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities
For the Fiscal Year Ended April 30, 2023

Net Change in Fund Balances - Total Governmental Funds	$ (4,555,017)
Amounts reported for governmental activities in the Statement of Activities are different because:	
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.	
Capital Outlays	12,056,018
Depreciation Expense	(3,317,440)
Disposals - Cost	(694,201)
Disposals - Accumulated Depreciation	694,201
The net effect of deferred outflows (inflows) of resources related to the pensions not reported in the funds.	
Change in Deferred Items - IMRF	2,856,362
Change in Deferred Items - Police Pension	313,171
Change in Deferred Items - RBP	(222,078)
The issuance of long-term debt provides current financial resources to governmental funds, while the repayment of the principal on long-term debt consumes the current financial resources of the governmental funds.	
Change in Compensated Absences Payable	(58,234)
Change in Net Pension Liability/(Asset) - IMRF	(2,750,539)
Change in Net Pension Liability - Police Pension	(305,975)
Change in Total OPEB Liability - RBP	205,553
Debt Issuance	(131,184)
Retirement of Debt	2,063,702
Amortization of Loss on Refunding	(14,997)
Amortization of Premium	60,820
Changes to accrued interest on long-term debt in the Statement of Activities does not require the use of current financial resources and, therefore, are not reported as expenditures in the governmental funds.	23,043
Changes in Net Position of Governmental Activities	6,223,205

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2023

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 4,696,913	3,138,356	7,835,269
Receivables - Net of Allowances			
Accounts	298,530	1,216,207	1,514,737
Leases	-	1,438,594	1,438,594
Prepaids	6,898	28,663	35,561
Total Current Assets	5,002,341	5,821,820	10,824,161
Noncurrent Assets			
Capital Assets			
Nondepreciable	3,432,457	2,510,724	5,943,181
Depreciable	37,602,884	56,686,145	94,289,029
Accumulated Depreciation	(9,204,288)	(17,508,919)	(26,713,207)
Total Capital Assets	31,831,053	41,687,950	73,519,003
Other Assets			
Assets Held for Others	11,091,000	-	11,091,000
Total Noncurrent Assets	42,922,053	41,687,950	84,610,003
Total Assets	47,924,394	47,509,770	95,434,164
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	86,973	188,650	275,623
Deferred Items - RBP	9,925	36,863	46,788
Deferred Items - ARO	-	2,671,538	2,671,538
Unamortized Loss (Gain) on Refunding	1,778	241	2,019
	98,676	2,897,292	2,995,968
Total Assets and Deferred Outflows of Resources	48,023,070	50,407,062	98,430,132

The notes to the financial statements are an integral part of this statements.

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 2,044,347	408,751	2,453,098
Accrued Payroll	5,974	12,998	18,972
Accrued Interest Payable	11,953	47,901	59,854
Other Payables	434,188	5,502	439,690
Current Portion of Long-Term Debt	1,041,056	634,676	1,675,732
Total Current Liabilities	3,537,518	1,109,828	4,647,346
Noncurrent Liabilities			
Compensated Absences Payable	15,348	56,218	71,566
Net Pension Liability - IMRF	71,858	155,865	227,723
Total OPEB Liability - RBP	24,753	91,939	116,692
IEPA Loans Payable	-	301,187	301,187
General Obligation Bonds Payable - Net	2,110,000	2,430,277	4,540,277
Developer Agreements	1,352,593	1,302,809	2,655,402
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	3,574,552	7,121,295	10,695,847
Total Liabilities	7,112,070	8,231,123	15,343,193
DEFERRED INFLOWS OF RESOURCES			
Deferred Items - Leases	-	1,388,547	1,388,547
Deferred Items - IMRF	5,894	12,785	18,679
Deferred Items - RPB	13,515	50,199	63,714
Total Deferred Inflows of Resources	19,409	1,451,531	1,470,940
Total Liabilities and Deferred Inflows of Resources	7,131,479	9,682,654	16,814,133
NET POSITION			
Net Investment in Capital Assets	28,692,831	38,363,110	67,055,941
Unrestricted	12,198,760	2,361,298	14,560,058
Total Net Position	40,891,591	40,724,408	81,615,999

The notes to the financial statements are an integral part of this statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenses and Changes in Net Position - Proprietary Funds
For the Fiscal Year Ended April 30, 2023

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Operating Revenues			
Charges for Services	$ 1,616,929	5,332,272	6,949,201
Operating Expenses			
Operations	749,145	2,194,644	2,943,789
Depreciation and Amortization	731,872	1,179,826	1,911,698
Total Operating Expenses	1,481,017	3,374,470	4,855,487
Operating Income	135,912	1,957,802	2,093,714
Nonoperating Revenues (Expenses)			
Investment Income	50,335	44,227	94,562
Unrealized Gain	-	6,819	6,819
Connection Fees	302,500	594,585	897,085
Other Income (Expense)	3,210,204	(20,410)	3,189,794
Interest Expense	(49,623)	(152,928)	(202,551)
	3,513,416	472,293	3,985,709
Income Before Transfers	3,649,328	2,430,095	6,079,423
Transfers In	1,600,356	177,859	1,778,215
Transfers Out	(73,650)	-	(73,650)
	1,526,706	177,859	1,704,565
Change in Net Position	5,176,034	2,607,954	7,783,988
Net Position - Beginning	35,715,557	38,116,454	73,832,011
Net Position - Ending	40,891,591	40,724,408	81,615,999

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Cash Flows - Proprietary Funds
For the Fiscal Year Ended April 30, 2023

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Cash Flows from Operating Activities			
Receipts from Customers and Users	$ 5,218,579	4,166,193	9,384,772
Payments to Employees	(499,696)	(259,124)	(758,820)
Payments to Suppliers	2,203,058	(492,635)	1,710,423
	6,921,941	3,414,434	10,336,375
Cash Flows from Noncapital Financing Activities			
Transfers In	1,600,356	177,859	1,778,215
Transfers (Out)	(73,650)	-	(73,650)
	1,526,706	177,859	1,704,565
Cash Flows from Capital and Related Financing Activities			
Purchase of Capital Assets	(3,333,959)	(2,087,070)	(5,421,029)
Debt Repayment	(1,175,000)	(1,486,080)	(2,661,080)
Interest Payments	(49,623)	(152,928)	(202,551)
	(4,558,582)	(3,726,078)	(8,284,660)
Cash Flows from Investing Activities			
Investment Income	50,335	51,046	101,381
Net Change in Cash and Cash Equivalents	3,940,400	(82,739)	3,857,661
Cash and Cash Equivalents - Beginning	756,513	3,221,095	3,977,608
Cash and Cash Equivalents - Ending	4,696,913	3,138,356	7,835,269
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities			
Operating Income	135,912	1,957,802	2,093,714
Adjustments to Reconcile Operating Income to Net Income to Net Cash Provided by (Used in) Operating Activities:			
Depreciation and Amortization Expense	731,872	1,179,826	1,911,698
Connection Fees/Other Income	3,512,704	574,175	4,086,879
(Increase) Decrease in Current Assets	88,946	(1,740,254)	(1,651,308)
Increase (Decrease) in Current Liabilities	2,452,507	1,442,885	3,895,392
Net Cash Provided by Operating Activities	6,921,941	3,414,434	10,336,375

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Fiduciary Net Position
April 30, 2023

	Police Pension Trust
ASSETS	
Cash and Cash Equivalents	$ 1,998,122
Investments	
Illinois Police Officers Pension Investment Fund	13,010,562
Receivables - Net of Allowances	
Other	2,363
Total Assets	15,011,047
LIABILITIES	
None	-
NET POSITION	
Net Position Restricted for Pensions	15,011,047

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Changes in Fiduciary Net Position
For the Fiscal Year Ended April 30, 2023

	Police Pension Trust
Additions	
Contributions - Employer	$ 1,334,771
Contributions - Plan Members	381,767
Total Contributions	1,716,538
Investment Income	
Interest Earned	143,076
Net Change in Fair Value	(26,079)
	116,997
Less Investment Expenses	(33,837)
Net Investment Income	83,160
Total Additions	1,799,698
Deductions	
Administration	26,932
Benefits and Refunds	1,245,047
Total Deductions	1,271,979
Change in Fiduciary Net Position	527,719
Net Position Restricted for Pensions	
Beginning	14,483,328
Ending	15,011,047

The notes to the financial statement are an integral part of this statement.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The United City of Yorkville (City) is an Illinois unit of local government. The financial statements include all functions, programs, and activities under control of the City Council. The City's major operations include public safety, public works, library, parks and recreation, community development, water and sewer services, and general administration. The City Council has oversight responsibility for the City, the Public Library and the Park and Recreation Board. Oversight responsibility includes designation of management and all other control over operations of these entities.

The government-wide financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The more significant of the City's accounting policies established in GAAP and used by the City are described below.

REPORTING ENTITY

The City's financial reporting entity comprises the following:

Primary Government:	United City of Yorkville

In determining the financial reporting entity, the City complies with the provisions of GASB Statement No. 61, "The Financial Reporting Omnibus - an Amendment of GASB Statements No. 14 and No. 34," and includes all component units that have a significant operational or financial relationship with the City. Based upon the criteria set forth in the GASB Statement No. 61, there are no component units included in the reporting entity.

Police Pension Employees Retirement System

The City's police employees participate in the Police Pension Employees Retirement System (PPERS). PPERS functions for the benefit of these employees and is governed by a five-member pension board. Two members appointed by the City's Mayor, one elected pension beneficiary and two elected police employees constitute the pension board. The participants are required to contribute a percentage of salary as established by state statute and the City is obligated to fund all remaining PPERS costs based upon actuarial valuations. The State of Illinois is authorized to establish benefit levels and the City is authorized to approve the actuarial assumptions used in the determination of contribution levels. Although it is legally separate from the City, the PPERS is reported as if it were part of the primary City because its sole purpose is to provide retirement benefits for the City's police employees. The PPERS is reported as a pension trust fund.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION

Government-Wide Statements

The City's basic financial statements include both government-wide (reporting the City as a whole) and fund financial statements (reporting the City's major funds). Both the government-wide and fund financial statements categorize primary activities as either governmental or business-type. The City's public safety, highway and street maintenance and reconstruction, building code enforcement, public improvements, economic development, parks and recreation, planning and zoning, and general administrative services are classified as governmental activities. The City's sewer and water services are classified as business-type activities.

In the government-wide Statement of Net Position, both the governmental and business-type activities columns are: (a) presented on a consolidated basis by column, and (b) reported on a full accrual, economic resource basis, which recognizes all long-term assets/deferred outflows and receivables as well as long-term debt/deferred inflows and obligations.

The City's net position is reported in three parts: net investment in capital assets; restricted; and unrestricted. The City first utilizes restricted resources to finance qualifying activities.

The government-wide Statement of Activities reports both the gross and net cost of each of the City's functions (general government, public safety, highways and streets, etc.) and business-type activities. The functions are supported by general government revenues (property, sales and use taxes, certain intergovernmental revenues, fines, permits and charges for services, etc.). The Statement of Activities reduces gross expenses (including depreciation) by related program revenues, which include 1) changes to customers or applicants who purchase, use or directly benefit from goods, services or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment.

The net costs (by function or business-type activity) are normally covered by general revenue (property, sales and use taxes, certain intergovernmental revenues, permits and charges for services, etc.).

This government-wide focus is more on the sustainability of the City as an entity and the change in the City's net position resulting from the current year's activities.

Fund Financial Statements

The financial transactions of the City are reported in individual funds in the fund financial statements. Each fund is accounted for by providing a separate set of self-balancing accounts that comprise its assets/deferred outflows, liabilities/deferred inflows, fund equity, revenues and expenditures/expenses. Funds are organized into three major categories: governmental, proprietary, and fiduciary. The emphasis in fund financial statements is on the major funds in either the governmental or business-type activities categories.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Nonmajor funds by category are summarized into a single column. GASB Statement No. 34 sets forth minimum criteria (percentage of the assets/deferred outflows, liabilities/deferred inflows, revenues or expenditures/expenses of either fund category or the governmental and enterprise combined) for the determination of major funds. The City electively added funds, as major funds, which either have debt outstanding or a specific community focus. The nonmajor funds are combined in a column in the fund financial statements. A fund is considered major if it is the primary operating fund of the City or meets the following criteria:

> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of that individual governmental or enterprise fund are at least 10 percent of the corresponding total for all funds of that category or type; and
>
> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of the individual governmental fund or enterprise fund are at least 5 percent of the corresponding total for all governmental and enterprise funds combined.

The various funds are reported by generic classification within the financial statements. The following fund types are used by the City:

Governmental Funds

The focus of the governmental funds' measurement (in the fund statements) is upon determination of financial position and changes in financial position (sources, uses, and balances of financial resources) rather than upon net income. The following is a description of the governmental funds of the City:

General fund is the general operating fund of the City. It is used to account for all financial resources except those required to be accounted for in another fund. The General Fund is a major fund.

Special revenue funds are used to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes. The City maintains nine special revenue funds. The Library Fund, a major fund, is used to account for the activity relating to the Yorkville Public Library. The primary revenue source for the Library Fund is property taxes. The Parks and Recreation Fund, also a major fund, is used to account for the revenues and expenditures associated with Yorkville's Parks and Recreation departments. The primary revenue source for the Parks and Recreation Fund is charges for services.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Governmental Funds – Continued

Debt service funds are used to account for the accumulation of funds for the periodic payment of principal and interest on general long-term debt. The City maintains one debt service fund.

Capital projects funds are used to account for financial resources to be used for the acquisition or construction of major capital facilities (other than those financed by business-type/proprietary funds). The City maintains three capital projects funds. The Citywide Capital Fund, a major fund, is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public. The Buildings and Grounds Fund, also a major fund, is used to account for maintenance of existing and construction of new municipal owned buildings.

Proprietary Funds

The focus of proprietary fund measurement is upon determination of operating income, changes in net position, financial position, and cash flows. The generally accepted accounting principles applicable are those similar to businesses in the private sector. The following is a description of the proprietary funds of the City:

Enterprise funds are required to account for operations for which a fee is charged to external users for goods or services and the activity is (a) financed with debt that is solely secured by a pledge of the net revenues, (b) has third party requirements that the cost of providing services, including capital costs, be recovered with fees and charges, or (c) establishes fees and charges based on a pricing policy designed to recover similar costs. The City maintains two enterprise funds. The Sewer Fund, a major fund, is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees. The Water Fund, also a major fund, is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

Fiduciary Funds

Fiduciary funds are used to report assets held in a trustee or custodial capacity by the City for others and therefore are not available to support City programs. The reporting focus is on net position and changes in net position and is reported using accounting principles similar to proprietary funds.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Fiduciary Funds – Continued

Pension trust funds are used to account for assets held in a trustee capacity by the City for pension benefit payments. The Police Pension Fund accounts for the accumulation of resources to pay pension costs. Resources are contributed by police force members at rates fixed by state statutes and by the government through an annual property tax levy.

The City's pension trust fund is presented in the fiduciary fund financial statements. Since by definition these assets are being held for the benefit of a third party (pension participants, etc.) and cannot be used to address activities or obligations of the City, these funds are not incorporated into the government-wide statements.

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

Measurement focus is a term used to describe "which" transactions are recorded within the various financial statements. Basis of accounting refers to "when" transactions are recorded regardless of the measurement focus applied.

Measurement Focus

On the government-wide Statement of Net Position and the Statement of Activities, both governmental and business-type activities are presented using the economic resources measurement focus as defined below.

In the fund financial statements, the "current financial resources" measurement focus or the "economic resources" measurement focus is used as appropriate.

All governmental funds utilize a "current financial resources" measurement focus. Only current financial assets/deferred outflows and liabilities/deferred inflows are generally included on their balance sheets. Their operating statements present sources and uses of available spendable financial resources during a given period. These funds use fund balance as their measure of available spendable financial resources at the end of the period.

All proprietary and pension trust funds utilize an "economic resources" measurement focus. The accounting objectives of this measurement focus are the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. All assets/deferred outflows and liabilities/deferred inflows (whether current or noncurrent) associated with their activities are reported. Proprietary and pension trust fund equity is classified as net position.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING – Continued

Basis of Accounting

In the government-wide Statement of Net Position and Statement of Activities, both governmental and business-type activities are presented using the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability/deferred inflow is incurred or economic asset used. Revenues, expenses, gains, losses, assets/deferred outflows, and liabilities/deferred inflows resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

In the fund financial statements, governmental funds are presented on the modified accrual basis of accounting. Under this modified accrual basis of accounting, revenues are recognized when "measurable and available." Measurable means knowing or being able to reasonably estimate the amount. Available means collectible within the current period or within sixty days after year-end. The City recognizes property taxes when they become both measurable and available in accordance with GASB Codification Section P70.

A sixty-day availability is generally used for revenue recognition for all other governmental fund revenues. Expenditures (including capital outlay) are recorded when the related fund liability is incurred, except for general obligation bond principal and interest which are recognized when due.

In applying the susceptible to accrual concept under the modified accrual basis, those revenues susceptible to accrual are property taxes, state and utility taxes, franchise taxes, interest revenue, charges for services, and fines and forfeits. All other revenues are not susceptible to accrual because generally they are not measurable until received in cash.

All proprietary and pension trust funds utilize the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the City's enterprise funds are charges to customers for sales and services. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY

Cash and Investments

Cash and cash equivalents on the Statement of Net Position are considered to be cash on hand, demand deposits, and cash with fiscal agent. For the purpose of the proprietary funds "Statement of Cash Flows," cash and cash equivalents are considered to be cash on hand, demand deposits, cash with fiscal agent, and all highly liquid investments with an original maturity of three months or less.

Investments are generally reported at fair value. Short-term investments are reported at cost, which approximates fair value. For investments, the City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Interfund Receivables, Payables and Activity

Interfund activity is reported as loans, services provided, reimbursements or transfers. Loans are reported as interfund receivables and payables as appropriate and are subject to elimination upon consolidation. All other interfund transactions are treated as transfers. Any residual balances outstanding between the governmental activities and business-type activities are reported in the government-wide financial statements as "internal balances."

Receivables

In the government-wide financial statements, receivables consist of all revenues earned at year-end and not yet received. Major receivables balances for governmental activities include property taxes, state and utility taxes, franchise taxes, and grants. Business-type activities report utility charges as their major receivables.

Assets Held for Others

In June of 2004, the City entered into an intergovernmental agreement with Yorkville-Bristol Sanitary District for design and construction of the Rob Roy Creek Interceptor. At the date of completion, the Yorkville-Bristol Sanitary District owns and maintains the Interceptor. All costs associated with the construction of the infrastructure asset are recorded as Assets Held for Others in the City's financial statements. As of April 30, 2023, the balance of this project was $11,091,000 reported in the Sewer Fund. In connection with this project, the City issued General Obligation Alternate Revenue Source Bonds of 2005D in the fiscal year 2006 for $11,300,000, which were refunded in 2008, 2011 and again in 2022. At April 30, 2023, the outstanding balance of the 2022 refunding bonds is $3,900,000. See Note 3 for more information on this long-term debt issue.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Prepaids

Prepaids are valued at cost, which approximates market. The cost of governmental fund-type prepaids are recorded as expenditures when consumed rather than when purchased. Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaids in both the government-wide and fund financial statements.

Deferred Outflows/Inflows of Resources

Deferred outflow/inflow of resources represents a consumption/acquisition of net assets that applies to a future period and therefore will not be recognized as an outflow of resources (expense)/inflow of resources (revenue) until that future time.

Capital Assets

Capital assets purchased or acquired with an original cost of $5,000 to $75,000, depending on asset class, (see chart on the following page) or more are reported at historical cost or estimated historical cost. Contributed assets are reported at acquisition value as of the date received. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred.

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. General capital assets are long-lived assets of the City as a whole. Infrastructure such as streets, traffic signals and signs are capitalized. In the case of the initial capitalization of general infrastructure assets (i.e., those reported by the governmental activities) the government chose to include all such items regardless of their acquisition date. The valuation basis for general capital assets are historical cost, or where historical cost is not available, estimated historical cost based on replacement costs.

Capital assets in the proprietary funds are capitalized in the fund in which they are utilized. The valuation bases for proprietary fund capital assets are the same as those used for the general capital assets. Donated capital assets are capitalized at acquisition value on the date donated.

Depreciation on all assets is computed and recorded using the straight-line method of depreciation over the following estimated useful lives:

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Capital Assets – Continued

Capital Asset	Capitalized Threshold	Estimated Useful Life
Land	$ 25,000	N/A
Buildings	35,000	10 - 50 Years
Equipment	5,000	5 - 75 Years
Vehicles	5,000	5 - 15 Years
Infrastructure - Street and Storm Sewer	50,000	10 - 75 Years
Infrastructure - Water and Sewer	75,000	10 - 75 Years
Lease Assets - Equipment	40,000	10 - 40 Years

Compensated Absences

The City accrues accumulated unpaid vacation and associated employee-related costs when earned (or estimated to be earned) by the employee. In accordance with GASB Statement No. 16, no liability is recorded for nonvesting accumulation rights to receive sick pay benefits. However, a liability is recognized for that portion of accumulated sick leave that is estimated to be taken as "terminal leave" prior to retirement. All vacation pay is accrued when incurred in the government-wide and proprietary fund financial statements. A liability for these amounts is reported in the governmental funds only if they have matured, for example, as a result of employee resignations and retirements.

Long-Term Obligations

In the government-wide financial statements, and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type Statement of Net Position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as expenses at the time of issuance.

In the fund financial statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Net Position

In the government-wide financial statements, equity is classified as net position and displayed in three components:

> Net Investment in Capital Assets – Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
>
> Restricted – Consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislations.
>
> Unrestricted – All other net position balances that do not meet the definition of "restricted" or "net investment in capital assets."

NOTE 2 – STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY

BUDGETARY INFORMATION

Budgets are adopted on a basis consistent with generally accepted accounting principles. Annual budgets are adopted for all funds. All annual appropriations lapse at fiscal year-end. During the year, several supplementary appropriations were necessary. The City follows these procedures in establishing the budgetary data reflected in the financial statements:

- Prior to May 1, the Mayor submits to the City Council the proposed budget for the fiscal year commencing the following May 1. The operating budget includes proposed expenditures and the means of financing them.

- Public hearings are conducted at the City offices to obtain taxpayer comments.

- Prior to May 1, the budget is legally adopted by a vote of the City Council through passage of an ordinance.

- The budget officer is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the total expenditures of any fund must be approved by the City Council.

NOTE 2 – STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY – Continued

DEFICIT FUND BALANCE

The following funds had deficit fund balance as of the date of this report:

Fund	Deficit
Countryside TIF	$ 1,175,044
Downtown TIF	1,614,928

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS

The City maintains a cash and investment pool that is available for use by all funds except the pension trust fund. Each fund type's portion of this pool is displayed on the financial statements as "cash and investments." In addition, investments are separately held by several of the City's funds. The deposits and investments of the pension trust fund are held separately from those of other funds.

Permitted Deposits and Investments – Statutes authorize the City to make deposits/invest in commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, obligations of States and their political subdivisions, credit union shares, repurchase agreements, commercial paper rated within the three highest classifications by at least two standard rating services, the Illinois Funds, the Illinois Trust, and the Illinois Public Reserves Investment Management Trust.

The Illinois Funds is an investment pool managed by the Illinois Public Treasurer's Office which allows governments within the State to pool their funds for investment purposes. The Illinois Funds is not registered with the SEC as an investment company. Investments in Illinois Funds are valued at the share price, the price for which the investment could be sold.

The Illinois Trust was established for the purpose of allowing various public agencies including, but not limited to, counties, townships, cities, towns, villages, school districts, housing authorities and public water supply districts, to jointly invest funds in accordance with the Laws of the State of Illinois. Participation in the Illinois Trust is voluntary. The Illinois Trust is not registered with the SEC as an Investment Company. Investments in the Illinois Trust are valued at the share price, the price for which the investment could be sold.

The Illinois Public Reserves Investment Management Trust (I-PRIME) is an investment opportunity and cash management service for Illinois Municipal Treasurers acting on behalf of counties, townships, cities, towns, villages, special road districts, public water supply districts, fire protection districts, drainage districts, levee districts, sewer districts, housing authorities, and all other political corporations or subdivisions of the State of Illinois. Participation in I-PRIME is voluntary. I-PRIME is not registered with the SEC as an Investment Company. Investments in I-PRIME are valued at the share price, the price for which the investment could be sold.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

City

Deposits. At year-end, the carrying amount of the City's deposits for governmental and business-type activities totaled $13,944,016 and the bank balances totaled $18,173,699.

Investments. The City has the following investment fair values and maturities:

		Investment Maturities (in Years)			
Investment Type	Fair Value	Less Than 1	1 to 5	6 to 10	More Than 10
U.S. Treasuries	$ 1,923,762	982,724	941,038	-	-
Illinois Funds	9,179,841	9,179,841	-	-	-
Illinois Trust	104,400	104,400	-	-	-
I-PRIME	3,872,047	3,872,047			
	15,080,050	14,139,012	941,038	-	-

At year-end, the City has the following recurring fair value measurements:

		Fair Value Measurements Using		
Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
U.S. Treasuries	$ 1,923,762	1,923,762	-	-
Investments Measured at the Net Asset Value (NAV)				
Illinois Funds	9,179,841			
Illinois Trust	104,400			
I-PRIME	3,872,047			
Total Investments at the (NAV)	13,156,288			
Total Investments Measured at Fair Value	15,080,050			

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

City – Continued

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. The policy does not state specific limits in investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in management of their own affairs, no for speculation, but for investment, considering the safety of their capital, as well as the probable income to be derived. The standard of prudence to be used by investment officials shall be the 'prudent person' standard and shall be applied in the context of managing an overall portfolio. At year-end, the City's investment in the Illinois Funds is rated AAA by Fitch, and the City's investment the Illinois Trust and I-PRIME are rated AAAm by Standard & Poor's.

Concentration Risk. This is the risk of loss attributed to the magnitude of the City's investment in a single issuer. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. Diversifying instruments and maturities will avoid incurring unreasonable risks in the investment portfolio regarding specific security types, issuers or individual financial institutions. The City shall diversify to the best of its ability based on the type of funds invested and the cash flow needs of those funds. The City places no limit on the amount the City may invest in any one issuer. At year-end, the City does not have any investments over 5 percent of the total cash and investment portfolio (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) over 5 percent of the total cash and investment portfolio.

Custodial Credit Risk. In the case of deposits, this is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City's investment policy requires that all amounts in excess of any insurance limits be collateralized by approved securities or surety bonds issued by top-rated insurers, having a value of at least 110% of the deposits. Collateral is required as security whenever deposits exceed the insurance limits of the FDIC. Repurchase agreements must also be collateralized in the amount of 105% of the market value of principal and accrued interest. Collateral shall be held at an independent, third-party institution in the name of the City. The third-party institution shall comply with all qualifications and requirements as set forth in the Illinois Complied Statutes 30 ILCS 235/6. At year end, all deposits are collateralized.

For an investment, this is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At year-end, the City's investments in the Illinois Funds, the Illinois Trust, and I-PRIME are not subject to custodial credit risk.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund

The Illinois Police Officers Pension Investment Fund (IPOPIF) is an investment trust fund responsible for the consolidation and fiduciary management of the pension assets of Illinois suburban and downstate police pension funds. IPOPIF was created by Public Act 101-0610, and codified within the Illinois Pension Code, becoming effective January 1, 2020, to streamline investments and eliminate unnecessary and redundant administrative costs, thereby ensuring assets are available to fund pension benefits for the beneficiaries of the participating pension funds. Participation in IPOPIF by Illinois suburban and downstate police pension funds is mandatory. Investments of the Fund are combined in a commingled external investment pool and held by IPOPIF. A schedule of investment expenses is included in IPOPIF's annual report. For additional information on IPOPIF's investments, please refer to their annual report, which can be obtained from IFPIF at 456 Fulton Street, Suite 402 Peoria, Illinois 61602 or at www.ipopif.org. The Fund transferred all eligible assets to the Investment Fund on November 1, 2022.

Deposits. The Fund retains all its available cash with one financial institution. Available cash is determined to be that amount which is required for the current expenditures of the Fund. The excess of available cash is required to be transferred to IPOPIF for purposes of the long-term investment for the Fund. At year-end, the carrying amount of the Fund's cash on hand totaled $1,998,122 and the bank balances totaled $1,998,478.

Custodial Credit Risk. In the case of deposits, this is the risk that in the event of a bank failure, the Fund's deposits may not be returned to it. The Fund's investment policy requires all deposits in excess of federally insured limits (other than bank managed money market mutual funds) to be no less than 110% of the fair market value and secured by some form of collateral. The Fund will accept (1) United States Treasury Bills, Notes or Bonds, or (2) United States Government Agency Notes or Bonds as authorized by the Public Funds Investment Act but excluding the government sponsored agencies prohibited by the Department of Insurance. At year-end, the entire amount of the bank balance of deposits was covered by collateral, federal depository or equivalent insurance.

Investments. At year-end the Fund has $13,010,562 invested in IPOPIF, which is measured at the Net Asset Value (NAV) per share as determined by the pool. The pooled investments consist of the investments as noted in the target allocation table available at www.ipopif.org.

Investment Policy. IPOPIF's current investment policy was adopted by the Board of Trustees on December 17, 2021. IPOPIF is authorized to invest in all investments allowed by Illinois Compiled Statutes (ILCS). The IPOPIF shall not be subject to any of the limitations applicable to investments of pension fund assets currently held by the transferor pension funds under Sections 1-113.1 through 1-113.12 or Article 3 of the Illinois Pension Code.

Rate of Return

At year-end, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was (0.91%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LEASES RECEIVABLE

The City is a lessor on the following leases at year end:

Lease	Term	Start Date	Payments	Interest Rate
Verizon Cell Tower-Wheaton Woods	107 months	April 1, 2011	$4,490 to $6,145 per month, including interest	4.34%
SprintCom Cell Tower	261 months	February 10, 2004	$3,064 to $5,701 per month, including interest	4.34%
Verizon Cell Tower-Lehman Crossing	115 months	December 1, 2011	$2,194 to $2,622 per month, including interest	4.34%
Verizon Cell Tower-Tower Lane	204 months	May 1, 2019	$3,169 to $5,085 per month, including interest	4.34%

During the fiscal year, the City has recognized $72,914 of lease revenue.

The future principal and interest lease payments as of the year-end were as follows:

Fiscal Year	Governmental Activities		Business-Type Activities	
	Principal	Interest	Principal	Interest
2024	$ 38,376	17,847	42,813	61,596
2025	42,368	16,104	47,628	59,642
2026	46,629	14,181	52,738	57,474
2027	51,177	12,066	58,158	55,078
2028	56,021	9,752	63,900	52,446
2029	61,186	7,218	69,995	49,548
2030	66,686	4,454	76,445	46,385
2031	66,152	1,433	83,277	42,933
2032	-	-	77,037	39,276
2033	-	-	64,552	36,343
2034	-	-	70,502	33,419
2035	-	-	76,799	30,240
2036	-	-	83,476	26,775
2037	-	-	90,545	23,013
2038	-	-	98,028	18,941
2039	-	-	105,943	14,531
2040	-	-	50,206	11,029
2041	-	-	54,305	8,767
2042	-	-	58,638	6,326
2043	-	-	63,221	3,692
2044	-	-	50,388	918
	428,595	83,055	1,438,594	678,372

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS

Governmental Activities

Governmental capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 31,247,764	1,378,602	-	32,626,366
Construction in Progress	7,829,838	9,441,492	6,302,176	10,969,154
	39,077,602	10,820,094	6,302,176	43,595,520
Depreciable Capital Assets				
Buildings	15,690,311	-	-	15,690,311
Equipment	9,365,165	599,754	291,589	9,673,330
Vehicles	3,376,017	516,075	402,612	3,489,480
Infrastructure	81,327,791	6,291,087	-	87,618,878
Lease Assets - Equipment	-	131,184	-	131,184
	109,759,284	7,538,100	694,201	116,603,183
Less Accumulated Depreciation				
Buildings	5,400,642	323,619	-	5,724,261
Equipment	7,146,859	345,019	291,589	7,200,289
Vehicles	2,582,347	323,154	402,612	2,502,889
Infrastructure	28,238,113	2,314,718	-	30,552,831
Lease Assets - Equipment	-	10,930	-	10,930
	43,367,961	3,317,440	694,201	45,991,200
Total Net Depreciable Capital Assets	66,391,323	4,220,660	-	70,611,983
Total Net Capital Assets	105,468,925	15,040,754	6,302,176	114,207,503

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS – Continued

Governmental Activities – Continued

Depreciation expense was charged to governmental activities as follows:

General Government	$ 133,068
Library	181,757
Parks and Recreation	313,701
Public Safety	171,325
Public Works	2,517,589
	3,317,440

Business-Type Activities

Business-type capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 615,376	-	-	615,376
Construction in Progress	4,234,027	5,213,432	4,119,654	5,327,805
	4,849,403	5,213,432	4,119,654	5,943,181
Depreciable Capital Assets				
Equipment	19,210,280	345,408	-	19,555,688
Vehicles	618,559	133,664	-	752,223
Infrastructure	70,132,939	3,848,179	-	73,981,118
	89,961,778	4,327,251	-	94,289,029
Less Accumulated Depreciation				
Equipment	8,665,492	506,441	-	9,171,933
Vehicles	523,107	47,939	-	571,046
Infrastructure	15,639,287	1,330,941	-	16,970,228
	24,827,886	1,885,321	-	26,713,207
Total Net Depreciable Capital Assets	65,133,892	2,441,930	-	67,575,822
Total Net Capital Assets	69,983,295	7,655,362	4,119,654	73,519,003

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS – Continued

Business-Type Activities – Continued

Depreciation expense was charged to business-type activities as follows:

Sewer	$ 730,111
Water	1,155,210
	1,885,321

PROPERTY TAXES

Property taxes for 2022 attach as an enforceable lien on January 1, 2023, on property values assessed as of the same date. Taxes are levied by December of the subsequent fiscal year (by passage of a Tax Levy Ordinance). Tax bills are prepared by the County and are payable in two installments, on or about June 1 and September 1. The County collects such taxes and remits them periodically.

INTERFUND BALANCES

Interfund balances are advances in anticipation of receipts to cover temporary cash shortages. The composition of interfund balances as of the date of this report, is as follows:

Receivable Fund	Payable Fund	Amount
General	Nonmajor Governmental	$ 2,662,619
Nonmajor Governmental	Nonmajor Governmental	89,385
		2,752,004

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

INTERFUND TRANSFERS

Interfund transfers for the year consisted of the following:

Transfers In	Transfers Out	Amount	
Library	General	$ 29,489	(2)
Parks and Recreation	General	2,232,541	(2)
Citywide Capital	General	2,902,227	(2)
Buildings and Grounds	General	803,877	(2)
Nonmajor Governmental	General	321,373	(1)
Nonmajor Governmental	Nonmajor Governmental	33,843	(2)
Sewer	General	1,600,356	(1)
Water	Citywide Capital	104,209	(1)
Water	Sewer	73,650	(1)
		8,101,565	

Transfers are used to (1) move revenues from the fund that statute or budget requires to collect them to the fund that statute or budget requires to expend them and (2) use unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations.

The purpose of significant interfund transfers are as follows:

- $2,232,541 to the Parks and Recreation Fund to subsidize operations.
- $2,902,227 to the Citywide Capital Fund to fund the construction of current and future roadway projects.
- $803,877 to the Buildings and Grounds Fund to fund current and future City building projects and acquisitions.
- $1,600,356 to the Sewer Fund to finance debt service costs related to the 2022 refunding bond.

LEASES PAYABLE

The City has the following leases outstanding at year end:

Lease	Term	Start Date	Payments	Interest Rate
Body Cameras	5 years	December 1, 2022	$25,839 per year	4.34%

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LEASES PAYABLE – Continued

The future principal and interest lease payments as of the year-end were as follows:

Fiscal Year	Principal	Interest
2024	$ 21,801	4,038
2025	22,747	3,092
2026	23,734	2,105
2027	24,764	1,075
	93,046	10,310

LONG-TERM DEBT

Other Obligations

Other Obligations currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Conover Sewer Recapture owed to John Conover as reimbursement for sewer extension, due in one lump sum payment of $1,890 in fiscal year 2023.	Governmental Activities	$ 1,890	-	1,890	-

Notes Payable

The City enters into notes payable to provide funds for acquisition of capital assets. Notes payable have been issued for the governmental activities. Notes payable are direct obligations and pledge the full faith and credit of the City. Notes payable currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Promissory Note of 2019, payable in monthly installments of $71,570, which includes interest at 3.60%, through November 18, 2028.	Vehicle and Equipment	$ 418,222	-	57,250	360,972

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Illinois Environmental Protection Agency (IEPA) Loans Payable

The City has entered into loan agreements with the IEPA to provide low interest financing for sewer and water improvements. IEPA loans currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
IEPA (L17-1156300) Loan Payable of 2007, due in semi-annual installments of $28,263 to $61,744 including interest at 2.50% through August 9, 2026.	Water	$ 529,024	-	112,504	416,520

General Obligation Bonds

The City issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities. General obligation bonds have been issued for both governmental and business-type activities. General obligation bonds issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues. General obligation bonds are direct obligations and pledge the full faith and credit of the City.

General obligation bonds currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Library Bonds of 2006, due in annual installments of $50,000 to $100,000 plus interest at 4.75% to 4.80% through December 30, 2024.	Library	$ 275,000	-	75,000	200,000
General Obligation Library Refunding Bonds of 2013, due in annual installments of $155,000 to $730,000 plus interest at 2.00% to 4.00% through December 30, 2024.	Library	2,105,000	-	675,000	1,430,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2014, due in annual installments of $230,000 to $270,000 plus interest at 4.00% to 4.30% through December 1, 2029.	Countryside TIF	$ 1,235,000	-	-	1,235,000
General Obligation Alternate Revenue Source Bonds of 2014A, due in annual installments of $135,000 to $300,000 plus interest at 3.00% to 4.00% through December 1, 2033.	Citywide Capital	3,000,000	-	210,000	2,790,000
General Obligation Refunding Alternate Revenue Source Bonds of 2014B, due in annual installments of $255,000 to $320,000 plus interest at 2.00% to 3.00% through December 30, 2022.	Debt Service	320,000	-	320,000	-
General Obligation Refunding Alternate Revenue Source Bonds of 2014C, due in annual installments of $120,000 to $140,000 plus interest at 2.00% to 3.00% through December 30, 2024.	Water	410,000	-	135,000	275,000
General Obligation Alternate Revenue Source Bonds of 2015A, due in annual installments of $100,000 to $475,000 plus interest at 4.00% through December 1, 2034.	Countryside TIF	1,041,067	-	116,424	924,643
	Water	2,893,933	-	323,576	2,570,357

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2016, due in annual installments of $430,000 to $1,475,000 plus interest at 4.00% to 4.25% through December 30, 2022.	Water	$ 915,000	-	915,000	-
General Obligation Alternate Revenue Source Bonds of 2021, due in annual installments of $320,000 to $530,000 plus interest at 2.00% to 4.00% through December 30, 2040.	Building and Grounds	8,250,000	-	320,000	7,930,000
General Obligation Refunding Alternate Revenue Source Bonds of 2022, due in annual installments of $1,270,000 to $1,320,000 plus interest at 1.142% through December 1, 2025.	Building and Grounds	1,010,000	-	250,000	760,000
	Sewer	4,160,000	-	1,020,000	3,140,000
		25,615,000	-	4,360,000	21,255,000

Activity	Beginning Balances	Issuances	Retirements	Ending Balances
Governmental	$ 17,236,067	-	1,966,424	15,269,643
Business-Type	8,378,933	-	2,393,576	5,985,357
	25,615,000	-	4,360,000	21,255,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Certificates

The City issues debt certificates to provide funds for the acquisition and construction of major capital facilities. Debt certificates have been issued for both governmental and business-type activities. Debt Certificates issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues. Debt certificates currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Illinois Rural Bond Bank Debt Certificates of 2003A, due in annual installments of $80,000 to $155,000 plus interest at 1.60% to 5.20% through February 1, 2023.	Sewer	$ 155,000	-	155,000	-

Asset Retirement Obligation

The City has recognized an asset retirement obligation (ARO) and related deferred outflow of resources in connection with its obligation to seal and abandon various water wells and for the demolition of the City's underground storage tanks at the end of their estimated useful lives in accordance with federal, state, and/or local requirements. The ARO was measured using actual historical costs for similar abandonments, adjusted for inflation through the end of the year. The estimated remaining useful lives of the water wells and underground storage ranges between 48 and 83 years.

Non-Commitment Debt

Special service area bonds outstanding as of the date of this report totaled $47,958,000, Kendall Marketplace business district bonds totaled $6,665,000 and Kendall Marketplace sales tax bonds totaled $4,755,000. These bonds are not an obligation of the government and are secured by the levy of an annual tax on the real property within the special service area, business district taxes, and sales taxes, respectively. The government is in no way liable for repayment but is only acting as agent for the property owners in levying/assessing and collecting the tax and forwarding the collections to bondholders.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Long-Term Liability Activity

Changes in long-term liabilities during the fiscal year were as follows:

Type of Debt	Beginning Balances	Additions	Deductions	Ending Balances	Amounts Due within One Year
Governmental Activities					
Compensated Absences	$ 691,508	116,468	58,234	749,742	149,948
Net Pension Liability/(Asset) - IMRF	(1,528,392)	2,750,539	-	1,222,147	-
Net Pension Liability - Police Pension	12,558,636	305,975	-	12,864,611	-
Total OPEB Liability - RBP	959,165	-	205,553	753,612	-
Other Obligations	1,890	-	1,890	-	-
Notes Payable	418,222	-	57,250	360,972	59,347
General Obligation Bonds	17,236,067	-	1,966,424	15,269,643	1,711,716
Plus: Unamortized Premium	545,063	-	60,820	484,243	-
Leases Payable	-	131,184	38,138	93,046	38,376
	30,882,159	3,304,166	2,388,309	31,798,016	1,959,387
Business-Type Activities					
Compensated Absences	$ 123,365	632	316	123,681	52,115
Net Pension Liability/(Asset) - IMRF	(330,272)	557,995	-	227,723	-
Total OPEB Liability - RBP	143,322	-	26,630	116,692	-
IEPA Loans Payable	529,024	-	112,504	416,520	115,333
General Obligation Bonds	8,378,933	-	2,393,576	5,985,357	1,508,284
Plus: Unamortized Premium	76,232	-	13,028	63,204	-
Debt Certificates	155,000	-	155,000	-	-
Developer Agreements	2,505,402	150,000	-	2,655,402	-
Asset Retirement Obligation	2,783,000	-	-	2,783,000	-
	14,364,006	708,627	2,701,054	12,371,579	1,675,732

For the governmental activities, the compensated absences, the net pension liabilities/(asset), and the total OPEB liability are generally liquidated by the General Fund. The Vehicle and Equipment Fund makes payment on the notes payable and leases payable. General obligation bonds are being liquidated by the Library, Countryside TIF, Citywide Capital, Buildings and Grounds, and Debt Service funds. The other obligations are paid by governmental activities.

For the business-type activities, the Sewer and Water Funds liquidate compensated absences, the net pension liability/(asset), and the total OPEB liability. The Sewer and Water Funds are making payments on the IEPA loans payable, general obligation bonds, debt certificates and developer agreements. The Water Fund liquidates the asset retirement obligation.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Service Requirements to Maturity

The annual debt service requirements to maturity, including principal and interest, are as follows:

	Governmental Activities			
	Notes Payable		General Obligation Bonds	
Fiscal Year	Principal	Interest	Principal	Interest
2024	$ 59,347	12,223	1,711,716	477,272
2025	61,581	9,989	1,775,685	417,298
2026	63,867	7,703	1,126,889	354,959
2027	66,237	5,333	898,212	319,421
2028	68,691	2,879	940,858	285,506
2029	41,249	501	973,504	247,750
2030	-	-	1,021,150	208,427
2031	-	-	778,796	166,771
2032	-	-	796,442	144,319
2033	-	-	819,088	121,361
2034	-	-	841,734	97,697
2035	-	-	555,569	73,328
2036	-	-	480,000	60,600
2037	-	-	490,000	51,000
2038	-	-	500,000	41,200
2039	-	-	510,000	31,200
2040	-	-	520,000	21,000
2041	-	-	530,000	10,600
Total	360,972	38,628	15,269,643	3,129,709

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Service Requirements to Maturity – Continued

	Business-Type Activities			
	IEPA		General Obligation	
Fiscal	Loan Payable		Bonds	
Year	Principal	Interest	Principal	Interest
2024	$ 115,333	9,697	1,508,284	146,918
2025	118,235	6,795	1,529,315	117,424
2026	121,209	3,821	1,223,111	87,467
2027	61,743	773	161,788	68,981
2028	-	-	169,142	62,509
2029	-	-	176,496	55,743
2030	-	-	183,850	48,683
2031	-	-	191,204	41,329
2032	-	-	198,558	33,681
2033	-	-	205,912	25,739
2034	-	-	213,266	17,503
2035	-	-	224,431	8,972
Total	416,520	21,086	5,985,357	714,949

Legal Debt Margin

Chapter 65, Section 5/8-5-1 of the Illinois Compiled Statutes provides, "…no municipality having a population of less than 500,000 shall become indebted in any manner or for any purpose, to an amount, including existing indebtedness in the aggregate exceeding 8.625% on the value of the taxable property therein, to be ascertained by the last assessment for state and county purposes, previous to the incurring of the indebtedness or, until January 1, 1983, if greater, the sum that is produced by multiplying the municipality's 1978 equalized assessed valuation by the debt limitation percentage in effect on January 1, 1979."

Assessed Valuation - 2022	$ 700,198,445
Legal Debt Limit - 8.625% of Assessed Value	60,392,116
Amount of Debt Applicable to Limit	
General Obligation Bonds	1,630,000
Legal Debt Margin	58,762,116

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

NET POSITION CLASSIFICATIONS

Net investment in capital assets was comprised of the following as of year-end:

Governmental Activities	
Capital Assets - Net of Accumulated Depreciation	$ 114,207,503
Plus: Unspent Bond Proceeds	241,086
Less Capital Related Debt:	
Notes Payable of 2019	(360,972)
General Obligation Library Bonds of 2006	(200,000)
General Obligation Library Refunding Bonds of 2013	(1,430,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014	(1,235,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014A	(2,790,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(924,643)
General Obligation Alternate Revenue Source Bonds of 2021	(7,930,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2022	(760,000)
Leases	(93,046)
Loss on Refunding	28,249
Premium on Debt Issuance	(484,243)
Net Investment in Capital Assets	98,268,934
Business-Type Activities	
Capital Assets - Net of Accumulated Depreciation	$ 73,519,003
Less Capital Related Debt:	
IEPA (L17-1156300) Loan Payable of 2007	(416,520)
General Obligation Refunding Alternate Revenue Source Bonds of 2014C	(275,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(2,570,357)
General Obligation Refunding Alternate Revenue Source Bonds of 2022	(3,140,000)
Loss on Refunding	2,019
Premium on Debt Issuance	(63,204)
Net Investment in Capital Assets	67,055,941

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

FUND BALANCE CLASSIFICATIONS

In the governmental funds' financial statements, the City considers restricted amounts to have been spent when an expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available. The City first utilizes committed, then assigned and then unassigned fund balance when an expenditure is incurred for purposes for which all three unrestricted fund balances are available.

Nonspendable Fund Balance. Consists of resources that cannot be spent because they are either: a) not in a spendable form; or b) legally or contractually required to be maintained intact.

Restricted Fund Balance. Consists of resources that are restricted to specific purposes, that is, when constraints placed on the use of resources are either: a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments; or b) imposed by law through constitutional provisions or enabling legislation.

Committed Fund Balance. Consists of resources constrained (issuance of an ordinance) to specific purposes by the government itself, using its highest level of decision-making authority, Members of the City Council; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest-level action to remove or change the constraint.

Assigned Fund Balance. Consists of amounts that are constrained by Members of the City Council's intent to be used for specific purposes but are neither restricted nor committed. Intent is expressed by a) Members of the City Council itself or b) a body or official to which Members of the City Council has delegated the authority to assign amounts to be used for specific purposes. The City's highest level of decision-making authority is Members of the City Council, who is authorized to assign amounts to a specific purpose.

Unassigned Fund Balance. Consists of residual net resources of a fund that has not been restricted, committed, or assigned within the General Fund and deficit fund balances of other governmental funds.

Minimum Fund Balance Policy. The City's policy states that the General fund should maintain a minimum unrestricted fund balance of no less than 30% of the annual appropriations budget.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

FUND BALANCE CLASSIFICATIONS – Continued

The following is a schedule of fund balance classifications for the governmental funds as of the date of this report:

		Special Revenue		Capital Projects			
	General	Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
Fund Balances							
Nonspendable							
Prepaids	$ 171,778	12,241	38,518	-	491	-	223,028
Restricted							
Library Operations	-	1,033,277	-	-	-	-	1,033,277
Motor Fuel Tax	-	-	-	-	-	319,840	319,840
Special Service Areas	-	-	-	-	-	48,820	48,820
Tax Increment Financing	-	-	-	-	-	87,577	87,577
Capital Projects - Bond Proceeds	-	-	-	-	241,086	-	241,086
	-	1,033,277	-	-	241,086	456,237	1,730,600
Assigned							
Capital Projects	-	-	-	4,785,053	1,624,330	1,432,503	7,841,886
Parks and Recreation	-	-	222,600	-	-	-	222,600
	-	-	222,600	4,785,053	1,624,330	1,432,503	8,064,486
Unassigned	10,824,829	-	-	-	-	(2,789,972)	8,034,857
Total Fund Balances	10,996,607	1,045,518	261,118	4,785,053	1,865,907	(901,232)	18,052,971

NOTE 4 – OTHER INFORMATION

RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; natural disasters; and injuries to the City's employees. The City has purchased insurance from private insurance companies. Risks covered included certain types of liabilities and bonds. Premiums have been displayed as expenditures/expenses in appropriate funds. There were no significant changes in insurance coverages from the prior year and settlements did not exceed insurance coverage in any of the past three fiscal years.

NOTE 4 – OTHER INFORMATION – Continued

CONTINGENT LIABILITIES

Litigation

The City is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the City's attorney, the resolution of these matters will not have a material adverse effect on the financial condition of the City.

Grants

Amounts received or receivable from grantor agencies are subject to audit and adjustment by grantor agencies, principally the federal government. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures which may be disallowed by the grantor cannot be determined at this time although the City expects such amounts, if any, to be immaterial.

COMMITMENTS

Agreements with Developers – Governmental Activities

Under a Development and Annexation Agreement entered into in July of 2000, amended in October of 2001, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Kennedy Road. Eligible costs of $5,977,027 are to be reimbursed from 65% of the sales tax generated in the development. Through April 30, 2023, the City has reimbursed $4,158,576, including $463,927 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under an Annexation Agreement entered into in April of 2006, the City agreed to reimburse eligible costs associated with a development located at Route 47 between Base Line Road and Corneils Road. Eligible costs are to be reimbursed from 55% of City Admissions Taxes collected, limited to a period of ten years. Through April 30, 2023, the City has reimbursed $1,738,927, including $208,296 in the current year. All payments have been recorded as an expenditure of the General Fund. The agreement was amended in April of 2019 to rebate 100% of admissions tax received by the City from the developer for a period of twenty years, until September 2026, and the admissions tax rate was decreased from 5% to 2.75%. The 100% rebate went into effect beginning with the 2013 fiscal year.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under a Development/Economic Initiative Agreement entered into in January of 2007, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Corneils Road. Eligible costs of $287,392 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of twenty years. Through April 30, 2023, the City has reimbursed $23,404, including $0 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development Agreement entered into in June of 2007, the City agreed to create a business district in the area around Route 34 and Cannonball Trail. Under the agreement, 50% of sales tax and 100% of the business district tax generated in the district are remitted by the City to an escrow agent to pay the debt service on the Special Service Area Revenue Bonds of 2007. The bonds are secured solely by the pledged revenues and are not obligations of the City and are therefore not recorded on the City's books. All payments have been recorded as an expenditure of the General Fund. Expenditures in the current year were $564,884 for sales taxes and $477,183 in business district taxes.

In February of 2011, the City amended a Development/Economic Initiative Agreement dated April 2007. Under the original agreement, the City agreed to reimburse 20% of eligible costs associated with a development located at Route 47 and Fountainview Drive from 50% of the sales tax generated in the development, limited to a period of twenty years. Under the amended agreement, the City will hold the sales tax rebates in an escrow account until certain land improvements has been completed. Through April 30, 2023, the City is holding $29,908 in escrow, including $4,650 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under development agreements entered into in April 2012, the City agreed to reimburse eligible costs associated with a development located at within the Downtown TIF district. Eligible costs are to be reimbursed from 85% of the incremental property tax and 100% of the business district tax generated in the development, through December 31, 2029. Through April 30, 2023, the City has reimbursed $236,377 in incremental property taxes and $249,436 in business district taxes. Incremental property tax payments have been recorded as an expenditure of the Downtown TIF Fund and the Business District Tax Rebates have been recorded as an expenditure of the General Fund.

Under a development agreement entered into in May 2013, the City agreed to reimburse eligible costs associated with a development located at Route 34 and Route 47 in the Countryside TIF district. Eligible costs are to be reimbursed from 50% of the amusement tax and 100% of the business district tax generated in the development, limited to a period of 10 years. Through April 30, 2023, the City has reimbursed $385,574 in amusement taxes and $219,790 in business district taxes. For the current year, amusement tax rebate expenditures of $32,836 and business district rebate expenditures of $69,534 were recorded in the General Fund.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under a Development/Economic Initiative Agreement entered into in March of 2016, the City agreed to reimburse eligible costs associated with a development located within the Fountainview Subdivision. Eligible costs of $63,350 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of ten years. Through April 30, 2023, the City has reimbursed $27,722, including $5,196 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development/Economic Initiative Agreement entered into in April of 2019, the City agreed to accept all previously constructed public improvements and complete all remaining infrastructure improvements in the Raintree Subdivision Special Service Area, as stipulated in the agreement. The Developer has acquired certain vacant lots within the Raintree Subdivision, and has further agreed to pay certain impact fees and other contributions towards the City at agreed upon timeframes and complete construction on certain dwelling units. As of April 30, 2023, the City has incurred $97,391 in expenditures, including $4,377 in the current year, which have been fully reimbursed by the developer.

Under a development agreement entered into in August 2019, the City agreed to reimburse eligible costs associated with the renovation of the historic Kendall County jail. Eligible costs are to be reimbursed from incremental property taxes through 2034. Through April 30, 2023, the City has reimbursed $139,592 in renovation costs, including $1,808 in the current year, which are recorded as an expenditure of the Downtown TIF II Fund.

Agreements with Developers – Business-Type Activities

Under a reimbursement agreement entered into in August of 2003, the City and the developer of the Fox Hill subdivision agreed to reimburse eligible costs associated with the construction and over-sizing of water and sewer infrastructure lines within the area. Eligible costs are to be paid to the developer within twenty years of the agreement. This agreement was amended in April 2006 to include additional costs. Total eligible costs were $807,847, which accrues compounded interest of 5% annually. Interest for a portion of eligible costs was computed back to January 1, 1995. Total interest to date is $1,458,945. The amount recorded as a liability, including interest, as of April 30, 2023 is $2,505,402. Of this amount, 52% is recorded in the Water Fund. The remaining 48% of this amount is recorded in the Sewer Fund.

Hotel/Motel Tax Rebates

All hotels and motels located within the City limits are required to pay a tax of 3% based on the gross rental receipts from the renting, leasing or letting of a hotel or motel room. Proceeds from the hotel/motel tax are remitted to the Aurora Area Convention & Visitors Bureau (AACVB) for the purposes of promoting tourism and conventions within Yorkville, pursuant to State Statute. The City has recorded $137,264 in rebates in the General Fund for the fiscal year ended April 30, 2023.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS

The City contributes to two defined benefit pension plans, the Illinois Municipal Retirement Fund, a defined benefit agent multiple-employer public employee retirement system and the Police Pension Plan which is a single-employer pension plan. A separate report is issued for the Police Pension Plan and may be obtained by writing to the City at 651 Prairie Pointe Drive, Yorkville, Illinois 60560. IMRF does issue a publicly available financial report that includes financial statements and required supplementary information for the plan as a whole, but not by individual employer. That report may be obtained on-line at www.imrf.org. The benefit, benefit levels, employee contributions, and employer contributions are governed by Illinois Compiled Statutes (ILCS) and can only be amended by the Illinois General Assembly.

The aggregate amounts recognized for the two pension plans are:

	Net Pension Liability	Deferred Outflows	Deferred Inflows	Pension Expense
IMRF	$ 1,449,870	1,754,838	118,931	247,146
Police Pension	12,864,611	2,185,870	1,239,958	1,327,575
	14,314,481	3,940,708	1,358,889	1,574,721

Illinois Municipal Retirement (IMRF)

Plan Descriptions

Plan Administration. All employees (other than those covered by the Police Pension Plan) hired in positions that meet or exceed the prescribed annual hourly standard must be enrolled in IMRF as participating members. The plan is accounted for on the economic resources' measurement focus and the accrual basis of accounting. Employer and employee contributions are recognized when earned in the year that the contributions are required, benefits and refunds are recognized as an expense and liability when due and payable.

Benefits Provided. IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. IMRF provides two tiers of pension benefits. Employees hired ***before*** January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last 10 years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

Employees hired ***on or after*** January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the *lesser* of:

- 3% of the original pension amount
- or 1/2 of the increase in the Consumer Price Index of the original pension amount.

Plan Membership. As of December 31, 2022, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	51
Inactive Plan Members Entitled to but not yet Receiving Benefits	59
Active Plan Members	61
Total	171

Contributions. As set by statute, the City's Regular Plan Members are required to contribute 4.50% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. For the year-ended April 30, 2023, the City's contribution was 7.97% of covered payroll.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Net Pension Liability/(Asset). The City's net pension liability/(asset) was measured as of December 31, 2022. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation performed, as of December 31, 2022, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.25%
Salary Increases	2.85% to 13.75%
Cost of Living Adjustments	2.75%
Inflation	2.25%

For nondisabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Actuarial Assumptions – Continued.

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	25.50%	4.90%
Domestic Equities	35.50%	6.50%
International Equities	18.00%	7.60%
Real Estate	10.50%	6.20%
Blended	9.50%	6.25% - 9.90%
Cash and Cash Equivalents	1.00%	4.00%

Discount Rate

The discount rate used to measure the total pension liability was 7.25%, same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability/(Asset)	$ 4,221,473	1,449,870	(657,243)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Changes in the Net Pension Liability/(Asset)

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability/ (Asset) (A) - (B)
Balances at December 31, 2021	$ 16,822,361	18,681,025	(1,858,664)
Changes for the Year:			
Service Cost	392,560	-	392,560
Interest on the Total Pension Liability	1,213,553	-	1,213,553
Difference Between Expected and Actual Experience of the Total Pension Liability	382,869	-	382,869
Changes of Assumptions	-	-	-
Contributions - Employer	-	404,024	(404,024)
Contributions - Employees	-	227,639	(227,639)
Net Investment Income	-	(2,103,296)	2,103,296
Benefit Payments, including Refunds of Employee Contributions	(559,948)	(559,948)	-
Other (Net Transfer)	-	152,081	(152,081)
Net Changes	1,429,034	(1,879,500)	3,308,534
Balances at December 31, 2022	18,251,395	16,801,525	1,449,870

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2023, the City recognized pension expense of $247,146. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions – Continued

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 398,200	(20,194)	378,006
Change in Assumptions	-	(98,737)	(98,737)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	1,249,772	-	1,249,772
Total Expenses to be Recognized in Future Periods	1,647,972	(118,931)	1,529,041
Pension Contributions Made Subsequent to the Measurement Date	106,866	-	106,866
Total Deferred Amounts Related to IMRF	1,754,838	(118,931)	1,635,907

The $106,866 reported as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the reporting year ended April 30, 2024. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/ (Inflows) of Resources
2024	$ (11,706)
2025	323,529
2026	504,094
2027	713,124
2028	-
Thereafter	-
Total	1,529,041

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan

Plan Descriptions

Plan Administration. The Police Pension Plan is a single-employer defined benefit pension plan that covers all sworn police personnel. The defined benefits and employee and minimum employer contribution levels are governed by Illinois Compiled Statutes (40 ILCS 5/3-1) and may be amended only by the Illinois legislature. The City accounts for the Fund as a pension trust fund. The Fund is governed by a five-member pension board. Two members of the Board are appointed by the City Mayor, one member is elected by pension beneficiaries and two members are elected by active police employees.

Plan Membership. At April 30, 2023, the measurement date, membership consisted of the following:

Inactive Plan Members Currently Receiving Benefits	13
Inactive Plan Members Entitled to but not yet Receiving Benefits	8
Active Plan Members	33
Total	54

Benefits Provided. The following is a summary of the Police Pension Plan as provided for in Illinois State Statutes.

The Police Pension Plan provides retirement benefits through two tiers of benefits as well as death and disability benefits. Covered employees hired before January 1, 2011 (Tier 1), attaining the age of 50 or older with 20 or more years of creditable service are entitled to receive an annual retirement benefit of ½ of the salary attached to the rank held on the last day of service, or for one year prior to the last day, whichever is greater. The annual benefit shall be increased by 2.5 percent of such salary for each additional year of service over 20 years up to 30 years, to a maximum of 75 percent of such salary. Employees with at least eight years but less than 20 years of credited service may retire at or after age 60 and receive a reduced benefit. The monthly benefit of a police officer who retired with 20 or more years of service after January 1, 1977 shall be increased annually, following the first anniversary date of retirement and be paid upon reaching the age of at least 55 years, by 3 percent of the original pension and 3 percent compounded annually thereafter. Covered employees hired on or after January 1, 2011 (Tier 2), attaining the age of 55 or older with 10 or more years of creditable service are entitled to receive an annual retirement benefit equal to the average monthly salary obtained by dividing the total salary of the police officer during the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest by the number of months of service in that period. Police officer salary for the pension purposes is capped at $106,800, plus the lesser of ½ of the annual change in the Consumer Price Index or 3 percent compounded. The annual benefit shall be increased by 2.5 percent of such a salary for each additional year of service over 20 years up to 30 years to a maximum of 75 percent of such salary. Employees with at least 10 years may retire at or after age 50 and receive a reduced benefit (i.e., ½ percent for each month under 55).

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. The monthly benefit of a Tier 2 police officer shall be increased annually at age 60 on the January 1st after the police officer retires, or the first anniversary of the pension starting date, whichever is later. Noncompounding increases occur annually, each January thereafter. The increase is the lesser of 3 percent or ½ of the change in the Consumer Price Index for the proceeding calendar year.

Contributions. Covered employees are required to contribute 9.91% of their base salary to the Police Pension Plan. If an employee leaves covered employment with less than 20 years of service, accumulated employee contributions may be refunded without accumulated interest. The City is required to contribute the remaining amounts necessary to finance the plan and the administrative costs as actuarially determined by an enrolled actuary. However, effective January 1, 2011, ILCS requires the City to contribute a minimum amount annually calculated using the projected unit credit actuarial cost method that will result in the funding of 90% of the past service cost by the year 2040. For the year-ended April 30, 2023, the City's contribution was 44.25% of covered payroll.

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation performed, as of April 30, 2023, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.00%
Salary Increases	Graded by Years of Service
Cost of Living Adjustments	2.50%
Inflation	2.50%

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Actuarial Assumptions – Continued

Mortality rates were based on the PubS-2010 base rates projected generationally using Scale MP2021.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%, the same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the net pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 17,426,325	12,864,611	9,203,592

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Changes in the Net Pension Liability

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability (A) - (B)
Balances at April 30, 2022	$ 27,041,964	14,483,328	12,558,636
Changes for the Year:			
Service Cost	723,495	-	723,495
Interest on the Total Pension Liability	1,845,726	-	1,845,726
Changes of Benefit Terms	-	-	-
Difference Between Expected and Actual Experience of the Total Pension Liability	148,948	-	148,948
Changes of Assumptions	(612,496)	-	(612,496)
Contributions - Employer	-	1,334,771	(1,334,771)
Contributions - Employees	-	381,767	(381,767)
Net Investment Income	-	83,160	(83,160)
Benefit Payments, including Refunds of Employee Contributions	(1,245,047)	(1,245,047)	-
Administrative Expense	(26,932)	(26,932)	-
Net Changes	833,694	527,719	305,975
Balances at April 30, 2023	27,875,658	15,011,047	12,864,611
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability			53.85%

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2023, the City recognized pension expense of $1,327,575. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions – Continued

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 519,437	(503,001)	16,436
Change in Assumptions	608,741	(736,957)	(128,216)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	1,057,692	-	1,057,692
Total Deferred Amounts Related to Police Pension	2,185,870	(1,239,958)	945,912

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/ (Inflows) of Resources
2024	$ 188,625
2025	35,202
2026	541,521
2027	235,071
2028	19,743
Thereafter	(74,250)
Total	945,912

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS

General Information about the OPEB Plan

Plan Description. The City's defined benefit OPEB plan, Retiree Benefits Plan (RBP), provides OPEB for all permanent full-time general and public safety employees of the City. RBP is a single-employer defined benefit OPEB plan administered by the City. Article 11 of the State Compiled Statutes grants the authority to establish and amend the benefit terms and financing requirements to the City Board. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Benefits Provided. RBP provides coverage under the City of Yorkville group health program by contributing the monthly premium to retirees and their dependents.

Plan Membership. As of April 30, 2023, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	8
Inactive Plan Members Entitled to but not yet Receiving Benefits	-
Active Plan Members	93
Total	101

Total OPEB Liability

The City's total OPEB liability was measured as of April 30, 2023 and was determined by an actuarial valuation as of that date.

Actuarial Assumptions and Other Inputs. The total OPEB liability in the April 30, 2023 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.50%
Salary Increases	3.50%
Discount Rate	3.77%
Healthcare Cost Trend Rates	6.75% for 2023, decreasing 0.25% per year to an ultimate rate of 4.5% for 2031 and later years
Retirees' Share of Benefit-Related Costs	100% of projected health insurance premiums for retirees

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Total OPEB Liability – Continued

Actuarial Assumptions and Other Inputs – Continued. The discount rate was based upon the expected rate of return associated with funded benefits, and unfunded benefits, the 20-year municipal bond rate.

Mortality rates were based on the PubS-2010 table rates projected generationally using Scale MP2021 for Police Officers. For all others, the PubG-2010 table base rates projected generationally using Scale MP2021 was used.

Change in the Total OPEB Liability

	Total Total OPEB Liability
Balance at April 30, 2022	$ 1,102,487
Changes for the Year:	
Service Cost	52,680
Interest on the Total Pension Liability	36,695
Changes of Benefit Terms	-
Difference Between Expected and Actual Experience	(283,584)
Changes of Assumptions or Other Inputs	21,122
Benefit Payments	(59,096)
Net Changes	(232,183)
Balance at April 30, 2023	870,304

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The discount rate used to measure the total pension liability was 3.77%, while the prior valuation used 3.42%. The following presents the total OPEB liability, calculated using the discount rate, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher:

	1% Decrease (2.77%)	Current Discount Rate (3.77%)	1% Increase (4.77%)
Total OPEB Liability	$ 940,471	870,304	804,307

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability, calculated using varied Healthcare Trend Rates, as well as what the total OPEB liability would be if it were calculated using a Healthcare Trend Rate that is one percentage point lower or one percentage point higher:

	(Varies)	Healthcare Cost Trend Rates (Varies)	(Varies)
Total OPEB Liability	$ 775,842	870,304	981,736

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended April 30, 2023, the City recognized OPEB expense of $82,767. At April 30, 2023, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 267,570	(265,230)	2,340
Change in Assumptions	81,375	(209,954)	(128,579)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	-	-
Total Deferred Amounts Related to OPEB	348,945	(475,184)	(126,239)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB – Continued

Fiscal Year	Net Deferred (Inflows) of Resources
2024	$ (6,608)
2025	(6,608)
2026	(6,608)
2027	(6,608)
2028	(6,608)
Thereafter	(93,199)
Total	(126,239)

SUBSEQUENT EVENT

On August 2, 2023, the United City of Yorkville issued $9,985,000 of Series 2023A General Obligation Alternate Revenue Source with interest rates ranging from 4.375% to 5.000% and maturing on December 30, 2053.

REQUIRED SUPPLEMENTARY INFORMATION

Required supplementary information includes financial information and disclosures that are required by the GASB but are not considered a part of the basic financial statements. Such information includes:

- Schedule of Employer Contributions
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Changes in the Employer's Net Pension Liability/(Asset)
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Investment Returns
  - Police Pension Fund

- Schedule of Changes in the Employer's Total OPEB Liability
  - Retiree Benefit Plan

- Budgetary Comparison Schedule
  - General Fund
  - Library – Special Revenue Fund
  - Parks and Recreation – Special Revenue Fund

Notes to the Required Supplementary Information

Budgetary Information – Budgets are adopted on a basis consistent with generally accepted accounting principles.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2023

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2016	$ 311,346	$ 311,346	$ -	$ 2,853,781	10.91%
2017	308,134	308,134	-	2,898,722	10.63%
2018	344,487	344,487	-	3,217,682	10.71%
2019	350,666	350,666	-	3,506,685	10.00%
2020	365,540	365,540	-	3,665,848	9.97%
2021	440,315	440,315	-	4,060,573	10.84%
2022	428,230	428,230	-	4,128,183	10.37%
2023	371,172	371,172	-	4,659,881	7.97%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	21 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation	2.25%
Salary Increases	2.85% - 13.75%, Including Interest
Investment Rate of Return	7.25%
Retirement Age	See the Notes to the Financial Statements
Mortality	For non-disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2023

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	$ 571,437	$ 624,168	$ 52,731	$ 2,220,146	28.11%
2016	722,940	722,940	-	2,294,948	31.50%
2017	825,413	825,413	-	2,320,642	35.57%
2018	966,211	966,211	-	2,543,266	37.99%
2019	963,361	963,361	-	2,449,210	39.33%
2020	1,111,484	1,111,484	-	2,631,165	42.24%
2021	1,226,371	1,230,604	4,233	2,744,017	44.85%
2022	1,334,771	1,334,771	-	2,694,486	49.54%
2023	1,320,595	1,334,771	14,176	3,016,544	44.25%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	17 Years
Asset Valuation Method	Fair Value
Inflation	2.50%
Salary Increases	Graded by years of service
Investment Rate of Return	7.00%
Retirement Age	Tier 1 - 20% at 50 to 100% at age 65
	Tier 2 - 5% at 50 to 100% at age 65
Mortality	PubS-2010 base rates projected generationally using Scale MP2021

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2023

	12/31/2015	12/31/2016
Total Pension Liability		
Service Cost	$ 303,003	317,347
Interest	764,628	825,222
Differences Between Expected and Actual Experience	40,167	27,153
Change of Assumptions	-	-
Benefit Payments, Including Refunds of Member Contributions	(295,309)	(318,792)
Net Change in Total Pension Liability	812,489	850,930
Total Pension Liability - Beginning	10,191,193	11,003,682
Total Pension Liability - Ending	11,003,682	11,854,612
Plan Fiduciary Net Position		
Contributions - Employer	$ 311,346	308,134
Contributions - Members	129,289	132,252
Net Investment Income	49,844	684,949
Benefit Payments, Including Refunds of Member Contributions	(295,309)	(318,792)
Other (Net Transfer)	(289,688)	39,225
Net Change in Plan Fiduciary Net Position	(94,518)	845,768
Plan Net Position - Beginning	9,896,191	9,801,673
Plan Net Position - Ending	9,801,673	10,647,441
Employer's Net Pension Liability/(Asset)	$ 1,202,009	1,207,171
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	89.08%	89.82%
Covered Payroll	$ 2,853,781	2,898,722
Employer's Net Pension Liability/(Asset) as a Percentage of Covered Payroll	42.12%	41.64%

Changes of Assumptions. Changes in assumptions related to the discount rate were made in 2015 through 2018 and 2020. Changes in assumptions related to the demographics were made in 2017.

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
330,734	316,829	356,154	384,165	376,700	392,560
887,780	924,525	1,024,674	1,104,694	1,136,979	1,213,553
132,182	507,597	213,134	(69,685)	189,246	382,869
(449,845)	508,408	-	(340,717)	-	-
(365,819)	(442,124)	(499,031)	(509,477)	(749,354)	(559,948)
535,032	1,815,235	1,094,931	568,980	953,571	1,429,034
11,854,612	12,389,644	14,204,879	15,299,810	15,868,790	16,822,361
12,389,644	14,204,879	15,299,810	15,868,790	16,822,361	18,251,395
335,204	365,769	324,580	429,468	443,761	404,024
139,927	167,364	172,689	173,017	188,122	227,639
1,792,699	(594,987)	2,196,500	1,983,375	2,628,659	(2,103,296)
(365,819)	(442,124)	(499,031)	(509,477)	(749,354)	(559,948)
(226,729)	196,498	(8,647)	(97,125)	(10,755)	152,081
1,675,282	(307,480)	2,186,091	1,979,258	2,500,433	(1,879,500)
10,647,441	12,322,723	12,015,243	14,201,334	16,180,592	18,681,025
12,322,723	12,015,243	14,201,334	16,180,592	18,681,025	16,801,525
66,921	2,189,636	1,098,476	(311,802)	(1,858,664)	1,449,870
99.46%	84.59%	92.82%	101.96%	111.05%	92.06%
3,109,498	3,467,005	3,582,558	3,844,833	3,994,256	4,539,593
2.15%	63.16%	30.66%	(8.11%)	(46.53%)	31.94%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability
April 30, 2023

	4/30/2015	4/30/2016
Total Pension Liability		
Service Cost	$ 522,029	576,907
Interest	986,212	1,097,143
Changes of Benefit Terms	-	-
Differences Between Expected and Actual Experience	(483,445)	322,766
Change of Assumptions	999,313	1,116,723
Benefit Payments, Including Refunds of Member Contributions	(435,435)	(443,314)
Administrative Expenses	-	-
Net Change in Total Pension Liability	1,588,674	2,670,225
Total Pension Liability - Beginning	14,306,459	15,895,133
Total Pension Liability - Ending	15,895,133	18,565,358
Plan Fiduciary Net Position		
Contributions - Employer	$ 624,168	722,940
Contributions - Members	214,237	222,736
Contributions - Others	-	-
Net Investment Income	343,590	(30,493)
Benefit Payments, Including Refunds of Member Contributions	(435,435)	(443,314)
Administrative Expense	(14,285)	(13,448)
Net Change in Plan Fiduciary Net Position	732,275	458,421
Plan Net Position - Beginning	5,690,471	6,422,746
Plan Net Position - Ending	6,422,746	6,881,167
Employer's Net Pension Liability	$ 9,472,387	11,684,191
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	40.41%	37.06%
Covered Payroll	$ 2,220,146	2,294,948
Employer's Net Pension Liability as a Percentage of Covered Payroll	426.66%	509.13%

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

4/30/2017	4/30/2018	4/30/2019	4/30/2020	4/30/2021	4/30/2022	4/30/2023
611,857	589,463	650,245	672,849	745,174	726,664	723,495
1,283,144	1,349,196	1,374,562	1,517,322	1,613,488	1,715,607	1,845,726
-	-	-	43,601	-	-	-
123,907	(1,529,007)	105,712	51,301	137,349	278,036	148,948
(565,454)	498,740	612,775	(54,912)	(97,277)	270,434	(612,496)
(469,494)	(501,417)	(597,064)	(798,961)	(906,100)	(975,134)	(1,245,047)
-	-	-	-	-	-	(26,932)
983,960	406,975	2,146,230	1,431,200	1,492,634	2,015,607	833,694
18,565,358	19,549,318	19,956,293	22,102,523	23,533,723	25,026,357	27,041,964
19,549,318	19,956,293	22,102,523	23,533,723	25,026,357	27,041,964	27,875,658
825,413	966,211	963,361	1,111,484	1,230,604	1,334,771	1,334,771
234,058	249,421	243,941	269,903	261,904	278,502	381,767
32,388	-	-	-	-	-	-
473,420	421,975	717,071	(121,161)	3,124,939	(731,141)	83,160
(469,494)	(501,417)	(597,064)	(787,372)	(893,334)	(955,800)	(1,245,047)
(11,774)	(12,266)	(12,693)	(11,589)	(12,766)	(19,334)	(26,932)
1,084,011	1,123,924	1,314,616	461,265	3,711,347	(93,002)	527,719
6,881,167	7,965,178	9,089,102	10,403,718	10,864,983	14,576,330	14,483,328
7,965,178	9,089,102	10,403,718	10,864,983	14,576,330	14,483,328	15,011,047
11,584,140	10,867,191	11,698,805	12,668,740	10,450,027	12,558,636	12,864,611
40.74%	45.55%	47.07%	46.17%	58.24%	53.56%	53.85%
2,320,642	2,543,266	2,449,210	2,631,165	2,744,017	2,694,486	3,016,544
499.18%	427.29%	477.66%	481.49%	380.83%	466.09%	426.47%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Investment Returns
April 30, 2023

Fiscal Year	Annual Money-Weighted Rate of Return, Net of Investment Expense
2015	5.89%
2016	(0.43%)
2017	6.54%
2018	5.09%
2019	7.56%
2020	(1.08%)
2021	26.92%
2022	(4.76%)
2023	(0.91%)

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2023

	4/30/2019
Total OPEB Liability	
Service Cost	$ 43,414
Interest	40,335
Changes in Benefit Terms	-
Differences Between Expected and Actual Experience	-
Change of Assumptions or Other Inputs	12,225
Benefit Payments	(122,570)
Net Change in Total OPEB Liability	(26,596)
Total OPEB Liability - Beginning	1,077,271
Total OPEB Liability - Ending	1,050,675
Covered-Employee Payroll	$ 5,675,523
Total OPEB Liability as a Percentage of Covered-Employee Payroll	18.51%

Notes:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Changes of Assumptions. Changes of assumptions related to the discount rate were made in 2019 through 2023.

4/30/2020	4/30/2021	4/30/2022	4/30/2023
46,531	62,448	63,305	52,680
37,312	29,424	24,995	36,695
-	-	-	-
-	328,449	-	(283,584)
72,122	(136,858)	(112,346)	21,122
(132,377)	(126,246)	(104,947)	(59,096)
23,588	157,217	(128,993)	(232,183)
1,050,675	1,074,263	1,231,480	1,102,487
1,074,263	1,231,480	1,102,487	870,304
5,874,167	6,432,473	6,657,610	7,482,410
18.29%	19.14%	16.56%	11.63%

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 14,316,507	14,316,507	15,255,097
Intergovernmental	5,282,917	5,282,917	5,916,027
Licenses, Permits and Fees	574,500	574,500	832,248
Charges for Services	1,950,962	1,950,962	2,067,245
Fines and Forfeitures	115,350	115,350	100,782
Investment Income	7,500	7,500	289,131
Miscellaneous	92,000	92,000	69,087
Total Revenues	22,339,736	22,339,736	24,529,617
Expenditures			
General Government	5,634,497	5,581,497	5,448,180
Public Safety	6,435,737	6,435,737	6,177,039
Community Development	1,240,747	1,380,747	1,312,006
Public Works	3,322,350	3,322,350	3,333,022
Total Expenditures	16,633,331	16,720,331	16,270,247
Excess (Deficiency) of Revenues Over (Under) Expenditures	5,706,405	5,619,405	8,259,370
Other Financing (Uses)			
Transfers Out	(5,706,405)	(5,759,405)	(7,889,863)
Net Change in Fund Balance	-	(140,000)	369,507
Fund Balance - Beginning			10,627,100
Fund Balance - Ending			10,996,607

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 1,667,234	1,667,234	1,665,847
Intergovernmental	29,151	29,151	52,529
Licenses, Permits and Fees	50,000	50,000	140,950
Charges for Services	11,500	11,500	13,825
Fines and Forfeitures	1,000	1,000	2,433
Investment Income	1,350	1,350	19,533
Miscellaneous	3,250	59,299	60,725
Total Revenues	1,763,485	1,819,534	1,955,842
Expenditures			
Library	985,307	1,057,356	1,014,370
Debt Service			
Principal Retirement	750,000	750,000	750,000
Interest and Fiscal Charges	99,013	99,013	99,002
Total Expenditures	1,834,320	1,906,369	1,863,372
Excess (Deficiency) of Revenues Over (Under) Expenditures	(70,835)	(86,835)	92,470
Other Financing Sources			
Transfers In	23,638	23,638	29,489
Net Change in Fund Balance	(47,197)	(63,197)	121,959
Fund Balance - Beginning			923,559
Fund Balance - Ending			1,045,518

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Charges for Services	$ 650,000	665,000	695,128
Grants and Donations	15,000	15,000	6,800
Investment Income	150	150	2,309
Miscellaneous	210,781	210,781	302,483
Total Revenues	875,931	890,931	1,006,720
Expenditures			
Parks and Recreation			
Park Operations	1,539,676	1,539,676	1,531,380
Recreation Operations	1,515,796	1,678,796	1,446,763
Total Expenditures	3,055,472	3,218,472	2,978,143
Excess (Deficiency) of Revenues Over (Under) Expenditures	(2,179,541)	(2,327,541)	(1,971,423)
Other Financing Sources			
Transfers In	2,179,541	2,232,541	2,232,541
Net Change in Fund Balance	-	(95,000)	261,118
Fund Balance - Beginning			-
Fund Balance - Ending			261,118

OTHER SUPPLEMENTARY INFORMATION

Other supplementary information includes financial statements and schedules not required by the GASB, nor a part of the basic financial statements, but are presented for purposes of additional analysis.

Such statements and schedules include:

- Budgetary Comparison Schedules – Major Governmental Funds
- Combining Statements – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Enterprise Funds

MAJOR GOVERNMENTAL FUNDS

GENERAL FUND

The General Fund accounts for all financial resources except those required to be accounted for in another fund.

SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Library Fund

The Library Fund is used to account for the activity relating to the Yorkville Public Library.

Parks and Recreation Fund

The Parks and Recreation Fund is used to account for the revenues and expenditures associated with the Yorkville Parks and Recreation departments.

CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Citywide Capital Fund

The Citywide Capital Fund is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public.

Buildings and Grounds Fund

The Buildings and Grounds Fund is used to account for maintenance of existing and construction of new municipal owned buildings.

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 3,544,194	3,544,194	3,552,451
Sales Tax	4,553,445	4,553,445	4,618,030
Non-Home Rule Sales Tax	3,543,838	3,543,838	3,756,857
Municipal Utility Tax	1,000,000	1,000,000	1,295,956
Excise Tax	183,090	183,090	201,150
Cable TV Franchise Tax	295,000	295,000	286,541
Hotel Tax	110,000	110,000	152,516
Video Gaming Tax	230,000	230,000	302,526
Admissions and Amusement Tax	335,000	335,000	473,179
Business District Tax	504,940	504,940	593,914
Auto Rental Tax	17,000	17,000	21,977
	14,316,507	14,316,507	15,255,097
Intergovernmental			
State Income Taxes	2,848,816	2,848,816	3,355,846
State Use Tax	807,488	807,488	882,974
Cannabis Excise Tax	41,989	41,989	33,520
Township Road and Bridge Tax	116,077	116,077	115,949
Personal Property Replacement Tax	25,000	25,000	55,258
Federal Grants	1,422,797	1,422,797	1,427,968
State Grants	20,000	20,000	43,485
Miscellaneous	750	750	1,027
	5,282,917	5,282,917	5,916,027
Licenses, Permits and Fees			
Liquor Licenses	65,000	65,000	86,362
Other Licenses	9,500	9,500	9,740
Building Permits	500,000	500,000	736,146
	574,500	574,500	832,248
Charges for Services			
Garbage Surcharge	1,553,021	1,553,021	1,642,610
Collection Fees - Sanitary District	170,000	170,000	191,474
Administrative Chargeback	225,941	225,941	225,941
Police Special Detail	2,000	2,000	7,220
	1,950,962	1,950,962	2,067,245

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Fines and Forfeitures			
Circuit Court Fines	$ 35,000	35,000	58,931
Administrative Adjudication	20,000	20,000	9,461
Police Tows	60,000	60,000	31,950
Other	350	350	440
	115,350	115,350	100,782
Investment Income (Loss)			
Investment Income	7,500	7,500	278,853
Unrealized Gain (Loss)	-	-	10,278
	7,500	7,500	289,131
Miscellaneous			
Reimbursements			
Engineering	5,000	5,000	-
Liability Insurance	10,000	10,000	10,301
Other	22,000	22,000	19,870
Miscellaneous Income	55,000	55,000	38,916
	92,000	92,000	69,087
Total Revenues	22,339,736	22,339,736	24,529,617

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
General Government			
Administration	$ 892,366	892,366	848,594
Finance	599,027	599,027	568,380
Administrative Services	4,143,104	4,090,104	4,031,206
	5,634,497	5,581,497	5,448,180
Public Safety			
Police Department	6,435,737	6,435,737	6,177,039
Community Development			
Building and Zoning	1,240,747	1,380,747	1,312,006
Public Works			
Streets Operations	1,745,293	1,745,293	1,717,927
Health and Sanitation	1,577,057	1,577,057	1,615,095
	3,322,350	3,322,350	3,333,022
Total Expenditures	16,633,331	16,720,331	16,270,247

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
General Government			
Administration			
Salaries - Mayor	$ 10,000	10,000	9,800
Salaries - Liquor Commissioner	1,000	1,000	1,000
Salaries - Alderman	48,000	48,000	44,600
Salaries - Administration	474,258	474,258	465,013
Retirement Plan Contribution	42,749	42,749	37,524
FICA Contribution	37,918	37,918	36,406
Group Health Insurance	63,330	63,330	64,338
Group Life Insurance	572	572	453
Dental Insurance	6,508	6,508	6,083
Vision Insurance	964	964	877
Training and Conferences	17,000	17,000	10,463
Travel and Lodging	10,000	10,000	8,404
Computer Replacement Chargeback	6,815	6,815	6,920
Publishing and Advertising	5,000	5,000	2,461
Printing and Duplicating	7,000	7,000	1,105
Telecommunications	35,000	35,000	36,403
Filing Fees	500	500	302
Codification	10,000	10,000	5,158
Postage and Shipping	2,500	2,500	487
Dues and Subscriptions	22,000	22,000	25,469
Professional Services	12,000	12,000	15,174
Utilities	35,730	35,730	42,293
Rental and Lease Purchase	7,500	7,500	2,717
Office Cleaning	26,022	26,022	12,849
Office Supplies	10,000	10,000	12,295
	892,366	892,366	848,594
Finance			
Salaries and Wages	336,380	336,380	326,134
Retirement Plan Contribution	30,321	30,321	26,266
FICA Contribution	24,548	24,548	23,588
Group Health Insurance	74,496	74,496	65,061
Group Life Insurance	382	382	370

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
General Government - Continued			
Finance - Continued			
Dental Insurance	$ 4,339	4,339	3,695
Vision Insurance	643	643	624
Training and Conferences	3,500	3,500	1,590
Auditing Services	28,695	28,695	28,695
Travel and Lodging	600	600	-
Computer Replacement Chargeback	2,223	2,223	1,623
Printing and Duplicating	3,250	3,250	3,169
Telecommunications	2,250	2,250	2,384
Postage and Shipping	1,200	1,200	2,177
Dues and Subscriptions	1,500	1,500	835
Professional Services	80,000	80,000	78,043
Rental and Lease Purchase	2,200	2,200	2,059
Office Supplies	2,500	2,500	2,067
	599,027	599,027	568,380
Administrative Services			
Police Special Detail Wages	2,000	2,000	7,220
Unemployment Insurance	16,500	16,500	21,197
Liability Insurance	405,061	405,061	408,518
Group Health Insurance - Retirees	45,420	45,420	22,464
Dental Insurance - Retirees	-	-	60
Vision Insurance - Retirees	-	-	19
Purchasing Services	55,707	55,707	11,065
IDOR Adminstration Fee	64,411	64,411	69,286
GC Housing Rental Assistance	10,187	10,187	10,242
Amusement Tax Rebate	36,000	36,000	32,836
Kencom	178,583	178,583	240,925
Information Technology Services	400,000	400,000	288,383
Building and Grounds Chargeback	154,526	154,526	154,526
Corporate Counsel	110,000	110,000	109,642
Litigation Counsel	100,000	100,000	46,992
Professional Services	38,400	38,400	33,273
Special Counsel	35,000	35,000	8,554

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
General Government - Continued			
Administrative Services - Continued			
Engineering Services	$ 450,000	450,000	399,880
Kendall Area Transit	25,000	25,000	23,550
Cable Consortium Fee	65,000	65,000	-
Hotel Tax Rebate	99,000	99,000	137,264
Economic Development	175,100	175,100	172,820
City Property Tax Rebate	1,368	1,368	1,370
Sales Tax Rebate	950,000	950,000	1,038,657
Business District Rebate	494,841	494,841	582,036
Admission Tax Rebate	145,000	145,000	208,296
Bad Debt	1,000	1,000	-
Reimbursable Repairs	10,000	10,000	2,131
Contingency	75,000	22,000	-
	4,143,104	4,090,104	4,031,206
Total General Government	5,634,497	5,581,497	5,448,180
Public Safety			
Police Department			
Salaries - Police Officers	2,132,588	2,132,588	2,023,682
Salaries - Command Staff	551,192	551,192	545,168
Salaries - Sergeants	574,834	574,834	573,255
Salaries - Police Clerks	166,921	166,921	164,708
Salaries - Crossing Guard	30,000	30,000	20,530
Part Time Salaries	70,000	70,000	59,206
Overtime	111,000	111,000	98,758
Retirement Plan Contribution	15,046	15,046	13,276
Employer Contribution - Police Pension	1,334,771	1,334,771	1,334,771
FICA Contribution	270,666	270,666	258,918
Group Health Insurance	649,929	649,929	590,268
Group Life Insurance	4,331	4,331	4,107
Dental Insurance	44,463	44,463	43,330
Vision Insurance	6,573	6,573	6,206
Tuition Reimbursement	6,250	6,250	3,618
Police Commission	7,810	7,810	6,435

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Safety - Continued			
Police Department - Continued			
Training and Conferences	$ 24,500	24,500	23,791
Travel and Lodging	10,000	10,000	6,851
Vehicle and Equipment Chargeback	47,825	47,825	47,825
Computer Replacement Chargeback	21,276	21,276	17,627
Printing and Duplicating	5,000	5,000	3,152
Telecommunications	43,500	43,500	39,451
Postage and Shipping	1,600	1,600	750
Dues and Subscriptions	11,000	11,000	11,980
Professional Services	45,115	45,115	38,371
Adjudication Services	22,050	22,050	14,172
New World Live Scan	2,000	2,000	-
Kendall Co. - Juve Probation	6,500	6,500	5,173
Rental and Lease Purchase	6,000	6,000	5,101
Office Cleaning	26,022	26,022	12,754
Outside Repair and Maintenance	57,000	57,000	41,600
Wearing Apparel	15,000	15,000	15,044
Office Supplies	4,500	4,500	4,701
Operating Supplies	17,100	17,100	41,033
Community Services	3,000	3,000	3,297
Ballistic Vests	3,375	3,375	1,920
Gasoline	78,000	78,000	87,289
Ammunition	9,000	9,000	8,921
Total Public Safety	6,435,737	6,435,737	6,177,039
Community Development			
Building and Zoning			
Salaries and Wages	743,420	743,420	745,841
Retirement Plan Contribution	67,011	67,011	60,301
FICA Contribution	55,572	55,572	55,514
Group Health Insurance	121,479	121,479	101,800
Group Life Insurance	940	940	899
Dental Insurance	9,733	9,733	9,550
Vision Insurance	1,499	1,499	1,431

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Community Development - Continued			
Building and Zoning - Continued			
Training and Conferences	$ 7,850	7,850	4,074
Travel and Lodging	7,000	7,000	4,852
Computer Replacement Chargebacks	8,518	8,518	8,428
Publishing and Advertising	2,500	2,500	397
Printing and Duplicating	3,000	3,000	915
Telecommunications	5,000	5,000	3,890
Postage and Shipping	500	500	258
Inspections	90,000	90,000	87,120
Dues and Subscriptions	3,500	3,500	1,290
Professional Services	75,000	215,000	192,143
Rental and Lease Purchase	5,500	5,500	2,269
Vehicle Maintenance Services	4,725	4,725	1,324
Office Supplies	2,000	2,000	1,785
Operating Supplies	18,250	18,250	18,342
Gasoline	7,750	7,750	9,583
Total Community Development	1,240,747	1,380,747	1,312,006
Public Works			
Streets Operations			
Salaries and Wages	589,189	589,189	585,881
Part Time Salaries	16,800	16,800	-
Overtime	22,500	22,500	15,821
Retirement Plan Contribution	55,137	55,137	48,355
FICA Contribution	46,684	46,684	45,443
Group Health Insurance	150,660	150,660	138,437
Group Life Insurance	799	799	1,037
Dental Insurance	10,908	10,908	10,387
Vision Insurance	1,728	1,728	1,454
Training and Conferences	6,000	6,000	1,311
Travel and Lodging	3,000	3,000	725
Vehicle and Equipment Chargeback	549,408	549,408	549,408
Computer Replacement Chargeback	8,780	8,780	6,866

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Works - Continued			
Streets Operations - Continued			
Traffic Signal Maintenance	$ 20,000	20,000	42,176
Telecommunications	7,600	7,600	5,208
Mosquito Control	6,615	6,615	7,404
Tree and Stump Removal	30,000	30,000	17,974
Professional Services	9,225	9,225	9,503
Julie Services	4,500	4,500	3,439
Rental and Lease Purchase	6,000	6,000	10,059
Office Cleaning	1,460	1,460	1,260
Vehicle Maintenance Services	65,000	65,000	104,338
Wearing Apparel	8,000	8,000	11,212
Operating Supplies	18,000	18,000	11,101
Vehicle Maintenance Supplies	30,000	30,000	26,382
Small Tools and Equipment	24,000	24,000	13,957
Repair and Maintenance	20,000	20,000	9,212
Julie Supplies	1,200	1,200	1,005
Gasoline	32,100	32,100	38,572
	1,745,293	1,745,293	1,717,927
Health and Sanitation			
Garbage Services	1,568,057	1,568,057	1,607,475
Leaf Pickup	9,000	9,000	7,620
	1,577,057	1,577,057	1,615,095
Total Public Works	3,322,350	3,322,350	3,333,022
Total Expenditures	16,633,331	16,720,331	16,270,247

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 1,667,234	1,667,234	1,665,847
Intergovernmental			
Personal Property Replacement Tax	8,000	8,000	18,312
Grants	21,151	21,151	34,217
	29,151	29,151	52,529
Licenses, Permits and Fees			
Development Fees	50,000	50,000	140,950
Charges for Services			
Library Subscription Cards	8,500	8,500	10,974
Program Fees	-	-	6
Copy Fees	3,000	3,000	2,845
	11,500	11,500	13,825
Fines and Forfeitures	1,000	1,000	2,433
Investment Income	1,350	1,350	19,533
Miscellaneous			
Rental Income	500	500	200
Miscellaneous Income	2,750	58,799	60,525
	3,250	59,299	60,725
Total Revenues	1,763,485	1,819,534	1,955,842

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Library			
Salaries and Wages	$ 291,111	291,111	307,963
Part Time Salaries	213,000	213,000	161,256
Retirement Plan Contribution	26,240	26,240	24,289
FICA Contribution	37,585	37,585	34,436
Group Health Insurance	102,663	102,663	102,604
Group Life Insurance	586	586	583
Dental Insurance	7,135	7,135	7,518
Vision Insurance	1,051	1,051	1,083
Unemployment Insurance	1,000	1,000	1,539
Administrative Chargeback	22,638	22,638	27,950
Liability Insurance	-	15,000	15,000
Training and Conferences	3,000	3,000	555
Travel and Lodging	1,500	1,500	727
Publishing and Advertising	2,500	2,500	567
Telecommunications	8,000	8,000	6,845
Postage and Shipping	750	750	1,146
Building and Grounds Chargeback	6,428	6,428	6,428
Dues and Subscriptions	11,000	11,000	8,642
Professional Services	40,000	40,000	23,157
Legal Services	3,000	3,000	-
Automation	21,000	21,000	18,877
Utilities	23,320	23,320	21,069
Office Cleaning	-	-	36,040
Outside Repair and Maintenance	50,000	107,049	121,291
Office Supplies	8,000	8,000	4,073
Operating Supplies	4,000	4,000	5,002
Custodial Supplies	7,000	7,000	4,353
Computer Equipment and Software	28,000	28,000	10,864
Library Programming	2,000	2,000	319
Employee Recognition	300	300	177
E-Book Subscriptions	3,500	3,500	3,000
Audio Books	3,500	3,500	2,068
DVD's and CD's	4,000	4,000	2,417
Books	51,500	51,500	52,532
Total Library	985,307	1,057,356	1,014,370

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Debt Service			
Principal Retirement	$ 750,000	750,000	750,000
Interest and Fiscal Charges	99,013	99,013	99,002
Total Debt Service	849,013	849,013	849,002
Total Expenditures	1,834,320	1,906,369	1,863,372

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Charges for Services			
Fees for Programs	$ 605,000	605,000	640,692
Library Chargeback	-	15,000	15,000
Concessions	45,000	45,000	39,436
Total Charges for Services	650,000	665,000	695,128
Grants and Donations			
Sponsorships and Donations	15,000	15,000	6,800
Investment Income	150	150	2,309
Miscellaneous			
Rental Income	85,781	85,781	101,873
Hometown Days Revenue	120,000	120,000	165,729
Reimbursements	-	-	21,125
Miscellaneous Income	5,000	5,000	13,756
Total Miscellaneous	210,781	210,781	302,483
Total Revenue	875,931	890,931	1,006,720

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Parks and Recreation			
Park Operations			
Salaries and Wages	$ 698,640	698,640	692,910
Part Time Salaries	67,250	67,250	62,116
Overtime	5,000	5,000	5,983
Retirement Plan Contribution	64,943	64,943	57,803
FICA Contribution	57,313	57,313	57,851
Group Health Insurance	163,125	163,125	141,730
Group Life Insurance	1,138	1,138	1,104
Dental Insurance	12,469	12,469	12,398
Vision Insurance	1,826	1,826	1,760
Training and Conferences	9,000	9,000	765
Travel and Lodging	3,000	3,000	22
Vehicle and Equipment Chargeback	154,854	154,854	204,854
Computer Replacement Chargeback	10,814	10,814	12,197
Telecommunications	9,000	9,000	9,510
Professional Services	11,400	11,400	9,789
Legal Services	1,000	1,000	2,355
Rental and Lease Purchase	8,428	8,428	8,219
Office Cleaning	4,456	4,456	3,533
Outside Repairs and Maintenance	40,000	40,000	28,422
Wearing Apparel	6,220	6,220	13,677
Operating Supplies	30,000	30,000	33,524
Small Tools and Equipment	11,000	11,000	10,913
Repairs and Maintenance	71,000	71,000	60,772
Athletic Fields and Equipment	55,000	55,000	52,774
Gasoline	42,800	42,800	46,399
Total Park Operations	1,539,676	1,539,676	1,531,380
Recreation Operations			
Salaries and Wages	416,678	455,946	464,286
Part Time Salaries	27,500	27,500	16,584
Concession Wages	15,000	15,000	12,701
Preschool Wages	60,000	60,000	51,931
Instructor Wages	40,000	40,000	28,880
Retirement Plan Contribution	43,860	47,064	39,905
FICA Contribution	41,339	44,133	42,846

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Parks and Recreation - Continued			
Recreation Operations - Continued			
Group Health Insurance	$ 116,325	137,506	82,352
Group Life Insurance	728	826	862
Dental Insurance	6,590	7,868	6,666
Vision Insurance	1,008	1,185	1,006
Training and Conferences	5,000	5,000	2,969
Travel and Lodging	3,000	3,000	1,813
Computer Replacement Chargeback	8,290	8,290	7,474
Publishing and Advertising	55,000	55,000	12,621
Telecommunications	8,750	8,750	15,203
Scholarships	2,500	2,500	-
Postage and Shipping	3,500	3,500	2,406
Dues and Subscriptions	3,000	3,000	3,169
Professional Services	140,000	140,000	122,304
Utilities	10,600	10,600	8,420
Rental and Lease Purchase	6,000	6,000	1,412
Office Cleaning	15,128	15,128	16,548
Outside Repairs and Maintenance	78,000	78,000	43,292
Hometown Days Expenditures	120,000	120,000	156,063
Program Supplies	240,000	335,000	249,385
Concession Supplies	18,000	18,000	20,133
Office Supplies	3,000	3,000	3,229
Operating Supplies	25,000	25,000	30,604
Repairs and Maintenance	2,000	2,000	1,699
Total Recreation Operations	1,515,796	1,678,796	1,446,763
Total Expenditures	3,055,472	3,218,472	2,978,143

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental			
Grants	$ 1,174,620	1,174,620	29,777
Licenses, Permits and Fees			
Building Permits	-	-	276,710
Development Fees	2,500	2,500	14,396
Road Contribution Fee	50,000	50,000	174,000
Charges for Services			
Road Infrastructure Fee	846,600	846,600	880,006
Investment Income	150	150	36,964
Miscellaneous	1,117,000	1,117,000	1,014,482
Total Revenues	3,190,870	3,190,870	2,426,335
Expenditures			
Public Works	249,827	249,827	152,882
Capital Outlay	4,918,224	4,918,224	2,132,206
Debt Service			
Principal Retirement	210,000	210,000	210,000
Interest and Fiscal Charges	109,813	109,813	109,813
Total Expenditures	5,487,864	5,487,864	2,604,901
Excess (Deficiency) of Revenues Over (Under) Expenditures	(2,296,994)	(2,296,994)	(178,566)
Other Financing Sources (Uses)			
Transfers In	804,352	804,352	2,902,227
Transfers Out	(104,209)	(104,209)	(104,209)
	700,143	700,143	2,798,018
Net Change in Fund Balance	(1,596,851)	(1,596,851)	2,619,452
Fund Balance - Beginning			2,165,601
Fund Balance - Ending			4,785,053

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Works			
Street Lighting and Signs	$ 131,827	131,827	77,042
Sidewalk and Street Lighting Supplies	55,000	55,000	51,583
Professional Services	10,000	10,000	-
Engineering Services	17,000	17,000	14,054
Asphalt Patching	35,000	35,000	9,715
Bad Debt	1,000	1,000	488
Total Public Works	249,827	249,827	152,882
Capital Outlay			
Fox Hill Improvements	75,000	75,000	135,732
Mill Road Improvement	200,000	200,000	448,532
US 34 (Center/Eldamain Road) Project	106,576	106,576	-
Road To Better Roads Program	1,435,000	1,435,000	650,514
Bristol Bridge Road	635,300	635,300	128,958
Shared Use Path Maintenance	140,000	140,000	-
Raintree Village Improvements	190,000	190,000	4,377
Parking Lot Maintenance	151,000	151,000	1,024
Sidewalk Replacement Program	200,000	200,000	171,753
RT 71 (RT47/Orchard Road) Project	25,253	25,253	-
US 34 (IL 47/Orchard Road) Project	84,903	84,903	-
Baseline Road Improvements	35,000	35,000	36,900
Rebuild Illinois Project	330,192	330,192	-
Corneils Road Improvements	145,000	145,000	-
Kennedy Road (Freedom Place)	100,000	100,000	101,671
Kennedy Road (North)	450,000	450,000	420,836
Van Emmon LAFO Project	583,000	583,000	-
Kennedy Road Bike Trail	32,000	32,000	31,909
Total Capital Outlay	4,918,224	4,918,224	2,132,206

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Debt Service			
Principal Retirement	$ 210,000	210,000	210,000
Interest and Fiscal Charges	109,813	109,813	109,813
Total Debt Service	319,813	319,813	319,813
Total Expenditures	5,487,864	5,487,864	2,604,901

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Development Fees	$ 30,000	30,000	168,005
Charges for Services			
Buildings and Grounds Chargeback	199,586	199,586	199,586
Investment Income	1,200	1,200	47,977
Miscellaneous	-	-	55,863
Total Revenues	230,786	230,786	471,431
Expenditures			
Public Works	368,158	368,158	367,622
Capital Outlay	9,700,000	9,700,000	8,238,317
Debt Service			
Principal Retirement	570,000	570,000	570,000
Interest and Fiscal Charges	233,402	233,402	235,719
Total Expenditures	10,871,560	10,871,560	9,411,658
Excess (Deficiency) of Revenues Over (Under) Expenditures	(10,640,774)	(10,640,774)	(8,940,227)
Other Financing Sources			
Transfers In	776,443	776,443	803,877
Net Change in Fund Balance	(9,864,331)	(9,864,331)	(8,136,350)
Fund Balance - Beginning			10,002,257
Fund Balance - Ending			1,865,907

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Public Works			
Salaries and Wages	$ 54,720	54,720	60,247
Overtime	-	-	2,494
Retirement Plan Contribution	4,932	4,932	5,155
FICA Contribution	4,186	4,186	5,098
Group Health Insurance	1,800	1,800	1,950
Group Life Insurance	127	127	123
Dental Insurance	933	933	931
Vision Insurance	157	157	152
Vehicle and Equipment Chargeback	55,000	55,000	-
Computer Replacement Chargeback	1,401	1,401	-
Facility Management Services	68,362	68,362	61,914
Telecommunications	540	540	3,151
Property and Building Maintenance Services	150,000	150,000	175,711
Professional Services	-	-	36
Wearing Apparel	1,000	1,000	1,747
Property and Building Maintenance Supplies	25,000	25,000	48,913
Total Public Works	368,158	368,158	367,622
Capital Outlay			
City Hall Improvements	8,200,000	8,200,000	6,841,632
Public Works Facility	1,500,000	1,500,000	1,396,685
Total Capital Outlay	9,700,000	9,700,000	8,238,317
Debt Service			
Principal Retirement	570,000	570,000	570,000
Interest and Fiscal Charges	233,402	233,402	235,719
Total Debt Service	803,402	803,402	805,719
Total Expenditures	10,871,560	10,871,560	9,411,658

NONMAJOR GOVERNMENTAL FUNDS
COMBINING STATEMENTS

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Balance Sheet
April 30, 2023

	Special Revenue	Debt Service	Capital Projects	Totals
ASSETS				
Cash and Investments	$ 168,948	-	2,219,151	2,388,099
Receivables - Net of Allowances				
Accounts	-	-	1,365	1,365
Other Taxes	200,227	-	-	200,227
Due from Other Funds	89,385	-	-	89,385
Total Assets	458,560	-	2,220,516	2,679,076
LIABILITIES				
Accounts Payable	40,291	-	18,204	58,495
Due to Other Funds	2,752,004	-	-	2,752,004
Deposit Payable	-	-	769,809	769,809
Total Liabilities	2,792,295	-	788,013	3,580,308
FUND BALANCES				
Restricted	456,237	-	-	456,237
Assigned	-	-	1,432,503	1,432,503
Unassigned	(2,789,972)	-	-	(2,789,972)
Total Fund Balances	(2,333,735)	-	1,432,503	(901,232)
Total Liabilities, Deferred Inflows of Resources and Fund Balances	458,560	-	2,220,516	2,679,076

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2023

	Special Revenue	Debt Service	Capital Projects	Totals
Revenues				
Taxes	$ 473,129	-	-	473,129
Intergovernmental	1,177,614	-	-	1,177,614
Licenses, Permits and Fees	-	8,425	155,950	164,375
Charges for Services	-	-	876,986	876,986
Fines and Forfeitures	-	-	11,585	11,585
Investment Income	79,710	-	-	79,710
Miscellaneous	-	-	47,698	47,698
Total Revenues	1,730,453	8,425	1,092,219	2,831,097
Expenditures				
General Government	92,504	-	74,899	167,403
Public Safety	-	-	17,321	17,321
Public Works	143,267	-	134	143,401
Capital Outlay	1,084,392	-	1,109,461	2,193,853
Debt Service				
Principal Retirement	116,424	320,000	95,388	531,812
Interest and Fiscal Charges	91,607	9,798	20,013	121,418
Total Expenditures	1,528,194	329,798	1,317,216	3,175,208
Excess (Deficiency) of Revenues Over (Under) Expenditures	202,259	(321,373)	(224,997)	(344,111)
Other Financing Sources				
Sale of Capital Assets	-	-	100,851	100,851
Debt Issuance	-	-	131,184	131,184
Transfers In	-	321,373	33,843	355,216
Transfers Out	(33,843)	-	-	(33,843)
	(33,843)	321,373	265,878	553,408
Net Change in Fund Balances	168,416	-	40,881	209,297
Fund Balances - Beginning	(2,502,151)	-	1,391,622	(1,110,529)
Fund Balances - Ending	(2,333,735)	-	1,432,503	(901,232)

NONMAJOR SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Fox Hill Special Service Area Fund

The Fox Hill Special Service Area Fund is used to account for the revenues and expenditures associated with the maintenance of the common areas of the Fox Hill Estates subdivision.

Sunflower Special Service Area Fund

The Sunflower Special Service Fund is used to account for revenues and expenditures associated with the maintenance of the common areas of the Sunflower Estates subdivision.

Motor Fuel Tax Fund

The Motor Fuel Tax Fund is used to account for allotments of motor fuel taxes from the State of Illinois made on per capita basis. These taxes are to be used to construct and maintain street, traffic signals and signs.

Land Cash Fund

The Land Cash Fund is used to account for the revenues and expenditures associated with the construction of park facilities.

Countryside TIF Fund

The Countryside TIF Fund is used to account for the accumulation of monies for the payment of the 2014 General Refunding Obligation Bond Series and 2015A General Obligation Refunding Bond Series. These bonds were issued to refund the 2005 General Obligation Bond Series, which were issued to finance retail development at Countryside Center.

Downtown TIF Fund

The Downtown TIF Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily along Hydraulic Avenue, Illinois Route 47 and Benjamin Street within Yorkville's historic commercial core.

Downtown TIF II Fund

The Downtown TIF II Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily south of Hydraulic Avenue and just north of Washington Street, between White Oak Estate to the west and Benjamin Street to the east.

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Balance Sheet
April 30, 2023

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Balance Sheet
April 30, 2023

	Fox Hill Special Service Area	Sunflower Special Service Area
ASSETS		
Cash and Investments	$ 37,299	12,036
Receivables - Net of Allowances		
Other Taxes	-	-
Due from Other Funds	-	-
Total Assets	37,299	12,036
LIABILITIES		
Accounts Payable	265	250
Due to Other Funds	-	-
Total Liabilities	265	250
FUND BALANCES		
Restricted	37,034	11,786
Unassigned	-	-
Total Fund Balances	37,034	11,786
Total Liabilities and Fund Balances	37,299	12,036

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
119,613	-	-	-	-	168,948
200,227	-	-	-	-	200,227
-	-	-	-	89,385	89,385
319,840	-	-	-	89,385	458,560
-	-	132	37,836	1,808	40,291
-	-	1,174,912	1,577,092	-	2,752,004
-	-	1,175,044	1,614,928	1,808	2,792,295
319,840	-	-	-	87,577	456,237
-	-	(1,175,044)	(1,614,928)	-	(2,789,972)
319,840	-	(1,175,044)	(1,614,928)	87,577	(2,333,735)
319,840	-	-	-	89,385	458,560

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2023

	Fox Hill Special Service Area	Sunflower Special Service Area
Revenues		
Taxes	$ 21,501	21,000
Intergovernmental	-	-
Investment Income	-	-
Total Revenues	21,501	21,000
Expenditures		
General Government	-	-
Public Works	6,043	11,600
Capital Outlay	-	-
Debt Service		
Principal Retirement	-	-
Interest and Fiscal Charges	-	-
Total Expenditures	6,043	11,600
Excess (Deficiency) of Revenues Over (Under) Expenditures	15,458	9,400
Other Financing (Uses)		
Transfers Out	-	-
Net Change in Fund Balances	15,458	9,400
Fund Balances - Beginning	21,576	2,386
Fund Balances - Ending	37,034	11,786

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
-	-	232,124	100,931	97,573	473,129
1,177,614	-	-	-	-	1,177,614
79,710	-	-	-	-	79,710
1,257,324	-	232,124	100,931	97,573	1,730,453
-	-	16,322	72,811	3,371	92,504
125,624	-	-	-	-	143,267
1,081,272	-	-	3,120	-	1,084,392
-	-	116,424	-	-	116,424
-	-	91,607	-	-	91,607
1,206,896	-	224,353	75,931	3,371	1,528,194
50,428	-	7,771	25,000	94,202	202,259
-	(33,843)	-	-	-	(33,843)
50,428	(33,843)	7,771	25,000	94,202	168,416
269,412	33,843	(1,182,815)	(1,639,928)	(6,625)	(2,502,151)
319,840	-	(1,175,044)	(1,614,928)	87,577	(2,333,735)

UNITED CITY OF YORKVILLE, ILLINOIS

Fox Hill Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 21,500	21,500	21,501
Expenditures			
Public Works			
Outside Repair and Maintenance	59,200	59,200	6,043
Net Change in Fund Balance	(37,700)	(37,700)	15,458
Fund Balance - Beginning			21,576
Fund Balance - Ending			37,034

UNITED CITY OF YORKVILLE, ILLINOIS

Sunflower Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 21,000	21,000	21,000
Expenditures			
Public Works			
Pond Maintenance	5,000	5,000	5,160
Outside Repair and Maintenance	12,200	12,200	6,440
Total Expenditures	17,200	17,200	11,600
Net Change in Fund Balance	3,800	3,800	9,400
Fund Balance - Beginning			2,386
Fund Balance - Ending			11,786

UNITED CITY OF YORKVILLE, ILLINOIS

Motor Fuel Tax - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental	$ 1,175,560	1,175,560	1,177,614
Investment Income	1,000	1,000	79,710
Total Revenues	1,176,560	1,176,560	1,257,324
Expenditures			
Public Works			
Supplies	190,000	190,000	125,624
Capital Outlay			
Streets and Alleys	1,087,045	1,087,045	1,081,272
Total Expenditures	1,277,045	1,277,045	1,206,896
Net Change in Fund Balance	(100,485)	(100,485)	50,428
Fund Balance - Beginning			269,412
Fund Balance - Ending			319,840

UNITED CITY OF YORKVILLE, ILLINOIS

Countryside TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 232,133	232,133	232,124
Expenditures			
General Government			
Administrative Fees	15,804	15,804	15,804
Professional Services	2,000	2,000	518
Debt Service			
Principal Retirement	116,424	116,424	116,424
Interest and Fiscal Charges	93,063	93,063	91,607
Total Expenditures	227,291	227,291	224,353
Net Change in Fund Balance	4,842	4,842	7,771
Fund Balance - Beginning			(1,182,815)
Fund Balance - Ending			(1,175,044)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 96,000	96,000	100,931
Expenditures			
General Government			
Administrative Fees	31,102	31,102	31,102
TIF Incentive Payout	38,390	38,390	37,836
Professional Services	5,000	5,000	3,873
Capital Outlay			
Project Costs	10,000	10,000	-
Route 47 Expansion	3,120	3,120	3,120
Total Expenditures	87,612	87,612	75,931
Net Change in Fund Balance	8,388	8,388	25,000
Fund Balance - Beginning			(1,639,928)
Fund Balance - Ending			(1,614,928)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF II - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 99,353	99,353	97,573
Expenditures			
General Government			
TIF Incentive Payout	25,500	25,500	1,808
Professional Services	5,000	5,000	1,563
Total Expenditures	30,500	30,500	3,371
Net Change in Fund Balance	68,853	68,853	94,202
Fund Balance - Beginning			(6,625)
Fund Balance - Ending			87,577

NONMAJOR DEBT SERVICE FUND

The Debt Service Fund is used to account for the accumulation of resources for, and the payment of, general long-term debt principal and interest.

UNITED CITY OF YORKVILLE, ILLINOIS

Debt Service Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Recapture Fees	$ 8,000	8,000	8,425
Expenditures			
Debt Service			
Principal	320,000	320,000	320,000
Interest and Fiscal Charges	10,075	10,075	9,798
Total Expenditures	330,075	330,075	329,798
Excess (Deficiency) of Revenues			
Over (Under) Expenditures	(322,075)	(322,075)	(321,373)
Other Financing Sources			
Transfers In	322,075	322,075	321,373
Net Change in Fund Balance	-	-	-
Fund Balance - Beginning			-
Fund Balance - Ending			-

NONMAJOR CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Vehicle and Equipment Fund

The Vehicle and Equipment Fund is used to account for financial resources accumulated to purchase vehicles, equipment and other capital assets for use in the Police, General Government, Public Works and Park and Recreation departments.

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Development Fees	$ 100,500	100,500	127,850
Engineering Capital Fee	10,000	10,000	28,100
Charges for Services	896,070	896,070	876,986
Fines and Forfeitures			
DUI Fines	6,000	6,000	10,805
Electronic Citations	800	800	780
Miscellaneous	40,500	40,500	47,698
Total Revenues	1,053,870	1,053,870	1,092,219
Expenditures			
General Government	86,983	86,983	74,899
Public Safety	53,750	53,750	17,321
Public Works	1,250	1,250	134
Capital Outlay	2,021,670	2,021,670	1,109,461
Debt Service			
Principal Retirement	57,253	57,253	95,388
Interest and Fiscal Charges	14,317	14,317	20,013
Total Expenditures	2,235,223	2,235,223	1,317,216
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,181,353)	(1,181,353)	(224,997)
Other Financing Sources			
Sale of Capital Assets	52,000	52,000	100,851
Debt Issuance	-	-	131,184
Transfers In	-	-	33,843
	52,000	52,000	265,878
Net Change in Fund Balance	(1,129,353)	(1,129,353)	40,881
Fund Balance - Beginning			1,391,622
Fund Balance - Ending			1,432,503

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
General Government Capital			
Supplies			
Computer Equipment and Software	$ 86,983	86,983	74,899
Police Capital			
Contractual Services	53,750	53,750	17,321
Capital Outlay			
Equipment	20,000	20,000	145,809
Vehicles	180,000	180,000	179,701
Total Police Capital	253,750	253,750	342,831
Public Works Capital			
Contractual Services	750	750	134
Supplies	500	500	-
Capital Outlay			
Equipment	439,940	439,940	305,803
Vehicles	786,474	786,474	136,318
Total Public Works Capital	1,227,664	1,227,664	442,255
Park and Recreation Capital			
Capital Outlay			
Outside Repair and Maintenance	1,600	1,600	-
Park Improvements	310,000	310,000	81,645
Equipment	73,156	73,156	55,481
Vehicles	210,500	210,500	204,704
Total Park and Recreation Capital	595,256	595,256	341,830
Debt Service			
Principal Retirement	57,253	57,253	95,388
Interest and Fiscal Charges	14,317	14,317	20,013
Total Debt Service	71,570	71,570	115,401
Total Expenditures	2,235,223	2,235,223	1,317,216

ENTERPRISE FUNDS

Enterprise Funds are used to account for operations that are financed and operated in a manner similar to private business enterprises where the intent is that costs of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or where it has been decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purpose.

Sewer Fund

The Sewer Fund is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees.

Water Fund

The Water Fund is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

UNITED CITY OF YORKVILLE, ILLINOIS

Sewer - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 1,571,200	1,571,200	1,616,929
Operating Expenses			
Operations	4,690,281	4,690,281	749,145
Depreciation and Amortization	-	-	731,872
Total Operating Expenses	4,690,281	4,690,281	1,481,017
Operating Income (Loss)	(3,119,081)	(3,119,081)	135,912
Nonoperating Revenues (Expenses)			
Investment Income	750	750	50,335
Connection Fees	205,000	205,000	302,500
Other Income	2,227,415	2,227,415	3,210,204
Interest Expense	(54,773)	(54,773)	(49,623)
	2,378,392	2,378,392	3,513,416
Income (Loss) Before Capital Grants and Transfers	(740,689)	(740,689)	3,649,328
Capital Grants	1,000,000	1,000,000	-
Transfers In	1,600,356	1,600,356	1,600,356
Transfers Out	(73,650)	(73,650)	(73,650)
	2,526,706	2,526,706	1,526,706
Change in Net Position	1,786,017	1,786,017	5,176,034
Net Position - Beginning			35,715,557
Net Position - Ending			40,891,591

UNITED CITY OF YORKVILLE, ILLINOIS

Water - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2023

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 5,093,543	5,093,543	5,332,272
Operating Expenses			
Operations	6,038,995	6,038,995	2,194,644
Depreciation and Amortization	-	-	1,179,826
Total Operating Expenses	6,038,995	6,038,995	3,374,470
Operating Income (Loss)	(945,452)	(945,452)	1,957,802
Nonoperating Revenues (Expenses)			
Investment Income	2,000	2,000	44,227
Unrealized Gain	-	-	6,819
Connection Fees	300,000	300,000	594,585
Other Income (Expense)	105,601	105,601	(20,410)
Interest Expense	(168,029)	(168,029)	(152,928)
	239,572	239,572	472,293
Income (Loss) Before Capital Grants and Transfers	(705,880)	(705,880)	2,430,095
Capital Grants	100,000	100,000	-
Transfers In	177,859	177,859	177,859
	277,859	277,859	177,859
Change in Net Position	(428,021)	(428,021)	2,607,954
Net Position - Beginning			38,116,454
Net Position - Ending			40,724,408

SUPPLEMENTAL SCHEDULES

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

Promissory Note of 2019
April 30, 2023

Date of Issue	November 18, 2019
Date of Maturity	November 18, 2028
Authorized Issue	$548,273
Interest Rate	3.60%
Interest Dates	Monthly
Principal Maturity Dates	Monthly
Payable at	First National Bank of Omaha

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal Year	Requirements		
	Principal	Interest	Totals
2024	$ 59,347	12,223	71,570
2025	61,581	9,989	71,570
2026	63,867	7,703	71,570
2027	66,237	5,333	71,570
2028	68,691	2,879	71,570
2029	41,249	501	41,750
	360,972	38,628	399,600

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

IEPA (L17-1156300) Loan Payable of 2007
April 30, 2023

Date of Issue	November 9, 2006
Date of Maturity	August 9, 2026
Authorized Issue	$1,889,244
Denomination of Bonds	$5,000
Interest Rate	2.50%
Interest Dates	August 9 and February 9
Principal Maturity Dates	August 9 and February 9
Payable at	Illinois Environmental Protection Agency

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Aug. 9	Amount	Feb. 9	Amount
2024	$ 115,333	9,697	125,030	2023	5,207	2024	4,490
2025	118,235	6,795	125,030	2024	3,765	2025	3,030
2026	121,209	3,821	125,030	2025	2,287	2026	1,534
2027	61,743	773	62,516	2026	773	2027	-
	416,520	21,086	437,606		12,032		9,054

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Bonds of 2006
April 30, 2023

Date of Issue	August 1, 2006
Date of Maturity	December 30, 2024
Authorized Issue	$1,500,000
Denomination of Bonds	$5,000
Interest Rates	4.75% to 4.80%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	BNY Midwest Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2024	$ 100,000	9,550	109,550	2023	4,775	2023	4,775
2025	100,000	4,800	104,800	2024	2,400	2024	2,400
	200,000	14,350	214,350		7,175		7,175

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Refunding Bonds of 2013
April 30, 2023

Date of Issue	May 9, 2013
Date of Maturity	December 30, 2024
Authorized Issue	$6,625,000
Denomination of Bonds	$5,000
Interest Rates	2.00% to 4.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Bank of New York Mellon

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2024	$ 700,000	57,200	757,200	2023	28,600	2023	28,600
2025	730,000	29,200	759,200	2024	14,600	2024	14,600
	1,430,000	86,400	1,516,400		43,200		43,200

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014
April 30, 2023

Date of Issue	January 6, 2014
Date of Maturity	December 1, 2029
Authorized Issue	$1,235,000
Denomination of Bonds	$5,000
Interest Rates	4.00% to 4.30%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	The Bank of New York Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2024	$ -	50,715	50,715	2023	25,357	2023	25,358
2025	-	50,715	50,715	2024	25,357	2024	25,358
2026	230,000	50,715	280,715	2025	25,357	2025	25,358
2027	235,000	41,515	276,515	2026	20,757	2026	20,758
2028	245,000	32,115	277,115	2027	16,057	2027	16,058
2029	255,000	22,193	277,193	2028	11,096	2028	11,097
2030	270,000	11,610	281,610	2029	5,805	2029	5,805
	1,235,000	259,578	1,494,578		129,786		129,792

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014A
April 30, 2023

Date of Issue	August 5, 2014
Date of Maturity	December 1, 2033
Authorized Issue	$4,295,000
Denomination of Bonds	$5,000
Interest Rates	3.00% to 4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2024	$ 210,000	103,037	313,037	2023	51,519	2023	51,518
2025	220,000	96,737	316,737	2024	48,369	2024	48,368
2026	225,000	90,137	315,137	2025	45,069	2025	45,068
2027	230,000	83,387	313,387	2026	41,694	2026	41,693
2028	245,000	76,200	321,200	2027	38,100	2027	38,100
2029	250,000	66,400	316,400	2028	33,200	2028	33,200
2030	265,000	56,400	321,400	2029	28,200	2029	28,200
2031	275,000	45,800	320,800	2030	22,900	2030	22,900
2032	280,000	34,800	314,800	2031	17,400	2031	17,400
2033	290,000	23,600	313,600	2032	11,800	2032	11,800
2034	300,000	12,000	312,000	2033	6,000	2033	6,000
	2,790,000	688,498	3,478,498		344,251		344,247

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014C
April 30, 2023

Date of Issue	August 5, 2014
Date of Maturity	December 30, 2024
Authorized Issue	$1,290,000
Denomination of Bonds	$5,000
Interest Rates	2.00% to 3.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2024	$ 140,000	8,250	148,250	2023	4,125	2023	4,125
2025	135,000	4,050	139,050	2024	2,025	2024	2,025
	275,000	12,300	287,300		6,150		6,150

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2015A
April 30, 2023

Date of Issue	July 8, 2015
Date of Maturity	December 1, 2034
Authorized Issue	$5,575,000
Denomination of Bonds	$5,000
Interest Rate	4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2024	$ 460,000	139,800	599,800	2024	69,900	2023	69,900
2025	475,000	121,400	596,400	2025	60,700	2024	60,700
2026	215,000	102,400	317,400	2026	51,200	2025	51,200
2027	220,000	93,800	313,800	2027	46,900	2026	46,900
2028	230,000	85,000	315,000	2028	42,500	2027	42,500
2029	240,000	75,800	315,800	2029	37,900	2028	37,900
2030	250,000	66,200	316,200	2030	33,100	2029	33,100
2031	260,000	56,200	316,200	2031	28,100	2030	28,100
2032	270,000	45,800	315,800	2032	22,900	2031	22,900
2033	280,000	35,000	315,000	2033	17,500	2032	17,500
2034	290,000	23,800	313,800	2034	11,900	2033	11,900
2035	305,000	12,200	317,200	2035	6,100	2034	6,100
	3,495,000	857,400	4,352,400		428,700		428,700
Governmental	924,643	226,868	1,151,511		113,434		113,434
Business-Type	2,570,357	630,532	3,200,889		315,266		315,266
	3,495,000	857,400	4,352,400		428,700		428,700

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Alternate Revenue Source Bonds of 2021
April 30, 2023

Date of Issue	May 27, 2021
Date of Maturity	December 30, 2040
Authorized Issue	$8,250,000
Denomination of Bonds	$5,000
Interest Rates	2.00% to 4.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2024	$ 330,000	211,100	541,100	2023	105,550	2023	105,550
2025	345,000	197,900	542,900	2024	98,950	2024	98,950
2026	360,000	184,100	544,100	2025	92,050	2025	92,050
2027	375,000	169,700	544,700	2026	84,850	2026	84,850
2028	390,000	154,700	544,700	2027	77,350	2027	77,350
2029	405,000	139,100	544,100	2028	69,550	2028	69,550
2030	420,000	122,900	542,900	2029	61,450	2029	61,450
2031	435,000	106,100	541,100	2030	53,050	2030	53,050
2032	445,000	97,400	542,400	2031	48,700	2031	48,700
2033	455,000	88,500	543,500	2032	44,250	2032	44,250
2034	465,000	79,400	544,400	2033	39,700	2033	39,700
2035	475,000	70,100	545,100	2034	35,050	2034	35,050
2036	480,000	60,600	540,600	2035	30,300	2035	30,300
2037	490,000	51,000	541,000	2036	25,500	2036	25,500
2038	500,000	41,200	541,200	2037	20,600	2037	20,600
2039	510,000	31,200	541,200	2038	15,600	2038	15,600
2040	520,000	21,000	541,000	2039	10,500	2039	10,500
2041	530,000	10,600	540,600	2040	5,300	2040	5,300
	7,930,000	1,836,600	9,766,600		918,300		918,300

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2022
April 30, 2023

Date of Issue	January 6, 2022
Date of Maturity	December 1, 2025
Authorized Issue	$5,170,000
Denomination of Bonds	$5,000
Interest Rate	1.142%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2024	$ 1,280,000	44,538	1,324,538	2023	22,269	2023	22,269
2025	1,300,000	29,920	1,329,920	2024	14,960	2024	14,960
2026	1,320,000	15,074	1,335,074	2025	7,537	2025	7,537
	3,900,000	89,532	3,989,532		44,766		44,766
Governmental	760,000	17,415	777,415		14,283		14,475
Business-Type	3,140,000	72,117	3,212,117		59,020		59,812
	3,900,000	89,532	3,989,532		73,303		74,287

UNITED CITY OF YORKVILLE, ILLINOIS

Consolidated Year-End Financial Report
April 30, 2023

CSFA #	Program Name	State	Federal	Other	Totals
494-00-1004	Local Highway Safety Improvement Program	$ 46,694	-	-	46,694
494-42-0495	Local Surface Transportation Program	39,703	-	-	39,703
	Other Grant Programs and Activities	-	1,438,165	31,761	1,469,926
	All Other Costs Not Allocated	-	-	28,794,987	28,794,987
	Totals	86,397	1,438,165	28,826,748	30,351,310

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

October 12, 2023

The Honorable City Mayor
Members of the City Council
United City of Yorkville, Illinois

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of and for the year ended April 30, 2023, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated October 12, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements, on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the City's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

United City of Yorkville, Illinois
October 12, 2023

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

STATISTICAL SECTION
(Unaudited)

This part of the annual comprehensive financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the City's overall financial health.

Financial Trends

These schedules contain trend information to help the reader understand how the City's financial performance and well-being have changed over time.

Revenue Capacity

These schedules contain information to help the reader assess the City's most significant local revenue sources.

Debt Capacity

These schedules present information to help the reader assess the affordability of the City's current levels of outstanding debt and the City's ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the City's financial activities take place.

Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the City's financial report relates to the services the City provides and the activities it performs.

UNITED CITY OF YORKVILLE, ILLINOIS

Net Position by Component - Last Ten Fiscal Years*
April 30, 2023 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Net Position by Component - Last Ten Fiscal Years*
April 30, 2023 (Unaudited)

	2014	2015	2016	2017
Governmental Activities				
Net Investment in Capital Assets	$ 63,873,210	66,706,243	70,624,870	74,001,408
Restricted	1,946,088	2,744,103	3,064,646	2,634,940
Unrestricted	3,566,727	3,328,570	(6,321,934)	(6,198,767)
Total Governmental Activities Net Position	69,386,025	72,778,916	67,367,582	70,437,581
Business-Type Activities				
Net Investment in Capital Assets	34,717,042	46,482,812	49,232,266	53,490,328
Restricted	-	-	-	-
Unrestricted	13,015,100	1,891,407	2,346,622	3,158,076
Total Business-Type Activities Net Position	47,732,142	48,374,219	51,578,888	56,648,404
Primary Government				
Net Investment in Capital Assets	98,590,252	113,189,055	119,857,136	127,491,736
Restricted	1,946,088	2,744,103	3,064,646	2,634,940
Unrestricted	16,581,827	5,219,977	(3,975,312)	(3,040,691)
Total Primary Government Net Position	117,118,167	121,153,135	118,946,470	127,085,985

* Accrual Basis of Accounting

Note: The City implemented GASB Statement No. 68 for the year ended April 30, 2016.

2018	2019	2020	2021	2022	2023
83,186,083	83,800,089	86,397,801	90,458,186	93,931,218	98,268,934
1,992,274	1,741,515	1,862,586	2,083,335	7,859,306	1,489,514
(8,300,460)	(7,317,467)	(8,257,280)	(6,122,164)	(5,482,448)	2,772,833
76,877,897	78,224,137	80,003,107	86,419,357	96,308,076	102,531,281
57,257,183	58,098,381	55,429,397	58,409,514	60,848,375	67,055,941
-	-	-	-	-	-
4,884,605	6,235,797	12,763,017	12,920,276	12,983,636	14,560,058
62,141,788	64,334,178	68,192,414	71,329,790	73,832,011	81,615,999
140,443,266	141,898,470	141,827,198	148,867,700	154,779,593	165,324,875
1,992,274	1,741,515	1,862,586	2,083,335	7,859,306	1,489,514
(3,415,855)	(1,081,670)	4,505,737	6,798,112	7,501,188	17,332,891
139,019,685	142,558,315	148,195,521	157,749,147	170,140,087	184,147,280

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Net Position - Last Ten Fiscal Years*
April 30, 2023 (Unaudited)

	2014	2015	2016	2017	2018	2019	2020	2021	2022 **	2023
Expenses										
Governmental Activities										
General Government	$ 5,808,954	4,075,153	4,533,840	4,467,831	3,976,577	5,023,227	6,213,208	5,960,831	4,822,508	5,317,707
Public Safety	918,131	4,393,482	6,073,977	6,053,696	5,689,480	6,008,959	6,526,618	982,014	1,017,179	1,196,127
Community Development	2,029,523	592,588	649,507	734,317	629,894	869,044	816,350	2,513,280	2,471,380	3,264,494
Public Works	3,874,698	3,140,446	3,955,539	4,450,509	6,236,169	4,124,935	4,874,549	5,733,468	5,893,447	6,348,333
Library	407,537	930,024	877,154	930,739	941,123	974,154	1,017,437	828,098	1,044,496	1,310,456
Parks and Recreation	3,444,587	2,381,698	2,225,512	2,003,935	2,432,818	2,963,434	2,678,769	5,097,124	5,545,928	7,360,959
Interest on Long-Term Debt	698,519	611,243	540,506	570,061	536,177	500,169	464,883	409,695	627,947	495,196
Total Governmental Activities Expenses	17,181,949	16,124,634	18,856,035	19,211,088	20,442,238	20,463,922	22,591,814	21,524,510	21,422,885	25,293,272
Business-Type Activities										
Water	1,595,266	2,792,755	3,257,504	3,251,836	3,271,956	3,256,582	1,762,508	1,740,041	1,632,962	1,530,640
Sewer	2,710,511	1,704,058	1,789,770	1,701,742	1,806,076	1,589,599	3,271,485	3,405,189	3,630,501	3,527,398
Recreation Center	232,882	-	-	-	-	-	-	-	-	-
Total Business-Type Activities Expenses	4,538,659	4,496,813	5,047,274	4,953,578	5,078,032	4,846,181	5,033,993	5,145,230	5,263,463	5,058,038
Total Primary Government Expenses	21,720,608	20,621,447	23,903,309	24,164,666	25,520,270	25,310,103	27,625,807	26,669,740	26,686,348	30,351,310
Program Revenues										
Governmental Activities										
Charges for Services										
General Government	2,381,788	2,885,990	3,072,590	3,222,388	3,629,476	3,798,007	3,637,639	5,246,355	3,508,715	4,053,221
Public Safety	-	-	-	-	-	-	-	-	-	-
Public Works	-	-	-	-	-	-	-	-	1,182,864	1,712,703
Library	74,037	44,522	53,372	71,213	123,156	125,800	129,530	113,930	121,557	157,208
Parks and Recreation	299,478	352,714	408,469	455,675	453,466	579,155	527,941	357,208	549,231	695,128
Operating Grants/Contributions	1,135,659	943,410	774,856	610,480	694,321	854,662	888,037	3,037,020	2,834,644	2,709,423
Capital Grants/Contributions	1,229,829	768,423	3,317,330	3,814,671	6,448,555	1,011,418	3,270,712	1,815,564	1,131,958	29,777
Total Governmental Activities Program Revenues	5,120,791	4,995,059	7,626,617	8,174,427	11,348,974	6,369,042	8,453,859	10,570,077	9,328,969	9,357,460
Business-Type Activities										
Charges for Services										
Water	2,394,494	2,626,114	3,624,374	4,127,783	4,655,750	4,557,352	4,440,881	1,731,961	1,714,066	1,919,429
Sewer	1,130,954	1,186,389	1,388,258	1,390,806	1,688,339	1,552,159	1,601,247	5,062,645	4,944,694	5,926,857
Recreation	44,891	-	-	-	-	-	-	-	-	-
Operating Grants/Contributions	-	-	-	-	-	-	-	-	-	-
Capital Grants/Contributions	1,658,648	6,805	2,029,848	3,257,187	3,945,565	-	1,994,526	1,124,323	340,549	-
Total Business-Type Activities Program Revenues	5,228,987	3,819,308	7,042,480	8,775,776	10,289,654	6,109,511	8,036,654	7,918,929	6,999,309	7,846,286
Total Primary Government Program Revenues	10,349,778	8,814,367	14,669,097	16,950,203	21,638,628	12,478,553	16,490,513	18,489,006	16,328,278	17,203,746

	2014	2015	2016	2017	2018	2019	2020	2021	2022 **	2023
Net (Expense) Revenue										
Governmental Activities	$ (12,061,158)	(11,129,575)	(11,229,418)	(11,036,661)	(9,093,264)	(14,094,880)	(14,137,955)	(10,954,433)	(12,093,916)	(15,935,812)
Business-Type Activities	690,328	(677,505)	1,995,206	3,822,198	5,211,622	1,263,330	3,002,661	2,773,699	1,735,846	2,788,248
Total Primary Government Net (Expense) Revenue	(11,370,830)	(11,807,080)	(9,234,212)	(7,214,463)	(3,881,642)	(12,831,550)	(11,135,294)	(8,180,734)	(10,358,070)	(13,147,564)
General Revenues and Other Changes in Net Position										
Governmental Activities										
Taxes										
Property	4,670,934	4,850,981	4,901,983	4,899,485	4,925,489	5,041,762	5,195,891	5,248,398	5,544,463	5,807,376
Sales	4,573,026	4,782,712	4,904,967	5,200,763	5,327,756	5,429,231	5,635,945	6,341,989	7,933,942	8,374,887
Income	1,613,102	1,735,422	1,715,155	1,602,410	1,640,291	1,966,699	1,870,977	2,470,986	3,175,556	3,355,846
Utility	1,633,242	1,600,296	1,585,758	1,615,153	1,587,270	1,647,511	1,545,821	1,527,572	1,707,542	1,783,647
Other	988,822	1,127,859	1,265,439	1,331,191	1,445,549	1,600,502	1,652,074	1,668,294	2,173,425	2,515,864
Investment Income (Loss)	14,895	(176,911)	9,828	30,481	85,356	154,071	239,155	15,488	(24,510)	475,624
Miscellaneous	737,693	1,736,079	761,857	561,229	705,968	1,494,246	456,998	376,595	2,096,524	1,550,338
Transfers	(1,626,263)	(1,133,972)	(1,134,654)	(1,134,052)	(184,099)	(921,615)	(679,936)	(278,639)	(624,307)	(1,704,565)
Total Governmental Activities	12,605,451	14,522,466	14,010,333	14,106,660	15,533,580	16,412,407	15,916,925	17,370,683	21,982,635	22,159,017
Business-Type Activities										
Investment Income (Loss)	11,491	11,206	6,685	13,623	36,002	28,777	67,934	1,777	(24,493)	101,381
Miscellaneous	182,783	174,404	64,678	99,643	61,661	84,652	107,705	83,261	166,561	3,189,794
Transfers	1,626,263	1,133,972	1,134,654	1,134,052	184,099	921,615	679,936	278,639	624,307	1,704,565
Total Business-Type Activities	1,820,537	1,319,582	1,206,017	1,247,318	281,762	1,035,044	855,575	363,677	766,375	4,995,740
Total Primary Government	14,425,988	15,842,048	15,216,350	15,353,978	15,815,342	17,447,451	16,772,500	17,734,360	22,749,010	27,154,757
Changes in Net Position										
Governmental Activities	544,293	3,392,891	2,780,915	3,069,999	6,440,316	2,317,527	1,778,970	6,416,250	9,888,719	6,223,205
Business-Type Activities	2,510,865	642,077	3,201,223	5,069,516	5,493,384	2,298,374	3,858,236	3,137,376	2,502,221	7,783,988
Total Primary Government	3,055,158	4,034,968	5,982,138	8,139,515	11,933,700	4,615,901	5,637,206	9,553,626	12,390,940	14,007,193

* Accrual Basis of Accounting

** In 2022, expenses related to non-capital costs in the Citywide Captial Projects Fund were moved from the General Government function to the Public Works function.

UNITED CITY OF YORKVILLE, ILLINOIS

Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2023 (Unaudited)

	2014	2015	2016	2017
General Fund				
Nonspendable	$ 156,680	145,012	138,312	150,464
Restricted	-	984,526	1,216,288	984,514
Unassigned	3,703,901	3,696,520	4,337,106	5,079,111
Total General Fund	3,860,581	4,826,058	5,691,706	6,214,089
All Other Governmental Funds				
Nonspendable	34,385	33,284	37,376	37,664
Restricted	1,951,407	1,767,419	1,848,358	1,650,426
Committed	527,635	537,853	480,034	421,586
Assigned	824,301	4,788,775	3,004,149	1,625,937
Unassigned	(534,087)	(624,928)	(584,901)	(511,528)
Total All Other Governmental Funds	2,803,641	6,502,403	4,785,016	3,224,085
Total All Governmental Funds	6,664,222	11,328,461	10,476,722	9,438,174

* Modified Accrual Basis of Accounting

2018	2019	2020	2021	2022	2023
83,305	85,744	63,193	152,003	162,600	171,778
726,019	458,685	203,874	-	-	-
5,687,049	6,335,394	7,244,993	9,020,351	10,464,500	10,824,829
6,496,373	6,879,823	7,512,060	9,172,354	10,627,100	10,996,607
16,392	18,266	13,515	38,268	51,745	51,250
1,266,255	1,282,830	1,658,712	2,083,335	7,859,306	1,730,600
467,816	435,216	398,488	43,801	-	-
743,997	1,125,471	1,099,847	1,605,360	6,941,081	8,064,486
(1,441,197)	(1,260,507)	(2,469,332)	(2,716,429)	(2,871,244)	(2,789,972)
1,053,263	1,601,276	701,230	1,054,335	11,980,888	7,056,364
7,549,636	8,481,099	8,213,290	10,226,689	22,607,988	18,052,971

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2023 (Unaudited)

	2014	2015	2016	2017
Revenues				
Taxes	$ 5,176,481	11,830,762	12,103,254	12,466,013
Intergovernmental	9,469,590	3,312,823	3,180,626	3,343,533
Licenses, Permits and Fees	393,746	379,242	493,619	706,782
Charges for Services	2,169,670	2,749,195	2,897,718	2,888,281
Fines and Forfeitures	191,887	154,789	143,094	154,213
Investment Income (Loss)	14,895	(176,911)	9,828	30,481
Miscellaneous	737,693	1,736,079	761,857	561,229
Total Revenues	18,153,962	19,985,979	19,589,996	20,150,532
Expenditures				
General Government	5,685,541	3,910,635	3,928,055	4,293,081
Public Safety	3,834,655	4,337,573	4,689,129	4,907,384
Community Development	407,537	592,588	649,507	734,317
Public Works	2,207,757	2,361,827	2,460,192	2,344,878
Library	737,191	748,905	694,441	748,026
Parks and Recreation	1,644,065	2,041,792	1,803,333	1,936,083
Capital Outlay	2,050,456	3,285,489	3,653,071	3,656,703
Debt Service				
Principal Retirement	1,099,223	844,112	1,040,880	1,149,185
Interest and Fiscal Charges	641,673	496,090	604,406	563,433
Total Expenditures	18,308,098	18,619,011	19,523,014	20,333,090
Excess (Deficiency) of Revenues Over (Under) Expenditures	(154,136)	1,366,968	66,982	(182,558)
Other Financing Sources (Uses)				
Disposal of Capital Assets	16,325	-	48,446	278,062
Debt Issuance	8,053,963	6,670,678	1,627,183	-
Bond Premium/(Discount)	115,109	119,680	122,288	-
Payment to Escrow Agent	(7,787,598)	(2,359,115)	(1,581,984)	-
Transfers In	2,881,535	1,375,448	1,326,090	1,524,658
Transfers Out	(4,507,798)	(2,509,420)	(2,460,744)	(2,658,710)
	(1,228,464)	3,297,271	(918,721)	(855,990)
Net Change in Fund Balances	(1,382,600)	4,664,239	(851,739)	(1,038,548)
Debt Service as a Percentage of Noncapital Expenditures	11.540%	9.497%	10.293%	9.793%

* Modified Accrual Basis of Accounting
** In 2022, expenses related to non-capital costs in the Citywide Captial Projects Fund were moved from the General Government function to the Public Works function.

2018	2019	2020	2021	2022**	2023
12,662,678	12,995,856	13,211,204	13,838,886	16,424,479	17,394,073
3,164,026	4,279,863	3,620,336	6,464,863	6,954,683	7,182,747
1,016,223	1,208,345	1,128,865	1,475,431	1,296,907	1,770,684
3,047,606	3,176,017	3,078,023	4,125,547	3,854,197	4,732,776
142,269	118,600	88,222	116,515	211,263	114,800
85,356	154,071	239,155	15,488	(24,510)	475,624
705,968	1,494,246	445,275	362,668	2,096,524	1,550,338
20,824,126	23,426,998	21,811,080	26,399,398	30,813,543	33,221,042
5,036,599	4,946,923	5,921,054	7,752,809	5,264,752	5,615,583
5,302,038	5,356,149	5,818,063	5,686,873	6,019,369	6,194,360
629,894	869,044	816,350	828,098	1,154,892	1,312,006
2,223,750	2,288,047	2,337,032	2,990,739	3,224,616	3,996,927
758,411	791,441	834,724	799,301	834,944	1,014,370
2,632,896	2,562,757	2,224,304	2,478,660	2,381,042	2,978,143
5,037,740	2,782,137	1,516,238	1,618,216	6,534,677	12,564,376
1,195,669	1,462,304	1,485,368	1,540,392	1,597,659	2,061,812
514,068	515,118	474,199	426,199	616,595	565,952
23,331,065	21,573,920	21,427,332	24,121,287	27,628,546	36,303,529
(2,506,939)	1,853,078	383,748	2,278,111	3,184,997	(3,082,487)
2,500	-	11,723	13,927	35,598	100,851
800,000	-	548,273	-	9,260,000	131,184
-	-	-	-	525,011	-
-	-	(531,617)	-	-	-
2,753,031	2,213,618	2,023,602	3,384,573	8,729,848	6,323,350
(2,937,130)	(3,135,233)	(2,703,538)	(3,663,212)	(9,354,155)	(8,027,915)
618,401	(921,615)	(651,557)	(264,712)	9,196,302	(1,472,530)
(1,888,538)	931,463	(267,809)	2,013,399	12,381,299	(4,555,017)
9.228%	10.629%	9.769%	9.673%	10.624%	10.837%

UNITED CITY OF YORKVILLE, ILLINOIS

Assessed Value and Actual Value of Taxable Property - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

Fiscal Year	Tax Levy Year	Residential Property	Farm	Commercial Property
2014	2013	$ 311,316,069	$ 2,618,131	$ 99,434,012
2015	2014	310,655,449	2,743,283	90,744,145
2016	2015	320,914,471	2,861,401	84,529,087
2017	2016	354,408,067	2,963,511	84,099,111
2018	2017	386,855,913	3,083,218	83,975,023
2019	2018	416,780,620	3,202,140	83,874,064
2020	2019	450,745,939	3,259,791	83,974,878
2021	2020	484,024,398	3,360,133	79,649,698
2022	2021	524,668,429	3,524,082	79,815,145
2023	2022	599,625,774	3,936,704	80,620,321

Data Source: Office of the County Clerk

Note: Property is assess at 33% of actual value.

Industrial Property	Railroad Property	Total Taxable Assessed Value	Estimated Actual Value of Taxable Property	Total Direct Tax Rate
$ 6,656,792	$ 17,328	$ 420,042,332	$ 1,260,126,996	0.7738
12,668,201	17,328	416,828,406	1,250,485,218	0.7581
13,000,039	17,329	421,322,327	1,263,966,981	0.7361
14,944,561	17,328	456,432,578	1,369,297,734	0.6795
15,349,880	17,328	489,281,362	1,467,844,086	0.6471
15,386,433	60,243	519,303,500	1,557,910,500	0.6242
15,509,884	89,004	553,579,496	1,660,738,488	0.6029
15,586,411	75,859	582,696,499	1,748,089,497	0.5880
15,512,284	77,628	623,597,568	1,870,792,704	0.5710
15,925,318	90,328	700,198,445	2,085,143,583	0.5377

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Property Taxpayers - Current Tax Levy Year and Nine Tax Levy Years Ago
April 30, 2023 (Unaudited)

	2022 Tax Levy			2013 Tax Levy		
Taxpayer	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value
Wrigley Manufacturing Co., LLC	$ 4,668,910	1	0.67%	$ 2,706,507	6	0.64%
Yorkville Marketplace LLC	3,851,349	2	0.55%	3,968,109	3	0.94%
Yorkville Apartments Holdings LLC	3,486,011	3	0.50%	2,254,626	9	0.54%
Menards, Inc	2,991,882	4	0.43%	7,568,986	1	1.80%
Fox River Harmony Housing LLC	2,779,144	5	0.40%	2,341,056	7	0.56%
Rainy Properties LLC	2,555,759	6	0.37%			
Cedarhurst of Yorkville Real Estate LLC	2,098,088	7	0.30%			
Target Corporation	1,900,000	8	0.27%	3,092,795	5	0.74%
Alliance Development Corporation	1,866,429	9	0.27%			
Kendall Holdings	1,592,230	10	0.23%	6,001,794	2	1.43%
Copley Ventures, Inc.				3,726,607	4	0.89%
Boombah Properties LLC				2,269,648	8	0.54%
Prime Yorkville LLC				1,805,566	10	0.43%
	27,789,802		4.00%	35,735,694		8.51%

Data Source: Office of the County Clerk

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Property Tax Rates - Last Ten Tax Levy Years
April 30, 2023 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Property Tax Rates - Last Ten Tax Levy Years
April 30, 2023 (Unaudited)

	2013	2014	2015
City Direct Rates			
Corporate	0.2484	0.2503	0.2380
Bonds and Interest	0.0797	0.0397	0.0113
IMRF	0.1071	0.1080	-
Police Protection	0.0833	0.0840	0.2407
Police Pension	0.1493	0.1694	0.1959
Audit	0.0071	0.0072	0.0069
Liability Insurance	0.0095	0.0096	0.0091
Social Security	0.0714	0.0720	0.0342
School Crossing Guard	0.0060	0.0060	-
Revenue Recapture	-	-	-
Unemployment Insurance	0.0119	0.0120	-
Total Direct Rates	0.7738	0.7581	0.7361
Overlapping Rates			
Kendall County	0.8009	0.8085	0.7909
Kendall County Forest Preserve	0.1640	0.1826	0.1787
Bristol Township	0.4239	0.4172	0.3960
Bristol - Kendall Fire District	0.7718	0.8041	0.8077
Yorkville Community Unit School District #115	7.4081	7.7083	7.8713
Waubonsee Community College District #516	0.5691	0.5973	0.5885
Yorkville Public Library	0.3241	0.3299	0.3287
Total Overlapping Rates	10.4619	10.8479	10.9618
Total Direct and Overlapping Rates	11.2357	11.6060	11.6979

Data Source: Office of the County Clerk

Notes:
(1) Rates are per $100 of Assessed Value.
(2) Representative tax rates for other government units are from Bristol Township

2016	2017	2018	2019	2020	2021	2022
0.2197	0.2049	0.1931	0.1811	0.1694	0.1579	0.1417
-	-	-	-	-	-	-
-	-	-	-	-	-	-
0.1999	0.2003	0.1709	0.1562	0.1484	0.1596	0.1625
0.2117	0.1969	0.2140	0.2223	0.2291	0.2141	0.1984
0.0066	0.0061	0.0057	0.0054	0.0052	0.0048	0.0043
0.0088	0.0082	0.0077	0.0072	0.0069	0.0064	0.0058
0.0329	0.0307	0.0289	0.0271	0.0258	0.0241	0.0216
-	-	0.0039	0.0036	0.0034	0.0032	0.0029
-	-	-	-	-	0.0009	0.0006
-	-	-	-	-	-	-
0.6795	0.6471	0.6242	0.6029	0.5880	0.5710	0.5377
0.7477	0.7088	0.6728	0.6409	0.6232	0.6016	0.5908
0.1755	0.1752	0.1503	0.1542	0.1582	0.1620	0.1476
0.3408	0.2787	0.2618	0.0952	0.0912	0.1535	0.1412
0.7592	0.7425	0.7300	0.7202	0.7159	0.7050	0.6988
7.5634	7.3444	7.1852	7.0338	6.9567	6.7867	6.6524
0.5601	0.5514	0.5413	0.5273	0.4378	0.4698	0.4642
0.3080	0.2994	0.2892	0.2829	0.2775	0.2678	0.2553
10.4547	10.1004	9.8306	9.4545	9.2605	9.1465	8.9502
11.1342	10.7475	10.4548	10.0574	9.8485	9.7175	9.4879

UNITED CITY OF YORKVILLE, ILLINOIS

Property Tax Levies and Collections - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

Fiscal Year	Tax Levy Year	Taxes Levied for the Fiscal Year	Collected within the Fiscal Year of the Levy		Collections in Subsequent Years***	Total Collections to Date **	
			Amount	Percentage of Levy		Amount	Percentage of Levy
2014	2012*	$ 3,318,990	$ 3,193,672	96.22%	-	$ 3,193,672	96.22%
2015	2013*	3,250,204	3,234,448	99.52%	-	3,234,448	99.52%
2016	2014*	3,159,892	3,146,278	99.57%	-	3,146,278	99.57%
2017	2015*	3,101,185	3,071,484	99.04%	-	3,071,484	99.04%
2018	2016	3,101,322	3,093,892	99.76%	-	3,093,892	99.76%
2019	2017	3,165,651	3,149,635	99.49%	-	3,149,635	99.49%
2020	2018	3,241,457	3,231,926	99.71%	-	3,231,926	99.71%
2021	2019	3,337,703	3,327,913	99.71%	-	3,327,913	99.71%
2022	2020	3,426,430	3,415,461	99.68%	-	3,415,461	99.68%
2023	2021	3,560,742	3,552,451	99.77%	-	3,552,451	99.77%

Data Source: Office of the County Treasurer

* The 2012, 2013, 2014 and 2015 tax levy extended amounts include bonds and interest in the amount of $723,689, $486,150, $334,816, $165,564 & $47,525, respectively, that were previously abated.

** Includes property taxes collected in the current year that may be attributable to prior years. These collections, if any, are immaterial as 99% or greater of the current year's tax levy has historically been collected during the respective fiscal year. Additionally, information to associate any non-current tax collections to a specific tax levy is not readily available.

*** Information for collections in subsequent years is unavailable.

Note: Property in the City is reassessed each year. Property is assessed at 33% of actual value.

UNITED CITY OF YORKVILLE, ILLINOIS

Estimate of Taxable Sales by Category - Last Ten Calendar Years
April 30, 2023 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Estimate of Taxable Sales by Category - Last Ten Calendar Years
April 30, 2023 (Unaudited)

	2013	2014	2015
General Merchandise	$ 594,685	593,361	608,996
Food	266,937	289,897	385,034
Drinking and Eating Places	293,131	299,300	332,752
Apparel	88,739	87,834	95,975
Furniture & H.H. & Radio	3,370	2,710	2,597
Lumber, Building Hardware	413,711	446,440	470,357
Automobile and Filling Stations	156,091	146,062	160,717
Drugs and Miscellaneous Retail	597,615	566,665	362,225
Agriculture and All Others	89,359	161,114	232,923
Manufacturers	89,239	90,998	102,011
Total	2,592,877	2,684,381	2,753,587
City Direct Sales Tax Rate	1.00%	1.00%	1.00%

Data Source: Illinois Department of Revenue - Local Tax Allocation Division

Data available for calendar year only.

2016	2017	2018	2019	2020	2021	2022
597,618	581,090	596,620	565,194	553,360	672,669	673,531
377,825	417,028	452,298	485,658	522,083	552,205	621,989
376,762	401,725	413,204	429,128	454,292	606,299	595,743
99,354	94,459	99,121	49,305	34,163	65,116	73,247
2,373	1,590	1,902	1,150	891	6,702	11,409
510,521	539,760	558,358	592,844	745,531	802,407	789,516
188,830	187,127	220,232	251,785	295,001	358,029	428,416
506,123	487,129	484,825	527,795	554,512	1,010,887	979,753
135,378	213,964	219,283	239,758	221,374	251,437	333,121
116,723	36,167	30,503	30,270	32,510	45,663	57,179
2,911,507	2,960,039	3,076,346	3,172,887	3,413,717	4,371,414	4,563,903
1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Sales Tax Rates - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

Fiscal Year	State Sales Tax	Local Sales Tax to City	City Non-Home Rule Sales Tax	County Sales Tax	County Public Safety Property	Total Sales Tax Rate
2014	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2015	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2016	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2017	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2018	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2019	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2020	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2021	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2022	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2023	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%

Data Source: Illinois Department of Revenue

The above tax rates are for General Merchandise.

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of Outstanding Debt by Type - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of Outstanding Debt by Type - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

	Governmental Activities				
Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Notes Payable	Other Commitments	Leases	General Obligation and Alternative Revenue Source Bonds
2014	$ 12,520,000	$ 940,341	$ 1,890	$ -	$ 16,855,000
2015	16,120,000	901,907	1,890	-	15,700,000
2016	15,325,990	938,210	1,890	-	18,555,000
2017	14,252,531	820,482	1,890	-	20,613,544
2018	13,138,403	1,500,822	1,890	-	18,605,065
2019	11,967,952	1,170,850	1,890	-	16,503,368
2020	10,718,207	926,655	1,890	-	13,685,179
2021	9,406,558	673,426	1,890	-	10,841,111
2022	17,781,130	418,222	1,890	-	8,455,165
2023	15,753,886	360,972	-	93,046	6,048,561

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Demographic and Economic Statistics for personal income and population data.

Business-Type Activities					
Debt Certificates	IEPA Loans Payable	Other Commitments	Total Primary Government	Percentage of Personal Income (1)	Per Capita (1)
$ 6,680,000	$ 1,880,084	$ 1,919,909	$ 40,797,224	8.70%	$ 2,291
5,865,000	1,694,504	1,942,898	42,226,199	8.72%	2,325
5,220,000	1,504,138	2,000,619	43,545,847	8.38%	2,360
1,230,000	1,308,862	2,061,951	40,289,260	7.61%	2,139
1,010,000	1,108,550	2,126,965	37,491,695	6.95%	1,971
580,000	903,070	2,194,902	33,322,032	5.82%	1,656
445,000	745,816	2,272,473	28,795,220	4.75%	1,397
305,000	638,766	2,386,097	24,252,848	3.81%	1,126
155,000	529,024	2,505,402	29,845,833	4.53%	1,386
-	416,520	2,655,402	25,328,387	3.52%	1,063

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of General Bonded Debt Outstanding - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Less: Amounts Available in Debt Service	Total	Percentage of Total Taxable Assessed Value of Property (1)	Per Capita (2)
2014	$ 29,375,000	$ -	$ 29,375,000	6.99%	$ 1,650
2015	31,820,000	-	31,820,000	7.63%	1,752
2016	33,880,990	-	33,880,990	8.04%	1,836
2017	34,866,075	-	34,866,075	7.64%	1,851
2018	31,743,468	-	31,743,468	6.49%	1,669
2019	28,471,320	-	28,471,320	5.48%	1,415
2020	24,403,386	-	24,403,386	4.41%	1,184
2021	20,247,669	-	20,247,669	3.47%	940
2022	26,236,295	-	26,236,295	4.21%	1,218
2023	21,802,447	-	21,802,447	3.11%	915

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Assessed Value and Actual Value of Taxable Property for property value data.

(2) See the Schedule of Demographic and Economic Statistics for personal income and population data.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Direct and Overlapping Governmental Activities Debt
April 30, 2023 (Unaudited)

Governmental Unit	(1) Gross Debt	(2) Percentage of Debt Applicable to City *	(3) City's Share of Debt
United City of Yorkville	$ 16,207,904	100.000%	$ 16,207,904
Overlapping Debt			
County of Kendall (4)	14,985,000	16.85%	2,524,973
Forest Preserve District of Kendall County	22,565,000	16.85%	3,802,203
Yorkville-Bristol Sanitary District	6,850,000	97.94%	6,708,890
Yorkville Community Unit School District #115	49,205,000	60.68%	29,857,594
Waubonsee Community College District #516	30,550,000	5.84%	1,784,120
Joliet Junior College District #525	107,100,000	0.00%	2,142
Plano Community Unit School District #88	35,385,788	0.52%	184,006
Newark Community Consolidated School District #66	650,000	0.47%	3,055
Total Overlapping Debt	267,290,788		44,866,982
Total Direct and Overlapping Debt	283,498,692		61,074,886

Data Source: Kendall County Tax Extension Department

* Determined by ratio of assessed valuation of property subject to taxation in the City to valuation of property subject to taxation in overlapping unit.

Notes:
(1) As of March 22, 2023.
(2) Percentages are based on 2021 EAV's, the latest available.
(3) The United City of Yorkville has $59,378,000 in outstanding non-committal debt which is expected to be from sources other than City revenues.
(4) Includes Public Building Commission.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Legal Debt Margin - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

	2014	2015	2016	2017
Legal Debt Limit	$ 36,228,651	35,951,450	36,339,051	39,367,310
Total Net Debt Applicable to Limit	19,290,000	14,855,000	13,420,000	6,835,000
Legal Debt Margin	16,938,651	21,096,450	22,919,051	32,532,310
Total Net Debt Applicable to the Limit as a Percentage of Debt Limit	53.25%	41.32%	36.93%	17.36%

2018	2019	2019	2021	2022	2023
42,200,517	44,789,927	47,746,232	50,257,573	53,785,290	60,392,116
6,045,000	5,000,000	4,230,000	3,405,000	2,535,000	1,630,000
36,155,517	39,789,927	43,516,232	46,852,573	51,250,290	58,762,116
14.32%	11.16%	8.86%	6.78%	4.71%	2.70%

Legal Debt Margin Calculation for Fiscal Year 2023

Assessed Value	$ 700,198,445
Bonded Debt Limit - 8.625% of Assessed Value	60,392,116
Amount of Debt Applicable to Limit	1,630,000
Legal Debt Margin	58,762,116

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Governmental Activities
April 30, 2023 (Unaudited)

Fiscal Year	Incremental Property/ Property Tax	Municipal Utility Tax	Motor Fuel Tax	Municipal Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2014	$ 315,790	$ -	$ -	$ 2,586,460	$ 2,902,250	$ 400,000	$ 230,917	4.60
2015	327,984	418,509	-	2,704,651	3,451,144	225,000	56,789	12.25
2016	164,852	393,680	-	2,778,116	3,336,648	255,000	53,550	10.81
2017	215,360	359,947	-	2,940,976	3,516,283	270,000	50,150	10.98
2018	198,294	334,595	-	3,002,133	3,535,022	275,000	44,750	11.06
2019	198,918	329,742	-	3,070,663	3,599,323	285,000	39,250	11.10
2020	279,643	971,440	-	3,222,256	4,473,339	290,000	34,025	13.81
2021	222,099	1,010,210	-	3,617,361	4,849,670	295,000	28,225	15.00
2022	347,161	1,209,606	-	4,450,012	6,006,779	310,000	19,375	18.24
2023	333,055	1,295,956	-	4,618,030	6,247,041	320,000	9,798	18.94

Notes:
Details regarding the City's outstanding debt can be found in the Notes to the Financial Statements.

Series 2014, 2014A and 2015A Bonds are payable from revenues from Sales Taxes and incremental taxes, if any, from the Countryside TIF.

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Business-Type Activities
April 30, 2023 (Unaudited)

Fiscal Year	Water and Sewer Revenues	Less: Operating Expenses	State Income Tax	Non-Home Rule Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2014	$ 3,379,454	$ 1,695,780	$ 1,613,102	$ 1,986,566	$ 3,296,776	$ 1,050,000	$ 759,986	1.82
2015	3,646,020	1,929,555	1,735,422	2,078,061	5,529,948	1,175,000	704,410	2.94
2016	4,493,694	2,386,468	1,715,155	2,126,851	5,949,232	1,245,000	624,002	3.18
2017	4,364,434	2,366,493	1,602,410	2,259,787	5,860,138	1,290,000	592,364	3.11
2018	5,642,966	2,570,417	1,640,291	2,325,623	7,038,463	1,878,991	831,200	2.60
2019	5,571,153	2,331,257	1,966,699	2,358,568	7,565,163	1,982,668	719,080	2.80
2020	5,500,876	2,570,624	1,870,977	2,413,689	7,214,918	2,730,483	602,768	2.16
2021	5,798,153	2,669,714	2,470,986	2,724,628	8,324,053	2,787,837	492,459	2.54
2022	6,175,376	2,906,277	3,175,556	3,483,930	9,928,585	6,512,545	457,580	1.42
2023	6,949,201	2,943,789	3,355,846	3,756,857	11,118,115	2,393,576	202,218	4.28

Notes:
Details regarding the City's outstanding debt can be found in the notes to the financial statements.

Water and Sewer revenues exclude capital contributions and developer donations. Operating expenses do not include depreciation or amortization expenses.

UNITED CITY OF YORKVILLE, ILLINOIS

Demographic and Economic Statistics - Last Ten Calendar Years
April 30, 2023 (Unaudited)

Calendar Year	Population (1)	Personal Income (4)	Per Capita Personal Income (4)	Median Age (1)	School Enrollment (2)	Unemployment Rate (3)
2013	17,804	$ 468,864,947	$ 49,123	31.1	5,630	8.20%
2014	18,161	484,322,292	50,690	31.6	5,786	6.40%
2015	18,451	519,692,602	54,516	31.6	5,801	4.80%
2016	18,833	529,121,652	55,621	32.3	5,980	5.20%
2017	19,022	539,704,085	58,331	32.3	6,026	4.50%
2018	20,119	572,600,072	61,642	33.7	6,233	3.50%
2019	20,613	605,818,372	64,079	33.7	6,319	3.40%
2020	21,533	636,555,184	67,671	33.3	6,245	8.50%
2021	21,533	658,834,615	70,039	32.7	6,266	5.30%
2022	23,835	718,873,132	75,592	34.5	6,596	4.30%

Data Source:
(1) U.S. Census Buerau
(2) Data provided by School District Administrative Offices
(3) Illinois Department of Employment Security, Economic Information and Analysis
(4) U.S. Bureau of Economic Analysis: Chicago-Naperville-Elgin Metropolitan Statistical Area

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Employers - Current Calendar Year and Nine Calendar Years Ago
April 30, 2023 (Unaudited)

	2023 Calendar Year			2013 Calendar Year		
Employer	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
Raging Waves (Seasonal)	400	1	1.86%	450	1	2.66%
Wrigley Manufacturing Co.	400	1	1.86%	323	2	1.91%
Super Target	265	2	1.23%	180	3	1.06%
Jewel/Osco	198	3	0.92%	130	5	0.77%
Menards Mega Store	157	4	0.73%	140	4	0.83%
Newlywed Foods	134	5	0.62%	115	6	0.68%
Home Depot	125	6	0.58%	90	7	0.53%
Boombah, Inc	99	7	0.46%	85	8	0.50%
Wheatland Title	93	8	0.43%	65	9	0.38%
Hillside Health Care Center	80	9	0.37%	90	7	0.53%
Aurora Speciality Textiles	75	10	0.35%			
Kohl's				115	6	0.68%
Marshalls				50	10	0.30%
Brenart Eye Clinic				50	10	0.30%
C.J. Insulation				50	10	0.30%
	2,026		9.41%	1,933		11.42%

Data Source: City Records and Illinois Manufacturers Directory.

UNITED CITY OF YORKVILLE, ILLINOIS

Full-Time and Part-Time Government Employees by Function - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

	2014	2015	2016
Full Time			
General Government			
Administration	4.0	4.0	4.0
Finance	4.0	4.0	4.0
Community Development	4.0	4.0	4.0
Public Safety			
Police			
Officers	28.0	29.0	29.0
Civilians	3.0	3.0	3.0
Public Works			
Streets	5.3	5.3	5.3
Water	5.3	5.3	5.3
Sewer	3.3	3.3	3.3
Parks & Recreation			
Parks	8.5	8.5	6.5
Recreation	4.5	5.5	5.5
Library	5.0	4.0	4.0
Part Time			
General Government			
Administration	1.0	-	1.0
Community Development	1.0	1.0	1.0
Public Safety			
Police			
Officers	5.0	6.0	5.0
Civilians	10.0	9.0	9.0
Public Works			
Streets	-	1.0	1.0
Water	-	2.0	2.0
Sewer	-	-	-
Parks & Recreation			
Parks	4.0	7.0	7.0
Recreation	3.0	23.0	32.0
Library	25.0	31.0	27.0
Total	123.9	155.9	159.0

Data Source: City Human Resource Department

2017	2018	2019	2020	2021	2022	2023
4.0	5.5	5.5	5.5	5.5	4.5	4.5
4.0	4.0	4.0	4.0	4.0	4.0	4.0
4.0	5.0	6.0	6.0	6.0	7.0	8.3
29.0	30.0	27.0	31.0	32.0	32.0	33.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0
5.3	5.3	5.3	5.3	5.3	7.3	7.6
5.3	5.3	4.3	5.8	5.8	5.8	6.1
3.3	3.3	2.3	3.8	3.8	1.0	1.0
					3.8	3.1
7.5	7.5	8.5	7.5	7.5	9.5	8.0
5.5	6.0	6.0	6.0	5.0	5.0	8.5
4.0	4.0	5.0	5.0	4.0	4.0	6.0
1.0	-	-	-	-	-	-
3.0	2.0	-	-	-	-	-
5.0	4.0	3.0	3.0	1.0	1.0	1.0
8.0	9.0	8.0	10.0	3.0	7.0	7.0
1.0	3.0	-	3.0	-	-	-
1.0	-	-	1.0	-	-	-
-	-	-	1.0	-	-	-
7.0	7.0	6.0	6.0	1.0	6.0	3.0
35.0	33.0	33.0	48.0	17.0	48.0	28.0
28.0	24.0	23.0	32.0	22.0	29.0	18.0
163.9	160.9	150.0	187.0	126.0	178.0	150.0

UNITED CITY OF YORKVILLE, ILLINOIS

Operating Indicators by Function/Program - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

	2014	2015	2016	2017
Police				
Arrests Made	390	503	466	602
Parking Violations	628	515	655	426
Traffic Violations	1,097	987	1,252	881
Reports Taken	1,840	1,788	1,911	1,916
Calls for Service	11,633	12,458	13,727	11,953
Community Development				
Permits Issued	576	577	681	871
Public Works				
Street Resurfacing (Miles)	1.69	0.65	2.12	6.01
Snow and Ice Control (Tons of Salt)	1,349	1,509	1,490	1,285
Pothole Repairs (Tons of Asphalt)	252	442	610	511
Water				
Number of Accounts	6,135	6,361	6,465	6,644
Total Annual Consumption (Cubic Feet)	62,743,823	59,385,852	61,736,969	64,208,149
Average Daily Consumption (Cubic Feet)	171,901	162,701	169,142	175,913

*Police information is presented on a calendar year basis. Operating indicators are through June 2023.

Data Source: Various City Departments

2018	2019	2020	2021	2022	2023	
619	665	401	502	201	421	*
274	170	56	49	45	175	*
1,022	604	6,053	6,050	2,929	5,176	*
2,045	2,022	2,251	2,504	921	2,223	*
12,047	13,043	12,449	13,450	5,752	13,538	*
1,003	980	2,247	1,975	1,519	1,552	
7.51	4.39	3.05	2.35	7.87	4.51	
1,748	1,730	1,130	1,786	1,885	1,614	
218	212	202	31	33	119	
6,805	7,038	7,265	7,492	7,913	8,203	
68,062,433	68,173,114	66,979,711	73,117,169	77,527,954	75,269,793	
186,472	186,776	183,506	200,321	212,405	206,219	

UNITED CITY OF YORKVILLE, ILLINOIS

Capital Asset Statistics by Function/Program - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

	2014	2015	2016
Public Safety			
Police			
Stations	1	1	1
Patrol Units	20	22	20
Public Works			
Streets (Miles)	83	84	88
Traffic Signals	26	26	26
Storm Sewers (Miles)	83	83	90
Water			
Water Mains (Miles)	68	68	72
Fire Hydrants	1,349	1,349	1,415
Sewer			
Sanitary Sewers (Miles)	60	60	64
Lift Stations	7	7	7

Data Source: Various City Departments

2017	2018	2019	2020	2021	2022	2023
1	1	1	1	1	1	1
20	22	21	20	22	23	23
90	95	95	138	140	140	116
26	26	26	26	26	26	27
96	106	106	136	140	141	152
77	85	85	134	137	138	139
1,515	1,645	1,647	1,929	1,972	1,981	2,026
68	74	74	108	108	108	108
7	7	7	7	7	7	7

UNITED CITY OF YORKVILLE, ILLINOIS

New Permits and Construction Values - Last Ten Fiscal Years
April 30, 2023 (Unaudited)

Fiscal Year	Commercial Construction		Residential Construction Single-Family		Residential Construction Multi-Family		Total	
	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value
2014	11	$ 3,215,000	73	$ 11,451,799	-	$ -	84	$ 14,666,799
2015	10	38,279,500	72	13,063,555	-	-	82	51,343,055
2016	6	1,060,000	98	16,451,049	-	-	104	17,511,049
2017	6	2,361,795	159	28,818,289	-	-	165	31,180,084
2018	10	25,292,000	165	28,598,202	48	2,640,000	223	56,530,202
2019	8	3,626,350	217	34,439,272	5	324,254	230	38,389,876
2020	11	3,992,100	139	20,410,448	34	3,813,608	184	28,216,156
2021	8	1,044,324	272	41,739,549	118	13,588,257	398	56,372,130
2022	7	3,016,607	210	34,888,478	148	18,461,906	365	56,366,991
2023	7	1,680,000	197	34,027,249	141	19,776,340	345	55,483,589

Data Source: City Records



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
FY 2022 Yorkville Annual Comprehensive Financial Report

File Name:
C.5b_FY 2022 Yorkville Annual Comprehensive Financial Report

Description:
Year-end audited financial statements for the United City of Yorkville for 2022.

August 2024

Annual Comprehensive Financial Report
Fiscal Year Ended April 30, 2022



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PARKS & RECREATION

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UNITED CITY OF YORKVILLE

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UNITED CITY OF YORKVILLE,
ILLINOIS

ANNUAL COMPREHENSIVE FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED
APRIL 30, 2022

Prepared by:

Rob Fredrickson
Director of Finance

INTRODUCTORY SECTION

This section includes miscellaneous data regarding the City including: List of Principal Officials, Organization Chart, Transmittal Letter and the Certificate of Achievement for Excellence in Financial Reporting.

UNITED CITY OF YORKVILLE, ILLINOIS

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UNITED CITY OF YORKVILLE, ILLINOIS

Principal Officials

Fiscal Year Ended April 30, 2022

EXECUTIVE

Mayor: John Purcell

LEGISLATIVE

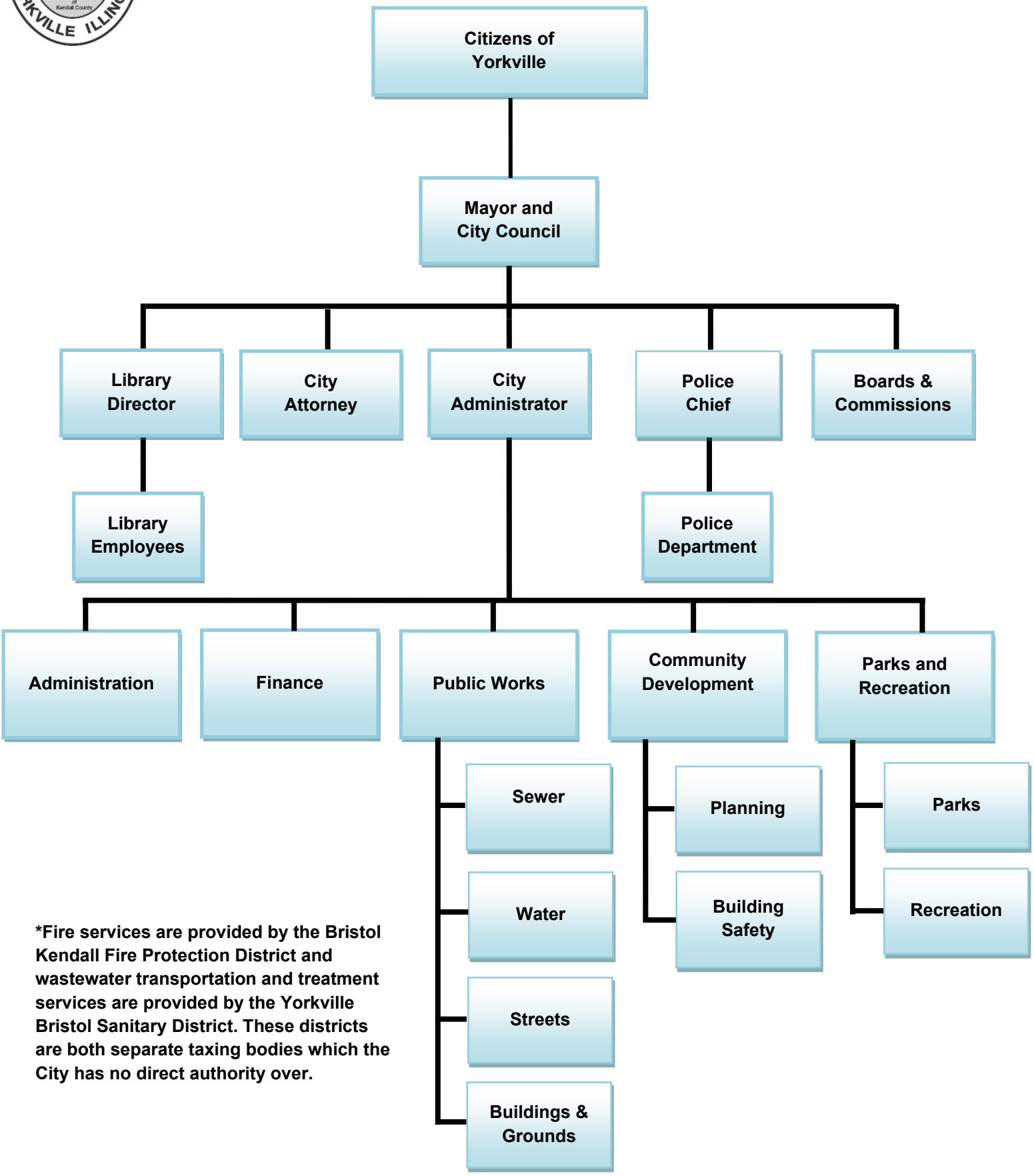
Ward 1:	Dan Transier, Alderman
Ward 1:	Ken Koch, Alderman
Ward 2:	Craig Soling, Alderman
Ward 2:	Arden Joe Plocher, Alderman
Ward 3:	Matt Marek, Alderman
Ward 3:	Chris Funkhouser, Alderman
Ward 4:	Seaver Tarulis, Alderman
Ward 4:	Jason Peterson, Alderman

ADMINISTRATION

City Administrator:	Bart Olson
Director of Finance/Treasurer:	Rob Fredrickson
Director of Public Works:	Eric Dhuse
Chief of Police:	Jim Jensen
Director of Community Development:	Krysti Barksdale-Noble
Director of Parks & Recreation:	Tim Evans
Library Director:	Shelley Augustine
Assistant City Administrator:	Erin Willrett
City Clerk:	Jori Behland

United City of Yorkville

Fiscal Year 2022 Organization Structure



*Fire services are provided by the Bristol Kendall Fire Protection District and wastewater transportation and treatment services are provided by the Yorkville Bristol Sanitary District. These districts are both separate taxing bodies which the City has no direct authority over.

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October 20, 2022

To The Honorable John Purcell, Mayor
Members of the City Council
Citizens of Yorkville, Illinois

The Annual Comprehensive Financial Report of the United City of Yorkville, Illinois, for the Fiscal Year ended April 30, 2022, is hereby submitted. The submittal of this report complies with Illinois state law which requires that the City issue a report on its financial position and activity presented in conformance with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted auditing standards (GAAS) by an independent firm of licensed certified public accountants.

This report consists of management's representations concerning the finances of the City. Consequently, responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with management. We believe the data, as presented, is accurate in all material respects; and is presented in a manner designed to fairly set forth the financial position of the United City of Yorkville. The results of operations as measured by the financial activity of its various funds; and all disclosures necessary to enable the reader to gain a reasonable understanding of the City's financial affairs have been included.

The City's financial statements have been audited by Lauterbach & Amen LLP, a firm of licensed certified public accountants. The goal of the independent audit is to provide reasonable assurance that the financial statements of the United City of Yorkville for the fiscal year ended April 30, 2022, are free of material misstatements. The independent audit involves examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluation of the overall financial statement presentation. The independent auditors concluded, based upon their audit procedures, that there was a reasonable basis for rendering an unmodified ("clean") opinion that the City's financial statements for the fiscal year ended April 30, 2022, are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

This report includes all funds of the City (primary government), including the Yorkville Public Library and Parks and Recreation Department, and its pension trust fund, the Yorkville Police Pension Fund. The Police Pension was determined to be a pension trust fund due to its fiduciary and fiscal relationship with the City, as its singular purpose is to provide retirement benefits to the City's sworn police officers. The City does not have any other reporting units that would qualify as a discretely presented component unit in the separate column of the government-wide financial statements.

Generally accepted accounting principles require that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This transmittal letter is designed to complement the MD&A and should be read in conjunction with it. The City's MD&A can be found immediately following the report of the independent auditors.

Profile of the United City of Yorkville

Yorkville was first settled in 1833 and has been the county seat of Kendall County since 1859. The Village of Yorkville was incorporated in 1874, with a population of approximately 500 people. At that time, the Village of Yorkville only encompassed land on the south side of the Fox River; another village, called Bristol, was located directly across from Yorkville on the north side of the river. In 1957 the two villages merged, via referendum, to form the United City of Yorkville. The City, a non-home rule community as defined by the Illinois Constitution, covers approximately 22 square miles with a 2020 census population of 21,533 residents. The City is located in central Kendall County, about 45 miles southwest of Chicago, Illinois. The City is primarily agricultural and residential in nature, with housing stock consisting of approximately 7,850 single family (includes townhomes, condominiums and duplexes) dwelling units.

The City operates under a Mayor/Council form of government, as defined in Illinois State Statutes. The legislative authority of the City is vested in an eight-member council, each elected from their respective wards to overlapping four-year terms. The Mayor is elected at large to a four-year term. The Mayor appoints, with Council consent, a City Administrator to manage the day-to-day operations of the City.

The City provides a full range of municipal services with 87 full-time, and 91 part-time employees working in public safety, public works (including water distribution and sewer services), community development, building and zoning, parks and recreation, library services and general administration. The City maintains approximately 140 lane miles of streets and 240 acres of green space at 32 locations. Solid waste collection and recycling services are administered by the City through a contract with a private firm. Sewage treatment and fire protection services are provided by the Yorkville Bristol Sanitary District and the Bristol Kendall Fire Protection District; both of which are independent units of government.

The Yorkville Public Library is operated under an appointed board, which is separate from the City Council. Library Board positions are appointed by the Mayor and expire on a rotating basis. Library operations are administered by the Library Board; however, the City is required by state statute to include within its property tax levy and budget, the Library's requests. The Library does not have authority to issue debt and must do so through the City.

Accounting System and Budgetary Control

Management of the United City of Yorkville is responsible for establishing and maintaining an internal control structure. The internal control structure is designed to ensure that the assets of the City are protected from loss, theft or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. This structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

In addition, the United City of Yorkville maintains budgetary controls. The objective of these budgetary controls is to ensure compliance with legal provisions embodied in the annual appropriated budget approved by the City's governing body. Activities of the general fund, special revenue funds, capital project funds, debt service funds and enterprise funds are included in the annual appropriated budget. The level of budgetary control (that is, the level at which expenditures cannot legally exceed the appropriated amount) is established at the fund level for all budgeted funds. The budget process begins in the fall when department heads begin to prepare line-item budgets for their respective departments for the upcoming fiscal year, before submitting them to the City Administrator and Finance Director. Throughout the fall and winter, the proposed budgets from each department are discussed and revisions are made based on the projected financial outlook and priorities of the City. A draft budget is then prepared and presented to City Council in February or March. A public hearing is required to be held on the budget prior to formal adoption by City Council. The annual budget must be adopted before May 1st, which is the beginning of the City's fiscal year.

Local Economy

Yorkville is home to several large and midsized manufacturers and retailers including the Wm. Wrigley Jr. Company, Boombah, Inc., Newlywed Foods, Jewel/Osco, Target, Kohl's, Home Depot and Menards. It is also home to Raging Waves, Illinois largest water park. The City's administrative staff, in conjunction with its economic development consultant, continues to work on attracting and retaining commercial and industrial business to the City.

Over the course of the current fiscal year, a total of 1,518 building permits were issued by the United City of Yorkville. This includes 32 new commercial buildout/construction/remodeling permits including such new businesses as the Kendall Meat Company, a fresh meat and seafood market located in the Kendall Marketplace business district; Sephora, a cosmetic and beauty retailer located within the Kohl's department store; and Belle Tire, a wheel and automotive service retailer located in the Menards development area. In addition, two national quick-service food retailers, Noodles & Company and Chipotle, are currently under construction and slated for late Fall/Winter 2022 openings. Within the downtown, a new local coffee shop, Iconic Coffee, recently opened offering pastries and beverages at site along the Fox River. On the residential side, the City issued a total of 358 new construction permits, which included 210 single-family and 148 townhomes, primarily located within the Grande Reserve and Raintree Village subdivisions.

The City's three tax increment financing (TIF) districts also saw a fair amount of activity in the current fiscal year. The Burnt Barrel Social, a one-of-a-kind family friendly lounge offering local fare and crafted spirits (located in the Countryside TIF district on the corner of US Route 34 and Illinois Route 47), applied for a building permit to construct a 605 square foot addition to their existing commercial space. Additionally, the final vacant lot within the TIF district was purchased and a proposed new business, Station One Smokehouse – a Texas styled BBQ restaurant, is planned to open in early 2023. In the City's two Downtown TIF districts, the former Kendallwood Estates residential development, consisting of 83 single-family lots on 50-acres of land just south of Van Emmon Road and east of Illinois Route 47, was purchased by Rally Homes in the winter of 2021 and renamed Timber Ridge Estates. This development will offer seven different semi-custom home plans and three distinct elevations per plan. The homes will range in size from 2,000 square foot ranches to nearly 4,000 square foot two-story homes. Furthermore, in December of 2021 the City approved a TIF inducement resolution with the Williams Group, LLC for eight parcels located at the northwest corner of Illinois Route 47 (Bridge Street) and Hydraulic Avenue. The redevelopment plans included remodeling the interior spaces for two residential apartments on the second floor and commercial space on the ground floor.

Despite the many budgetary challenges facing the State of Illinois, including looming debt and pension obligations, the City has seen multiple signs that the local economy is continuing to remain resilient. The U.S. Census Bureau 5-year Community Survey estimates report that the City has a median household income of $101,245. This compares to $96,854 for Kendall County and $68,428 for the State of Illinois. Yorkville's average unemployment rate was 5.3% at the end of calendar year 2021, which was lower that both the State and the Chicago-Naperville-Arlington Heights Metropolitain Area (which includes Cook, DuPage, Grundy, Kendall, McHenry and Will Counties) rates of 6.1% and 6.4%, respectively. The equalized assessed valuation (EAV) of taxable property within the City continues to steadily rise, increasing by an average of approximately 7% from 2016 through 2021. In addition, the City's sales tax base continues to expand, as municipal sales tax proceeds have continued to exceed prior year amounts by an average annualized growth rate of over 6% since fiscal year 2014.

As Yorkville emerges from the COVID-19 pandemic, the City's financial position remains strong with sufficient reserve levels. Management is pleased to report that initial estimated revenue losses did not come to fruition as the City weathered the pandemic over the last two fiscal cycles, as several material revenue streams have reached record heights, appreciably exceeding pre-pandemic actuals. Moreover, for those few operational revenue sources that were impacted by COVID, (particularly hotel, amusement and video game taxes) have either returned to or exceeded pre-pandemic figures.

Major Initiatives

In fiscal year 2022 the City continued to pursue several major initiatives, including:

- **Bond Issuance and Refundings** - In May of 2021, the City issued $8.25 million in bonds to finance the renovation of a three-story building located at 651 Prairie Point Drive on the City's northeast side. This 43,000 square foot facility, which was purchased in the prior fiscal year for $1.9 million, will serve as Yorkville's new City Hall / Police Station, and is currently slated for completion by the of calendar year 2022. Furthermore, in January of 2022 the City issued a second bond for $5.17 million, with $4.16 million of the proceeds used to refinance the 2011 bonds, and the remaining proceeds ($1.10 million) to be used to finance renovations to the new City Hall / Police Station facility. The refunding of the 2011 bonds reduced overall debt service by $275,353 and yielded an economic gain of $266,090.

- **Road to Better Roads (RTBR) Program and Other Capital Projects** – Based on the findings of an updated road study conducted in 2018 and in an effort to address ongoing infrastructure needs, the City continued its annual capital improvement program in the current fiscal year, commonly referred to as the "Road to Better Roads" program. Construction costs in fiscal year 2022 totaled approximately $1.6 million for roadway improvements, consisting of pavement milling and overlays on several local streets. In addition, the City neared completion on watermain improvements at Appletree Court and Elizabeth Street and roadway improvements within the Fox Hill subdivision; finalized preliminary engineering for the East Main Street water main replacement; and continued to progress with the reconstruction of Mill Road. Moreover, preliminary engineering activities commenced on several roadway, sewer and water related projects including: the intersection at Mill and Kennedy Roads; construction of a new sewer interceptor on Corneils Road; and the rehabilitations of the City's north central water tower and water well #4. Notable non-infrastructure improvements comprised of two playground installations at Price and Fox Hill Parks; and the purchase several new vehicles, including two SUV police squads, the refurbishment of two Street Department dump trucks and the acquisition of three full-size pick-ups by the Community Development Department.

- **City Water Source Transition** – After reviewing several options throughout the first half of fiscal year 2022, in December the City Council identified Lake Michigan (via the DuPage Water Commission) as the preferred choice, as the City begins its transition to a more sustainable long-term water source. This multi-year project, which is projected to cost $230 million, will be done in conjunction with the Village of Oswego and the Village of Montgomery, with Yorkville's portion currently estimated at $90 million. The project is anticipated to be funded by a mix of debt financing, rate increases, and other City revenue streams, along with the potential for Federal and State assistance as well. In the current fiscal year, City Staff initiated the supply transition by beginning the permitting process with the Illinois Department of Natural Resources, in order to receive the State's consent to utilize water from Lake Michigan. Preliminary engineering was also commenced, for the purposes of addressing various considerations regarding the transition, including water loss, meter replacement and long-term water rate planning.

- **New Public Works Facility** – The City commenced planning for a new public works facility in June of 2021, as the City Council engaged a consultant to conduct a space needs and development analysis. This analysis, which is expected to be completed in the subsequent fiscal year, will identify potential sites for the new facility, ascertain space needs for current and future operational considerations and develop various cost scenarios. At present, the new facility is expected to encompass an area of 10 to 15 acres, at an estimated cost between $22 and $36 million and will likely be financed by a future bond issuance.

Long-Term Financial Planning

Management annually develops five-year financial forecasts for all budgeted funds. These forecasts serve as the basis for identifying not only future capital needs, but future operational and personnel requirements as well. Revenue and expenditure trends will be evaluated and prioritized based on the goals set forth by the City Council. It is the intent of management that this five-year financial forecast will serve as the foundation for each year's corresponding budget document.

Relevant Financial Policies

In order to ensure that the City continues to meet its immediate and long-term service goals, several financial policies and procedures have been implemented by management. Some of the more prescient policies include the following:

- Issue an Annual Comprehensive Financial Report within 180 days of the end of each fiscal year that complies with generally accepted accounting principles.

- Monthly revenue, expenditure and cash balance reporting for all funds. These financial reports ensure that the City Council is made aware of any variances from the appropriated budget. In addition, the City's budget document continues to be revised in order to enhance transparency.

- Maintain the "Information for Citizens" webpage on the City's website, which contains a wide array of financial information including budget and audit information; annual treasurer's reports; bill lists; employee salary and benefit information; tax rates and fees; and other nonfinancial information.

- A fund balance policy establishing benchmark reserve levels to be maintained in the City's various funds, in order to promote financial stability and provide adequate cash flow for operations.

- A pension funding policy which defines the manner in which the City funds the long-term cost of benefits promised to plan participants and defines the calculation of the actuarial determined contribution (ADC) to the Yorkville Police Pension and Illinois Municipal Retirement Funds.

- An investment policy which invests public funds in a manner which protects principal, maximizes return for a given level of risk and meets the daily cash flow needs of the City.

- A capital asset policy which establishes the capitalization thresholds and estimated useful lives of capital assets.

- A purchasing policy to ensure that goods and services are obtained in a timely manner at the lowest possible cost.

- A post issuance compliance policy to ensure that City remains in compliance with federal tax laws after the issuance of tax-exempt debt.

- A credit card policy for all City related credit card purchases. All City employees are required to sign a credit card policy acknowledgement form prior to receiving a City issued credit card.

Pension Trust Funds and Post-Employment Benefits

Two pension plans are established by State Statute, which cover City employees. The benefits and funding of each plan are determined by state statute, and each plan provides retirement, disability and death benefits for participants.

The Police Pension Fund is funded through an annual property tax levy, employee contributions and investment earnings. The Illinois Municipal Retirement Fund (IMRF) pension plan covers civilian full-time employees. Funding for IMRF is made through contributions from the employer (actuarially determined annually by IMRF) and employees of the City (established at 4.5% of total compensation). Employees covered under both pension plans also contribute to Social Security (6.2% of salary capped annually) and Medicare (1.45% of total compensation). The City also provides post-retirement health care benefits for retirees and their dependents, which is financed on a pay-as-you-go basis, with retirees paying 100% of their health care premiums. The notes to the financial statement provide more information pertaining to employee pensions and post-retirement health care benefits.

Awards and Acknowledgments

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the United City of Yorkville for its annual comprehensive financial report for the fiscal year ended April 30, 2021. This was the 11th year that the City has received this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive financial report. The report must also satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The preparation of the annual comprehensive financial report would not have been possible without the dedicated services of the City department heads and staff. The entire finance department staff is extended a special appreciation for all of their assistance in the completion of the annual audit.

Additionally, we would like to acknowledge the Mayor and City Council for their leadership and support in planning and conducting the financial operations of the City, which has made preparation of this report possible.

Respectfully submitted,

Bart Olson
City Administrator

Rob Fredrickson, CPA
Director of Finance

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

United City of Yorkville
Illinois

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

April 30, 2021

Christopher P. Morrill

Executive Director/CEO

INDEPENDENT AUDITORS' REPORT

This section includes the opinion of the City's independent auditing firm.

Lauterbach & Amen, LLP
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INDEPENDENT AUDITOR'S REPORT

October 20, 2022

The Honorable City Mayor
Members of the City Council
United City of Yorkville, Illinois

Opinions

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of and for the year ended April 30, 2022, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of April 30, 2022, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the City, and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with generally accepted auditing standards will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with generally accepted auditing standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the City's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, the budgetary comparison schedules, and GASB-required pension and other post-employment benefit (OPEB) reporting, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the United City of Yorkville, Illinois' basic financial statements. The other supplementary information and supplemental schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, other supplementary information and supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory and statistical sections but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the United City of Yorkville ("City"), we offer readers of the City's financial statements this narrative overview and analysis of the financial activities of the City for the fiscal year ended April 30, 2022. Since the Management's Discussion and Analysis ("MD&A") is designed to focus on the current year's activities, resulting changes and currently known facts, it should be read in conjunction with the Letter of Transmittal, which can be found in the introductory section of this report, and the City's financial statements, which can be found in the basic financial statements section of this report.

Financial Highlights

- The assets/deferred outflows of the United City of Yorkville exceeded its liabilities/deferred inflows at the close of the fiscal year by $170,140,087 (*net position*). Of this amount, $154,779,593 was invested in capital assets, net of related debt; $7,859,306 was restricted for specific activities such as highways and streets, special service areas, bond proceeds, land cash and library operations. Remaining net position, totaling $7,501,188, was unrestricted.
- The City's aggregate net position increased by $12,390,940 or 7.9% during the fiscal year ended April 30, 2022. Of this increase, $9,888,719 is attributable to governmental activities and $2,502,221 is attributable to business-type activities.
- Total revenues increased by 7.9% from $36,223,366 to $39,077,288. Overall expenses totaled $26,686,348, which is an increase of 0.1% over the preceding fiscal year.
- At the culmination of the current fiscal year, the City's governmental funds reported combined fund balances of $22,607,988, compared to $10,226,689 as reported on April 30, 2021.
- For the fiscal year ended April 30, 2022, the City's General Fund reported an increase in fund balance of $1,454,746. Total ending fund balance in the General Fund was a positive $10,627,100.
- Both the City's Water and Sewer Funds reported positive changes in net position during the current fiscal year, reporting ending balances of $38,116,454 and $35,715,557, respectively.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the City's basic financial statements. The City's basic financial statements are comprised of three components: (1) government-wide financial statements, (2) fund financial statements, and (3) notes to the financial statements. The governmental-wide statements are divided between governmental activities and business-type activities. The perspective of the fund financial statements presents financial information for individual funds established by the City for specific purposes. They are categorized into three distinct groups: governmental, proprietary and fiduciary. This report also contains other supplementary information in addition to the basic financial statements.

Government-Wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business. The Statement of Net Position presents information on all of the City's assets/deferred outflows and liabilities/deferred inflows, with the difference between the two reported as net position. Over time increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The Statement of Activities presents information showing how the City's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

Both of the government-wide financial statements distinguish functions of the City that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or a significant portion of their costs through user fees and charges (business-type activities). The governmental activities of the City include general government (legislative, administration and finance), public safety (police), community development, public works (street operations, health and sanitation) and parks and recreation. Property taxes, shared state taxes and local utility taxes finance the majority of these services. Business-type activities reflect private sector type operations, where the fee for service typically covers all or most of the cost of operations, including depreciation. The business-type activities of the City include water and sewer operations.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the United City of Yorkville can be divided into three categories: governmental funds, proprietary funds and fiduciary funds.

Governmental Funds

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the City's near-term financing decisions. Both the Governmental Fund Balance Sheet and the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

The City maintains fourteen individual governmental funds. Information is presented separately in the Governmental Fund Balance Sheet and in the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances for the General Fund, Library Fund, Parks and Recreation Fund, Citywide Capital Fund and Buildings and Grounds Fund, all of which are considered to be major funds. Information from the City's other nine governmental funds are combined into a single column presentation. Individual fund information for these non-major governmental funds is provided elsewhere in the report.

The United City of Yorkville adopts annual budgets for its General Fund, Library Fund, Parks and Recreation Fund, Citywide Capital Fund and Buildings and Grounds Fund. A budgetary comparison schedule has been provided for all four funds to demonstrate compliance with this budget.

Proprietary Funds

The City maintains one type of proprietary fund (enterprise funds). Enterprise funds are used to report the same functions presented as business-type activities in the government-wide financial statements. The City uses enterprise funds to account for its water and sewer operations.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the Water Fund (major fund) and the Sewer Fund (major fund).

Fiduciary Funds
Fiduciary funds are used to account for resources held for the benefit of parties outside the City. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support the City's operations. The City maintains one fiduciary trust fund, the Police Pension Fund. The accounting used for fiduciary funds is similar to that used by proprietary funds.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the information provided in the government-wide and fund financial statements.

Other Information

In addition to the basic financial statements, this report also includes certain required supplementary information related to budgetary information and the City's progress in funding its obligation to provide pension and other post-employment benefits to its employees. Required non-major fund information can be found following the required supplementary information.

The combing statements referred to earlier in connection with non-major governmental funds are presented immediately following the required supplementary information on pensions.

GOVERNMENT-WIDE FINANCIAL ANALYSIS

Statement of Net Position

The following chart reflects the condensed Statement of Net Position (in millions):

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**
Assets:						
Current Assets	$ 36.8	$ 20.9	$ 5.2	$ 5.0	$ 42.0	$ 25.9
Capital Assets	105.5	100.5	70.0	70.2	175.5	170.7
Other Assets	1.5	0.3	11.4	11.1	12.9	11.4
Total Assets	143.8	121.6	86.6	86.4	230.4	207.9
Deferred Outflows	2.3	1.8	2.8	2.9	5.1	4.7
Total Assets/Deferred Outflows	**146.1**	**123.4**	**89.4**	**89.3**	**235.5**	**212.7**
Liabilities:						
Current Liabilities	10.2	6.5	3.2	3.1	13.4	9.6
Long-term Liabilities	30.2	20.6	12.0	14.5	42.2	35.1
Total Liabilities	40.4	27.0	15.2	17.6	55.6	44.7
Deferred Inflows	9.4	10.0	0.4	0.3	9.8	10.2
Total Liabilities/Deferred Inflows	**49.8**	**37.0**	**15.6**	**17.9**	**65.4**	**54.9**
Net Position:						
Net Investment in Capital Assets	93.9	90.5	60.8	58.4	154.8	148.9
Restricted	7.9	2.1	-	-	7.9	2.1
Unrestricted (Deficit)	(5.5)	(6.1)	13.0	12.9	7.5	6.8
Total Net Position	**$ 96.3**	**$ 86.4**	**$ 73.8**	**$ 71.3**	**$ 170.1**	**$ 157.7**

The City's combined net position increased by $12.4 million, from $157.7 million to $170.1 million, during the current fiscal year. This change is the result of $9.9 million and $2.5 million increases in the net position of governmental activities and business-type activities, respectively. The increase in the net position of governmental activities was due primarily to an increase in current assets, as cash flows in the current fiscal year significantly increased as the result of better-than-expected operating outcomes. Moreover, capital assets grew by $5 million, consisting of developer donations, City constructed roadway improvements and unfinished infrastructure/building projects that were still being constructed at fiscal year-end. Long-term liabilities for governmental activities increased by approximately $9.6 million as the direct result of debt being issued over the course of fiscal year 2022. Restricted net position for governmental activities rose by $5.8 million, predominantly comprised of unspent bond proceeds. The enhanced net position of business-type activities was chiefly due to the continued amortization of long-term debt applicable to the Water and Sewer Funds. Net position of business-type activities was further impacted in positive manner by current year gains to the IMRF net pension asset and improved operating results.

The largest portion of the United City of Yorkville's net position, totaling $154,779,593, reflects its investment in capital assets (e.g., land, infrastructure, buildings, vehicles and equipment), less any related debt used to acquire or construct those assets that are still outstanding. The City uses its capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although Yorkville's investment in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. The final component of the City's net position (4.6%) represents resources that are subject to external restrictions on how they may be used. At fiscal year-end, total restricted net position was comprised as follows: 11.6% was for prospective library operations; 84.2% was comprised of remaining bond proceeds pertaining to the new City Hall and Police Station project; 3.4% was for upcoming road maintenance and improvement projects relating to the City's motor fuel tax (MFT) program; 0.4% was for future land cash related park projects; and 0.3% was restricted for special service area use.

As of April 30, 2022, the City was able to report positive balances in all three categories of net position, both for the government as a whole, and for its business-type activities. Unrestricted net position for governmental activities finished fiscal year 2022 at negative $5,482,448. This was an increase of approximately $0.64 million in comparison to the prior fiscal year, as a consequence of better-than-expected operating results. Unrestricted net position for business-type activities ended the current fiscal year at $12,983,636, a nominal increase of $0.06 million, as the result of enhanced water sales and infrastructure fees directly related to the steady flow of new housing starts.

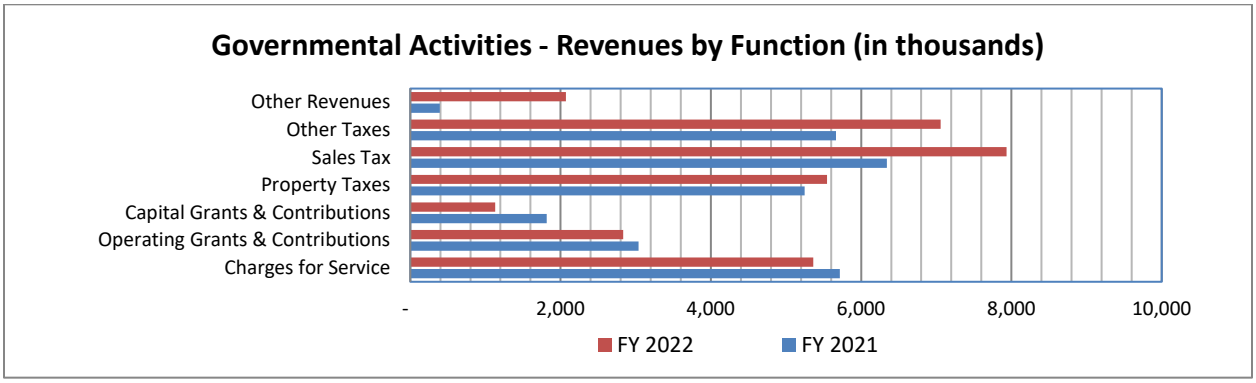
Activities

The following table reflects the revenue and expenses of the City's governmental and business-type activities (in millions).

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2022	**2021**	**2022**	**2021**	**2022**	**2021**
Revenues						
Program Revenues:						
Charges for Services	$ 5.4	$ 5.7	$ 6.7	$ 6.8	$ 12.0	$ 12.5
Operating Grants & Contributions	2.8	3.0	-	-	2.8	3.0
Capital Grants & Contributions	1.1	1.8	0.3	1.1	1.5	2.9
General Revenues:						
Property Taxes	5.5	5.2	-	-	5.5	5.2
Other Taxes	15.0	12.0	-	-	15.0	12.0
Other Revenue	2.1	0.4	0.1	0.1	2.2	0.5
Total Revenues	**$ 31.9**	**$ 28.2**	**$ 7.1**	**$ 8.0**	**$ 39.1**	**$ 36.2**
Expenses						
General Government	4.8	6.0	-	-	4.8	6.0
Library	1.0	1.0	-	-	1.0	1.0
Parks & Recreation	2.5	2.5	-	-	2.5	2.5
Public Safety	5.9	5.7	-	-	5.9	5.7
Community Development	1.0	0.8	-	-	1.0	0.8
Public Works	5.5	5.1	-	-	5.5	5.1
Interest Long-Term Debt	0.6	0.4	-	-	0.6	0.4
Water	-	-	3.6	3.4	3.6	3.4
Sewer	-	-	1.6	1.7	1.6	1.7
Total Expenses	**$ 21.4**	**$ 21.5**	**$ 5.3**	**$ 5.1**	**$ 26.7**	**$ 26.7**
Excess(Deficiency) before Transfers	$ 10.5	$ 6.7	$ 1.9	$ 2.9	$ 12.4	$ 9.6
Transfers	(0.6)	(0.3)	0.6	0.3	-	-
Change in Net Position	**$ 9.9**	**$ 6.4**	**$ 2.5**	**$ 3.1**	**$ 12.4**	**$ 9.6**
Net Position, Beginning	**$ 86.4**	**$ 80.0**	**$ 71.3**	**$ 68.2**	**$ 157.7**	**$ 148.2**
Net Position, Ending	**$ 96.3**	**$ 86.4**	**$ 73.8**	**$ 71.3**	**$ 170.1**	**$ 157.7**

Governmental Activities

Revenues

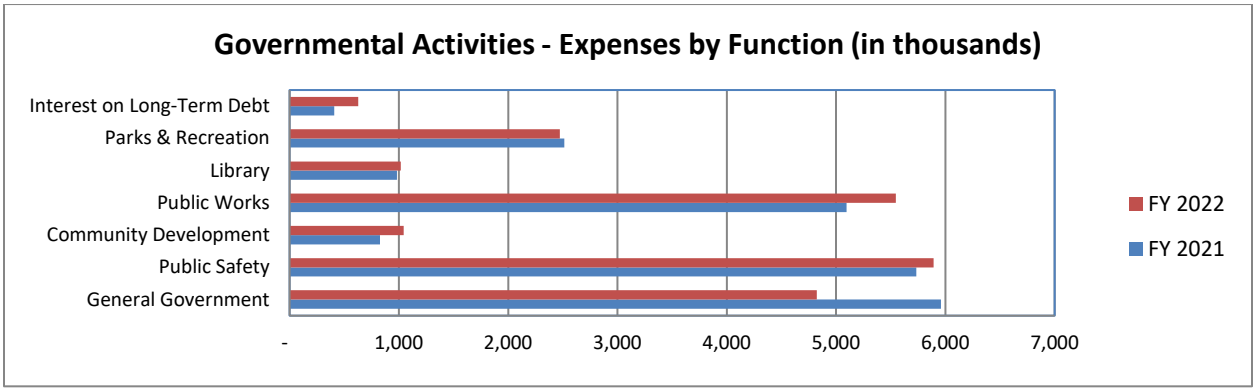


Total governmental activities revenue for the current fiscal year was $31,935,911, compared to $28,219,399 in the previous fiscal year, which is an increase of 13.2%. Property taxes, one of the City's principal revenue sources (17.4% of aggregate revenues), totaled over $5.5 million in fiscal year 2022. Property taxes support various governmental activities, including the City's annual contribution to the Yorkville Police Pension Fund. The City contributed $1,334,771 to the Police Pension Fund in the current fiscal year, fully funding its actuarially determined contribution amount, as pursuant to its pension funding policy. Total property tax revenues increased by 5.6%, as the Library increased its levy for operations, and all three of the City's TIF districts generated additional incremental property tax revenues totaling $156,484. The City increased its requested levy as well, but only by the increment generated solely from new construction. This resulted in additional proceeds of approximately $90,000, which were used to offset the increased employer contribution of $104,176 (8.5%) to the Pension Fund.

After last year's dynamic growth of 12.5%, sales taxes continued to reach unprecedented heights over the course of the current fiscal year due to the confluence of several factors consisting of: aggressive fiscal and monetary policies in response to the pandemic, which have spurred consumer demand; ongoing supply chain issues, which further drove up demand; statutory changes regarding how these proceeds are sourced; and the resiliency of the local economy. In the past, tax revenues from products purchased on the internet that were used or consumed in Illinois, were distributed to municipalities on a per-capita basis. With the new sourcing laws that went into effect last fiscal year, most on-line retailers are now required to collect both State and locally imposed (including non-home rule) sales taxes on products being used or consumed within Yorkville. The effect of these on-line sourcing rule changes, in combination with the other economic factors mentioned above, was that the City received $7.9 million in sales taxes in fiscal year 2022, which resulted in an extraordinary year-over-year gain of 25.1%. The "other taxes" classification includes several revenue sources, including income, excise, utility, business district, video gaming and state use taxes. The other taxes classification increased by 24.5% in the current fiscal year, as many of these revenue streams benefited from the same pandemic related demand issues that positively impacted sales taxes; in addition to the periodic easing of COVID restrictions and revised per capita figures from the 2020 decennial census. Most notably income and utility taxes increased precipitously, posting year-over-year gains of $704,570 and $179,970, respectively.

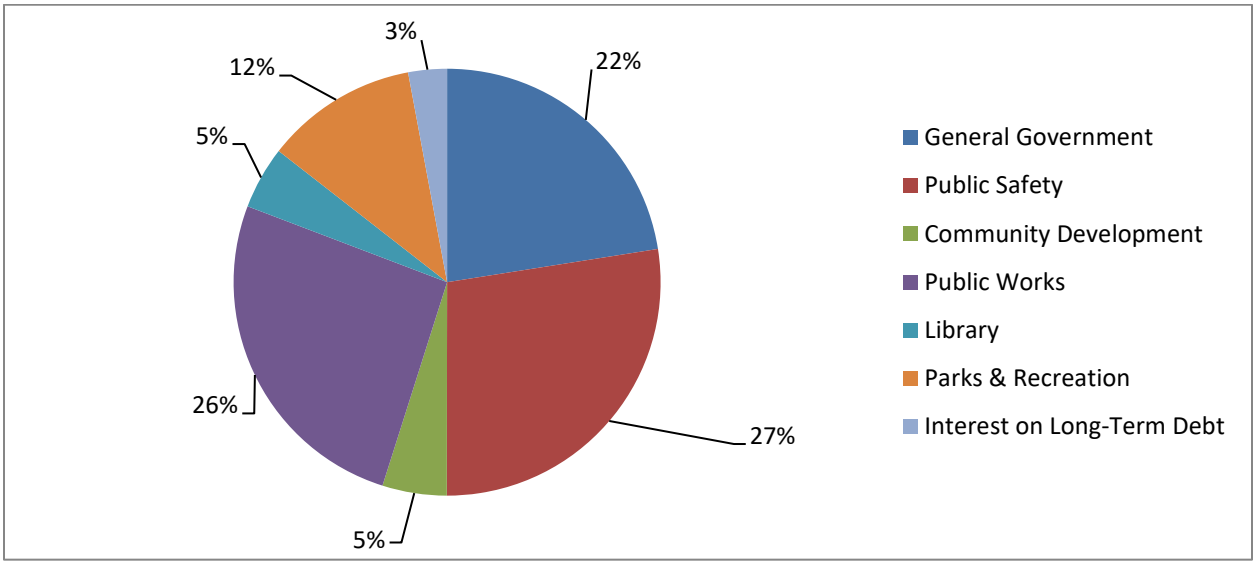
Aggregate charges for service revenues decreased by 6.2% in the current fiscal year, due to a reduction in overall vehicle and equipment chargebacks in comparison to the year prior. The "other revenues" classification, which is primarily made up of interest income and various reimbursements related to capital projects, increased significantly in fiscal year 2022, due to various developer funded road infrastructure improvements within the Grande Reserve subdivision. Operating grant and contribution revenues declined by $202,376 (6.7%) in comparison to fiscal year 2021 amounts, due to the timing of grant proceeds from the State's Rebuild Illinois program. Capital grants and contributions decreased by approximately $700,000, as the City accepted fewer capital contributions from developers.

Expenses



Total expenses amounted to $21,422,885 for governmental activities at the end of fiscal year 2022. This reflected a nominal decrease of 0.5% from the prior year. The public safety and general government functions comprised the greatest proportion of governmental activities expenses, accounting for a combined 50.0% of the total. Other primary functional areas include public works and parks and recreation, which accounted for 25.9% and 11.5%, respectively, of total governmental activities expense.

Public works expenses totaled just over $5.5 million for the fiscal year ended April 30, 2022, which is an 8.8% increase over the preceding year. This increase is primarily attributable to additional expenses related to building and ground operations and fewer vehicle and equipment acquisitions, in comparison to the previous fiscal year. Public safety expenses modestly increased by 2.8%, stemming from inflationary wage augmentations and an increase in the current year's employer pension contribution. General government expenses decreased by 19.1%, as last year's amount was skewed due to one-time Federally funded payouts of almost $750,000 to local businesses, pursuant to the Downstate Small Business Stabilization and Business Interruption grant programs, in an effort to mitigate the impact of COVID-19 on the Yorkville business community. Community development expenses increased by 26.1%, due to the addition of one new employee, enhanced vehicle funding and increased inspection costs, which were directly correlated with the rapidity of the local housing environment. Parks and Recreation expenses were slightly down by 1.7%, as fewer capitalizable assets related to playground improvements were completed in the current fiscal year. Interest on long-term debt rose by 53.3%, due to interest being paid on the new 2021 bond and the associated costs of issuance. The following pie chart shows the breakdown of governmental activities expenses by function.



Business-Type Activities

Business-type activities increased the City's net position by $2,502,221. For the current fiscal year, 93.2% of all business-type activity revenue was generated from fees for services relating to the City's water and sewer utilities. Charges for services totaled $6.7 million in fiscal year 2022, which represents a slight reduction of approximately $140,000 (2.0%) in comparison to the year prior. This nominal decrease in charge for service revenue was the result of fewer new housing starts, which lead to reduced connection fee revenue in comparison to fiscal year 2021. Nonetheless, water sales revenue increased by 4.4%, resulting from expanded consumption and an uptick in new utility billing accounts, which expanded by 4.8% in the current fiscal year. Other water and sewer related utility fees increased in a similar manner, posting combined year-over-year gains of $107,196.

Capital grant and contribution revenues for business-type activities in fiscal year 2022 decreased by more than two thirds, as fewer water and sewer related infrastructure assets were accepted from developers relative to the prior year. "Other revenues", which are comprised of rental income, reimbursements, proceeds from capital asset sales, interest income and miscellaneous items; increased by $57,030, due to developer reimbursements related to the construction of a new sanitary sewer interceptor on Corneils Road. Net transfers totaled a positive $624,307, which were used to fund debt service payments.

FINANCIAL ANALYSIS OF THE GOVERNMENT'S FUNDS

Governmental Funds - The focus of the United City of Yorkville's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the United City of Yorkville's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year. At the end of the current fiscal year, the United City of Yorkville's governmental funds reported combined ending fund balances of $22,607,988, an increase of $12,381,299 over last year's totals. Approximately 99% of fund balance for the governmental funds is identified between the restricted, assigned and unassigned categories. Restricted fund balance, which accounts for 34.8% of total fund balance, includes amounts restricted for library operations, bond proceeds, special service areas, land cash and the City's motor fuel tax program. The bulk of unassigned fund balance, which accounts for 46.3% of total governmental fund balance, is in the General Fund ($10.5 million); with the majority of the negative equity portion of $2.8 million residing in the City's three TIF Funds. Remaining fund balance for the governmental funds are allocated as follows: $214,345 (1.0%) is nonspendable (i.e., prepaids); $7,859,306 (34.8%) is restricted in the form of unspent bond proceeds, funds reserved for special service areas and the State's Motor Fuel program; $6,941,081 is assigned to various road related capital projects, building improvements, vehicles and equipment. Overall General Fund revenues increased by $3.6 million (18.2%), to finish at $23.1 million for the fiscal year, led by dramatic year-over-year gains in sales taxes (+$1.6 million), income tax (+$0.7 million) and Federal grant (+1.5 million) proceeds. When coupled with lower-than--expected salary and benefit expenditures, this resulted in a revenue over expenditure excess of $8.2 million. Approximately half of this excess was earmarked by City Council for capital purposes, as an additional $3.8 million was transferred out in addition the original budgeted amounts of $3 million; thus, resulting in a positive General Fund surplus of $1.5 million. It should also be noted that the tax revenues that were most impacted by the pandemic (namely hotel, video gaming and amusement taxes) either returned to, or exceeded, pre-pandemic levels, resulting in an aggregate gain of $318,144.

The Library Fund reported a positive fund balance of $923,559 at the end of fiscal year 2022, which represents an increase of $116,338 over last year's fund balance amount of $807,221. Property taxes used to finance library operations, which accounted for 91.7% of total library operational revenues, increased by $37,365 (5.1%). Aggregate operational expenditures increased by $35,643 (4.5%), as a result of inflationary increases in wages and utilities, along with an expansion in the number of hours worked by part-time personnel, as Library hours of operation returned to its pre-pandemic norm.

The Parks and Recreation Fund reported a deficit in the amount of $73,000 at the close of the current fiscal year, thus decreasing fund balance from $73,000 to $0, as stipulated in the fiscal year 2022 budget. The Parks and Recreation Fund, more so than any other Fund in the City, had been the most negatively impacted by the pandemic, due to the very social nature of its revenue generating activities. Fortunately, aggregate charge for service (comprised of child development, concession, special events and athletics & fitness) revenues returned to pre-COVID-19 levels, posting collective year-over-year gains of 53.8% ($192,023), as social distancing guidelines were phased out and program participation levels returned to normal. Operational expenditures in the Parks and Recreation Fund increased by 6.2%, due to the addition of a new full-time Park's maintenance employee, increased program spending and the restoration of the City's annual Hometown Day's festival, which was canceled in 2020 due to the pandemic.

The Citywide Capital Fund ended fiscal year 2022 with a surplus of just over $2.0 million, which increased fund balance from $119,569 to $2,165,601. Aggregate revenues exceeded prior year amounts by $1.2 million, as developer reimbursements directly offset roadway expenditures in the Grande Reserve subdivision. Transfers in for fiscal year 2022 totaled $3,138,492, comprised of a $2.0 million transfer from the Building and Grounds Fund as a payback for land acquisition costs incurred in the previous year; and a $1.1 million transfer from the General Fund to be used towards future capital projects. On the other side of the ledger, roadway related capital expenditures increased by $2.3 million, as the City continued work on several major road projects and launched its inaugural sidewalk replacement program in the amount of $159,960.

The Buildings and Grounds Fund was created in the current fiscal year for the purposes of accounting for the maintenance, acquirement and improvements of all City-owned buildings. The Fund has one full time employee, who works in conjunction with the Facilities Manager, which is a shared position between Yorkville and the Village of Oswego. Personnel costs for the Fund are financed by permit fees and chargebacks, whereas building related maintenance and supplies are funded by a transfer from the General Fund. This Fund received $9.785 million in bond proceeds, in addition to a General Fund transfer of $3.324 million in fiscal year 2022, which has been earmarked for the renovation of the new City Hall and Police Station facility. As of April 30, 2022, just under $1.1 million has been incurred in renovation costs associated with this project.

GENERAL FUND BUDGETARY HIGHLIGHTS

The chart below compares the fiscal year 2022 final budget to the actual results of the City's General Fund.

Fiscal Year 2022 General Fund Budgetary Highlights

	Final Budget	Actual	Over (Under)	Actual as % of Budget
Revenues				
Taxes	$ 12,089,017	$ 14,350,349	$ 2,261,332	119%
Intergovernmental	3,401,780	5,630,190	2,228,410	166%
Licenses, Permits and Fees	524,500	834,170	309,670	159%
Charges for Services	1,781,123	1,902,362	121,239	107%
Fines and Forfeitures	116,850	197,158	80,308	169%
Interest	20,000	(33,857)	(53,857)	-169%
Miscellaneous	132,000	237,575	105,575	180%
Total Revenues	$ 18,065,270	$ 23,117,947	$ 5,052,677	128%
Expenditures				
General Government	$ 5,293,141	$ 5,141,027	$ (152,114)	97%
Public Safety	6,158,904	6,018,903	(140,001)	98%
Community Development	990,515	1,154,892	164,377	117%
Public Works	2,649,285	2,572,571	(76,714)	97%
Total Expenditures	$ 15,091,845	$ 14,887,393	$ (204,452)	99%
Excess of Revenues over Expenditures	$ 2,973,425	$ 8,230,554	$ 5,257,129	277%
Other Financing Sources (Uses)	(2,973,425)	(6,775,808)	3,802,383	228%
Net Change in Fund Balance	$ -	**$ 1,454,746**		
Fund Balance - Beginning of Year		9,172,354		
Fund Balance - End of Year		**$ 10,627,100**		

The General Fund is the City's primary operating fund and the largest source of funding for the day-to-day activities of its various departments. Actual revenues exceed budgetary amounts by $5,052,677; as taxes, intergovernmental, licenses & permits, fines, charges for service and miscellaneous revenues proved to be more robust than initially anticipated. In August of 2021, the City received its first tranche of $1.4 million from the American Rescue Plan Act (ARPA), which was signed into law in March of 2021. Based on guidelines promulgated by the United States Treasury Department's Final Rule, these proceeds were accounted for as revenue loss within the City's General Fund and applied towards sworn police officer salary expenditures incurred over the course of the fiscal year.

Aggregate building permits totaled $949,459 in fiscal year 2022, of which $745,979 was retained in the General Fund to cover inspection related personnel, operating and vehicle costs within the Community Development Department. Per the City's past practice, remaining building permit proceeds were allocated to the Citywide Capital Fund, to assist in the facilitation of future roadway related capital projects. Despite the continual increase in General Fund cash reserves, investment income continued to lag pre-COVID actuals in the current fiscal year, as interest rates remained at historically low levels, which began with the onset of the pandemic in March of 2020. The negative $33,857 interest amount presented on the preceding page is comprised of realized positive earnings of $11,013 and an unrealized loss of negative $44,870. The unrealized losses are ascribed to the City's investment in United States Treasury securities, which fluctuate in value as the market changes, and are accounted for under the mark-to-market basis pursuant to Generally Accepted Accounting Principles (GAAP). These losses will not become realized, as it's the City's policy to hold such investments to maturity.

Actual General Fund expenditures for the year were $204,452 lower than budget ($14,887,393 actual compared to $15,091,845 budgeted), as all departments within the General Fund, with the exception of Community Development and the Administration Services Department, were under their respective appropriated budgets. The expenditure overage of $43,150 in Administrative Services was due to higher than expected municipal and business district sales tax rebates, which were directly correlated with the remarkable revenue growth of those types of sales taxes over the course of the current fiscal year. Community Development exceeded budgeted amounts by $164,377, caused by increased demand for outsourced inspection services needed to maintain timely issuance of building permits, and the expediting of vehicle purchases due to supply chain issues. Net other financing uses (i.e., transfers out) exceeded budgetary amounts by $3.8 million, as the City Council decided to supplement transfers to the Capital Project Funds in order to finance roadway and building projects in subsequent fiscal years.

As shown in the table on the previous page, current year operating results generated a surplus amount of $1,454,746, which increased overall fund balance from $9,172,354 at the beginning of the year, to $10,627,100 at the end of fiscal year 2022. The surplus at fiscal year-end was primarily attributable to enhanced revenues, predominately related to the tax and intergovernmental categories; and lower than expected salary and benefit expenditures, as a direct result of retirements and temporary vacancies. Ending fund balance for the General Fund was comprised of nonspendable (i.e., prepaid) amounts totaling $162,600, with the remaining balance of $10,464,500 classified as unassigned, which can be used for any corporate purpose. At the culmination of fiscal year 2022, unassigned fund balance as a percentage of total expenditures equated to 70.3%, which is the equivalent of approximately eight to nine months of operating reserves.

Proprietary Funds - The United City of Yorkville's proprietary funds provide the same type of information found in the government-wide financial statements, but in greater detail. The net position of the City's proprietary funds at the end of the year totaled $73,832,011, allocated between the Water and Sewer Funds in the amounts of $38,116,454 and $35,715,557, respectively. Lower than expected operational expenses and the deferral of capital projects and vehicle purchases (due to ongoing supply chain issues) into the subsequent fiscal year, accounted for the bulk of the increase.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets – The United City of Yorkville's investment in capital assets for its governmental and business-type activities as of April 30, 2022 totaled $175,452,220 (net of accumulated depreciation). Investments in capital assets include land, land improvements, construction in progress (CIP), infrastructure (roadway improvements, sanitary sewer lines, storm sewers and watermains), buildings, equipment and vehicles. The following tables summarize the changes in the City's capital assets for governmental and business-type activities.

Change in Capital Assets – Governmental Activities (in millions)

	Balance May 1, 2021	Net Additions/ (Deletions)	Balance April 30, 2022
Non-Depreciable Assets:			
Land and Construction in Progress	$ 34.6	$ 4.5	$ 39.1
Depreciable Capital Assets:			
Buildings	15.7	-	15.7
Equipment	9.1	0.2	9.3
Vehicles	3.2	0.2	3.4
Infrastructure	78.5	2.8	81.3
Accumulated Depreciation on Capital Assets	(40.6)	(2.7)	(43.3)
Total Capital Assets, Net	**$ 100.5**	**$ 5.0**	**$ 105.5**

Total net capital assets for the City's governmental activities increased by $5.0 million in the current fiscal year, predominately due to developer donated roadway and storm sewer infrastructure, ongoing City financed street infrastructure and building improvement projects, and the capitalization of infrastructure improvements stemming from the 2021 road program. During the fiscal year depreciation expense totaling $2,913,659 was charged to the following functions: General Government ($115,579), Library ($182,235), Parks and Recreation ($137,871), Public Safety ($125,759), and Public Works ($2,352,215).

Change in Capital Assets – Business-Type Activities (in millions)

	Balance May 1, 2021	Net Additions/ Deletions	Balance April 30, 2022
Non-Depreciable Assets:			
Land and Construction in Progress	$ 3.6	$ 1.3	$ 4.9
Depreciable Capital Assets:			
Equipment	19.1	0.0	19.2
Vehicles	0.6	-	0.6
Infrastructure	69.8	0.3	70.1
Accumulated Depreciation on Capital Assets	(22.9)	(1.8)	(24.7)
Total Capital Assets, Net	**$ 70.2**	**$ (0.2)**	**$ 70.0**

Net capital assets decreased by $198,793 in fiscal year 2022, as depreciation expense exceeded asset addition amounts recorded as infrastructure and construction in progress. Developer capital asset additions for the year totaled $340,549 and were comprised of water infrastructure improvements ($111,473), and sewer infrastructure improvements ($229,076) located within the Grande Reserve subdivision. During the fiscal year depreciation expense of $1,111,786 and $732,083 was charged to the Water and Sewer Funds functional expense categories, respectively. For more detailed information, related to capital assets, see Note 3 to the financial statements.

Debt Administration

As of April 30, 2022, the United City of Yorkville had total debt outstanding of $29,845,833, which included general obligation and alternative revenue source bonds, debt certificates, developer commitments and loans payable. This amount is partially comprised of eight alternative revenue bonds which pledge income, sales, incremental property taxes, and water/sewer revenues. In addition, these bonds would be reverted to the property tax rolls should the alternative revenue source prove to be inadequate.

	Governmental Activities	Business-Type Activities	Total
General Obligation & Alternative Revenue Source Bonds	$ 17,781,130	$ 8,455,165	$ 26,236,295
Debt Certificates	-	155,000	155,000
Developer Commitments	-	2,505,402	2,505,402
Notes and Loans Payable	420,112	529,024	949,136
	$ 18,201,242	**$ 11,644,591**	**$ 29,845,833**

The City's general obligation debt is rated AA by Standard & Poor's and Fitch Ratings. Yorkville is a non-home rule community and as such is subject to a legal debt limit of 8.625% of the equalized assessed value (EAV) of the City, per State statute. The 2021 EAV of the City was $623,597,568, which resulted in a legal debt limit of $53,785,290. At the end of the fiscal year, the City had $2,535,000 in debt applicable to the debt limit, resulting in a debt to EAV ratio of 0.41%. For more detailed information related to long-term debt, see Note 3 to the financial statements.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

Fiscal year 2023 saw the General Fund continue to build up its reserves, as overall fund balance exceeded $10.6 million, eclipsing its previous apex of $9.2 million in the year prior. Despite all the uncertainty surrounding the last two fiscal years, management is pleased to report that the anticipated negative financial effects of the COVID-19 pandemic did not come to fruition; as the City's primary locally sourced revenue streams, consisting of sales taxes, property taxes, income taxes and building permits, have thus far remained resilient. Furthermore, based on the overall operating results of fiscal year 2022 and the events that have come to pass thus far in fiscal year 2023, it would appear that the local economy has continued to remain stable and that development in Yorkville continues to carry on in a progressive manner, as the City remains committed to developing economic incentives and other measures to attract and retain businesses.

After a 7.0% increase last year, overall property values (i.e., assessed valuation) in the City are currently estimated to increase an additional 11.4% in 2022, which is a positive indicator that the local housing market continues to strengthen. Despite the increases in EAV over the last several years, the City remains mindful of its impact on residents when developing the annual property tax levy. For the 2021 levy year, the City Council once again continued its past practice of only increasing the levy by the incremental property tax proceeds generated from new construction. This resulted in the City foregoing the inflationary increment of the levy, valued at approximately $50,000.

As the City moved forward into the subsequent fiscal year, management continued its practice of conservatively projecting revenues, while looking for ways to reduce expenditures, in order to maintain adequate fund balances and cash reserves. In addition, management continues to monitor the fiscal activities of the State of Illinois, in order to ascertain the impact, if any, of how additional State budget cuts would impact Yorkville's share of State revenues.

Looking ahead at fiscal year 2023 from a financial planning standpoint, the General Fund budget is at breakeven, with continued budgetary emphasis on enhanced funding for roadway improvements and vehicle and equipment replacement. At the same time, the City remains committed to maintaining adequate reserves, should an economic downturn occur. Budgeted capital and other significant projects for the upcoming fiscal year total around $15 million (excluding City-owned building projects) and include: the continuation of the annual "Road to Better Roads" program, with approximately $2.44 million budgeted for roadway improvements; the implementation of new enterprise resource planning system; the continuance of the City's sidewalk replacement and pavement striping program, along with a new shared use and parking lot maintenance programs; potential grant funding for road infrastructure improvements on Van Emmon Street and Bristol Ridge Road, in addition to roadway and underground utility work in the City's downtown; water infrastructure improvements on Prairie Lane, Pleasure Drive and Georgeanna Street; and vehicle and equipment purchases budgeted at $2.1 million.

REQUESTS FOR INFORMATION

This financial report is designed to provide our citizens, customers, investors and creditors with a general overview of the City's finances. Questions concerning this report or requests for additional financial information should be directed to Rob Fredrickson, Director of Finance, United City of Yorkville, 800 Game Farm Road, Yorkville, Illinois.

BASIC FINANCIAL STATEMENTS

The basic financial Statements include integrated sets of financial statements as required by the GASB. The sets of statements include:

- Government-Wide Financial Statements
- Fund Financial Statements

    Governmental Funds

    Proprietary Funds

    Fiduciary Fund

In addition, the notes to the financial statements are included to provide information that is essential to a user's understanding of the basic financial statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position
April 30, 2022

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position
April 30, 2022

	Governmental Activities	Business-Type Activities	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 26,171,576	3,977,608	30,149,184
Receivables - Net	10,448,231	1,184,063	11,632,294
Prepaids	214,419	31,232	245,651
Total Current Assets	36,834,226	5,192,903	42,027,129
Noncurrent Assets			
Capital Assets			
Nondepreciable Capital Assets	39,077,602	4,849,403	43,927,005
Depreciable Capital Assets	109,759,284	89,961,778	199,721,062
Accumulated Depreciation	(43,367,961)	(24,827,886)	(68,195,847)
Total Capital Assets	105,468,925	69,983,295	175,452,220
Other Assets			
Net Pension Asset - IMRF	1,528,392	330,272	1,858,664
Assets Held for Others	-	11,091,000	11,091,000
Total Other Assets	1,528,392	11,421,272	12,949,664
Total Noncurrent Assets	106,997,317	81,404,567	188,401,884
Total Assets	143,831,543	86,597,470	230,429,013
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	315,996	68,283	384,279
Deferred Items - RBP	308,821	46,145	354,966
Deferred Items - Police Pension	1,587,776	-	1,587,776
Deferred Items - ARO	-	2,708,692	2,708,692
Unamortized Loss on Refunding	43,246	4,269	47,515
Total Deferred Outflows of Resources	2,255,839	2,827,389	5,083,228
Total Assets and Deferred Outflows of Resources	146,087,382	89,424,859	235,512,241

The notes to the financial statements are an integral part of this statement.

	Governmental Activities	Business-Type Activities	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 2,575,522	367,722	2,943,244
Deposits Payable	4,874,754	-	4,874,754
Accrued Payroll	182,911	27,131	210,042
Accrued Interest Payable	198,031	81,522	279,553
Other Payables	173,228	5,363	178,591
Current Portion of Long-Term Debt	2,161,979	2,715,795	4,877,774
Total Current Liabilities	10,166,425	3,197,533	13,363,958
Noncurrent Liabilities			
Compensated Absences Payable	553,206	68,649	621,855
Net Pension Liability - Police Pension	12,558,636	-	12,558,636
Total OPEB Liability - RBP	959,165	143,322	1,102,487
Other Liabilities	1,890	-	1,890
Notes Payable	360,969	-	360,969
IEPA Loans Payable	-	416,521	416,521
General Obligation Bonds Payable - Net	15,814,706	6,061,589	21,876,295
Developer Agreements	-	2,505,402	2,505,402
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	30,248,572	11,978,483	42,227,055
Total Liabilities	40,414,997	15,176,016	55,591,013
DEFERRED INFLOWS OF RESOURCES			
Property and State Taxes	6,419,823	-	6,419,823
Deferred Items - IMRF	1,793,395	387,537	2,180,932
Deferred Items - RBP	196,056	29,295	225,351
Deferred Items - Police Pension	955,035	-	955,035
Total Deferred Inflows of Resources	9,364,309	416,832	9,781,141
Total Liabilities and Deferred Inflows of Resources	49,779,306	15,592,848	65,372,154
NET POSITION			
Net Investment in Capital Assets	93,931,218	60,848,375	154,779,593
Restricted			
Library Operations	913,690	-	913,690
Motor Fuel Tax	269,412	-	269,412
Special Service Areas	23,962	-	23,962
Land Cash	33,843	-	33,843
Capital Projects - Bond Proceeds	6,618,399	-	6,618,399
Unrestricted (Deficit)	(5,482,448)	12,983,636	7,501,188
Total Net Position	96,308,076	73,832,011	170,140,087

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Activities
For the Fiscal Year Ended April 30, 2022

	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants/ Contributions	Program Revenues: Capital Grants/ Contributions
Governmental Activities				
General Government	$ 4,822,508	3,508,715	-	-
Library	1,017,179	121,557	48,746	-
Parks and Recreation	2,471,380	549,231	10,512	-
Public Safety	5,893,447	-	-	9,590
Community Development	1,044,496	-	-	-
Public Works	5,545,928	1,182,864	2,775,386	1,122,368
Interest on Long-Term Debt	627,947	-	-	-
Total Governmental Activities	21,422,885	5,362,367	2,834,644	1,131,958
Business-Type Activities				
Sewer	1,632,962	1,714,066	-	229,076
Water	3,630,501	4,944,694	-	111,473
Total Business-Type Activities	5,263,463	6,658,760	-	340,549
	26,686,348	12,021,127	2,834,644	1,472,507
General Revenues				
Taxes				
Property Taxes				
Utility Taxes				
Business District Taxes				
Admissions and Amusement Taxes				
Video Gaming Taxes				
Other Taxes				
Intergovernmental - Unrestricted				
Sales Taxes				
Income Taxes				
State Use Taxes				
Interest Income (Loss)				
Miscellaneous				
Transfers - Internal Activity				
Change in Net Position				
Net Position - Beginning				
Net Position - Ending				

The notes to the financial statements are an integral part of this statement.

Net (Expenses)/Revenues		
Primary Government		
Governmental Activities	Business-Type Activities	Totals
(1,313,793)	-	(1,313,793)
(846,876)	-	(846,876)
(1,911,637)	-	(1,911,637)
(5,883,857)	-	(5,883,857)
(1,044,496)	-	(1,044,496)
(465,310)	-	(465,310)
(627,947)	-	(627,947)
(12,093,916)	-	(12,093,916)
-	310,180	310,180
-	1,425,666	1,425,666
-	1,735,846	1,735,846
(12,093,916)	1,735,846	(10,358,070)
5,544,463	-	5,544,463
1,707,542	-	1,707,542
547,651	-	547,651
337,279	-	337,279
252,890	-	252,890
236,841	-	236,841
7,933,942	-	7,933,942
3,175,556	-	3,175,556
798,764	-	798,764
(24,510)	(21,573)	(46,083)
2,096,524	163,641	2,260,165
(624,307)	624,307	-
21,982,635	766,375	22,749,010
9,888,719	2,502,221	12,390,940
86,419,357	71,329,790	157,749,147
96,308,076	73,832,011	170,140,087

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Balance Sheet - Governmental Funds
April 30, 2022

	General
ASSETS	
Cash and Investments	$ 7,117,389
Receivables - Net of Allowances	
Property Taxes	3,560,742
Accounts	1,040,135
Grants	11,656
Other Taxes	3,916,739
Due from Other Funds	2,829,423
Prepaids	162,600
Total Assets	18,638,684
LIABILITIES	
Accounts Payable	965,949
Deposit Payable	2,158,320
Accrued Payroll	132,592
Due to Other Funds	-
Other Payables	4,707
Total Liabilities	3,261,568
DEFERRED INFLOWS OF RESOURCES	
Property and State Taxes	4,750,016
Total Liabilities and Deferred Inflows of Resources	8,011,584
FUND BALANCES	
Nonspendable	162,600
Restricted	-
Assigned	-
Unassigned	10,464,500
Total Fund Balances	10,627,100
Total Liabilities, Deferred Inflows of Resources and Fund Balances	18,638,684

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects			
Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
996,651	171,848	5,033,665	10,693,229	2,158,794	26,171,576
1,669,807	-	-	-	-	5,230,549
325	2,338	148,807	164	29,691	1,221,460
-	-	-	-	-	11,656
3,996	-	-	-	63,831	3,984,566
-	-	-	-	-	2,829,423
9,869	41,876	-	74	-	214,419
2,680,648	216,062	5,182,472	10,693,467	2,252,316	39,663,649
21,744	88,394	538,828	688,201	272,406	2,575,522
-	9,375	2,446,043	-	261,016	4,874,754
10,262	37,048	-	3,009	-	182,911
-	-	-	-	2,829,423	2,829,423
55,276	81,245	32,000	-	-	173,228
87,282	216,062	3,016,871	691,210	3,362,845	10,635,838
1,669,807	-	-	-	-	6,419,823
1,757,089	216,062	3,016,871	691,210	3,362,845	17,055,661
9,869	41,876	-	-	-	214,345
913,690	-	-	6,618,399	327,217	7,859,306
-	-	2,165,601	3,383,858	1,391,622	6,941,081
-	(41,876)	-	-	(2,829,368)	7,593,256
923,559	-	2,165,601	10,002,257	(1,110,529)	22,607,988
2,680,648	216,062	5,182,472	10,693,467	2,252,316	39,663,649

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of Total Governmental Fund Balance to
Net Position of Governmental Activities

April 30, 2022

Total Governmental Fund Balances	$ 22,607,988
Amounts reported for governmental activities in the Statement of Net Position are different because:	
Capital assets used in governmental activities are not financial resources and therefore, are not reported in the funds.	105,468,925
Deferred outflows (inflows) of resources related to the pensions not reported in the funds.	
Deferred Items - IMRF	(1,477,399)
Deferred Items - Police Pension	632,741
Deferred Items - RBP	112,765
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the funds.	
Accrued Interest Payable	(198,031)
Compensated Absences Payable	(691,508)
Net Pension Liability/(Asset) - IMRF	1,528,392
Net Pension Liability - Police Pension	(12,558,636)
Total OPEB Liability - RBP	(959,165)
Notes Payable	(418,222)
General Obligation Bonds Payable	(17,781,130)
Unamortized Loss on Refunding	43,246
Other Obligations Payable	(1,890)
Net Position of Governmental Activities	96,308,076

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2022

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2022

	General
Revenues	
Taxes	$ 14,350,349
Intergovernmental	5,630,190
Licenses, Permits and Fees	834,170
Charges for Services	1,902,362
Fines and Forfeits	197,158
Grants and Donations	-
Interest Income (Loss)	(33,857)
Miscellaneous	237,575
Total Revenues	23,117,947
Expenditures	
General Government	5,141,027
Library	-
Parks and Recreation	-
Public Safety	6,018,903
Community Development	1,154,892
Public Works	2,572,571
Capital Outlay	-
Debt Service	
Principal Retirement	-
Interest and Fiscal Charges	-
Total Expenditures	14,887,393
Excess (Deficiency) of Revenues Over (Under) Expenditures	8,230,554
Other Financing Sources (Uses)	
Sale of Capital Assets	-
Debt Issuance	-
Premium on Debt Issuance	-
Transfers In	21,231
Transfers Out	(6,797,039)
	(6,775,808)
Net Change in Fund Balances	1,454,746
Fund Balances - Beginning	9,172,354
Fund Balances - Ending	10,627,100

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects			
Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
1,611,808	-	-	-	462,322	16,424,479
48,746	-	-	-	1,265,235	6,944,171
103,850	-	216,195	21,231	121,461	1,296,907
11,131	549,231	837,007	108,431	446,035	3,854,197
6,576	-	-	-	7,529	211,263
-	7,800	-	-	2,712	10,512
1,530	87	4,712	1,172	1,846	(24,510)
2,796	235,413	1,619,841	576	323	2,096,524
1,786,437	792,531	2,677,755	131,410	2,307,463	30,813,543
-	-	-	-	123,725	5,264,752
834,944	-	-	-	-	834,944
-	2,381,042	-	-	-	2,381,042
-	-	-	-	466	6,019,369
-	-	-	-	-	1,154,892
-	-	285,078	238,056	128,911	3,224,616
18,050	-	2,679,942	1,078,232	2,758,453	6,534,677
720,000	-	200,000	-	677,659	1,597,659
121,914	-	115,813	239,522	139,346	616,595
1,694,908	2,381,042	3,280,833	1,555,810	3,828,560	27,628,546
91,529	(1,588,511)	(603,078)	(1,424,400)	(1,521,097)	3,184,997
-	-	-	-	35,598	35,598
-	-	-	9,260,000	-	9,260,000
-	-	-	525,011	-	525,011
24,809	1,515,511	3,138,492	3,709,380	320,425	8,729,848
-	-	(489,382)	(2,067,734)	-	(9,354,155)
24,809	1,515,511	2,649,110	11,426,657	356,023	9,196,302
116,338	(73,000)	2,046,032	10,002,257	(1,165,074)	12,381,299
807,221	73,000	119,569	-	54,545	10,226,689
923,559	-	2,165,601	10,002,257	(1,110,529)	22,607,988

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities

For the Fiscal Year Ended April 30, 2022

Net Change in Fund Balances - Total Governmental Funds	$ 12,381,299
Amounts reported for governmental activities in the Statement of Activities are different because:	
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.	
Capital Outlays	6,786,994
Capital Contributions	1,122,368
Depreciation Expense	(2,913,659)
Disposals - Cost	(212,661)
Disposals - Accumulated Depreciation	212,661
The net effect of deferred outflows (inflows) of resources related to the pensions not reported in the funds.	
Change in Deferred Items - IMRF	(711,831)
Change in Deferred Items - Police Pension	2,261,207
Change in Deferred Items - RBP	(106,448)
The issuance of long-term debt provides current financial resources to governmental funds, while the repayment of the principal on long-term debt consumes the current financial resources of the governmental funds.	
Change in Compensated Absences Payable	(7,565)
Change in Net Pension Liability/(Asset) - IMRF	1,273,019
Change in Net Pension Liability - Police Pension	(2,108,609)
Change in Total OPEB Liability - RBP	110,648
Debt Issuance	(9,260,000)
Premium on Debt Issuance	(525,011)
Retirement of Debt	1,597,659
Amortization of Loss on Refunding	(21,702)
Amortization of Premium	67,984
Changes to accrued interest on long-term debt in the Statement of Activities does not require the use of current financial resources and, therefore, are not reported as expenditures in the governmental funds.	(57,634)
Changes in Net Position of Governmental Activities	9,888,719

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2022

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2022

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 756,513	3,221,095	3,977,608
Receivables - Net of Allowances			
Accounts	327,348	856,715	1,184,063
Prepaids	7,987	23,245	31,232
Total Current Assets	1,091,848	4,101,055	5,192,903
Noncurrent Assets			
Capital Assets			
Nondepreciable	674,494	4,174,909	4,849,403
Depreciable	37,026,888	52,934,890	89,961,778
Accumulated Depreciation	(8,474,177)	(16,353,709)	(24,827,886)
	29,227,205	40,756,090	69,983,295
Other Assets			
Net Pension Asset - IMRF	114,443	215,829	330,272
Assets Held for Others	11,091,000	-	11,091,000
Total Other Assets	11,205,443	215,829	11,421,272
Total Noncurrent Assets	40,432,648	40,971,919	81,404,567
Total Assets	41,524,496	45,072,974	86,597,470
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	23,660	44,623	68,283
Deferred Items - RBP	17,834	28,311	46,145
Deferred Items - ARO	-	2,708,692	2,708,692
Unamortized Loss (Gain) on Refunding	3,539	730	4,269
	45,033	2,782,356	2,827,389
Total Assets and Deferred Outflows of Resources	41,569,529	47,855,330	89,424,859

The notes to the financial statements are an integral part of this statements.

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 81,210	286,512	367,722
Accrued Payroll	9,147	17,984	27,131
Accrued Interest Payable	17,103	64,419	81,522
Other Payables	-	5,363	5,363
Current Portion of Long-Term Debt	1,189,821	1,525,974	2,715,795
Total Current Liabilities	1,297,281	1,900,252	3,197,533
Noncurrent Liabilities			
Compensated Absences Payable	13,098	55,551	68,649
Total OPEB Liability - RBP	55,392	87,930	143,322
IEPA Loans Payable	-	416,521	416,521
General Obligation Bonds Payable - Net	3,140,000	2,921,589	6,061,589
Developer Agreements	1,202,593	1,302,809	2,505,402
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	4,411,083	7,567,400	11,978,483
Total Liabilities	5,708,364	9,467,652	15,176,016
DEFERRED INFLOWS OF RESOURCES			
Deferred Items - IMRF	134,286	253,251	387,537
Deferred Items - RPB	11,322	17,973	29,295
Total Deferred Inflows of Resources	145,608	271,224	416,832
Total Liabilities and Deferred Inflows of Resources	5,853,972	9,738,876	15,592,848
NET POSITION			
Net Investment in Capital Assets	24,915,744	35,932,631	60,848,375
Unrestricted	10,799,813	2,183,823	12,983,636
Total Net Position	35,715,557	38,116,454	73,832,011

The notes to the financial statements are an integral part of this statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenses and Changes in Net Position - Proprietary Funds
For the Fiscal Year Ended April 30, 2022

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Operating Revenues			
Charges for Services	$ 1,513,766	4,661,610	6,175,376
Operating Expenses			
Operations	660,028	2,246,249	2,906,277
Depreciation and Amortization	734,417	1,121,240	1,855,657
Total Operating Expenses	1,394,445	3,367,489	4,761,934
Operating Income	119,321	1,294,121	1,413,442
Nonoperating Revenues (Expenses)			
Interest Income	3,139	2,031	5,170
Unrealized Gain (Loss)	-	(29,663)	(29,663)
Connection Fees	200,300	283,084	483,384
Other Income	56,067	110,494	166,561
Interest Expense	(238,517)	(263,012)	(501,529)
	20,989	102,934	123,923
Income Before Transfers and Contributions	140,310	1,397,055	1,537,365
Capital Contributions	229,076	111,473	340,549
Transfers In	519,749	180,233	699,982
Transfers Out	(75,675)	-	(75,675)
	673,150	291,706	964,856
Change in Net Position	813,460	1,688,761	2,502,221
Net Position - Beginning	34,902,097	36,427,693	71,329,790
Net Position - Ending	35,715,557	38,116,454	73,832,011

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Cash Flows - Proprietary Funds
For the Fiscal Year Ended April 30, 2022

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Cash Flows from Operating Activities			
Receipts from Customers and Users	$ 1,617,320	4,918,394	6,535,714
Payments to Employees	(499,696)	(259,124)	(758,820)
Payments to Suppliers	(96,083)	(1,744,523)	(1,840,606)
	1,021,541	2,914,747	3,936,288
Cash Flows from Noncapital Financing Activities			
Transfers In	519,749	180,233	699,982
Transfers (Out)	(75,675)	-	(75,675)
	444,074	180,233	624,307
Cash Flows from Capital and Related Financing Activities			
Purchase of Capital Assets	(120,222)	(1,184,305)	(1,304,527)
Debt Issuance	4,160,000	-	4,160,000
Debt Repayment	(5,175,000)	(1,597,287)	(6,772,287)
Interest Payments	(238,517)	(263,012)	(501,529)
	(1,373,739)	(3,044,604)	(4,418,343)
Cash Flows from Investing Activities			
Investment Income	3,139	(27,632)	(24,493)
Net Change in Cash and Cash Equivalents	95,015	22,744	117,759
Cash and Cash Equivalents - Beginning	661,498	3,198,351	3,859,849
Cash and Cash Equivalents - Ending	756,513	3,221,095	3,977,608
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities			
Operating Income	119,321	1,294,121	1,413,442
Adjustments to Reconcile Operating Income to Net Income to Net Cash Provided by (Used in) Operating Activities:			
Depreciation and Amortization Expense	734,417	1,121,240	1,855,657
Connection Fees/Other Income	256,367	393,578	649,945
(Increase) Decrease in Current Assets	(152,813)	(136,794)	(289,607)
Increase (Decrease) in Current Liabilities	64,249	242,602	306,851
Net Cash Provided by Operating Activities	1,021,541	2,914,747	3,936,288
Noncash Capital and Related Financing Activities			
Capital Contributions	229,076	111,473	340,549

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Fiduciary Net Position
April 30, 2022

	Police Pension Trust
ASSETS	
Cash and Cash Equivalents	$ 831,635
Investments	
U.S. Treasury Securities	3,506,849
U.S. Agency Securities	165,486
Corporate Bonds	946,135
Mutual Funds	5,433,015
Common Stocks	3,576,277
Accrued Interest	23,931
Total Assets	14,483,328
LIABILITIES	
None	-
NET POSITION	
Net Position Restricted for Pensions	14,483,328

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Changes in Fiduciary Net Position
For the Fiscal Year Ended April 30, 2022

	Police Pension Trust
Additions	
Contributions - Employer	$ 1,334,771
Contributions - Plan Members	278,502
Total Contributions	1,613,273
Investment Income	
Interest Earned	453,072
Net Change in Fair Value	(1,128,874)
	(675,802)
Less Investment Expenses	(55,339)
Net Investment Income	(731,141)
Total Additions	882,132
Deductions	
Administration	19,334
Benefits and Refunds	955,800
Total Deductions	975,134
Change in Fiduciary Net Position	(93,002)
Net Position Restricted for Pensions	
Beginning	14,576,330
Ending	14,483,328

The notes to the financial statement are an integral part of this statement.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The United City of Yorkville (City) is an Illinois unit of local government. The financial statements include all functions, programs and activities under control of the City Council. The City's major operations include public safety, public works, library, parks and recreation, community development, water and sewer services, and general administration. The City Council has oversight responsibility for the City, the Public Library and the Park and Recreation Board. Oversight responsibility includes designation of management and all other control over operations of these entities.

The government-wide financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The more significant of the City's accounting policies established in GAAP and used by the City are described below.

REPORTING ENTITY

The City's financial reporting entity comprises the following:

Primary Government:	United City of Yorkville

In determining the financial reporting entity, the City complies with the provisions of GASB Statement No. 61, "The Financial Reporting Omnibus - an Amendment of GASB Statements No. 14 and No. 34," and includes all component units that have a significant operational or financial relationship with the City. Based upon the criteria set forth in the GASB Statement No. 61, there are no component units included in the reporting entity.

Police Pension Employees Retirement System

The City's police employees participate in the Police Pension Employees Retirement System (PPERS). PPERS functions for the benefit of these employees and is governed by a five-member pension board. Two members appointed by the City's Mayor, one elected pension beneficiary and two elected police employees constitute the pension board. The participants are required to contribute a percentage of salary as established by state statute and the City is obligated to fund all remaining PPERS costs based upon actuarial valuations. The State of Illinois is authorized to establish benefit levels and the City is authorized to approve the actuarial assumptions used in the determination of contribution levels. Although it is legally separate from the City, the PPERS is reported as if it were part of the primary City because its sole purpose is to provide retirement benefits for the City's police employees. The PPERS is reported as a pension trust fund.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION

Government-Wide Statements

The City's basic financial statements include both government-wide (reporting the City as a whole) and fund financial statements (reporting the City's major funds). Both the government-wide and fund financial statements categorize primary activities as either governmental or business-type. The City's public safety, highway and street maintenance and reconstruction, building code enforcement, public improvements, economic development, parks and recreation, planning and zoning, and general administrative services are classified as governmental activities. The City's sewer and water services are classified as business-type activities.

In the government-wide Statement of Net Position, both the governmental and business-type activities columns are: (a) presented on a consolidated basis by column, and (b) reported on a full accrual, economic resource basis, which recognizes all long-term assets/deferred outflows and receivables as well as long-term debt/deferred inflows and obligations.

The City's net position is reported in three parts: net investment in capital assets; restricted; and unrestricted. The City first utilizes restricted resources to finance qualifying activities.

The government-wide Statement of Activities reports both the gross and net cost of each of the City's functions (general government, public safety, highways and streets, etc.) and business-type activities. The functions are supported by general government revenues (property, sales and use taxes, certain intergovernmental revenues, fines, permits and charges for services, etc.). The Statement of Activities reduces gross expenses (including depreciation) by related program revenues, which include 1) changes to customers or applicants who purchase, use or directly benefit from goods, services or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment.

The net costs (by function or business-type activity) are normally covered by general revenue (property, sales and use taxes, certain intergovernmental revenues, permits and charges for services, etc.).

This government-wide focus is more on the sustainability of the City as an entity and the change in the City's net position resulting from the current year's activities.

Fund Financial Statements

The financial transactions of the City are reported in individual funds in the fund financial statements. Each fund is accounted for by providing a separate set of self-balancing accounts that comprise its assets/deferred outflows, liabilities/deferred inflows, fund equity, revenues and expenditures/expenses. Funds are organized into three major categories: governmental, proprietary, and fiduciary. The emphasis in fund financial statements is on the major funds in either the governmental or business-type activities categories.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Nonmajor funds by category are summarized into a single column. GASB Statement No. 34 sets forth minimum criteria (percentage of the assets/deferred outflows, liabilities/deferred inflows, revenues or expenditures/expenses of either fund category or the governmental and enterprise combined) for the determination of major funds. The City electively added funds, as major funds, which either have debt outstanding or a specific community focus. The nonmajor funds are combined in a column in the fund financial statements. A fund is considered major if it is the primary operating fund of the City or meets the following criteria:

> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of that individual governmental or enterprise fund are at least 10 percent of the corresponding total for all funds of that category or type; and
>
> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of the individual governmental fund or enterprise fund are at least 5 percent of the corresponding total for all governmental and enterprise funds combined.

The various funds are reported by generic classification within the financial statements. The following fund types are used by the City:

Governmental Funds

The focus of the governmental funds' measurement (in the fund statements) is upon determination of financial position and changes in financial position (sources, uses, and balances of financial resources) rather than upon net income. The following is a description of the governmental funds of the City:

General fund is the general operating fund of the City. It is used to account for all financial resources except those required to be accounted for in another fund. The General Fund is a major fund.

Special revenue funds are used to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes. The City maintains nine special revenue funds. The Library Fund, a major fund, is used to account for the activity relating to the Yorkville Public Library. The primary revenue source for the Library Fund is property taxes. The Parks and Recreation Fund, also a major fund, is used to account for the revenues and expenditures associated with Yorkville's Parks and Recreation departments. The primary revenue source for the Parks and Recreation Fund is charges for services.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Governmental Funds – Continued

Debt service funds are used to account for the accumulation of funds for the periodic payment of principal and interest on general long-term debt. The City maintains one debt service fund.

Capital projects funds are used to account for financial resources to be used for the acquisition or construction of major capital facilities (other than those financed by business-type/proprietary funds). The City maintains three capital projects funds. The Citywide Capital Fund, a major fund, is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public. The Buildings and Grounds Fund, also a major fund, is used to account for maintenance of existing and construction of new municipal owned buildings.

Proprietary Funds

The focus of proprietary fund measurement is upon determination of operating income, changes in net position, financial position, and cash flows. The generally accepted accounting principles applicable are those similar to businesses in the private sector. The following is a description of the proprietary funds of the City:

Enterprise funds are required to account for operations for which a fee is charged to external users for goods or services and the activity is (a) financed with debt that is solely secured by a pledge of the net revenues, (b) has third party requirements that the cost of providing services, including capital costs, be recovered with fees and charges, or (c) establishes fees and charges based on a pricing policy designed to recover similar costs. The City maintains two enterprise funds. The Sewer Fund, a major fund, is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees. The Water Fund, also a major fund, is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

Fiduciary Funds

Fiduciary funds are used to report assets held in a trustee or custodial capacity by the City for others and therefore are not available to support City programs. The reporting focus is on net position and changes in net position and is reported using accounting principles similar to proprietary funds.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Fiduciary Funds – Continued

Pension trust funds are used to account for assets held in a trustee capacity by the City for pension benefit payments. The Police Pension Fund accounts for the accumulation of resources to pay pension costs. Resources are contributed by police force members at rates fixed by state statutes and by the government through an annual property tax levy.

The City's pension trust fund is presented in the fiduciary fund financial statements. Since by definition these assets are being held for the benefit of a third party (pension participants, etc.) and cannot be used to address activities or obligations of the City, these funds are not incorporated into the government-wide statements.

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

Measurement focus is a term used to describe "which" transactions are recorded within the various financial statements. Basis of accounting refers to "when" transactions are recorded regardless of the measurement focus applied.

Measurement Focus

On the government-wide Statement of Net Position and the Statement of Activities, both governmental and business-type activities are presented using the economic resources measurement focus as defined below.

In the fund financial statements, the "current financial resources" measurement focus or the "economic resources" measurement focus is used as appropriate.

All governmental funds utilize a "current financial resources" measurement focus. Only current financial assets/deferred outflows and liabilities/deferred inflows are generally included on their balance sheets. Their operating statements present sources and uses of available spendable financial resources during a given period. These funds use fund balance as their measure of available spendable financial resources at the end of the period.

All proprietary and pension trust funds utilize an "economic resources" measurement focus. The accounting objectives of this measurement focus are the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. All assets/deferred outflows and liabilities/deferred inflows (whether current or noncurrent) associated with their activities are reported. Proprietary and pension trust fund equity is classified as net position.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING – Continued

Basis of Accounting

In the government-wide Statement of Net Position and Statement of Activities, both governmental and business-type activities are presented using the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability/deferred inflow is incurred or economic asset used. Revenues, expenses, gains, losses, assets/deferred outflows, and liabilities/deferred inflows resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

In the fund financial statements, governmental funds are presented on the modified accrual basis of accounting. Under this modified accrual basis of accounting, revenues are recognized when "measurable and available." Measurable means knowing or being able to reasonably estimate the amount. Available means collectible within the current period or within sixty days after year-end. The City recognizes property taxes when they become both measurable and available in accordance with GASB Codification Section P70.

A sixty-day availability is generally used for revenue recognition for all other governmental fund revenues. Expenditures (including capital outlay) are recorded when the related fund liability is incurred, except for general obligation bond principal and interest which are recognized when due.

In applying the susceptible to accrual concept under the modified accrual basis, those revenues susceptible to accrual are property taxes, state and utility taxes, franchise taxes, interest revenue, charges for services, and fines and forfeits. All other revenues are not susceptible to accrual because generally they are not measurable until received in cash.

All proprietary and pension trust funds utilize the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the City's enterprise funds are charges to customers for sales and services. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY

Cash and Investments

Cash and cash equivalents on the Statement of Net Position are considered to be cash on hand, demand deposits, and cash with fiscal agent. For the purpose of the proprietary funds "Statement of Cash Flows," cash and cash equivalents are considered to be cash on hand, demand deposits, cash with fiscal agent, and all highly liquid investments with an original maturity of three months or less.

Investments are generally reported at fair value. Short-term investments are reported at cost, which approximates fair value. For investments, the City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Interfund Receivables, Payables and Activity

Interfund activity is reported as loans, services provided, reimbursements or transfers. Loans are reported as interfund receivables and payables as appropriate and are subject to elimination upon consolidation. All other interfund transactions are treated as transfers. Any residual balances outstanding between the governmental activities and business-type activities are reported in the government-wide financial statements as "internal balances."

Receivables

In the government-wide financial statements, receivables consist of all revenues earned at year-end and not yet received. Major receivables balances for governmental activities include property taxes, state and utility taxes, franchise taxes, and grants. Business-type activities report utility charges as their major receivables.

Assets Held for Others

In June of 2004, the City entered into an intergovernmental agreement with Yorkville-Bristol Sanitary District for design and construction of the Rob Roy Creek Interceptor. At the date of completion, the Yorkville-Bristol Sanitary District owns and maintains the Interceptor. All costs associated with the construction of the infrastructure asset are recorded as Assets Held for Others in the City's financial statements. As of April 30, 2022, the balance of this project was $11,091,000 reported in the Sewer Fund. In connection with this project, the City issued General Obligation Alternate Revenue Source Bonds of 2005D in the fiscal year 2006 for $11,300,000, which were refunded in 2008, 2011 and again in 2021. At April 30, 2022, the outstanding balance of the 2022 refunding bonds is $5,170,000. See Note 3 for more information on this long-term debt issue.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Prepaids

Prepaids are valued at cost, which approximates market. The cost of governmental fund-type prepaids are recorded as expenditures when consumed rather than when purchased. Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaids in both the government-wide and fund financial statements.

Deferred Outflows/Inflows of Resources

Deferred outflow/inflow of resources represents a consumption/acquisition of net assets that applies to a future period and therefore will not be recognized as an outflow of resources (expense)/inflow of resources (revenue) until that future time.

Capital Assets

Capital assets purchased or acquired with an original cost of $5,000 to $75,000, depending on asset class, (see chart on the following page) or more are reported at historical cost or estimated historical cost. Contributed assets are reported at acquisition value as of the date received. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred.

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. General capital assets are long-lived assets of the City as a whole. Infrastructure such as streets, traffic signals and signs are capitalized. In the case of the initial capitalization of general infrastructure assets (i.e., those reported by the governmental activities) the government chose to include all such items regardless of their acquisition date. The valuation basis for general capital assets are historical cost, or where historical cost is not available, estimated historical cost based on replacement costs.

Capital assets in the proprietary funds are capitalized in the fund in which they are utilized. The valuation bases for proprietary fund capital assets are the same as those used for the general capital assets. Donated capital assets are capitalized at acquisition value on the date donated.

Depreciation on all assets is computed and recorded using the straight-line method of depreciation over the following estimated useful lives:

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Capital Assets – Continued

Capital Asset	Capitalized Threshold	Estimated Useful Life
Land	$ 25,000	N/A
Buildings	35,000	10 - 50 Years
Equipment	5,000	5 - 75 Years
Vehicles	5,000	5 - 15 Years
Infrastructure - Street and Storm Sewer	50,000	10 - 75 Years
Infrastructure - Water and Sewer	75,000	10 - 75 Years

Compensated Absences

The City accrues accumulated unpaid vacation and associated employee-related costs when earned (or estimated to be earned) by the employee. In accordance with GASB Statement No. 16, no liability is recorded for nonvesting accumulation rights to receive sick pay benefits. However, a liability is recognized for that portion of accumulated sick leave that is estimated to be taken as "terminal leave" prior to retirement. All vacation pay is accrued when incurred in the government-wide and proprietary fund financial statements. A liability for these amounts is reported in the governmental funds only if they have matured, for example, as a result of employee resignations and retirements.

Long-Term Obligations

In the government-wide financial statements, and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type Statement of Net Position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as expenses at the time of issuance.

In the fund financial statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Net Position

In the government-wide financial statements, equity is classified as net position and displayed in three components:

> Net Investment in Capital Assets – Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
>
> Restricted – Consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislations.
>
> Unrestricted – All other net position balances that do not meet the definition of "restricted" or "net investment in capital assets."

NOTE 2 – STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY

BUDGETARY INFORMATION

Budgets are adopted on a basis consistent with generally accepted accounting principles. Annual budgets are adopted for all funds. All annual appropriations lapse at fiscal year-end. During the year, several supplementary appropriations were necessary. The City follows these procedures in establishing the budgetary data reflected in the financial statements:

- Prior to May 1, the Mayor submits to the City Council the proposed budget for the fiscal year commencing the following May 1. The operating budget includes proposed expenditures and the means of financing them.

- Public hearings are conducted at the City offices to obtain taxpayer comments.

- Prior to May 1, the budget is legally adopted by a vote of the City Council through passage of an ordinance.

- The budget officer is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the total expenditures of any fund must be approved by the City Council.

NOTE 2 – STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY – Continued

DEFICIT FUND BALANCE

The following funds had deficit fund balance as of the date of this report:

Fund	Deficit
Countryside TIF	$ 1,182,815
Downtown TIF	1,639,928
Downtown TIF II	6,625

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS

The City maintains a cash and investment pool that is available for use by all funds except the pension trust fund. Each fund type's portion of this pool is displayed on the financial statements as "cash and investments." In addition, investments are separately held by several of the City's funds. The deposits and investments of the pension trust fund are held separately from those of other funds.

Permitted Deposits and Investments – Statutes authorize the City to make deposits/invest in commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, obligations of States and their political subdivisions, credit union shares, repurchase agreements, commercial paper rated within the three highest classifications by at least two standard rating services, the Illinois Funds, the Illinois Trust, and the Illinois Public Reserves Investment Management Trust.

The deposits and investments of the Pension Fund are held separately from those of other City funds. Statutes authorize the Pension Fund to make deposits/invest in interest bearing direct obligations of the United States of America; obligations that are fully guaranteed or insured as to the payment of principal and interest by the United States of America; bonds, notes, debentures, or similar obligations of agencies of the United States of America; savings accounts or certificates of deposit issued by banks or savings and loan associations chartered by the United States of America or by the State of Illinois, to the extent that the deposits are insured by the agencies or instrumentalities of the federal government; credit unions, to the extent that the deposits are insured by the agencies or instrumentalities of the federal government; State of Illinois bonds; pooled accounts managed by the Illinois Funds Market Fund (Formerly known as IPTIP, Illinois Public Treasurer's Investment Pool), or by banks, their subsidiaries or holding companies, in accordance with the laws of the State of Illinois; bonds or tax anticipation warrants of any county, township, or municipal corporation of the State of Illinois; direct obligations of the State of Israel; money market mutual funds managed by investment companies that are registered under the Federal Investment Company

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS

Act of 1940 and the Illinois Securities Law of 1953 and are diversified, open-ended management investment companies, provided the portfolio is limited to specified restrictions; general accounts of life insurance companies; and separate accounts of life insurance companies and mutual funds, the mutual funds must meet specific restrictions, provided the investment in separate accounts and mutual funds does not exceed ten percent of the Pension Fund's plan net position; and corporate bonds managed through an investment advisor, rated as investment grade by one of the two largest rating services at the time of purchase. Pension Funds with plan net position of $2.5 million or more may invest up to forty-five percent of plan net position in separate accounts of life insurance companies and mutual funds. Pension Funds with plan net position of at least $5 million that have appointed an investment advisor, may through that investment advisor invest up to forty-five percent of the plan net position in common and preferred stocks that meet specific restrictions. In addition, pension funds with plan net position of at least $10 million that have appointed an investment advisor, may invest up to sixty-five percent of its net position in common and preferred stocks and mutual funds that meet specific restrictions effective July 1, 2012.

The Illinois Funds is an investment pool managed by the Illinois Public Treasurer's Office which allows governments within the State to pool their funds for investment purposes. The Illinois Funds is not registered with the SEC as an investment company. Investments in Illinois Funds are valued at the share price, the price for which the investment could be sold.

The Illinois Trust was established for the purpose of allowing various public agencies including, but not limited to, counties, townships, cities, towns, villages, school districts, housing authorities and public water supply districts, to jointly invest funds in accordance with the Laws of the State of Illinois. Participation in the Illinois Trust is voluntary. The Illinois Trust is not registered with the SEC as an Investment Company. Investments in the Illinois Trust are valued at the share price, the price for which the investment could be sold.

The Illinois Public Reserves Investment Management Trust (IPRIME) is an investment opportunity and cash management service for Illinois Municipal Treasurers acting on behalf of counties, townships, cities, towns, villages, special road districts, public water supply districts, fire protection districts, drainage districts, levee districts, sewer districts, housing authorities, and all other political corporations or subdivisions of the State of Illinois. Participation in IPRIME is voluntary. IPRIME is not registered with the SEC as an Investment Company. Investments in IPRIME are valued at the share price, the price for which the investment could be sold.

City Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk

Deposits. At year-end, the carrying amount of the City's deposits for governmental and business-type activities totaled $21,778,000 and the bank balances totaled $23,303,390.

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS – Continued

City Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Investments. The City has the following investment fair values and maturities:

		Investment Maturities (in Years)			
Investment Type	Fair Value	Less Than 1	1 to 5	6 to 10	More Than 10
U.S. Treasuries	$ 2,909,596	994,228	1,915,368	-	-
Illinois Funds	4,545,768	4,545,768	-	-	-
Illinois Trust	101,204	101,204	-	-	-
I-PRIME	814,616	814,616			
	8,371,184	6,455,816	1,915,368	-	-

At year-end, the City has the following recurring fair value measurements:

		Fair Value Measurements Using		
Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
U.S. Treasuries	$ 2,909,596	2,909,596	-	-
Investments Measured at the Net Asset Value (NAV)				
Illinois Funds	4,545,768			
Illinois Trust	101,204			
I-PRIME	814,616			
Total Investments at the (NAV)	5,461,588			
Total Investments Measured at Fair Value	8,371,184			

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. The policy does not state specific limits in investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates.

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS – Continued

City Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in management of their own affairs, no for speculation, but for investment, considering the safety of their capital, as well as the probable income to be derived. The standard of prudence to be used by investment officials shall be the 'prudent person' standard and shall be applied in the context of managing an overall portfolio. At year-end, the City's investment in the Illinois Funds, the Illinois Trust, and I-PRIME are rated AAAm by Standard & Poor's.

Concentration Risk. This is the risk of loss attributed to the magnitude of the City's investment in a single issuer. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. Diversifying instruments and maturities will avoid incurring unreasonable risks in the investment portfolio regarding specific security types, issuers or individual financial institutions. The City shall diversify to the best of its ability based on the type of funds invested and the cash flow needs of those funds. The City places no limit on the amount the City may invest in any one issuer. At year-end, the City does not have any investments over 5 percent of the total cash and investment portfolio (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) over 5 percent of the total cash and investment portfolio.

Custodial Credit Risk. In the case of deposits, this is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City's investment policy requires that all amounts in excess of any insurance limits be collateralized by approved securities or surety bonds issued by top-rated insurers, having a value of at least 110% of the deposits. Collateral is required as security whenever deposits exceed the insurance limits of the FDIC. Repurchase agreements must also be collateralized in the amount of 105% of the market value of principal and accrued interest. Collateral shall be held at an independent, third-party institution in the name of the City. The third-party institution shall comply with all qualifications and requirements as set forth in the Illinois Complied Statutes 30 ILCS 235/6. At year end, all deposits are collateralized.

For an investment, this is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At year-end, the City's investments in the Illinois Funds, the Illinois Trust, and I-PRIME are not subject to custodial credit risk.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk

Deposits. At year-end, the carrying amount of the Fund's deposits totaled $831,635 and the bank balances totaled $832,857.

Investments. At year-end, the Fund has the following investments and maturities:

		Investment Maturities (in Years)			
Investment Type	Fair Value	Less Than 1	1 to 5	6 to 10	More Than 10
U.S. Treasuries	$ 3,506,849	660,976	2,519,943	325,930	-
U.S. Agencies	165,486	155,629	692	-	9,165
Corporate Bonds	946,135	50,428	847,027	48,680	-
	4,618,470	867,033	3,367,662	374,610	9,165

Investments. At year-end, the Fund has the following recurring fair value measurements:

		Fair Value Measurements Using		
Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Indentical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
U.S. Treasuries	$ 3,506,849	3,506,849	-	-
U.S. Agencies	165,486	-	165,486	-
Corporate Bonds	946,135	-	946,135	-
Equity Securities				
Mutual Funds	5,433,015	5,433,015	-	-
Common Stock	3,576,277	3,576,277	-	-
Total Investments by Fair Value Level	13,627,762	12,516,141	1,111,621	-

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Debt Securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Interest Rate Risk. The Fund's investment policy states that the investment portfolio shall remain sufficiently liquid to enable the Fund to meet all operating requirements which may be reasonable anticipated.

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund helps limit its exposure to credit risk by primarily investing in securities issued by the United States Government and/or its agencies that are implicitly guaranteed by the United States Government. The Pension Fund's investment policy establishes criteria for allowable investments; those criteria follow the requirements of the Illinois Pension Code. The investments in the securities of U.S. Government Agencies obligations were all rated AA+ by Standard & Poor's or by Moody's Investors Services and Corporate Bonds were rated AA+ to BBB+ by Standard & Poor's. Besides investing in securities issued by agencies of the United States Government, the Pension Fund's investment policy for reducing credit risk is by the Board conducting its responsibilities with the care, skill and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use the conduct of an activity of like character or purpose.

Custodial Credit Risk. The Fund's investment policy requires all deposits in excess of federally insured limits (other than bank managed money market mutual funds) to be no less than 110% of the fair market value and secured by some form of collateral. The Fund will accept (1) United States Treasury Bills, Notes or Bonds, or (2) United States Government Agency Notes or Bonds as authorized by the Public Funds Investment Act but excluding the government sponsored agencies prohibited by the Department of Insurance. At year-end, the entire amount of the bank balance of deposits was covered by collateral, federal depository or equivalent insurance.

Concentration Risk. This is the risk of loss attributed to the magnitude of the Pension Fund's investment in a single issuer. The Funds investment policy states the Board should diversify investments to avoid incurring unreasonable risks from the practice of concentrating investments in specific security types and/or individual financial institutions. In addition to the securities and fair values previously listed, the Fund also has $5,433,015 invested in mutual funds and $3,576,277 invested in common stocks. At year-end, the Fund has over 5 percent of net plan assets available for retirement benefits (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) invested in DWS RREEF Global Real Estate Securities Fund of $725,634.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

The Fund's investment policy in accordance with Illinois Compiled Statutes (ILCS) establishes the following target allocation across asset classes:

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	55.00%	7.50%
Equities	44.00%	11.80%
Cash and Cash Equivalents	1.00%	4.20%

Illinois Compiled Statutes (ILCS) limit the Fund's investments in equities, mutual funds and variable annuities to 65%. Securities in any one company should not exceed 5% of the total fund.

The long-term expected rate of return on the Fund's investments was determined using an asset allocation study conducted by the Fund's investment management consultant in May 2022 in which best-estimate ranges of expected future real rates of return (net of pension plan investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding the expected inflation. Best estimates or arithmetic real rates of return for each major asset class included in the Fund's target asset allocation as of April 30, 2022 are listed in the table on previous page.

For the year ended April 30, 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was (4.76%). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

PROPERTY TAXES

Property taxes for 2021 attach as an enforceable lien on January 1, 2022, on property values assessed as of the same date. Taxes are levied by December of the subsequent fiscal year (by passage of a Tax Levy Ordinance). Tax bills are prepared by the County and are payable in two installments, on or about June 1 and September 1. The County collects such taxes and remits them periodically.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS

Governmental Activities

Governmental capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 31,247,764	-	-	31,247,764
Construction in Progress	3,350,036	6,691,123	2,211,321	7,829,838
	34,597,800	6,691,123	2,211,321	39,077,602
Depreciable Capital Assets				
Buildings	15,690,311	-	-	15,690,311
Equipment	9,187,313	218,709	40,857	9,365,165
Vehicles	3,170,064	377,757	171,804	3,376,017
Infrastructure	78,494,697	2,833,094	-	81,327,791
	106,542,385	3,429,560	212,661	109,759,284
Less Accumulated Depreciation				
Buildings	5,077,023	323,619	-	5,400,642
Equipment	7,025,323	162,393	40,857	7,146,859
Vehicles	2,517,147	237,004	171,804	2,582,347
Infrastructure	26,047,470	2,190,643	-	28,238,113
	40,666,963	2,913,659	212,661	43,367,961
Total Net Depreciable Capital Assets	65,875,422	515,901	-	66,391,323
Total Net Capital Assets	100,473,222	7,207,024	2,211,321	105,468,925

Depreciation expense was charged to governmental activities as follows:

General Government	$ 115,579
Library	182,235
Parks and Recreation	137,871
Public Safety	125,759
Public Works	2,352,215
	2,913,659

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS – Continued

Business-Type Activities

Business-type capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 615,376	-	-	615,376
Construction in Progress	2,973,283	1,260,744	-	4,234,027
	3,588,659	1,260,744	-	4,849,403
Depreciable Capital Assets				
Equipment	19,166,497	43,783	-	19,210,280
Vehicles	618,559	-	-	618,559
Infrastructure	69,792,390	340,549	-	70,132,939
	89,577,446	384,332	-	89,961,778
Less Accumulated Depreciation				
Equipment	8,175,288	490,204	-	8,665,492
Vehicles	454,822	68,285	-	523,107
Infrastructure	14,353,907	1,285,380	-	15,639,287
	22,984,017	1,843,869	-	24,827,886
Total Net Depreciable Capital Assets	66,593,429	(1,459,537)	-	65,133,892
Total Net Capital Assets	70,182,088	(198,793)	-	69,983,295

Depreciation expense was charged to business-type activities as follows:

Sewer	$ 732,083
Water	1,111,786
	1,843,869

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

INTERFUND RECEIVABLES, PAYABLES AND TRANSFERS

Interfund Balances

Interfund balances are advances in anticipation of receipts to cover temporary cash shortages. The composition of interfund balances as of the date of this report, is as follows:

Receivable Fund	Payable Fund	Amount
General	Nonmajor Governmental	$ 2,829,423

Interfund Transfers

Interfund transfers for the year consisted of the following:

Transfers In	Transfers Out	Amount	
General	Nonmajor Governmental	$ 21,231	(1)
Library	General	24,809	(2)
Parks and Recreation	General	1,515,511	(2)
Citywide Capital	General	1,412,414	(1)
Citywide Capital	Buildings and Grounds	2,046,503	(1)
Buildings and Grounds	General	3,324,556	(2)
Buildings and Grounds	Nonmajor Governmental	384,824	(1)
Sewer	General	519,749	(1)
Water	Sewer	75,675	(1)
Water	Citywide Capital	104,558	(1)
		9,429,830	

Transfers are used to (1) move revenues from the fund that statute or budget requires to collect them to the fund that statute or budget requires to expend them and (2) use unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations.

The purpose of significant interfund transfers are as follows:

- $1,515,511 to the Parks and Recreation Fund to subsidize operations.
- $3,458,917 to the Citywide Capital Fund to fund the construction of future roadway projects and to reimburse the Fund for acquisition costs associated with the new City Hall property.
- $3,324,556 to the Buildings and Grounds Fund to fund current and future City building projects and acquisitions.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT

Other Obligations

Other Obligations currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Conover Sewer Recapture owed to John Conover as reimbursement for sewer extension, due in one lump sum payment of $1,890 in fiscal year 2023.	Governmental Activities	$ 1,890	-	-	1,890

Notes Payable

The City enters into notes payable to provide funds for acquisition of capital assets. Notes payable have been issued for the governmental activities. Notes payable are direct obligations and pledge the full faith and credit of the City. Notes payable currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
102 E Van Emmon Building Loan Payable of 2017, payable in annual installments equal to one-fourth of the amount borrowed which includes an annualized interet rate of 3.00% through June 1, 2021.	Downtown TIF	$ 200,000	-	200,000	-
Promissory Note of 2019, payable in monthly installments of $71,570, which includes interest at 3.60%, through November 18, 2028.	Vehicle & Equipment	473,426	-	55,204	418,222
		673,426	-	255,204	418,222

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Illinois Environmental Protection Agency (IEPA) Loans Payable

The City has entered into loan agreements with the IEPA to provide low interest financing for sewer and water improvements. IEPA loans currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
IEPA (L17-1156300) Loan Payable of 2007, due in semi-annual installments of $28,263 to $61,744 including interest at 2.50% through August 9, 2026.	Water	$ 638,766	-	109,742	529,024

General Obligation Bonds

The City issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities. General obligation bonds have been issued for both governmental and business-type activities. General obligation bonds issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues. General obligation bonds are direct obligations and pledge the full faith and credit of the City.

General obligation bonds currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Library Bonds of 2006, due in annual installments of $50,000 to $100,000 plus interest at 4.75% to 4.80% through December 30, 2024.	Library	$ 350,000	-	75,000	275,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2011, due in annual installments of $660,000 to $1,100,000 plus interest at 4.28% through December 30, 2025.	Sewer	$ 5,025,000	-	4,105,000 * 920,000	-
General Obligation Library Refunding Bonds of 2013, due in annual installments of $155,000 to $730,000 plus interest at 2.00% to 4.00% through December 30, 2024.	Library	2,750,000	-	645,000	2,105,000
General Obligation Refunding Alternate Revenue Source Bonds of 2014, due in annual installments of $230,000 to $270,000 plus interest at 4.00% to 4.30% through December 1, 2029.	Countryside TIF	1,235,000	-	-	1,235,000
General Obligation Alternate Revenue Source Bonds of 2014A, due in annual installments of $135,000 to $300,000 plus interest at 3.00% to 4.00% through December 1, 2033.	Citywide Capital	3,200,000	-	200,000	3,000,000
General Obligation Refunding Alternate Revenue Source Bonds of 2014B, due in annual installments of $255,000 to $320,000 plus interest at 2.00% to 3.00% through December 30, 2022.	Debt Service	630,000	-	310,000	320,000

*Refunded

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2014C, due in annual installments of $120,000 to $140,000 plus interest at 2.00% to 3.00% through December 30, 2024.	Water	$ 545,000	-	135,000	410,000
General Obligation Alternate Revenue Source Bonds of 2015A, due in annual installments of $100,000 to $475,000 plus interest at 4.00% through December 1, 2034.	Countryside TIF	1,153,522	-	112,455	1,041,067
	Water	3,206,478	-	312,545	2,893,933
General Obligation Refunding Alternate Revenue Source Bonds of 2016, due in annual installments of $430,000 to $1,475,000 plus interest at 4.00% to 4.25% through December 30, 2022.	Water	1,955,000	-	1,040,000	915,000
General Obligation Alternate Revenue Source Bonds of 2021, due in annual installments of $320,000 to $530,000 plus interest at 2.00% to 4.00% through December 1, 2040.	Building and Grounds	-	8,250,000	-	8,250,000
General Obligation Refunding Alternate Revenue Source Bonds of 2022, due in annual installments of $1,270,000 to $1,320,000 plus interest at 1.142% through December 1, 2025.	Building and Grounds	-	1,010,000	-	1,010,000
	Sewer	-	4,160,000	-	4,160,000
		20,050,000	13,420,000	7,855,000	25,615,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Activity	Beginning Balances	Issuances	Retirements	Ending Balances
Governmental	$ 9,318,522	9,260,000	1,342,455	17,236,067
Business-Type	10,731,478	4,160,000	6,512,545	8,378,933
	20,050,000	13,420,000	7,855,000	25,615,000

Debt Certificates

The City issues debt certificates to provide funds for the acquisition and construction of major capital facilities. Debt certificates have been issued for both governmental and business-type activities. Debt Certificates issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues. Debt certificates currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Illinois Rural Bond Bank Debt Certificates of 2003A, due in annual installments of $80,000 to $155,000 plus interest at 1.60% to 5.20% through February 1, 2023.	Sewer	$ 305,000	-	150,000	155,000

Asset Retirement Obligation

The City has recognized an asset retirement obligation (ARO) and related deferred outflow of resources in connection with its obligation to seal and abandon various water wells and for the demolition of the City's underground storage tanks at the end of their estimated useful lives in accordance with federal, state, and/or local requirements. The ARO was measured using actual historical costs for similar abandonments, adjusted for inflation through the end of the year. The estimated remaining useful lives of the water wells and underground storage ranges between 49 and 84 years.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Long-Term Liability Activity

Changes in long-term liabilities during the fiscal year were as follows:

Type of Debt	Beginning Balances	Additions	Deductions	Ending Balances	Amounts Due within One Year
Governmental Activities					
Compensated Absences	$ 683,943	15,130	7,565	691,508	138,302
Net Pension Liability - Police Pension	10,450,027	2,108,609	-	12,558,636	-
Total OPEB Liability - RBP	1,069,813	-	110,648	959,165	-
Other Obligations	1,890	-	-	1,890	-
Notes Payable	673,426	-	255,204	418,222	57,253
General Obligation Bonds	9,318,522	9,260,000	1,342,455	17,236,067	1,966,424
Plus: Unamortized Premium	88,036	525,011	67,984	545,063	-
	22,285,657	11,908,750	1,783,856	32,410,551	2,161,979
Business-Type Activities					
Compensated Absences	$ 114,633	17,464	8,732	123,365	54,716
Total OPEB Liability - RBP	161,667	-	18,345	143,322	-
IEPA Loans Payable	638,766	-	109,742	529,024	112,503
General Obligation Bonds	10,731,478	4,160,000	6,512,545	8,378,933	2,393,576
Plus: Unamortized Premium	109,633	-	33,401	76,232	-
Debt Certificates	305,000	-	150,000	155,000	155,000
Developer Agreements	2,386,097	119,305	-	2,505,402	-
Asset Retirement Obligation	2,783,000	-	-	2,783,000	-
	17,230,274	4,296,769	6,832,765	14,694,278	2,715,795

For the governmental activities, the compensated absences, the net pension liabilities, and the total OPEB liability are generally liquidated by the General Fund. The Vehicle and Equipment Funds make payment on the notes payable. General obligation bonds are being liquidated by the Library, Countryside TIF, Citywide Capital, Buildings and Grounds, and Debt Service Funds.

For the business-type activities, the Sewer and Water Funds liquidate compensated absences, the net pension liability, and the total OPEB liability. The Sewer and Water Funds are making payments on the IEPA loans payable, general obligation bonds, debt certificates and developer agreements.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Non-Commitment Debt

Special service area bonds outstanding as of the date of this report totaled $51,491,968, Kendall Marketplace business district bonds totaled $6,665,000 and Kendall Marketplace sales tax bonds totaled $5,165,000. These bonds are not an obligation of the government and are secured by the levy of an annual tax on the real property within the special service area, business district taxes, and sales taxes, respectively. The government is in no way liable for repayment but is only acting as agent for the property owners in levying/assessing and collecting the tax, and forwarding the collections to bondholders.

Debt Service Requirements to Maturity

The annual debt service requirements to maturity, including principal and interest, are as follows:

	Governmental Activities			
	Notes Payable		General Obligation Bonds	
Fiscal Year	Principal	Interest	Principal	Interest
2023	$ 57,253	14,317	1,966,424	543,854
2024	59,347	12,223	1,711,716	477,272
2025	61,581	9,989	1,775,685	417,298
2026	63,867	7,703	1,126,889	354,959
2027	66,237	5,333	898,212	319,421
2028	68,691	2,879	940,858	285,506
2029	41,246	504	973,504	247,750
2030	-	-	1,021,150	208,427
2031	-	-	778,796	166,771
2032	-	-	796,442	144,319
2033	-	-	819,088	121,361
2034	-	-	841,734	97,697
2035	-	-	555,569	73,328
2036	-	-	480,000	60,600
2037	-	-	490,000	51,000
2038	-	-	500,000	41,200
2039	-	-	510,000	31,200
2040	-	-	520,000	21,000
2041	-	-	530,000	10,600
Total	418,222	52,948	17,236,067	3,673,563

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Service Requirements to Maturity – Continued

	Business-Type Activities					
	IEPA		General Obligation		Debt	
Fiscal	Loan Payable		Bonds		Certificates	
Year	Principal	Interest	Principal	Interest	Principal	Interest
2023	$ 112,503	12,527	2,393,576	202,218	155,000	8,060
2024	115,333	9,697	1,508,284	146,918	-	-
2025	118,235	6,795	1,529,315	117,424	-	-
2026	121,209	3,821	1,223,111	87,467	-	-
2027	61,744	772	161,788	68,981	-	-
2028	-	-	169,142	62,509	-	-
2029	-	-	176,496	55,743	-	-
2030	-	-	183,850	48,683	-	-
2031	-	-	191,204	41,329	-	-
2032	-	-	198,558	33,681	-	-
2033	-	-	205,912	25,739	-	-
2034	-	-	213,266	17,503	-	-
2035	-	-	224,431	8,972	-	-
Total	529,024	33,612	8,378,933	917,167	155,000	8,060

Legal Debt Margin

Chapter 65, Section 5/8-5-1 of the Illinois Compiled Statutes provides, "…no municipality having a population of less than 500,000 shall become indebted in any manner or for any purpose, to an amount, including existing indebtedness in the aggregate exceeding 8.625% on the value of the taxable property therein, to be ascertained by the last assessment for state and county purposes, previous to the incurring of the indebtedness or, until January 1, 1983, if greater, the sum that is produced by multiplying the municipality's 1978 equalized assessed valuation by the debt limitation percentage in effect on January 1, 1979."

Assessed Valuation - 2021	$ 623,597,568
Legal Debt Limit - 8.625% of Assessed Value	53,785,290
Amount of Debt Applicable to Limit General Obligation Bonds	2,535,000
Legal Debt Margin	51,250,290

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Defeased Debt

On January 6, 2022, the City issued $4,160,000 par value General Obligation Refunding Alternative Revenue Source Bonds, Series of 2022 to refund $4,105,000 of the General Obligation Refunding Alternate Revenue Source Bonds, Series of 2011. The City defeased bonds by placing the proceeds of the new bonds in an irrevocable trust to provide for all future debt service payment of the old bonds. Since the requirements that normally satisfy defeasance have been met, the financial statements reflect satisfaction of the original liability through the irrevocable transfer to an escrow agent of an amount computed to be adequate to meet the future debt service requirements of the issue. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the government's basic financial statements. Through this refunding, the City reduced its total debt service by $275,353 and obtained an economic gain of $266,090.

NET POSITION CLASSIFICATIONS

Net investment in capital assets was comprised of the following as of year-end:

Governmental Activities	
Capital Assets - Net of Accumulated Depreciation	$ 105,468,925
Plus: Unspent Bond Proceeds	6,618,399
Less Capital Related Debt:	
Notes Payable of 2019	(418,222)
General Obligation Library Bonds of 2006	(275,000)
General Obligation Library Refunding Bonds of 2013	(2,105,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014	(1,235,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014A	(3,000,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014B	(320,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(1,041,067)
General Obligation Alternate Revenue Source Bonds of 2021	(8,250,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2022	(1,010,000)
Loss on Refunding	43,246
Premium on Debt Issuance	(545,063)
Net Investment in Capital Assets	93,931,218

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

NET POSITION CLASSIFICATIONS – Continued

Business-Type Activities	
Capital Assets - Net of Accumulated Depreciation	$ 69,983,295
Less Capital Related Debt:	
IEPA (L17-1156300) Loan Payable of 2007	(529,024)
General Obligation Refunding Alternate Revenue Source Bonds of 2014C	(410,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(2,893,933)
General Obligation Alternate Revenue Source Bonds of 2016	(915,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2022	(4,160,000)
Illinois Rural Bond Bank Debt Certificates of 2003	(155,000)
Loss on Refunding	4,269
Premium on Debt Issuance	(76,232)
Net Investment in Capital Assets	60,848,375

FUND BALANCE CLASSIFICATIONS

In the governmental funds' financial statements, the City considers restricted amounts to have been spent when an expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available. The City first utilizes committed, then assigned and then unassigned fund balance when an expenditure is incurred for purposes for which all three unrestricted fund balances are available.

Nonspendable Fund Balance. Consists of resources that cannot be spent because they are either: a) not in a spendable form; or b) legally or contractually required to be maintained intact.

Restricted Fund Balance. Consists of resources that are restricted to specific purposes, that is, when constraints placed on the use of resources are either: a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments; or b) imposed by law through constitutional provisions or enabling legislation.

Committed Fund Balance. Consists of resources constrained (issuance of an ordinance) to specific purposes by the government itself, using its highest level of decision-making authority, Members of the City Council; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest-level action to remove or change the constraint.

Assigned Fund Balance. Consists of amounts that are constrained by Members of the City Council's intent to be used for specific purposes but are neither restricted nor committed. Intent is expressed by a) Members of the City Council itself or b) a body or official to which Members of the City Council has delegated the authority to assign amounts to be used for specific purposes. The City's highest level of decision-making authority is Members of the City Council, who is authorized to assign amounts to a specific purpose.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

FUND BALANCE CLASSIFICATIONS – Continued

Unassigned Fund Balance. Consists of residual net resources of a fund that has not been restricted, committed, or assigned within the General Fund and deficit fund balances of other governmental funds.

Minimum Fund Balance Policy. The City's policy states that the General fund should maintain a minimum unrestricted fund balance of no less than 30% of the annual appropriations budget.

The following is a schedule of fund balance classifications for the governmental funds as of the date of this report:

		Special Revenue		Capital Projects			
	General	Library	Parks and Recreation	Citywide Capital	Buildings and Grounds	Nonmajor	Totals
Fund Balances							
Nonspendable							
Prepaids	$ 162,600	9,869	41,876	-	-	-	214,345
Restricted							
Library Operations	-	913,690	-	-	-	-	913,690
Motor Fuel Tax	-	-	-	-	-	269,412	269,412
Special Service Areas	-	-	-	-	-	23,962	23,962
Land Cash	-	-	-	-	-	33,843	33,843
Capital Projects - Bond Proceeds	-	-	-	-	6,618,399	-	6,618,399
	-	913,690	-	-	6,618,399	327,217	7,859,306
Assigned							
Capital Projects	-	-	-	2,165,601	3,383,858	1,391,622	6,941,081
Unassigned	10,464,500	-	(41,876)	-	-	(2,829,368)	7,593,256
Total Fund Balances	10,627,100	923,559	-	2,165,601	10,002,257	(1,110,529)	22,607,988

NOTE 4 – OTHER INFORMATION

RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; natural disasters; and injuries to the City's employees. The City has purchased insurance from private insurance companies. Risks covered included certain types of liabilities and bonds. Premiums have been displayed as expenditures/expenses in appropriate funds. There were no significant changes in insurance coverages from the prior year and settlements did not exceed insurance coverage in any of the past three fiscal years.

NOTE 4 – OTHER INFORMATION – Continued

CONTINGENT LIABILITIES

Litigation

The City is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the City's attorney, the resolution of these matters will not have a material adverse effect on the financial condition of the City.

Grants

Amounts received or receivable from grantor agencies are subject to audit and adjustment by grantor agencies, principally the federal government. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures which may be disallowed by the grantor cannot be determined at this time although the City expects such amounts, if any, to be immaterial.

COMMITMENTS

Agreements with Developers – Governmental Activities

Under a Development/Economic Initiative Agreement entered into in March of 2001, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Route 34. Eligible costs of $2,074,833 and accrued interest at 5% are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of eighteen years. Through April 30, 2022, the City has reimbursed $3,221,659 including $136,750 in the current year. All payments have been recorded as an expenditure of the General Fund. As of April 30, 2022, the incentive agreement was paid in full.

Under a Development and Annexation Agreement entered into in July of 2000, amended in October of 2001, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Kennedy Road. Eligible costs of $5,977,027 are to be reimbursed from 50% of the sales tax generated in the development. Through April 30, 2022, the City has reimbursed $3,694,649, including $308,810 in the current year. All payments have been recorded as an expenditure of the General Fund.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under an Annexation Agreement entered into in April of 2006, the City agreed to reimburse eligible costs associated with a development located at Route 47 between Base Line Road and Corneils Road. Eligible costs are to be reimbursed from 55% of City Admissions Taxes collected, limited to a period of ten years. Through April 30, 2022, the City has reimbursed $1,530,631, including $148,663 in the current year. All payments have been recorded as an expenditure of the General Fund. The agreement was amended in April of 2019 to rebate 100% of admissions tax received by the City from the developer for a period of twenty years, until September 2026, and the admissions tax rate was decreased from 5% to 2.75%. The 100% rebate went into effect beginning with the 2013 fiscal year.

Under a Development/Economic Initiative Agreement entered into in January of 2007, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Corneils Road. Eligible costs of $287,392 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of twenty years. Through April 30, 2022, the City has reimbursed $23,404, including $0 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development Agreement entered into in June of 2007, the City agreed to create a business district in the area around Route 34 and Cannonball Trail. Under the agreement, 50% of sales tax and 100% of the business district tax generated in the district are remitted by the City to an escrow agent to pay the debt service on the Special Service Area Revenue Bonds of 2007. The bonds are secured solely by the pledged revenues and are not obligations of the City and are therefore not recorded on the City's books. All payments have been recorded as an expenditure of the General Fund. Expenditures in the current year were $691,180 for sales taxes and $435,946 in business district taxes.

In February of 2011, the City amended a Development/Economic Initiative Agreement dated April 2007. Under the original agreement, the City agreed to reimburse 20% of eligible costs associated with a development located at Route 47 and Fountainview Drive from 50% of the sales tax generated in the development, limited to a period of twenty years. Under the amended agreement, the City will hold the sales tax rebates in an escrow account until certain land improvements has been completed. Through April 30, 2022, the City is holding $25,258 in escrow, including $2,467 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development/Economic Initiative Agreement entered into on December 22, 2011 the City agreed to reimburse eligible costs associated with a development located west of Route 47 and north of Cannonball Trail on Boombah Boulevard. Through April 30, 2022, the City has reimbursed $93,383, including $9,531 in the current year. All payments have been recorded as an expenditure of the General Fund. As of April 30, 2022 the inventive agreement was paid in full.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under development agreements entered into in April 2012, the City agreed to reimburse eligible costs associated with a development located at within the Downtown TIF district. Eligible costs are to be reimbursed from 85% of the incremental property tax and 100% of the business district tax generated in the development, through December 31, 2029. Through April 30, 2022, the City has reimbursed $198,541 in incremental property taxes and $214,117 in business district taxes. Incremental property tax payments have been recorded as an expenditure of the Downtown TIF Fund and the Business District Tax Rebates have been recorded as an expenditure of the General Fund.

Under a development agreement entered into in May 2013, the City agreed to reimburse eligible costs associated with a development located at Route 34 and Route 47 in the Countryside TIF district. Eligible costs are to be reimbursed from 50% of the amusement tax and 100% of the business district tax generated in the development, limited to a period of 10 years. Through April 30, 2022, the City has reimbursed $327,175 in amusement taxes and $94,044 in business district taxes. For the current year, amusement tax rebate expenditures of $25,564 and business district rebate expenditures of $56,211 were recorded in the General Fund.

Under a Development/Economic Initiative Agreement entered into in March of 2016, the City agreed to reimburse eligible costs associated with a development located within the Fountainview Subdivision. Eligible costs of $63,350 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of ten years. Through April 30, 2022, the City has reimbursed $22,526, including $6,730 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development/Economic Initiative Agreement entered into in April of 2019, the City agreed to accept all previously constructed public improvements and complete all remaining infrastructure improvements in the Raintree Subdivision Special Service Area, as stipulated in the agreement. The Developer has acquired certain vacant lots within the Raintree Subdivision, and has further agreed to pay certain impact fees and other contributions towards the City at agreed upon timeframes and complete construction on certain dwelling units. As of April 30, 2022, the City has incurred $93,014 in expenditures, which have been fully reimbursed by the developer.

Under a development agreement entered into in August 2019, the City agreed to reimburse eligible costs associated with the renovation of the historic Kendall County jail. Eligible costs are to be reimbursed from incremental property taxes through 2034. Through April 30, 2022, the City has reimbursed $137,784 in renovation costs, which are recorded as an expenditure of the Downtown TIF II Fund.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Business-Type Activities

Under a reimbursement agreement entered into in August of 2003, the City and the developer of the Fox Hill subdivision agreed to reimburse eligible costs associated with the construction and over-sizing of water and sewer infrastructure lines within the area. Eligible costs are to be paid to the developer within twenty years of the agreement. This agreement was amended in April 2006 to include additional costs. Total eligible costs were $807,847, which accrues compounded interest of 5% annually. Interest for a portion of eligible costs was computed back to January 1, 1995. Total interest to date is $1,458,945. The amount recorded as a liability, including interest, as of April 30, 2022 is $2,505,402. Of this amount, 52% is recorded in the Water Fund. The remaining 48% of this amount is recorded in the Sewer Fund.

Hotel/Motel Tax Rebates

All hotels and motels located within the City limits are required to pay a tax of 3% based on the gross rental receipts from the renting, leasing or letting of a hotel or motel room. Proceeds from the hotel/motel tax are remitted to the Aurora Area Convention & Visitors Bureau (AACVB) for the purposes of promoting tourism and conventions within Yorkville, pursuant to State Statute. The City has recorded $124,574 in rebates in the General Fund for the fiscal year ended April 30, 2022.

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS

The City contributes to two defined benefit pension plans, the Illinois Municipal Retirement Fund, a defined benefit agent multiple-employer public employee retirement system and the Police Pension Plan which is a single-employer pension plan. A separate report is issued for the Police Pension Plan and may be obtained by writing to the City at 804 Game Farm Road, Yorkville, Illinois 60560. IMRF does issue a publicly available financial report that includes financial statements and required supplementary information for the plan as a whole, but not by individual employer. That report may be obtained on-line at www.imrf.org. The benefit, benefit levels, employee contributions, and employer contributions are governed by Illinois Compiled Statutes (ILCS) and can only be amended by the Illinois General Assembly.

The aggregate amounts recognized for the two pension plans is:

	Net Pension Liability/ (Asset)	Deferred Outflows	Deferred Inflows	Pension Expense (Revenue)
IMRF	$ (1,858,664)	384,279	2,180,932	(259,617)
Police Pension	12,558,636	1,587,776	955,035	1,182,173
	10,699,972	1,972,055	3,135,967	922,556

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF)

Plan Descriptions

Plan Administration. All employees (other than those covered by the Police Pension Plan) hired in positions that meet or exceed the prescribed annual hourly standard must be enrolled in IMRF as participating members. The plan is accounted for on the economic resources' measurement focus and the accrual basis of accounting. Employer and employee contributions are recognized when earned in the year that the contributions are required, benefits and refunds are recognized as an expense and liability when due and payable.

Benefits Provided. IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

IMRF provides two tiers of pension benefits. Employees hired ***before*** January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last 10 years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

Employees hired ***on or after*** January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the *lesser* of:

- 3% of the original pension amount
- or 1/2 of the increase in the Consumer Price Index of the original pension amount.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Plan Membership. As of December 31, 2021, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	49
Inactive Plan Members Entitled to but not yet Receiving Benefits	52
Active Plan Members	58
Total	159

Contributions. As set by statute, the City's Regular Plan Members are required to contribute 4.5% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. For the year-ended April 30, 2022, the City's contribution was 10.37% of covered payroll.

Net Pension Liability/(Asset). The City's net pension liability/(asset) was measured as of December 31, 2021. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation performed, as of December 31, 2021, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.25%
Salary Increases	2.85% to 13.75%
Cost of Living Adjustments	3.25%
Inflation	2.25%

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Actuarial Assumptions – Continued. For nondisabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	25.00%	(0.60%)
Domestic Equities	39.00%	1.90%
International Equities	15.00%	3.15%
Real Estate	10.00%	3.30%
Blended	10.00%	1.70% - 5.50%
Cash and Cash Equivalents	1.00%	(0.90%)

Discount Rate

The discount rate used to measure the total pension liability was 7.25%, same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability/(Asset)	$ 751,724	(1,858,664)	(3,835,568)

Changes in the Net Pension Liability/(Asset)

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension (Asset) (A) - (B)
Balances at December 31, 2020	$ 15,868,790	16,180,592	(311,802)
Changes for the Year:			
Service Cost	376,700	-	376,700
Interest on the Total Pension Liability	1,136,979	-	1,136,979
Difference Between Expected and Actual Experience of the Total Pension Liability	189,246	-	189,246
Changes of Assumptions	-	-	-
Contributions - Employer	-	443,761	(443,761)
Contributions - Employees	-	188,122	(188,122)
Net Investment Income	-	2,628,659	(2,628,659)
Benefit Payments, including Refunds of Employee Contributions	(749,354)	(749,354)	-
Other (Net Transfer)	-	(10,755)	10,755
Net Changes	953,571	2,500,433	(1,546,862)
Balances at December 31, 2021	16,822,361	18,681,025	(1,858,664)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2022, the City recognized pension revenue of $259,617. At April 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 226,110	(36,691)	189,419
Change in Assumptions	23,888	(179,397)	(155,509)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	(1,964,844)	(1,964,844)
Total Expenses to be Recognized in Future Periods	249,998	(2,180,932)	(1,930,934)
Pension Contributions Made Subsequent to the Measurement Date	134,281	-	134,281
Total Deferred Amounts Related to IMRF	384,279	(2,180,932)	(1,796,653)

The $134,281 reported as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the reporting year ended April 30, 2023. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred (Inflows) of Resources
2023	$ (395,205)
2024	(795,588)
2025	(460,353)
2026	(279,788)
2027	-
Thereafter	-
Total	(1,930,934)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan

Plan Descriptions

Plan Administration. The Police Pension Plan is a single-employer defined benefit pension plan that covers all sworn police personnel. The defined benefits and employee and minimum employer contribution levels are governed by Illinois Compiled Statutes (40 ILCS 5/3-1) and may be amended only by the Illinois legislature. The City accounts for the Fund as a pension trust fund. The Fund is governed by a five-member pension board. Two members of the Board are appointed by the City Mayor, one member is elected by pension beneficiaries and two members are elected by active police employees.

Plan Membership. At April 30, 2022, the measurement date, membership consisted of the following:

Inactive Plan Members Currently Receiving Benefits	13
Inactive Plan Members Entitled to but not yet Receiving Benefits	9
Active Plan Members	30
Total	52

Benefits Provided. The following is a summary of the Police Pension Plan as provided for in Illinois State Statutes.

The Police Pension Plan provides retirement benefits through two tiers of benefits as well as death and disability benefits. Covered employees hired before January 1, 2011 (Tier 1), attaining the age of 50 or older with 20 or more years of creditable service are entitled to receive an annual retirement benefit of ½ of the salary attached to the rank held on the last day of service, or for one year prior to the last day, whichever is greater. The annual benefit shall be increased by 2.5 percent of such salary for each additional year of service over 20 years up to 30 years, to a maximum of 75 percent of such salary. Employees with at least eight years but less than 20 years of credited service may retire at or after age 60 and receive a reduced benefit. The monthly benefit of a police officer who retired with 20 or more years of service after January 1, 1977 shall be increased annually, following the first anniversary date of retirement and be paid upon reaching the age of at least 55 years, by 3 percent of the original pension and 3 percent compounded annually thereafter. Covered employees hired on or after January 1, 2011 (Tier 2), attaining the age of 55 or older with 10 or more years of creditable service are entitled to receive an annual retirement benefit equal to the average monthly salary obtained by dividing the total salary of the police officer during the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest by the number of months of service in that period. Police officer salary for the pension purposes is capped at $106,800, plus the lesser of ½ of the annual change in the Consumer Price Index or 3 percent compounded. The annual benefit shall be increased by 2.5 percent of such a salary for each additional year of service over 20 years up to 30 years to a maximum of 75 percent of such salary. Employees with at least 10 years may retire at or after age 50 and receive a reduced benefit (i.e., ½ percent for each month under 55).

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. The monthly benefit of a Tier 2 police officer shall be increased annually at age 60 on the January 1st after the police officer retires, or the first anniversary of the pension starting date, whichever is later. Noncompounding increases occur annually, each January thereafter. The increase is the lesser of 3 percent of ½ of the change in the Consumer Price Index for the proceeding calendar year.

Contributions. Covered employees are required to contribute 9.91% of their base salary to the Police Pension Plan. If an employee leaves covered employment with less than 20 years of service, accumulated employee contributions may be refunded without accumulated interest. The City is required to contribute the remaining amounts necessary to finance the plan and the administrative costs as actuarially determined by an enrolled actuary. However, effective January 1, 2011, ILCS requires the City to contribute a minimum amount annually calculated using the projected unit credit actuarial cost method that will result in the funding of 90% of the past service cost by the year 2040. For the year-ended April 30, 2022, the City's contribution was 49.54% of covered payroll.

Concentrations. At year-end, the Fund has over 5 percent of net plan assets available for retirement benefits (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) invested in DWS RREEF Global Real Estate Securities Fund of $725,634.

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation performed, as of April 30, 2022, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.00%
Salary Increases	5.00%
Cost of Living Adjustments	2.50%
Inflation	2.50%

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Actuarial Assumptions – Continued

Mortality rates were based on the PubS-2010 base rates projected to 2022 with scale MP2021.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%, the same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

Discount Rate Sensitivity

The following is a sensitive analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 16,999,917	12,558,636	8,984,655

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Changes in the Net Pension Liability

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability (A) - (B)
Balances at April 30, 2021	$ 25,026,357	14,576,330	10,450,027
Changes for the Year:			
Service Cost	726,664	-	726,664
Interest on the Total Pension Liability	1,715,607	-	1,715,607
Changes of Benefit Terms	-	-	-
Difference Between Expected and Actual Experience of the Total Pension Liability	278,036	-	278,036
Changes of Assumptions	270,434	-	270,434
Contributions - Employer	-	1,334,771	(1,334,771)
Contributions - Employees	-	278,502	(278,502)
Net Investment Income	-	(731,141)	731,141
Benefit Payments, including Refunds of Employee Contributions	(955,800)	(955,800)	-
Administrative Expense	(19,334)	(19,334)	-
Net Changes	2,015,607	(93,002)	2,108,609
Balances at April 30, 2022	27,041,964	14,483,328	12,558,636

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2022, the City recognized pension expense of $1,182,173. At April 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions – Continued

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 473,122	(674,002)	(200,880)
Change in Assumptions	773,107	(281,033)	492,074
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	341,547	-	341,547
Total Deferred Amounts Related to Police Pension	1,587,776	(955,035)	632,741

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/(Inflows) of Resources
2023	$ 35,551
2024	54,666
2025	(98,757)
2026	407,562
2027	101,113
Thereafter	132,606
Total	632,741

OTHER POST-EMPLOYMENT BENEFITS

General Information about the OPEB Plan

Plan Description. The City's defined benefit OPEB plan, Retiree Benefits Plan (RBP), provides OPEB for all permanent full-time general and public safety employees of the City. RBP is a single-employer defined benefit OPEB plan administered by the City. Article 11 of the State Compiled Statutes grants the authority to establish and amend the benefit terms and financing requirements to the City Board. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

General Information about the OPEB Plan – Continued

Benefits Provided. RBP provides coverage under the City of Yorkville group health program by contributing the monthly premium to retirees and their dependents.

Plan Membership. As of April 30, 2022, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	11
Inactive Plan Members Entitled to but not yet Receiving Benefits	-
Active Plan Members	83
Total	94

Total OPEB Liability

The City's total OPEB liability was measured as of April 30, 2022 and was determined by an actuarial valuation as of April 30, 2021.

Actuarial Assumptions and Other Inputs. The total OPEB liability in the April 30, 2022 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.50%
Salary Increases	3.50%
Discount Rate	3.42%
Healthcare Cost Trend Rates	7.0% for 2021, decreasing 0.25% per year to an ultimate rate of 4.0% for 2031 and later
Retirees' Share of Benefit-Related Costs	100% of projected health insurance premiums for retirees

The discount rate was based upon the expected rate of return associated with funded benefits, and unfunded benefits, the 20-year municipal bond rate.

Mortality rates were based on the RP-2014 Blue Collar base rates projected to 2021 using scale MP-2020 for Police. For all others, the RP-2014 base rates projected to 2021 using scale MP-2020 was used.

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Change in the Total OPEB Liability

	Total Total OPEB Liability
Balance at April 30, 2021	$ 1,231,480
Changes for the Year:	
Service Cost	63,305
Interest on the Total Pension Liability	24,995
Changes of Benefit Terms	-
Difference Between Expected and Actual Experience	-
Changes of Assumptions or Other Inputs	(112,346)
Benefit Payments	(104,947)
Net Changes	(128,993)
Balance at April 30, 2022	1,102,487

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The discount rate used to measure the total pension liability was 3.42%, while the prior valuation used 2.12%. The following presents the total OPEB liability, calculated using the discount rate, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher:

	1% Decrease (2.42%)	Current Discount Rate (3.42%)	1% Increase (4.42%)
Total OPEB Liability	$ 1,186,171	1,102,487	1,024,187

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability, calculated using varied Healthcare Trend Rates, as well as what the total OPEB liability would be if it were calculated using a Healthcare Trend Rate that is one percentage point lower or one percentage point higher:

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates – Continued

	(6.00% Decreasing to 3.00%)	Healthcare Cost Trend Rates (7.00% Decreasing to 4.00%)	(8.00% Decreasing to 5.00%)
Total OPEB Liability	$ 998,471	1,102,487	1,224,236

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended April 30, 2022, the City recognized OPEB expense of $98,679. At April 30, 2022, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 287,863	-	287,863
Change in Assumptions	67,103	(225,351)	(158,248)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	-	-
Total Deferred Amounts Related to OPEB	354,966	(225,351)	129,615

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB – Continued

Fiscal Year	Net Deferred Outflows of Resources
2023	$ 10,379
2024	10,379
2025	10,379
2026	10,379
2027	10,379
Thereafter	77,720
Total	129,615

SUBSEQUENT EVENTS

American Rescue Plan Act of 2021

On March 11, 2021, the American Rescue Plan Act of 2021 was signed into law. This act provides $350 billion in funding for local governments. The City has been allocated $2,805,113 to be received in two installments. On August 13, 2021 the City received their first installment of $1,402,557. On September 16th, 2022, the City received their final installment for $1,402,556.

REQUIRED SUPPLEMENTARY INFORMATION

Required supplementary information includes financial information and disclosures that are required by the GASB but are not considered a part of the basic financial statements. Such information includes:

- Schedule of Employer Contributions
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Changes in the Employer's Net Pension Liability
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Investment Returns
  - Police Pension Fund

- Schedule of Changes in the Employer's Total OPEB Liability
  - Retiree Benefit Plan

- Budgetary Comparison Schedule
  - General Fund
  - Library – Special Revenue Fund
  - Parks and Recreation – Special Revenue Fund

Notes to the Required Supplementary Information

Budgetary Information – Budgets are adopted on a basis consistent with generally accepted accounting principles.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2022

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2016	$ 311,346	$ 311,346	$ -	$ 2,853,781	10.91%
2017	308,134	308,134	-	2,898,722	10.63%
2018	344,487	344,487	-	3,217,682	10.71%
2019	350,666	350,666	-	3,506,685	10.00%
2020	365,540	365,540	-	3,665,848	9.97%
2021	440,315	440,315	-	4,060,573	10.84%
2022	428,230	428,230	-	4,128,183	10.37%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	22 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation	2.50%
Salary Increases	3.35% - 14.25%
Investment Rate of Return	7.50%
Retirement Age	See the Notes to the Financial Statements
Mortality	IMRF specific mortality table was used with fully generational projection scale MP-2017 (base year 2015).

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2022

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	$ 571,437	$ 624,168	$ 52,731	$ 2,220,146	28.11%
2016	722,940	722,940	-	2,294,948	31.50%
2017	825,413	825,413	-	2,320,642	35.57%
2018	966,211	966,211	-	2,543,266	37.99%
2019	963,361	963,361	-	2,449,210	39.33%
2020	1,111,484	1,111,484	-	2,631,165	42.24%
2021	1,226,371	1,230,604	4,233	2,744,017	44.85%
2022	1,334,771	1,334,771	-	2,694,486	49.54%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	18 Years
Asset Valuation Method	Fair Value
Inflation	2.5%
Salary Increases	5.0%
Investment Rate of Return	7.0%
Retirement Age	Tier 1 - 15% at 50 to 100% at age 65
	Tier 2 - 5% at 50 to 100% at age 65
Mortality	PubS-2010 base rates projected to 2022 with scale MP2021

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2022

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2022

	12/31/2015
Total Pension Liability	
Service Cost	$ 303,003
Interest	764,628
Differences Between Expected and Actual Experience	40,167
Change of Assumptions	-
Benefit Payments, Including Refunds of Member Contributions	(295,309)
Net Change in Total Pension Liability	812,489
Total Pension Liability - Beginning	10,191,193
Total Pension Liability - Ending	11,003,682
Plan Fiduciary Net Position	
Contributions - Employer	$ 311,346
Contributions - Members	129,289
Net Investment Income	49,844
Benefit Payments, Including Refunds of Member Contributions	(295,309)
Other (Net Transfer)	(289,688)
Net Change in Plan Fiduciary Net Position	(94,518)
Plan Net Position - Beginning	9,896,191
Plan Net Position - Ending	9,801,673
Employer's Net Pension Liability/(Asset)	$ 1,202,009
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	89.08%
Covered Payroll	$ 2,853,781
Employer's Net Pension Liability/(Asset) as a Percentage of Covered Payroll	42.12%

Changes of Assumptions. Changes in assumptions related to the discount rate were made in 2015 through 2018 and 2020. Changes in assumptions related to the demographics were made in 2017.

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021
317,347	330,734	316,829	356,154	384,165	376,700
825,222	887,780	924,525	1,024,674	1,104,694	1,136,979
27,153	132,182	507,597	213,134	(69,685)	189,246
-	(449,845)	508,408	-	(340,717)	-
(318,792)	(365,819)	(442,124)	(499,031)	(509,477)	(749,354)
850,930	535,032	1,815,235	1,094,931	568,980	953,571
11,003,682	11,854,612	12,389,644	14,204,879	15,299,810	15,868,790
11,854,612	12,389,644	14,204,879	15,299,810	15,868,790	16,822,361
308,134	335,204	365,769	324,580	429,468	443,761
132,252	139,927	167,364	172,689	173,017	188,122
684,949	1,792,699	(594,987)	2,196,500	1,983,375	2,628,659
(318,792)	(365,819)	(442,124)	(499,031)	(509,477)	(749,354)
39,225	(226,729)	196,498	(8,647)	(97,125)	(10,755)
845,768	1,675,282	(307,480)	2,186,091	1,979,258	2,500,433
9,801,673	10,647,441	12,322,723	12,015,243	14,201,334	16,180,592
10,647,441	12,322,723	12,015,243	14,201,334	16,180,592	18,681,025
1,207,171	66,921	2,189,636	1,098,476	(311,802)	(1,858,664)
89.82%	99.46%	84.59%	92.82%	101.96%	111.05%
2,898,722	3,109,498	3,467,005	3,582,558	3,844,833	3,994,256
41.64%	2.15%	63.16%	30.66%	(8.11%)	(46.53%)

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability
April 30, 2022

	4/30/2015
Total Pension Liability	
Service Cost	$ 522,029
Interest	986,212
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	(483,445)
Change of Assumptions	999,313
Benefit Payments, Including Refunds of Member Contributions	(435,435)
Net Change in Total Pension Liability	1,588,674
Total Pension Liability - Beginning	14,306,459
Total Pension Liability - Ending	15,895,133
Plan Fiduciary Net Position	
Contributions - Employer	$ 624,168
Contributions - Members	214,237
Contributions - Others	-
Net Investment Income	343,590
Benefit Payments, Including Refunds of Member Contributions	(435,435)
Administrative Expense	(14,285)
Net Change in Plan Fiduciary Net Position	732,275
Plan Net Position - Beginning	5,690,471
Plan Net Position - Ending	6,422,746
Employer's Net Pension Liability	$ 9,472,387
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	40.41%
Covered Payroll	$ 2,220,146
Employer's Net Pension Liability as a Percentage of Covered Payroll	426.66%

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

4/30/2016	4/30/2017	4/30/2018	4/30/2019	4/30/2020	4/30/2021	4/30/2022
576,907	611,857	589,463	650,245	672,849	745,174	726,664
1,097,143	1,283,144	1,349,196	1,374,562	1,517,322	1,613,488	1,715,607
-	-	-	-	43,601	-	-
322,766	123,907	(1,529,007)	105,712	51,301	137,349	278,036
1,116,723	(565,454)	498,740	612,775	(54,912)	(97,277)	270,434
(443,314)	(469,494)	(501,417)	(597,064)	(798,961)	(906,100)	(975,134)
2,670,225	983,960	406,975	2,146,230	1,431,200	1,492,634	2,015,607
15,895,133	18,565,358	19,549,318	19,956,293	22,102,523	23,533,723	25,026,357
18,565,358	19,549,318	19,956,293	22,102,523	23,533,723	25,026,357	27,041,964
722,940	825,413	966,211	963,361	1,111,484	1,230,604	1,334,771
222,736	234,058	249,421	243,941	269,903	261,904	278,502
-	32,388	-	-	-	-	-
(30,493)	473,420	421,975	717,071	(121,161)	3,124,939	(731,141)
(443,314)	(469,494)	(501,417)	(597,064)	(787,372)	(893,334)	(955,800)
(13,448)	(11,774)	(12,266)	(12,693)	(11,589)	(12,766)	(19,334)
458,421	1,084,011	1,123,924	1,314,616	461,265	3,711,347	(93,002)
6,422,746	6,881,167	7,965,178	9,089,102	10,403,718	10,864,983	14,576,330
6,881,167	7,965,178	9,089,102	10,403,718	10,864,983	14,576,330	14,483,328
11,684,191	11,584,140	10,867,191	11,698,805	12,668,740	10,450,027	12,558,636
37.06%	40.74%	45.55%	47.07%	46.17%	58.24%	53.56%
2,294,948	2,320,642	2,543,266	2,449,210	2,631,165	2,744,017	2,694,486
509.13%	499.18%	427.29%	477.66%	481.49%	380.83%	466.09%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Investment Returns
April 30, 2022

Fiscal Year	Annual Money-Weighted Rate of Return, Net of Investment Expense
2015	5.89%
2016	(0.43%)
2017	6.54%
2018	5.09%
2019	7.56%
2020	(1.08%)
2021	26.92%
2022	(4.76%)

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2022

	4/30/2019	4/30/2020	4/30/2021	4/30/2022
Total OPEB Liability				
Service Cost	$ 43,414	46,531	62,448	63,305
Interest	40,335	37,312	29,424	24,995
Changes in Benefit Terms	-	-	-	-
Differences Between Expected and Actual Experience	-	-	328,449	-
Change of Assumptions or Other Inputs	12,225	72,122	(136,858)	(112,346)
Benefit Payments	(122,570)	(132,377)	(126,246)	(104,947)
Net Change in Total OPEB Liability	(26,596)	23,588	157,217	(128,993)
Total OPEB Liability - Beginning	1,077,271	1,050,675	1,074,263	1,231,480
Total OPEB Liability - Ending	1,050,675	1,074,263	1,231,480	1,102,487
Covered-Employee Payroll	$ 5,675,523	5,874,167	6,432,473	6,657,610
Total OPEB Liability as a Percentage of Covered-Employee Payroll	18.51%	18.29%	19.14%	16.56%

Notes:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Changes of Assumptions. Changes of assumptions related to the discount rate were made in 2019 through 2022.

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 12,089,017	12,089,017	14,350,349
Intergovernmental	3,401,780	3,401,780	5,630,190
Licenses, Permits and Fees	524,500	524,500	834,170
Charges for Services	1,781,123	1,781,123	1,902,362
Fines and Forfeitures	116,850	116,850	197,158
Interest Income (Loss)	20,000	20,000	(33,857)
Miscellaneous	132,000	132,000	237,575
Total Revenues	18,065,270	18,065,270	23,117,947
Expenditures			
General Government	5,324,141	5,293,141	5,141,027
Public Safety	6,158,904	6,158,904	6,018,903
Community Development	959,515	990,515	1,154,892
Public Works	2,649,285	2,649,285	2,572,571
Total Expenditures	15,091,845	15,091,845	14,887,393
Excess (Deficiency) of Revenues Over (Under) Expenditures	2,973,425	2,973,425	8,230,554
Other Financing Sources (Uses)			
Transfers In	35,000	35,000	21,231
Transfers Out	(3,008,425)	(3,008,425)	(6,797,039)
	(2,973,425)	(2,973,425)	(6,775,808)
Net Change in Fund Balance	-	-	1,454,746
Fund Balance - Beginning			9,172,354
Fund Balance - Ending			10,627,100

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 1,612,758	1,612,758	1,611,808
Intergovernmental	26,401	26,401	48,746
Licenses, Permits and Fees	50,000	50,000	103,850
Charges for Services	12,300	12,300	11,131
Fines and Forfeits	8,500	8,500	6,576
Interest Income	2,200	2,200	1,530
Miscellaneous	3,750	3,750	2,796
Total Revenues	1,715,909	1,715,909	1,786,437
Expenditures			
Library	943,018	943,018	834,944
Capital Outlay	20,000	20,000	18,050
Debt Service			
Principal Retirement	720,000	720,000	720,000
Interest and Fiscal Charges	121,925	121,925	121,914
Total Expenditures	1,804,943	1,804,943	1,694,908
Excess (Deficiency) of Revenues Over (Under) Expenditures	(89,034)	(89,034)	91,529
Other Financing Sources			
Transfers In	26,993	26,993	24,809
Net Change in Fund Balance	(62,041)	(62,041)	116,338
Fund Balance - Beginning			807,221
Fund Balance - Ending			923,559

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Charges for Services	$ 650,000	650,000	549,231
Grants and Donations	349,250	349,250	7,800
Interest Income	250	250	87
Miscellaneous	208,709	208,709	235,413
Total Revenues	1,208,209	1,208,209	792,531
Expenditures			
Parks and Recreation			
Park Operations	1,402,523	1,402,523	1,300,338
Recreation Operations	1,313,535	1,398,535	1,080,704
Total Expenditures	2,716,058	2,801,058	2,381,042
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,507,849)	(1,592,849)	(1,588,511)
Other Financing Sources			
Transfers In	1,434,849	1,434,849	1,515,511
Net Change in Fund Balance	(73,000)	(158,000)	(73,000)
Fund Balance - Beginning			73,000
Fund Balance - Ending			-

OTHER SUPPLEMENTARY INFORMATION

Other supplementary information includes financial statements and schedules not required by the GASB, nor a part of the basic financial statements, but are presented for purposes of additional analysis.

Such statements and schedules include:

- Budgetary Comparison Schedules – Major Governmental Funds
- Combining Statements – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Enterprise Funds
- Consolidated Year-End Financial Report

MAJOR GOVERNMENTAL FUNDS

GENERAL FUND

The General Fund accounts for all financial resources except those required to be accounted for in another fund.

SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Library Fund

The Library Fund is used to account for the activity relating to the Yorkville Public Library.

Parks and Recreation Fund

The Parks and Recreation Fund is used to account for the revenues and expenditures associated with the Yorkville Parks and Recreation departments.

CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Citywide Capital Fund

The Citywide Capital Fund is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public.

Buildings and Grounds Fund

The Buildings and Grounds Fund is used to account for maintenance of existing and construction of new municipal owned buildings.

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 3,426,246	3,426,246	3,415,461
Sales Tax	3,582,508	3,582,508	4,450,012
Non-Home Rule Sales Tax	2,649,473	2,649,473	3,483,930
Municipal Utility Tax	993,340	993,340	1,209,606
Excise Tax	209,000	209,000	199,888
Cable TV Franchise Tax	300,000	300,000	298,048
Hotel Tax	80,000	80,000	138,415
Video Gaming Tax	140,000	140,000	252,890
Admissions and Amusement Tax	270,000	270,000	337,279
Business District Tax	421,950	421,950	547,651
Auto Rental Tax	16,500	16,500	17,169
	12,089,017	12,089,017	14,350,349
Intergovernmental			
State Income Taxes	2,336,774	2,336,774	3,175,556
State Use Tax	937,660	937,660	798,764
Cannabis Excise Tax	19,596	19,596	32,368
Township Road and Bridge Tax	54,975	54,975	54,872
Personal Property Replacement Tax	16,500	16,500	48,889
Federal Grants	15,275	15,275	1,506,738
State Grants	20,000	20,000	12,329
Miscellaneous	1,000	1,000	674
	3,401,780	3,401,780	5,630,190
Licenses, Permits and Fees			
Liquor Licenses	65,000	65,000	79,614
Other Licenses	9,500	9,500	8,577
Building Permits	450,000	450,000	745,979
	524,500	524,500	834,170
Charges for Services			
Garbage Surcharge	1,397,063	1,397,063	1,494,148
Collection Fees - Sanitary District	165,000	165,000	184,951
Administrative Chargeback	218,560	218,560	218,560
Police Special Detail	500	500	4,703
	1,781,123	1,781,123	1,902,362

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Fines and Forfeitures			
Circuit Court Fines	$ 35,000	35,000	50,258
Administrative Adjudication	26,500	26,500	88,880
Police Tows	55,000	55,000	57,500
Other	350	350	520
	116,850	116,850	197,158
Interest Income (Loss)			
Investment Income	20,000	20,000	11,013
Unrealized Gain (Loss)	-	-	(44,870)
	20,000	20,000	(33,857)
Miscellaneous			
Reimbursements			
Engineering	10,000	10,000	296
Liability Insurance	15,000	15,000	1,056
Other	19,000	19,000	85,011
Miscellaneous Income	88,000	88,000	151,212
	132,000	132,000	237,575
Total Revenues	18,065,270	18,065,270	23,117,947

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
General Government			
Administration	$ 996,443	996,443	822,343
Finance	557,390	557,390	536,226
Administrative Services	3,770,308	3,739,308	3,782,458
	5,324,141	5,293,141	5,141,027
Public Safety			
Police Department	6,158,904	6,158,904	6,018,903
Community Development			
Building and Zoning	959,515	990,515	1,154,892
Public Works			
Streets Operations	1,255,026	1,255,026	1,095,413
Health and Sanitation	1,394,259	1,394,259	1,477,158
	2,649,285	2,649,285	2,572,571
Total Expenditures	15,091,845	15,091,845	14,887,393

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
General Government			
Administration			
Salaries - Mayor	$ 10,000	10,000	9,800
Salaries - Liquor Commissioner	1,000	1,000	1,000
Salaries - Alderman	48,000	48,000	46,000
Salaries - Administration	567,473	567,473	472,283
Retirement Plan Contribution	59,061	59,061	46,428
FICA Contribution	44,356	44,356	35,793
Group Health Insurance	88,445	88,445	56,131
Group Life Insurance	687	687	581
Dental Insurance	7,454	7,454	5,670
Vision Insurance	1,130	1,130	910
Training and Conferences	17,000	17,000	1,908
Travel and Lodging	10,000	10,000	2,116
Computer Replacement Chargeback	3,336	3,336	4,612
Publishing and Advertising	5,000	5,000	5,033
Printing and Duplicating	3,250	3,250	1,279
Telecommunications	22,300	22,300	32,921
Filing Fees	500	500	-
Codification	10,000	10,000	2,272
Postage and Shipping	3,000	3,000	311
Dues and Subscriptions	22,000	22,000	22,489
Professional Services	12,000	12,000	9,725
Utilities	33,708	33,708	40,210
Rental and Lease Purchase	3,000	3,000	2,792
Office Cleaning	13,743	13,743	12,915
Office Supplies	10,000	10,000	9,164
	996,443	996,443	822,343
Finance			
Salaries and Wages	326,735	326,735	316,610
Retirement Plan Contribution	34,006	34,006	32,884
FICA Contribution	23,676	23,676	22,937
Group Health Insurance	48,081	48,081	37,512
Group Life Insurance	361	361	362
Dental Insurance	4,132	4,132	4,132

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
General Government - Continued			
Finance - Continued			
Vision Insurance	$ 624	624	624
Training and Conferences	3,500	3,500	140
Auditing Services	35,900	35,900	35,900
Travel and Lodging	600	600	-
Computer Replacement Chargeback	1,895	1,895	3,736
Printing and Duplicating	3,500	3,500	3,265
Telecommunications	1,980	1,980	2,049
Postage and Shipping	1,200	1,200	1,044
Dues and Subscriptions	1,500	1,500	510
Professional Services	65,000	65,000	70,638
Rental and Lease Purchase	2,200	2,200	2,063
Office Supplies	2,500	2,500	1,820
	557,390	557,390	536,226
Administrative Services			
Police Special Detail Wages	500	500	4,703
Unemployment Insurance	16,500	16,500	15,312
Liability Insurance	346,323	346,323	369,608
Group Health Insurance - Retirees	44,302	44,302	41,950
Dental Insurance - Retirees	333	333	1,838
Vision Insurance - Retirees	62	62	74
Purchasing Services	62,437	62,437	37,114
IDOR Adminstration Fee	49,556	49,556	64,461
Computer Replacement Chargeback	1,895	1,895	1,278
GC Housing Rental Assistance	10,114	10,114	9,960
Utility Tax Rebate	8,000	8,000	8,627
Amusement Tax Rebate	12,000	12,000	25,564
Kencom	124,409	124,409	194,516
Information Technology Services	400,000	400,000	173,138
Building and Grounds Chargeback	118,190	118,190	86,745
Corporate Counsel	110,000	110,000	60,657
Litigation Counsel	110,000	110,000	61,263
Professional Services	48,150	48,150	33,483
Special Counsel	25,000	25,000	12,391

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
General Government - Continued			
Administrative Services - Continued			
Engineering Services	$ 300,000	300,000	410,303
Kendall Area Transit	25,000	25,000	35,325
Cable Consortium Fee	65,000	65,000	-
Hotel Tax Rebate	72,000	72,000	124,574
Economic Development	165,000	165,000	167,135
City Property Tax Rebate	1,326	1,326	1,328
Sales Tax Rebate	1,004,700	1,004,700	1,155,467
Business District Rebate	413,511	413,511	536,698
Admission Tax Rebate	145,000	145,000	148,662
Bad Debt	1,000	1,000	284
Reimbursable Repairs	15,000	15,000	-
Contingency	75,000	44,000	-
	3,770,308	3,739,308	3,782,458
Total General Government	5,324,141	5,293,141	5,141,027
Public Safety			
Police Department			
Salaries - Police Officers	1,975,199	1,975,199	2,005,286
Salaries - Command Staff	525,732	525,732	473,178
Salaries - Sergeants	559,921	559,921	559,317
Salaries - Police Clerks	182,926	182,926	165,838
Salaries - Crossing Guard	30,000	30,000	27,597
Part Time Salaries	70,000	70,000	56,665
Overtime	111,000	111,000	75,521
Retirement Plan Contribution	19,039	19,039	17,232
Employer Contribution - Police Pension	1,334,771	1,334,771	1,334,771
FICA Contribution	257,542	257,542	249,950
Group Health Insurance	572,407	572,407	547,823
Group Life Insurance	4,269	4,269	4,228
Dental Insurance	39,409	39,409	39,843
Vision Insurance	5,987	5,987	6,014
Tuition Reimbursement	13,350	13,350	12,864
Police Commission	5,780	5,780	5,171

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Safety - Continued			
Police Department - Continued			
Training and Conferences	$ 24,500	24,500	24,817
Travel and Lodging	10,000	10,000	2,066
Vehicle and Equipment Chargeback	91,732	91,732	91,732
Computer Replacement Chargeback	3,336	3,336	3,518
Printing and Duplicating	5,000	5,000	3,797
Telecommunications	43,500	43,500	40,158
Postage and Shipping	1,200	1,200	702
Dues and Subscriptions	10,700	10,700	9,997
Professional Services	39,950	39,950	29,959
Adjudication Services	20,750	20,750	14,046
New World Live Scan	2,000	2,000	1,995
Kendall Co. - Juve Probation	4,600	4,600	6,608
Rental and Lease Purchase	5,600	5,600	4,825
Office Cleaning	13,806	13,806	12,724
Outside Repair and Maintenance	60,000	60,000	51,274
Wearing Apparel	15,000	15,000	14,963
Office Supplies	4,500	4,500	7,487
Operating Supplies	16,500	16,500	31,366
Community Services	3,000	3,000	2,947
Ballistic Vests	4,550	4,550	4,440
Gasoline	62,348	62,348	70,454
Ammunition	9,000	9,000	7,730
Total Public Safety	6,158,904	6,158,904	6,018,903
Community Development			
Building and Zoning			
Salaries and Wages	561,611	561,611	602,702
Retirement Plan Contribution	58,451	58,451	62,128
FICA Contribution	41,374	41,374	44,979
Group Health Insurance	85,991	85,991	84,594
Group Life Insurance	707	707	608
Dental Insurance	7,034	7,034	7,088
Vision Insurance	1,115	1,115	1,131

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Community Development - Continued			
Building and Zoning - Continued			
Training and Conferences	$ 7,300	7,300	1,605
Travel and Lodging	6,500	6,500	1,426
Vehicle and Equipment Chargebacks	-	31,000	110,395
Computer Replacement Chargebacks	-	-	5,910
Publishing and Advertising	2,500	2,500	3,522
Printing and Duplicating	1,500	1,500	835
Telecommunications	4,000	4,000	3,403
Postage and Shipping	500	500	123
Inspections	70,000	70,000	160,270
Dues and Subscriptions	2,750	2,750	2,112
Professional Services	89,280	89,280	46,690
Rental and Lease Purchase	3,150	3,150	2,269
Vehicle Maintenance Services	4,500	4,500	1,927
Office Supplies	1,500	1,500	1,675
Operating Supplies	5,000	5,000	4,533
Gasoline	4,752	4,752	4,967
Total Community Development	959,515	990,515	1,154,892
Public Works			
Streets Operations			
Salaries and Wages	560,857	560,857	493,536
Part Time Salaries	13,440	13,440	3,870
Overtime	22,500	22,500	27,495
Retirement Plan Contribution	60,715	60,715	52,811
FICA Contribution	43,565	43,565	38,377
Group Health Insurance	156,120	156,120	118,132
Group Life Insurance	941	941	1,049
Dental Insurance	10,663	10,663	8,534
Vision Insurance	1,576	1,576	1,258
Training and Conferences	6,000	6,000	-
Travel and Lodging	3,000	3,000	8
Vehicle and Equipment Chargeback	100,000	100,000	108,000
Computer Replacement Chargeback	-	-	453

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Works - Continued			
Streets Operations - Continued			
Traffic Signal Maintenance	$ 30,000	30,000	16,406
Telecommunications	7,600	7,600	4,866
Mosquito Control	6,615	6,615	-
Tree and Stump Removal	15,000	15,000	12,750
Professional Services	9,225	9,225	11,753
Julie Services	4,500	4,500	4,002
Rental and Lease Purchase	6,000	6,000	3,379
Office Cleaning	1,329	1,329	1,270
Vehicle Maintenance Services	65,000	65,000	73,825
Wearing Apparel	5,000	5,000	5,077
Operating Supplies	22,000	22,000	19,760
Vehicle Maintenance Supplies	30,000	30,000	39,293
Small Tools and Equipment	21,500	21,500	8,921
Repair and Maintenance	25,000	25,000	11,782
Julie Supplies	1,200	1,200	650
Gasoline	25,680	25,680	28,156
	1,255,026	1,255,026	1,095,413
Health and Sanitation			
Garbage Services	1,385,259	1,385,259	1,471,265
Leaf Pickup	9,000	9,000	5,893
	1,394,259	1,394,259	1,477,158
Total Public Works	2,649,285	2,649,285	2,572,571
Total Expenditures	15,091,845	15,091,845	14,887,393

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 1,612,758	1,612,758	1,611,808
Intergovernmental			
Personal Property Replacement Tax	5,250	5,250	16,201
Grants	21,151	21,151	32,545
	26,401	26,401	48,746
Licenses, Permits and Fees			
Development Fees	50,000	50,000	103,850
Charges for Services			
Library Subscription Cards	8,500	8,500	8,378
Program Fees	-	-	51
Copy Fees	3,800	3,800	2,702
	12,300	12,300	11,131
Fines and Forfeitures	8,500	8,500	6,576
Interest Income	2,200	2,200	1,530
Miscellaneous			
Rental Income	1,750	1,750	200
Miscellaneous Income	2,000	2,000	2,596
	3,750	3,750	2,796
Total Revenues	1,715,909	1,715,909	1,786,437

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Library			
Salaries and Wages	$ 286,470	286,470	269,386
Part Time Salaries	195,544	195,544	170,202
Retirement Plan Contribution	32,180	32,180	27,675
FICA Contribution	35,685	35,685	32,700
Group Health Insurance	105,501	105,501	79,114
Group Life Insurance	377	377	532
Dental Insurance	7,079	7,079	6,336
Vision Insurance	1,088	1,088	915
Unemployment Insurance	1,000	1,000	645
Liability Insurance	25,993	25,993	24,164
Training and Conferences	3,000	3,000	357
Travel and Lodging	1,500	1,500	310
Publishing and Advertising	2,500	2,500	1,332
Telecommunications	7,200	7,200	7,199
Postage and Shipping	750	750	884
Dues and Subscriptions	11,000	11,000	9,324
Professional Services	40,000	40,000	34,322
Legal Services	3,000	3,000	4,050
Automation	20,000	20,000	17,461
Utilities	12,351	12,351	27,568
Outside Repair and Maintenance	50,000	50,000	22,916
Office Supplies	8,000	8,000	4,694
Operating Supplies	4,000	4,000	1,240
Custodial Supplies	7,000	7,000	4,030
Computer Equipment and Software	17,000	17,000	26,881
Library Programming	2,000	2,000	325
Employee Recognition	300	300	171
E-Book Subscriptions	3,500	3,500	3,000
Audio Books	3,500	3,500	3,029
DVD's and CD's	4,000	4,000	2,867
Books	51,500	51,500	51,315
Total Library	943,018	943,018	834,944

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Capital Outlay			
Building Improvements	$ 20,000	20,000	18,050
Debt Service			
Principal Retirement	720,000	720,000	720,000
Interest and Fiscal Charges	121,925	121,925	121,914
Total Debt Service	841,925	841,925	841,914
Total Expenditures	1,804,943	1,804,943	1,694,908

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Charges for Services			
Fees for Programs	$ 605,000	605,000	523,027
Concessions	45,000	45,000	26,204
Total Charges for Services	650,000	650,000	549,231
Grants and Donations			
Federal Grants	334,250	334,250	-
Sponsorships and Donations	15,000	15,000	7,800
Total Grants and Donations	349,250	349,250	7,800
Interest Income	250	250	87
Miscellaneous			
Rental Income	83,709	83,709	74,117
Hometown Days Revenue	120,000	120,000	145,676
Reimbursements	-	-	3,991
Miscellaneous Income	5,000	5,000	11,629
Total Miscellaneous	208,709	208,709	235,413
Total Revenue	1,208,209	1,208,209	792,531

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Parks and Recreation			
Park Operations			
Salaries and Wages	$ 659,709	659,709	626,958
Part Time Salaries	62,500	62,500	54,471
Overtime	5,000	5,000	4,590
Retirement Plan Contribution	70,935	70,935	66,794
FICA Contribution	53,594	53,594	51,118
Group Health Insurance	173,195	173,195	141,648
Group Life Insurance	1,149	1,149	1,015
Dental Insurance	11,605	11,605	10,794
Vision Insurance	1,734	1,734	1,616
Training and Conferences	9,000	9,000	1,160
Travel and Lodging	3,000	3,000	322
Vehicle and Equipment Chargeback	88,866	88,866	88,866
Telecommunications	8,250	8,250	9,348
Professional Services	11,400	11,400	10,648
Legal Services	1,000	1,000	495
Rental and Lease Purchase	8,055	8,055	7,934
Office Cleaning	3,487	3,487	3,542
Outside Repairs and Maintenance	40,000	40,000	24,007
Wearing Apparel	6,220	6,220	5,226
Operating Supplies	25,000	25,000	14,277
Small Tools and Equipment	11,000	11,000	8,862
Repairs and Maintenance	71,000	71,000	83,078
Athletic Fields and Equipment	55,000	55,000	49,357
Gasoline	21,824	21,824	34,212
Total Park Operations	1,402,523	1,402,523	1,300,338
Recreation Operations			
Salaries and Wages	386,753	386,753	369,077
Part Time Salaries	23,500	23,500	4,078
Concession Wages	15,000	15,000	8,820
Preschool Wages	40,000	40,000	42,373
Instructor Wages	40,000	40,000	12,468
Retirement Plan Contribution	45,446	45,446	39,317
FICA Contribution	37,238	37,238	32,801

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Parks and Recreation - Continued			
Recreation Operations - Continued			
Group Health Insurance	$ 107,479	107,479	69,510
Group Life Insurance	748	748	607
Dental Insurance	7,685	7,685	5,084
Vision Insurance	1,156	1,156	797
Training and Conferences	5,000	5,000	1,952
Travel and Lodging	3,000	3,000	4
Computer Replacement Chargeback	1,770	1,770	2,473
Publishing and Advertising	55,000	55,000	11,356
Telecommunications	8,750	8,750	14,482
Scholarships	2,500	2,500	-
Postage and Shipping	3,500	3,500	1,114
Dues and Subscriptions	3,000	3,000	2,247
Professional Services	140,000	140,000	87,708
Utilities	14,072	14,072	7,333
Rental and Lease Purchase	3,000	3,000	1,339
Office Cleaning	7,938	7,938	7,419
Outside Repairs and Maintenance	3,000	3,000	976
Hometown Days Expenditures	120,000	120,000	127,875
Program Supplies	200,000	285,000	189,295
Concession Supplies	18,000	18,000	13,013
Office Supplies	3,000	3,000	2,394
Operating Supplies	15,000	15,000	23,430
Repairs and Maintenance	2,000	2,000	1,362
Total Recreation Operations	1,313,535	1,398,535	1,080,704
Total Expenditures	2,716,058	2,801,058	2,381,042

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Building Permits	$ -	-	203,480
Development Fees	5,000	5,000	4,715
Road Contribution Fee	100,000	100,000	8,000
Charges for Services			
Road Infrastructure Fee	785,000	785,000	837,007
Interest Income	500	500	4,712
Miscellaneous	2,521,322	2,521,322	1,619,841
Total Revenues	3,411,822	3,411,822	2,677,755
Expenditures			
Public Works	301,214	301,214	285,078
Capital Outlay	4,438,876	4,438,876	2,679,942
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	115,813	115,813	115,813
Total Expenditures	5,055,903	5,055,903	3,280,833
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,644,081)	(1,644,081)	(603,078)
Other Financing Sources (Uses)			
Transfers In	2,396,250	2,396,250	3,138,492
Transfers Out	(489,382)	(489,382)	(489,382)
	1,906,868	1,906,868	2,649,110
Net Change in Fund Balance	262,787	262,787	2,046,032
Fund Balance - Beginning			119,569
Fund Balance - Ending			2,165,601

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Works			
Street Lighting and Signs	$ 125,214	125,214	114,101
Sidewalk and Street Lighting Supplies	52,500	52,500	44,475
Professional Services	13,500	13,500	-
Engineering Services	109,000	109,000	126,167
Bad Debt	1,000	1,000	335
Total General Government	301,214	301,214	285,078
Capital Outlay			
Asphalt Patching	35,000	35,000	5,264
Fox Hill Improvements	85,000	85,000	158
Mill Road Improvement	2,260,000	2,260,000	1,560,439
Blackberry Woods Subdivision	6,101	6,101	-
Road To Better Roads Program	1,148,725	1,148,725	812,945
Bristol Bridge Road	70,000	70,000	76,381
Sidewalk Replacement Program	300,000	300,000	159,960
RT 71 (RT47/Orchard Road) Project	82,050	82,050	-
US 34 (Center/Eldamain Road) Project	110,000	110,000	-
US 34 (IL 47/Orchard Road) Project	85,000	85,000	-
Raintree Village Improvements	165,000	165,000	6,355
Kennedy Road (North)	60,000	60,000	58,440
Kennedy Road Bike Trail	32,000	32,000	-
Total Capital Outlay	4,438,876	4,438,876	2,679,942
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	115,813	115,813	115,813
Total Debt Service	315,813	315,813	315,813
Total Expenditures	5,055,903	5,055,903	3,280,833

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Development Fees	$ 35,000	35,000	21,231
Charges for Services			
Buildings and Grounds Chargeback	147,738	147,738	108,431
Interest Income	3,000	3,000	1,172
Miscellaneous	2,000	2,000	576
Total Revenues	187,738	187,738	131,410
Expenditures			
Public Works	334,738	334,738	238,056
Capital Outlay	6,980,000	6,980,000	1,078,232
Debt Service			
Interest and Fiscal Charges	239,511	239,511	239,522
Total Expenditures	7,554,249	7,554,249	1,555,810
Excess (Deficiency) of Revenues Over (Under) Expenditures	(7,366,511)	(7,366,511)	(1,424,400)
Other Financing Sources (Uses)			
Debt Issuance	8,707,478	8,707,478	9,260,000
Premium on Debt Issuance	-	-	525,011
Transfers In	689,033	689,033	3,709,380
Transfers Out	(2,030,000)	(2,030,000)	(2,067,734)
	7,366,511	7,366,511	11,426,657
Net Change in Fund Balance	-	-	10,002,257
Fund Balance - Beginning			-
Fund Balance - Ending			10,002,257

UNITED CITY OF YORKVILLE, ILLINOIS

Buildings and Grounds - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Public Works			
Salaries and Wages	$ 50,117	50,117	33,558
Retirement Plan Contribution	5,216	5,216	3,339
FICA Contribution	3,547	3,547	2,640
Group Health Insurance	21,690	21,690	900
Group Life Insurance	109	109	62
Dental Insurance	1,352	1,352	444
Vision Insurance	197	197	75
Computer Replacement Chargeback	-	-	1,191
Facility Management Services	65,510	65,510	62,592
Telecommunications	-	-	2,331
Property and Building Maintenance Services	160,000	160,000	116,890
Professional Services	-	-	45
Wearing Apparel	-	-	841
Hanging Baskets	2,000	2,000	412
Property and Building Maintenance Supplies	25,000	25,000	12,736
Total Public Works	334,738	334,738	238,056
Capital Outlay			
City Hall Improvements	6,980,000	6,980,000	1,078,232
Debt Service			
Interest and Fiscal Charges	239,511	239,511	239,522
Total Expenditures	7,554,249	7,554,249	1,555,810

NONMAJOR GOVERNMENTAL FUNDS
COMBINING STATEMENTS

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Balance Sheet
April 30, 2022

	Special Revenue	Debt Service	Capital Projects	Totals
ASSETS				
Cash and Investments	$ 529,847	-	1,628,947	2,158,794
Receivables - Net of Allowances				
Accounts	-	-	29,691	29,691
Other Taxes	63,831	-	-	63,831
Total Assets	593,678	-	1,658,638	2,252,316
LIABILITIES				
Accounts Payable	266,406	-	6,000	272,406
Due to Other Funds	2,829,423	-	-	2,829,423
Deposit Payable	-	-	261,016	261,016
Total Liabilities	3,095,829	-	267,016	3,362,845
FUND BALANCES				
Restricted	327,217	-	-	327,217
Assigned	-	-	1,391,622	1,391,622
Unassigned	(2,829,368)	-	-	(2,829,368)
Total Fund Balances	(2,502,151)	-	1,391,622	(1,110,529)
Total Liabilities, Deferred Inflows of Resources and Fund Balances	593,678	-	1,658,638	2,252,316

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2022

	Special Revenue	Debt Service	Capital Projects	Totals
Revenues				
Taxes	$ 462,322	-	-	462,322
Intergovernmental	1,255,645	-	9,590	1,265,235
Licenses, Permits and Fees	-	8,950	112,511	121,461
Charges for Services	-	-	446,035	446,035
Fines and Forfeits	-	-	7,529	7,529
Grants and Donations	2,712	-	-	2,712
Interest Income	1,846	-	-	1,846
Miscellaneous	-	-	323	323
Total Revenues	1,722,525	8,950	575,988	2,307,463
Expenditures				
General Government	123,725	-	-	123,725
Public Safety	-	-	466	466
Public Works	128,844	-	67	128,911
Capital Outlay	2,124,801	-	633,652	2,758,453
Debt Service				
Principal Retirement	312,455	310,000	55,204	677,659
Interest and Fiscal Charges	103,605	19,375	16,366	139,346
Total Expenditures	2,793,430	329,375	705,755	3,828,560
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,070,905)	(320,425)	(129,767)	(1,521,097)
Other Financing Sources				
Sale of Capital Assets	-	-	35,598	35,598
Transfers In	-	320,425	-	320,425
	-	320,425	35,598	356,023
Net Change in Fund Balances	(1,070,905)	-	(94,169)	(1,165,074)
Fund Balances - Beginning	(1,431,246)	-	1,485,791	54,545
Fund Balances - Ending	(2,502,151)	-	1,391,622	(1,110,529)

NONMAJOR SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Fox Hill Special Service Area Fund

The Fox Hill Special Service Area Fund is used to account for the revenues and expenditures associated with the maintenance of the common areas of the Fox Hill Estates subdivision.

Sunflower Special Service Area Fund

The Sunflower Special Service Fund is used to account for revenues and expenditures associated with the maintenance of the common areas of the Sunflower Estates subdivision.

Motor Fuel Tax Fund

The Motor Fuel Tax Fund is used to account for allotments of motor fuel taxes from the State of Illinois made on per capita basis. These taxes are to be used to construct and maintain street, traffic signals and signs.

Land Cash Fund

The Land Cash Fund is used to account for the revenues and expenditures associated with the construction of park facilities.

Countryside TIF Fund

The Countryside TIF Fund is used to account for the accumulation of monies for the payment of the 2014 General Refunding Obligation Bond Series and 2015A General Obligation Refunding Bond Series. These bonds were issued to refund the 2005 General Obligation Bond Series, which were issued to finance retail development at Countryside Center.

Downtown TIF Fund

The Downtown TIF I Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily along Hydraulic Avenue, Illinois Route 47 and Benjamin Street within Yorkville's historic commercial core.

Downtown TIF II Fund

The Downtown TIF II Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily south of Hydraulic Avenue and just north of Washington Street, between White Oak Estate to the west and Benjamin Street to the east.

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Balance Sheet
April 30, 2022

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Balance Sheet
April 30, 2022

	Fox Hill Special Service Area	Sunflower Special Service Area
ASSETS		
Cash and Investments	$ 21,576	2,386
Receivables - Net of Allowances		
Other Taxes	-	-
Total Assets	21,576	2,386
LIABILITIES		
Accounts Payable	-	-
Due to Other Funds	-	-
Total Liabilities	-	-
FUND BALANCES		
Restricted	21,576	2,386
Unassigned	-	-
Total Fund Balances	21,576	2,386
Total Liabilities and Fund Balances	21,576	2,386

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
471,899	33,843	143	-	-	529,847
63,831	-	-	-	-	63,831
535,730	33,843	143	-	-	593,678
266,318	-	88	-	-	266,406
-	-	1,182,870	1,639,928	6,625	2,829,423
266,318	-	1,182,958	1,639,928	6,625	3,095,829
269,412	33,843	-	-	-	327,217
-	-	(1,182,815)	(1,639,928)	(6,625)	(2,829,368)
269,412	33,843	(1,182,815)	(1,639,928)	(6,625)	(2,502,151)
535,730	33,843	143	-	-	593,678

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2022

	Fox Hill Special Service Area	Sunflower Special Service Area
Revenues		
Taxes	$ 16,034	20,363
Intergovernmental	-	-
Grants and Donations	-	-
Interest Income	-	-
Total Revenues	16,034	20,363
Expenditures		
General Government	-	-
Public Works	4,689	9,568
Capital Outlay	-	-
Debt Service		
Principal Retirement	-	-
Interest and Fiscal Charges	-	-
Total Expenditures	4,689	9,568
Net Change in Fund Balances	11,345	10,795
Fund Balances - Beginning	10,231	(8,409)
Fund Balances - Ending	21,576	2,386

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
-	-	250,366	96,795	78,764	462,322
1,255,645	-	-	-	-	1,255,645
-	2,712	-	-	-	2,712
1,846	-	-	-	-	1,846
1,257,491	2,712	250,366	96,795	78,764	1,722,525
-	-	11,982	74,223	37,520	123,725
114,587	-	-	-	-	128,844
2,117,313	-	-	7,488	-	2,124,801
-	-	112,455	200,000	-	312,455
-	-	97,522	6,083	-	103,605
2,231,900	-	221,959	287,794	37,520	2,793,430
(974,409)	2,712	28,407	(190,999)	41,244	(1,070,905)
1,243,821	31,131	(1,211,222)	(1,448,929)	(47,869)	(1,431,246)
269,412	33,843	(1,182,815)	(1,639,928)	(6,625)	(2,502,151)

UNITED CITY OF YORKVILLE, ILLINOIS

Fox Hill Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 19,000	19,000	16,034
Expenditures			
Public Works			
Outside Repair and Maintenance	59,200	59,200	4,689
Net Change in Fund Balance	(40,200)	(40,200)	11,345
Fund Balance - Beginning			10,231
Fund Balance - Ending			21,576

UNITED CITY OF YORKVILLE, ILLINOIS

Sunflower Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 21,000	21,000	20,363
Expenditures			
Public Works			
Pond Maintenance	5,000	5,000	3,267
Outside Repair and Maintenance	12,200	12,200	6,301
Total Expenditures	17,200	17,200	9,568
Net Change in Fund Balance	3,800	3,800	10,795
Fund Balance - Beginning			(8,409)
Fund Balance - Ending			2,386

UNITED CITY OF YORKVILLE, ILLINOIS

Motor Fuel Tax - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental	$ 1,258,019	1,258,019	1,255,645
Interest Income	2,000	2,000	1,846
Total Revenues	1,260,019	1,260,019	1,257,491
Expenditures			
Public Works			
Supplies	138,000	138,000	114,587
Capital Outlay			
Streets and Alleys	2,297,413	2,297,413	2,117,313
Total Expenditures	2,435,413	2,435,413	2,231,900
Net Change in Fund Balance	(1,175,394)	(1,175,394)	(974,409)
Fund Balance - Beginning			1,243,821
Fund Balance - Ending			269,412

UNITED CITY OF YORKVILLE, ILLINOIS

Land Cash - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Grants and Donations			
White Oak	$ 1,406	1,406	-
Whispering Meadows	4,699	4,699	-
Blackberry Woods Nature Reserve	1,932	1,932	1,705
Caledonia	4,698	4,698	1,007
Country Hills	4,358	4,358	-
Heartland Meadows	3,522	3,522	-
Briarwood	5,145	5,145	-
Total Revenues	25,760	25,760	2,712
Expenditures			
Parks and Recreation			
Blackberry Creek	5,000	5,000	-
Net Change in Fund Balance	20,760	20,760	2,712
Fund Balance - Beginning			31,131
Fund Balance - Ending			33,843

UNITED CITY OF YORKVILLE, ILLINOIS

Countryside TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 260,727	260,727	250,366
Expenditures			
General Government			
Administrative Fees	11,381	11,381	11,381
Professional Services	2,000	2,000	601
Debt Service			
Principal Retirement	112,455	112,455	112,455
Interest and Fiscal Charges	97,561	97,561	97,522
Total Expenditures	223,397	223,397	221,959
Net Change in Fund Balance	37,330	37,330	28,407
Fund Balance - Beginning			(1,211,222)
Fund Balance - Ending			(1,182,815)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 70,000	70,000	96,795
Expenditures			
General Government			
Administrative Fees	35,020	35,020	35,020
TIF Incentive Payout	27,820	27,820	36,562
Professional Services	5,000	5,000	2,641
Capital Outlay			
Project Costs	10,000	10,000	-
Route 47 Expansion	7,488	7,488	7,488
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	6,084	6,084	6,083
Total Expenditures	291,412	291,412	287,794
Net Change in Fund Balance	(221,412)	(221,412)	(190,999)
Fund Balance - Beginning			(1,448,929)
Fund Balance - Ending			(1,639,928)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF II - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 48,526	48,526	78,764
Expenditures			
General Government			
Professional Services	5,000	5,000	715
TIF Incentive Payout	25,500	36,805	36,805
Total Expenditures	30,500	41,805	37,520
Net Change in Fund Balance	18,026	6,721	41,244
Fund Balance - Beginning			(47,869)
Fund Balance - Ending			(6,625)

NONMAJOR DEBT SERVICE FUND

The Debt Service Fund is used to account for the accumulation of resources for, and the payment of, general long-term debt principal and interest.

UNITED CITY OF YORKVILLE, ILLINOIS

Debt Service Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Recapture Fees	$ 8,000	8,000	8,950
Expenditures			
Debt Service			
Principal	310,000	310,000	310,000
Interest and Fiscal Charges	19,375	19,375	19,375
Total Expenditures	329,375	329,375	329,375
Excess (Deficiency) of Revenues Over (Under) Expenditures	(321,375)	(321,375)	(320,425)
Other Financing Sources			
Transfers In	321,375	321,375	320,425
Net Change in Fund Balance	-	-	-
Fund Balance - Beginning			-
Fund Balance - Ending			-

NONMAJOR CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Vehicle and Equipment Fund

The Vehicle and Equipment Fund is used to account for financial resources accumulated to purchase vehicles, equipment and other capital assets for use in the Police, General Government, Public Works and Park and Recreation departments.

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental			
Grants	$ -	-	9,590
Licenses, Permits and Fees			
Development Fees	99,500	99,500	90,711
Engineering Capital Fee	10,000	10,000	21,800
Charges for Services	396,926	427,926	446,035
Fines and Forfeits			
DUI Fines	7,000	7,000	6,649
Electronic Citations	800	800	880
Miscellaneous	1,000	1,000	323
Interest Income	1,000	1,000	-
Total Revenues	516,226	547,226	575,988
Expenditures			
Public Safety	8,750	8,750	466
Public Works	1,750	1,750	67
Capital Outlay	1,533,928	1,795,928	633,652
Debt Service			
Principal Retirement	55,204	55,204	55,204
Interest and Fiscal Charges	16,366	16,366	16,366
Total Expenditures	1,615,998	1,877,998	705,755
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,099,772)	(1,330,772)	(129,767)
Other Financing Sources			
Sale of Capital Assets	-	-	35,598
Net Change in Fund Balance	(1,099,772)	(1,330,772)	(94,169)
Fund Balance - Beginning			1,485,791
Fund Balance - Ending			1,391,622

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Police Capital			
Contractual Services	$ 8,750	8,750	466
Capital Outlay			
Equipment	50,000	50,000	-
Vehicles	260,000	260,000	120,259
Total Police Capital	318,750	318,750	120,725
General Government Capital			
Capital Outlay			
Computer Equipment and Software	12,232	12,232	24,088
Vehicles	-	31,000	110,395
Total General Government Capital	12,232	43,232	134,483
Public Works Capital			
Contractual Services	750	750	67
Supplies	1,000	1,000	-
Capital Outlay			
Equipment	15,000	15,000	92,186
Vehicles	680,000	911,000	147,102
Total Public Works Capital	696,750	927,750	239,355
Park and Recreation Capital			
Capital Outlay			
Outside Repair and Maintenance	1,600	1,600	-
Park Improvements	152,096	152,096	90,890
Equipment	50,000	50,000	48,732
Vehicles	313,000	313,000	-
Total Park and Recreation Capital	516,696	516,696	139,622
Debt Service			
Principal Retirement	55,204	55,204	55,204
Interest and Fiscal Charges	16,366	16,366	16,366
Total Debt Service	71,570	71,570	71,570
Total Expenditures	1,615,998	1,877,998	705,755

ENTERPRISE FUNDS

Enterprise Funds are used to account for operations that are financed and operated in a manner similar to private business enterprises where the intent is that costs of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or where it has been decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purpose.

Sewer Fund

The Sewer Fund is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees.

Water Fund

The Water Fund is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

UNITED CITY OF YORKVILLE, ILLINOIS

Sewer - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 1,466,553	1,466,553	1,513,766
Operating Expenses			
Operations	2,119,374	2,119,374	660,028
Depreciation and Amortization	-	-	734,417
Total Operating Expenses	2,119,374	2,119,374	1,394,445
Operating Income (Loss)	(652,821)	(652,821)	119,321
Nonoperating Revenues (Expenses)			
Interest Income	1,500	1,500	3,139
Connection Fees	203,300	203,300	200,300
Other Income (Expense)	(2,000)	(2,000)	56,067
Interest Expense	(231,530)	(231,530)	(238,517)
	(28,730)	(28,730)	20,989
Income (Loss) Before Transfers and Contributions	(681,551)	(681,551)	140,310
Capital Contributions	-	-	229,076
Capital Grants	84,500	84,500	-
Transfers In	519,749	519,749	519,749
Transfers Out	(75,675)	(75,675)	(75,675)
	528,574	528,574	673,150
Change in Net Position	(152,977)	(152,977)	813,460
Net Position - Beginning			34,902,097
Net Position - Ending			35,715,557

UNITED CITY OF YORKVILLE, ILLINOIS

Water - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2022

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 4,413,894	4,413,894	4,661,610
Operating Expenses			
Operations	5,863,191	5,863,191	2,246,249
Depreciation and Amortization	-	-	1,121,240
Total Operating Expenses	5,863,191	5,863,191	3,367,489
Operating Income (Loss)	(1,449,297)	(1,449,297)	1,294,121
Nonoperating Revenues (Expenses)			
Interest Income	3,000	3,000	2,031
Unrealized Gain (Loss)	-	-	(29,663)
Connection Fees	230,000	230,000	283,084
Other Income	102,894	102,894	110,494
Interest Expense	(218,542)	(218,542)	(263,012)
	117,352	117,352	102,934
Income (Loss) Before Contributions and Transfers	(1,331,945)	(1,331,945)	1,397,055
Capital Contributions	-	-	111,473
Capital Grants	131,250	131,250	-
Transfers In	180,233	180,233	180,233
	311,483	311,483	291,706
Change in Net Position	(1,020,462)	(1,020,462)	1,688,761
Net Position - Beginning			36,427,693
Net Position - Ending			38,116,454

UNITED CITY OF YORKVILLE, ILLINOIS

Consolidated Year-End Financial Report
April 30, 2022

CSFA #	Program Name	State	Federal	Other	Totals
494-00-0967	High-Growth Cities Program	$ 79,463	-	-	79,463
494-00-1004	Local Highway Safety Improvement Program	19,490	-	-	19,490
494-00-1488	Motor Fuel Tax Program	2,152,437	-	-	2,152,437
	Other Grant Programs and Activities	-	1,441,667	24,958	1,466,625
	All Other Costs Not Allocated	-	-	22,968,333	22,968,333
	Totals	2,251,390	1,441,667	22,993,291	26,686,348

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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

October 20, 2022

The Honorable City Mayor
Members of the City Council
United City of Yorkville, Illinois

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of and for the year ended April 30, 2022, and the related notes to the financial statements, which collectively comprise the City's basic financial statements, and have issued our report thereon dated October 20, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the City's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. According, we do not express an opinion on the effectiveness of the City's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements, on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the City's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or, significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

SUPPLEMENTAL SCHEDULES

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

Promissory Note of 2019
April 30, 2022

Date of Issue	November 18, 2019
Date of Maturity	November 18, 2028
Authorized Issue	$548,273
Interest Rate	3.60%
Interest Dates	Monthly
Principal Maturity Dates	Monthly
Payable at	First National Bank of Omaha

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal Year	Requirements		
	Principal	Interest	Totals
2023	$ 57,253	14,317	71,570
2024	59,347	12,223	71,570
2025	61,581	9,989	71,570
2026	63,867	7,703	71,570
2027	66,237	5,333	71,570
2028	68,691	2,879	71,570
2029	41,246	504	41,750
	418,222	52,948	471,170

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

IEPA (L17-1156300) Loan Payable of 2007
April 30, 2022

Date of Issue	November 9, 2006
Date of Maturity	August 9, 2026
Authorized Issue	$1,889,244
Denomination of Bonds	$5,000
Interest Rate	2.50%
Interest Dates	August 9 and February 9
Principal Maturity Dates	August 9 and February 9
Payable at	Illinois Environmental Protection Agency

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Aug. 9	Amount	Feb. 9	Amount
2023	$ 112,503	12,527	125,030	2022	6,613	2023	5,914
2024	115,333	9,697	125,030	2023	5,207	2024	4,490
2025	118,235	6,795	125,030	2024	3,765	2025	3,030
2026	121,209	3,821	125,030	2025	2,287	2026	1,534
2027	61,744	772	62,516	2026	772	2027	-
	529,024	33,612	562,636		18,644		14,968

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Bonds of 2006
April 30, 2022

Date of Issue	August 1, 2006
Date of Maturity	December 30, 2024
Authorized Issue	$1,500,000
Denomination of Bonds	$5,000
Interest Rates	4.75% to 4.80%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	BNY Midwest Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 75,000	13,112	88,112	2022	6,556	2022	6,556
2024	100,000	9,550	109,550	2023	4,775	2023	4,775
2025	100,000	4,800	104,800	2024	2,400	2024	2,400
	275,000	27,462	302,462		13,731		13,731

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Refunding Bonds of 2013
April 30, 2022

Date of Issue	May 9, 2013
Date of Maturity	December 30, 2024
Authorized Issue	$6,625,000
Denomination of Bonds	$5,000
Interest Rates	2.00% to 4.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Bank of New York Mellon

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 675,000	84,200	759,200	2022	42,100	2022	42,100
2024	700,000	57,200	757,200	2023	28,600	2023	28,600
2025	730,000	29,200	759,200	2024	14,600	2024	14,600
	2,105,000	170,600	2,275,600		85,300		85,300

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014
April 30, 2022

Date of Issue	January 6, 2014
Date of Maturity	December 1, 2029
Authorized Issue	$1,235,000
Denomination of Bonds	$5,000
Interest Rate	4.00% to 4.30%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	The Bank of New York Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2023	$ -	50,715	50,715	2022	25,357	2022	25,358
2024	-	50,715	50,715	2023	25,357	2023	25,358
2025	-	50,715	50,715	2024	25,357	2024	25,358
2026	230,000	50,715	280,715	2025	25,357	2025	25,358
2027	235,000	41,515	276,515	2026	20,757	2026	20,758
2028	245,000	32,115	277,115	2027	16,057	2027	16,058
2029	255,000	22,193	277,193	2028	11,096	2028	11,097
2030	270,000	11,610	281,610	2029	5,805	2029	5,805
	1,235,000	310,293	1,545,293		155,143		155,150

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014A
April 30, 2022

Date of Issue	August 5, 2014
Date of Maturity	December 1, 2033
Authorized Issue	$4,295,000
Denomination of Bonds	$5,000
Interest Rate	3.00% to 4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2023	$ 210,000	109,337	319,337	2022	54,669	2022	54,668
2024	210,000	103,037	313,037	2023	51,519	2023	51,518
2025	220,000	96,737	316,737	2024	48,369	2024	48,368
2026	225,000	90,137	315,137	2025	45,069	2025	45,068
2027	230,000	83,387	313,387	2026	41,694	2026	41,693
2028	245,000	76,200	321,200	2027	38,100	2027	38,100
2029	250,000	66,400	316,400	2028	33,200	2028	33,200
2030	265,000	56,400	321,400	2029	28,200	2029	28,200
2031	275,000	45,800	320,800	2030	22,900	2030	22,900
2032	280,000	34,800	314,800	2031	17,400	2031	17,400
2033	290,000	23,600	313,600	2032	11,800	2032	11,800
2034	300,000	12,000	312,000	2033	6,000	2033	6,000
	3,000,000	797,835	3,797,835		398,920		398,915

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014B
April 30, 2022

Date of Issue	August 5, 2014
Date of Maturity	December 30, 2022
Authorized Issue	$2,300,000
Denomination of Bonds	$5,000
Interest Rate	2.00% to 3.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 320,000	9,600	329,600	2022	4,800	2022	4,800

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014C
April 30, 2022

Date of Issue	August 5, 2014
Date of Maturity	December 30, 2024
Authorized Issue	$1,290,000
Denomination of Bonds	$5,000
Interest Rate	2.00% to 3.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 135,000	12,300	147,300	2022	6,150	2022	6,150
2024	140,000	8,250	148,250	2023	4,125	2023	4,125
2025	135,000	4,050	139,050	2024	2,025	2024	2,025
	410,000	24,600	434,600		12,300		12,300

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2015A
April 30, 2022

Date of Issue	July 8, 2015
Date of Maturity	December 1, 2034
Authorized Issue	$5,575,000
Denomination of Bonds	$5,000
Interest Rates	4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2023	$ 440,000	157,400	597,400	2023	78,700	2022	78,700
2024	460,000	139,800	599,800	2024	69,900	2023	69,900
2025	475,000	121,400	596,400	2025	60,700	2024	60,700
2026	215,000	102,400	317,400	2026	51,200	2025	51,200
2027	220,000	93,800	313,800	2027	46,900	2026	46,900
2028	230,000	85,000	315,000	2028	42,500	2027	42,500
2029	240,000	75,800	315,800	2029	37,900	2028	37,900
2030	250,000	66,200	316,200	2030	33,100	2029	33,100
2031	260,000	56,200	316,200	2031	28,100	2030	28,100
2032	270,000	45,800	315,800	2032	22,900	2031	22,900
2033	280,000	35,000	315,000	2033	17,500	2032	17,500
2034	290,000	23,800	313,800	2034	11,900	2033	11,900
2035	305,000	12,200	317,200	2035	6,100	2034	6,100
	3,935,000	1,014,800	4,949,800		507,400		507,400
Governmental	1,041,067	268,516	1,309,583		134,258		134,258
Business-Type	2,893,933	746,284	3,640,217		373,142		373,142
	3,935,000	1,014,800	4,949,800		507,400		507,400

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding (Alternate Revenue Source) Bonds of 2016
April 30, 2022

Date of Issue	October 27,2016
Date of Maturity	December 30, 2022
Authorized Issue	$5,800,000
Denomination of Bonds	$5,000
Interest Rates	4.00% to 4.25%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 915,000	27,450	942,450	2022	13,725	2022	13,725

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Alternate Revenue Source Bonds of 2021
April 30, 2022

Date of Issue	May 27, 2021
Date of Maturity	December 30, 2040
Authorized Issue	$8,250,000
Denomination of Bonds	$5,000
Interest Rate	2.00% to 4.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2023	$ 320,000	223,900	543,900	2022	111,950	2022	111,950
2024	330,000	211,100	541,100	2023	105,550	2023	105,550
2025	345,000	197,900	542,900	2024	98,950	2024	98,950
2026	360,000	184,100	544,100	2025	92,050	2025	92,050
2027	375,000	169,700	544,700	2026	84,850	2026	84,850
2028	390,000	154,700	544,700	2027	77,350	2027	77,350
2029	405,000	139,100	544,100	2028	69,550	2028	69,550
2030	420,000	122,900	542,900	2029	61,450	2029	61,450
2031	435,000	106,100	541,100	2030	53,050	2030	53,050
2032	445,000	97,400	542,400	2031	48,700	2031	48,700
2033	455,000	88,500	543,500	2032	44,250	2032	44,250
2034	465,000	79,400	544,400	2033	39,700	2033	39,700
2035	475,000	70,100	545,100	2034	35,050	2034	35,050
2036	480,000	60,600	540,600	2035	30,300	2035	30,300
2037	490,000	51,000	541,000	2036	25,500	2036	25,500
2038	500,000	41,200	541,200	2037	20,600	2037	20,600
2039	510,000	31,200	541,200	2038	15,600	2038	15,600
2040	520,000	21,000	541,000	2039	10,500	2039	10,500
2041	530,000	10,600	540,600	2040	5,300	2040	5,300
	8,250,000	2,060,500	10,310,500		1,030,250		1,030,250

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2022
April 30, 2022

Date of Issue	January 6, 2022
Date of Maturity	December 1, 2025
Authorized Issue	$5,170,000
Denomination of Bonds	$5,000
Interest Rates	1.142%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2023	$ 1,270,000	58,058	1,328,058	2022	28,537	2022	29,521
2024	1,280,000	44,538	1,324,538	2023	22,269	2023	22,269
2025	1,300,000	29,920	1,329,920	2024	14,960	2024	14,960
2026	1,320,000	15,074	1,335,074	2025	7,537	2025	7,537
	5,170,000	147,590	5,317,590		73,303		74,287
Governmental	1,010,000	28,757	1,038,757		14,283		14,475
Business-Type	4,160,000	118,833	4,278,833		59,020		59,812
	5,170,000	147,590	5,317,590		73,303		74,287

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

Illinois Rural Bond Bank Debt Certificates of 2003A
April 30, 2022

Date of Issue	September 24, 2003
Date of Maturity	February 1, 2023
Authorized Issue	$2,035,000
Denomination of Bonds	$5,000
Interest Rates	1.60% to 5.20%
Interest Dates	August 1 and February 1
Principal Maturity Date	February 1
Payable at	US National Bank Assoc.

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Aug. 1	Amount	Feb. 1	Amount
2023	$ 155,000	8,060	163,060	2022	4,030	2023	4,030

STATISTICAL SECTION
(Unaudited)

This part of the comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the City's overall financial health.

Financial Trends

These schedules contain trend information to help the reader understand how the City's financial performance and well-being have changed over time.

Revenue Capacity

These schedules contain information to help the reader assess the City's most significant local revenue sources.

Debt Capacity

These schedules present information to help the reader assess the affordability of the City's current levels of outstanding debt and the City's ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the City's financial activities take place.

Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the City's financial report relates to the services the City provides and the activities it performs.

UNITED CITY OF YORKVILLE, ILLINOIS

Net Position by Component - Last Ten Fiscal Years*
April 30, 2022 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Net Position by Component - Last Ten Fiscal Years*
April 30, 2022 (Unaudited)

	2013	2014	2015	2016
Governmental Activities				
Net Investment in Capital Assets	$ 62,000,588	63,873,210	66,706,243	70,624,870
Restricted	3,537,867	1,946,088	2,744,103	3,064,646
Unrestricted	3,341,127	3,566,727	3,328,570	(6,321,934)
Total Governmental Activities Net Position	68,879,582	69,386,025	72,778,916	67,367,582
Business-Type Activities				
Net Investment in Capital Assets	31,719,100	34,717,042	46,482,812	49,232,266
Restricted	-	-	-	-
Unrestricted	13,502,177	13,015,100	1,891,407	2,346,622
Total Business-Type Activities Net Position	45,221,277	47,732,142	48,374,219	51,578,888
Primary Government				
Net Investment in Capital Assets	93,719,688	98,590,252	113,189,055	119,857,136
Restricted	3,537,867	1,946,088	2,744,103	3,064,646
Unrestricted	16,843,304	16,581,827	5,219,977	(3,975,312)
Total Primary Government Net Position	114,100,859	117,118,167	121,153,135	118,946,470

* Accrual Basis of Accounting

Note: The City implemented GASB Statement No. 68 for the year ended April 30, 2016.

2017	2018	2019	2020	2021	2022
74,001,408	83,186,083	83,800,089	86,397,801	90,458,186	93,931,218
2,634,940	1,992,274	1,741,515	1,862,586	2,083,335	7,859,306
(6,198,767)	(8,300,460)	(7,317,467)	(8,257,280)	(6,122,164)	(5,482,448)
70,437,581	76,877,897	78,224,137	80,003,107	86,419,357	96,308,076
53,490,328	57,257,183	58,098,381	55,429,397	58,409,514	60,848,375
-	-	-	-	-	-
3,158,076	4,884,605	6,235,797	12,763,017	12,920,276	12,983,636
56,648,404	62,141,788	64,334,178	68,192,414	71,329,790	73,832,011
127,491,736	140,443,266	141,898,470	141,827,198	148,867,700	154,779,593
2,634,940	1,992,274	1,741,515	1,862,586	2,083,335	7,859,306
(3,040,691)	(3,415,855)	(1,081,670)	4,505,737	6,798,112	7,501,188
127,085,985	139,019,685	142,558,315	148,195,521	157,749,147	170,140,087

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Net Position - Last Ten Fiscal Years*
April 30, 2022 (Unaudited)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 **
Expenses										
Governmental Activities										
General Government	$ 3,121,857	5,808,954	4,075,153	4,533,840	4,467,831	3,976,577	5,023,227	6,213,208	5,960,831	4,822,508
Public Safety	3,750,318	918,131	4,393,482	6,073,977	6,053,696	5,689,480	6,008,959	6,526,618	982,014	1,017,179
Community Development	356,689	2,029,523	592,588	649,507	734,317	629,894	869,044	816,350	2,513,280	2,471,380
Public Works	2,983,200	3,874,698	3,140,446	3,955,539	4,450,509	6,236,169	4,124,935	4,874,549	5,733,468	5,893,447
Library	932,748	407,537	930,024	877,154	930,739	941,123	974,154	1,017,437	828,098	1,044,496
Parks and Recreation	1,812,483	3,444,587	2,381,698	2,225,512	2,003,935	2,432,818	2,963,434	2,678,769	5,097,124	5,545,928
Interest on Long-Term Debt	691,551	698,519	611,243	540,506	570,061	536,177	500,169	464,883	409,695	627,947
Total Governmental Activities Expenses	13,648,846	17,181,949	16,124,634	18,856,035	19,211,088	20,442,238	20,463,922	22,591,814	21,524,510	21,422,885
Business-Type Activities										
Water	2,638,252	1,595,266	2,792,755	3,257,504	3,251,836	3,271,956	3,256,582	1,762,508	1,740,041	1,632,962
Sewer	1,630,023	2,710,511	1,704,058	1,789,770	1,701,742	1,806,076	1,589,599	3,271,485	3,405,189	3,630,501
Recreation Center	592,707	232,882	-	-	-	-	-	-	-	-
Total Business-Type Activities Expenses	4,860,982	4,538,659	4,496,813	5,047,274	4,953,578	5,078,032	4,846,181	5,033,993	5,145,230	5,263,463
Total Primary Government Expenses	18,509,828	21,720,608	20,621,447	23,903,309	24,164,666	25,520,270	25,310,103	27,625,807	26,669,740	26,686,348
Program Revenues										
Governmental Activities										
Charges for Services										
General Government	1,751,309	2,381,788	2,885,990	3,072,590	3,222,388	3,629,476	3,798,007	3,637,639	5,246,355	3,508,715
Public Safety	-	-	-	-	-	-	-	-	-	-
Public Works	-	-	-	-	-	-	-	-	-	1,182,864
Library	58,794	74,037	44,522	53,372	71,213	123,156	125,800	129,530	113,930	121,557
Parks and Recreation	265,614	299,478	352,714	408,469	455,675	453,466	579,155	527,941	357,208	549,231
Operating Grants/Contributions	696,058	1,135,659	943,410	774,856	610,480	694,321	854,662	888,037	3,037,020	2,834,644
Capital Grants/Contributions	3,317,256	1,229,829	768,423	3,317,330	3,814,671	6,448,555	1,011,418	3,270,712	1,815,564	1,131,958
Total Governmental Activities Program Revenues	6,089,031	5,120,791	4,995,059	7,626,617	8,174,427	11,348,974	6,369,042	8,453,859	10,570,077	9,328,969
Business-Type Activities										
Charges for Services										
Water	2,823,357	2,394,494	2,626,114	3,624,374	4,127,783	4,655,750	4,557,352	4,440,881	1,731,961	1,714,066
Sewer	1,358,420	1,130,954	1,186,389	1,388,258	1,390,806	1,688,339	1,552,159	1,601,247	5,062,645	4,944,694
Recreation	493,617	44,891	-	-	-	-	-	-	-	-
Operating Grants/Contributions	-	-	-	-	-	-	-	-	-	-
Capital Grants/Contributions	4,829,491	1,658,648	6,805	2,029,848	3,257,187	3,945,565	-	1,994,526	1,124,323	340,549
Total Business-Type Activities Program Revenues	9,504,885	5,228,987	3,819,308	7,042,480	8,775,776	10,289,654	6,109,511	8,036,654	7,918,929	6,999,309
Total Primary Government Program Revenues	15,593,916	10,349,778	8,814,367	14,669,097	16,950,203	21,638,628	12,478,553	16,490,513	18,489,006	16,328,278

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 **
Net (Expense) Revenue										
Governmental Activities	$ (7,559,815)	(12,061,158)	(11,129,575)	(11,229,418)	(11,036,661)	(9,093,264)	(14,094,880)	(14,137,955)	(10,954,433)	(12,093,916)
Business-Type Activities	4,643,903	690,328	(677,505)	1,995,206	3,822,198	5,211,622	1,263,330	3,002,661	2,773,699	1,735,846
Total Primary Government Net (Expense) Revenue	(2,915,912)	(11,370,830)	(11,807,080)	(9,234,212)	(7,214,463)	(3,881,642)	(12,831,550)	(11,135,294)	(8,180,734)	(10,358,070)
General Revenues and Other Changes in Net Position										
Governmental Activities										
Taxes										
Property	4,743,599	4,670,934	4,850,981	4,901,983	4,899,485	4,925,489	5,041,762	5,195,891	5,248,398	5,544,463
Sales	4,409,926	4,573,026	4,782,712	4,904,967	5,200,763	5,327,756	5,429,231	5,635,945	6,341,989	7,933,942
Income	1,587,324	1,613,102	1,735,422	1,715,155	1,602,410	1,640,291	1,966,699	1,870,977	2,470,986	3,175,556
Utility	1,553,693	1,633,242	1,600,296	1,585,758	1,615,153	1,587,270	1,647,511	1,545,821	1,527,572	1,707,542
Other	922,439	988,822	1,127,859	1,265,439	1,331,191	1,445,549	1,600,502	1,652,074	1,668,294	2,173,425
Development Fees	-	-	-	-	-	-	-	-	-	-
Interest Income (Loss)	16,368	14,895	(176,911)	9,828	30,481	85,356	154,071	239,155	15,488	(24,510)
Miscellaneous	690,456	737,693	1,736,079	761,857	561,229	705,968	1,494,246	456,998	376,595	2,096,524
Transfers	-	(1,626,263)	(1,133,972)	(1,134,654)	(1,134,052)	(184,099)	(921,615)	(679,936)	(278,639)	(624,307)
Total Governmental Activities	13,923,805	12,605,451	14,522,466	14,010,333	14,106,660	15,533,580	16,412,407	15,916,925	17,370,683	21,982,635
Business-Type Activities										
Property Taxes	1,883,730	-	-	-	-	-	-	-	-	-
Interest Income (Loss)	9,542	11,491	11,206	6,685	13,623	36,002	28,777	67,934	1,777	(24,493)
Miscellaneous	(1,624,872)	182,783	174,404	64,678	99,643	61,661	84,652	107,705	83,261	166,561
Transfers	-	1,626,263	1,133,972	1,134,654	1,134,052	184,099	921,615	679,936	278,639	624,307
Total Business-Type Activities	268,400	1,820,537	1,319,582	1,206,017	1,247,318	281,762	1,035,044	855,575	363,677	766,375
Total Primary Government	14,192,205	14,425,988	15,842,048	15,216,350	15,353,978	15,815,342	17,447,451	16,772,500	17,734,360	22,749,010
Changes in Net Position										
Governmental Activities	6,363,990	544,293	3,392,891	2,780,915	3,069,999	6,440,316	2,317,527	1,778,970	6,416,250	9,888,719
Business-Type Activities	4,912,303	2,510,865	642,077	3,201,223	5,069,516	5,493,384	2,298,374	3,858,236	3,137,376	2,502,221
Total Primary Government	11,276,293	3,055,158	4,034,968	5,982,138	8,139,515	11,933,700	4,615,901	5,637,206	9,553,626	12,390,940

* Accrual Basis of Accounting

** In 2022, expenses related to non-capital costs in the Citywide Captial Projects Fund were moved from the General Government function to the Public Works function.

UNITED CITY OF YORKVILLE, ILLINOIS

Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2022 (Unaudited)

	2013	2014	2015	2016
General Fund				
Nonspendable	$ 139,985	156,680	145,012	138,312
Restricted	-	-	984,526	1,216,288
Unassigned	4,083,835	3,703,901	3,696,520	4,337,106
Total General Fund	4,223,820	3,860,581	4,826,058	5,691,706
All Other Governmental Funds				
Nonspendable	34,586	34,385	33,284	37,376
Restricted	3,549,913	1,951,407	1,767,419	1,848,358
Committed	305,804	527,635	537,853	480,034
Assigned	504,314	824,301	4,788,775	3,004,149
Unassigned	(571,615)	(534,087)	(624,928)	(584,901)
Total All Other Governmental Funds	3,823,002	2,803,641	6,502,403	4,785,016
Total All Governmental Funds	8,046,822	6,664,222	11,328,461	10,476,722

* Modified Accrual Basis of Accounting

2017	2018	2019	2020	2021	2022
150,464	83,305	85,744	63,193	152,003	162,600
984,514	726,019	458,685	203,874	-	-
5,079,111	5,687,049	6,335,394	7,244,993	9,020,351	10,464,500
6,214,089	6,496,373	6,879,823	7,512,060	9,172,354	10,627,100
37,664	16,392	18,266	13,515	38,268	51,745
1,650,426	1,266,255	1,282,830	1,658,712	2,083,335	7,859,306
421,586	467,816	435,216	398,488	43,801	-
1,625,937	743,997	1,125,471	1,099,847	1,605,360	6,941,081
(511,528)	(1,441,197)	(1,260,507)	(2,469,332)	(2,716,429)	(2,871,244)
3,224,085	1,053,263	1,601,276	701,230	1,054,335	11,980,888
9,438,174	7,549,636	8,481,099	8,213,290	10,226,689	22,607,988

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2022 (Unaudited)

	2013	2014	2015	2016
Revenues				
Taxes	$ 6,767,061	5,176,481	11,830,762	12,103,254
Intergovernmental	7,545,978	9,469,590	3,312,823	3,180,626
Licenses, Permits and Fees	400,718	393,746	379,242	493,619
Charges for Services	1,479,712	2,169,670	2,749,195	2,897,718
Fines and Forfeitures	195,287	191,887	154,789	143,094
Interest Income (Loss)	16,368	14,895	(176,911)	9,828
Miscellaneous	690,456	737,693	1,736,079	761,857
Total Revenues	17,095,580	18,153,962	19,985,979	19,589,996
Expenditures				
General Government	3,498,104	5,685,541	3,910,635	3,928,055
Public Safety	3,568,665	3,834,655	4,337,573	4,689,129
Community Development	365,188	407,537	592,588	649,507
Public Works	1,841,795	2,207,757	2,361,827	2,460,192
Library	752,373	737,191	748,905	694,441
Parks and Recreation	1,450,824	1,644,065	2,041,792	1,803,333
Capital Outlay	572,022	2,050,456	3,285,489	3,653,071
Debt Service				
Principal Retirement	1,025,074	1,099,223	844,112	1,040,880
Interest and Fiscal Charges	663,495	641,673	496,090	604,406
Total Expenditures	13,737,540	18,308,098	18,619,011	19,523,014
Excess (Deficiency) of Revenues Over (Under) Expenditures	3,358,040	(154,136)	1,366,968	66,982
Other Financing Sources (Uses)				
Disposal of Capital Assets	5,200	16,325	-	48,446
Debt Issuance	-	8,053,963	6,670,678	1,627,183
Bond Premium/(Discount)	-	115,109	119,680	122,288
Payment to Escrow Agent	-	(7,787,598)	(2,359,115)	(1,581,984)
Transfers In	1,504,002	2,881,535	1,375,448	1,326,090
Transfers Out	(1,504,002)	(4,507,798)	(2,509,420)	(2,460,744)
	5,200	(1,228,464)	3,297,271	(918,721)
Net Change in Fund Balances	3,363,240	(1,382,600)	4,664,239	(851,739)
Debt Service as a Percentage of Noncapital Expenditures	17.159%	11.540%	9.497%	10.293%

* Modified Accrual Basis of Accounting
** In 2022, expenses related to non-capital costs in the Citywide Captial Projects Fund were moved from the G

2017	2018	2019	2020	2021	2022**
12,466,013	12,662,678	12,995,856	13,211,204	13,838,886	16,424,479
3,343,533	3,164,026	4,279,863	3,620,336	6,464,863	6,954,683
706,782	1,016,223	1,208,345	1,128,865	1,475,431	1,296,907
2,888,281	3,047,606	3,176,017	3,078,023	4,125,547	3,854,197
154,213	142,269	118,600	88,222	116,515	211,263
30,481	85,356	154,071	239,155	15,488	(24,510)
561,229	705,968	1,494,246	445,275	362,668	2,096,524
20,150,532	20,824,126	23,426,998	21,811,080	26,399,398	30,813,543
4,293,081	5,036,599	4,946,923	5,921,054	7,752,809	5,264,752
4,907,384	5,302,038	5,356,149	5,818,063	5,686,873	6,019,369
734,317	629,894	869,044	816,350	828,098	1,154,892
2,344,878	2,223,750	2,288,047	2,337,032	2,990,739	3,224,616
748,026	758,411	791,441	834,724	799,301	834,944
1,936,083	2,632,896	2,562,757	2,224,304	2,478,660	2,381,042
3,656,703	5,037,740	2,782,137	1,516,238	1,618,216	6,534,677
1,149,185	1,195,669	1,462,304	1,485,368	1,540,392	1,597,659
563,433	514,068	515,118	474,199	426,199	616,595
20,333,090	23,331,065	21,573,920	21,427,332	24,121,287	27,628,546
(182,558)	(2,506,939)	1,853,078	383,748	2,278,111	3,184,997
278,062	2,500	-	11,723	13,927	35,598
-	800,000	-	548,273	-	9,260,000
-	-	-	-	-	525,011
-	-	-	(531,617)	-	
1,524,658	2,753,031	2,213,618	2,023,602	3,384,573	8,729,848
(2,658,710)	(2,937,130)	(3,135,233)	(2,703,538)	(3,663,212)	(9,354,155)
(855,990)	618,401	(921,615)	(651,557)	(264,712)	9,196,302
(1,038,548)	(1,888,538)	931,463	(267,809)	2,013,399	12,381,299
9.793%	9.228%	10.629%	9.769%	9.673%	10.624%

eneral Government function to the Public Works function.

UNITED CITY OF YORKVILLE, ILLINOIS

Assessed Value and Actual Value of Taxable Property - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

Fiscal Year	Tax Levy Year	Residential Property	Farm	Commercial Property
2013	2012	$ 332,551,186	$ 2,568,351	$ 101,264,981
2014	2013	311,316,069	2,618,131	99,434,012
2015	2014	310,655,449	2,743,283	90,744,145
2016	2015	320,914,471	2,861,401	84,529,087
2017	2016	354,408,067	2,963,511	84,099,111
2018	2017	386,855,913	3,083,218	83,975,023
2019	2018	416,780,620	3,202,140	83,874,064
2020	2019	450,745,939	3,259,791	83,974,878
2021	2020	484,024,398	3,360,133	79,649,698
2022	2021	524,668,429	3,524,082	79,815,145

Data Source: Office of the County Clerk

Note: Property is assess at 33% of actual value.

Industrial Property	Railroad Property	Total Taxable Assessed Value	Estimated Actual Value of Taxable Property	Total Direct Tax Rate
$ 6,720,962	$ 17,328	$ 443,122,808	$ 1,329,368,424	0.7490
6,656,792	17,328	420,042,332	1,260,126,996	0.7738
12,668,201	17,328	416,828,406	1,250,485,218	0.7581
13,000,039	17,329	421,322,327	1,263,966,981	0.7361
14,944,561	17,328	456,432,578	1,369,297,734	0.6795
15,349,880	17,328	489,281,362	1,467,844,086	0.6471
15,386,433	60,243	519,303,500	1,557,910,500	0.6242
15,509,884	89,004	553,579,496	1,660,738,488	0.6029
15,586,411	75,859	582,696,499	1,748,089,497	0.5880
15,512,284	77,628	623,597,568	1,870,792,704	0.5710

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Property Taxpayers - Current Tax Levy Year and Nine Tax Levy Years Ago
April 30, 2022 (Unaudited)

	2021 Tax Levy			2012 Tax Levy		
Taxpayer	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value
Wrigley Manufacturing Co., LLC	$ 4,666,112	1	0.75%	$ 2,893,422	6	0.65%
Yorkville Marketplace LLC	3,741,270	2	0.60%	3,884,596	4	0.88%
Menard, Inc	3,134,222	3	0.50%	7,804,600	1	1.76%
Fox River Harmony Housing LLC	2,779,144	4	0.45%			
Rainy Properties LLC	2,406,761	5	0.39%			
York Meadows LLC	2,286,011	6	0.37%	1,686,666	10	0.38%
Cedarhurst of Yorkville Real Estate LLC	2,005,518	7	0.32%			
Target Corporation	1,900,000	8	0.30%	3,104,272	5	0.70%
Alliance Development Corporation	1,866,429	9	0.30%			
Kendall Holdings	1,566,691	10	0.25%			
Copley Ventures, Inc.				7,338,864	2	1.66%
Cannonball LLC				4,596,172	3	1.04%
Boombah Properties LLC				2,269,648	7	0.51%
Home Depot USA Inc.				1,832,215	8	0.41%
Prime Yorkville LLC				1,803,983	9	0.41%
	26,352,158		4.23%	37,214,438		8.40%

Data Source: Office of the County Clerk

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Property Tax Rates - Last Ten Tax Levy Years
April 30, 2022 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Property Tax Rates - Last Ten Tax Levy Years
April 30, 2022 (Unaudited)

	2012	2013	2014
City Direct Rates			
Corporate	0.2354	0.2484	0.2503
Bonds and Interest	0.1097	0.0797	0.0397
IMRF	0.1016	0.1071	0.1080
Police Protection	0.0790	0.0833	0.0840
Police Pension	0.1229	0.1493	0.1694
Audit	0.0068	0.0071	0.0072
Liability Insurance	0.0090	0.0095	0.0096
Social Security	0.0677	0.0714	0.0720
School Crossing Guard	0.0056	0.0060	0.0060
Revenue Recapture	-	-	-
Unemployment Insurance	0.0113	0.0119	0.0120
Total Direct Rates	0.7490	0.7738	0.7581
Overlapping Rates			
Kendall County	0.7446	0.8009	0.8085
Kendall County Forest Preserve	0.1495	0.1640	0.1826
Bristol Township	0.3934	0.4239	0.4172
Bristol - Kendall Fire District	0.7356	0.7718	0.8041
Yorkville Community Unit School District #115	6.7561	7.4081	7.7083
Waubonsee Community College District #516	0.5306	0.5691	0.5973
Yorkville Public Library	0.3242	0.3241	0.3299
Total Overlapping Rates	9.6340	10.4619	10.8479
Total Direct and Overlapping Rates	10.3830	11.2357	11.6060

Data Source: Office of the County Clerk

Notes:
(1) Rates are per $100 of Assessed Value.
(2) Representative tax rates for other government units are from Bristol Township

2015	2016	2017	2018	2019	2020	2021
0.2380	0.2197	0.2049	0.1931	0.1811	0.1694	0.1579
0.0113	-	-	-	-	-	-
-	-	-	-	-	-	-
0.2407	0.1999	0.2003	0.1709	0.1562	0.1484	0.1596
0.1959	0.2117	0.1969	0.2140	0.2223	0.2291	0.2141
0.0069	0.0066	0.0061	0.0057	0.0054	0.0052	0.0048
0.0091	0.0088	0.0082	0.0077	0.0072	0.0069	0.0064
0.0342	0.0329	0.0307	0.0289	0.0271	0.0258	0.0241
-	-	-	0.0039	0.0036	0.0034	0.0032
-	-	-	-	-	-	0.0009
-	-	-	-	-	-	-
0.7361	0.6795	0.6471	0.6242	0.6029	0.5880	0.5710
0.7909	0.7477	0.7088	0.6728	0.6409	0.6232	0.6016
0.1787	0.1755	0.1752	0.1503	0.1542	0.1582	0.1620
0.3960	0.3408	0.2787	0.2618	0.0952	0.0912	0.1535
0.8077	0.7592	0.7425	0.7300	0.7202	0.7159	0.7050
7.8713	7.5634	7.3444	7.1852	7.0338	6.9567	6.7867
0.5885	0.5601	0.5514	0.5413	0.5273	0.4378	0.4698
0.3287	0.3080	0.2994	0.2892	0.2829	0.2775	0.2678
10.9618	10.4547	10.1004	9.8306	9.4545	9.2605	9.1465
11.6979	11.1342	10.7475	10.4548	10.0574	9.8485	9.7175

UNITED CITY OF YORKVILLE, ILLINOIS

Property Tax Levies and Collections - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

Fiscal Year	Tax Levy Year	Taxes Levied for the Fiscal Year	Collected within the Fiscal Year of the Levy		Collections in Subsequent Years***	Total Collections to Date **	
			Amount	Percentage of Levy		Amount	Percentage of Levy
2013	2011*	$ 3,452,742	$ 3,435,616	99.50%	-	$ 3,435,616	99.50%
2014	2012*	3,318,990	3,193,672	96.22%	-	3,193,672	96.22%
2015	2013*	3,250,204	3,234,448	99.52%	-	3,234,448	99.52%
2016	2014*	3,159,892	3,146,278	99.57%	-	3,146,278	99.57%
2017	2015*	3,101,185	3,071,484	99.04%	-	3,071,484	99.04%
2018	2016	3,101,322	3,093,892	99.76%	-	3,093,892	99.76%
2019	2017	3,165,651	3,149,635	99.49%	-	3,149,635	99.49%
2020	2018	3,241,457	3,231,926	99.71%	-	3,231,926	99.71%
2021	2019	3,337,703	3,327,913	99.71%	-	3,327,913	99.71%
2022	2020	3,426,430	3,415,461	99.68%	-	3,415,461	99.68%

Data Source: Office of the County Treasurer

* The 2011, 2012, 2013, 2014 and 2015 tax levy extended amounts include bonds and interest in the amount of $723,689, $486,150, $334,816, $165,564 & $47,525, respectively, that were previously abated.

** Includes property taxes collected in the current year that may be attributable to prior years. These collections, if any, are immaterial as 99% or greater of the current year's tax levy has historically been collected during the respective fiscal year. Additionally, information to associate any non-current tax collections to a specific tax levy is not readily available.

*** Information for collections in subsequent years is unavailable.

Note: Property in the City is reassessed each year. Property is assessed at 33% of actual value.

UNITED CITY OF YORKVILLE, ILLINOIS

Estimate of Taxable Sales by Category - Last Ten Calendar Years
April 30, 2022 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Estimate of Taxable Sales by Category - Last Ten Calendar Years
April 30, 2022 (Unaudited)

	2012	2013	2014
General Merchandise*	$ 571,210	594,685	593,361
Food	259,509	266,937	289,897
Drinking and Eating Places	279,649	293,131	299,300
Apparel*	85,797	88,739	87,834
Furniture & H.H. & Radio	7,727	3,370	2,710
Lumber, Building Hardware	362,987	413,711	446,440
Automobile and Filling Stations	178,282	156,091	146,062
Drugs and Miscellaneous Retail	582,001	597,615	566,665
Agriculture and All Others	64,558	89,359	161,114
Manufacturers	78,346	89,239	90,998
Total	2,470,066	2,592,877	2,684,381
City Direct Sales Tax Rate	1.00%	1.00%	1.00%

Data Source: Illinois Department of Revenue - Local Tax Allocation Division

Data available for calendar year only.

* Data by category is not available from the State of Illinois for categories with less than four taxpayers. However, they are included in the totals.

2015	2016	2017	2018	2019	2020	2021
608,996	597,618	581,090	596,620	565,194	553,360	672,669
385,034	377,825	417,028	452,298	485,658	522,083	552,205
332,752	376,762	401,725	413,204	429,128	454,292	606,299
95,975	99,354	94,459	99,121	49,305	34,163	65,116
2,597	2,373	1,590	1,902	1,150	891	6,702
470,357	510,521	539,760	558,358	592,844	745,531	802,407
160,717	188,830	187,127	220,232	251,785	295,001	358,029
362,225	506,123	487,129	484,825	527,795	554,512	1,010,887
232,923	135,378	213,964	219,283	239,758	221,374	251,437
102,011	116,723	36,167	30,503	30,270	32,510	45,663
2,753,587	2,911,507	2,960,039	3,076,346	3,172,887	3,413,717	4,371,414
1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Sales Tax Rates - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

Fiscal Year	State Sales Tax	Local Sales Tax to City	City Non-Home Rule Sales Tax	County Sales Tax	County Public Safety Property	Total Sales Tax Rate
2013	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2014	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2015	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2016	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2017	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2018	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2019	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2020	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2021	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2022	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%

Data Source: Illinois Department of Revenue

The above tax rates are for General Merchandise.

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of Outstanding Debt by Type - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of Outstanding Debt by Type - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

	Governmental Activities				
Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Debt Certificates	Notes Payable	Other Commitments	General Obligation and Alternative Revenue Source Bonds
2013	$ 13,025,000	$ -	$ 855,601	$ 1,890	$ 17,905,000
2014	12,520,000	-	940,341	1,890	16,855,000
2015	16,120,000	-	901,907	1,890	15,700,000
2016	15,325,990	-	938,210	1,890	18,555,000
2017	14,252,531	-	820,482	1,890	20,613,544
2018	13,138,403	-	1,500,822	1,890	18,605,065
2019	11,967,952	-	1,170,850	1,890	16,503,368
2020	10,718,207	-	926,655	1,890	13,685,179
2021	9,406,558	-	673,426	1,890	10,841,111
2022	17,781,130	-	418,222	1,890	8,455,165

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Demographic and Economic Statistics for personal income and population data.

Business-Type Activities					
Debt Certificates	IEPA Loans Payable	Other Commitments	Total Primary Government	Percentage of Personal Income (1)	Per Capita (1)
$ 7,465,000	$ 2,060,997	$ 1,952,534	$ 43,266,022	9.25%	$ 2,470
6,680,000	1,880,084	1,919,909	40,797,224	8.70%	2,291
5,865,000	1,694,504	1,942,898	42,226,199	8.72%	2,325
5,220,000	1,504,138	2,000,619	43,545,847	8.38%	2,360
1,230,000	1,308,862	2,061,951	40,289,260	7.61%	2,139
1,010,000	1,108,550	2,126,965	37,491,695	6.95%	1,971
580,000	903,070	2,194,902	33,322,032	5.82%	1,656
445,000	745,816	2,272,473	28,795,220	4.75%	1,397
305,000	638,766	5,169,097	27,035,848	4.25%	1,256
155,000	529,024	5,288,402	32,628,833	4.95%	1,515

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of General Bonded Debt Outstanding - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Less: Amounts Available in Debt Service	Total	Percentage of Total Taxable Assessed Value of Property (1)	Per Capita (2)
2013	$ 30,930,000	$ 57,844	$ 30,872,156	6.97%	$ 1,762
2014	29,375,000	-	29,375,000	6.99%	1,650
2015	31,820,000	-	31,820,000	7.63%	1,752
2016	33,880,990	-	33,880,990	8.04%	1,836
2017	34,866,075	-	34,866,075	7.64%	1,851
2018	31,743,468	-	31,743,468	6.49%	1,669
2019	28,471,320	-	28,471,320	5.48%	1,415
2020	24,403,386	-	24,403,386	4.41%	1,184
2021	20,247,669	-	20,247,669	3.47%	940
2022	26,236,295	-	26,236,295	4.21%	1,218

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Assessed Value and Actual Value of Taxable Property for property value data.

(2) See the Schedule of Demographic and Economic Statistics for personal income and population data.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Direct and Overlapping Governmental Activities Debt
April 30, 2022 (Unaudited)

Governmental Unit	(1) Gross Debt	(2) Percentage of Debt Applicable to City *	(3) City's Share of Debt
United City of Yorkville	$ 18,201,242	100.000%	$ 18,201,242
Overlapping Debt			
County of Kendall (4)	18,435,000	16.49%	3,039,932
Forest Preserve District of Kendall County	26,925,000	16.49%	4,439,933
Yorkville Community Unit School District #115	55,725,000	59.81%	33,329,123
Waubonsee Community College District #516	34,555,000	5.61%	1,938,536
Joliet Junior College District #525	117,255,000	0.00%	2,111
Plano Community Unit School District #88	36,060,000	0.56%	201,936
Newark Community Consolidated School District #66	765,000	0.47%	3,596
Total Overlapping Debt	289,720,000		42,955,164
Total Direct and Overlapping Debt	307,921,242		61,156,406

Data Source: Kendall County Tax Extension Department

* Determined by ratio of assessed valuation of property subject to taxation in the City to valuation of property subject to taxation in overlapping unit.

Notes:
(1) As of May 16, 2022.
(2) Percentages are based on 2021 EAV's, the latest available.
(3) The United City of Yorkville has $63,321,968 in outstanding non-committal debt which is expected to be paid from sources other than City revenues.
(4) Includes Public Building Commission.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Legal Debt Margin - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

	2013	2014	2015	2016
Legal Debt Limit	$ 38,219,342	36,228,651	35,951,450	36,339,051
Total Net Debt Applicable to Limit	22,945,000	19,290,000	14,855,000	13,420,000
Legal Debt Margin	15,274,342	16,938,651	21,096,450	22,919,051
Total Net Debt Applicable to the Limit as a Percentage of Debt Limit	60.04%	53.25%	41.32%	36.93%

2017	2018	2019	2019	2021	2022
39,367,310	42,200,517	44,789,927	47,746,232	50,257,573	53,785,290
6,835,000	6,045,000	5,000,000	4,230,000	3,405,000	2,535,000
32,532,310	36,155,517	39,789,927	43,516,232	46,852,573	51,250,290
17.36%	14.32%	11.16%	8.86%	6.78%	4.71%

Legal Debt Margin Calculation for Fiscal Year 2022

Assessed Value	$ 623,597,568
Bonded Debt Limit - 8.625% of Assessed Value	53,785,290
Amount of Debt Applicable to Limit	2,535,000
Legal Debt Margin	51,250,290

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Governmental Activities
April 30, 2022 (Unaudited)

Fiscal Year	Incremental Property/ Property Tax	Municipal Utility Tax	Motor Fuel Tax	Municipal Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2013	$ 364,742	$ -	$ 402,932	$ 2,490,503	$ 3,258,177	$ 460,000	$ 249,609	4.59
2014	315,790	-	-	2,586,460	2,902,250	400,000	230,917	4.60
2015	327,984	418,509	-	2,704,651	3,451,144	225,000	56,789	12.25
2016	164,852	393,680	-	2,778,116	3,336,648	255,000	53,550	10.81
2017	215,360	359,947	-	2,940,976	3,516,283	270,000	50,150	10.98
2018	198,294	334,595	-	3,002,133	3,535,022	275,000	44,750	11.06
2019	198,918	329,742	-	3,070,663	3,599,323	285,000	39,250	11.10
2020	279,643	971,440	-	3,222,256	4,473,339	290,000	34,025	13.81
2021	222,099	1,010,210	-	3,617,361	4,849,670	295,000	28,225	15.00
2022	347,161	1,209,606	-	4,450,012	6,006,779	310,000	19,375	18.24

Notes:

Details regarding the City's outstanding debt can be found in the Notes to the Financial Statements.

Series 2014, 2014A and 2015A Bonds are payable from revenues from Sales Taxes and incremental taxes, if any, from the Countryside TIF. Series 2014B Bonds are payable from Utility Taxes.

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Business-Type Activities
April 30, 2022 (Unaudited)

Fiscal Year	Water and Sewer Revenues	Less: Operating Expenses	State Income Tax	Non-Home Rule Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2013	$ 4,432,710	$ 2,895,830	$ 1,587,324	$ 1,919,423	$ 3,124,204	$ 270,000	$ 769,100	3.01
2014	3,379,454	1,695,780	1,613,102	1,986,566	5,283,342	1,050,000	759,986	2.92
2015	3,646,020	1,929,555	1,735,422	2,078,061	5,529,948	1,175,000	704,410	2.94
2016	4,493,694	2,386,468	1,715,155	2,126,851	5,949,232	1,245,000	624,002	3.18
2017	4,364,434	2,366,493	1,602,410	2,259,787	5,860,138	1,290,000	592,364	3.11
2018	5,642,966	2,570,417	1,640,291	2,325,623	7,038,463	1,878,991	831,200	2.60
2019	5,571,153	2,331,257	1,966,699	2,358,568	7,565,163	1,982,668	719,080	2.80
2020	5,500,876	2,570,624	1,870,977	2,413,689	7,214,918	2,730,483	602,768	2.16
2021	5,798,153	2,669,714	2,470,986	2,724,628	8,324,053	2,787,837	492,459	2.54
2022	6,175,376	2,906,277	3,175,556	3,483,930	9,928,585	6,512,545	457,580	1.42

Notes:
Details regarding the City's outstanding debt can be found in the notes to the financial statements.

Water and Sewer revenues exclude capital contributions and developer donations. Operating expenses do not include depreciation or amortization expenses.

UNITED CITY OF YORKVILLE, ILLINOIS

Demographic and Economic Statistics - Last Ten Calendar Years
April 30, 2022 (Unaudited)

Calendar Year	Population (1)	Personal Income (4)	Per Capita Personal Income (4)	Median Age (1)	School Enrollment (2)	Unemployment Rate (3)
2012	17,518	$ 467,491,704	$ 49,110	32.9	5,474	5.20%
2013	17,804	468,864,947	49,123	31.1	5,630	8.20%
2014	18,161	484,322,292	50,690	31.6	5,786	6.40%
2015	18,451	519,692,602	54,516	31.6	5,801	4.80%
2016	18,833	529,121,652	55,621	32.3	5,980	5.20%
2017	19,022	539,704,085	58,331	32.3	6,026	4.50%
2018	20,119	572,600,072	61,642	33.7	6,233	3.50%
2019	20,613	605,818,372	64,079	33.7	6,319	3.40%
2020	21,533	636,555,184	67,671	33.3	6,245	8.50%
2021	21,533	658,834,615	70,039	32.7	6,266	5.30%

Data Source:
(1) U.S. Census Buerau
(2) Data provided by School District Administrative Offices
(3) Illinois Department of Employment Security, Economic Information and Analysis
(4) U.S. Bureau of Economic Analysis: Chicago-Naperville-Elgin Metropolitan Statistical Area

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Employers - Current Calendar Year and Nine Calendar Years Ago
April 30, 2022 (Unaudited)

	2021 Calendar Year			2012 Calendar Year		
Employer	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
Raging Waves (Seasonal)	400	1	1.86%	450	1	2.57%
Wrigley Manufacturing Co.	400	1	1.86%	335	2	1.91%
Super Target	265	2	1.23%	180	3	1.03%
Jewel/Osco	198	3	0.92%	130	5	0.74%
Menards Mega Store	157	4	0.73%	140	4	0.80%
Newlywed Foods	134	5	0.62%	130	5	0.74%
Home Depot	125	6	0.58%	85	8	0.49%
Boombah, Inc	99	7	0.46%	90	7	0.51%
Wheatland Title	93	8	0.43%	65	9	0.37%
Hillside Health Care Center	80	9	0.37%	90	7	0.51%
Aurora Speciality Textiles	75	10	0.35%			
Kohl's				115	6	0.66%
	2,026		9.41%	1,810		10.33%

Data Source: City Records and Illinois Manufacturers Directory.

UNITED CITY OF YORKVILLE, ILLINOIS

Full-Time and Part-Time Government Employees by Function - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

	2013	2014	2015
Full Time			
General Government			
Administration	4.0	4.0	4.0
Finance	4.0	4.0	4.0
Community Development	3.0	4.0	4.0
Public Safety			
Police			
Officers	26.0	28.0	29.0
Civilians	2.0	3.0	3.0
Public Works			
Streets	5.3	5.3	5.3
Water	5.3	5.3	5.3
Sewer	3.3	3.3	3.3
Parks & Recreation			
Parks	8.5	8.5	8.5
Recreation	5.5	4.5	5.5
Library	5.0	5.0	4.0
Part Time			
General Government			
Administration	1.0	1.0	-
Community Development	2.0	1.0	1.0
Public Safety			
Police			
Officers	6.0	5.0	6.0
Civilians	9.0	10.0	9.0
Public Works			
Streets	-	-	1.0
Water	-	-	2.0
Sewer	-	-	-
Parks & Recreation			
Parks	4.0	4.0	7.0
Recreation	16.0	3.0	23.0
Library	26.0	25.0	31.0
Total	135.9	123.9	155.9

Data Source: City Human Resource Department

2016	2017	2018	2019	2020	2021	2022
4.0	4.0	5.5	5.5	5.5	5.5	4.5
4.0	4.0	4.0	4.0	4.0	4.0	4.0
4.0	4.0	5.0	6.0	6.0	6.0	7.0
29.0	29.0	30.0	27.0	31.0	32.0	32.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0
5.3	5.3	5.3	5.3	5.3	5.3	7.3
5.3	5.3	5.3	4.3	5.8	5.8	5.8
3.3	3.3	3.3	2.3	3.8	3.8	1.0
						3.8
6.5	7.5	7.5	8.5	7.5	7.5	9.5
5.5	5.5	6.0	6.0	6.0	5.0	5.0
4.0	4.0	4.0	5.0	5.0	4.0	4.0
1.0	1.0	-	-	-	-	-
1.0	3.0	2.0	-	-	-	-
5.0	5.0	4.0	3.0	3.0	1.0	1.0
9.0	8.0	9.0	8.0	10.0	3.0	7.0
1.0	1.0	3.0	-	3.0	-	-
2.0	1.0	-	-	1.0	-	-
-	-	-	-	1.0	-	-
7.0	7.0	7.0	6.0	6.0	1.0	6.0
32.0	35.0	33.0	33.0	48.0	17.0	48.0
27.0	28.0	24.0	23.0	32.0	22.0	29.0
159.0	163.9	160.9	150.0	187.0	126.0	178.0

UNITED CITY OF YORKVILLE, ILLINOIS

Operating Indicators by Function/Program - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

	2013	2014	2015	2016
Police				
Arrests Made	547	390	503	466
Parking Violations	846	628	515	655
Traffic Violations	4,287	1,097	987	1,252
Reports Taken	1,813	1,840	1,788	1,911
Calls for Service	11,860	11,633	12,458	13,727
Community Development				
Permits Issued	593	576	577	681
Public Works				
Street Resurfacing (Miles)	-	1.69	0.65	2.12
Snow and Ice Control (Tons of Salt)	1,081	1,349	1,509	1,490
Pothole Repairs (Tons of Asphalt)	336	252	442	610
Water				
Number of Accounts	6,189	6,135	6,361	6,465
Total Annual Consumption (Cubic Feet)	66,241,600	62,743,823	59,385,852	61,736,969
Average Daily Consumption (Cubic Feet)	181,484	171,901	162,701	169,142

*Police information is presented on a calendar year basis. Operating indicators for 2022 are thru May.

Data Source: Various City Departments

2017	2018	2019	2020	2021	2022	
602	619	665	401	502	201	*
426	274	170	56	49	45	*
881	1,022	604	6,053	6,050	2,929	*
1,916	2,045	2,022	2,251	2,504	921	*
11,953	12,047	13,043	12,449	13,450	5,752	*
871	1,003	980	2,247	1,975	1,519	
6.01	7.51	4.39	3.05	2.35	7.87	
1,285	1,748	1,730	1,130	1,786	1,885	
511	218	212	202	31	33	
6,644	6,805	7,038	7,265	7,492	7,913	
64,208,149	68,062,433	68,173,114	66,979,711	73,117,169	77,527,954	
175,913	186,472	186,776	183,506	200,321	212,405	

UNITED CITY OF YORKVILLE, ILLINOIS

Capital Asset Statistics by Function/Program - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

	2013	2014	2015
Public Safety			
Police			
Stations	1	1	1
Patrol Units	20	20	22
Public Works			
Streets (Miles)	82	83	84
Traffic Signals	26	26	26
Storm Sewers (Miles)	80	83	83
Water			
Water Mains (Miles)	67	68	68
Fire Hydrants	1,327	1,349	1,349
Sewer			
Sanitary Sewers (Miles)	59	60	60
Lift Stations	7	7	7

Data Source: Various City Departments

2016	2017	2018	2019	2020	2021	2022
1	1	1	1	1	1	1
20	20	22	21	20	22	23
88	90	95	95	138	140	140
26	26	26	26	26	26	26
90	96	106	106	136	140	141
72	77	85	85	134	137	138
1,415	1,515	1,645	1,647	1,929	1,972	1,981
64	68	74	74	115	117	118
7	7	7	7	7	7	7

UNITED CITY OF YORKVILLE, ILLINOIS

New Permits and Construction Values - Last Ten Fiscal Years
April 30, 2022 (Unaudited)

Fiscal Year	Commercial Construction		Residential Construction Single-Family		Residential Construction Multi-Family		Total	
	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value
2013	9	$ 3,149,000	83	$ 12,287,740	-	$ -	92	$ 15,436,740
2014	11	3,215,000	73	11,451,799	-	-	84	14,666,799
2015	10	38,279,500	72	13,063,555	-	-	82	51,343,055
2016	6	1,060,000	98	16,451,049	-	-	104	17,511,049
2017	6	2,361,795	159	28,818,289	-	-	165	31,180,084
2018	10	25,292,000	165	28,598,202	48	2,640,000	223	56,530,202
2019	8	3,626,350	217	34,439,272	5	324,254	230	38,389,876
2020	11	3,992,100	139	20,410,448	34	3,813,608	184	28,216,156
2021	8	1,044,324	272	41,739,549	118	13,588,257	398	56,372,130
2022	7	3,016,607	210	34,888,478	148	18,461,906	365	56,366,991

Data Source: City Records



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
FY 2021 Yorkville Annual Comprehensive Financial Report

File Name:
C.5c_FY 2021 Yorkville Annual Comprehensive Financial Report

Description:
Year-end audited financial statements for the United City of Yorkville for 2021.

August 2024

COMPREHENSIVE ANNUAL FINANCIAL REPORT

United City of Yorkville

800 Game Farm Road

Yorkville, Illinois 60560

(630) 553-4350

www.yorkville.il.us

Fiscal Year Ended April 30, 2021

UNITED CITY OF YORKVILLE, ILLINOIS

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED APRIL 30, 2021

Prepared by:

Rob Fredrickson
Director of Finance

UNITED CITY OF YORKVILLE, ILLINOIS

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INTRODUCTORY SECTION

This section includes miscellaneous data regarding the City including: List of Principal Officials, Organization Chart, Transmittal Letter and the Certificate of Achievement for Excellence in Financial Reporting.

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Officials

Fiscal Year Ended April 30, 2021

EXECUTIVE

Mayor: John Purcell

LEGISLATIVE

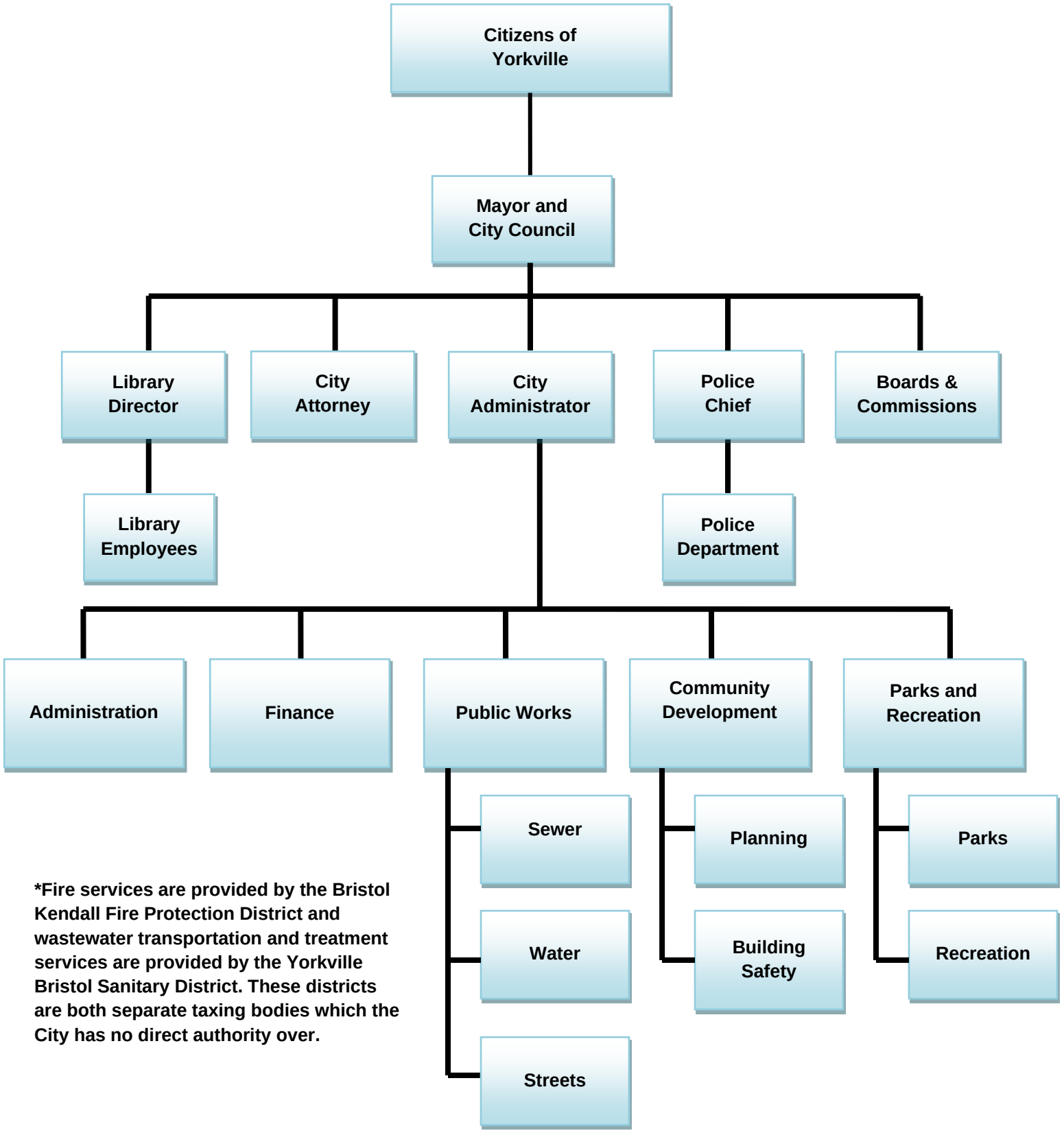
Ward 1:	Dan Transier, Alderman
Ward 1:	Ken Koch, Alderman
Ward 2:	Jackie Milschewski, Alderman
Ward 2:	Arden Joe Plocher, Alderman
Ward 3:	Joel Frieders, Alderman
Ward 3:	Chris Funkhouser, Alderman
Ward 4:	Seaver Tarulis, Alderman
Ward 4:	Jason Peterson, Alderman

ADMINISTRATION

City Administrator:	Bart Olson
Director of Finance/Treasurer:	Rob Fredrickson
Director of Public Works:	Eric Dhuse
Chief of Police:	Jim Jensen
Director of Community Development:	Krysti Barksdale-Noble
Director of Parks & Recreation:	Tim Evans
Library Director:	Shelley Augustine
Assistant City Administrator:	Erin Willrett
City Clerk:	Lisa Pickering

United City of Yorkville

Fiscal Year 2021 Organization Structure



***Fire services are provided by the Bristol Kendall Fire Protection District and wastewater transportation and treatment services are provided by the Yorkville Bristol Sanitary District. These districts are both separate taxing bodies which the City has no direct authority over.**

United City of Yorkville

800 Game Farm Road
Yorkville, Illinois 60560
Telephone: (630) 553-4350
www.yorkville.il.us

October 19, 2021

To The Honorable John Purcell, Mayor
Members of the City Council
Citizens of Yorkville, Illinois

The Comprehensive Annual Financial Report of the United City of Yorkville, Illinois, for the Fiscal Year ended April 30, 2021, is hereby submitted. The submittal of this report complies with Illinois state law which requires that the City issue a report on its financial position and activity presented in conformance with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted auditing standards (GAAS) by an independent firm of licensed certified public accountants.

This report consists of management's representations concerning the finances of the City. Consequently, responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with management. We believe the data, as presented, is accurate in all material respects; and is presented in a manner designed to fairly set forth the financial position of the United City of Yorkville. The results of operations as measured by the financial activity of its various funds; and all disclosures necessary to enable the reader to gain a reasonable understanding of the City's financial affairs have been included.

The City's financial statements have been audited by Lauterbach & Amen LLP, a firm of licensed certified public accountants. The goal of the independent audit is to provide reasonable assurance that the financial statements of the United City of Yorkville for the fiscal year ended April 30, 2021, are free of material misstatements. The independent audit involves examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluation of the overall financial statement presentation. The independent auditors concluded, based upon their audit procedures, that there was a reasonable basis for rendering an unmodified ("clean") opinion that the City's financial statements for the fiscal year ended April 30, 2021, are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

This report includes all funds of the City (primary government), including the Yorkville Public Library and Parks and Recreation Department, and its pension trust fund, the Yorkville Police Pension Fund. The Police Pension was determined to be a pension trust fund due to its fiduciary and fiscal relationship with the City, as its singular purpose is to provide retirement benefits to the City's sworn police officers. The City does not have any other reporting units that would qualify as a discretely presented component unit in the separate column of the government-wide financial statements.

Generally accepted accounting principles require that management provide a narrative introduction, overview and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This transmittal letter is designed to complement the MD&A and should be read in conjunction with it. The City's MD&A can be found immediately following the report of the independent auditors.

Profile of the United City of Yorkville

Yorkville was first settled in 1833 and has been the county seat of Kendall County since 1859. The Village of Yorkville was incorporated in 1874, with a population of approximately 500 people. At that time, the Village of Yorkville only encompassed land on the south side of the Fox River; another village, called Bristol, was located directly across from Yorkville on the north side of the river. In 1957 the two villages merged, via referendum, to form the United City of Yorkville. The City, a non-home rule community as defined by the Illinois Constitution, covers approximately 22 square miles with a 2020 census population of 21,533 residents. The City is located in central Kendall County, about 45 miles southwest of Chicago, Illinois. The City is primarily agricultural and residential in nature, with housing stock consisting of approximately 7,700 single family (includes townhomes, condominiums and duplexes) dwelling units.

The City operates under a Mayor/Council form of government, as defined in Illinois State Statutes. The legislative authority of the City is vested in an eight-member council, each elected from their respective wards to overlapping four-year terms. The Mayor is elected at large to a four-year term. The Mayor appoints, with Council consent, a City Administrator to manage the day-to-day operations of the City.

The City provides a full range of municipal services with 82 full-time, and 44 part-time employees working in public safety, public works (including water distribution and sewer services), community development, building and zoning, parks and recreation, library services and general administration. The City maintains approximately 140 miles of streets and 300 acres of park and green space. Solid waste collection and recycling services are administered by the City through a contract with a private firm. Sewage treatment and fire protection services are provided by the Yorkville Bristol Sanitary District and the Bristol Kendall Fire Protection District; both of which are independent units of government.

The Yorkville Public Library is operated under an appointed board, which is separate from the City Council. Library Board positions are appointed by the Mayor and expire on a rotating basis. Library operations are administered by the Library Board; however, the City is required by state statute to include within its property tax levy and budget, the Library's requests. The Library does not have authority to issue debt and must do so through the City.

Accounting System and Budgetary Control

Management of the United City of Yorkville is responsible for establishing and maintaining an internal control structure. The internal control structure is designed to ensure that the assets of the City are protected from loss, theft or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. This structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived; and (2) the valuation of costs and benefits requires estimates and judgments by management.

In addition, the United City of Yorkville maintains budgetary controls. The objective of these budgetary controls is to ensure compliance with legal provisions embodied in the annual appropriated budget approved by the City's governing body. Activities of the general fund, special revenue funds, capital project funds, debt service funds and enterprise funds are included in the annual appropriated budget. The level of budgetary control (that is, the level at which expenditures cannot legally exceed the appropriated amount) is established at the fund level for all budgeted funds. The budget process begins in the fall when department heads begin to prepare line-item budgets for their respective departments for the upcoming fiscal year, before submitting them to the City Administrator and Finance Director. Throughout the fall and winter, the proposed budgets from each department are discussed and revisions are made based on the projected financial outlook and priorities of the City. A draft budget is then prepared and presented to City Council in February or March. A public hearing is required to be held on the budget prior to formal adoption by City Council. The annual budget must be adopted before May 1st, which is the beginning of the City's fiscal year.

Local Economy

Yorkville is home to several large and midsized manufacturers and retailers including the Wm. Wrigley Jr. Company, Boombah, Inc., Newlywed Foods, Jewel/Osco, Target, Kohl's, Home Depot and Menards. It is also home to Raging Waves, Illinois largest water park. The City's administrative staff, in conjunction with its economic development consultant, continues to work on attracting and retaining commercial and industrial business to the City.

Building permits were issued for several commercial developments during the current fiscal year, with a number of new unique businesses opening in established retail developments. Stretch Club, a physical therapy clinic, opened recently in the Yorkville Marketplace development at Illinois Route 47 and US Route 34. An additional wellness-oriented business, called Breathe Salt Therapy, began operations in the Yorkville Business Center located at Cannonball Trail and Illinois Route 47. There were also two new food establishments (Jay's Seafood Grill and The Ice Cream Dessert Shop) that opened for business in the Cimarron Ridge commercial development along US Route 34; both filling vacant space within the retail strip. Finally, Juicehead Smoothies and Coffee Bar opened in the City's downtown area, offering a café style beverage experience in the former Mongolian 211 restaurant location.

The local housing market continues to improve, as the number of new single family building permits more than doubled (390) in fiscal year 2021, compared with 175 new housing starts in the previous fiscal year; with early figures from the subsequent fiscal year suggesting an even larger amount of new housing starts despite the ongoing COVID-19 pandemic. After peaking with a post-recessionary high of 362 in 2010, foreclosures in the City have fallen an average of 18% per annum since 2011, to finish at 51 in 2019. Foreclosures totaled 19 in 2020, however, this figure was undoubtably skewed as a result of the forbearance options offered to homeowners pursuant to the Coronavirus Aid, Relief and Economic Security Act (CARES Act) passed by Congress in March of 2020.

Despite the many budgetary challenges facing the State of Illinois, including looming debt and pension obligations, the City has seen multiple signs that the local economy is continuing to remain resilient. The U.S. Census Bureau 5-year Community Survey estimates report that the City has a median household income of $97,610. This compares to $96,563 for Kendall County and $65,886 for the State of Illinois. Yorkville's unemployment rate was 8.5% on average throughout calendar year 2020, which is in line with Kendall County at 8.4%, and lower than the State average unemployment rate of 9.5%. The equalized assessed valuation (EAV) of taxable property within the City continues to steadily rise, increasing by an average of 7% from 2016 through 2020. In addition, the City's sales tax base continues to expand, as municipal sales tax proceeds have continued to exceed prior year amounts by an average annualized growth rate of approximately 5% since fiscal year 2014.

Despite the onset of the COVID-19 pandemic, the City's financial position remains strong with sufficient reserve levels. Management is pleased to report that early estimates regarding revenue losses did not come to fruition in the current fiscal year, with most material revenue streams exceeding prior year actuals. The City's commercial base is primarily comprised grocery, food and home improvement enterprises. These types of establishments fared particularly well during the first several months of fiscal year 2021, as demand for groceries and other household items increased significantly with the onset of COVID-19. Moreover, after initial setbacks stemming from pandemic, local restaurants and other retailers began to resume operations as the fiscal year progressed, which helped to further solidify the City's sales tax base.

Major Initiatives

In fiscal year 2021 the City continued to pursue several major initiatives, including:

- **Property Acquisition** - In November of 2020, the City acquired a three-story building located at 651 Prairie Point Drive on the City's northeast side. This 43,000 square foot facility, which was purchased for $1.9 million, is anticipated to serve as Yorkville's new City Hall / Police Station beginning in the latter half of calendar year 2022. Additionally, in December the City purchased a vacant lot immediately adjacent to the Prairie Point property for $65,000, in order to facilitate future growth in municipal operations.

- **Comprehensive Plan** – Early in Fiscal Year 2021, City Council approved an amendment to the existing 2016 Comprehensive Plan. A majority of the revisions were made to the future land use map, as certain developments were approved that differed from their designated preferred land use. Furthermore, with the improvements to Eldamain Road and funding for a bridge over the Fox River in progress, the City altered some land at the northern edge of the planning boundary for manufacturing uses to better align with Kendall County's future plans.

- **Lift Station Improvements** – Five of the seven Yorkville lift stations were enhanced over the course of fiscal year 2021, as part of a three-year program to update all lift stations within the City. These lift stations, located at Fox Hill, River's Edge, Prestwick, Bruell Street and Raintree Village, were augmented with new supervisory control and data acquisition (SCADA) systems. Additionally, the Blackberry Creek North lift station was completely rebuilt to include modern pumps, wiring, and a modern SCADA system to monitor operations. Improvements were also completed at the Countryside lift station, where the interior walls of the pumping area were repainted, as the previous coating system had failed and was peeling off the walls due to the corrosive environment.

- **Local Business Support Grants -** The City participated in two grant programs over the course of the current fiscal year designed to assist local businesses mitigate the economic impact of COVID-19 pandemic. The first of these grants was the Downstate Small Business Stabilization Program, which provided working capital funds up to $25,000 for non-franchise Yorkville businesses with less than 50 employees. The City awarded grant proceeds to sixteen local businesses, for a total of $334,250. The second program, known as the Economic Support Payments Grant Program, provided financial assistance to businesses that have experienced significant disruption or temporary closure of their business attributable to COVID-19, from the period March 1, 2020 through December 30, 2020. Amounts totaling $400,000 were awarded to forty-two businesses. Both programs were fully reimbursable to the City by the State, which leveraged Federal funding via the CARES Act to facilitate the programs.

- **Road to Better Roads (RTBR) Program and Other Capital Projects** – Based on the findings of an updated road study conducted in 2018 and in an effort to address ongoing infrastructure needs, the City continued its annual capital improvement program in the current fiscal year, commonly referred to as the "Road to Better Roads" program. Construction costs in fiscal year 2021 totaled approximately $750,000 for roadway improvements, consisting of pavement milling and overlays on several local streets. In addition, the City continued work on watermain improvements at Appletree Court and Elizabeth Street; completed a water risk and resilience assessment pursuant to EPA guidelines; commenced preliminary engineering on Fox Hill Roadway Improvements; concluded playground installations at Beecher Center, Caledonia Autumn Creek and Purcell Parks; and purchased several new vehicles, including two SUV police squads and the refurbishment of a dump truck for the Streets Department.

Long-Term Financial Planning

Management annually develops five-year financial forecasts for all budgeted funds. These forecasts serve as the basis for identifying not only future capital needs, but future operational and personnel requirements as well. Revenue and expenditure trends will be evaluated and prioritized based on the goals set forth by the City Council. It is the intent of management that this five-year financial forecast will serve as the foundation for each year's corresponding budget document.

Relevant Financial Policies

In order to ensure that the City continues to meet its immediate and long-term service goals, several financial policies and procedures have been implemented by management. Some of the more prescient policies include the following:

- Issue a Comprehensive Annual Financial Report within 180 days of the end of each fiscal year that complies with generally accepted accounting principles.

- Monthly revenue, expenditure and cash balance reporting for all funds. These financial reports ensure that the City Council is made aware of any variances from the appropriated budget. In addition, the City's budget document continues to be revised in order to enhance transparency.

- Maintain the "Information for Citizens" webpage on the City's website, which contains a wide array of financial information including budget and audit information; annual treasurer's reports; bill lists; employee salary and benefit information; tax rates and fees; and other nonfinancial information.

- A fund balance policy establishing benchmark reserve levels to be maintained in the City's various funds, in order to promote financial stability and provide adequate cash flow for operations.

- A pension funding policy which defines the manner in which the City funds the long-term cost of benefits promised to plan participants and defines the calculation of the actuarial determined contribution (ADC) to the Yorkville Police Pension and Illinois Municipal Retirement Funds.

- An investment policy which invests public funds in a manner which protects principal, maximizes return for a given level of risk and meets the daily cash flow needs of the City.

- A capital asset policy which establishes the capitalization thresholds and estimated useful lives of capital assets.

- A purchasing policy to ensure that goods and services are obtained in a timely manner at the lowest possible cost.

- A post issuance compliance policy to ensure that City remains in compliance with federal tax laws after the issuance of tax-exempt debt.

- A credit card policy for all City related credit card purchases. All City employees are required to sign a credit card policy acknowledgement form prior to receiving a City issued credit card.

Pension Trust Funds and Post-Employment Benefits

Two pension plans are established by State Statute, which cover City employees. The benefits and funding of each plan are determined by state statute, and each plan provides retirement, disability and death benefits for participants.

The Police Pension Fund is funded through an annual property tax levy, employee contributions and investment earnings. The Illinois Municipal Retirement Fund (IMRF) pension plan covers civilian full-time employees. Funding for IMRF is made through contributions from the employer (actuarially determined annually by IMRF) and employees of the City (established at 4.5% of total compensation). Employees covered under both pension plans also contribute to Social Security (6.2% of salary capped annually) and Medicare (1.45% of total compensation). The City also provides post-retirement health care benefits for retirees and their dependents, which is financed on a pay-as-you-go basis, with retirees paying 100% of their health care premiums. The notes to the financial statement provide more information pertaining to employee pensions and post-retirement health care benefits.

Awards and Acknowledgments

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the United City of Yorkville for its comprehensive annual financial report for the fiscal year ended April 30, 2020. This was the 10th year that the City has received this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. The report must also satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The preparation of the comprehensive annual financial report would not have been possible without the dedicated services of the City department heads and staff. The entire finance department staff is extended a special appreciation for all of their assistance in the completion of the annual audit.

Additionally, we would like to acknowledge the Mayor and City Council for their leadership and support in planning and conducting the financial operations of the City, which has made preparation of this report possible.

Respectfully submitted,



Bart Olson
City Administrator



Rob Fredrickson, CPA
Director of Finance

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

United City of Yorkville
Illinois

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

April 30, 2020

Christopher P. Morrill

Executive Director/CEO

INDEPENDENT AUDITORS' REPORT

This section includes the opinion of the City's independent auditing firm.

Lauterbach & Amen, LLP
CERTIFIED PUBLIC ACCOUNTANTS
668 N. RIVER ROAD • NAPERVILLE, ILLINOIS 60563
PHONE 630.393.1483 • FAX 630.393.2516
www.lauterbachamen.com

INDEPENDENT AUDITORS' REPORT

October 19, 2021

The Honorable City Mayor
Members of the City Council
United City of Yorkville, Illinois

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of and for the year ended April 30, 2021, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the City's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the United City of Yorkville, Illinois, as of April 30, 2021, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis as listed in the table of contents and budgetary information reported in the required supplementary information as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the United City of Yorkville, Illinois' basic financial statements. The introductory section, other supplementary information, supplemental schedules, and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The other supplementary information and supplemental schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information and supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Matters – Continued

Other Information – Continued

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 19, 2021, on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

Lauterbach & Amen, LLP

LAUTERBACH & AMEN, LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the United City of Yorkville ("City"), we offer readers of the City's financial statements this narrative overview and analysis of the financial activities of the City for the fiscal year ended April 30, 2021. Since the Management's Discussion and Analysis ("MD&A") is designed to focus on the current year's activities, resulting changes and currently known facts, it should be read in conjunction with the Letter of Transmittal, which can be found in the introductory section of this report, and the City's financial statements, which can be found in the basic financial statements section of this report.

Financial Highlights

- The assets/deferred outflows of the United City of Yorkville exceeded its liabilities/deferred inflows at the close of the fiscal year by $157,749,147 (*net position*). Of this amount, $148,867,700 was invested in capital assets, net of related debt; $2,083,335 was restricted for specific activities such as highways and streets, special service areas, land cash and library operations. Remaining net position, totaling $6,798,112, was unrestricted.
- The City's aggregate net position increased by $9,553,626 or 6.4% during the fiscal year ended April 30, 2021. Of this increase, $6,416,250 is attributable to governmental activities and $3,137,376 is attributable to business-type activities.
- Total revenues increased by 8.9% from $33,263,013 to $36,223,366. Overall expenses totaled $26,669,740, which is a decrease of 3.5% over the preceding fiscal year.
- At the culmination of the current fiscal year, the City's governmental funds reported combined fund balances of $10,226,689, compared to $8,213,290 as reported on April 30, 2020.
- For the fiscal year ended April 30, 2021, the City's General Fund reported an increase in fund balance of $1,660,294. Total ending fund balance in the General Fund was a positive $9,172,354.
- Both the City's Water and Sewer Funds reported positive changes in net position during the current fiscal year, reporting ending balances of $36,427,693 and $34,902,097, respectively.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the City's basic financial statements. The City's basic financial statements are comprised of three components: (1) government-wide financial statements, (2) fund financial statements, and (3) notes to the financial statements. The governmental-wide statements are divided between governmental activities and business-type activities. The perspective of the fund financial statements presents financial information for individual funds established by the City for specific purposes. They are categorized into three distinct groups: governmental, proprietary and fiduciary. This report also contains other supplementary information in addition to the basic financial statements.

Government-Wide Financial Statements

The government-wide financial statements are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business. The Statement of Net Position presents information on all of the City's assets/deferred outflows and liabilities/deferred inflows, with the difference between the two reported as net position. Over time increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The Statement of Activities presents information showing how the City's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods.

Both of the government-wide financial statements distinguish functions of the City that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or a significant portion of their costs through user fees and charges (business-type

activities). The governmental activities of the City include general government (legislative, administration and finance), public safety (police), community development, public works (street operations, health and sanitation) and parks and recreation. Property taxes, shared state taxes and local utility taxes finance the majority of these services. Business-type activities reflect private sector type operations, where the fee for service typically covers all or most of the cost of operations, including depreciation. The business-type activities of the City include water and sewer operations.

Fund Financial Statements

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of the United City of Yorkville can be divided into three categories: governmental funds, proprietary funds and fiduciary funds.

Governmental Funds

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the City's near-term financing decisions. Both the Governmental Fund Balance Sheet and the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

The City maintains twelve individual governmental funds. Information is presented separately in the Governmental Fund Balance Sheet and in the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund Balances for the General Fund, Library Fund, Parks and Recreation Fund and the Citywide Capital Fund, all of which are considered to be major funds. Information from the City's other eight governmental funds are combined into a single column presentation. Individual fund information for these non-major governmental funds is provided elsewhere in the report.

The United City of Yorkville adopts annual budgets for its General Fund, Library Fund, Parks and Recreation Fund and Citywide Capital Fund. A budgetary comparison schedule has been provided for all four funds to demonstrate compliance with this budget.

Proprietary Funds
The City maintains one type of proprietary fund (enterprise funds). Enterprise funds are used to report the same functions presented as business-type activities in the government-wide financial statements. The City uses enterprise funds to account for its water and sewer operations.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the Water Fund (major fund) and the Sewer Fund (major fund).

Fiduciary Funds
Fiduciary funds are used to account for resources held for the benefit of parties outside the City. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support the City's operations. The City maintains one fiduciary trust fund, the Police Pension Fund. The accounting used for fiduciary funds is similar to that used by proprietary funds.

Notes to the Financial Statements

The notes provide additional information that is essential to a full understanding of the information provided in the government-wide and fund financial statements.

Other Information

In addition to the basic financial statements, this report also includes certain required supplementary information related to budgetary information and the City's progress in funding its obligation to provide pension and other post-employment benefits to its employees. Required non-major fund information can be found following the required supplementary information.

The combing statements referred to earlier in connection with non-major governmental funds are presented immediately following the required supplementary information on pensions.

GOVERNMENT-WIDE FINANCIAL ANALYSIS

Statement of Net Position

The following chart reflects the condensed Statement of Net Position (in millions):

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2021	**2020**	**2021**	**2020**	**2021**	**2020**
Assets:						
Current Assets	$ 20.9	$ 18.1	$ 5.0	$ 4.8	$ 25.9	$ 22.9
Capital Assets	100.5	97.9	70.2	70.3	170.7	168.2
Other Assets	0.3	-	11.1	11.1	11.4	11.1
Total Assets	121.6	116.0	86.4	86.2	207.9	202.2
Deferred Outflows	1.8	2.7	2.9	0.2	4.7	2.9
Total Assets/Deferred Outflows	**123.4**	**118.7**	**89.3**	**86.3**	**212.7**	**205.1**
Liabilities:						
Current Liabilities	6.5	6.0	3.1	3.6	9.6	9.6
Long-term Liabilities	20.6	25.1	14.5	14.5	35.1	39.6
Total Liabilities	27.0	31.2	17.6	18.0	44.7	49.2
Deferred Inflows	10.0	7.6	0.3	0.1	10.2	7.7
Total Liabilities/Deferred Inflows	**37.0**	**38.7**	**17.9**	**18.2**	**54.9**	**56.9**
Net Position:						
Net Investment in Capital Assets	90.4	86.4	58.4	55.4	148.8	141.8
Restricted	2.1	1.9	-	-	2.1	1.9
Unrestricted (Deficit)	(6.0)	(8.3)	12.9	12.8	6.9	4.5
Total Net Position	**$ 86.5**	**$ 80.0**	**$ 71.3**	**$ 68.2**	**$ 157.8**	**$ 148.2**

The City's combined net position increased by $9.5 million, from $148.2 million to $157.8 million, during the current fiscal year. This change is the result of $6.4 million and $3.1 million increases in the net position of governmental activities and business-type activities, respectively. The increase in the net position of governmental activities was due to reductions in long-term liabilities and an increase in capital assets. Capital asset additions in the current fiscal year consisted primarily of developer donations, the acquisition of property, City constructed roadway improvements and unfinished infrastructure that was still being constructed at fiscal year-end. Long-term liabilities for governmental activities decreased by $4.5 million due to continued amortization of debt and the sharp reduction in the net pension liability for Police Pensions. The Police net pension liability declined by $2.2 million over the course of fiscal year 2021, due to its robust investment returns of a positive 26.9%, net of fees. Restricted net position for governmental activities increased by $0.2 million, as the City completed its draw down on accumulated property tax proceeds used to fund employer contributions related to IMRF. The enhanced net position of business-type activities was due mainly to the continued amortization of long-term debt applicable to the Water and Sewer Funds; and the addition of deferred asset retirement obligations totaling $2.7 million, consisting of water towers and wells, pursuant to GASB Statement Number 83.

The largest portion of the United City of Yorkville's net position, totaling $148,867,700, reflects its investment in capital assets (e.g., land, infrastructure, buildings, vehicles and equipment), less any related debt used to acquire or construct those assets that are still outstanding. The City uses its capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although the United City of Yorkville's investment in capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. The final component of the United City of Yorkville's net position (1.3%) represents resources that are subject to external restrictions on how they

may be used. At fiscal year-end, total restricted net position was comprised as follows: 38.3% is for prospective library operations; 59.7% is for upcoming road maintenance and improvement projects relating to the City's motor fuel tax (MFT) program; 1.5% is for future land cash related park projects; and 0.5% is restricted for special service area use.

As of April 30, 2021, the City was able to report positive balances in all three categories of net position for its business-type activities. Unrestricted net position for governmental activities finished fiscal year 2021 at negative $6,122,164. This was an increase of approximately $2.3 million in comparison to the prior fiscal year, resulting from better than expected operating results. Unrestricted net position for business-type activities ended the current fiscal year at $12,920,276, a nominal increase of $0.1 million, as the result of enhanced connection fee revenue directly related to the increase in new housing starts.

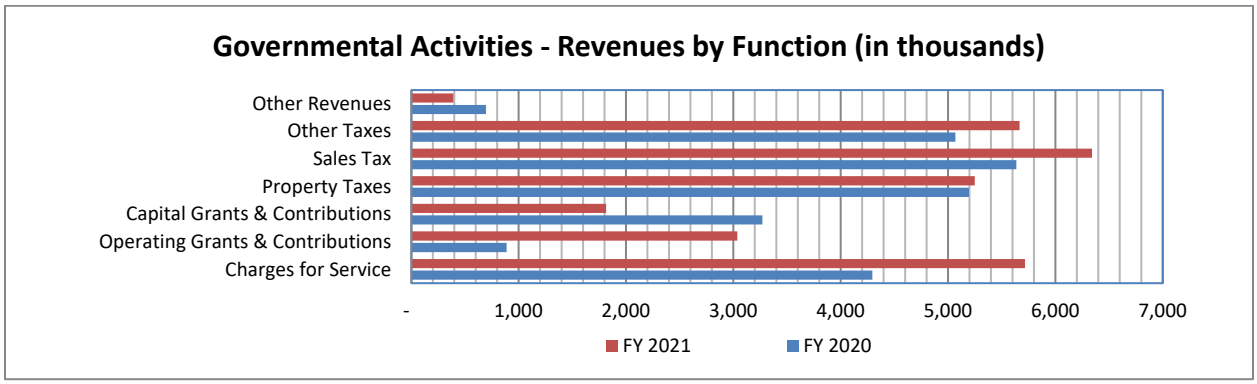
Activities

The following table reflects the revenue and expenses of the City's governmental and business-type activities (in millions).

	Governmental Activities		Business-Type Activities		Total Primary Government	
	2021	**2020**	**2021**	**2020**	**2021**	**2020**
Revenues						
Program Revenues:						
Charges for Services	$ 5.7	$ 4.3	$ 6.8	$ 6.0	$ 12.5	$ 10.3
Operating Grants & Contributions	3.0	0.9	-	-	3.0	0.9
Capital Grants & Contributions	1.8	3.3	1.1	2.0	2.9	5.3
General Revenues:						
Property Taxes	5.2	5.2	-	-	5.2	5.2
Other Taxes	12.0	10.7	-	-	12.0	10.7
Other Revenue	0.4	0.7	0.1	0.2	0.5	0.9
Total Revenues	**$ 28.2**	**$ 25.0**	**$ 8.0**	**$ 8.2**	**$ 36.2**	**$ 33.3**
Expenses						
General Government	6.0	6.2	-	-	6.0	6.2
Library	1.0	1.0	-	-	1.0	1.0
Parks & Recreation	2.5	2.7	-	-	2.5	2.7
Public Safety	5.7	6.5	-	-	5.7	6.5
Community Development	0.8	0.8	-	-	0.8	0.8
Public Works	5.1	4.9	-	-	5.1	4.9
Interest Long-Term Debt	0.4	0.5	-	-	0.4	0.5
Water	-	-	3.4	3.3	3.4	3.3
Sewer	-	-	1.7	1.8	1.7	1.8
Total Expenses	**$ 21.5**	**$ 22.6**	**$ 5.1**	**$ 5.0**	**$ 26.7**	**$ 27.6**
Excess(Deficiency) before Transfers	$ 6.7	$ 2.5	$ 2.9	$ 3.2	$ 9.6	$ 5.6
Transfers	(0.3)	(0.7)	0.3	0.7	-	-
Change in Net Position	**$ 6.4**	**$ 1.8**	**$ 3.1**	**$ 3.9**	**$ 9.6**	**$ 5.6**
Net Position, Beginning	**$ 80.0**	**$ 78.2**	**$ 68.2**	**$ 64.3**	**$ 148.2**	**$ 142.6**
Net Position, Ending	**$ 86.4**	**$ 80.0**	**$ 71.3**	**$ 68.2**	**$ 157.7**	**$ 148.2**

Governmental Activities

Revenues



Total governmental activities revenue for the current fiscal year was $28,219,399, compared to $25,050,720 in the previous fiscal year, an increase of 12.6%.

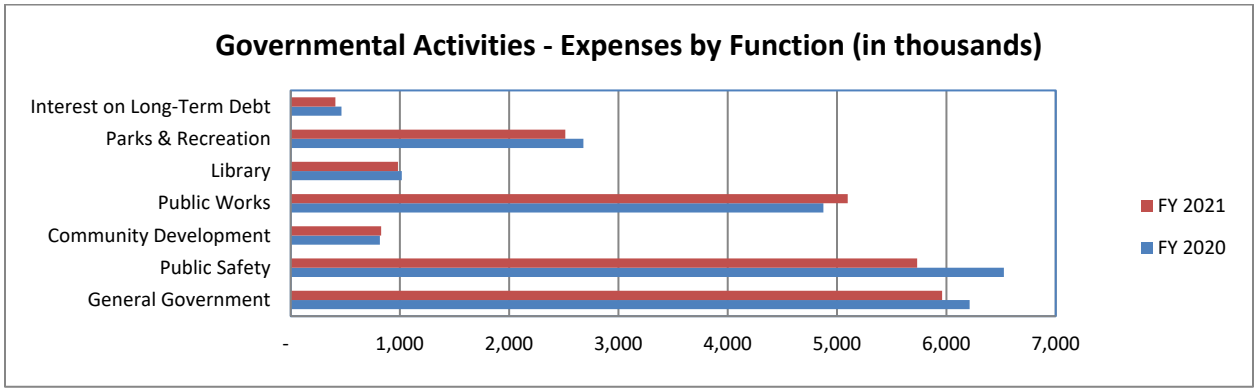
Property taxes, one of the City's principal revenue sources (18.6% of aggregate revenues), totaled over $5.2 million in fiscal year 2021. Property taxes support various governmental activities, including the City's annual contribution to the Yorkville Police Pension Fund. The City contributed $1,230,604 to the Police Pension Fund in the current fiscal year, fully funding its actuarially determined contribution amount, as pursuant to its pension funding policy. Total property tax revenues increased nominally by 1.0%, as the Library increased its levy for operations, and the second TIF in the downtown area continued to generate additional incremental revenue. The City increased its requested levy as well, but only by the increment generated solely from new construction. This resulted in additional proceeds of approximately $88,000, which were used to offset the increased employer contribution to the Yorkville Police Pension Fund.

Sales taxes were particularly vigorous during the latter half of the fiscal year, due to the resiliency of the local economy and statutory changes regarding how these proceeds are sourced. In the past, tax revenues from products purchased on the internet that were used or consumed in Illinois, were distributed to municipalities on a per-capita basis. With the new sourcing law that went into effect July 1, 2020, most on-line retailers are now required to collect both State and locally imposed sales taxes on products being used or consumed within Yorkville. This was followed by an additional requirement, effective January 1, 2021, that on-line retailers begin collecting non-home rule sales taxes as well. The effect of these changes was that the City received $6.3 million in sales taxes in fiscal year 2021, which resulted in a remarkable year-over-year increase of 12.5%. The "other taxes" classification includes several revenue sources, including income, excise, utility, business district, video gaming and state use taxes. The other taxes classification increased by 11.8% in the current fiscal year, as most of these revenue streams benefited from the increased demand caused by the pandemic. Most notably income and local use taxes increased precipitously over the course of the current fiscal year, posting year-over-year gains of $600,009 and $190,108, respectively.

Aggregate charges for service revenues increased by 33.1% in the current fiscal year, as overall license and permit fees improved by over 20.0%, spurred on by the record-setting pace of new housing starts. The "other revenues" classification, which primarily consists of interest income of various reimbursements related to capital projects declined significantly in fiscal year 2021, due to a low interest rate environment and fewer capital project reimbursements from outside sources.

Operating grant and contribution revenues increased significantly ($2.1 million) in comparison to fiscal year 2020 amounts, as the City received $784,715 in Local Cure proceeds, in addition to other federally funded grant awards. Capital grants and contributions decreased considerably ($1.5 million), as the City accepted fewer capital contributions from developers in the current fiscal year.

Expenses

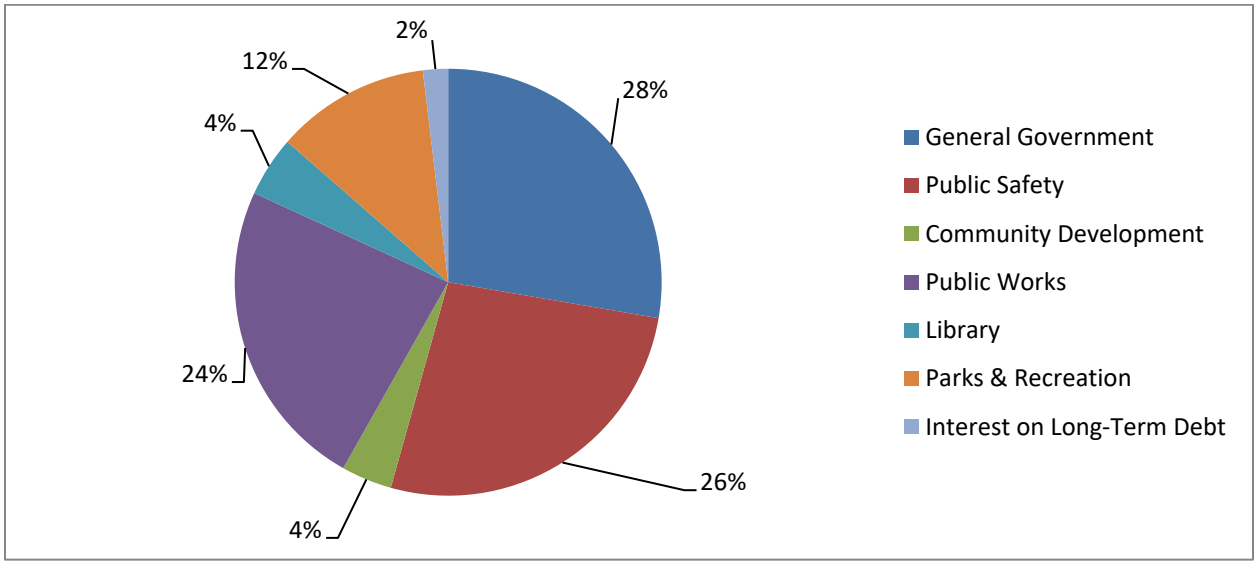


Total expenses amounted to $21,524,510 for governmental activities in fiscal year 2021. This reflects a decrease of 4.7% from the prior year. The public safety and general government functions comprised the greatest proportion of governmental activities expenses, accounting for a combined 54.3% of the total. Other primary functional areas include public works and parks and recreation, which accounted for 23.7% and 11.7%, respectively, of total governmental activities expense.

Public works expenses totaled $5.1 million for the fiscal year ended April 30, 2021, which is a 4.6% increase over the prior year. This increase is primarily attributable to enhanced funding for vehicle and equipment purchases. Public safety expenses decreased by 12.2%, due to savings resulting from a temporarily vacated position and a decrease in current year pension expense. General government expenses decreased by 4.1%, as last year's amount was skewed from a one-time incentive payout of $700,000 to the developer of a new hotel located in the City's Countryside TIF district.

Community development expenses increased marginally by 1.4%, due to inflationary increases in personnel costs. Parks and Recreation expenses were down 6.2%, due to increased capitalizable costs related to playground improvements at various parks throughout Yorkville. Interest on long-term debt declined by 11.9%, as the City continues to pay down debt related to governmental activities.

The following pie chart shows the breakdown of governmental activities expenses by function.



Business-Type Activities

Business-type activities increased the City's net position by $3,137,376. For the current fiscal year, 84.9% of all business-type activity revenue was generated from fees for services relating to the City's water and sewer utilities. Charges for services totaled $6.8 million in fiscal year 2021, which represents an increase of approximately $750,000 (12.5%) in comparison to the prior year. This considerable increase in charge for service revenue was the result of enhanced connection fee revenue stemming from the rise in new housing starts. Water sales revenue also increased by 8.2%, presumably due to residents deferring travel plans over the Summer of 2020 as a consequence of the ongoing COVID-19 pandemic. These revenue enhancements helped facility the City's decision to forego all late payment penalties on utility related charges throughout fiscal year 2021, in an effort to help mitigate the economic impact of the pandemic on local residents and businesses.

Capital grant and contribution revenue for business-type activities in fiscal year 2021 decreased significantly, as fewer water and sewer related infrastructure assets were accepted from developers relative to the prior year. "Other revenues", which are comprised of rental income, reimbursements, proceeds from capital asset sales, interest income and miscellaneous items; decreased by $90,601, due to increased OPEB expense, lower interest earnings and the fact that last year's amounts were heightened by the inclusion of recovered investment proceeds. Net transfers totaled a positive $278,639, which was used to fund debt service payments.

FINANCIAL ANALYSIS OF THE GOVERNMENT'S FUNDS

Governmental Funds - The focus of the United City of Yorkville's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the United City of Yorkville's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year. At the end of the current fiscal year, the United City of Yorkville's governmental funds reported combined ending fund balances of $10,226,689, an increase of $2,013,399 over last year's totals. Approximately 98% of fund balance for the governmental funds is identified between the restricted, assigned and unassigned categories. Restricted fund balance, which accounts for 20.4% of total fund balance, includes amounts restricted for library operations, special service areas, land cash and the City's motor fuel tax program. The bulk of unassigned fund balance, which accounts for 88.2% of total governmental fund balance, is in the General Fund ($9.0 million); with the majority of the negative equity portion of $2.7 million residing in the City's three TIF Funds. Remaining fund balance for the governmental funds are allocated as follows: $190,271 (1.9%) is nonspendable (i.e., prepaids); $43,801 (0.4%) is committed for parks and recreation activities; and $1,605,360 (15.7%) is assigned to various capital projects, vehicles and equipment. Higher than anticipated revenues, coupled with lower than expected contractual service expenditures, accounted for the positive surplus of $1.66 million in the General Fund.

The Library Fund reported a positive fund balance of $807,221 at the end of fiscal year 2021, which represents an increase of $105,031 over last year's fund balance amount of $702,190. Property taxes used to finance library operations, which account for 94.7% of total library operational revenues, increased by $34,167 (4.9%). Aggregate operational expenditures decreased slightly by $5,347 (0.3%), as a result of decreased spending on building maintenance and a reduction in hours for part-time personnel due to the pandemic.

The Parks and Recreation Fund reported a deficit in the amount of $338,485 in the current fiscal year, thus decreasing fund balance from $411,485 to $73,000. The Parks and Recreation Fund, more so than any other fund in the City, has been the most negatively impacted by the pandemic, due to the very social nature of its revenue generating activities. Child development, concession and special event revenues declined by 35.7%, 89.1% and 88.6%, respectively, as these programs were modified to comply with social distancing guidelines. Operational expenditures in the Parks and Recreation Fund increased marginally by 1.1%, as a consequence of augmented vehicle and equipment chargebacks and increases in operating supplies, stemming from the pandemic.

The Citywide Capital Fund ended fiscal year 2021 with a deficit of $468,586, which decreased fund balance from $588,155 to $119,569. Aggregate revenues exceeded prior year amount by $369,076, as permit fees more than doubled to finish at $486,868. It was a similar story on the other side of the ledger, as expenditures increased by $1,898,479 due to increased capital project spending. Capital project spending for the year totaled $2,399,218, and included various road projects, including a joint project with the State on Illinois Route 71, between Route 47 and Route 126.

GENERAL FUND BUDGETARY HIGHLIGHTS

The chart below compares the fiscal year 2021 final budget to the actual results of the City's General Fund.

Fiscal Year 2021 General Fund Budgetary Highlights

	Final Budget	Actual	Over (Under)	Actual as % of Budget
Revenues				
Taxes	$ 11,640,828	$ 11,970,764	$ 329,936	103%
Intergovernmental	3,173,484	5,016,435	1,842,951	158%
Licenses, Permits and Fees	474,500	602,328	127,828	127%
Charges for Services	1,702,046	1,743,212	41,166	102%
Fines and Forfeitures	113,000	109,268	(3,732)	97%
Interest	89,878	12,173	(77,705)	14%
Miscellaneous	108,000	106,560	(1,440)	99%
Total Revenues	$ 17,301,736	$ 19,560,740	$ 2,259,004	113%
Expenditures				
General Government	$ 5,897,133	$ 5,220,130	$ (677,003)	89%
Public Safety	6,108,720	5,686,416	(422,304)	93%
Community Development	942,154	828,098	(114,056)	88%
Public Works	2,512,538	2,871,863	359,325	114%
Total Expenditures	$ 15,460,545	$ 14,606,507	$ (854,038)	94%
Excess of Revenues over Expenditures	$ 1,841,191	$ 4,954,233	$ 3,113,042	269%
Other Financing Sources (Uses)	(2,156,837)	(3,293,939)	1,137,102	153%
Net Change in Fund Balance	$ (315,646)	**$ 1,660,294**		
Fund Balance - Beginning of Year		7,512,060		
Fund Balance - End of Year		**$ 9,172,354**		

The General Fund is the City's primary operating fund and the largest source of funding for the day-to-day activities of its various departments. Actual revenues exceed budgetary amounts by $2,259,004, as taxes, intergovernmental, licenses & permits, miscellaneous and charges for service revenues proved to be more robust than initially anticipated. Aggregate building permits totaled $735,653 in the current fiscal year, of which $495,059 was retained in the General Fund to cover inspection related personnel and operating costs within the Community Development Department. Per the City's past practice, remaining building permit proceeds were allocated to the Citywide Capital Fund, to assist in the facilitation of future capital projects. Despite the continual increase in General Fund cash reserves, investment income fell well below budgetary amounts in the current fiscal year, as interest rates continue to lag at historically low levels since the onset of the COVID-19 pandemic in March of 2020.

Actual General Fund expenditures for the year were $854,038 lower than budget ($14,606,507 actual compared to $15,460,545 budgeted), as all departments within the General Fund, with the exception of Street Operations and the Health and Sanitation Department, were under their respective appropriated

budgets for the fiscal year ended April 30, 2021. Due to contractual changes stipulated in the refuse contract, the Health & Sanitation Department exceeded budgetary amounts by approximately $57,000; however, this was essentially offset by garbage surcharge revenues, which resulted in a nominal net operating deficit of $5,524. Street Operations exceeded budgeted amounts by $301,889, as vehicle and equipment chargebacks were increased significantly in order to fund future capital acquisitions.

As shown in the table on the previous page, current year operating results generated a surplus amount of $1,660,294, which increased overall fund balance from $7,512,060 at the beginning of the year, to $9,172,354 at the end of fiscal year 2021. The surplus at the end of the fiscal year was primarily attributable to enhanced revenues, predominately related to the taxes, intergovernmental, charges for service, and permit fee categories; lower than expected contractual services costs, particularly related to information technology and engineering services; and lower than anticipated personnel related benefit costs, as a direct result of retirements and temporary vacancies. Ending fund balance for the General Fund was comprised of nonspendable (i.e., prepaid) amounts totaling $152,003, with the remaining balance of $9,020,351 classified as unassigned. At fiscal year-end, unassigned fund balance as a percentage of total expenditures equated to 61.8%, which is the equivalent of approximately seven to eight months of operating reserves.

Proprietary Funds - The United City of Yorkville's proprietary funds provide the same type of information found in the government-wide financial statements, but in greater detail. The net position of the City's proprietary funds at the end of the year totaled $71,329,790, allocated between the Water and Sewer Funds in the amounts of $36,427,693 and $34,902,097, respectively. Lower than expected operational expenses and the deferral of capital projects totaling $0.5 million into the subsequent fiscal year, accounted for the bulk of the increase.

CAPITAL ASSET AND DEBT ADMINISTRATION

Capital Assets – The United City of Yorkville's investment in capital assets for its governmental and business-type activities as of April 30, 2021 totaled $170,655,310 (net of accumulated depreciation). Investments in capital assets include land, land improvements, construction in progress (CIP), infrastructure (roadway improvements, sanitary sewer lines, storm sewers and watermains), buildings, equipment and vehicles. The following tables summarize the changes in the City's capital assets for governmental and business-type activities.

Change in Capital Assets – Governmental Activities (in millions)

	Balance May 1, 2020	Net Additions/ (Deletions)	Balance April 30, 2021
Non-Depreciable Assets:			
Land and Construction in Progress	$ 32.8	$ 1.8	$ 34.6
Depreciable Capital Assets:			
Buildings	15.7	-	15.7
Equipment	8.7	0.4	9.1
Vehicles	3.0	0.2	3.2
Infrastructure	75.4	3.1	78.5
Accumulated Depreciation on Capital Assets	(37.7)	(2.9)	(40.6)
Total Capital Assets, Net	**$ 97.9**	**$ 2.6**	**$ 100.5**

Total net capital assets for the City's governmental activities increased by $2.6 million in the current fiscal year, due predominately to developer donated roadway and storm sewer infrastructure and the culmination of several City financed roadway improvements. During the fiscal year depreciation expense totaling $3,072,959 was charged to the following functions: General Government ($104,538), Library ($182,713), Parks and Recreation ($399,628), Public Safety ($149,820), and Public Works ($2,236,260).

Change in Capital Assets – Business-Type Activities (in millions)

	Balance May 1, 2020	Net Additions/ Deletions	Balance April 30, 2021
Non-Depreciable Assets:			
Land and Construction in Progress	$ 4.0	$ (0.4)	$ 3.6
Depreciable Capital Assets:			
Equipment	18.8	0.3	19.1
Vehicles	0.5	0.1	0.6
Infrastructure	68.0	1.8	69.8
Accumulated Depreciation on Capital Assets	(21.1)	(1.8)	(22.9)
Total Capital Assets, Net	**$ 70.2**	**$ 0.0**	**$ 70.2**

Net capital assets decreased by $96,597 in fiscal year 2021, as depreciation expense and the reduction in construction in progress were greater than asset additions. Non-developer capital asset additions for the year totaled $1,467,509, comprised of City financed water infrastructure improvements ($636,481), vehicles ($89,984), equipment ($312,180) and various infrastructure projects currently under construction ($428,864).

During the fiscal year depreciation expense of $1,090,543 and $745,416 was charged to the Water and Sewer Funds functional expense categories, respectively. For more detailed information, related to capital assets, see Note 3 to the financial statements.

Debt Administration

As of April 30, 2021, the United City of Yorkville had total debt outstanding of $24,252,848, comprised of general obligation and alternative revenue source bonds, debt certificates, developer commitments and loans payable. This amount is partially comprised of seven alternative revenue bonds which pledge income, sales, incremental property taxes, and water/sewer revenues. In addition, these bonds can be reverted to the property tax rolls should the alternative revenue source prove to be inadequate.

	Governmental Activities	Business-Type Activities	Total
General Obligation & Alternative Revenue Source Bonds	$ 9,406,558	$ 10,841,111	$ 20,247,669
Debt Certificates	-	305,000	305,000
Developer Commitments	-	2,386,097	2,386,097
Notes and Loans Payable	675,316	638,766	1,314,082
	$ 10,081,874	**$ 14,170,974**	**$ 24,252,848**

The City's general obligation debt is rated AA by Standard & Poor's and Fitch Ratings. The United City of Yorkville is a non-home rule community and as such is subject to a legal debt limit of 8.625% of the equalized assessed value (EAV) of the City, per State statute. The 2020 EAV of the City was $582,696,499, which resulted in a legal debt limit of $50,257,573. At the end of the fiscal year, the City had $3,405,000 in debt applicable to the debt limit, resulting in a debt to EAV ratio of 0.58%.

For more detailed information related to long-term debt, see Note 3 to the financial statements.

ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

Fiscal year 2021 saw the General Fund continue to build up its reserves, as overall fund balance exceeded $9.1 million, eclipsing its previous high point of $7.5 million in the year prior. Despite all the uncertainty at the beginning of the fiscal year, management is pleased to report that the anticipated negative effects of the COVID-19 pandemic did not come to fruition; as the City's primary locally sourced revenue streams, consisting of sales taxes, property taxes and building permits, have thus far remained resilient. Furthermore, based on the overall operating results of fiscal year 2021 and the events that have come to pass thus far in fiscal year 2022, it would appear that the local economy has continued to remain stable and that development in Yorkville continues to carry on in a positive manner, as the City remains committed to developing economic incentives and other measures to attract and retain businesses.

After a 5.3% increase last year, overall property values (i.e., assessed valuation) in the City are currently estimated to increase an additional 7.0% in 2021, which is a positive indicator that the local housing market continues to strengthen. Despite the increases in EAV over the last several years, the City remains mindful of its impact on residents when developing the annual property tax levy. For the 2020 levy year, the City Council once again continued its past practice of only increasing the levy by the incremental property tax proceeds generated from new construction. This resulted in the City foregoing the inflationary increment of the levy, valued at approximately $76,000.

As the City moved forward into the subsequent fiscal year, management continued its practice of conservatively projecting revenues, while looking for ways to reduce expenditures, in order to maintain adequate fund balances and cash reserves. In addition, management continues to monitor the fiscal activities of the State of Illinois, in order to ascertain the impact, if any, of how additional State budget cuts would impact Yorkville's share of State revenues.

In May of 2022, the City issued a bond for $8.25 million in order to finance the renovation of the recently acquired Prairie Point building, with the intent of utilizing the facility as a new City Hall and Police Station. Construction is expected to take place over the course of fiscal year 2022 and continue into the following fiscal year, with completion slated for the Fall of 2022. Furthermore, in August the City received its first tranche from the Federal government in the amount of $1.4 million pursuant to the American Rescue Plan Act; with a second and final installment scheduled for August of 2022 for an equal amount. The American Rescue Plan provides financial support to local governments in responding to the ongoing COVID-19 pandemic and also allows spending on certain qualified items per the guidelines established by the United States Department of the Treasury.

Looking ahead at fiscal year 2022 from a financial planning standpoint, the General Fund budget is at breakeven, with increased budgetary emphasis on enhanced funding for roadway improvements and vehicle and equipment replacement. At the same time, the City remains committed to maintaining adequate reserves, should an economic downturn occur. Budgeted capital and other significant projects for the upcoming fiscal year include: continuation of the annual "Road to Better Roads" program, with approximately $3.0 million budgeted for water, sanitary sewer, storm sewer and roadway improvements; the implementation of new enterprise resource planning system; an augmented sidewalk replacement program; water infrastructure improvements on Elizabeth Street and Appletree Court; the completion of the cation media exchange replacement at water treatment plant #4; and the construction of a new standby generator on Beaver Street.

REQUESTS FOR INFORMATION

This financial report is designed to provide our citizens, customers, investors and creditors with a general overview of the City's finances. Questions concerning this report or requests for additional financial information should be directed to Rob Fredrickson, Director of Finance, United City of Yorkville, 800 Game Farm Road, Yorkville, Illinois.

BASIC FINANCIAL STATEMENTS

The basic financial Statements include integrated sets of financial statements as required by the GASB. The sets of statements include:

- Government-Wide Financial Statements
- Fund Financial Statements

    Governmental Funds

    Proprietary Funds

    Fiduciary Fund

In addition, the notes to the financial statements are included to provide information that is essential to a user's understanding of the basic financial statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position
April 30, 2021

	Governmental Activities	Business-Type Activities	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 10,927,077	3,859,849	14,786,926
Receivables - Net	9,747,321	1,131,248	10,878,569
Prepaids	190,271	30,851	221,122
Total Current Assets	20,864,669	5,021,948	25,886,617
Noncurrent Assets			
Capital Assets			
Nondepreciable Capital Assets	34,597,800	3,588,659	38,186,459
Depreciable Capital Assets	106,542,385	89,577,446	196,119,831
Accumulated Depreciation	(40,666,963)	(22,984,017)	(63,650,980)
Total Capital Assets	100,473,222	70,182,088	170,655,310
Other Assets			
Net Pension Asset - IMRF	255,373	56,429	311,802
Assets Held for Others	-	11,091,000	11,091,000
Total Other Assets	255,373	11,147,429	11,402,802
Total Noncurrent Assets	100,728,595	81,329,517	182,058,112
Total Assets	121,593,264	86,351,465	207,944,729
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	461,056	101,877	562,933
Deferred Items - RBP	330,759	49,983	380,742
Deferred Items - Police Pension	946,993	-	946,993
Deferred Items - ARO	-	2,745,846	2,745,846
Unamortized Loss on Refunding	64,948	12,303	77,251
Total Deferred Outflows of Resources	1,803,756	2,910,009	4,713,765
Total Assets and Deferred Outflows of Resources	123,397,020	89,261,474	212,658,494

The notes to the financial statements are an integral part of this statement.

	Governmental Activities	Business-Type Activities	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 1,286,032	235,012	1,521,044
Deposits Payable	2,961,152	-	2,961,152
Accrued Payroll	146,852	15,664	162,516
Accrued Interest Payable	140,397	157,606	298,003
Other Payables	198,262	5,228	203,490
Current Portion of Long-Term Debt	1,734,448	2,723,392	4,457,840
Total Current Liabilities	6,467,143	3,136,902	9,604,045
Noncurrent Liabilities			
Compensated Absences Payable	547,154	58,528	605,682
Net Pension Liability - Police Pension	10,450,027	-	10,450,027
Total OPEB Liability - RBP	1,069,813	161,667	1,231,480
Other Liabilities	1,890	-	1,890
Notes Payable	418,222	-	418,222
IEPA Loans Payable	-	529,024	529,024
General Obligation Bonds Payable - Net	8,064,103	8,433,566	16,497,669
Debt Certificates Payable	-	155,000	155,000
Developer Agreements	-	2,386,097	2,386,097
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	20,551,209	14,506,882	35,058,091
Total Liabilities	27,018,352	17,643,784	44,662,136
DEFERRED INFLOWS OF RESOURCES			
Property and State Taxes	6,045,682	-	6,045,682
Deferred Items - IMRF	1,226,624	271,044	1,497,668
Deferred Items - RBP	111,546	16,856	128,402
Deferred Items - Police Pension	2,575,459	-	2,575,459
Total Deferred Inflows of Resources	9,959,311	287,900	10,247,211
Total Liabilities and Deferred Inflows of Resources	36,977,663	17,931,684	54,909,347
NET POSITION			
Net Investment in Capital Assets	90,458,186	58,409,514	148,867,700
Restricted			
Library Operations	798,152	-	798,152
Motor Fuel Tax	1,243,821	-	1,243,821
Special Service Areas	10,231	-	10,231
Land Cash	31,131	-	31,131
Unrestricted (Deficit)	(6,122,164)	12,920,276	6,798,112
Total Net Position	86,419,357	71,329,790	157,749,147

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Activities
For the Fiscal Year Ended April 30, 2021

	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants/ Contributions	Program Revenues: Capital Grants/ Contributions
Governmental Activities				
General Government	$ 5,960,831	5,246,355	-	-
Library	982,014	113,930	29,083	-
Parks and Recreation	2,513,280	357,208	22,515	-
Public Safety	5,733,468	-	-	9,490
Community Development	828,098	-	-	-
Public Works	5,097,124	-	2,985,422	1,806,074
Interest on Long-Term Debt	409,695	-	-	-
Total Governmental Activities	21,524,510	5,717,493	3,037,020	1,815,564
Business-Type Activities				
Sewer	1,740,041	1,731,961	-	481,070
Water	3,405,189	5,062,645	-	643,253
Total Business-Type Activities	5,145,230	6,794,606	-	1,124,323
	26,669,740	12,512,099	3,037,020	2,939,887
General Revenues				
Taxes				
Property Taxes				
Utility Taxes				
Business District Taxes				
Admissions and Amusement Taxes				
Video Gaming Taxes				
Other Taxes				
Intergovernmental - Unrestricted				
Sales Taxes				
Income Taxes				
State Use Taxes				
Interest Income				
Miscellaneous				
Transfers - Internal Activity				
Change in Net Position				
Net Position - Beginning				
Net Position - Ending				

The notes to the financial statements are an integral part of this statement.

Net (Expenses)/Revenues		
Primary Government		
Governmental Activities	Business-Type Activities	Totals
(714,476)	-	(714,476)
(839,001)	-	(839,001)
(2,133,557)	-	(2,133,557)
(5,723,978)	-	(5,723,978)
(828,098)	-	(828,098)
(305,628)	-	(305,628)
(409,695)	-	(409,695)
(10,954,433)	-	(10,954,433)
-	472,990	472,990
-	2,300,709	2,300,709
-	2,773,699	2,773,699
(10,954,433)	2,773,699	(8,180,734)
5,248,398	-	5,248,398
1,527,572	-	1,527,572
438,325	-	438,325
127,550	-	127,550
125,583	-	125,583
121,092	-	121,092
6,341,989	-	6,341,989
2,470,986	-	2,470,986
855,744	-	855,744
15,488	1,777	17,265
376,595	83,261	459,856
(278,639)	278,639	-
17,370,683	363,677	17,734,360
6,416,250	3,137,376	9,553,626
80,003,107	68,192,414	148,195,521
86,419,357	71,329,790	157,749,147

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Balance Sheet - Governmental Funds
April 30, 2021

	General
ASSETS	
Cash and Investments	$ 6,053,513
Receivables - Net of Allowances	
Property Taxes	3,426,430
Accounts	893,098
Grants	228,068
Other Taxes	3,280,243
Due from Other Funds	2,715,489
Prepaids	152,003
Total Assets	16,748,844
LIABILITIES	
Accounts Payable	1,030,354
Deposit Payable	1,964,826
Accrued Payroll	116,197
Due to Other Funds	-
Other Payables	36,414
Total Liabilities	3,147,791
DEFERRED INFLOWS OF RESOURCES	
Property and State Taxes	4,428,699
Total Liabilities and Deferred Inflows of Resources	7,576,490
FUND BALANCES	
Nonspendable	152,003
Restricted	-
Committed	-
Assigned	-
Unassigned	9,020,351
Total Fund Balances	9,172,354
Total Liabilities, Deferred Inflows of Resources and Fund Balances	16,748,844

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects		
Library	Parks and Recreation	Citywide Capital	Nonmajor	Totals
864,865	206,079	944,386	2,858,234	10,927,077
1,619,068	-	-	-	5,045,498
309	2,091	223,896	1,964	1,121,358
-	-	-	9,490	237,558
-	-	-	62,664	3,342,907
-	-	-	-	2,715,489
9,069	29,199	-	-	190,271
2,493,311	237,369	1,168,282	2,932,352	23,580,158
11,155	54,479	129,822	60,222	1,286,032
-	7,339	886,891	102,096	2,961,152
8,441	22,214	-	-	146,852
-	-	-	2,715,489	2,715,489
49,511	80,337	32,000	-	198,262
69,107	164,369	1,048,713	2,877,807	7,307,787
1,616,983	-	-	-	6,045,682
1,686,090	164,369	1,048,713	2,877,807	13,353,469
9,069	29,199	-	-	190,271
798,152	-	-	1,285,183	2,083,335
-	43,801	-	-	43,801
-	-	119,569	1,485,791	1,605,360
-	-	-	(2,716,429)	6,303,922
807,221	73,000	119,569	54,545	10,226,689
2,493,311	237,369	1,168,282	2,932,352	23,580,158

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2021

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of Total Governmental Fund Balance to
Net Position of Governmental Activities

April 30, 2021

Total Governmental Fund Balances	$ 10,226,689
Amounts reported for governmental activities in the Statement of Net Position are different because:	
Capital assets used in governmental activities are not financial resources and therefore, are not reported in the funds.	100,473,222
Deferred outflows (inflows) of resources related to the pensions not reported in the funds.	
Deferred Items - IMRF	(765,568)
Deferred Items - Police Pension	(1,628,466)
Deferred Items - RBP	219,213
Long-term liabilities are not due and payable in the current period and, therefore, are not reported in the funds.	
Accrued Interest Payable	(140,397)
Compensated Absences Payable	(683,943)
Net Pension Liability/(Asset) - IMRF	255,373
Net Pension Liability - Police Pension	(10,450,027)
Total OPEB Liability - RBP	(1,069,813)
Notes Payable	(673,426)
General Obligation Bonds Payable	(9,406,558)
Unamortized Loss on Refunding	64,948
Other Obligations Payable	(1,890)
Net Position of Governmental Activities	86,419,357

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenditures and Changes in Fund Balances - Governmental Funds
For the Fiscal Year Ended April 30, 2021

	General
Revenues	
Taxes	$ 11,970,764
Intergovernmental	5,016,435
Licenses, Permits and Fees	602,328
Charges for Services	1,743,212
Fines and Forfeits	109,268
Grants and Donations	-
Interest	12,173
Miscellaneous	106,560
Total Revenues	19,560,740
Expenditures	
Current	
General Government	5,220,130
Library	-
Parks and Recreation	-
Public Safety	5,686,416
Community Development	828,098
Public Works	2,871,863
Capital Outlay	-
Debt Service	
Principal Retirement	-
Interest and Fiscal Charges	-
Total Expenditures	14,606,507
Excess (Deficiency) of Revenues Over (Under) Expenditures	4,954,233
Other Financing Sources (Uses)	
Sale of Capital Assets	-
Transfers In	132,689
Transfers Out	(3,426,628)
	(3,293,939)
Net Change in Fund Balances	1,660,294
Fund Balances - Beginning	7,512,060
Fund Balances - Ending	9,172,354

The notes to the financial statements are an integral part of this statement.

Special Revenue		Capital Projects		
Library	Parks and Recreation	Citywide Capital	Nonmajor	Totals
1,561,523	-	-	306,599	13,838,886
29,083	-	-	1,396,830	6,442,348
104,600	-	486,868	281,635	1,475,431
6,081	357,208	787,642	1,231,404	4,125,547
3,249	-	-	3,998	116,515
-	3,745	-	18,770	22,515
1,455	235	72	1,553	15,488
1,235	69,881	173,690	11,302	362,668
1,707,226	431,069	1,448,272	3,252,091	26,399,398
-	-	2,422,142	95,419	7,737,691
799,301	-	-	-	799,301
-	2,242,987	-	235,673	2,478,660
-	-	-	457	5,686,873
-	-	-	-	828,098
-	-	-	118,876	2,990,739
-	-	378,655	1,254,679	1,633,334
685,000	-	200,000	655,392	1,540,392
143,778	-	121,813	160,608	426,199
1,628,079	2,242,987	3,122,610	2,521,104	24,121,287
79,147	(1,811,918)	(1,674,338)	730,987	2,278,111
-	-	-	13,927	13,927
25,884	1,473,433	1,442,336	310,231	3,384,573
-	-	(236,584)	-	(3,663,212)
25,884	1,473,433	1,205,752	324,158	(264,712)
105,031	(338,485)	(468,586)	1,055,145	2,013,399
702,190	411,485	588,155	(1,000,600)	8,213,290
807,221	73,000	119,569	54,545	10,226,689

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Reconciliation of the Statement of Revenues, Expenditures and Changes in Fund Balances of Governmental Funds to the Statement of Activities

For the Fiscal Year Ended April 30, 2021

Net Change in Fund Balances - Total Governmental Funds	$	2,013,399
Amounts reported for governmental activities in the Statement of Activities are different because:		
Governmental funds report capital outlays as expenditures. However, in the Statement of Activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense.		
Capital Outlays		3,790,530
Capital Contributions		1,806,074
Depreciation Expense		(3,072,959)
Disposals - Cost		(146,806)
Disposals - Accumulated Depreciation		146,806
The net effect of deferred outflows (inflows) of resources related to the pensions not reported in the funds.		
Change in Deferred Items - IMRF		(926,920)
Change in Deferred Items - Police Pension		(2,115,488)
Change in Deferred Items - RBP		149,309
The issuance of long-term debt provides current financial resources to governmental funds, while the repayment of the principal on long-term debt consumes the current financial resources of the governmental funds.		
Change in Compensated Absences Payable		(67,055)
Change in Net Pension Liability/(Asset) - IMRF		1,171,645
Change in Net Pension Liability - Police Pension		2,218,713
Change in Total OPEB Liability - RBP		(107,894)
Retirement of Debt		1,540,392
Amortization of Loss on Refunding		(28,138)
Amortization of Premium		24,486
Changes to accrued interest on long-term debt in the Statement of Activities does not require the use of current financial resources and, therefore, are not reported as expenditures in the governmental funds.		20,156
Changes in Net Position of Governmental Activities		6,416,250

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2021

See Following Page

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Net Position - Proprietary Funds
April 30, 2021

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
ASSETS			
Current Assets			
Cash and Investments	$ 661,498	3,198,351	3,859,849
Receivables - Net of Allowances			
Accounts	256,657	874,591	1,131,248
Prepaids	8,424	22,427	30,851
Total Current Assets	926,579	4,095,369	5,021,948
Noncurrent Assets			
Capital Assets			
Nondepreciable	598,055	2,990,604	3,588,659
Depreciable	36,754,029	52,823,417	89,577,446
Accumulated Depreciation	(7,742,094)	(15,241,923)	(22,984,017)
	29,609,990	40,572,098	70,182,088
Other Assets			
Net Pension Asset - IMRF	19,319	37,110	56,429
Assets Held for Others	11,091,000	-	11,091,000
Total Other Assets	11,110,319	37,110	11,147,429
Total Noncurrent Assets	40,720,309	40,609,208	81,329,517
Total Assets	41,646,888	44,704,577	86,351,465
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	34,879	66,998	101,877
Deferred Items - RBP	19,180	30,803	49,983
Deferred Items - ARO	-	2,745,846	2,745,846
Unamortized Loss on Refunding	5,873	6,430	12,303
	59,932	2,850,077	2,910,009
Total Assets and Deferred Outflows of Resources	41,706,820	47,554,654	89,261,474

The notes to the financial statements are an integral part of this statements.

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	$ 56,398	178,614	235,012
Accrued Payroll	5,494	10,170	15,664
Accrued Interest Payable	75,618	81,988	157,606
Other Payables	-	5,228	5,228
Current Portion of Long-Term Debt	1,084,630	1,638,762	2,723,392
Total Current Liabilities	1,222,140	1,914,762	3,136,902
Noncurrent Liabilities			
Compensated Absences Payable	15,956	42,572	58,528
Total OPEB Liability - RBP	62,036	99,631	161,667
IEPA Loans Payable	-	529,024	529,024
General Obligation Bonds Payable - Net	4,105,000	4,328,566	8,433,566
Debt Certificates Payable	155,000	-	155,000
Developer Agreements	1,145,327	1,240,770	2,386,097
Asset Retirement Obligation	-	2,783,000	2,783,000
Total Noncurrent Liabilities	5,483,319	9,023,563	14,506,882
Total Liabilities	6,705,459	10,938,325	17,643,784
DEFERRED INFLOWS OF RESOURCES			
Deferred Items - IMRF	92,796	178,248	271,044
Deferred Items - RPB	6,468	10,388	16,856
Total Deferred Inflows of Resources	99,264	188,636	287,900
Total Liabilities and Deferred Inflows of Resources	6,804,723	11,126,961	17,931,684
NET POSITION			
Net Investment in Capital Assets	24,285,863	34,123,651	58,409,514
Unrestricted	10,616,234	2,304,042	12,920,276
Total Net Position	34,902,097	36,427,693	71,329,790

The notes to the financial statements are an integral part of this statements.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Revenues, Expenses and Changes in Net Position - Proprietary Funds
For the Fiscal Year Ended April 30, 2021

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Operating Revenues			
Charges for Services	$ 1,424,861	4,373,292	5,798,153
Operating Expenses			
Operations	676,188	1,993,526	2,669,714
Depreciation and Amortization	748,230	1,083,057	1,831,287
Total Operating Expenses	1,424,418	3,076,583	4,501,001
Operating Income	443	1,296,709	1,297,152
Nonoperating Revenues (Expenses)			
Interest Income	475	1,302	1,777
Connection Fees	307,100	689,353	996,453
Other Income (Expense)	(511)	83,772	83,261
Interest Expense	(315,623)	(328,606)	(644,229)
	(8,559)	445,821	437,262
Income (Loss) Before Transfers and Contributions	(8,116)	1,742,530	1,734,414
Capital Contributions	481,070	643,253	1,124,323
Transfers In	174,744	179,020	353,764
Transfers Out	(75,125)	-	(75,125)
	580,689	822,273	1,402,962
Change in Net Position	572,573	2,564,803	3,137,376
Net Position - Beginning	34,329,524	33,862,890	68,192,414
Net Position - Ending	34,902,097	36,427,693	71,329,790

The notes to the financial statements are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Cash Flows - Proprietary Funds
For the Fiscal Year Ended April 30, 2021

	Business-Type Activities - Enterprise		
	Sewer	Water	Totals
Cash Flows from Operating Activities			
Receipts from Customers and Users	$ 1,698,922	5,196,933	6,895,855
Payments to Employees	(469,696)	(246,204)	(715,900)
Payments to Suppliers	(216,295)	(1,780,878)	(1,997,173)
	1,012,931	3,169,851	4,182,782
Cash Flows from Noncapital Financing Activities			
Transfers In	174,744	179,020	353,764
Transfers (Out)	(75,125)	-	(75,125)
	99,619	179,020	278,639
Cash Flows from Capital and Related Financing Activities			
Purchase of Capital Assets	(207,754)	(407,285)	(615,039)
Debt Issuance	54,540	59,084	113,624
Debt Repayment	(1,025,000)	(2,009,887)	(3,034,887)
Interest Payments	(315,623)	(328,606)	(644,229)
	(1,493,837)	(2,686,694)	(4,180,531)
Cash Flows from Investing Activities			
Interest Received	475	1,302	1,777
Net Change in Cash and Cash Equivalents	(380,812)	663,479	282,667
Cash and Cash Equivalents - Beginning	1,042,310	2,534,872	3,577,182
Cash and Cash Equivalents - Ending	661,498	3,198,351	3,859,849
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities			
Operating Income	443	1,296,709	1,297,152
Adjustments to Reconcile Operating Income to Net Income to Net Cash Provided by (Used in) Operating Activities:			
Depreciation and Amortization Expense	748,230	1,083,057	1,831,287
Connection Fees/Other Income	306,589	773,125	1,079,714
(Increase) Decrease in Current Assets	(32,528)	50,516	17,988
Increase (Decrease) in Current Liabilities	(9,803)	(33,556)	(43,359)
Net Cash Provided by Operating Activities	1,012,931	3,169,851	4,182,782
Noncash Capital and Related Financing Activities			
Capital Contributions	481,070	643,253	1,124,323

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Fiduciary Net Position
April 30, 2021

	Police Pension Trust
ASSETS	
Cash and Cash Equivalents	$ 965,248
Investments	
U.S. Treasury Securities	3,054,597
U.S. Agency Securities	255,697
Corporate Bonds	1,006,176
Mutual Funds	3,644,132
Common Stocks	5,633,040
Accrued Interest	30,542
Total Assets	14,589,432
LIABILITIES	
Accounts Payable	7,020
Due to City	6,082
Total Liabilities	13,102
NET POSITION	
Net Position Restricted for Pensions	14,576,330

The notes to the financial statement are an integral part of this statement.

UNITED CITY OF YORKVILLE, ILLINOIS

Statement of Changes in Fiduciary Net Position
For the Fiscal Year Ended April 30, 2021

	Police Pension Trust
Additions	
Contributions - Employer	$ 1,230,604
Contributions - Plan Members	261,904
Total Contributions	1,492,508
Investment Income	
Interest Earned	216,734
Net Change in Fair Value	2,941,534
	3,158,268
Less Investment Expenses	(33,329)
Net Investment Income	3,124,939
Total Additions	4,617,447
Deductions	
Administration	12,766
Benefits and Refunds	893,334
Total Deductions	906,100
Change in Fiduciary Net Position	3,711,347
Net Position Restricted for Pensions	
Beginning	10,864,983
Ending	14,576,330

The notes to the financial statement are an integral part of this statement.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The United City of Yorkville (City) is an Illinois unit of local government. The financial statements include all functions, programs and activities under control of the City Council. The City's major operations include public safety, public works, library, parks and recreation, community development, water and sewer services, and general administration. The City Council has oversight responsibility for the City, the Public Library and the Park and Recreation Board. Oversight responsibility includes designation of management and all other control over operations of these entities.

The government-wide financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The more significant of the City's accounting policies established in GAAP and used by the City are described below.

REPORTING ENTITY

The City's financial reporting entity comprises the following:

Primary Government:	United City of Yorkville

In determining the financial reporting entity, the City complies with the provisions of GASB Statement No. 61, "The Financial Reporting Omnibus - an Amendment of GASB Statements No. 14 and No. 34," and includes all component units that have a significant operational or financial relationship with the City. Based upon the criteria set forth in the GASB Statement No. 61, there are no component units included in the reporting entity.

Police Pension Employees Retirement System

The City's police employees participate in the Police Pension Employees Retirement System (PPERS). PPERS functions for the benefit of these employees and is governed by a five-member pension board. Two members appointed by the City's Mayor, one elected pension beneficiary and two elected police employees constitute the pension board. The participants are required to contribute a percentage of salary as established by state statute and the City is obligated to fund all remaining PPERS costs based upon actuarial valuations. The State of Illinois is authorized to establish benefit levels and the City is authorized to approve the actuarial assumptions used in the determination of contribution levels. Although it is legally separate from the City, the PPERS is reported as if it were part of the primary City because its sole purpose is to provide retirement benefits for the City's police employees. The PPERS is reported as a pension trust fund.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION

Government-Wide Statements

The City's basic financial statements include both government-wide (reporting the City as a whole) and fund financial statements (reporting the City's major funds). Both the government-wide and fund financial statements categorize primary activities as either governmental or business-type. The City's public safety, highway and street maintenance and reconstruction, building code enforcement, public improvements, economic development, parks and recreation, planning and zoning, and general administrative services are classified as governmental activities. The City's sewer and water services are classified as business-type activities.

In the government-wide Statement of Net Position, both the governmental and business-type activities columns are: (a) presented on a consolidated basis by column, and (b) reported on a full accrual, economic resource basis, which recognizes all long-term assets/deferred outflows and receivables as well as long-term debt/deferred inflows and obligations.

The City's net position is reported in three parts: net investment in capital assets; restricted; and unrestricted. The City first utilizes restricted resources to finance qualifying activities.

The government-wide Statement of Activities reports both the gross and net cost of each of the City's functions (general government, public safety, highways and streets, etc.) and business-type activities. The functions are supported by general government revenues (property, sales and use taxes, certain intergovernmental revenues, fines, permits and charges for services, etc.). The Statement of Activities reduces gross expenses (including depreciation) by related program revenues, which include 1) changes to customers or applicants who purchase, use or directly benefit from goods, services or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment.

The net costs (by function or business-type activity) are normally covered by general revenue (property, sales and use taxes, certain intergovernmental revenues, permits and charges for services, etc.).

This government-wide focus is more on the sustainability of the City as an entity and the change in the City's net position resulting from the current year's activities.

Fund Financial Statements

The financial transactions of the City are reported in individual funds in the fund financial statements. Each fund is accounted for by providing a separate set of self-balancing accounts that comprise its assets/deferred outflows, liabilities/deferred inflows, fund equity, revenues and expenditures/expenses. Funds are organized into three major categories: governmental, proprietary, and fiduciary. The emphasis in fund financial statements is on the major funds in either the governmental or business-type activities categories.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Nonmajor funds by category are summarized into a single column. GASB Statement No. 34 sets forth minimum criteria (percentage of the assets/deferred outflows, liabilities/deferred inflows, revenues or expenditures/expenses of either fund category or the governmental and enterprise combined) for the determination of major funds. The City electively added funds, as major funds, which either have debt outstanding or a specific community focus. The nonmajor funds are combined in a column in the fund financial statements. A fund is considered major if it is the primary operating fund of the City or meets the following criteria:

> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of that individual governmental or enterprise fund are at least 10 percent of the corresponding total for all funds of that category or type; and
>
> Total assets/deferred outflows, liabilities/deferred inflows, revenues, or expenditures/expenses of the individual governmental fund or enterprise fund are at least 5 percent of the corresponding total for all governmental and enterprise funds combined.

The various funds are reported by generic classification within the financial statements. The following fund types are used by the City:

Governmental Funds

The focus of the governmental funds' measurement (in the fund statements) is upon determination of financial position and changes in financial position (sources, uses, and balances of financial resources) rather than upon net income. The following is a description of the governmental funds of the City:

General fund is the general operating fund of the City. It is used to account for all financial resources except those required to be accounted for in another fund. The General Fund is a major fund.

Special revenue funds are used to account for the proceeds of specific revenue sources that are legally restricted to expenditures for specified purposes. The City maintains nine special revenue funds. The Library Fund, a major fund, is used to account for the activity relating to the Yorkville Public Library. The primary revenue source for the Library Fund is property taxes. The Parks and Recreation Fund, also a major fund, is used to account for the revenues and expenditures associated with Yorkville's Parks and Recreation departments. The primary revenue source for the Parks and Recreation Fund is charges for services.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Governmental Funds – Continued

Debt service funds are used to account for the accumulation of funds for the periodic payment of principal and interest on general long-term debt. The City maintains one debt service fund.

Capital projects funds are used to account for financial resources to be used for the acquisition or construction of major capital facilities (other than those financed by business-type/proprietary funds). The City maintains two capital projects funds. The Citywide Capital Fund, a major fund, is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public.

Proprietary Funds

The focus of proprietary fund measurement is upon determination of operating income, changes in net position, financial position, and cash flows. The generally accepted accounting principles applicable are those similar to businesses in the private sector. The following is a description of the proprietary funds of the City:

Enterprise funds are required to account for operations for which a fee is charged to external users for goods or services and the activity is (a) financed with debt that is solely secured by a pledge of the net revenues, (b) has third party requirements that the cost of providing services, including capital costs, be recovered with fees and charges, or (c) establishes fees and charges based on a pricing policy designed to recover similar costs. The City maintains two enterprise funds. The Sewer Fund, a major fund, is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees. The Water Fund, also a major fund, is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

Fiduciary Funds

Fiduciary funds are used to report assets held in a trustee or custodial capacity by the City for others and therefore are not available to support City programs. The reporting focus is on net position and changes in net position and is reported using accounting principles similar to proprietary funds.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

Fund Financial Statements – Continued

Fiduciary Funds – Continued

Pension trust funds are used to account for assets held in a trustee capacity by the City for pension benefit payments. The Police Pension Fund accounts for the accumulation of resources to pay pension costs. Resources are contributed by police force members at rates fixed by state statutes and by the government through an annual property tax levy.

The City's fiduciary fund is presented in the fiduciary fund financial statements. Since by definition these assets are being held for the benefit of a third party (other local governments, private parties, pension participants, etc.) and cannot be used to address activities or obligations of the City, these funds are not incorporated into the government-wide statements.

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

Measurement focus is a term used to describe "which" transactions are recorded within the various financial statements. Basis of accounting refers to "when" transactions are recorded regardless of the measurement focus applied.

Measurement Focus

On the government-wide Statement of Net Position and the Statement of Activities, both governmental and business-type activities are presented using the economic resources measurement focus as defined below.

In the fund financial statements, the "current financial resources" measurement focus or the "economic resources" measurement focus is used as appropriate.

All governmental funds utilize a "current financial resources" measurement focus. Only current financial assets/deferred outflows and liabilities/deferred inflows are generally included on their balance sheets. Their operating statements present sources and uses of available spendable financial resources during a given period. These funds use fund balance as their measure of available spendable financial resources at the end of the period.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING – Continued

Measurement Focus – Continued

All proprietary and pension trust funds utilize an "economic resources" measurement focus. The accounting objectives of this measurement focus are the determination of operating income, changes in net position (or cost recovery), financial position, and cash flows. All assets/deferred outflows and liabilities/deferred inflows (whether current or noncurrent) associated with their activities are reported. Proprietary and pension trust fund equity is classified as net position.

Basis of Accounting

In the government-wide Statement of Net Position and Statement of Activities, both governmental and business-type activities are presented using the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability/deferred inflow is incurred or economic asset used. Revenues, expenses, gains, losses, assets/deferred outflows, and liabilities/deferred inflows resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

In the fund financial statements, governmental funds are presented on the modified accrual basis of accounting. Under this modified accrual basis of accounting, revenues are recognized when "measurable and available." Measurable means knowing or being able to reasonably estimate the amount. Available means collectible within the current period or within sixty days after year-end. The City recognizes property taxes when they become both measurable and available in accordance with GASB Codification Section P70.

A sixty-day availability is generally used for revenue recognition for all other governmental fund revenues. Expenditures (including capital outlay) are recorded when the related fund liability is incurred, except for general obligation bond principal and interest which are recognized when due.

In applying the susceptible to accrual concept under the modified accrual basis, those revenues susceptible to accrual are property taxes, state and utility taxes, franchise taxes, interest revenue, charges for services, and fines and forfeits. All other revenues are not susceptible to accrual because generally they are not measurable until received in cash.

All proprietary and pension trust funds utilize the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING – Continued

Basis of Accounting – Continued

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the City's enterprise funds are charges to customers for sales and services. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY

Cash and Investments

Cash and cash equivalents on the Statement of Net Position are considered to be cash on hand, demand deposits, and cash with fiscal agent. For the purpose of the proprietary funds "Statement of Cash Flows," cash and cash equivalents are considered to be cash on hand, demand deposits, cash with fiscal agent, and all highly liquid investments with an original maturity of three months or less.

Investments are generally reported at fair value. Short-term investments are reported at cost, which approximates fair value. For investments, the City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

Interfund Receivables, Payables and Activity

Interfund activity is reported as loans, services provided, reimbursements or transfers. Loans are reported as interfund receivables and payables as appropriate and are subject to elimination upon consolidation. All other interfund transactions are treated as transfers. Any residual balances outstanding between the governmental activities and business-type activities are reported in the government-wide financial statements as "internal balances."

Receivables

In the government-wide financial statements, receivables consist of all revenues earned at year-end and not yet received. Major receivables balances for governmental activities include property taxes, state and utility taxes, franchise taxes, and grants. Business-type activities report utility charges as their major receivables.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Prepaids

Prepaids are valued at cost, which approximates market. The cost of governmental fund-type prepaids are recorded as expenditures when consumed rather than when purchased. Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaids in both the government-wide and fund financial statements.

Assets Held for Others

In June of 2004, the City entered into an intergovernmental agreement with Yorkville-Bristol Sanitary District for design and construction of the Rob Roy Creek Interceptor. At the date of completion, the Yorkville-Bristol Sanitary District owns and maintains the Interceptor. All costs associated with the construction of the infrastructure asset are recorded as Assets Held for Others in the City's financial statements. As of April 30, 2021, the balance of this project was $11,091,000 reported in the Sewer Fund. In connection with this project, the City issued General Obligation Alternate Revenue Source Bonds of 2005D in the fiscal year 2006 for $11,300,000, which were refunded in 2008 and again in 2011. At April 30, 2021, the outstanding balance of the 2011 refunding bonds is $5,910,000. See Note 3 for more information on this long-term debt issue.

Deferred Outflows/Inflows of Resources

Deferred outflow/inflow of resources represents an acquisition/reduction of net position that applies to a future period and therefore will not be recognized as an outflow of resources (expense)/inflow of resources (revenue) until that future time.

Capital Assets

Capital assets purchased or acquired with an original cost of $5,000 to $75,000, depending on asset class, (see chart on the following page) or more are reported at historical cost or estimated historical cost. Contributed assets are reported at acquisition value as of the date received. Additions, improvements and other capital outlays that significantly extend the useful life of an asset are capitalized. Other costs incurred for repairs and maintenance are expensed as incurred.

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. General capital assets are long-lived assets of the City as a whole. Infrastructure such as streets, traffic signals and signs are capitalized. In the case of the initial capitalization of general infrastructure assets (i.e., those reported by the governmental activities) the government chose to include all such items regardless of their acquisition date. The valuation basis for general capital assets are historical cost, or where historical cost is not available, estimated historical cost based on replacement costs.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Capital Assets – Continued

Capital assets in the proprietary funds are capitalized in the fund in which they are utilized. The valuation bases for proprietary fund capital assets are the same as those used for the general capital assets. Donated capital assets are capitalized at acquisition value on the date donated.

Depreciation on all assets is computed and recorded using the straight-line method of depreciation over the following estimated useful lives:

Capital Asset	Capitalized Threshold	Estimated Useful Life
Land	$ 25,000	N/A
Buildings	35,000	10 - 50 Years
Equipment	5,000	5 - 75 Years
Vehicles	5,000	5 - 15 Years
Infrastructure - Street and Storm Sewer	50,000	10 - 75 Years
Infrastructure - Water and Sewer	75,000	10 - 75 Years

Compensated Absences

The City accrues accumulated unpaid vacation and associated employee-related costs when earned (or estimated to be earned) by the employee. In accordance with GASB Statement No. 16, no liability is recorded for nonvesting accumulation rights to receive sick pay benefits. However, a liability is recognized for that portion of accumulated sick leave that is estimated to be taken as "terminal leave" prior to retirement. All vacation pay is accrued when incurred in the government-wide and proprietary fund financial statements. A liability for these amounts is reported in the governmental funds only if they have matured, for example, as a result of employee resignations and retirements.

Long-Term Obligations

In the government-wide financial statements, and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type Statement of Net Position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as expenses at the time of issuance.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Long-Term Obligations – Continued

In the fund financial statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

Net Position

In the government-wide financial statements, equity is classified as net position and displayed in three components:

> Net Investment in Capital Assets – Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
>
> Restricted – Consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislations.
>
> Unrestricted – All other net position balances that do not meet the definition of "restricted" or "net investment in capital assets."

NOTE 2 – STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY

BUDGETARY INFORMATION

Budgets are adopted on a basis consistent with generally accepted accounting principles. Annual budgets are adopted for all funds. All annual appropriations lapse at fiscal year-end. During the year, several supplementary appropriations were necessary. The City follows these procedures in establishing the budgetary data reflected in the financial statements:

- Prior to May 1, the Mayor submits to the City Council the proposed budget for the fiscal year commencing the following May 1. The operating budget includes proposed expenditures and the means of financing them.
- Public hearings are conducted at the City offices to obtain taxpayer comments.
- Prior to May 1, the budget is legally adopted by a vote of the City Council through passage of an ordinance.
- The budget officer is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the total expenditures of any fund must be approved by the City Council.

DEFICIT FUND BALANCE

The following funds had deficit fund balance as of the date of this report:

Fund	Deficit
Sunflower Special Service Area	$ 8,409
Countryside TIF	1,211,222
Downtown TIF	1,448,929
Downtown TIF II	47,869

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS

The City maintains a cash and investment pool that is available for use by all funds except the pension trust fund. Each fund type's portion of this pool is displayed on the financial statements as "cash and investments." In addition, investments are separately held by several of the City's funds. The deposits and investments of the pension trust fund are held separately from those of other funds.

Permitted Deposits and Investments – Statutes authorize the City to make deposits/invest in commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, obligations of States and their political subdivisions, credit union shares, repurchase agreements, commercial paper rated within the three highest classifications by at least two standard rating services and Illinois Funds and the Illinois Trust.

The deposits and investments of the Pension Fund are held separately from those of other City funds. Statutes authorize the Pension Fund to make deposits/invest in interest bearing direct obligations of the United States of America; obligations that are fully guaranteed or insured as to the payment of principal and interest by the United States of America; bonds, notes, debentures, or similar obligations of agencies of the United States of America; savings accounts or certificates of deposit issued by banks or savings and loan associations chartered by the United States of America or by the State of Illinois, to the extent that the deposits are insured by the agencies or instrumentalities of the federal government; credit unions, to the extent that the deposits are insured by the agencies or instrumentalities of the federal government; State of Illinois bonds; pooled accounts managed by the Illinois Funds Market Fund (Formerly known as IPTIP, Illinois Public Treasurer's Investment Pool), or by banks, their subsidiaries or holding companies, in accordance with the laws of the State of Illinois; bonds or tax anticipation warrants of any county, township, or municipal corporation of the State of Illinois; direct obligations of the State of Israel; money market mutual funds managed by investment companies that are registered under the Federal Investment Company Act of 1940 and the Illinois Securities Law of 1953 and are diversified, open-ended management investment companies, provided the portfolio is limited to specified restrictions; general accounts of life insurance companies; and separate accounts of life insurance companies and mutual funds, the mutual funds must meet specific restrictions, provided the investment in separate accounts and mutual funds does not exceed ten percent of the Pension Fund's plan net position; and corporate bonds managed through an investment advisor, rated as investment grade by one of the two largest rating services at the time of purchase. Pension Funds with plan net position of $2.5 million or more may invest up to forty-five percent of plan net position in separate accounts of life insurance companies and mutual funds. Pension Funds with plan net position of at least $5 million that have appointed an investment advisor, may through that investment advisor invest up to forty-five percent of the plan net position in common and preferred stocks that meet specific restrictions. In addition, pension funds with plan net position of at least $10 million that have appointed an investment advisor, may invest up to sixty-five percent of its net position in common and preferred stocks and mutual funds that meet specific restrictions effective July 1, 2012.

NOTE 3 – DETAIL NOTES ON ALL FUNDS

DEPOSITS AND INVESTMENTS – Continued

The Illinois Funds is an investment pool managed by the Illinois Public Treasurer's Office which allows governments within the State to pool their funds for investment purposes. The Illinois Funds is not registered with the SEC as an investment company. Investments in Illinois Funds are valued at the share price, the price for which the investment could be sold.

The Illinois Trust was established for the purpose of allowing various public agencies including, but not limited to, counties, townships, cities, towns, villages, school districts, housing authorities and public water supply districts, to jointly invest funds in accordance with the Laws of the State of Illinois. Participation in the Illinois Trust is voluntary. The Illinois Trust is not registered with the SEC as an Investment Company. Investments in the Illinois Trust are valued at the share price, the price for which the investment could be sold.

City Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk

Deposits. At year-end, the carrying amount of the City's deposits for governmental and business-type activities totaled $10,221,934 and the bank balances totaled $10,623,981. Additionally, the City has $4,463,859 invested in the Illinois Fund and $101,133 invested in the Illinois Trust at year-end, which are measured at net asset value per share determined by the plans.

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. The policy does not state specific limits in investment maturities as a means of managing its exposure to fair value losses arising from increasing interest rates. At year-end, the City's investment in the Illinois Funds have an average maturity of less than one year.

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in management of their own affairs, no for speculation, but for investment, considering the safety of their capital, as well as the probable income to be derived. The standard of prudence to be used by investment officials shall be the 'prudent person' standard and shall be applied in the context of managing an overall portfolio. At year-end, the City's investment in the Illinois Funds and the Illinois Trust are rated AAAm by Standard & Poor's.

Concentration Risk. This is the risk of loss attributed to the magnitude of the City's investment in a single issuer. The City's investment policy states that a variety of financial instruments and maturities, properly balanced, will help to insure liquidity and reduce risk or interest rate volatility and loss of principal. Diversifying instruments and maturities will avoid incurring unreasonable risks in the investment portfolio regarding specific security types, issuers or individual financial institutions. The City shall diversify to the best of its ability based on the type of funds invested and the cash flow needs of those funds. The City places no limit on the amount the City may invest in any one issuer.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

City Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Concentration Risk – Continued. At year-end, the City does not have any investments over 5 percent of the total cash and investment portfolio (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) over 5 percent of the total cash and investment portfolio.

Custodial Credit Risk. In the case of deposits, this is the risk that in the event of a bank failure, the City's deposits may not be returned to it. The City's investment policy requires that all amounts in excess of any insurance limits be collateralized by approved securities or surety bonds issued by top-rated insurers, having a value of at least 110% of the deposits. Collateral is required as security whenever deposits exceed the insurance limits of the FDIC. Repurchase agreements must also be collateralized in the amount of 105% of the market value of principal and accrued interest. Collateral shall be held at an independent, third-party institution in the name of the City. The third-party institution shall comply with all qualifications and requirements as set forth in the Illinois Complied Statutes 30 ILCS 235/6. At year end, all deposits are collateralized.

For an investment, this is the risk that in the event of the failure of the counterparty, the City will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At year-end, the City's investments in the Illinois Funds and the Illinois Trust are not subject to custodial credit risk.

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk

Deposits. At year-end, the carrying amount of the Fund's deposits totaled $965,248 and the bank balances totaled $966,134.

Investments. At year-end, the Fund has the following investments and maturities:

		Investment Maturities (in Years)			
Investment Type	Fair Value	Less Than 1	1 to 5	6 to 10	More Than 10
U.S. Treasuries	$ 3,054,597	261,278	2,128,509	664,810	-
U.S. Agencies	255,697	81,288	161,884	-	12,525
Corporate Bonds	1,006,176	256,588	340,210	409,378	-
	4,316,470	599,154	2,630,603	1,074,188	12,525

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Investments. At year-end, the Fund has the following recurring fair value measurements:

		Fair Value Measurements Using		
Investments by Fair Value Level	Total	Quoted Prices in Active Markets for Indentical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
U.S. Treasuries	$ 3,054,597	3,054,597	-	-
U.S. Agencies	255,697	-	255,697	-
Corporate Bonds	1,006,176	-	1,006,176	-
Equity Securities				
Mutual Funds	3,644,132	3,644,132	-	-
Common Stock	5,633,040	5,633,040	-	-
Total Investments by Fair Value Level	13,593,642	12,331,769	1,261,873	-

Debt Securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Interest Rate Risk. The Fund's investment policy states that the investment portfolio shall remain sufficiently liquid to enable the Fund to meet all operating requirements which may be reasonable anticipated.

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Fund helps limit its exposure to credit risk by primarily investing in securities issued by the United States Government and/or its agencies that are implicitly guaranteed by the United States Government. The Pension Fund's investment policy establishes criteria for allowable investments; those criteria follow the requirements of the Illinois Pension Code. The investments in the securities of U.S. Government Agencies obligations were all rated AA+ by Standard & Poor's or by Moody's Investors Services and Corporate Bonds were rated AA+ to BBB+ by Standard & Poor's. Besides investing in securities issued by agencies of the United States Government, the Pension Fund's investment policy for reducing credit risk is by the Board conducting its responsibilities with the care, skill and caution under the circumstances then prevailing which a prudent person acting in a like capacity and familiar with those matters would use the conduct of an activity of like character or purpose.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Custodial Credit Risk. The Fund's investment policy requires all deposits in excess of federally insured limits (other than bank managed money market mutual funds) to be no less than 110% of the fair market value and secured by some form of collateral. The Fund will accept (1) United States Treasury Bills, Notes or Bonds, or (2) United States Government Agency Notes or Bonds as authorized by the Public Funds Investment Act but excluding the government sponsored agencies prohibited by the Department of Insurance. At year-end, the entire amount of the bank balance of deposits was covered by collateral, federal depository or equivalent insurance.

Concentration Risk. This is the risk of loss attributed to the magnitude of the Pension Fund's investment in a single issuer. The Funds investment policy states the Board should diversify investments to avoid incurring unreasonable risks from the practice of concentrating investments in specific security types and/or individual financial institutions. In addition to the securities and fair values previously listed, the Fund also has $3,644,132 invested in mutual funds and $5,633,040 invested in common stocks. At year-end, the Fund has no investments over 5 percent of net plan position available for retirement benefits (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments) in any one organization that represent 5 percent or more of net position available for benefits.

The Fund's investment policy in accordance with Illinois Compiled Statutes (ILCS) establishes the following target allocation across asset classes:

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	55.00%	7.50%
Equities	44.00%	11.80%
Cash and Cash Equivalents	1.00%	4.20%

Illinois Compiled Statutes (ILCS) limit the Fund's investments in equities, mutual funds and variable annuities to 65%. Securities in any one company should not exceed 5% of the total fund.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

DEPOSITS AND INVESTMENTS – Continued

Police Pension Fund Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Concentration Risk – Continued. The long-term expected rate of return on the Fund's investments was determined using an asset allocation study conducted by the Fund's investment management consultant in May 2020 in which best-estimate ranges of expected future real rates of return (net of pension plan investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding the expected inflation. Best estimates or arithmetic real rates of return for each major asset class included in the Fund's target asset allocation as of April 30, 2021 are listed in the table on previous page.

Rate of Return

For the year ended April 30, 2021, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 26.92%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

PROPERTY TAXES

Property taxes for 2020 attach as an enforceable lien on January 1, 2021, on property values assessed as of the same date. Taxes are levied by December of the subsequent fiscal year (by passage of a Tax Levy Ordinance). Tax bills are prepared by the County and are payable in two installments, on or about June 1 and September 1. The County collects such taxes and remits them periodically.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS

Governmental Activities

Governmental capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 30,991,088	256,676	-	31,247,764
Construction in Progress	1,859,302	2,953,824	1,463,090	3,350,036
	32,850,390	3,210,500	1,463,090	34,597,800
Depreciable Capital Assets				
Buildings	15,690,311	-	-	15,690,311
Equipment	8,754,559	486,754	54,000	9,187,313
Vehicles	2,990,584	272,286	92,806	3,170,064
Infrastructure	75,404,543	3,090,154	-	78,494,697
	102,839,997	3,849,194	146,806	106,542,385
Less Accumulated Depreciation				
Buildings	4,753,678	323,345	-	5,077,023
Equipment	6,657,194	422,129	54,000	7,025,323
Vehicles	2,363,411	246,542	92,806	2,517,147
Infrastructure	23,966,527	2,080,943	-	26,047,470
	37,740,810	3,072,959	146,806	40,666,963
Total Net Depreciable Capital Assets	65,099,187	776,235	-	65,875,422
Total Net Capital Assets	97,949,577	3,986,735	1,463,090	100,473,222

Depreciation expense was charged to governmental activities as follows:

General Government	$ 104,538
Library	182,713
Parks and Recreation	399,628
Public Safety	149,820
Public Works	2,236,260
	3,072,959

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

CAPITAL ASSETS – Continued

Business-Type Activities

Business-type capital asset activity for the year was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Nondepreciable Capital Assets				
Land	$ 615,376	-	-	615,376
Construction in Progress	3,396,889	428,864	852,470	2,973,283
	4,012,265	428,864	852,470	3,588,659
Depreciable Capital Assets				
Equipment	18,854,317	312,180	-	19,166,497
Vehicles	528,575	89,984	-	618,559
Infrastructure	68,031,586	1,760,804	-	69,792,390
	87,414,478	2,162,968	-	89,577,446
Less Accumulated Depreciation				
Equipment	7,704,481	470,807	-	8,175,288
Vehicles	361,822	93,000	-	454,822
Infrastructure	13,081,755	1,272,152	-	14,353,907
	21,148,058	1,835,959	-	22,984,017
Total Net Depreciable Capital Assets	66,266,420	327,009	-	66,593,429
Total Net Capital Assets	70,278,685	755,873	852,470	70,182,088

Depreciation expense was charged to business-type activities as follows:

Sewer	$ 745,416
Water	1,090,543
	1,835,959

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

INTERFUND RECEIVABLES, PAYABLES AND TRANSFERS

Interfund Balances

Interfund balances are advances in anticipation of receipts to cover temporary cash shortages. The composition of interfund balances as of the date of this report, is as follows:

Receivable Fund	Payable Fund	Amount
General	Nonmajor Governmental	$ 2,715,489

Interfund Transfers

Interfund transfers for the year consisted of the following:

Transfers In	Transfers Out	Amount
General	City Wide Capital	$ 132,689
Library	General	25,884
Parks and Recreation	General	1,473,433
City Wide Capital	General	1,442,336
Nonmajor Governmental	General	310,231
Sewer	General	174,744
Water	Sewer	75,125
Water	City Wide Capital	103,895
		3,738,337

Transfers are used to (1) move revenues from the fund that statute or budget requires to collect them to the fund that statute or budget requires to expend them and (2) use unrestricted revenues collected in the General Fund to finance various programs accounted for in other funds in accordance with budgetary authorizations.

The purpose of significant interfund transfers are as follows:

- $1,473,433 to the Parks and Recreation Fund to subsidize operations.

- $1,442,336 to the Citywide Capital Fund to fund the construction of additional roadway projects.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT

Other Obligations

Other Obligations currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Conover Sewer Recapture owed to John Conover as reimbursement for sewer extension, due in one lump sum payment of $1,890 in fiscal year 2023.	Governmental Activities	$ 1,890	-	-	1,890

Notes Payable

The City enters into notes payable to provide funds for acquisition of capital assets. Notes payable have been issued for the governmental activities. Notes payable are direct obligations and pledge the full faith and credit of the City. Notes payable currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
102 E Van Emmon Building Loan Payable of 2017, payable in annual installments equal to one-fourth of the amount borrowed which includes an annualized interet rate of 3.00% through June 1, 2021.	Downtown TIF	$ 400,000	-	200,000	200,000
Promissory Note of 2019, payable in monthly installments of $71,570, which includes interest at 3.60%, through November 18, 2028.	Vehicle & Equipment	526,655	-	53,229	473,426
		926,655	-	253,229	673,426

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Illinois Environmental Protection Agency (IEPA) Loans Payable

The City has entered into loan agreements with the IEPA to provide low interest financing for sewer and water improvements. IEPA loans currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
IEPA (L17-1156300) Loan Payable of 2007, due in semi-annual installments of $28,263 to $61,744 including interest at 2.50% through August 9, 2026.	Water	$ 745,816	-	107,050	638,766

General Obligation Bonds

The City issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities. General obligation bonds have been issued for both governmental and business-type activities. General obligation bonds issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues. General obligation bonds are direct obligations and pledge the full faith and credit of the City.

General obligation bonds currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Library Bonds of 2006, due in annual installments of $50,000 to $100,000 plus interest at 4.75% to 4.80% through December 30, 2024.	Library	$ 425,000	-	75,000	350,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2011, due in annual installments of $660,000 to $1,100,000 plus interest at 4.28% through December 30, 2025.	Sewer	$ 5,910,000	-	885,000	5,025,000
General Obligation Library Refunding Bonds of 2013, due in annual installments of $155,000 to $730,000 plus interest at 2.00% to 4.00% through December 30, 2024.	Library	3,360,000	-	610,000	2,750,000
General Obligation Refunding Alternate Revenue Source Bonds of 2014, due in annual installments of $230,000 to $270,000 plus interest at 4.00% to 4.30% through December 1, 2029.	Countryside TIF	1,235,000	-	-	1,235,000
General Obligation Alternate Revenue Source Bonds of 2014A, due in annual installments of $135,000 to $300,000 plus interest at 3.00% to 4.00% through December 1, 2033.	Citywide Capital	3,400,000	-	200,000	3,200,000
General Obligation Refunding Alternate Revenue Source Bonds of 2014B, due in annual installments of $255,000 to $320,000 plus interest at 2.00% to 3.00% through December 30, 2022.	Debt Service	925,000	-	295,000	630,000

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

General Obligation Bonds – Continued

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
General Obligation Refunding Alternate Revenue Source Bonds of 2014C, due in annual installments of $120,000 to $140,000 plus interest at 2.00% to 3.00% through December 30, 2024.	Water	$ 675,000	-	130,000	545,000
General Obligation Alternate Revenue Source Bonds of 2015A, due in annual installments of $100,000 to $475,000 plus interest at 4.00% through December 1, 2034.	Countryside TIF	1,260,685	-	107,163	1,153,522
	Water	3,504,315	-	297,837	3,206,478
General Obligation Refunding Alternate Revenue Source Bonds of 2016, due in annual installments of $430,000 to $1,475,000 plus interest at 4.00% to 4.25% through December 30, 2022.	Water	3,430,000	-	1,475,000	1,955,000
		24,125,000	-	4,075,000	20,050,000
Governmental		10,605,685	-	1,287,163	9,318,522
Business-Type		13,519,315	-	2,787,837	10,731,478
		24,125,000	-	4,075,000	20,050,000

Debt Certificates

The City issues debt certificates to provide funds for the acquisition and construction of major capital facilities. Debt certificates have been issued for both governmental and business-type activities. Debt Certificates issued for business-type activities are reported in the proprietary funds as they are expected to be repaid from proprietary revenues.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Certificates – Continued

Debt certificates currently outstanding are as follows:

Issue	Fund Debt Retired by	Beginning Balances	Issuances	Retirements	Ending Balances
Illinois Rural Bond Bank Debt Certificates of 2003A, due in annual installments of $80,000 to $155,000 plus interest at 1.60% to 5.20% through February 1, 2023.	Sewer	$ 445,000	-	140,000	305,000

Long-Term Liability Activity

Changes in long-term liabilities during the fiscal year were as follows:

Type of Debt	Beginning Balances	Additions	Deductions	Ending Balances	Amounts Due within One Year
Governmental Activities					
Compensated Absences	$ 616,888	134,110	67,055	683,943	136,789
Net Pension Liability/(Asset) - IMRF	916,272	-	1,171,645	(255,373)	-
Net Pension Liability - Police Pension	12,668,740	-	2,218,713	10,450,027	-
Total OPEB Liability - RBP	961,919	107,894	-	1,069,813	-
Other Obligations	1,890	-	-	1,890	-
Notes Payable	926,655	-	253,229	673,426	255,204
General Obligation Bonds	10,605,685	-	1,287,163	9,318,522	1,342,455
Plus: Unamortized Premium	112,522	-	24,486	88,036	-
	26,810,571	242,004	5,022,291	22,030,284	1,734,448
Business-Type Activities					
Compensated Absences	$ 93,302	42,662	21,331	114,633	56,105
Net Pension Liability/(Asset) - IMRF	182,204	-	238,633	(56,429)	-
Total OPEB Liability - RBP	112,344	49,323	-	161,667	-
IEPA Loans Payable	745,816	-	107,050	638,766	109,742
General Obligation Bonds	13,519,315	-	2,787,837	10,731,478	2,407,545
Plus: Unamortized Premium	165,864	-	56,231	109,633	-
Debt Certificates	445,000	-	140,000	305,000	150,000
Developer Agreements	2,272,473	113,624	-	2,386,097	-
Asset Retirement Obligation	-	2,783,000	-	2,783,000	-
	17,536,318	2,988,609	3,351,082	17,173,845	2,723,392

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Long-Term Liability Activity – Continued

For the governmental activities, the compensated absences, the net pension liabilities, and the total OPEB liability are generally liquidated by the General Fund. The Vehicle and Equipment Funds make payment on the notes payable. General obligation bonds are being liquidated by the Library, Countryside TIF, Citywide Capital and Debt Service Funds.

For the business-type activities, the Sewer and Water Funds liquidate compensated absences, the net pension liability, and the total OPEB liability. The Sewer and Water Funds are making payments on the IEPA loans payable, general obligation bonds, debt certificates and developer agreements.

Debt Service Requirements to Maturity

The annual debt service requirements to maturity, including principal and interest, are as follows:

	Governmental Activities			
	Notes Payable		General Obligation Bonds	
Fiscal Year	Principal	Interest	Principal	Interest
2022	$ 255,204	22,449	1,342,455	351,324
2023	57,253	14,317	1,396,424	308,612
2024	59,347	12,223	1,131,716	257,493
2025	61,581	9,989	1,175,685	213,574
2026	63,867	7,703	511,889	167,947
2027	66,237	5,333	523,212	149,721
2028	68,691	2,879	550,858	130,806
2029	41,246	504	568,504	108,650
2030	-	-	601,150	85,527
2031	-	-	343,796	60,671
2032	-	-	351,442	46,919
2033	-	-	364,088	32,861
2034	-	-	376,734	18,297
2035	-	-	80,569	3,228
Total	673,426	75,397	9,318,522	1,935,630

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Debt Service Requirements to Maturity – Continued

	Business-Type Activities					
	IEPA		General Obligation		Debt	
Fiscal	Loan Payable		Bonds		Certificates	
Year	Principal	Interest	Principal	Interest	Principal	Interest
2022	$ 109,742	15,288	2,407,545	418,324	150,000	15,710
2023	112,503	12,527	2,333,576	331,196	155,000	8,060
2024	115,333	9,697	1,478,284	245,665	-	-
2025	118,235	6,795	1,529,315	185,134	-	-
2026	121,209	3,821	1,258,111	122,385	-	-
2027	61,744	772	161,788	68,981	-	-
2028	-	-	169,142	62,509	-	-
2029	-	-	176,496	55,743	-	-
2030	-	-	183,850	48,683	-	-
2031	-	-	191,204	41,329	-	-
2032	-	-	198,558	33,681	-	-
2033	-	-	205,912	25,739	-	-
2034	-	-	213,266	17,503	-	-
2035	-	-	224,431	8,972	-	-
Total	638,766	48,900	10,731,478	1,665,844	305,000	23,770

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

LONG-TERM DEBT – Continued

Non-Commitment Debt

Special service area bonds outstanding as of the date of this report totaled $55,107,000, Kendall Marketplace business district bonds totaled $6,665,000 and Kendall Marketplace sales tax bonds totaled $5,225,000. These bonds are not an obligation of the government and are secured by the levy of an annual tax on the real property within the special service area, business district taxes, and sales taxes, respectively. The government is in no way liable for repayment but is only acting as agent for the property owners in levying/assessing and collecting the tax, and forwarding the collections to bondholders.

Legal Debt Margin

Chapter 65, Section 5/8-5-1 of the Illinois Compiled Statutes provides, "…no municipality having a population of less than 500,000 shall become indebted in any manner or for any purpose, to an amount, including existing indebtedness in the aggregate exceeding 8.625% on the value of the taxable property therein, to be ascertained by the last assessment for state and county purposes, previous to the incurring of the indebtedness or, until January 1, 1983, if greater, the sum that is produced by multiplying the municipality's 1978 equalized assessed valuation by the debt limitation percentage in effect on January 1, 1979."

Assessed Valuation - 2020	$ 582,696,499
Legal Debt Limit - 8.625% of Assessed Value	50,257,573
Amount of Debt Applicable to Limit	
General Obligation Bonds	3,405,000
Legal Debt Margin	46,852,573

Asset Retirement Obligation

The City has recognized an asset retirement obligation (ARO) and related deferred outflow of resources in connection with its obligation to seal and abandon various water wells and for the demolition of the City's underground storage tanks at the end of their estimated useful lives in accordance with federal, state, and/or local requirements. The ARO was measured using actual historical costs for similar abandonments, adjusted for inflation through the end of the year. The estimated remaining useful lives of the water wells and underground storage ranges between 49 and 84 years.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

NET POSITION CLASSIFICATIONS

Net investment in capital assets was comprised of the following as of April 30, 2021:

Governmental Activities	
Capital Assets - Net of Accumulated Depreciation	$ 100,473,222
Less Capital Related Debt:	
Loan Payable of 2017	(200,000)
Notes Payable of 2019	(473,426)
General Obligation Library Bonds of 2006	(350,000)
General Obligation Library Refunding Bonds of 2013	(2,750,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014	(1,235,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014A	(3,200,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014B	(630,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(1,153,522)
Loss on Refunding	64,948
Premium on Debt Issuance	(88,036)
Net Investment in Capital Assets	90,458,186
Business-Type Activities	
Capital Assets - Net of Accumulated Depreciation	70,182,088
Less Capital Related Debt:	
IEPA (L17-1156300) Loan Payable of 2007	(638,766)
General Obligation Refunding Alternate Revenue Source Bonds of 2011	(5,025,000)
General Obligation Refunding Alternate Revenue Source Bonds of 2014C	(545,000)
General Obligation Alternate Revenue Source Bonds of 2015A	(3,206,478)
General Obligation Alternate Revenue Source Bonds of 2016	(1,955,000)
Illinois Rural Bond Bank Debt Certificates of 2003	(305,000)
Loss on Refunding	12,303
Premium on Debt Issuance	(109,633)
Net Investment in Capital Assets	58,409,514

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

FUND BALANCE CLASSIFICATIONS

In the governmental funds' financial statements, the City considers restricted amounts to have been spent when an expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available. The City first utilizes committed, then assigned and then unassigned fund balance when an expenditure is incurred for purposes for which all three unrestricted fund balances are available.

The following is a schedule of fund balance classifications for the governmental funds as of the date of this report:

		Special Revenue		Capital Projects		
	General	Library	Parks and Recreation	Citywide Capital	Nonmajor	Totals
Fund Balances						
Nonspendable						
Prepaids	$ 152,003	9,069	29,199	-	-	190,271
Restricted						
Library Operations	-	798,152	-	-	-	798,152
Motor Fuel Tax	-	-	-	-	1,243,821	1,243,821
Special Service Areas	-	-	-	-	10,231	10,231
Land Cash	-	-	-	-	31,131	31,131
	-	798,152	-	-	1,285,183	2,083,335
Committed						
Parks and Recreation						
Programs and Facility Improvements	-	-	43,801	-	-	43,801
Assigned						
Capital Projects	-	-	-	119,569	1,485,791	1,605,360
Unassigned	9,020,351	-	-	-	(2,716,429)	6,303,922
Total Fund Balances	9,172,354	807,221	73,000	119,569	54,545	10,226,689

Nonspendable Fund Balance. Consists of resources that cannot be spent because they are either: a) not in a spendable form; or b) legally or contractually required to be maintained intact.

Restricted Fund Balance. Consists of resources that are restricted to specific purposes, that is, when constraints placed on the use of resources are either: a) externally imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments; or b) imposed by law through constitutional provisions or enabling legislation.

NOTE 3 – DETAIL NOTES ON ALL FUNDS – Continued

FUND BALANCE CLASSIFICATIONS – Continued

Committed Fund Balance. Consists of resources constrained (issuance of an ordinance) to specific purposes by the government itself, using its highest level of decision-making authority, Members of the City Council; to be reported as committed, amounts cannot be used for any other purpose unless the government takes the same highest-level action to remove or change the constraint.

Assigned Fund Balance. Consists of amounts that are constrained by Members of the City Council' intent to be used for specific purposes but are neither restricted nor committed. Intent is expressed by a) Members of the City Council itself or b) a body or official to which Members of the City Council has delegated the authority to assign amounts to be used for specific purposes. The City's highest level of decision-making authority is Members of the City Council, who is authorized to assign amounts to a specific purpose.

Unassigned Fund Balance. Consists of residual net resources of a fund that has not been restricted, committed, or assigned within the General Fund and deficit fund balances of other governmental funds.

Minimum Fund Balance Policy. The City's policy states that the General fund should maintain a minimum unrestricted fund balance of no less than 30% of the annual appropriations budget.

NOTE 4 – OTHER INFORMATION

RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; natural disasters; and injuries to the City's employees. The City has purchased insurance from private insurance companies. Risks covered included certain types of liabilities and bonds. Premiums have been displayed as expenditures/expenses in appropriate funds. There were no significant changes in insurance coverages from the prior year and settlements did not exceed insurance coverage in any of the past three fiscal years.

CONTINGENT LIABILITIES

Litigation

The City is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the City's attorney, the resolution of these matters will not have a material adverse effect on the financial condition of the City.

NOTE 4 – OTHER INFORMATION – Continued

CONTINGENT LIABILITIES - Continued

Grants

Amounts received or receivable from grantor agencies are subject to audit and adjustment by grantor agencies, principally the federal government. Any disallowed claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures which may be disallowed by the grantor cannot be determined at this time although the City expects such amounts, if any, to be immaterial.

Financial Impact from COVID-19

In March 2020, the World Health Organization declared the COVID-19 virus a public health emergency. As of the date of this report, the extent of the impact of COVID-19 on the City's operations and financial position cannot be determined.

COMMITMENTS

Agreements with Developers – Governmental Activities

Under a Development/Economic Initiative Agreement entered into in March of 2001, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Route 34. Eligible costs of $2,074,833 and accrued interest at 5% are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of eighteen years. Through April 30, 2021, the City has reimbursed $3,084,909 including $110,699 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development and Annexation Agreement entered into in July of 2000, amended in October of 2001, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Kennedy Road. Eligible costs of $5,977,027 are to be reimbursed from 50% of the sales tax generated in the development. Through April 30, 2021, the City has reimbursed $3,385,839, including $293,404 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under an Annexation Agreement entered into in April of 2006, the City agreed to reimburse eligible costs associated with a development located at Route 47 between Base Line Road and Corneils Road. Eligible costs are to be reimbursed from 55% of City Admissions Taxes collected, limited to a period of ten years. Through April 30, 2021, the City has reimbursed $1,381,968, including $58,105 in the current year. All payments have been recorded as an expenditure of the General Fund. The agreement was amended in April of 2019 to rebate 100% of admissions tax received by the City from the developer for a period of twenty years, until September 2026, and the admissions tax rate was decreased from 5% to 2.75%. The 100% rebate went into effect beginning with the 2013 fiscal year.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under a Development/Economic Initiative Agreement entered into in January of 2007, the City agreed to reimburse eligible costs associated with a development located at Route 47 and Corneils Road. Eligible costs of $287,392 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of twenty years. Through April 30, 2021, the City has reimbursed $23,404, including $0 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development Agreement entered into in June of 2007, the City agreed to create a business district in the area around Route 34 and Cannonball Trail. Under the agreement, 50% of sales tax and 100% of the business district tax generated in the district are remitted by the City to an escrow agent to pay the debt service on the Special Service Area Revenue Bonds of 2007. The bonds are secured solely by the pledged revenues and are not obligations of the City and are therefore not recorded on the City's books. All payments have been recorded as an expenditure of the General Fund. Expenditures in the current year were $459,155 for sales taxes and $369,694 in business district taxes.

In February of 2011, the City amended a Development/Economic Initiative Agreement dated April 2007. Under the original agreement, the City agreed to reimburse 20% of eligible costs associated with a development located at Route 47 and Fountainview Drive from 50% of the sales tax generated in the development, limited to a period of twenty years. Under the amended agreement, the City will hold the sales tax rebates in an escrow account until certain land improvements has been completed. Through April 30, 2021, the City is holding $22,791 in escrow, including $1,234 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development/Economic Initiative Agreement entered into on December 22, 2011 the City agreed to reimburse eligible costs associated with a development located west of Route 47 and north of Cannonball Trail on Boombah Boulevard. Through April 30, 2021, the City has reimbursed $83,852, including $7,940 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under development agreements entered into in April 2012, the City agreed to reimburse eligible costs associated with a development located at within the Downtown TIF district. Eligible costs are to be reimbursed from 85% of the incremental property tax and 100% of the business district tax generated in the development, through December 31, 2029. Through April 30, 2021, the City has reimbursed $161,980 in incremental property taxes and $171,574 in business district taxes. Incremental property tax payments have been recorded as an expenditure of the Downtown TIF Fund and the Business District Tax Rebates have been recorded as an expenditure of the General Fund.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Agreements with Developers – Governmental Activities – Continued

Under a development agreement entered into in May 2013, the City agreed to reimburse eligible costs associated with a development located at Route 34 and Route 47 in the Countryside TIF district. Eligible costs are to be reimbursed from 50% of the amusement tax and 100% of the business district tax generated in the development, limited to a period of 10 years. Through April 30, 2021, the City has reimbursed $327,175 in amusement taxes and $94,044 in business district taxes. Amusement tax rebate expenditures have been recorded in the General Fund of $5,686 and Business District rebate expenditures have been recorded in the General Fund of $25,310.

Under a Development/Economic Initiative Agreement entered into in March of 2016, the City agreed to reimburse eligible costs associated with a development located within the Fountainview Subdivision. Eligible costs of $63,350 are to be reimbursed from 50% of the sales tax generated in the development, limited to a period of ten years. Through April 30, 2021, the City has reimbursed $15,796, including $4,993 in the current year. All payments have been recorded as an expenditure of the General Fund.

Under a Development/Economic Initiative Agreement entered into in April of 2019, the City agreed to accept all previously constructed public improvements and complete all remaining infrastructure improvements in the Raintree Subdivision Special Service Area, as stipulated in the agreement. The Developer has acquired certain vacant lots within the Raintree Subdivision, and has further agreed to pay certain impact fees and other contributions towards the City at agreed upon timeframes and complete construction on certain dwelling units. As of April 30, 2021, the City has incurred $86,659 in expenditures, which have been fully reimbursed by the developer.

Under a development agreement entered into in August 2019, the City agreed to reimburse eligible costs associated with the renovation of the historic Kendall County jail. Eligible costs are to be reimbursed from incremental property taxes through 2034. Through April 30, 2021, the City has reimbursed $100,979 in renovation costs, which are recorded as an expenditure of the Downtown TIF II Fund.

Agreements with Developers – Business-Type Activities

Under a reimbursement agreement entered into in August of 2003, the City and the developer of the Fox Hill subdivision agreed to reimburse eligible costs associated with the construction and over-sizing of water and sewer infrastructure lines within the area. Eligible costs are to be paid to the developer within twenty years of the agreement. This agreement was amended in April 2006 to include additional costs. Total eligible costs were $807,847, which accrues compounded interest of 5% annually. Interest for a portion of eligible costs was computed back to January 1, 1995. Total interest to date is $1,578,250. The amount recorded as a liability, including interest, as of April 30, 2021 is $2,386,097. Of this amount, 52% is recorded in the Water Fund. The remaining 48% of this amount is recorded in the Sewer Fund.

NOTE 4 – OTHER INFORMATION – Continued

COMMITMENTS – Continued

Hotel/Motel Tax Rebates

All hotels and motels located within the City limits are required to pay a tax of 3% based on the gross rental receipts from the renting, leasing or letting of a hotel or motel room. Proceeds from the hotel/motel tax are remitted to the Aurora Area Convention & Visitors Bureau (AACVB) for the purposes of promoting tourism and conventions within Yorkville, pursuant to State Statute. The City has recorded $60,076 in rebates in the General Fund for the fiscal year ended April 30, 2021.

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS

The City contributes to two defined benefit pension plans, the Illinois Municipal Retirement Fund, a defined benefit agent multiple-employer public employee retirement system and the Police Pension Plan which is a single-employer pension plan. A separate report is issued for the Police Pension Plan and may be obtained by writing to the City at 804 Game Farm Road, Yorkville, Illinois 60560. IMRF does issue a publicly available financial report that includes financial statements and required supplementary information for the plan as a whole, but not by individual employer. That report may be obtained on-line at www.imrf.org. The benefit, benefit levels, employee contributions, and employer contributions are governed by Illinois Compiled Statutes (ILCS) and can only be amended by the Illinois General Assembly.

The aggregate amounts recognized for the two pension plans is:

	Net Pension Liability/ (Asset)	Deferred Outflows	Deferred Inflows	Pension Expense
IMRF	$ (311,802)	562,933	1,497,668	158,209
Police Pension	10,450,027	946,993	2,575,459	1,127,379
	10,138,225	1,509,926	4,073,127	1,285,588

Illinois Municipal Retirement (IMRF)

Plan Descriptions

Plan Administration. All employees (other than those covered by the Police Pension Plan) hired in positions that meet or exceed the prescribed annual hourly standard must be enrolled in IMRF as participating members. The plan is accounted for on the economic resources' measurement focus and the accrual basis of accounting. Employer and employee contributions are recognized when earned in the year that the contributions are required, benefits and refunds are recognized as an expense and liability when due and payable.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Benefits Provided. IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

IMRF provides two tiers of pension benefits. Employees hired ***before*** January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last 10 years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

Employees hired ***on or after*** January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the *lesser* of:

- 3% of the original pension amount
- or 1/2 of the increase in the Consumer Price Index of the original pension amount.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Plan Membership. As of December 31, 2020, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	48
Inactive Plan Members Entitled to but not yet Receiving Benefits	50
Active Plan Members	54
Total	152

Contributions. As set by statute, the City's Regular Plan Members are required to contribute 4.5% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. For the year-ended April 30, 2021, the City's contribution was 10.84% of covered payroll.

Net Pension Liability/(Asset). The City's net pension liability/(asset) was measured as of December 31, 2020. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation performed, as of December 31, 2020, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.25%
Salary Increases	2.85% to 13.75%
Cost of Living Adjustments	2.25%
Inflation	2.25%

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Plan Descriptions – Continued

Actuarial Assumptions – Continued. For nondisabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Retiree, Male (adjusted 106%) and Female (adjusted 105%) tables, and future mortality improvements projected using scale MP-2020. For disabled retirees, the Pub-2010, Amount-Weighted, below-median income, General, Disabled Retiree, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020. For active members, the Pub-2010, Amount-Weighted, below-median income, General, Employee, Male and Female (both unadjusted) tables, and future mortality improvements projected using scale MP-2020.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

Asset Class	Target	Long-Term Expected Real Rate of Return
Fixed Income	28.00%	1.30%
Domestic Equities	37.00%	5.00%
International Equities	18.00%	6.00%
Real Estate	9.00%	6.20%
Blended	7.00%	2.85% - 6.95%
Cash and Cash Equivalents	1.00%	0.70%

Discount Rate

The discount rate used to measure the total pension liability was 7.25%, same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Discount Rate Sensitivity

The following is a sensitivity analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Net Pension Liability/(Asset)	$ 2,182,339	(311,802)	(2,186,229)

Changes in the Net Pension Liability/(Asset)

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability/ (Asset) (A) - (B)
Balances at December 31, 2019	$ 15,299,810	14,201,334	1,098,476
Changes for the Year:			
Service Cost	384,165	-	384,165
Interest on the Total Pension Liability	1,104,694	-	1,104,694
Difference Between Expected and Actual Experience of the Total Pension Liability	(69,685)	-	(69,685)
Changes of Assumptions	(340,717)	-	(340,717)
Contributions - Employer	-	429,468	(429,468)
Contributions - Employees	-	173,017	(173,017)
Net Investment Income	-	1,983,375	(1,983,375)
Benefit Payments, including Refunds of Employee Contributions	(509,477)	(509,477)	-
Other (Net Transfer)	-	(97,125)	97,125
Net Changes	568,980	1,979,258	(1,410,278)
Balances at December 31, 2020	15,868,790	16,180,592	(311,802)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement (IMRF) – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2021, the City recognized pension expense of $158,209. At April 30, 2021, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 265,200	(53,188)	212,012
Change in Assumptions	145,018	(298,154)	(153,136)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	(1,146,326)	(1,146,326)
Total Expenses to be Recognized in Future Periods	410,218	(1,497,668)	(1,087,450)
Pension Contributions Made Subsequent to the Measurement Date	152,715	-	152,715
Total Deferred Amounts Related to IMRF	562,933	(1,497,668)	(934,735)

The $152,715 reported as deferred outflows of resources related to pensions resulting from employer contributions subsequent to the measurement date and will be recognized as a reduction of the net pension liability in the reporting year ended April 30, 2022. Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred (Inflows) of Resources
2022	$ (179,689)
2023	(147,410)
2024	(547,793)
2025	(212,558)
2026	-
Thereafter	-
Total	(1,087,450)

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan

Plan Descriptions

Plan Administration. The Police Pension Plan is a single-employer defined benefit pension plan that covers all sworn police personnel. The defined benefits and employee and minimum employer contribution levels are governed by Illinois Compiled Statutes (40 ILCS 5/3-1) and may be amended only by the Illinois legislature. The City accounts for the Fund as a pension trust fund. The Fund is governed by a five-member pension board. Two members of the Board are appointed by the City Mayor, one member is elected by pension beneficiaries and two members are elected by active police employees.

Plan Membership. At April 30, 2021, the measurement date, membership consisted of the following:

Inactive Plan Members Currently Receiving Benefits	13
Inactive Plan Members Entitled to but not yet Receiving Benefits	7
Active Plan Members	32
Total	52

Benefits Provided. The following is a summary of the Police Pension Plan as provided for in Illinois State Statutes.

The Police Pension Plan provides retirement benefits through two tiers of benefits as well as death and disability benefits. Covered employees hired before January 1, 2011 (Tier 1), attaining the age of 50 or older with 20 or more years of creditable service are entitled to receive an annual retirement benefit of ½ of the salary attached to the rank held on the last day of service, or for one year prior to the last day, whichever is greater. The annual benefit shall be increased by 2.5 percent of such salary for each additional year of service over 20 years up to 30 years, to a maximum of 75 percent of such salary. Employees with at least eight years but less than 20 years of credited service may retire at or after age 60 and receive a reduced benefit. The monthly benefit of a police officer who retired with 20 or more years of service after January 1, 1977 shall be increased annually, following the first anniversary date of retirement and be paid upon reaching the age of at least 55 years, by 3 percent of the original pension and 3 percent compounded annually thereafter.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. Covered employees hired on or after January 1, 2011 (Tier 2), attaining the age of 55 or older with 10 or more years of creditable service are entitled to receive an annual retirement benefit equal to the average monthly salary obtained by dividing the total salary of the police officer during the 48 consecutive months of service within the last 60 months of service in which the total salary was the highest by the number of months of service in that period. Police officer salary for the pension purposes is capped at $106,800, plus the lesser of ½ of the annual change in the Consumer Price Index or 3 percent compounded. The annual benefit shall be increased by 2.5 percent of such a salary for each additional year of service over 20 years up to 30 years to a maximum of 75 percent of such salary. Employees with at least 10 years may retire at or after age 50 and receive a reduced benefit (i.e., ½ percent for each month under 55). The monthly benefit of a Tier 2 police officer shall be increased annually at age 60 on the January 1st after the police officer retires, or the first anniversary of the pension starting date, whichever is later. Noncompounding increases occur annually, each January thereafter. The increase is the lesser of 3 percent of ½ of the change in the Consumer Price Index for the proceeding calendar year.

Contributions. Covered employees are required to contribute 9.91% of their base salary to the Police Pension Plan. If an employee leaves covered employment with less than 20 years of service, accumulated employee contributions may be refunded without accumulated interest. The City is required to contribute the remaining amounts necessary to finance the plan and the administrative costs as actuarially determined by an enrolled actuary. However, effective January 1, 2011, ILCS requires the City to contribute a minimum amount annually calculated using the projected unit credit actuarial cost method that will result in the funding of 90% of the past service cost by the year 2040. For the year-ended April 30, 2021, the City's contribution was 44.85% of covered payroll.

Concentrations. At year end, the Pension Plan did not have any investments (other than investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments), in any one organization that represent 5 percent or more of net position available for benefits.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation performed, as of April 30, 2021, using the following actuarial methods and assumptions:

Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Fair Value
Actuarial Assumptions	
Interest Rate	7.00%
Salary Increases	5.00%
Cost of Living Adjustments	2.50%
Inflation	2.50%

Mortality rates were based on the RP-2014 base rates with blue collar adjustment projected from 2013 with scale MP-2020 fully generationally.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%, the same as the prior valuation. The projection of cash flows used to determine the discount rate assumed that member contributions will be made at the current contribution rate and that City contributions will be made at rates equal to the difference between the actuarially determined contribution rates and the member rate. Based on those assumptions, the Fund's fiduciary net position was projected to be available to make all project future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the total pension liability.

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Discount Rate Sensitivity

The following is a sensitive analysis of the net pension liability to changes in the discount rate. The table below presents the pension liability of the City calculated using the discount rate as well as what the City's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net Pension Liability	$ 14,764,111	10,450,027	7,020,016

Changes in the Net Pension Liability

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability (A) - (B)
Balances at April 30, 2020	$ 23,533,723	10,864,983	12,668,740
Changes for the Year:			
Service Cost	745,174	-	745,174
Interest on the Total Pension Liability	1,613,488	-	1,613,488
Changes of Benefit Terms	-	-	-
Difference Between Expected and Actual Experience of the Total Pension Liability	137,349	-	137,349
Changes of Assumptions	(97,277)	-	(97,277)
Contributions - Employer	-	1,230,604	(1,230,604)
Contributions - Employees	-	261,904	(261,904)
Net Investment Income	-	3,124,939	(3,124,939)
Benefit Payments, including Refunds of Employee Contributions	(893,334)	(893,334)	-
Administrative Expense	(12,766)	(12,766)	-
Net Changes	1,492,634	3,711,347	(2,218,713)
Balances at April 30, 2021	25,026,357	14,576,330	10,450,027

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Police Pension Plan – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended April 30, 2021, the City recognized pension expense of $1,127,379. At April 30, 2021, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 279,954	(845,003)	(565,049)
Change in Assumptions	667,039	(364,553)	302,486
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	(1,365,903)	(1,365,903)
Total Deferred Amounts Related to Police Pension	946,993	(2,575,459)	(1,628,466)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows/(Inflows) of Resources
2021	$ (364,258)
2022	(389,789)
2023	(370,678)
2024	(524,097)
2025	(17,783)
Thereafter	38,139
Total	(1,628,466)

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS

General Information about the OPEB Plan

Plan Description. The City's defined benefit OPEB plan, Retiree Benefits Plan (RBP), provides OPEB for all permanent full-time general and public safety employees of the City. RBP is a single-employer defined benefit OPEB plan administered by the City. Article 11 of the State Compiled Statutes grants the authority to establish and amend the benefit terms and financing requirements to the City Board. No assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Benefits Provided. RBP provides coverage under the City of Yorkville group health program by contributing the monthly premium to retirees and their dependents.

Plan Membership. As of April 30, 2021, the measurement date, the following employees were covered by the benefit terms:

Inactive Plan Members Currently Receiving Benefits	11
Inactive Plan Members Entitled to but not yet Receiving Benefits	-
Active Plan Members	83
Total	94

Total OPEB Liability

The City's total OPEB liability was measured as of April 30, 2021 and was determined by an actuarial valuation as of that date.

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Total OPEB Liability – Continued

Actuarial Assumptions and Other Inputs. The total OPEB liability in the April 30, 2021 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	3.50%
Salary Increases	3.50%
Discount Rate	2.12%
Healthcare Cost Trend Rates	7.0% for 2021, decreasing 0.25% per year to an ultimate rate of 4.0% for 2031 and later
Retirees' Share of Benefit-Related Costs	100% of projected health insurance premiums for retirees

The discount rate was based upon the expected rate of return associated with funded benefits, and unfunded benefits, the 20-year municipal bond rate.

Mortality rates were based on the RP-2014 Blue Collar base rates projected to 2021 using scale MP-2020 for Police. For all others, the RP-2014 base rates projected to 2021 using scale MP-2020 was used.

Change in the Total OPEB Liability

	Total OPEB Liability
Balance at April 30, 2020	$ 1,074,263
Changes for the Year:	
Service Cost	62,448
Interest on the Total Pension Liability	29,424
Changes of Benefit Terms	-
Difference Between Expected and Actual Experience	328,449
Changes of Assumptions or Other Inputs	(136,858)
Benefit Payments	(126,246)
Net Changes	157,217
Balance at April 30, 2021	1,231,480

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The discount rate used to measure the total pension liability was 2.12%, while the prior valuation used 2.91%. The following presents the total OPEB liability, calculated using the discount rate, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher:

	1% Decrease (1.12%)	Current Discount Rate (2.12%)	1% Increase (3.12%)
Total OPEB Liability	$ 1,322,570	1,231,480	1,144,938

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the total OPEB liability, calculated using varied Healthcare Trend Rates, as well as what the total OPEB liability would be if it were calculated using a Healthcare Trend Rate that is one percentage point lower or one percentage point higher:

	1% Decrease (Varies)	Healthcare Cost Trend Rates (Varies)	1% Increase (Varies)
Total OPEB Liability	$ 1,110,234	1,231,480	1,374,029

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS – Continued

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended April 30, 2021, the City recognized OPEB expense of $109,192. At April 30, 2021, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	$ 308,156	-	308,156
Change in Assumptions	72,586	(128,402)	(55,816)
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	-	-	-
Total Deferred Amounts Related to OPEB	380,742	(128,402)	252,340

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Fiscal Year	Net Deferred Outflows of Resources
2022	$ 17,320
2023	17,320
2024	17,320
2025	17,320
2026	17,320
Thereafter	165,740
Total	252,340

NOTE 4 – OTHER INFORMATION – Continued

SUBSEQUENT EVENTS

American Rescue Plan Act of 2021

On March 11, 2021, the American Rescue Plan Act of 2021 was signed into law. This act provides $350 billion in funding for local governments. The City has been allocated $2,802,218 to be received in two installments. On August 13, 2021, the City received their first installment of $1,401,109.

General Obligation Bonds

On May 27, 2021, the City issued $8,250,000 of Series 2021 General Obligation (ARS) Bonds with interest rates ranging between 2.00% and 4.00% and maturing on December 30, 2040.

REQUIRED SUPPLEMENTARY INFORMATION

Required supplementary information includes financial information and disclosures that are required by the GASB but are not considered a part of the basic financial statements. Such information includes:

- Schedule of Employer Contributions
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Changes in the Employer's Net Pension Liability
  - Illinois Municipal Retirement Fund
  - Police Pension Fund

- Schedule of Investment Returns
  - Police Pension Fund

- Schedule of Changes in the Employer's Total OPEB Liability
  - Retiree Benefit Plan

- Budgetary Comparison Schedule
  - General Fund
  - Library – Special Revenue Fund
  - Parks and Recreation – Special Revenue Fund

Notes to the Required Supplementary Information

Budgetary Information – Budgets are adopted on a basis consistent with generally accepted accounting principles.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2021

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2016	$ 311,346	$ 311,346	$ -	$ 2,853,781	10.91%
2017	308,134	308,134	-	2,898,722	10.63%
2018	344,487	344,487	-	3,217,682	10.71%
2019	350,666	350,666	-	3,506,685	10.00%
2020	365,540	365,540	-	3,665,848	9.97%
2021	440,315	440,315	-	4,060,573	10.84%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	23 Years
Asset Valuation Method	5-Year Smoothed Fair Value
Inflation	2.50%
Salary Increases	3.35% - 14.25%
Investment Rate of Return	7.50%
Retirement Age	See the Notes to the Financial Statements
Mortality	IMFR specific mortality table was used with fully generational projection scale MP-2017 (base year 2015).

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Employer Contributions
April 30, 2021

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2015	$ 571,437	$ 624,168	$ 52,731	$ 2,220,146	28.11%
2016	722,940	722,940	-	2,294,948	31.50%
2017	825,413	825,413	-	2,320,642	35.57%
2018	966,211	966,211	-	2,543,266	37.99%
2019	963,361	963,361	-	2,449,210	39.33%
2020	1,111,484	1,111,484	-	2,631,165	42.24%
2021	1,226,371	1,230,604	4,233	2,744,017	44.85%

Notes to the Required Supplementary Information:

Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	19 Years
Asset Valuation Method	Fair Value
Inflation	2.5%
Salary Increases	5.0%
Investment Rate of Return	7.0%
Retirement Age	Tier 1 - 15% at 50 to 100% at age 65 Tier 2 - 5% at 50 to 100% at age 65
Mortality	RP2014 base rates with blue collar adjustment projected from 2013 with Scale MP2020 fully generationally

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Illinois Municipal Retirement Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability/(Asset)
April 30, 2021

	12/31/2015
Total Pension Liability	
Service Cost	$ 303,003
Interest	764,628
Differences Between Expected and Actual Experience	40,167
Change of Assumptions	-
Benefit Payments, Including Refunds of Member Contributions	(295,309)
Net Change in Total Pension Liability	812,489
Total Pension Liability - Beginning	10,191,193
Total Pension Liability - Ending	11,003,682
Plan Fiduciary Net Position	
Contributions - Employer	$ 311,346
Contributions - Members	129,289
Net Investment Income	49,844
Benefit Payments, Including Refunds of Member Contributions	(295,309)
Other (Net Transfer)	(289,688)
Net Change in Plan Fiduciary Net Position	(94,518)
Plan Net Position - Beginning	9,896,191
Plan Net Position - Ending	9,801,673
Employer's Net Pension Liability/(Asset)	$ 1,202,009
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	89.08%
Covered Payroll	$ 2,853,781
Employer's Net Pension Liability/(Asset) as a Percentage of Covered Payroll	42.12%

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

12/31/2016	12/31/2017	12/31/2018	12/31/2019	12/31/2020
317,347	330,734	316,829	356,154	384,165
825,222	887,780	924,525	1,024,674	1,104,694
27,153	132,182	507,597	213,134	(69,685)
-	(449,845)	508,408	-	(340,717)
(318,792)	(365,819)	(442,124)	(499,031)	(509,477)
850,930	535,032	1,815,235	1,094,931	568,980
11,003,682	11,854,612	12,389,644	14,204,879	15,299,810
11,854,612	12,389,644	14,204,879	15,299,810	15,868,790
308,134	335,204	365,769	324,580	429,468
132,252	139,927	167,364	172,689	173,017
684,949	1,792,699	(594,987)	2,196,500	1,983,375
(318,792)	(365,819)	(442,124)	(499,031)	(509,477)
39,225	(226,729)	196,498	(8,647)	(97,125)
845,768	1,675,282	(307,480)	2,186,091	1,979,258
9,801,673	10,647,441	12,322,723	12,015,243	14,201,334
10,647,441	12,322,723	12,015,243	14,201,334	16,180,592
1,207,171	66,921	2,189,636	1,098,476	(311,802)
89.82%	99.46%	84.59%	92.82%	101.96%
2,898,722	3,109,498	3,467,005	3,582,558	3,844,833
41.64%	2.15%	63.16%	30.66%	(8.11%)

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability
April 30, 2021

	4/30/2015
Total Pension Liability	
Service Cost	$ 522,029
Interest	986,212
Changes of Benefit Terms	-
Differences Between Expected and Actual Experience	(483,445)
Change of Assumptions	999,313
Benefit Payments, Including Refunds of Member Contributions	(435,435)
Net Change in Total Pension Liability	1,588,674
Total Pension Liability - Beginning	14,306,459
Total Pension Liability - Ending	15,895,133
Plan Fiduciary Net Position	
Contributions - Employer	$ 624,168
Contributions - Members	214,237
Contributions - Others	-
Net Investment Income	343,590
Benefit Payments, Including Refunds of Member Contributions	(435,435)
Administrative Expense	(14,285)
Net Change in Plan Fiduciary Net Position	732,275
Plan Net Position - Beginning	5,690,471
Plan Net Position - Ending	6,422,746
Employer's Net Pension Liability	$ 9,472,387
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	40.41%
Covered Payroll	$ 2,220,146
Employer's Net Pension Liability as a Percentage of Covered Payroll	426.66%

Note: This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

4/30/2016	4/30/2017	4/30/2018	4/30/2019	4/30/2020	4/30/2021
576,907	611,857	589,463	650,245	672,849	745,174
1,097,143	1,283,144	1,349,196	1,374,562	1,517,322	1,613,488
-	-	-	-	43,601	-
322,766	123,907	(1,529,007)	105,712	51,301	137,349
1,116,723	(565,454)	498,740	612,775	(54,912)	(97,277)
(443,314)	(469,494)	(501,417)	(597,064)	(798,961)	(906,100)
2,670,225	983,960	406,975	2,146,230	1,431,200	1,492,634
15,895,133	18,565,358	19,549,318	19,956,293	22,102,523	23,533,723
18,565,358	19,549,318	19,956,293	22,102,523	23,533,723	25,026,357
722,940	825,413	966,211	963,361	1,111,484	1,230,604
222,736	234,058	249,421	243,941	269,903	261,904
-	32,388	-	-	-	-
(30,493)	473,420	421,975	717,071	(121,161)	3,124,939
(443,314)	(469,494)	(501,417)	(597,064)	(787,372)	(893,334)
(13,448)	(11,774)	(12,266)	(12,693)	(11,589)	(12,766)
458,421	1,084,011	1,123,924	1,314,616	461,265	3,711,347
6,422,746	6,881,167	7,965,178	9,089,102	10,403,718	10,864,983
6,881,167	7,965,178	9,089,102	10,403,718	10,864,983	14,576,330
11,684,191	11,584,140	10,867,191	11,698,805	12,668,740	10,450,027
37.06%	40.74%	45.55%	47.07%	46.17%	58.24%
2,294,948	2,320,642	2,543,266	2,449,210	2,631,165	2,744,017
509.13%	499.18%	427.29%	477.66%	481.49%	380.83%

UNITED CITY OF YORKVILLE, ILLINOIS

Police Pension Fund

Required Supplementary Information
Schedule of Investment Returns
April 30, 2021

Fiscal Year	Annual Money-Weighted Rate of Return, Net of Investment Expense
2015	5.89%
2016	(0.43%)
2017	6.54%
2018	5.09%
2019	7.56%
2020	(1.08%)
2021	26.92%

Note:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

UNITED CITY OF YORKVILLE, ILLINOIS

Retiree Benefit Plan

Required Supplementary Information
Schedule of Changes in the Employer's Total OPEB Liability
April 30, 2021

	4/30/2019	4/30/2020	4/30/2021
Total OPEB Liability			
Service Cost	$ 43,414	46,531	62,448
Interest	40,335	37,312	29,424
Changes in Benefit Terms	-	-	-
Differences Between Expected and Actual Experience	-	-	328,449
Change of Assumptions or Other Inputs	12,225	72,122	(136,858)
Benefit Payments	(122,570)	(132,377)	(126,246)
Net Change in Total OPEB Liability	(26,596)	23,588	157,217
Total OPEB Liability - Beginning	1,077,271	1,050,675	1,074,263
Total OPEB Liability - Ending	1,050,675	1,074,263	1,231,480
Covered-Employee Payroll	$ 5,675,523	5,874,167	6,432,473
Total OPEB Liability as a Percentage of Covered-Employee Payroll	18.51%	18.29%	19.14%

Notes:
This schedule is intended to show information for ten years. Information for additional years will be displayed as it becomes available.

Changes of Assumptions. Changes of assumptions related to the discount rate were made in 2019 through 2021.

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 11,640,828	11,640,828	11,970,764
Intergovernmental	2,770,234	3,173,484	5,016,435
Licenses, Permits and Fees	474,500	474,500	602,328
Charges for Services	1,702,046	1,702,046	1,743,212
Fines and Forfeitures	113,000	113,000	109,268
Interest	89,878	89,878	12,173
Miscellaneous	108,000	108,000	106,560
Total Revenues	16,898,486	17,301,736	19,560,740
Expenditures			
General Government	5,293,883	5,897,133	5,220,130
Public Safety	6,064,220	6,108,720	5,686,416
Community Development	942,154	942,154	828,098
Public Works	2,512,538	2,512,538	2,871,863
Total Expenditures	14,812,795	15,460,545	14,606,507
Excess (Deficiency) of Revenues Over (Under) Expenditures	2,085,691	1,841,191	4,954,233
Other Financing Sources (Uses)			
Transfers In	35,000	35,000	132,689
Transfers Out	(2,085,837)	(2,191,837)	(3,426,628)
	(2,050,837)	(2,156,837)	(3,293,939)
Net Change in Fund Balance	34,854	(315,646)	1,660,294
Fund Balance - Beginning			7,512,060
Fund Balance - Ending			9,172,354

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes	$ 1,562,000	1,562,000	1,561,523
Intergovernmental	25,250	25,250	29,083
Licenses, Permits and Fees	50,000	50,000	104,600
Charges for Services	12,300	12,300	6,081
Fines and Forfeits	8,500	8,500	3,249
Interest	9,459	9,459	1,455
Miscellaneous	3,750	3,750	1,235
Total Revenues	1,671,259	1,671,259	1,707,226
Expenditures			
Library	911,090	911,090	799,301
Debt Service			
Principal Retirement	685,000	685,000	685,000
Interest and Fiscal Charges	143,788	143,788	143,778
Total Expenditures	1,739,878	1,739,878	1,628,079
Excess (Deficiency) of Revenues Over (Under) Expenditures	(68,619)	(68,619)	79,147
Other Financing Sources			
Transfers In	26,584	26,584	25,884
Net Change in Fund Balance	(42,035)	(42,035)	105,031
Fund Balance - Beginning			702,190
Fund Balance - Ending			807,221

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Charges for Services	$ 650,000	650,000	357,208
Grants and Donations	20,000	20,000	3,745
Interest	1,300	1,300	235
Miscellaneous	206,716	206,716	69,881
Total Revenues	878,016	878,016	431,069
Expenditures			
Parks and Recreation			
Park Operations	1,289,685	1,349,685	1,396,038
Recreation Operations	1,267,077	1,267,077	846,949
Total Expenditures	2,556,762	2,616,762	2,242,987
Excess (Deficiency) of Revenues Over (Under) Expenditures	(1,678,746)	(1,738,746)	(1,811,918)
Other Financing Sources			
Transfers In	1,309,284	1,369,284	1,473,433
Net Change in Fund Balance	(369,462)	(369,462)	(338,485)
Fund Balance - Beginning			411,485
Fund Balance - Ending			73,000

OTHER SUPPLEMENTARY INFORMATION

Other supplementary information includes financial statements and schedules not required by the GASB, nor a part of the basic financial statements, but are presented for purposes of additional analysis.

Such statements and schedules include:

- Budgetary Comparison Schedules – Major Governmental Funds
- Combining Statements – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Nonmajor Governmental Funds
- Budgetary Comparison Schedules – Enterprise Funds
- Consolidated Year-End Financial Report

MAJOR GOVERNMENTAL FUNDS

GENERAL FUND

The General Fund accounts for all financial resources except those required to be accounted for in another fund.

SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Library Fund

The Library Fund is used to account for the activity relating to the Yorkville Public Library.

Parks and Recreation Fund

The Parks and Recreation Fund is used to account for the revenues and expenditures associated with the Yorkville Parks and Recreation departments.

CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Citywide Capital Fund

The Citywide Capital Fund is used to account for financial resources accumulated for maintenance of public infrastructure and to fund new capital improvements that benefit the public.

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 3,337,703	3,337,703	3,327,913
Sales Tax	3,284,400	3,284,400	3,617,361
Non-Home Rule Sales Tax	2,493,900	2,493,900	2,724,628
Municipal Utility Tax	988,340	988,340	1,010,210
Excise Tax	246,075	246,075	227,090
Cable TV Franchise Tax	300,000	300,000	290,272
Hotel Tax	80,000	80,000	66,751
Video Gaming Tax	140,000	140,000	125,583
Admissions and Amusement Tax	350,000	350,000	127,550
Business District Tax	405,160	405,160	438,325
Auto Rental Tax	15,250	15,250	15,081
	11,640,828	11,640,828	11,970,764
Intergovernmental			
State Income Taxes	1,897,310	1,897,310	2,470,986
State Use Tax	675,281	675,281	855,744
Cannabis Excise Tax	15,218	15,218	16,831
Township Road and Bridge Tax	130,000	130,000	52,363
Personal Property Replacement Tax	16,500	16,500	22,429
Federal Grants	14,925	418,175	1,548,837
State Grants	20,000	20,000	48,352
Miscellaneous	1,000	1,000	893
	2,770,234	3,173,484	5,016,435
Licenses, Permits and Fees			
Liquor Licenses	65,000	65,000	95,217
Other Licenses	9,500	9,500	12,052
Building Permits	400,000	400,000	495,059
	474,500	474,500	602,328
Charges for Services			
Garbage Surcharge	1,322,650	1,322,650	1,355,077
Collection Fees - Sanitary District	165,000	165,000	172,889
Administrative Chargeback	213,896	213,896	213,896
Police Special Detail	500	500	1,350
	1,702,046	1,702,046	1,743,212

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Revenues - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Fines and Forfeitures			
Circuit Court Fines	$ 40,000	40,000	32,472
Administrative Adjudication	27,500	27,500	13,941
Police Tows	45,000	45,000	62,500
Other	500	500	355
	113,000	113,000	109,268
Interest			
Investment Income	89,878	89,878	12,173
Miscellaneous			
Reimbursements			
Engineering	25,000	25,000	5,638
Liability Insurance	15,000	15,000	9,824
Cable Consortium	36,000	36,000	-
Other	19,000	19,000	44,576
Miscellaneous Income	13,000	13,000	46,522
	108,000	108,000	106,560
Total Revenues	16,898,486	17,301,736	19,560,740

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government			
Administration	$ 992,350	992,350	966,619
Finance	562,508	562,508	513,066
Administrative Services	3,739,025	4,342,275	3,740,445
	5,293,883	5,897,133	5,220,130
Public Safety			
Police Department	6,064,220	6,108,720	5,686,416
Community Development			
Building and Zoning	942,154	942,154	828,098
Public Works			
Streets Operations	1,201,235	1,201,235	1,503,124
Health and Sanitation	1,311,303	1,311,303	1,368,739
	2,512,538	2,512,538	2,871,863
Total Expenditures	14,812,795	15,460,545	14,606,507

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government			
Administration			
Salaries - Mayor	$ 10,500	10,500	9,935
Salaries - Liquor Commissioner	1,000	1,000	1,000
Salaries - Alderman	50,000	50,000	47,680
Salaries - Administration	550,247	550,247	538,841
Retirement Plan Contribution	62,251	62,251	60,163
FICA Contribution	43,010	43,010	42,064
Group Health Insurance	97,664	97,664	88,509
Group Life Insurance	428	428	428
Dental Insurance	7,089	7,089	6,943
Vision Insurance	1,130	1,130	1,130
Training and Conferences	16,000	16,000	2,018
Travel and Lodging	10,000	10,000	-
Computer Replacement Chargeback	-	-	1,543
Publishing and Advertising	4,000	4,000	5,793
Printing and Duplicating	3,250	3,250	1,036
Telecommunications	22,300	22,300	26,499
Filing Fees	500	500	67
Codification	10,000	10,000	7,493
Postage and Shipping	3,000	3,000	440
Dues and Subscriptions	22,000	22,000	22,406
Professional Services	12,000	12,000	10,777
Utilities	31,800	31,800	64,458
Rental and Lease Purchase	3,000	3,000	2,709
Office Cleaning	12,181	12,181	13,089
Office Supplies	19,000	19,000	11,598
	992,350	992,350	966,619
Finance			
Salaries and Wages	324,856	324,856	283,247
Retirement Plan Contribution	36,752	36,752	31,395
FICA Contribution	23,420	23,420	20,418

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government - Continued			
Finance - Continued			
Group Health Insurance	$ 57,566	57,566	41,116
Group Life Insurance	246	246	225
Dental Insurance	4,604	4,604	4,125
Vision Insurance	707	707	629
Training and Conferences	3,500	3,500	1,220
Auditing Services	31,400	31,400	31,400
Travel and Lodging	600	600	-
Computer Replacement Chargeback	1,957	1,957	1,454
Printing and Duplicating	3,500	3,500	2,344
Telecommunications	1,000	1,000	1,593
Postage and Shipping	1,200	1,200	912
Dues and Subscriptions	1,500	1,500	745
Professional Services	65,000	65,000	87,031
Rental and Lease Purchase	2,200	2,200	2,059
Office Supplies	2,500	2,500	3,153
	562,508	562,508	513,066
Administrative Services			
Police Special Detail Wages	500	500	1,350
Unemployment Insurance	15,000	15,000	10,064
Liability Insurance	343,684	343,684	325,209
Group Health Insurance - Retirees	39,066	39,066	37,897
Dental Insurance - Retirees	423	423	122
Vision Insurance - Retirees	80	80	(1)
Purchasing Services	59,664	59,664	56,309
IDOR Adminstration Fee	47,047	47,047	50,984
GC Housing Rental Assistance	9,843	9,843	9,348
Utility Tax Rebate	14,375	14,375	7,703
Local Economic Support Program	-	603,250	734,250
Facility Management Services	64,443	64,443	59,348
Amusement Tax Rebate	46,000	46,000	5,685
Kencom	154,350	154,350	162,842
Information Technology Services	392,681	392,681	180,860
Corporate Counsel	110,000	110,000	90,090
Litigation Counsel	110,000	110,000	65,917
Professional Services	8,250	8,250	20,923
Special Counsel	25,000	25,000	36,188
Engineering Services	390,000	390,000	266,979

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government - Continued			
Administrative Services - Continued			
Kendall Area Transit	$ 25,000	25,000	11,775
Cable Consortium Fee	105,000	105,000	-
Hotel Tax Rebate	72,000	72,000	60,076
Economic Development	160,000	160,000	179,317
City Property Tax Rebate	1,300	1,300	1,287
Sales Tax Rebate	906,762	906,762	877,425
Business District Rebate	397,057	397,057	429,558
Admission Tax Rebate	145,000	145,000	58,105
Bad Debt	1,500	1,500	835
Reimbursable Repairs	15,000	15,000	-
Contingency	80,000	80,000	-
	3,739,025	4,342,275	3,740,445
Total General Government	5,293,883	5,897,133	5,220,130
Public Safety			
Police Department			
Salaries - Police Officers	1,981,203	1,981,203	1,912,488
Salaries - Chief and Deputies	394,401	394,401	394,701
Salaries - Sergeants	664,437	664,437	388,883
Salaries - Police Clerks	183,567	183,567	167,504
Salaries - Crossing Guard	30,000	30,000	22,490
Part Time Salaries	70,000	70,000	53,925
Overtime	111,000	111,000	87,155
Retirement Plan Contribution	20,767	20,767	18,723
Employer Contribution - Police Pension	1,230,604	1,230,604	1,230,604
FICA Contribution	253,963	253,963	225,698
Group Health Insurance	648,780	648,780	544,727
Group Life Insurance	2,714	2,714	2,546
Dental Insurance	41,677	41,677	37,173
Vision Insurance	6,602	6,602	6,065
Tuition Reimbursement	15,000	15,000	14,665
Police Commission	17,250	17,250	15,865
Training and Conferences	25,500	25,500	49,891
Travel and Lodging	10,000	10,000	2,763
Vehicle and Equipment Chargeback	43,844	88,344	218,334
Computer Replacement Chargeback	-	-	208

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Public Safety - Continued			
Police Department - Continued			
Printing and Duplicating	$ 5,000	5,000	2,448
Telecommunications	42,000	42,000	41,696
Postage and Shipping	1,200	1,200	854
Dues and Subscriptions	10,700	10,700	14,602
Professional Services	36,750	36,750	34,992
Adjudication Services	20,000	20,000	13,206
New World Live Scan	2,000	2,000	-
Kendall Co. - Juve Probation	4,000	4,000	1,793
Rental and Lease Purchase	5,600	5,600	4,857
Office Cleaning	12,181	12,181	13,089
Outside Repair and Maintenance	60,000	60,000	47,922
Wearing Apparel	15,000	15,000	21,088
Office Supplies	4,500	4,500	4,344
Operating Supplies	16,500	16,500	20,763
Community Services	1,500	1,500	1,368
Ballistic Vests	3,850	3,850	6,865
Gasoline	63,130	63,130	53,119
Ammunition	9,000	9,000	9,002
Total Public Safety	6,064,220	6,108,720	5,686,416
Community Development			
Building and Zoning			
Salaries and Wages	535,995	535,995	530,591
Retirement Plan Contribution	60,639	60,639	59,535
FICA Contribution	39,552	39,552	39,361
Group Health Insurance	93,545	93,545	76,505
Group Life Insurance	446	446	420
Dental Insurance	6,505	6,505	6,371
Vision Insurance	1,081	1,081	1,081
Training and Conferences	7,300	7,300	3,277

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Community Development - Continued			
Building and Zoning - Continued			
Travel and Lodging	$ 6,500	6,500	3
Publishing and Advertising	2,500	2,500	696
Printing and Duplicating	1,500	1,500	1,007
Telecommunications	4,000	4,000	2,986
Postage and Shipping	500	500	103
Inspections	70,000	70,000	79,895
Dues and Subscriptions	2,750	2,750	1,990
Professional Services	92,500	92,500	8,368
Rental and Lease Purchase	3,150	3,150	2,269
Vehicle Maintenance Services	4,000	4,000	1,461
Office Supplies	1,500	1,500	916
Operating Supplies	3,750	3,750	7,248
Gasoline	4,441	4,441	4,015
Total Community Development	942,154	942,154	828,098
Public Works			
Streets Operations			
Salaries and Wages	516,943	516,943	435,874
Part Time Salaries	12,500	12,500	-
Overtime	20,000	20,000	30,447
Retirement Plan Contribution	60,746	60,746	50,696
FICA Contribution	40,268	40,268	33,576
Group Health Insurance	134,105	134,105	111,839
Group Life Insurance	499	499	437
Dental Insurance	8,474	8,474	7,171
Vision Insurance	1,326	1,326	1,149
Training and Conferences	4,500	4,500	210
Travel and Lodging	2,500	2,500	70
Vehicle and Equipment Chargeback	142,551	142,551	622,551
Traffic Signal Maintenance	20,000	20,000	4,690
Telecommunications	7,600	7,600	3,610
Mosquito Control	6,300	6,300	-
Tree and Stump Removal	13,000	13,000	17,000

UNITED CITY OF YORKVILLE, ILLINOIS

General Fund

Schedule of Detailed Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Public Works - Continued			
Streets Operations - Continued			
Professional Services	$ 9,225	9,225	12,287
Julie Services	3,000	3,000	1,097
Rental and Lease Purchase	6,000	6,000	3,536
Office Cleaning	788	788	1,290
Vehicle Maintenance Services	65,000	65,000	75,004
Wearing Apparel	5,000	5,000	3,884
Operating Supplies	19,450	19,450	5,199
Vehicle Maintenance Supplies	42,000	42,000	35,523
Small Tools and Equipment	7,500	7,500	5,573
Repair and Maintenance	24,000	24,000	8,708
Julie Supplies	2,234	2,234	1,738
Gasoline	25,726	25,726	29,965
	1,201,235	1,201,235	1,503,124
Health and Sanitation			
Garbage Services	1,304,303	1,304,303	1,360,512
Leaf Pickup	7,000	7,000	8,227
	1,311,303	1,311,303	1,368,739
Total Public Works	2,512,538	2,512,538	2,871,863
Total Expenditures	14,812,795	15,460,545	14,606,507

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Taxes			
Property Tax	$ 1,562,000	1,562,000	1,561,523
Intergovernmental			
Personal Property Replacement Tax	5,250	5,250	7,432
Grants	20,000	20,000	21,651
	25,250	25,250	29,083
Licenses, Permits and Fees			
Development Fees	50,000	50,000	104,600
Charges for Services			
Library Subscription Cards	8,500	8,500	4,653
Copy Fees	3,800	3,800	1,428
	12,300	12,300	6,081
Fines and Forfeitures	8,500	8,500	3,249
Interest	9,459	9,459	1,455
Miscellaneous			
Rental Income	1,750	1,750	-
Miscellaneous Income	2,000	2,000	1,235
	3,750	3,750	1,235
Total Revenues	1,671,259	1,671,259	1,707,226

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Library			
Salaries and Wages	$ 289,742	289,742	274,146
Part Time Salaries	190,000	190,000	151,629
Retirement Plan Contribution	32,779	32,779	30,711
FICA Contribution	35,952	35,952	31,870
Group Health Insurance	76,764	76,764	73,940
Group Life Insurance	387	387	328
Dental Insurance	6,322	6,322	5,977
Vision Insurance	1,012	1,012	999
Unemployment Insurance	750	750	1,363
Liability Insurance	25,834	25,834	24,522
Training and Conferences	3,000	3,000	30
Travel and Lodging	1,500	1,500	-
Publishing and Advertising	2,500	2,500	1,104
Telecommunications	7,200	7,200	4,814
Postage and Shipping	750	750	491
Dues and Subscriptions	11,000	11,000	11,974
Professional Services	40,000	40,000	41,078
Legal Services	3,000	3,000	4,613
Automation	20,000	20,000	16,752
Utilities	11,798	11,798	13,213
Outside Repair and Maintenance	50,000	50,000	31,608
Office Supplies	8,000	8,000	4,773
Operating Supplies	4,000	4,000	1,559
Custodial Supplies	7,000	7,000	11,132
Computer Equipment and Software	17,000	17,000	8,735
Library Programming	2,000	2,000	679
Employee Recognition	300	300	45
E-Book Subscriptions	3,500	3,500	3,347
Audio Books	3,500	3,500	2,351
DVD's and CD's	4,000	4,000	2,591
Books	51,500	51,500	42,927
Total Library	911,090	911,090	799,301

UNITED CITY OF YORKVILLE, ILLINOIS

Library - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Debt Service			
Principal Retirement	$ 685,000	685,000	685,000
Interest and Fiscal Charges	143,788	143,788	143,778
Total Debt Service	828,788	828,788	828,778
Total Expenditures	1,739,878	1,739,878	1,628,079

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Revenues - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Charges for Services			
Fees for Programs	$ 605,000	605,000	352,566
Concessions	45,000	45,000	4,642
Total Charges for Services	650,000	650,000	357,208
Grants and Donations			
Sponsorships and Donations	20,000	20,000	3,745
Interest	1,300	1,300	235
Miscellaneous			
Rental Income	81,716	81,716	56,722
Hometown Days Revenue	120,000	120,000	-
Reimbursements	-	-	5,607
Miscellaneous Income	5,000	5,000	7,552
Total Miscellaneous	206,716	206,716	69,881
Total Revenue	878,016	878,016	431,069

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Parks and Recreation			
Park Operations			
Salaries and Wages	$ 601,936	601,936	587,260
Part Time Salaries	59,000	59,000	11,294
Overtime	5,000	5,000	1,959
Retirement Plan Contribution	70,570	70,570	67,663
FICA Contribution	48,830	48,830	45,274
Group Health Insurance	155,338	155,338	143,220
Group Life Insurance	645	645	645
Dental Insurance	9,708	9,708	9,545
Vision Insurance	1,537	1,537	1,544
Training and Conferences	7,000	7,000	23
Travel and Lodging	3,000	3,000	6
Vehicle and Equipment Chargeback	75,000	135,000	385,000
Computer Replacement Chargeback	875	875	-
Telecommunications	8,100	8,100	8,875
Professional Services	11,400	11,400	10,189
Legal Services	2,000	2,000	270
Rental and Lease Purchase	2,500	2,500	2,176
Office Cleaning	3,078	3,078	3,504
Outside Repairs and Maintenance	33,759	33,759	21,656
Wearing Apparel	6,220	6,220	5,942
Operating Supplies	25,000	25,000	23,393
Small Tools and Equipment	6,000	6,000	4,198
Repairs and Maintenance	71,000	71,000	37,541
Athletic Fields and Equipment	55,000	55,000	5,334
Gasoline	27,189	27,189	19,527
Total Park Operations	1,289,685	1,349,685	1,396,038
Recreation Operations			
Salaries and Wages	387,576	387,576	372,355
Part Time Salaries	23,500	23,500	473
Concession Wages	15,000	15,000	-
Preschool Wages	40,000	40,000	20,559
Instructor Wages	40,000	40,000	13,687
Retirement Plan Contribution	49,493	49,493	41,742
FICA Contribution	37,543	37,543	30,377
Group Health Insurance	103,025	103,025	76,908

UNITED CITY OF YORKVILLE, ILLINOIS

Parks and Recreation - Special Revenue Fund

Schedule of Expenditures - Budget and Actual - Continued
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Parks and Recreation - Continued			
Recreation Operations - Continued			
Group Life Insurance	$ 475	475	411
Dental Insurance	6,744	6,744	6,142
Vision Insurance	1,092	1,092	1,020
Training and Conferences	5,000	5,000	204
Travel and Lodging	3,000	3,000	-
Computer Replacement Chargeback	875	875	438
Publishing and Advertising	55,000	55,000	4,655
Telecommunications	8,750	8,750	11,641
Scholarships	2,500	2,500	-
Postage and Shipping	3,500	3,500	1,565
Dues and Subscriptions	3,000	3,000	2,803
Professional Services	140,000	140,000	51,882
Utilities	15,150	15,150	5,337
Rental and Lease Purchase	3,000	3,000	1,416
Office Cleaning	3,078	3,078	7,560
Outside Repairs and Maintenance	3,000	3,000	2,173
Hometown Days Expenditures	120,000	120,000	700
Program Supplies	158,241	158,241	118,617
Concession Supplies	18,000	18,000	4,852
Office Supplies	3,000	3,000	2,038
Operating Supplies	15,000	15,000	65,858
Repairs and Maintenance	2,000	2,000	1,140
Gasoline	535	535	396
Total Recreation Operations	1,267,077	1,267,077	846,949
Total Expenditures	2,556,762	2,616,762	2,242,987

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Building Permits	$ -	-	240,594
Development Fees	41,000	41,000	134,274
Road Contribution Fee	100,000	100,000	112,000
Charges for Services			
Road Infrastructure Fee	780,000	780,000	787,642
Interest	1,098	1,098	72
Miscellaneous	153,572	153,572	173,690
Total Revenues	1,075,670	1,075,670	1,448,272
Expenditures			
General Government	347,489	2,388,489	2,437,260
Capital Outlay	819,950	819,950	363,537
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	121,813	121,813	121,813
Total Expenditures	1,489,252	3,530,252	3,122,610
Excess (Deficiency) of Revenues Over (Under) Expenditures	(413,582)	(2,454,582)	(1,674,338)
Other Financing Sources (Uses)			
Transfers In	260,000	306,000	1,442,336
Transfers Out	(138,895)	(138,895)	(236,584)
	121,105	167,105	1,205,752
Net Change in Fund Balance	(292,477)	(2,287,477)	(468,586)
Fund Balance - Beginning			588,155
Fund Balance - Ending			119,569

UNITED CITY OF YORKVILLE, ILLINOIS

Citywide Capital - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
General Government			
Property and Building Maintenance Services	$ 258,989	258,989	197,918
Property and Building Maintenance Supplies	72,000	118,000	82,825
Buildings and Structures	-	1,995,000	2,046,503
Professional Services	15,000	15,000	109,350
Bad Debt	1,500	1,500	664
Total General Government	347,489	2,388,489	2,437,260
Capital Outlay			
Asphalt Patching	35,000	35,000	5,612
Mill Road Improvement	-	-	41,252
Blackberry Woods Subdivision	10,973	10,973	4,767
Fountain Village Subdivision	38,599	38,599	1,175
Road To Better Roads Program	312,500	312,500	103,363
Sidewalk Construction	130,000	130,000	11,919
RT 71 (RT47/Orchard Road) Project	53,878	53,878	110,955
US 34 (Center/Eldamain Road) Project	110,000	110,000	-
US 34 (IL 47/Orchard Road) Project	27,000	27,000	-
Raintree Village Improvements	70,000	70,000	84,494
Kennedy Road Bike Trail	32,000	32,000	-
Total Capital Outlay	819,950	819,950	363,537
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	121,813	121,813	121,813
Total Debt Service	321,813	321,813	321,813
Total Expenditures	1,489,252	3,530,252	3,122,610

NONMAJOR GOVERNMENTAL FUNDS
COMBINING STATEMENTS

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Balance Sheet
April 30, 2021

	Special Revenue	Debt Service	Capital Projects	Totals
ASSETS				
Cash and Investments	$ 1,281,188	-	1,577,046	2,858,234
Receivables - Net of Allowances				
Accounts	193	-	1,771	1,964
Grants	-	-	9,490	9,490
Other Taxes	62,664	-	-	62,664
Total Assets	1,344,045	-	1,588,307	2,932,352
LIABILITIES				
Accounts Payable	59,802	-	420	60,222
Due to Other Funds	2,715,489	-	-	2,715,489
Deposit Payable	-	-	102,096	102,096
Total Liabilities	2,775,291	-	102,516	2,877,807
FUND BALANCES				
Restricted	1,285,183	-	-	1,285,183
Assigned	-	-	1,485,791	1,485,791
Unassigned	(2,716,429)	-	-	(2,716,429)
Total Fund Balances	(1,431,246)	-	1,485,791	54,545
Total Liabilities, Deferred Inflows of Resources and Fund Balances	1,344,045	-	1,588,307	2,932,352

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2021

	Special Revenue	Debt Service	Capital Projects	Totals
Revenues				
Taxes	$ 306,599	-	-	306,599
Intergovernmental	1,387,340	-	9,490	1,396,830
Licenses, Permits and Fees	-	12,994	268,641	281,635
Charges for Services	-	-	1,231,404	1,231,404
Fines and Forfeits	-	-	3,998	3,998
Grants and Donations	18,770	-	-	18,770
Interest	1,403	-	150	1,553
Miscellaneous	193	-	11,109	11,302
Total Revenues	1,714,305	12,994	1,524,792	3,252,091
Expenditures				
General Government	95,419	-	-	95,419
Parks and Recreation	235,673	-	-	235,673
Public Safety	-	-	457	457
Public Works	118,407	-	469	118,876
Capital Outlay	762,556	-	492,123	1,254,679
Debt Service				
Principal Retirement	307,163	295,000	53,229	655,392
Interest and Fiscal Charges	114,041	28,225	18,342	160,608
Total Expenditures	1,633,259	323,225	564,620	2,521,104
Excess (Deficiency) of Revenues Over (Under) Expenditures	81,046	(310,231)	960,172	730,987
Other Financing Sources				
Sale of Capital Assets	-	-	13,927	13,927
Transfers In	-	310,231	-	310,231
	-	310,231	13,927	324,158
Net Change in Fund Balances	81,046	-	974,099	1,055,145
Fund Balances - Beginning	(1,512,292)	-	511,692	(1,000,600)
Fund Balances - Ending	(1,431,246)	-	1,485,791	54,545

NONMAJOR SPECIAL REVENUE FUNDS

Special Revenue Funds are created to account for the proceeds of specific revenue sources (other than fiduciary funds or capital project funds) that are legally restricted to expenditure for specified purposes.

Fox Hill Special Service Area Fund

The Fox Hill Special Service Area Fund is used to account for the revenues and expenditures associated with the maintenance of the common areas of the Fox Hill Estates subdivision.

Sunflower Special Service Area Fund

The Sunflower Special Service Fund is used to account for revenues and expenditures associated with the maintenance of the common areas of the Sunflower Estates subdivision.

Motor Fuel Tax Fund

The Motor Fuel Tax Fund is used to account for allotments of motor fuel taxes from the State of Illinois made on per capita basis. These taxes are to be used to construct and maintain street, traffic signals and signs.

Land Cash Fund

The Land Cash Fund is used to account for the revenues and expenditures associated with the construction of park facilities.

Countryside TIF Fund

The Countryside TIF Fund is used to account for the accumulation of monies for the payment of the 2014 General Refunding Obligation Bond Series and 2015A General Obligation Refunding Bond Series. These bonds were issued to refund the 2005 General Obligation Bond Series, which were issued to finance retail development at Countryside Center.

Downtown TIF Fund

The Downtown TIF I Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily along Hydraulic Avenue, Illinois Route 47 and Benjamin Street within Yorkville's historic commercial core.

Downtown TIF II Fund

The Downtown TIF II Fund is used to account for revenues and expenditures associated with the development activities of the downtown area located primarily south of Hydraulic Avenue and just north of Washington Street, between White Oak Estate to the west and Benjamin Street to the east.

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Balance Sheet
April 30, 2021

	Fox Hill Special Service Area	Sunflower Special Service Area
ASSETS		
Cash and Investments	$ 11,328	-
Receivables - Net of Allowances		
Accounts	-	-
Other Taxes	-	-
Total Assets	11,328	-
LIABILITIES		
Accounts Payable	1,097	940
Due to Other Funds	-	7,469
Total Liabilities	1,097	8,409
FUND BALANCES		
Restricted	10,231	-
Unassigned	-	(8,409)
Total Fund Balances	10,231	(8,409)
Total Liabilities and Fund Balances	11,328	-

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
1,238,922	30,938	-	-	-	1,281,188
-	193	-	-	-	193
62,664	-	-	-	-	62,664
1,301,586	31,131	-	-	-	1,344,045
57,765	-	-	-	-	59,802
-	-	1,211,222	1,448,929	47,869	2,715,489
57,765	-	1,211,222	1,448,929	47,869	2,775,291
1,243,821	31,131	-	-	-	1,285,183
-	-	(1,211,222)	(1,448,929)	(47,869)	(2,716,429)
1,243,821	31,131	(1,211,222)	(1,448,929)	(47,869)	(1,431,246)
1,301,586	31,131	-	-	-	1,344,045

UNITED CITY OF YORKVILLE, ILLINOIS

Nonmajor Governmental - Special Revenue Funds

Combining Statement of Revenues, Expenditures and Changes in Fund Balances
For the Fiscal Year Ended April 30, 2021

	Fox Hill Special Service Area	Sunflower Special Service Area
Revenues		
Taxes	$ 16,034	20,363
Intergovernmental	-	-
Grants and Donations	-	-
Interest	-	-
Miscellaneous	-	-
Total Revenues	16,034	20,363
Expenditures		
General Government	-	-
Parks and Recreation	-	-
Public Works	19,295	12,572
Capital Outlay	-	-
Debt Service		
Principal Retirement	-	-
Interest and Fiscal Charges	-	-
Total Expenditures	19,295	12,572
Net Change in Fund Balances	(3,261)	7,791
Fund Balances - Beginning	13,492	(16,200)
Fund Balances - Ending	10,231	(8,409)

Motor Fuel Tax	Land Cash	Countryside TIF	Downtown TIF	Downtown TIF II	Totals
-	-	151,422	70,677	48,103	306,599
1,387,340	-	-	-	-	1,387,340
-	18,770	-	-	-	18,770
1,403	-	-	-	-	1,403
-	193	-	-	-	193
1,388,743	18,963	151,422	70,677	48,103	1,714,305
-	-	11,889	61,357	22,173	95,419
-	235,673	-	-	-	235,673
86,540	-	-	-	-	118,407
754,089	-	-	8,467	-	762,556
-	-	107,163	200,000	-	307,163
-	-	101,808	12,233	-	114,041
840,629	235,673	220,860	282,057	22,173	1,633,259
548,114	(216,710)	(69,438)	(211,380)	25,930	81,046
695,707	247,841	(1,141,784)	(1,237,549)	(73,799)	(1,512,292)
1,243,821	31,131	(1,211,222)	(1,448,929)	(47,869)	(1,431,246)

UNITED CITY OF YORKVILLE, ILLINOIS

Fox Hill Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 16,034	16,034	16,034
Expenditures			
Public Works			
Professional Services	3,126	3,126	-
Outside Repair and Maintenance	34,200	34,200	19,295
Total Expenditures	37,326	37,326	19,295
Net Change in Fund Balance	(21,292)	(21,292)	(3,261)
Fund Balance - Beginning			13,492
Fund Balance - Ending			10,231

UNITED CITY OF YORKVILLE, ILLINOIS

Sunflower Special Service Area - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Tax	$ 20,363	20,363	20,363
Expenditures			
Public Works			
Pond Maintenance	5,000	5,000	4,275
Professional Services	3,126	3,126	-
Outside Repair and Maintenance	12,200	12,200	8,297
Total Expenditures	20,326	20,326	12,572
Net Change in Fund Balance	37	37	7,791
Fund Balance - Beginning			(16,200)
Fund Balance - Ending			(8,409)

UNITED CITY OF YORKVILLE, ILLINOIS

Motor Fuel Tax - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental	$ 809,598	809,598	1,387,340
Interest	4,263	4,263	1,403
Total Revenues	813,861	813,861	1,388,743
Expenditures			
Public Works			
Supplies	175,000	175,000	86,540
Capital Outlay			
Streets and Alleys	942,462	942,462	754,089
Total Expenditures	1,117,462	1,117,462	840,629
Net Change in Fund Balance	(303,601)	(303,601)	548,114
Fund Balance - Beginning			695,707
Fund Balance - Ending			1,243,821

UNITED CITY OF YORKVILLE, ILLINOIS

Land Cash - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Grants and Donations			
Kendall Marketplace	$ 2,752	2,752	5,531
Blackberry Woods	1,932	1,932	1,705
Caledonia	4,698	4,698	2,013
Country Hills	4,358	4,358	429
White Oak	1,406	1,406	1,406
Whispering Meadows	4,699	4,699	-
Heartland Meadows	3,522	3,522	-
River's Edge	671	671	-
Fox Highlands	3,298	3,298	-
Greenbriar Park	-	-	1,071
Cimarron Ridge	1,377	1,377	-
Briarwood	5,145	5,145	6,615
Miscellaneous	-	-	193
Total Revenues	33,858	33,858	18,963
Expenditures			
Parks and Recreation			
Rental & Lease Purchase	5,287	5,287	5,290
Beecher Center Park	95,000	95,000	118,032
Caledonia Park	85,000	85,000	65,077
Autumn Creek	50,000	50,000	47,274
Blackberry Creek	5,000	5,000	-
Total Expenditures	240,287	240,287	235,673
Net Change in Fund Balance	(206,429)	(206,429)	(216,710)
Fund Balance - Beginning			247,841
Fund Balance - Ending			31,131

UNITED CITY OF YORKVILLE, ILLINOIS

Countryside TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 153,965	153,965	151,422
Expenditures			
General Government			
Administrative Fees	11,475	11,475	11,475
Professional Services	2,000	2,000	414
Debt Service			
Principal Retirement	107,163	107,163	107,163
Interest and Fiscal Charges	101,848	101,848	101,808
Total Expenditures	222,486	222,486	220,860
Net Change in Fund Balance	(68,521)	(68,521)	(69,438)
Fund Balance - Beginning			(1,141,784)
Fund Balance - Ending			(1,211,222)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 76,000	76,000	70,677
Expenditures			
General Government			
Administrative Fees	33,487	33,487	33,487
TIF Incentive Payout	26,877	26,877	27,256
Professional Services	1,000	1,000	204
Legal Services	15,000	15,000	410
Capital Outlay			
Project Costs	10,000	10,000	979
Route 47 Expansion	7,488	7,488	7,488
Debt Service			
Principal Retirement	200,000	200,000	200,000
Interest and Fiscal Charges	12,200	12,200	12,233
Total Expenditures	306,052	306,052	282,057
Net Change in Fund Balance	(230,052)	(230,052)	(211,380)
Fund Balance - Beginning			(1,237,549)
Fund Balance - Ending			(1,448,929)

UNITED CITY OF YORKVILLE, ILLINOIS

Downtown TIF II - Special Revenue Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Taxes			
Property Taxes	$ 25,000	25,000	48,103
Expenditures			
General Government			
Professional Services	5,000	5,000	1,194
TIF Incentive Payout	17,500	39,500	20,979
Total Expenditures	22,500	44,500	22,173
Net Change in Fund Balance	2,500	(19,500)	25,930
Fund Balance - Beginning			(73,799)
Fund Balance - Ending			(47,869)

NONMAJOR DEBT SERVICE FUND

The Debt Service Fund is used to account for the accumulation of resources for, and the payment of, general long-term debt principal and interest.

UNITED CITY OF YORKVILLE, ILLINOIS

Debt Service Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Licenses, Permits and Fees			
Recapture Fees	$ 8,000	8,000	12,994
Expenditures			
Debt Service			
Principal	295,000	295,000	295,000
Interest and Fiscal Charges	28,225	28,225	28,225
Total Expenditures	323,225	323,225	323,225
Excess (Deficiency) of Revenues			
Over (Under) Expenditures	(315,225)	(315,225)	(310,231)
Other Financing Sources			
Transfers In	315,225	315,225	310,231
Net Change in Fund Balance	-	-	-
Fund Balance - Beginning			-
Fund Balance - Ending			-

NONMAJOR CAPITAL PROJECTS FUND

Capital Projects Funds are created to account for all resources used for the acquisition of capital facilities by a governmental unit except those financed by Proprietary Funds.

Vehicle and Equipment Fund

The Vehicle & Equipment Fund is used to account for financial resources accumulated to purchase vehicles, equipment and other capital assets for use in the Police, General Government, Public Works and Park and Recreation departments.

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Revenues, Expenditures and Changes in Fund Balance - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Revenues			
Intergovernmental			
Grants	$ -	-	9,490
Licenses, Permits and Fees			
Development Fees	99,500	99,500	246,241
Engineering Capital Fee	10,000	10,000	22,400
Charges for Services	269,059	373,559	1,231,404
Fines and Forfeits			
DUI Fines	8,000	8,000	3,228
Electronic Citations	800	800	770
Miscellaneous	60,464	60,464	11,109
Interest	1,000	1,000	150
Total Revenues	448,823	553,323	1,524,792
Expenditures			
Public Safety	8,750	8,750	457
Public Works	1,750	1,750	469
Capital Outlay	569,724	674,224	492,123
Debt Service			
Principal Retirement	53,229	53,229	53,229
Interest and Fiscal Charges	18,341	18,341	18,342
Total Expenditures	651,794	756,294	564,620
Excess (Deficiency) of Revenues Over (Under) Expenditures	(202,971)	(202,971)	960,172
Other Financing Sources			
Sale of Capital Assets	-	-	13,927
Net Change in Fund Balance	(202,971)	(202,971)	974,099
Fund Balance - Beginning			511,692
Fund Balance - Ending			1,485,791

UNITED CITY OF YORKVILLE, ILLINOIS

Vehicle and Equipment - Capital Projects Fund

Schedule of Expenditures - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Police Capital			
Contractual Services	$ 8,750	8,750	457
Capital Outlay			
Equipment	-	44,500	44,320
Vehicles	130,000	130,000	113,782
Total Police Capital	138,750	183,250	158,559
General Government Capital			
Capital Outlay			
Equipment	5,664	5,664	3,642
Public Works Capital			
Contractual Services	750	750	469
Supplies	1,000	1,000	-
Capital Outlay			
Equipment	130,000	130,000	63,986
Vehicles	100,000	100,000	99,369
Total Public Works Capital	231,750	231,750	163,824
Park and Recreation Capital			
Capital Outlay			
Outside Repair and Maintenance	1,600	1,600	-
Park Improvements	109,464	109,464	42,957
Buildings and Structures	12,596	12,596	7,174
Equipment	10,400	10,400	57,758
Vehicles	70,000	130,000	59,135
Total Park and Recreation Capital	204,060	264,060	167,024
Debt Service			
Principal Retirement	53,229	53,229	53,229
Interest and Fiscal Charges	18,341	18,341	18,342
Total Debt Service	71,570	71,570	71,571
Total Expenditures	651,794	756,294	564,620

ENTERPRISE FUNDS

Enterprise Funds are used to account for operations that are financed and operated in a manner similar to private business enterprises where the intent is that costs of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or where it has been decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability, or other purpose.

Sewer Fund

The Sewer Fund is used to account for the operation and sewer infrastructure maintenance of the City-owned sewer system, as well as the construction of new sewer systems within City limits. Revenues are generated through user maintenance fees.

Water Fund

The Water Fund is used to account for the operation and water infrastructure maintenance of the City-owned water distribution system, as well as the construction of new water systems. Revenues are generated through charges based on water consumption and user maintenance fees.

UNITED CITY OF YORKVILLE, ILLINOIS

Sewer - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 1,432,350	1,432,350	1,424,861
Operating Expenses			
Operations	910,629	910,629	676,188
Depreciation and Amortization	-	-	748,230
Total Operating Expenses	910,629	910,629	1,424,418
Operating Income	521,721	521,721	443
Nonoperating Revenues (Expenses)			
Interest Income	7,473	7,473	475
Connection Fees	203,300	203,300	307,100
Other Income (Expense)	-	-	(511)
Interest Expense	(392,948)	(392,948)	(315,623)
	(182,175)	(182,175)	(8,559)
Income (Loss) Before Transfers and Contributions	339,546	339,546	(8,116)
Capital Contributions	-	-	481,070
Transfers In	174,744	174,744	174,744
Transfers Out	(75,125)	(75,125)	(75,125)
	99,619	99,619	580,689
Change in Net Position	439,165	439,165	572,573
Net Position - Beginning			34,329,524
Net Position - Ending			34,902,097

UNITED CITY OF YORKVILLE, ILLINOIS

Water - Enterprise Fund

Schedule of Revenues, Expenses and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended April 30, 2021

	Budget		
	Original	Final	Actual
Operating Revenues			
Charges for Services	$ 4,120,250	4,120,250	4,373,292
Operating Expenses			
Operations	3,522,197	3,522,197	1,993,526
Depreciation and Amortization	-	-	1,083,057
Total Operating Expenses	3,522,197	3,522,197	3,076,583
Operating Income	598,053	598,053	1,296,709
Nonoperating Revenues (Expenses)			
Interest Income	22,557	22,557	1,302
Connection Fees	230,000	230,000	689,353
Other Income	100,260	100,260	83,772
Interest Expense	(296,048)	(296,048)	(328,606)
	56,769	56,769	445,821
Income Before Transfers and Contributions	654,822	654,822	1,742,530
Capital Contributions	-	-	643,253
Transfers In	179,020	179,020	179,020
	179,020	179,020	822,273
Change in Net Position	833,842	833,842	2,564,803
Net Position - Beginning			33,862,890
Net Position - Ending			36,427,693

UNITED CITY OF YORKVILLE, ILLINOIS

Consolidated Year-End Financial Report
April 30, 2021

CSFA #	Program Name	State	Federal	Other	Totals
420-00-2433	Local CURE and Economic Support Payments Grant Program	$ -	784,715	-	784,715
420-00-2452	Business Interruption Grant	-	400,000	-	400,000
420-75-2398	Downstate Small Business Stabilization Program	-	334,250	-	334,250
494-00-0967	High-Growth Cities Program	79,463	-	-	79,463
494-00-1488	Motor Fuel Tax Program	761,166	-	-	761,166
569-00-2095	Illinois Law Enforcement Training	18,988	-	-	18,988
569-00-2383	Law Enforcement Camera Grant	9,590	-	-	9,590
	Other Grant Programs and Activities	-	33,271	21,151	54,422
	All Other Costs Not Allocated	-	-	24,227,146	24,227,146
	Totals	869,207	1,552,236	24,248,297	26,669,740

SUPPLEMENTAL SCHEDULES

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

102 E Van Emmon Building Loan Payable of 2017
April 30, 2021

Date of Issue	May 10, 2017
Date of Maturity	June 1, 2021
Authorized Issue	$800,000
Interest Rate	3.00%
Interest Dates	June 1
Principal Maturity Dates	June 1
Payable at	First National Bank of Omaha

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal Year	Requirements		
	Principal	Interest	Totals
2022	$ 200,000	6,083	206,083

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

Promissory Note of 2019
April 30, 2021

Date of Issue	November 18, 2019
Date of Maturity	November 18, 2028
Authorized Issue	$548,273
Interest Rate	3.60%
Interest Dates	Monthly
Principal Maturity Dates	Monthly
Payable at	First National Bank of Omaha

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal Year	Requirements		
	Principal	Interest	Totals
2022	$ 55,204	16,366	71,570
2023	57,253	14,317	71,570
2024	59,347	12,223	71,570
2025	61,581	9,989	71,570
2026	63,867	7,703	71,570
2027	66,237	5,333	71,570
2028	68,691	2,879	71,570
2029	41,246	504	41,750
	473,426	69,314	542,740

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

IEPA (L17-1156300) Loan Payable of 2007
April 30, 2021

Date of Issue	November 9, 2006
Date of Maturity	August 9, 2026
Authorized Issue	$1,889,244
Denomination of Bonds	$5,000
Interest Rate	2.50%
Interest Dates	August 9 and February 9
Principal Maturity Dates	August 9 and February 9
Payable at	Illinois Environmental Protection Agency

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Aug. 9	Amount	Feb. 9	Amount
2022	$ 109,742	15,288	125,030	2021	7,985	2022	7,303
2023	112,503	12,527	125,030	2022	6,613	2023	5,914
2024	115,333	9,697	125,030	2023	5,207	2024	4,490
2025	118,235	6,795	125,030	2024	3,765	2025	3,030
2026	121,209	3,821	125,030	2025	2,287	2026	1,534
2027	61,744	772	62,516	2026	772	2027	-
	638,766	48,900	687,666		26,629		22,271

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Bonds of 2006
April 30, 2021

Date of Issue	August 1, 2006
Date of Maturity	December 30, 2024
Authorized Issue	$1,500,000
Denomination of Bonds	$5,000
Interest Rates	4.75% to 4.80%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	BNY Midwest Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 75,000	16,676	91,676	2021	8,338	2021	8,338
2023	75,000	13,112	88,112	2022	6,556	2022	6,556
2024	100,000	9,550	109,550	2023	4,775	2023	4,775
2025	100,000	4,800	104,800	2024	2,400	2024	2,400
	350,000	44,138	394,138		22,069		22,069

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2011
April 30, 2021

Date of Issue	November 10, 2011
Date of Maturity	December 30, 2025
Authorized Issue	$11,150,000
Denomination of Bonds	$5,000
Interest Rate	4.28%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	The Bank of New York Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 920,000	215,070	1,135,070	2021	107,535	2021	107,535
2023	960,000	175,694	1,135,694	2022	87,847	2022	87,847
2024	1,000,000	134,606	1,134,606	2023	67,303	2023	67,303
2025	1,045,000	91,806	1,136,806	2024	45,903	2024	45,903
2026	1,100,000	47,080	1,147,080	2025	23,540	2025	23,540
	5,025,000	664,256	5,689,256		332,128		332,128

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Library Refunding Bonds of 2013
April 30, 2021

Date of Issue	May 9, 2013
Date of Maturity	December 30, 2024
Authorized Issue	$6,625,000
Denomination of Bonds	$5,000
Interest Rates	2.00% to 4.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Bank of New York Mellon

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 645,000	103,550	748,550	2021	51,775	2021	51,775
2023	675,000	84,200	759,200	2022	42,100	2022	42,100
2024	700,000	57,200	757,200	2023	28,600	2023	28,600
2025	730,000	29,200	759,200	2024	14,600	2024	14,600
	2,750,000	274,150	3,024,150		137,075		137,075

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014
April 30, 2021

Date of Issue	January 6, 2014
Date of Maturity	December 1, 2029
Authorized Issue	$1,235,000
Denomination of Bonds	$5,000
Interest Rate	4.00% to 4.30%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	The Bank of New York Trust Company

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2022	$ -	50,715	50,715	2021	25,357	2021	25,358
2023	-	50,715	50,715	2022	25,357	2022	25,358
2024	-	50,715	50,715	2023	25,357	2023	25,358
2025	-	50,715	50,715	2024	25,357	2024	25,358
2026	230,000	50,715	280,715	2025	25,357	2025	25,358
2027	235,000	41,515	276,515	2026	20,757	2026	20,758
2028	245,000	32,115	277,115	2027	16,057	2027	16,058
2029	255,000	22,193	277,193	2028	11,096	2028	11,097
2030	270,000	11,610	281,610	2029	5,805	2029	5,805
	1,235,000	361,008	1,596,008		180,500		180,508

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014A
April 30, 2021

Date of Issue	August 5, 2014
Date of Maturity	December 1, 2033
Authorized Issue	$4,295,000
Denomination of Bonds	$5,000
Interest Rate	3.00% to 4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2022	$ 200,000	115,337	315,337	2021	57,669	2021	57,668
2023	210,000	109,337	319,337	2022	54,669	2022	54,668
2024	210,000	103,037	313,037	2023	51,519	2023	51,518
2025	220,000	96,737	316,737	2024	48,369	2024	48,368
2026	225,000	90,137	315,137	2025	45,069	2025	45,068
2027	230,000	83,387	313,387	2026	41,694	2026	41,693
2028	245,000	76,200	321,200	2027	38,100	2027	38,100
2029	250,000	66,400	316,400	2028	33,200	2028	33,200
2030	265,000	56,400	321,400	2029	28,200	2029	28,200
2031	275,000	45,800	320,800	2030	22,900	2030	22,900
2032	280,000	34,800	314,800	2031	17,400	2031	17,400
2033	290,000	23,600	313,600	2032	11,800	2032	11,800
2034	300,000	12,000	312,000	2033	6,000	2033	6,000
	3,200,000	913,172	4,113,172		456,589		456,583

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014B
April 30, 2021

Date of Issue	August 5, 2014
Date of Maturity	December 30, 2022
Authorized Issue	$2,300,000
Denomination of Bonds	$5,000
Interest Rate	2.00% to 3.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 310,000	18,900	328,900	2021	9,450	2021	9,450
2023	320,000	9,600	329,600	2022	4,800	2022	4,800
	630,000	28,500	658,500		14,250		14,250

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2014C
April 30, 2021

Date of Issue	August 5, 2014
Date of Maturity	December 30, 2024
Authorized Issue	$1,290,000
Denomination of Bonds	$5,000
Interest Rate	2.00% to 3.00%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 135,000	16,350	151,350	2021	8,175	2021	8,175
2023	135,000	12,300	147,300	2022	6,150	2022	6,150
2024	140,000	8,250	148,250	2023	4,125	2023	4,125
2025	135,000	4,050	139,050	2024	2,025	2024	2,025
	545,000	40,950	585,950		20,475		20,475

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding Alternate Revenue Source Bonds of 2015A
April 30, 2021

Date of Issue	July 8, 2015
Date of Maturity	December 1, 2034
Authorized Issue	$5,575,000
Denomination of Bonds	$5,000
Interest Rates	4.00%
Interest Dates	June 1 and December 1
Principal Maturity Date	December 1
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 1	Amount	Dec. 1	Amount
2022	$ 425,000	174,400	599,400	2022	87,200	2021	87,200
2023	440,000	157,400	597,400	2023	78,700	2022	78,700
2024	460,000	139,800	599,800	2024	69,900	2023	69,900
2025	475,000	121,400	596,400	2025	60,700	2024	60,700
2026	215,000	102,400	317,400	2026	51,200	2025	51,200
2027	220,000	93,800	313,800	2027	46,900	2026	46,900
2028	230,000	85,000	315,000	2028	42,500	2027	42,500
2029	240,000	75,800	315,800	2029	37,900	2028	37,900
2030	250,000	66,200	316,200	2030	33,100	2029	33,100
2031	260,000	56,200	316,200	2031	28,100	2030	28,100
2032	270,000	45,800	315,800	2032	22,900	2031	22,900
2033	280,000	35,000	315,000	2033	17,500	2032	17,500
2034	290,000	23,800	313,800	2034	11,900	2033	11,900
2035	305,000	12,200	317,200	2035	6,100	2034	6,100
	4,360,000	1,189,200	5,549,200		594,600		594,600
Governmental	1,153,522	314,662	1,468,184		157,331		157,331
Business-Type	3,206,478	874,538	4,081,016		437,269		437,269
	4,360,000	1,189,200	5,549,200		594,600		594,600

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

General Obligation Refunding (Alternate Revenue Source) Bonds of 2016
April 30, 2021

Date of Issue	October 27,2016
Date of Maturity	December 30, 2022
Authorized Issue	$5,800,000
Denomination of Bonds	$5,000
Interest Rates	4.00% to 4.25%
Interest Dates	June 30 and December 30
Principal Maturity Date	December 30
Payable at	Amalgamated

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Jun. 30	Amount	Dec. 30	Amount
2022	$ 1,040,000	58,650	1,098,650	2021	29,325	2021	29,325
2023	915,000	27,450	942,450	2022	13,725	2022	13,725
	1,955,000	86,100	2,041,100		43,050		43,050

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Long-Term Debt Requirements

Illinois Rural Bond Bank Debt Certificates of 2003A
April 30, 2021

Date of Issue	September 24, 2003
Date of Maturity	February 1, 2023
Authorized Issue	$2,035,000
Denomination of Bonds	$5,000
Interest Rates	1.60% to 5.20%
Interest Dates	August 1 and February 1
Principal Maturity Date	February 1
Payable at	US National Bank Assoc.

CURRENT AND LONG-TERM PRINCIPAL AND INTEREST REQUIREMENTS

Fiscal	Requirements			Interest Due on			
Year	Principal	Interest	Totals	Aug. 1	Amount	Feb. 1	Amount
2022	$ 150,000	15,710	165,710	2021	7,855	2022	7,855
2023	155,000	8,060	163,060	2022	4,030	2023	4,030
	305,000	23,770	328,770		11,885		11,885

STATISTICAL SECTION
(Unaudited)

This part of the comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the City's overall financial health.

Financial Trends

These schedules contain trend information to help the reader understand how the City's financial performance and well-being have changed over time.

Revenue Capacity

These schedules contain information to help the reader assess the City's most significant local revenue sources.

Debt Capacity

These schedules present information to help the reader assess the affordability of the City's current levels of outstanding debt and the City's ability to issue additional debt in the future.

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the City's financial activities take place.

Operating Information

These schedules contain service and infrastructure data to help the reader understand how the information in the City's financial report relates to the services the City provides and the activities it performs.

UNITED CITY OF YORKVILLE, ILLINOIS

Net Position by Component - Last Ten Fiscal Years*
April 30, 2021 (Unaudited)

	2012	2013	2014	2015
Governmental Activities				
Net Investment in Capital Assets	$ 58,943,771	62,000,588	63,873,210	66,706,243
Restricted	3,478,139	3,537,867	1,946,088	2,744,103
Unrestricted	93,682	3,341,127	3,566,727	3,328,570
Total Governmental Activities Net Position	62,515,592	68,879,582	69,386,025	72,778,916
Business-Type Activities				
Net Investment in Capital Assets	26,640,987	31,719,100	34,717,042	46,482,812
Restricted	683,147	-	-	-
Unrestricted	13,406,883	13,502,177	13,015,100	1,891,407
Total Business-Type Activities Net Position	40,731,017	45,221,277	47,732,142	48,374,219
Primary Government				
Net Investment in Capital Assets	85,584,758	93,719,688	98,590,252	113,189,055
Restricted	4,161,286	3,537,867	1,946,088	2,744,103
Unrestricted	13,500,565	16,843,304	16,581,827	5,219,977
Total Primary Government Net Position	103,246,609	114,100,859	117,118,167	121,153,135

* Accrual Basis of Accounting

Note: The City implemented GASB Statement No. 68 for the year ended April 30, 2016.

2016	2017	2018	2019	2020	2021
70,624,870	74,001,408	83,186,083	83,800,089	86,397,801	90,458,186
3,064,646	2,634,940	1,992,274	1,741,515	1,862,586	2,083,335
(6,321,934)	(6,198,767)	(8,300,460)	(7,317,467)	(8,257,280)	(6,122,164)
67,367,582	70,437,581	76,877,897	78,224,137	80,003,107	86,419,357
49,232,266	53,490,328	57,257,183	58,098,381	55,429,397	58,409,514
-	-	-	-	-	-
2,346,622	3,158,076	4,884,605	6,235,797	12,763,017	12,920,276
51,578,888	56,648,404	62,141,788	64,334,178	68,192,414	71,329,790
119,857,136	127,491,736	140,443,266	141,898,470	141,827,198	148,867,700
3,064,646	2,634,940	1,992,274	1,741,515	1,862,586	2,083,335
(3,975,312)	(3,040,691)	(3,415,855)	(1,081,670)	4,505,737	6,798,112
118,946,470	127,085,985	139,019,685	142,558,315	148,195,521	157,749,147

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Net Position - Last Ten Fiscal Years*
April 30, 2021 (Unaudited)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Expenses										
Governmental Activities										
General Government	$ 5,731,692	3,121,857	5,808,954	4,075,153	4,533,840	4,467,831	3,976,577	5,023,227	6,213,208	5,960,831
Public Safety	2,905,184	3,750,318	918,131	4,393,482	6,073,977	6,053,696	5,689,480	6,008,959	6,526,618	982,014
Community Development	307,053	356,689	2,029,523	592,588	649,507	734,317	629,894	869,044	816,350	2,513,280
Public Works	2,861,052	2,983,200	3,874,698	3,140,446	3,955,539	4,450,509	6,236,169	4,124,935	4,874,549	5,733,468
Library	871,050	932,748	407,537	930,024	877,154	930,739	941,123	974,154	1,017,437	828,098
Parks and Recreation	1,862,044	1,812,483	3,444,587	2,381,698	2,225,512	2,003,935	2,432,818	2,963,434	2,678,769	5,097,124
Interest on Long-Term Debt	704,213	691,551	698,519	611,243	540,506	570,061	536,177	500,169	464,883	409,695
Total Governmental Activities Expenses	15,242,288	13,648,846	17,181,949	16,124,634	18,856,035	19,211,088	20,442,238	20,463,922	22,591,814	21,524,510
Business-Type Activities										
Water	2,505,247	2,638,252	1,595,266	2,792,755	3,257,504	3,251,836	3,271,956	3,256,582	1,762,508	1,740,041
Sewer	1,653,025	1,630,023	2,710,511	1,704,058	1,789,770	1,701,742	1,806,076	1,589,599	3,271,485	3,405,189
Recreation Center	657,479	592,707	232,882	-	-	-	-	-	-	-
Total Business-Type Activities Expenses	4,815,751	4,860,982	4,538,659	4,496,813	5,047,274	4,953,578	5,078,032	4,846,181	5,033,993	5,145,230
Total Primary Government Expenses	20,058,039	18,509,828	21,720,608	20,621,447	23,903,309	24,164,666	25,520,270	25,310,103	27,625,807	26,669,740
Program Revenues										
Governmental Activities										
Charges for Services										
General Government	2,057,279	1,751,309	2,381,788	2,885,990	3,072,590	3,222,388	3,629,476	3,798,007	3,637,639	5,246,355
Public Safety	-	-	-	-	-	-	-	-	-	-
Public Works	-	-	-	-	-	-	-	-	-	-
Library	50,582	58,794	74,037	44,522	53,372	71,213	123,156	125,800	129,530	113,930
Parks and Recreation	265,698	265,614	299,478	352,714	408,469	455,675	453,466	579,155	527,941	357,208
Operating Grants/Contributions	633,091	696,058	1,135,659	943,410	774,856	610,480	694,321	854,662	888,037	3,037,020
Capital Grants/Contributions	1,409,412	3,317,256	1,229,829	768,423	3,317,330	3,814,671	6,448,555	1,011,418	3,270,712	1,815,564
Total Governmental Activities Program Revenues	4,416,062	6,089,031	5,120,791	4,995,059	7,626,617	8,174,427	11,348,974	6,369,042	8,453,859	10,570,077
Business-Type Activities										
Charges for Services										
Water	2,592,652	2,823,357	2,394,494	2,626,114	3,624,374	4,127,783	4,655,750	4,557,352	4,440,881	1,731,961
Sewer	1,366,022	1,358,420	1,130,954	1,186,389	1,388,258	1,390,806	1,688,339	1,552,159	1,601,247	5,062,645
Recreation	620,489	493,617	44,891	-	-	-	-	-	-	-
Operating Grants/Contributions	-	-	-	-	-	-	-	-	-	-
Capital Grants/Contributions	2,433,079	4,829,491	1,658,648	6,805	2,029,848	3,257,187	3,945,565	-	1,994,526	1,124,323
Total Business-Type Activities Program Revenues	7,012,242	9,504,885	5,228,987	3,819,308	7,042,480	8,775,776	10,289,654	6,109,511	8,036,654	7,918,929
Total Primary Government Program Revenues	11,428,304	15,593,916	10,349,778	8,814,367	14,669,097	16,950,203	21,638,628	12,478,553	16,490,513	18,489,006

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Net (Expense) Revenue										
Governmental Activities	$ (10,826,226)	(7,559,815)	(12,061,158)	(11,129,575)	(11,229,418)	(11,036,661)	(9,093,264)	(14,094,880)	(14,137,955)	(10,954,433)
Business-Type Activities	2,196,491	4,643,903	690,328	(677,505)	1,995,206	3,822,198	5,211,622	1,263,330	3,002,661	2,773,699
Total Primary Government										
Net (Expense) Revenue	(8,629,735)	(2,915,912)	(11,370,830)	(11,807,080)	(9,234,212)	(7,214,463)	(3,881,642)	(12,831,550)	(11,135,294)	(8,180,734)
General Revenues and Other Changes in Net Position										
Governmental Activities										
Taxes										
Property	4,953,862	4,743,599	4,670,934	4,850,981	4,901,983	4,899,485	4,925,489	5,041,762	5,195,891	5,248,398
Sales	2,962,810	4,409,926	4,573,026	4,782,712	4,904,967	5,200,763	5,327,756	5,429,231	5,635,945	6,341,989
Income	1,444,426	1,587,324	1,613,102	1,735,422	1,715,155	1,602,410	1,640,291	1,966,699	1,870,977	2,470,986
Utility	1,568,699	1,553,693	1,633,242	1,600,296	1,585,758	1,615,153	1,587,270	1,647,511	1,545,821	1,527,572
Other	963,524	922,439	988,822	1,127,859	1,265,439	1,331,191	1,445,549	1,600,502	1,652,074	1,668,294
Development Fees	-	-	-	-	-	-	-	-	-	-
Interest	10,388	16,368	14,895	(176,911)	9,828	30,481	85,356	154,071	239,155	15,488
Miscellaneous	667,637	690,456	737,693	1,736,079	761,857	561,229	705,968	1,494,246	456,998	376,595
Transfers	-	-	(1,626,263)	(1,133,972)	(1,134,654)	(1,134,052)	(184,099)	(921,615)	(679,936)	(278,639)
Total Governmental Activities	12,571,346	13,923,805	12,605,451	14,522,466	14,010,333	14,106,660	15,533,580	16,412,407	15,916,925	17,370,683
Business-Type Activities										
Property Taxes	1,883,730	1,883,730	-	-	-	-	-	-	-	-
Interest	2,687	9,542	11,491	11,206	6,685	13,623	36,002	28,777	67,934	1,777
Connection Fees	-	-	-	-	-	-	-	-	-	-
Miscellaneous	60,691	(1,624,872)	182,783	174,404	64,678	99,643	61,661	84,652	107,705	83,261
Transfers	-	-	1,626,263	1,133,972	1,134,654	1,134,052	184,099	921,615	679,936	278,639
Total Business-Type Activities	1,947,108	268,400	1,820,537	1,319,582	1,206,017	1,247,318	281,762	1,035,044	855,575	363,677
Total Primary Government	14,518,454	14,192,205	14,425,988	15,842,048	15,216,350	15,353,978	15,815,342	17,447,451	16,772,500	17,734,360
Changes in Net Position										
Governmental Activities	1,745,120	6,363,990	544,293	3,392,891	2,780,915	3,069,999	6,440,316	2,317,527	1,778,970	6,416,250
Business-Type Activities	4,143,599	4,912,303	2,510,865	642,077	3,201,223	5,069,516	5,493,384	2,298,374	3,858,236	3,137,376
Total Primary Government	5,888,719	11,276,293	3,055,158	4,034,968	5,982,138	8,139,515	11,933,700	4,615,901	5,637,206	9,553,626

* Accrual Basis of Accounting

UNITED CITY OF YORKVILLE, ILLINOIS

Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2021 (Unaudited)

	2012	2013	2014	2015
General Fund				
Nonspendable	$ 153,770	139,985	156,680	145,012
Restricted	-	-	-	984,526
Assigned	332,500	-	-	-
Unassigned	784,353	4,083,835	3,703,901	3,696,520
Total General Fund	1,270,623	4,223,820	3,860,581	4,826,058
All Other Governmental Funds				
Nonspendable	27,913	34,586	34,385	33,284
Restricted	3,565,649	3,549,913	1,951,407	1,767,419
Committed	264,616	305,804	527,635	537,853
Assigned	428,933	504,314	824,301	4,788,775
Unassigned	(874,152)	(571,615)	(534,087)	(624,928)
Total All Other Governmental Funds	3,412,959	3,823,002	2,803,641	6,502,403
Total All Governmental Funds	4,683,582	8,046,822	6,664,222	11,328,461

* Modified Accrual Basis of Accounting

2016	2017	2018	2019	2020	2021
138,312	150,464	83,305	85,744	63,193	152,003
1,216,288	984,514	726,019	458,685	203,874	-
-	-	-	-	-	-
4,337,106	5,079,111	5,687,049	6,335,394	7,244,993	9,020,351
5,691,706	6,214,089	6,496,373	6,879,823	7,512,060	9,172,354
37,376	37,664	16,392	18,266	13,515	38,268
1,848,358	1,650,426	1,266,255	1,282,830	1,658,712	2,083,335
480,034	421,586	467,816	435,216	398,488	43,801
3,004,149	1,625,937	743,997	1,125,471	1,099,847	1,605,360
(584,901)	(511,528)	(1,441,197)	(1,260,507)	(2,469,332)	(2,716,429)
4,785,016	3,224,085	1,053,263	1,601,276	701,230	1,054,335
10,476,722	9,438,174	7,549,636	8,481,099	8,213,290	10,226,689

UNITED CITY OF YORKVILLE, ILLINOIS

Changes in Fund Balances of Governmental Funds - Last Ten Fiscal Years*
April 30, 2021 (Unaudited)

	2012	2013	2014	2015
Revenues				
Taxes	$ 10,020,005	6,767,061	5,176,481	11,830,762
Intergovernmental	2,906,407	7,545,978	9,469,590	3,312,823
Licenses, Permits and Fees	336,683	400,718	393,746	379,242
Charges for Services	1,842,620	1,479,712	2,169,670	2,749,195
Fines and Forfeitures	194,256	195,287	191,887	154,789
Interest	10,388	16,368	14,895	(176,911)
Miscellaneous	667,637	690,456	737,693	1,736,079
Total Revenues	15,977,996	17,095,580	18,153,962	19,985,979
Expenditures				
General Government	5,501,632	3,498,104	5,685,541	3,910,635
Public Safety	2,849,067	3,568,665	3,834,655	4,337,573
Community Development	307,053	365,188	407,537	592,588
Public Works	1,926,169	1,841,795	2,207,757	2,361,827
Library	691,525	752,373	737,191	748,905
Parks and Recreation	1,488,018	1,450,824	1,644,065	2,041,792
Capital Outlay	101,133	572,022	2,050,456	3,285,489
Debt Service				
Principal Retirement	1,038,254	1,025,074	1,099,223	844,112
Interest and Fiscal Charges	701,809	663,495	641,673	496,090
Total Expenditures	14,604,660	13,737,540	18,308,098	18,619,011
Excess (Deficiency) of Revenues Over (Under) Expenditures	1,373,336	3,358,040	(154,136)	1,366,968
Other Financing Sources (Uses)				
Disposal of Capital Assets	16,100	5,200	16,325	-
Debt Issuance	-	-	8,053,963	6,670,678
Bond Premium/(Discount)	-	-	115,109	119,680
Payment to Escrow Agent	-	-	(7,787,598)	(2,359,115)
Transfers In	1,047,727	1,504,002	2,881,535	1,375,448
Transfers Out	(1,047,727)	(1,504,002)	(4,507,798)	(2,509,420)
	16,100	5,200	(1,228,464)	3,297,271
Net Change in Fund Balances	1,389,436	3,363,240	(1,382,600)	4,664,239
Debt Service as a Percentage of Noncapital Expenditures	13.098%	17.159%	11.540%	9.497%

* Modified Accrual Basis of Accounting

2016	2017	2018	2019	2020	2021
12,103,254	12,466,013	12,662,678	12,995,856	13,211,204	13,838,886
3,180,626	3,343,533	3,164,026	4,279,863	3,620,336	6,464,863
493,619	706,782	1,016,223	1,208,345	1,128,865	1,475,431
2,897,718	2,888,281	3,047,606	3,176,017	3,078,023	4,125,547
143,094	154,213	142,269	118,600	88,222	116,515
9,828	30,481	85,356	154,071	239,155	15,488
761,857	561,229	705,968	1,494,246	445,275	362,668
19,589,996	20,150,532	20,824,126	23,426,998	21,811,080	26,399,398
3,928,055	4,293,081	5,036,599	4,946,923	5,921,054	7,752,809
4,689,129	4,907,384	5,302,038	5,356,149	5,818,063	5,686,873
649,507	734,317	629,894	869,044	816,350	828,098
2,460,192	2,344,878	2,223,750	2,288,047	2,337,032	2,990,739
694,441	748,026	758,411	791,441	834,724	799,301
1,803,333	1,936,083	2,632,896	2,562,757	2,224,304	2,478,660
3,653,071	3,656,703	5,037,740	2,782,137	1,516,238	1,618,216
1,040,880	1,149,185	1,195,669	1,462,304	1,485,368	1,540,392
604,406	563,433	514,068	515,118	474,199	426,199
19,523,014	20,333,090	23,331,065	21,573,920	21,427,332	24,121,287
66,982	(182,558)	(2,506,939)	1,853,078	383,748	2,278,111
48,446	278,062	2,500	-	11,723	13,927
1,627,183	-	800,000	-	548,273	-
122,288	-	-	-	-	-
(1,581,984)	-	-	-	(531,617)	-
1,326,090	1,524,658	2,753,031	2,213,618	2,023,602	3,384,573
(2,460,744)	(2,658,710)	(2,937,130)	(3,135,233)	(2,703,538)	(3,663,212)
(918,721)	(855,990)	618,401	(921,615)	(651,557)	(264,712)
(851,739)	(1,038,548)	(1,888,538)	931,463	(267,809)	2,013,399
10.293%	9.793%	9.228%	10.629%	9.769%	9.673%

UNITED CITY OF YORKVILLE, ILLINOIS

Assessed Value and Actual Value of Taxable Property - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

Fiscal Year	Tax Levy Year	Residential Property	Farm	Commercial Property
2012	2011	$ 367,600,683	$ 2,450,231	$ 112,753,206
2013	2012	332,551,186	2,568,351	101,264,981
2014	2013	311,316,069	2,618,131	99,434,012
2015	2014	310,655,449	2,743,283	90,744,145
2016	2015	320,914,471	2,861,401	84,529,087
2017	2016	354,408,067	2,963,511	84,099,111
2018	2017	386,855,913	3,083,218	83,975,023
2019	2018	416,780,620	3,202,140	83,874,064
2020	2019	450,745,939	3,259,791	83,974,878
2021	2020	484,024,398	3,360,133	79,649,698

Data Source: Office of the County Clerk

Note: Property is assess at 33% of actual value.

Industrial Property	Railroad Property	Total Taxable Assessed Value	Estimated Actual Value of Taxable Property	Total Direct Tax Rate
$ 7,283,729	$ 17,328	$ 490,105,177	$ 1,470,315,531	0.7046
6,720,962	17,328	443,122,808	1,329,368,424	0.7490
6,656,792	17,328	420,042,332	1,260,126,996	0.7738
12,668,201	17,328	416,828,406	1,250,485,218	0.7581
13,000,039	17,329	421,322,327	1,263,966,981	0.7361
14,944,561	17,328	456,432,578	1,369,297,734	0.6795
15,349,880	17,328	489,281,362	1,467,844,086	0.6471
15,386,433	60,243	519,303,500	1,557,910,500	0.6242
15,509,884	89,004	553,579,496	1,660,738,488	0.6029
15,586,411	75,859	582,696,499	1,748,089,497	0.5880

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Property Taxpayers - Current Tax Levy Year and Nine Tax Levy Years Ago
April 30, 2021 (Unaudited)

	2020 Tax Levy			2011 Tax Levy		
Taxpayer	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value	Taxable Assessed Value	Rank	Percentage of Total City Taxable Assessed Value
Wrigley Manufacturing Co., LLC	$ 4,666,112	1	0.80%	$ 3,400,000	5	0.69%
Yorkville Marketplace LLC	4,089,620	2	0.70%	4,418,365	3	0.90%
Boombah Properties LLC	3,166,624	3	0.54%	2,385,989	6	0.49%
Menard, Inc	3,131,604	4	0.54%	8,383,239	1	1.71%
Yorkville Leased Housing Assoc.	2,779,144	5	0.48%			
York Meadows LLC	2,286,011	6	0.39%	1,896,726	9	0.39%
Rainy Properties LLC	2,278,426	7	0.39%			
Cedarhurst of Yorkville Real Estate LL	1,959,909	8	0.34%			
Target Corporation	1,900,000	9	0.33%	3,633,144	4	0.74%
Raging Waves	1,511,406	10	0.26%	1,846,023	10	0.38%
Cannonball LLC				5,753,680	2	1.17%
Home Depot USA Inc.				2,152,999	7	0.44%
Prime Yorkville LLC				2,119,824	8	0.43%
	27,768,856		4.77%	35,989,989		7.34%

Data Source: Office of the County Clerk

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Property Tax Rates - Last Ten Tax Levy Years
April 30, 2021 (Unaudited)

	2011	2012	2013
City Direct Rates			
Corporate	0.2108	0.2354	0.2484
Bonds and Interest	0.1477	0.1097	0.0797
IMRF	0.0918	0.1016	0.1071
Police Protection	0.0714	0.0790	0.0833
Police Pension	0.0900	0.1229	0.1493
Audit	0.0082	0.0068	0.0071
Liability Insurance	0.0082	0.0090	0.0095
Social Security	0.0612	0.0677	0.0714
School Crossing Guard	0.0051	0.0056	0.0060
Unemployment Insurance	0.0102	0.0113	0.0119
Total Direct Rates	0.7046	0.7490	0.7738
Overlapping Rates			
Kendall County	0.6999	0.7446	0.8009
Kendall County Forest Preserve	0.1205	0.1495	0.1640
Bristol Township	0.3693	0.3934	0.4239
Bristol - Kendall Fire District	0.7176	0.7356	0.7718
Yorkville - Bristol Sanitary District	-	-	-
Yorkville Community Unit School District #115	5.9101	6.7561	7.4081
Waubonsee Community College District #516	0.4702	0.5306	0.5691
Yorkville Public Library	0.3042	0.3242	0.3241
Total Overlapping Rates	8.5918	9.6340	10.4619
Total Direct and Overlapping Rates	9.2964	10.3830	11.2357

Data Source: Office of the County Clerk

Notes:
(1) Rates are per $100 of Assessed Value.
(2) Representative tax rates for other government units are from Bristol Township

2014	2015	2016	2017	2018	2019	2020
0.2503	0.2380	0.2197	0.2049	0.1931	0.1811	0.1694
0.0397	0.0113	-	-	-	-	-
0.1080	-	-	-	-	-	-
0.0840	0.2407	0.1999	0.2003	0.1709	0.1562	0.1484
0.1694	0.1959	0.2117	0.1969	0.2140	0.2223	0.2291
0.0072	0.0069	0.0066	0.0061	0.0057	0.0054	0.0052
0.0096	0.0091	0.0088	0.0082	0.0077	0.0072	0.0069
0.0720	0.0342	0.0329	0.0307	0.0289	0.0271	0.0258
0.0060	-	-	-	0.0039	0.0036	0.0034
0.0120	-	-	-	-	-	-
0.7581	0.7361	0.6795	0.6471	0.6242	0.6029	0.5880
0.8085	0.7909	0.7477	0.7088	0.6728	0.6409	0.6232
0.1826	0.1787	0.1755	0.1752	0.1503	0.1542	0.1582
0.4172	0.3960	0.3408	0.2787	0.2618	0.0952	0.0912
0.8041	0.8077	0.7592	0.7425	0.7300	0.7202	0.7159
-	-	-	-	-	-	-
7.7083	7.8713	7.5634	7.3444	7.1852	7.0338	6.9567
0.5973	0.5885	0.5601	0.5514	0.5413	0.5273	0.4378
0.3299	0.3287	0.3080	0.2994	0.2892	0.2829	0.2775
10.8479	10.9618	10.4547	10.1004	9.8306	9.4545	9.2605
11.6060	11.6979	11.1342	10.7475	10.4548	10.0574	9.8485

UNITED CITY OF YORKVILLE, ILLINOIS

Property Tax Levies and Collections - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

Fiscal Year	Tax Levy Year	Taxes Levied for the Fiscal Year	Collected within the Fiscal Year of the Levy		Collections in Subsequent Years***	Total Collections to Date **	
			Amount	Percentage of Levy		Amount	Percentage of Levy
2012	2010*	$ 4,862,185	$ 4,849,681	99.74%	-	$ 4,849,681	99.74%
2013	2011*	3,452,742	3,435,616	99.50%	-	3,435,616	99.50%
2014	2012*	3,318,990	3,193,672	96.22%	-	3,193,672	96.22%
2015	2013*	3,250,204	3,234,448	99.52%	-	3,234,448	99.52%
2016	2014*	3,159,892	3,146,278	99.57%	-	3,146,278	99.57%
2017	2015*	3,101,185	3,071,484	99.04%	-	3,071,484	99.04%
2018	2016	3,101,322	3,093,892	99.76%	-	3,093,892	99.76%
2019	2017	3,165,651	3,149,635	99.49%	-	3,149,635	99.49%
2020	2018	3,241,457	3,231,926	99.71%	-	3,231,926	99.71%
2021	2019	3,337,703	3,327,913	99.71%	-	3,327,913	99.71%

Data Source: Office of the County Treasurer

* The 2010, 2011, 2012, 2013, 2014 and 2015 tax levy extended amounts include bonds and interest in the amount of $2,212,770, $723,689, $486,150, $334,816, $165,564 & $47,525, respectively, that were previously abated.

** Includes property taxes collected in the current year that may be attributable to prior years. These collections, if any, are immaterial as 99% or greater of the current year's tax levy has historically been collected during the respective fiscal year. Additionally, information to associate any non-current tax collections to a specific tax levy is not readily available.

*** Information for collections in subsequent years is unavailable.

Note: Property in the City is reassessed each year. Property is assessed at 33% of actual value.

UNITED CITY OF YORKVILLE, ILLINOIS

Estimate of Taxable Sales by Category - Last Ten Calendar Years
April 30, 2021 (Unaudited)

	2011	2012	2013
General Merchandise*	$ 555,129	571,210	594,685
Food	262,556	259,509	266,937
Drinking and Eating Places	268,418	279,649	293,131
Apparel*	68,320	85,797	88,739
Furniture & H.H. & Radio	-	7,727	3,370
Lumber, Building Hardware	352,669	362,987	413,711
Automobile and Filling Stations	194,135	178,282	156,091
Drugs and Miscellaneous Retail	603,718	582,001	597,615
Agriculture and All Others	58,065	64,558	89,359
Manufacturers	191,287	78,346	89,239
Total	2,554,297	2,470,066	2,592,877
City Direct Sales Tax Rate	1.00%	1.00%	1.00%

Data Source: Illinois Department of Revenue - Local Tax Allocation Division

Data available for calendar year only.

* Data by category is not available from the State of Illinois for categories with less than four taxpayers. However, they are included in the totals. Per the State of Illinois, there must not have been four taxpayers during the year 2011.

2014	2015	2016	2017	2018	2019	2020
593,361	608,996	597,618	581,090	596,620	565,194	553,360
289,897	385,034	377,825	417,028	452,298	485,658	522,083
299,300	332,752	376,762	401,725	413,204	429,128	454,292
87,834	95,975	99,354	94,459	99,121	49,305	34,163
2,710	2,597	2,373	1,590	1,902	1,150	891
446,440	470,357	510,521	539,760	558,358	592,844	745,531
146,062	160,717	188,830	187,127	220,232	251,785	295,001
566,665	362,225	506,123	487,129	484,825	527,795	554,512
161,114	232,923	135,378	213,964	219,283	239,758	221,374
90,998	102,011	116,723	36,167	30,503	30,270	32,510
2,684,381	2,753,587	2,911,507	2,960,039	3,076,346	3,172,887	3,413,717
1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%

UNITED CITY OF YORKVILLE, ILLINOIS

Direct and Overlapping Sales Tax Rates - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

Fiscal Year	State Sales Tax	Local Sales Tax to City	City Non-Home Rule Sales Tax	County Sales Tax	County Public Safety Property	Total Sales Tax Rate
2012	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2013	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2014	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2015	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2016	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2017	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2018	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2019	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2020	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%
2021	5.00%	1.00%	1.00%	0.25%	1.00%	8.25%

Data Source: Illinois Department of Revenue

The above tax rates are for General Merchandise.

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of Outstanding Debt by Type - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

	Governmental Activities				
Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Debt Certificates	Notes Payable	Other Commitments	General Obligation and Alternative Revenue Source Bonds
2012	$ 13,925,000	$ 95,000	$ 847,825	$ 1,890	$ 18,175,000
2013	13,025,000	-	855,601	1,890	17,905,000
2014	12,520,000	-	940,341	1,890	16,855,000
2015	16,120,000	-	901,907	1,890	15,700,000
2016	15,325,990	-	938,210	1,890	18,555,000
2017	14,252,531	-	820,482	1,890	20,613,544
2018	13,138,403	-	1,500,822	1,890	18,605,065
2019	11,967,952	-	1,170,850	1,890	16,503,368
2020	10,718,207	-	926,655	1,890	13,685,179
2021	9,406,558	-	673,426	1,890	10,841,111

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Demographic and Economic Statistics for personal income and population data.

Business-Type Activities					
Debt Certificates	IEPA Loans Payable	Other Commitments	Total Primary Government	Percentage of Personal Income (1)	Per Capita (1)
$ 8,460,000	$ 2,275,320	$ 2,065,958	$ 45,845,993	10.30%	$ 2,655
7,465,000	2,060,997	1,952,534	43,266,022	9.25%	2,470
6,680,000	1,880,084	1,919,909	40,797,224	8.70%	2,291
5,865,000	1,694,504	1,942,898	42,226,199	8.72%	2,325
5,220,000	1,504,138	2,000,619	43,545,847	8.38%	2,360
1,230,000	1,308,862	2,061,951	40,289,260	7.61%	2,139
1,010,000	1,108,550	2,126,965	37,491,695	6.95%	1,971
580,000	903,070	2,194,902	33,322,032	5.82%	1,656
445,000	745,816	2,272,473	28,795,220	4.79%	1,397
305,000	638,766	5,169,097	27,035,848	4.31%	1,256

UNITED CITY OF YORKVILLE, ILLINOIS

Ratios of General Bonded Debt Outstanding - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

Fiscal Year	General Obligation and Alternative Revenue Source Bonds	Less: Amounts Available in Debt Service	Total	Percentage of Total Taxable Assessed Value of Property (1)	Per Capita (2)
2012	$ 32,100,000	$ -	$ 32,100,000	6.55%	$ 1,859
2013	30,930,000	57,844	30,872,156	6.97%	1,762
2014	29,375,000	-	29,375,000	6.99%	1,650
2015	31,820,000	-	31,820,000	7.63%	1,752
2016	33,880,990	-	33,880,990	8.04%	1,836
2017	34,866,075	-	34,866,075	7.64%	1,851
2018	31,743,468	-	31,743,468	6.49%	1,669
2019	28,471,320	-	28,471,320	5.48%	1,415
2020	24,403,386	-	24,403,386	4.41%	1,184
2021	20,247,669	-	20,247,669	3.47%	940

Note: Details regarding the City's outstanding debt can be found in the notes to the financial statements.

(1) See the Schedule of Assessed Value and Actual Value of Taxable Property for property value data.

(2) See the Schedule of Demographic and Economic Statistics for personal income and population data.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Direct and Overlapping Governmental Activities Debt
April 30, 2021 (Unaudited)

Governmental Unit	(1) Gross Debt	(2) Percentage of Debt Applicable to City *	(3) City's Share of Debt
United City of Yorkville	$ 10,081,874	100.000%	$ 10,081,874
Overlapping Debt			
County of Kendall (4)	21,205,000	16.25%	3,445,813
Forest Preserve District of Kendall County	30,720,000	16.25%	4,992,000
Yorkville Community Unit School District #115	60,803,619	59.47%	36,159,912
Waubonsee Community College District #516	41,430,000	5.47%	2,266,221
Joliet Junior College District #525	135,055,000	0.00%	2,296
Plano Community Unit School District #88	41,124,950	0.44%	180,950
Newark Community Consolidated School District #66	912,000	0.46%	4,195
Total Overlapping Debt	331,250,569		47,051,387
Total Direct and Overlapping Debt	341,332,443		57,133,261

Data Source: Kendall County Tax Extension Department

* Determined by ratio of assessed valuation of property subject to taxation in the City to valuation of property subject to taxation in overlapping unit.

Notes:
(1) As of May 4, 2021.
(2) Percentages are based on 2020 EAV's, the latest available.
(3) The United City of Yorkville has $67,027,000 in outstanding non-committal debt which is expected to be paid from sources other than City revenues.
(4) Includes Public Building Commission.

UNITED CITY OF YORKVILLE, ILLINOIS

Schedule of Legal Debt Margin - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

	2012	2013	2014	2015
Legal Debt Limit	$ 42,271,572	38,219,342	36,228,651	35,951,450
Total Net Debt Applicable to Limit	24,860,000	22,945,000	19,290,000	14,855,000
Legal Debt Margin	17,411,572	15,274,342	16,938,651	21,096,450
Total Net Debt Applicable to the Limit as a Percentage of Debt Limit	58.81%	60.04%	53.25%	41.32%

2016	2017	2018	2019	2019	2021
36,339,051	39,367,310	42,200,517	44,789,927	47,746,232	50,257,573
13,420,000	6,835,000	6,045,000	5,000,000	4,230,000	3,405,000
22,919,051	32,532,310	36,155,517	39,789,927	43,516,232	46,852,573
36.93%	17.36%	14.32%	11.16%	8.86%	6.78%

Legal Debt Margin Calculation for Fiscal Year 2021

Assessed Value	$ 582,696,499
Bonded Debt Limit - 8.625% of Assessed Value	50,257,573
Amount of Debt Applicable to Limit	3,405,000
Legal Debt Margin	46,852,573

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Governmental Activities
April 30, 2021 (Unaudited)

Fiscal Year	Incremental Property/ Property Tax	Municipal Utility Tax	Motor Fuel Tax	Municipal Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2012	$ 586,590	$ -	$ 417,416	$ 2,552,483	$ 3,556,489	$ 440,000	$ 267,104	5.03
2013	364,742	-	402,932	2,490,503	3,258,177	460,000	249,609	4.59
2014	315,790	-	-	2,586,460	2,902,250	400,000	230,917	4.60
2015	327,984	418,509	-	2,704,651	3,451,144	225,000	56,789	12.25
2016	164,852	393,680	-	2,778,116	3,336,648	255,000	53,550	10.81
2017	215,360	359,947	-	2,940,976	3,516,283	270,000	50,150	10.98
2018	198,294	334,595	-	3,002,133	3,535,022	275,000	44,750	11.06
2019	198,918	329,742	-	3,070,663	3,599,323	285,000	39,250	11.10
2020	279,643	971,440	-	3,222,256	4,473,339	290,000	34,025	13.81
2021	222,099	1,010,210	-	3,617,361	4,849,670	295,000	28,225	15.00

Notes:
Details regarding the City's outstanding debt can be found in the Notes to the Financial Statements.

Series 2014, 2014A and 2015A Bonds are payable from revenues from Sales Taxes and incremental taxes, if any, from the Countryside TIF. Series 2014B Bonds are payable from Utility Taxes.

UNITED CITY OF YORKVILLE, ILLINOIS

Pledged-Revenue Coverage - Last Ten Fiscal Years
Business-Type Activities
April 30, 2021 (Unaudited)

Fiscal Year	Water and Sewer Revenues	Less: Operating Expenses	State Income Tax	Non-Home Rule Sales Tax	Net Available Revenue	Debt Service		Coverage
						Principal	Interest	
2012	$ 5,891,708	$ 2,776,270	$ 1,444,426	$ 410,327	$ 4,559,864	$ 260,000	$ 793,668	4.33
2013	4,432,710	2,895,830	1,587,324	1,919,423	3,124,204	270,000	769,100	3.01
2014	3,379,454	1,695,780	1,613,102	1,986,566	5,283,342	1,050,000	759,986	2.92
2015	3,646,020	1,929,555	1,735,422	2,078,061	5,529,948	1,175,000	704,410	2.94
2016	4,493,694	2,386,468	1,715,155	2,126,851	5,949,232	1,245,000	624,002	3.18
2017	4,364,434	2,366,493	1,602,410	2,259,787	5,860,138	1,290,000	592,364	3.11
2018	5,642,966	2,570,417	1,640,291	2,325,623	7,038,463	1,878,991	831,200	2.60
2019	5,571,153	2,331,257	1,966,699	2,358,568	7,565,163	1,982,668	719,080	2.80
2020	5,500,876	2,570,624	1,870,977	2,413,689	7,214,918	2,730,483	602,768	2.16
2021	5,798,153	2,669,714	2,470,986	2,724,628	8,324,053	2,787,837	492,459	2.54

Notes:

Details regarding the City's outstanding debt can be found in the notes to the financial statements.

Water and Sewer revenues exclude capital contributions and developer donations. Operating expenses do not include depreciation or amortization expenses.

UNITED CITY OF YORKVILLE, ILLINOIS

Demographic and Economic Statistics - Last Ten Calendar Years
April 30, 2021 (Unaudited)

Calendar Year	Population (1)	Personal Income (4)	Per Capita Personal Income (4)	Median Age (1)	School Enrollment (2)	Unemployment Rate (3)
2011	17,266	$ 445,027,116	$ 46,877	33.5	5,426	5.90%
2012	17,518	467,491,704	49,110	32.9	5,474	5.20%
2013	17,804	468,864,947	49,123	31.1	5,630	8.20%
2014	18,161	484,322,292	50,690	31.6	5,786	6.40%
2015	18,451	519,692,602	54,516	31.6	5,801	4.80%
2016	18,833	529,121,652	55,621	32.3	5,980	5.20%
2017	19,022	539,704,085	58,331	32.3	6,026	4.50%
2018	20,119	572,600,072	61,642	33.7	6,233	3.50%
2019	20,613	600,616,821	63,500	33.7	6,319	3.40%
2020	21,533	626,623,529	66,370	33.3	6,245	8.50%

Data Source:
(1) U.S. Census Buerau
(2) Data provided by School District Administrative Offices
(3) Illinois Department of Employment Security, Economic Information and Analysis
(4) U.S. Bureau of Economic Analysis: Chicago-Naperville-Elgin Metropolitan Statistical Area

UNITED CITY OF YORKVILLE, ILLINOIS

Principal Employers - Current Calendar Year and Nine Calendar Years Ago
April 30, 2021 (Unaudited)

	2020 Calendar Year			2011 Calendar Year		
Employer	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
Raging Waves (Seasonal)	460	1	2.14%	450	1	2.61%
Wrigley Manufacturing Co.	400	2	1.86%	335	2	1.94%
Super Target	260	3	1.21%	180	3	1.04%
Menards Mega Store	160	4	0.74%	140	4	0.81%
Jewel/Osco	140	5	0.65%	130	5	0.75%
Newlywed Foods	128	6	0.59%	130	5	0.75%
Home Depot	115	7	0.53%	85	8	0.49%
Boombah, Inc	100	8	0.46%	90	7	0.52%
Wheatland Title	95	9	0.44%	65	9	0.38%
Hillside Health Care Center	80	10	0.37%	90	7	0.52%
Kohl's				115	6	0.67%
	1,938		9.00%	1,810		10.48%

Data Source: City Records and Illinois Manufacturers Directory.

UNITED CITY OF YORKVILLE, ILLINOIS

Full-Time and Part-Time Government Employees by Function - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

	2012	2013	2014
Full Time			
General Government			
Administration	4.0	4.0	4.0
Finance	4.0	4.0	4.0
Community Development	2.0	3.0	4.0
Public Safety			
Police			
Officers	25.0	26.0	28.0
Civilians	3.0	2.0	3.0
Public Works			
Streets	5.0	5.3	5.3
Water	5.5	5.3	5.3
Sewer	3.5	3.3	3.3
Parks & Recreation			
Parks	8.0	8.5	8.5
Recreation	4.0	5.5	4.5
Library	5.0	5.0	5.0
Part Time			
General Government			
Administration	-	1.0	1.0
Community Development	1.0	2.0	1.0
Public Safety			
Police			
Officers	5.0	6.0	5.0
Civilians	7.0	9.0	10.0
Public Works			
Streets	-	-	-
Water	-	-	-
Sewer	-	-	-
Parks & Recreation			
Parks	3.0	4.0	4.0
Recreation	40.0	16.0	3.0
Library	30.0	26.0	25.0
Total	155.0	135.9	123.9

Data Source: City Human Resource Department

2015	2016	2017	2018	2019	2020	2021
4.0	4.0	4.0	5.5	5.5	5.5	5.5
4.0	4.0	4.0	4.0	4.0	4.0	4.0
4.0	4.0	4.0	5.0	6.0	6.0	6.0
29.0	29.0	29.0	30.0	27.0	31.0	32.0
3.0	3.0	3.0	3.0	3.0	3.0	3.0
5.3	5.3	5.3	5.3	5.3	5.3	5.3
5.3	5.3	5.3	5.3	4.3	5.8	5.8
3.3	3.3	3.3	3.3	2.3	3.8	3.8
8.5	6.5	7.5	7.5	8.5	7.5	7.5
5.5	5.5	5.5	6.0	6.0	6.0	5.0
4.0	4.0	4.0	4.0	5.0	5.0	4.0
-	1.0	1.0	-	-	-	-
1.0	1.0	3.0	2.0	-	-	-
6.0	5.0	5.0	4.0	3.0	3.0	1.0
9.0	9.0	8.0	9.0	8.0	10.0	3.0
1.0	1.0	1.0	3.0	-	3.0	-
2.0	2.0	1.0	-	-	1.0	-
-	-	-	-	-	1.0	-
7.0	7.0	7.0	7.0	6.0	6.0	1.0
23.0	32.0	35.0	33.0	33.0	48.0	17.0
31.0	27.0	28.0	24.0	23.0	32.0	22.0
155.9	159.0	163.9	160.9	150.0	187.0	126.0

UNITED CITY OF YORKVILLE, ILLINOIS

Operating Indicators by Function/Program - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

	2012	2013	2014	2015
Police				
Arrests Made	700	547	390	503
Parking Violations	1,501	846	628	515
Traffic Violations	4,338	4,287	1,097	987
Reports Taken	1,815	1,813	1,840	1,788
Calls for Service	13,311	11,860	11,633	12,458
Community Development				
Permits Issued	566	593	576	577
Public Works				
Street Resurfacing (Miles)	-	-	1.69	0.65
Snow and Ice Control (Tons of Salt)	1,986	1,081	1,349	1,509
Pothole Repairs (Tons of Asphalt)	286	336	252	442
Water				
Number of Accounts	5,947	6,189	6,135	6,361
Total Annual Consumption (Cubic Feet)	59,828,300	66,401,150	62,743,823	56,658,370
Average Daily Consumption (Cubic Feet)	163,913	181,921	171,901	155,228

*Police information is presented on a calendar year basis. Operating indicators for 2021 are thru May.

Data Source: Various City Departments

2016	2017	2018	2019	2020	2021	
466	602	619	665	401	211	*
655	426	274	170	56	25	*
1,252	881	1,022	604	6,053	2,877	*
1,911	1,916	2,045	2,022	2,251	1,174	*
13,727	11,953	12,047	13,043	12,449	6,656	*
681	871	1,003	980	2,247	1,975	
2.12	6.01	7.51	4.39	3.05	2.35	
1,490	1,285	1,748	1,730	1,130	1,786	
610	511	218	212	202	31	
6,465	6,644	6,805	7,038	7,265	7,492	
58,570,769	64,208,149	68,062,433	68,173,114	64,641,961	66,407,476	
160,468	175,913	186,472	186,776	177,101	181,938	

UNITED CITY OF YORKVILLE, ILLINOIS

Capital Asset Statistics by Function/Program - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

	2012	2013	2014
Public Safety			
Police			
Stations	1	1	1
Patrol Units	19	20	20
Public Works			
Streets (Miles)	61	82	83
Traffic Signals	26	26	26
Storm Sewers (Miles)	73	80	83
Water			
Water Mains (Miles)	62	67	68
Fire Hydrants	1,239	1,327	1,349
Sewer			
Sanitary Sewers (Miles)	55	59	60
Lift Stations	7	7	7

Data Source: Various City Departments

2015	2016	2017	2018	2019	2020	2021
1	1	1	1	1	1	1
22	20	20	22	21	20	22
84	88	90	95	95	138	140
26	26	26	26	26	26	26
83	90	96	106	106	136	140
68	72	77	85	85	134	137
1,349	1,415	1,515	1,645	1,647	1,929	1,972
60	64	68	74	74	115	117
7	7	7	7	7	7	7

UNITED CITY OF YORKVILLE, ILLINOIS

New Permits and Construction Values - Last Ten Fiscal Years
April 30, 2021 (Unaudited)

Fiscal Year	Commercial Construction		Residential Construction Single-Family		Residential Construction Multi-Family		Total	
	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value	Permits Issued	Construction Value
2012	7	$ 1,016,600	69	$ 10,318,804	-	$ -	76	$ 11,335,404
2013	9	3,149,000	83	12,287,740	-	-	92	15,436,740
2014	11	3,215,000	73	11,451,799	-	-	84	14,666,799
2015	10	38,279,500	72	13,063,555	-	-	82	51,343,055
2016	6	1,060,000	98	16,451,049	-	-	104	17,511,049
2017	6	2,361,795	159	28,818,289	-	-	165	31,180,084
2018	10	25,292,000	165	28,598,202	48	2,640,000	223	56,530,202
2019	8	3,626,350	217	34,439,272	5	324,254	230	38,389,876
2020	11	3,992,100	139	20,410,448	34	3,813,608	184	28,216,156
2021	8	1,044,324	272	41,739,549	118	13,588,257	398	56,372,130

Data Source: City Records

Financial Pro Forma - Water Fund **Schedule 6**

				FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
1	**Income Statement Items**													
2	**Rate Revenue Subject to Growth & Rate Adjustments**													
3	**WATER**													
4	Water Rate Revenue			$ 4,300,000	$ 4,300,000	$ 5,142,378	$ 6,294,590	$ 7,383,588	$ 9,037,090	$ 11,061,470	$ 11,283,254	$ 11,508,654	$ 11,738,875	$ 17,684,097
5	Additional Rate Revenue From Growth			-	85,823	103,114	125,921	147,320	180,802	221,784	225,400	230,221	235,043	354,252
6	Additional Rate Revenue From Rate Adjustment [1]			-	756,554	1,049,098	963,077	1,506,182	1,843,578	-	-	-	5,710,179	-
7	**Total Water Rate Revenues**			**4,300,000**	**5,142,378**	**6,294,590**	**7,383,588**	**9,037,090**	**11,061,470**	**11,283,254**	**11,508,654**	**11,738,875**	**17,684,097**	**18,038,349**
8	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**$4,300,000**	**$5,142,378**	**$6,294,590**	**$7,383,588**	**$9,037,090**	**$11,061,470**	**$11,283,254**	**$11,508,654**	**$11,738,875**	**$17,684,097**	**$18,038,349**
9	**Plus: Other Operating Revenues**													
10	Other Operating Revenues			2,233,000	1,658,897	1,568,565	1,620,114	1,688,911	1,767,802	1,795,958	1,824,677	1,853,971	1,853,971	1,853,971
11	**Equals: Total Operating Revenue**			**$6,533,000**	**$6,801,275**	**$7,863,155**	**$9,003,702**	**$10,726,001**	**$12,829,272**	**$13,079,212**	**$13,333,331**	**$13,592,846**	**$19,538,068**	**$19,892,320**
12	**Plus: Non-Operating Revenues/(Expense)**													
13	Non-Operating Revenue			$ 816,059	$ 1,286,555	$ 1,203,304	$ 901,980	$ 979,866	$ 998,059	$ 1,015,678	$ 1,033,720	$ 1,052,052	$ 1,051,982	$ 1,051,843
14	Bond Proceeds & Contributions			10,672,744	34,023,835	48,493,600	49,143,950	28,277,600	1,959,200	8,212,740	-	-	-	-
15	Interest Income			44,000	28,138	20,632	13,758	10,921	7,167	15,125	23,753	26,286	28,834	31,839
16	**Equals: Total Non-Operating Revenues**			**$11,532,803**	**$35,338,527**	**$49,717,536**	**$50,059,688**	**$29,268,387**	**$2,964,426**	**$9,243,544**	**$1,057,473**	**$1,078,337**	**$1,080,816**	**$1,083,682**
17	**Less: Revenues Excluded From Coverage Test**													
18	Bond Proceeds & Contributions			(10,672,744)	(34,023,835)	(48,493,600)	(49,143,950)	(28,277,600)	(1,959,200)	(8,212,740)	-	-	-	-
19	**Total Excluded Revenues**			**(10,672,744)**	**(34,023,835)**	**(48,493,600)**	**(49,143,950)**	**(28,277,600)**	**(1,959,200)**	**(8,212,740)**	**-**	**-**	**-**	**-**
20	**Less: Operating Expenses**													
21	Personal Services			$ (844,056)	$ (1,031,826)	$ (1,087,000)	$ (1,140,586)	$ (1,186,290)	$ (1,234,248)	$ (1,302,431)	$ (1,374,594)	$ (1,450,982)	$ (1,478,755)	$ (1,508,680)
22	Fixed O&M Expenses			(1,828,103)	(2,201,421)	(1,832,332)	(1,822,080)	(1,885,995)	(7,198,354)	(7,385,810)	(7,607,384)	(7,835,605)	(7,835,605)	(7,835,605)
23	**Total Expenses**			**(2,672,159)**	**(3,233,247)**	**(2,919,332)**	**(2,962,666)**	**(3,072,285)**	**(8,432,602)**	**(8,688,240)**	**(8,981,978)**	**(9,286,588)**	**(9,314,360)**	**(9,344,285)**
24	**Equals: Net Income Available For Debt Service**			**$ 4,720,900**	**$ 4,882,720**	**$ 6,167,760**	**$ 6,956,774**	**$ 8,644,503**	**$ 5,401,897**	**$ 5,421,776**	**$ 5,408,827**	**$ 5,384,596**	**$ 11,304,523**	**$ 11,631,716**
25	**Cash Flow Statement Items**													
26	Net Income Available For Debt Service			$ 4,720,900	$ 4,882,720	$ 6,167,760	$ 6,956,774	$ 8,644,503	$ 5,401,897	$ 5,421,776	$ 5,408,827	$ 5,384,596	$ 11,304,523	$ 11,631,716
27	Total Debt Service			(459,038)	(865,924)	(2,416,766)	(2,383,280)	(3,208,867)	(3,087,808)	(3,159,621)	(3,159,621)	(3,159,121)	(9,043,619)	(9,042,119)
28	Funds from Operations (FFO)			4,261,862	4,016,796	3,750,993	4,573,494	5,435,637	2,314,088	2,262,154	2,249,206	2,225,474	2,260,905	2,589,597
29	Add Back: Bond Proceeds & Contributions			10,672,744	34,023,835	48,493,600	49,143,950	28,277,600	1,959,200	8,212,740	-	-	-	-
30	Capital Outlay			(7,456,062)	(36,187,000)	(58,036,000)	(51,567,000)	(36,277,200)	(2,855,200)	(3,668,200)	(295,200)	(295,200)	(295,200)	(295,200)
31	Other Below the Line Expenses			(441,093)	(438,593)	(233,416)	(230,769)	(231,651)	(232,239)	(232,533)	(232,533)	(232,239)	(231,651)	(230,769)
32	Transfer Out			(97,224)	(697,283)	(697,389)	(696,729)	(696,729)	(696,729)	(696,729)	(696,729)	(696,729)	(696,729)	(696,729)
33	**Free Cash Flow (FCF)**			**6,940,227**	**717,755**	**(6,722,212)**	**1,222,946**	**(3,492,343)**	**489,120**	**5,877,432**	**1,024,744**	**1,001,306**	**1,037,325**	**1,366,899**
34	**Calculation of Debt Service Coverage**													
35	Existing Debt Service			273,280	264,080	125,030	62,516	-	-	-	-	-	-	-
36	GO ARS Bond 2023			185,758	601,844	609,344	606,094	607,594	608,594	609,094	609,094	608,594	607,594	606,094
37	WIFIA			-	-	347,949	732,258	952,326	1,086,627	1,157,940	1,157,940	1,157,940	7,043,438	7,043,438
38	Revenue Bonds in Support of WIFIA Loan			-	-	1,334,444	982,413	1,648,947	1,392,588	1,392,588	1,392,588	1,392,588	1,392,588	1,392,588
39	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-	-
40	**Total Debt Service**			**459,038**	**865,924**	**2,416,766**	**2,383,280**	**3,208,867**	**3,087,808**	**3,159,621**	**3,159,621**	**3,159,121**	**9,043,619**	**9,042,119**
41	**Calculated All In Debt Service Coverage**	1.25	Req.	**10.28**	**5.64**	**2.55**	**2.92**	**2.69**	**1.75**	**1.72**	**1.71**	**1.70**	**1.25**	**1.29**
42	**Calculated Senior Debt Service Coverage**	1.25	Req.	**10.28**	**5.64**	**2.98**	**4.21**	**3.83**	**2.70**	**2.71**	**2.70**	**2.69**	**5.65**	**5.82**
43	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**0.00**	**0.00**	**11.78**	**7.25**	**6.71**	**3.13**	**2.95**	**2.94**	**2.92**	**1.32**	**1.37**
	Unrestricted Working Capital Reserve Fund Test													
44	Balance At Beginning Of Fiscal Year			$ 3,955,975	$ 10,896,202	$ 11,613,957	$ 4,891,745	$ 6,114,691	$ 2,622,348	$ 3,111,468	$ 8,988,900	$ 10,013,644	$ 11,014,950	$ 12,052,275
45	Cash Flow Surplus/Deficit			6,940,227	717,755	(6,722,212)	1,222,946	(3,492,343)	489,120	5,877,432	1,024,744	1,001,306	1,037,325	1,366,899
46	**Balance At End Of Fiscal Year**			**$ 10,896,202**	**$ 11,613,957**	**$ 4,891,745**	**$ 6,114,691**	**$ 2,622,348**	**$ 3,111,468**	**$ 8,988,900**	**$ 10,013,644**	**$ 11,014,950**	**$ 12,052,275**	**$ 13,419,174**
47	Minimum Working Capital Reserve Target			668,040	808,312	729,833	740,667	768,071	2,108,151	2,172,060	2,245,494	2,321,647	2,328,590	2,336,071
48	**Excess Working Capital Above Target**			**$ 10,228,162**	**$ 10,805,645**	**$ 4,161,912**	**$ 5,374,025**	**$ 1,854,276**	**$ 1,003,317**	**$ 6,816,840**	**$ 7,768,150**	**$ 8,693,303**	**$ 9,723,685**	**$ 11,083,103**
49	**Other Ratios**													
50	Days Cash on Hand			1,488	1,311	612	753	312	135	378	407	433	472	524
51	Target			91	91	91	91	91	91	91	91	91	91	91

Notes:
1. The Utility is actively contracting a rate study which will determine future rate increases. This pro forma calculated rate revenue as needed to meet debt service coverage, reserve targets, and needed cash funding.
2. 3% annual escalation assumed for operating expenses and non-operating revenues after FY 2034

Financial Pro Forma - Water Fund

				FY 2035	FY 2036	FY 2037	FY 2038	FY 2039	FY 2040	FY 2041	FY 2042	FY 2043	FY 2044
1	**Income Statement Items**												
2	**Rate Revenue Subject to Growth & Rate Adjustments**												
3	**WATER**												
4	Water Rate Revenue			$18,038,349	$18,940,266	$20,076,682	$21,281,283	$21,600,502	$21,919,722	$22,243,729	$22,572,525	$22,906,181	$23,244,769
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-	-	-
6	Additional Rate Revenue From Rate Adjustment [1]			901,917	1,136,416	1,204,601	319,219	319,219	324,008	328,796	333,656	338,588	343,593
7	**Total Water Rate Revenues**			**18,940,266**	**20,076,682**	**21,281,283**	**21,600,502**	**21,919,722**	**22,243,729**	**22,572,525**	**22,906,181**	**23,244,769**	**23,588,361**
8	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**18,940,266**	**20,076,682**	**21,281,283**	**21,600,502**	**21,919,722**	**22,243,729**	**22,572,525**	**22,906,181**	**23,244,769**	**23,588,361**
9	**Plus: Other Operating Revenues**												
10	Other Operating Revenues			1,717,079	1,743,622	1,770,696	1,798,310	1,826,478	1,855,208	1,884,514	1,903,359	1,922,392	1,941,616
11	**Equals: Total Operating Revenue**			**20,657,346**	**21,820,304**	**23,051,979**	**23,398,813**	**23,746,199**	**24,098,937**	**24,457,038**	**24,809,540**	**25,167,161**	**25,529,978**
12	**Plus: Non-Operating Revenues/(Expense)**												
13	Non-Operating Revenue			1,083,398	1,115,900	1,149,377	1,183,858	1,219,374	1,255,955	1,293,634	1,332,443	1,372,416	1,413,588
14	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-	-	-
15	Interest Income			32,794	33,778	34,792	35,835	36,910	38,018	39,158	40,333	41,543	42,789
16	**Equals: Total Non-Operating Revenues**			**1,116,192**	**1,149,678**	**1,184,168**	**1,219,693**	**1,256,284**	**1,293,973**	**1,332,792**	**1,372,776**	**1,413,959**	**1,456,378**
17	**Less: Revenues Excluded From Coverage Test**												
18	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-	-	-
19	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
20	**Less: Operating Expenses**												
21	Personal Services			(1,553,940)	(1,600,558)	(1,648,575)	(1,698,032)	(1,748,973)	(1,801,443)	(1,855,486)	(1,911,150)	(1,968,485)	(2,027,540)
22	Fixed O&M Expenses			(8,070,674)	(8,312,794)	(8,562,178)	(8,819,043)	(9,083,614)	(9,356,123)	(9,636,806)	(9,925,911)	(10,223,688)	(10,530,399)
23	**Total Expenses**			**(9,624,614)**	**(9,913,352)**	**(10,210,753)**	**(10,517,075)**	**(10,832,588)**	**(11,157,565)**	**(11,492,292)**	**(11,837,061)**	**(12,192,173)**	**(12,557,938)**
24	**Equals: Net Income Available For Debt Service**			**$ 12,148,924**	**$ 13,056,630**	**$ 14,025,394**	**$ 14,101,431**	**$ 14,169,896**	**$ 14,235,345**	**$ 14,297,538**	**$ 14,345,254**	**$ 14,388,947**	**$ 14,428,417**
25	**Cash Flow Statement Items**												
26	Net Income Available For Debt Service			$ 12,148,924	$ 13,056,630	$ 14,025,394	$ 14,101,431	$ 14,169,896	$ 14,235,345	$ 14,297,538	$ 14,345,254	$ 14,388,947	$ 14,428,417
27	Total Debt Service			(9,285,833)	(10,291,908)	(11,047,810)	(11,043,310)	(11,049,059)	(11,039,559)	(11,042,309)	(11,047,909)	(11,044,359)	(11,040,005)
28	Funds from Operations (FFO)			2,863,091	2,764,722	2,977,584	3,058,121	3,120,837	3,195,786	3,255,229	3,297,345	3,344,588	3,388,413
29	Add Back: Bond Proceeds & Contributions												
30	Capital Outlay			(1,500,000)	(1,545,000)	(1,591,350)	(1,639,091)	(1,688,263)	(1,738,911)	(1,791,078)	(1,844,811)	(1,900,155)	(1,957,160)
31	Other Below the Line Expenses			(230,769)	(233,269)	-	-	-	-	-	-	-	-
32	Transfer Out												
33	**Free Cash Flow (FCF)**			**1,132,322**	**986,453**	**1,386,234**	**1,419,031**	**1,432,573**	**1,456,875**	**1,464,151**	**1,452,534**	**1,444,433**	**1,431,253**
34	**Calculation of Debt Service Coverage**												
35	Existing Debt Service			-	-	-	-	-	-	-	-	-	-
36	GO ARS Bond 2023			606,094	614,094	611,094	607,594	608,594	603,844	608,594	610,594	606,994	606,944
37	WIFIA			5,929,127	6,929,127	7,688,129	7,685,628	7,687,503	7,687,478	7,682,928	7,687,128	7,685,903	7,683,673
38	Revenue Bonds in Support of WIFIA Loan			2,750,613	2,748,688	2,748,588	2,750,088	2,752,963	2,748,238	2,750,788	2,750,188	2,751,463	2,749,388
39	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-
40	**Total Debt Service**			**9,285,833**	**10,291,908**	**11,047,810**	**11,043,310**	**11,049,059**	**11,039,559**	**11,042,309**	**11,047,909**	**11,044,359**	**11,040,005**
41	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.31**	**1.27**	**1.27**	**1.28**	**1.28**	**1.29**	**1.29**	**1.30**	**1.30**	**1.31**
42	**Calculated Senior Debt Service Coverage**	1.25	Req.	**3.62**	**3.88**	**4.17**	**4.20**	**4.22**	**4.25**	**4.26**	**4.27**	**4.28**	**4.30**
43	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.48**	**1.40**	**1.39**	**1.40**	**1.41**	**1.42**	**1.42**	**1.87**	**1.87**	**1.88**
	Unrestricted Working Capital Reserve Fund Test												
44	Balance At Beginning Of Fiscal Year			11,144,491	10,111,821	8,861,699	8,049,823	7,420,978	6,977,721	6,722,464	8,186,615	9,639,149	11,083,582
45	Cash Flow Surplus/Deficit			1,132,322	986,453	1,386,234	1,419,031	1,432,573	1,456,875	1,464,151	1,452,534	1,444,433	1,431,253
46	**Balance At End Of Fiscal Year**			**12,276,813**	**11,098,274**	**10,247,934**	**9,468,853**	**8,853,551**	**8,434,595**	**8,186,615**	**9,639,149**	**11,083,582**	**12,514,834**
47	Minimum Working Capital Reserve Target			1,838,527	1,903,738	1,971,555	2,042,102	2,115,508	2,191,908	2,271,448	2,959,265	3,048,043	3,139,485
48	**Excess Working Capital Above Target**			**$ 10,438,287**	**$ 9,194,537**	**$ 8,276,378**	**$ 7,426,751**	**$ 6,738,044**	**$ 6,242,687**	**$ 5,915,167**	**$ 6,679,883**	**$ 8,035,538**	**$ 9,375,350**
49	**Other Ratios**												
50	Days Cash on Hand			466	409	366	329	298	276	260	297	332	364
51	Target			91	91	91	91	91	91	91	91	91	91

Notes:
1. The Utility is actively contracting a rate study which will determine future rate increases. This pro forr
2. 3% annual escalation assumed for operating expenses and non-operating revenues after FY 2034

Financial Pro Forma - Water Fund

				FY 2045	FY 2046	FY 2047	FY 2048	FY 2049	FY 2050	FY 2051	FY 2052	FY 2053	FY 2054	FY 2055	FY 2056
1	**Income Statement Items**														
2	**Rate Revenue Subject to Growth & Rate Adjustments**														
3	**WATER**														
4	Water Rate Revenue			$23,588,361	$23,937,033	$24,290,858	$24,649,914	$25,014,277	$25,384,026	$25,759,240	$26,140,000	$26,526,389	$26,918,489	$27,316,384	$27,989,347
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-	-	-	-	-
6	Additional Rate Revenue From Rate Adjustment [1]			348,672	353,825	359,055	364,363	369,749	375,214	380,760	386,389	392,100	397,896	672,962	341,455
7	**Total Water Rate Revenues**			**23,937,033**	**24,290,858**	**24,649,914**	**25,014,277**	**25,384,026**	**25,759,240**	**26,140,000**	**26,526,389**	**26,918,489**	**27,316,384**	**27,989,347**	**28,330,802**
8	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**23,937,033**	**24,290,858**	**24,649,914**	**25,014,277**	**25,384,026**	**25,759,240**	**26,140,000**	**26,526,389**	**26,918,489**	**27,316,384**	**27,989,347**	**28,330,802**
9	**Plus: Other Operating Revenues**														
10	Other Operating Revenues			1,961,032	1,980,643	2,000,449	2,020,454	2,040,658	2,061,065	2,081,675	2,102,492	2,123,517	2,144,752	2,166,200	2,187,862
11	**Equals: Total Operating Revenue**			**25,898,065**	**26,271,501**	**26,650,363**	**27,034,730**	**27,424,684**	**27,820,304**	**28,221,675**	**28,628,881**	**29,042,006**	**29,461,137**	**30,155,546**	**30,518,663**
12	**Plus: Non-Operating Revenues/(Expense)**														
13	Non-Operating Revenue			1,455,996	1,499,676	1,544,666	1,591,006	1,638,736	1,687,898	1,738,535	1,790,692	1,844,412	1,899,745	1,956,737	2,015,439
14	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-	-	-	-	-
15	Interest Income			44,073	45,395	46,757	48,160	49,605	51,093	52,626	54,204	55,830	57,505	59,230	61,007
16	**Equals: Total Non-Operating Revenues**			**1,500,069**	**1,545,071**	**1,591,423**	**1,639,166**	**1,688,341**	**1,738,991**	**1,791,161**	**1,844,896**	**1,900,243**	**1,957,250**	**2,015,967**	**2,076,446**
17	**Less: Revenues Excluded From Coverage Test**														
18	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-	-	-	-	-
19	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
20	**Less: Operating Expenses**														
21	Personal Services			(2,088,366)	(2,151,017)	(2,215,547)	(2,282,014)	(2,350,474)	(2,420,988)	(2,493,618)	(2,568,426)	(2,645,479)	(2,724,844)	(2,806,589)	(2,890,787)
22	Fixed O&M Expenses			(10,846,311)	(11,171,700)	(11,506,851)	(11,852,056)	(12,207,618)	(12,573,847)	(12,951,062)	(13,339,594)	(13,739,782)	(14,151,975)	(14,576,534)	(15,013,830)
23	**Total Expenses**			**(12,934,676)**	**(13,322,717)**	**(13,722,398)**	**(14,134,070)**	**(14,558,092)**	**(14,994,835)**	**(15,444,680)**	**(15,908,020)**	**(16,385,261)**	**(16,876,819)**	**(17,383,123)**	**(17,904,617)**
24	**Equals: Net Income Available For Debt Service**			**$ 14,463,458**	**$ 14,493,856**	**$ 14,519,388**	**$ 14,539,826**	**$ 14,554,933**	**$ 14,564,461**	**$ 14,568,156**	**$ 14,565,756**	**$ 14,556,987**	**$ 14,541,568**	**$ 14,788,391**	**$ 14,690,493**
25	**Cash Flow Statement Items**														
26	Net Income Available For Debt Service			$ 14,463,458	$ 14,493,856	$ 14,519,388	$ 14,539,826	$ 14,554,933	$ 14,564,461	$ 14,568,156	$ 14,565,756	$ 14,556,987	$ 14,541,568	$ 14,788,391	$ 14,690,493
27	Total Debt Service			(11,045,865)	(11,046,309)	(11,041,946)	(11,047,797)	(11,043,435)	(11,044,284)	(11,040,747)	(11,046,840)	(11,042,715)	(11,043,809)	(11,654,902)	(11,044,309)
28	Funds from Operations (FFO)			3,417,593	3,447,547	3,477,442	3,492,030	3,511,498	3,520,177	3,527,409	3,518,916	3,514,273	3,497,759	3,133,488	3,646,184
29	Add Back: Bond Proceeds & Contributions														
30	Capital Outlay			(2,015,875)	(2,076,351)	(2,138,641)	(2,202,801)	(2,268,885)	(2,336,951)	(2,407,060)	(2,479,271)	(2,553,650)	(2,630,259)	(2,709,167)	(2,790,442)
31	Other Below the Line Expenses			-	-	-	-	-	-	-	-	-	-	-	-
32	Transfer Out														
33	**Free Cash Flow (FCF)**			**1,401,719**	**1,371,196**	**1,338,801**	**1,289,229**	**1,242,613**	**1,183,226**	**1,120,350**	**1,039,644**	**960,623**	**867,500**	**424,321**	**855,742**
34	**Calculation of Debt Service Coverage**														
35	Existing Debt Service			-	-	-	-	-	-	-	-	-	-	-	-
36	GO ARS Bond 2023			611,249	609,694	607,694	610,056	606,569	607,444	607,469	611,031	608,500	610,094	610,594	-
37	WIFIA			7,685,654	7,686,628	7,685,690	7,684,728	8,538,954	8,535,115	8,535,929	10,435,809	10,434,215	10,433,715	11,044,309	11,044,309
38	Revenue Bonds in Support of WIFIA Loan			2,748,963	2,749,988	2,748,563	2,753,013	1,897,913	1,901,725	1,897,350	-	-	-	-	-
39	Additional Projected Borrowing			-	-	-	-	-	-	-	-	-	-	-	-
40	**Total Debt Service**			**11,045,865**	**11,046,309**	**11,041,946**	**11,047,797**	**11,043,435**	**11,044,284**	**11,040,747**	**11,046,840**	**11,042,715**	**11,043,809**	**11,654,902**	**11,044,309**
41	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.31**	**1.31**	**1.31**	**1.32**	**1.32**	**1.32**	**1.32**	**1.32**	**1.32**	**1.32**	**1.27**	**1.33**
42	**Calculated Senior Debt Service Coverage**	1.25	Req.	**4.30**	**4.31**	**4.33**	**4.32**	**5.81**	**5.80**	**5.82**	**23.84**	**23.92**	**23.83**	**24.22**	**0.00**
43	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.88**	**1.89**	**1.89**	**1.89**	**1.70**	**1.71**	**1.71**	**1.40**	**1.40**	**1.39**	**1.34**	**1.33**
	Unrestricted Working Capital Reserve Fund Test														
44	Balance At Beginning Of Fiscal Year			12,514,834	13,916,553	15,287,749	16,626,551	17,915,780	19,158,393	20,341,619	21,461,968	22,501,613	23,462,236	24,329,736	24,754,057
45	Cash Flow Surplus/Deficit			1,401,719	1,371,196	1,338,801	1,289,229	1,242,613	1,183,226	1,120,350	1,039,644	960,623	867,500	424,321	855,742
46	**Balance At End Of Fiscal Year**			**13,916,553**	**15,287,749**	**16,626,551**	**17,915,780**	**19,158,393**	**20,341,619**	**21,461,968**	**22,501,613**	**23,462,236**	**24,329,736**	**24,754,057**	**25,609,799**
47	Minimum Working Capital Reserve Target			3,233,669	3,330,679	3,430,600	3,533,517	3,639,523	3,748,709	3,861,170	3,977,005	4,096,315	4,219,205	4,345,781	4,476,154
48	**Excess Working Capital Above Target**			**$ 10,682,884**	**$ 11,957,070**	**$ 13,195,951**	**$ 14,382,262**	**$ 15,518,870**	**$ 16,592,910**	**$ 17,600,798**	**$ 18,524,608**	**$ 19,365,920**	**$ 20,110,531**	**$ 20,408,276**	**$ 21,133,645**
49	**Other Ratios**														
50	Days Cash on Hand			393	419	442	463	480	495	507	516	523	526	520	522
51	Target			91	91	91	91	91	91	91	91	91	91	91	91

Notes:
1. The Utility is actively contracting a rate study which will determine future rate increases. This pro forr
2. 3% annual escalation assumed for operating expenses and non-operating revenues after FY 2034

Financial Pro Forma - Water Fund

				FY 2057	FY 2058	FY 2059	FY 2060	FY 2061	FY 2062	FY 2063	FY 2064
1	**Income Statement Items**										
2	**Rate Revenue Subject to Growth & Rate Adjustments**										
3	**WATER**										
4	Water Rate Revenue			$28,330,802	$28,680,668	$29,034,803	$29,393,312	$29,756,247	$30,123,663	$30,495,616	$31,098,089
5	Additional Rate Revenue From Growth			-	-	-	-	-	-	-	-
6	Additional Rate Revenue From Rate Adjustment [1]			349,867	354,135	358,508	362,935	367,416	371,953	602,473	609,912
7	**Total Water Rate Revenues**			**28,680,668**	**29,034,803**	**29,393,312**	**29,756,247**	**30,123,663**	**30,495,616**	**31,098,089**	**31,708,002**
8	**Total Rate Revenue Subject to Growth & Rate Adjustments**			**28,680,668**	**29,034,803**	**29,393,312**	**29,756,247**	**30,123,663**	**30,495,616**	**31,098,089**	**31,708,002**
9	**Plus: Other Operating Revenues**										
10	Other Operating Revenues			2,209,740	2,231,838	2,254,156	2,276,698	2,299,465	2,322,459	2,345,684	2,369,141
11	**Equals: Total Operating Revenue**			**30,890,409**	**31,266,641**	**31,647,468**	**32,032,944**	**32,423,128**	**32,818,076**	**33,443,773**	**34,077,143**
12	**Plus: Non-Operating Revenues/(Expense)**										
13	Non-Operating Revenue			2,075,902	2,138,179	2,202,325	2,268,394	2,336,446	2,406,540	2,478,736	2,553,098
14	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-
15	Interest Income			62,838	64,723	66,664	68,664	70,724	72,846	75,031	77,282
16	**Equals: Total Non-Operating Revenues**			**2,138,740**	**2,202,902**	**2,268,989**	**2,337,059**	**2,407,171**	**2,479,386**	**2,553,767**	**2,630,380**
17	**Less: Revenues Excluded From Coverage Test**										
18	Bond Proceeds & Contributions			-	-	-	-	-	-	-	-
19	**Total Excluded Revenues**			**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
20	**Less: Operating Expenses**										
21	Personal Services			(2,977,510)	(3,066,835)	(3,158,841)	(3,253,606)	(3,351,214)	(3,451,750)	(3,555,303)	(3,661,962)
22	Fixed O&M Expenses			(15,464,245)	(15,928,173)	(16,406,018)	(16,898,198)	(17,405,144)	(17,927,299)	(18,465,118)	(19,019,071)
23	**Total Expenses**			**(18,441,755)**	**(18,995,008)**	**(19,564,858)**	**(20,151,804)**	**(20,756,358)**	**(21,379,049)**	**(22,020,420)**	**(22,681,033)**
24	**Equals: Net Income Available For Debt Service**			**$ 14,587,393**	**$ 14,474,535**	**$ 14,351,599**	**$ 14,218,199**	**$ 14,073,940**	**$ 13,918,412**	**$ 13,977,120**	**$ 14,026,490**
25	**Cash Flow Statement Items**										
26	Net Income Available For Debt Service			$ 14,587,393	$ 14,474,535	$ 14,351,599	$ 14,218,199	$ 14,073,940	$ 13,918,412	$ 13,977,120	$ 14,026,490
27	Total Debt Service			(11,044,309)	(11,044,309)	(11,044,309)	(11,044,309)	(11,044,309)	(11,044,310)	(11,044,310)	(11,044,309)
28	Funds from Operations (FFO)			3,543,084	3,430,226	3,307,289	3,173,890	3,029,631	2,874,103	2,932,811	2,982,181
29	Add Back: Bond Proceeds & Contributions										
30	Capital Outlay			(2,874,155)	(2,960,380)	(3,049,191)	(3,140,667)	(3,234,887)	(3,331,934)	(3,431,892)	(3,534,848)
31	Other Below the Line Expenses			-	-	-	-	-	-	-	-
32	Transfer Out										
33	**Free Cash Flow (FCF)**			**668,929**	**469,846**	**258,098**	**33,223**	**(205,256)**	**(457,831)**	**(499,081)**	**(552,668)**
34	**Calculation of Debt Service Coverage**										
35	Existing Debt Service			-	-	-	-	-	-	-	-
36	GO ARS Bond 2023			-	-	-	-	-	-	-	-
37	WIFIA			11,044,309	11,044,309	11,044,309	11,044,309	11,044,309	11,044,310	11,044,310	11,044,309
38	Revenue Bonds in Support of WIFIA Loan			-	-	-	-	-	-	-	-
39	Additional Projected Borrowing			-	-	-	-	-	-	-	-
40	**Total Debt Service**			**11,044,309**	**11,044,309**	**11,044,309**	**11,044,309**	**11,044,309**	**11,044,310**	**11,044,310**	**11,044,309**
41	**Calculated All In Debt Service Coverage**	1.25	Req.	**1.32**	**1.31**	**1.30**	**1.29**	**1.27**	**1.26**	**1.27**	**1.27**
42	**Calculated Senior Debt Service Coverage**	1.25	Req.	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
43	**Calculated WIFIA Debt Service Coverage**	1.25	Req.	**1.32**	**1.31**	**1.30**	**1.29**	**1.27**	**1.26**	**1.27**	**1.27**
	Unrestricted Working Capital Reserve Fund Test										
44	Balance At Beginning Of Fiscal Year			25,609,799	26,278,728	26,748,575	27,006,673	27,039,896	26,834,640	26,376,809	25,877,728
45	Cash Flow Surplus/Deficit			668,929	469,846	258,098	33,223	(205,256)	(457,831)	(499,081)	(552,668)
46	**Balance At End Of Fiscal Year**			**26,278,728**	**26,748,575**	**27,006,673**	**27,039,896**	**26,834,640**	**26,376,809**	**25,877,728**	**25,325,060**
47	Minimum Working Capital Reserve Target			4,610,439	4,748,752	4,891,215	5,037,951	5,189,090	5,344,762	5,505,105	5,670,258
48	**Excess Working Capital Above Target**			**$ 21,668,289**	**$ 21,999,823**	**$ 22,115,458**	**$ 22,001,945**	**$ 21,645,550**	**$ 21,032,047**	**$ 20,372,623**	**$ 19,654,802**
49	**Other Ratios**										
50	Days Cash on Hand			520	514	504	490	472	450	429	408
51	Target			91	91	91	91	91	91	91	91

Notes:
1. The Utility is actively contracting a rate study which will determine future rate increases. This pro forr
2. 3% annual escalation assumed for operating expenses and non-operating revenues after FY 2034



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2014-14

File Name:
C.7a_Ordinance 2014-14

Description:
An Ordinance of the United City of Yorkville, Kendall County, Illinois, Providing for New Water Service Rates.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2014-14

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, PROVIDING FOR NEW WATER SERVICE RATES

Passed by the City Council of the
United City of Yorkville, Kendall County, Illinois
This 22nd day of April, 2014

Published in pamphlet form by the
authority of the Mayor and City Council
of the United City of Yorkville, Kendall
County, Illinois on April 30, 2014.

Ordinance No. 2014- 14

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, PROVIDING FOR NEW WATER SERVICE RATES

WHEREAS, the United City of Yorkville (the "*City*") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, expenses to be paid by the City's water fund include operational expenses and expenses incurred in expansion of the water system, namely repayment of bonds; and,

WHEREAS, due to a decrease in water tap-on fees and an expected increase in bond payments, there is an anticipated deficit for the water fund; and,

WHEREAS, in order to diminish the anticipated water fund deficit, the City now desires to increase the water service rates; and,

WHEREAS, Mayor and City Council have determined that the fees established by this ordinance are reasonable to pay for the cost of such services.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. That Title 7, Chapter 5, Section 5-1(A)(2) of the United City of Yorkville Code of Ordinances is hereby amended by deleting this section in its entirety and replacing it with the following:

2. Water service rates shall be as follows:

a. Effective May 1, 2014, the water rates shall be:

$14.00 up to 350 cubic feet of usage

$2.97 per 100 cubic feet of usage over 350 cubic feet

b. Effective May 1, 2015, the water rates shall be:

$15.00 up to 350 cubic feet of usage

$3.65 per 100 cubic feet of usage over 350 cubic feet

c. Effective May 1, 2016, the water rates shall be:

$17.00 up to 350 cubic feet of usage

$4.30 per 100 cubic feet of usage over 350 cubic feet

d. Effective May 1, 2017, the water rates shall be:

$17.00 up to 350 cubic feet of usage

$4.30 per 100 cubic feet of usage over 350 cubic feet

e. Effective May 1, 2018, the water rates shall be:

$17.00 up to 350 cubic feet of usage

$4.30 per 100 cubic feet of usage over 350 cubic feet

Section 2. That Title 7, Chapter 5, Section 5-1(A) of the United City of Yorkville Code of Ordinances is hereby amended by adding a new paragraph (A)(4):

4. Notwithstanding the rates hereinabove set forth, the City Council retains its right at any time to change, increase, decrease, add or eliminate charges so long as such action is taken in accordance with all applicable law.

Section 3. This Ordinance shall be in full force and effect on upon its passage, approval, and publication as provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 22 day of April, 2014.

Betty Warren
CITY CLERK

CARLO COLOSIMO	Y	KEN KOCH	Y
JACKIE MILSCHEWSKI	Y	LARRY KOT	N
CHRIS FUNKHOUSER	Y	JOEL FRIEDERS	Y
ROSE ANN SPEARS	Y	DIANE TEELING	Y

Approved by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, this 28 day of APRIL 2014.

Gary J. Golinski
MAYOR



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2015-22

File Name:
C.7b_Ordinance 2015-22

Description:
An Ordinance of the United City of Yorkville, Kendall County, Illinois, Providing for New Water Service Rates.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2015-22

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS
AMENDING WATER SERVICE RATES

Passed by the City Council of the
United City of Yorkville, Kendall County, Illinois
This 28th day of April, 2015

Published in pamphlet form by the
authority of the Mayor and City Council
of the United City of Yorkville, Kendall
County, Illinois on June 5, 2015.

Ordinance No. 2015- 22

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING WATER SERVICE RATES

WHEREAS, the United City of Yorkville (the "*City*") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, expenses to be paid by the City's water fund include operational expenses and expenses incurred in expansion of the water system, namely repayment of bonds; and,

WHEREAS, in order to diminish the anticipated water fund deficit, the City now desires to increase the water service rates; and,

WHEREAS, Mayor and City Council have determined that the fees established by this ordinance are reasonable to pay for the cost of providing such services.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1: That Section 7-5-5-1A2.b. of the Yorkville City Code is hereby amended to read as follows:

"b. Effective May 1, 2015, the water rates shall be:

$16.00 up to 350 cubic feet of usage

$3.65 per 100 cubic feet of usage over 350 cubic feet"

Section 2: This Ordinance shall be in full force and effect on May 1, 2015 upon its passage, approval, and publication as provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 28 day of April, 2015.

Kelly Vaudrey
CITY CLERK

CARLO COLOSIMO	Y	KEN KOCH	Y
JACKIE MILSCHEWSKI	Y	LARRY KOT	Y
CHRIS FUNKHOUSER	Y	JOEL FRIEDERS	Y
ROSE ANN SPEARS	Y	DIANE TEELING	Y

Approved by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, this 4 day of MAY, 2015.

MAYOR



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2022-11

File Name:
C.7c_Ordinance 2022-11

Description:
An Ordinance of the United City of Yorkville, Kendall County, Illinois, Providing for New Water Service Rates.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2022-11

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS
AMENDING WATER SERVICE RATES AND SEWER MAINTENANCE FEES

Passed by the City Council of the
United City of Yorkville, Kendall County, Illinois
This 22nd day of March, 2022

Published in pamphlet form by the
authority of the Mayor and City Council
of the United City of Yorkville, Kendall
County, Illinois on March 28, 2022.

Ordinance No. 2022- 11

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING WATER SERVICE RATES AND SEWER MAINTENANCE FEES

WHEREAS, the United City of Yorkville (the "*City*") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

WHEREAS, expenses to be paid by the City's water fund include operational expenses and expenses incurred in expansion of the water system, namely repayment of bonds; and,

WHEREAS, in order to diminish the anticipated water fund deficit, the City now desires to increase the water service rates; and,

WHEREAS, Mayor and City Council have determined that the fees established by this ordinance are reasonable to pay for the cost of providing such services.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. That Title 7 of Chapter 5, Section 7-5-5-1A2. of the Yorkville City Code is hereby amended to read as follows:

"2. The water rates shall be:

$24.00 up to 350 cubic feet of usage, effective September 1, 2022

$4.80 per 100 cubic feet of usage over 350 cubic feet, effective January 1, 2023."

Section 2. That Title 7, Chapter 6, Section 7-6-6-3A is hereby amended to read as follows:

"A. Sanitary sewer service rates shall be twenty-one dollars and fifty cents ($21.50) bi-monthly, effective May 1, 2023."

Section 3. This Ordinance shall be in full force and effect on May 1, 2022 upon its passage, approval, and publication as provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 22nd day of March, 2022.

CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
JACKIE MILSCHEWSKI	AYE	ARDEN JOE PLOCHER	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE	JASON PETERSON	AYE

Approved by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, this 25th day of March, 2022.

MAYOR

Attest:

CITY CLERK



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2024-13

File Name:
C.7d_Ordinance 2024-13

Description:
An Ordinance of the United City of Yorkville, Kendall County, Illinois, Providing for New Water Service Rates.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2024-13

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS
AMENDING WATER SERVICE RATES

Passed by the City Council of the
United City of Yorkville, Kendall County, Illinois
This 23rd day of April, 2024

Published in pamphlet form by the
authority of the Mayor and City Council
of the United City of Yorkville, Kendall
County, Illinois on April 26, 2024.

Ordinance No. 2024- 13

AN ORDINANCE OF THE UNITED CITY OF YORKVILLE, ILLINOIS AMENDING WATER SERVICE RATES

WHEREAS, the United City of Yorkville (the "*City*") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and

WHEREAS, expenses to be paid by the City's water fund include operational expenses and expenses incurred in expansion of the water system, namely repayment of bonds; and

WHEREAS, the City has planned future water infrastructure projects that are anticipated to cause a water fund deficit; and

WHEREAS, to diminish the anticipated water fund deficit, the City now desires to increase the water service rates; and

WHEREAS, Mayor and City Council have determined that the fees established by this ordinance are reasonable to pay for the cost of providing such services.

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. The foregoing recitals shall be and are hereby incorporated as findings of fact as if set forth herein.

Section 2. That Title 7 of Chapter 5, Section 7-5-5-1A2. of the Yorkville City Code is hereby amended to read as follows:

"2. The water rates shall be:

$33.00 up to 350 cubic feet of usage, effective May 1, 2024

$5.80 per 100 cubic feet of usage over 350 cubic feet, effective May 1, 2024."

Section 3. This Ordinance shall be in full force and effect on May 1, 2024, after its passage, approval, and publication as provided by law.

Passed by the City Council of the United City of Yorkville, Kendall County, Illinois this 23rd day of April, 2024.

CITY CLERK

KEN KOCH	AYE	DAN TRANSIER	AYE
ARDEN JOE PLOCHER	AYE	CRAIG SOLING	AYE
CHRIS FUNKHOUSER	AYE	MATT MAREK	AYE
SEAVER TARULIS	AYE	RUSTY CORNEILS	AYE

Approved by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, this 25th day of April, 2024.

Mayor

Attest:

City Clerk



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
City Council Minutes 05-28-24

File Name:
C.7e_City Council Minutes 05-28-24

Description:
United City of Yorkville City Council Meeting Minutes - May 28, 2024 - Adoption of Rate Study

August 2024

MINUTES OF THE REGULAR MEETING OF THE CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, HELD IN THE CITY COUNCIL CHAMBERS, 651 PRAIRIE POINTE DRIVE ON TUESDAY, MAY 28, 2024

Mayor Purcell called the meeting to order at 7:00 p.m. and led the Council in the Pledge of Allegiance.

ROLL CALL

City Clerk Behland called the roll.

Ward I	Koch	Absent
	Transier	Present
Ward II	Plocher	Absent
	Soling	Present
Ward III	Funkhouser	Present
	Marek	Present
Ward IV	Tarulis	Present
	Corneils	Present

Staff in attendance at City Hall: City Administrator Olson, City Clerk Behland, Chief of Police Jensen, Attorney Orr, Community Development Director Barksdale-Noble, Finance Director Fredrickson, Parks and Recreation Director Evans, Assistant City Administrator Willrett, and EEI Engineer Sanderson.

Members of the public were able to attend this meeting in person as well as being able to access the meeting remotely via Zoom which allowed for video, audio, and telephonic participation.

A meeting notice was posted on the City's website on the agenda, minutes, and packets webpage with instructions regarding remote meeting access and a link was included for the public to participate in the meeting remotely:
https://us02web.zoom.us/j/81166415978?pwd=cUY0VXN4eFZ2aEdiRXgxalNLZVFZUT09.
The Zoom meeting ID was 811 6641 5978.

QUORUM

A quorum was established.

AMENDMENTS TO THE AGENDA

None.

PRESENTATIONS

Swearing-In to Sergeant – Officer Robbie Hart

Mayor Purcell swore in Sergeant Robbie Hart. Chief Jensen shared that they are honored to have Sergeant Hart, with his 21 years of experience, added to the command staff. He has served as a School Resource Officer, certified Crisis Intervention Officer, Field Training Officer, Defensive Tactics Instructor, and De-Escalation Instructor, and works with the Citizens at Risk program.

Merit Award – Officer Nick Mertes

Commander McMahon presented Officer Mertes with a Merit Award, which is given to officers who perform an outstanding act that results in improved administration or operation, substantial savings in labor or operational cost, or greatly enhances the police department's mission. Officer Mertes took the initiative to develop and implement supplemental training for the City's officers.

Michael Garrett Wolancevich – Blues Hall of Fame Induction Recognition

Mayor Purcell presented a certificate to Michael Garrett Wolancevich, a Yorkville resident, for his induction into the Blues Hall of Fame. Michael is the guitarist with the band Lil'Ed and Blues Imperials. He has been a part of the blues scene for over 30 years.

PUBLIC HEARINGS

1. 2024 Water Bond

   A public hearing will be held to receive public comments on the proposal to issue revenue bonds of the City, payable solely from the revenue derived from the operation of the City's water delivery system (the "System"), and other such funds to be pledged, in the amount not to exceed $25,000,000 and bearing interest per annum at a rate not to exceed the maximum rate authorized

by law at the such revenue bonds are sold (the "*Revenue Bonds*") or, in lieu thereof, its general obligation alternate revenue bonds in the amount not to exceed $25,000,000 (the "*Alternate Bonds*"), for the purpose of providing funds for the enhancement of the City's water delivery system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System.

2. WIFIA Loan

   A public hearing will be held to receive public comments on the proposal to borrow a Water Infrastructure Finance and Innovation Act loan (a "WIFIA Loan") from the United States Environmental Protection Agency, payable solely from the revenue derived from the operation of the City's water delivery system (the "System"), in the amount of not to exceed $160,000,000 and bearing interest per annum at a rate not to exceed the maximum rate authorized by law at the time such WIFIA Loan is borrowed (a "Revenue-Backed WIFIA Loan") or, in lieu thereof, a general obligation alternate revenue WIFIA Loan in an amount of not to exceed $160,000,000 (the "Alternate Revenue WIFIA Loan"), for the purpose of providing funds for the enhancement of the City's water delivery system, including, without limitation, replacing existing water mains, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System, and for the construction of a new water supply line and connection to the DuPage Water Commission for a new source of water.

3. Public Works and Parks Facility Bond

   A public hearing will be held to receive public comments on the proposal to issue revenue bonds of the City in the amount of not to exceed $40,000,000 for the purpose of providing funds for (i) the acquisition of certain real property located within the City, including, without limitation, approximately twelve acres of the real property known as Lot 4 in the Yorkville Business Center located within the City, (ii) the construction of a new public works facility thereon, and (iii) certain other capital infrastructure projects within the City.

Please see the attached transcript from the court reporter regarding the public hearing portion of the meeting.

CITIZEN COMMENTS ON AGENDA ITEMS

None.

CONSENT AGENDA

1. Bill Payments for Approval
   $ 545,735.58 (vendors – FY 24)
   $ 1,309,743.75 (vendors – FY 25)
   $ 412,087.19 (payroll period ending 05/10/24)
   $ 2,267,566.52 (total)
2. Bluestem Water Main Replacement - Design Engineering Agreement – *authorize the Mayor and City Clerk to execute* (PW 2024-44)
3. Water Rate Study – Professional Services Agreement – *authorize the Mayor and City Clerk to execute* (PW 2024-45)

Mayor Purcell entertained a motion to approve the consent agenda. So moved by Alderman Tarulis; seconded by Alderman Marek.

Motion approved by a roll call vote. Ayes-6 Nays-0
Funkhouser-aye, Tarulis-aye, Transier-aye,
Soling-aye, Marek-aye, Corneils-aye

REPORTS

MAYOR'S REPORT

Ordinance Amending Title 3, Chapter 3 of the Code of Ordinances Creating a New Liquor License Class and Fee (Water Parks) – Informational Item
(CC 2024-35)

Mayor Purcell read the following amended language added to the new liquor license class for water parks: "No beer, wine, or liquor shall be sold or served to anyone not wearing a wristband provided by the water park. No beer, wine, or liquor shall be consumed on the premises without wearing a wristband provided by the water park. Wristbands will only be provided to individuals twenty-one years or older who present a valid driver's license or state identification card."

Resolution 2024-27 **Authorizing the Purchase of a Skid Steer From McCann Industries, Inc. in an Amount Not to Exceed $45,440**
(CC 2024-44)

Mayor Purcell entertained a motion to approve a Resolution Authorizing the Purchase of a Skid Steer From McCann Industries, Inc. in an Amount Not to Exceed $45,440 and authorize the Mayor and City Clerk to execute. So moved by Alderman Transier; seconded by Alderman Marek.

Motion approved by a roll call vote. Ayes-6 Nays-0
Tarulis-aye, Transier-aye, Soling-aye,
Marek-aye, Corneils-aye, Funkhouser-nay

Selection of Mayor Pro Tem for Fiscal Year 2025
(CC 2023-45)

Mayor Purcell asked for nominations from the floor for Mayor Pro Tem. Alderman Tarulis nominated Alderman Transier.

Mayor Purcell entertained a motion to appoint Alderman Transier as Mayor Pro Tem for Fiscal Year 2025. So moved by Alderman Tarulis; seconded by Alderman Funkhouser.

Motion approved by a roll call vote. Ayes-5 Nays-0 Present-1
Transier-present, Soling-aye, Marek-aye,
Corneils-aye, Funkhouser-aye, Tarulis-aye

Ordinance 2024-24 **Approving a Redevelopment Agreement By and Between the United City of Yorkville, Kendall County, Illinois and the Williams Group, LLC**
(CC 2024-46)

Mayor Purcell entertained a motion to approve an Ordinance Approving a Redevelopment Agreement By and Between the United City of Yorkville, Kendall County, Illinois and the Williams Group, LLC and removing the proposed language from the Redevelopment Agreement Article 3, Section 3.1, requiring the Developer to provide no less than 1,500 square feet of retail space and authorize the Mayor and City Clerk to execute. So moved by Alderman Marek; seconded by Alderman Soling.

City Administrator Olson reported that the Williams Group was okay with the requirement of pulling the permits before the calendar year ends. They were not ok with having a tenant locked in before the end of the year. They want to take their time and select the proper tenant for their location. Alderman Transier asked how long the permits are good for, and City Administrator Olson stated they are good for a year.

Motion approved by a roll call vote. Ayes-6 Nays-0
Soling-aye, Marek-aye, Corneils-aye,
Funkhouser-aye, Tarulis-aye, Transier-aye

121 East Van Emmon Street (FS Property)
(CC 2024-47)

Mayor Purcell entertained a motion to table to the June 11, 2024, City Council meeting. So moved by Alderman Soling; seconded by Alderman Corneils.

Motion approved by a roll call vote. Ayes-6 Nays-0
Marek-aye, Corneils-aye, Funkhouser-aye,
Tarulis-aye, Transier-aye, Soling-aye

Mayor Purcell reported to the Council that the owner of the FS property (three parcels totaling 1.6 acres) has agreed to sell it to the City for $900,000. The $900,000 would be paid in interest-free installments of $150,000, with installments starting on the closing day. Mayor Purcell stated the property has been vacant for many years. He also noted the cash flow would not be negatively impacted if the purchase was made, and there would still be a substantial surplus yearly. He also stated that in the last few goal-setting meetings the Council has had, one of the number one goals was downtown redevelopment. The City also proposes applying for a grant for up to $2 million for the downtown. City Administrator Olson reported that if the City applied for the grant, the state would need to know the plans, benefits for businesses, and benefits to downtown activity. He shared that the memo explains some ideas for the grant. The City has already budgeted $700,000 for the East Alley water main improvements.

Alderman Soling shared that he has questions regarding the remediation mentioned within the packet. City Administrator Olson stated that the property was identified as a brownfield in the early 2000s and entered the IEPA's brownfield program for around 15 years. To be removed as a brownfield, you can cap the property and build on top of the cap, physically remove the contamination, or treat it on-site. The state will require updated testing.

Alderman Funkhouser stated he hesitates to purchase the property without due diligence and a new environmental assessment. His other concern is the funding. He also noted that if the City buys this property, the property would no longer generate money for the TIF. Alderman Funkhouser mentioned a private business is already working on the possibility of a band shell and would not want to take that opportunity away from them. He thinks doing some public/private partnerships would be beneficial. He also brought up the possibility of Metra coming downtown, and this property could be prime development property that the City would take away. Alderman Funkhouser stated he has significant reservations about the contract without reviewing more questions.

Alderman Tarulis shared that he supports much of what Alderman Funkhouser brought up. He said he is looking for more private development downtown. He is also concerned about music downtown, as the City already receives complaints about other businesses' music.

Mayor Purcell reported that even if the City makes the purchase this year and within the next five years, it will have a surplus of $1.4 million in revenues over expenditures in the TIF. He said that he has received many complaints about this property. He doesn't believe this property would be developed anytime soon. There are still many opportunities to build downtown. He does understand some of the concerns brought up. Alderman Soling reported that over the past 12 years, there has been no interest in the property. Because it requires remediation, people could find a better property elsewhere.

PUBLIC WORKS COMMITTEE REPORT

2024 Local Road Program – Contract Award
(PW 2024-41)

Alderman Soling made a motion to accept the bid and award contract to Builders Paving, LLC in the amount not to exceed $3,162,008.00 and authorize the Mayor and City Clerk to execute; seconded by Alderman Marek.

Motion approved by a roll call vote. Ayes-6 Nays-0
Corneils-aye, Funkhouser-aye, Tarulis-aye,
Transier-aye, Soling-aye, Marek-aye

2024 Local Road Program – Construction Engineering Agreement
(PW 2024-42)

Alderman Soling made a motion to approve the 2024 Local Road Program – Professional Services Agreement – Construction Engineering Agreement and authorize the Mayor and City Clerk to execute; seconded by Alderman Transier.

Motion approved by a roll call vote. Ayes-6 Nays-0
Funkhouser-aye, Tarulis-aye, Transier-aye,
Soling-aye, Marek-aye, Corneils-aye

2025 Water Main Replacement – Design Engineering Agreement
(PW 2024-43)

Alderman Soling made a motion to approve the 2025 Water Main Improvements Agreement for Professional Services – Design Engineering and authorize the Mayor and City Clerk to execute; seconded by Alderman Corneils.

Motion approved by a roll call vote. Ayes-6 Nays-0
Tarulis-aye, Transier-aye, Soling-aye,
Marek-aye, Corneils-aye, Funkhouser-aye

ECONOMIC DEVELOPMENT COMMITTEE REPORT

East Village of Westbury
(EDC 2024-30)

Ordinance 2024-25 **a. Repealing a Planned Unit Development Agreement for the East Village of Westbury**

Alderman Funkhouser made a motion to approve an Ordinance Repealing a Planned Unit Development Agreement for the East Village of Westbury and authorize the Mayor and City Clerk to execute; seconded by Alderman Soling.

Motion approved by a roll call vote. Ayes-6 Nays-0
Transier-aye, Soling-aye, Marek-aye,
Corneils-aye, Funkhouser-aye, Tarulis-aye

Ordinance 2024-26 **b. Approving a Memorandum of Understanding Regarding the East Village of Westbury**

Alderman Funkhouser made a motion to approve an Ordinance Approving a Memorandum of Understanding Regarding the East Village of Westbury and authorize the Mayor and City Clerk to execute; seconded by Alderman Marek.

Motion approved by a roll call vote. Ayes-6 Nays-0
Soling-aye, Marek-aye, Corneils-aye,
Funkhouser-aye, Tarulis-aye, Transier-aye

PUBLIC SAFETY COMMITTEE REPORT

No report.

ADMINISTRATION COMMITTEE REPORT

No report.

PARK BOARD

Margaritas En Mayo

Parks and Recreation Director Evans reported that Margaritas En Mayo was an outstanding success and the busiest he has ever seen downtown for an event. The turnout was great.

Memorial Day Ceremony

Parks and Recreation Director Evans thanked everyone for attending the Memorial Day Ceremony with the Yorkville American Legion on May 27, 2024.

School's Out Beach Party

Parks and Recreation Director Evans reminded that the School's Out Beach Party will take place at Town Square Park on Thursday, June 6th, from 5:00 p.m. to 9:00 p.m.

FORE! Yorkville Golf Outing

Parks and Recreation Director Evans reminded that the Yorkville Golf Outing will occur on Thursday, June 13th, from 7:00 a.m. to 2:00 p.m. at Blackberry Oaks Golf Course.

PLANNING AND ZONING COMMISSION

No report.

CITY COUNCIL REPORT

No report.

CITY CLERK'S REPORT

No report.

COMMUNITY & LIAISON REPORT

No report.

STAFF REPORT

No report.

MAYOR'S REPORT (cont'd)

City Buildings Updates
(CC 2021-04)

No report.

Water Study Update
(CC 2021-38)

No report.

ADDITIONAL BUSINESS

None.

CITIZEN COMMENTS

Todd Milliron, a resident of unincorporated Yorkville, informed the Council at tonight's meeting that the city has approved $200 million of debt, making this a monumental meeting. He hopes the water project between Yorkville, Oswego, and Montgomery will be well-planned and well-executed. He shared that the Margaritas en Mayo event was well attended and showcased the City's diversity and inclusion. Mr. Milliron thanked the Parks and Recreation Department for the event. He asked when the next Comp Plan review was, which Community Development Director Barksdale-Noble said the current plan expires in

2026. He shared there are talks about an industrial park near Silver Springs. He said the people of Yorkville should have some input on that topic.

Lisa Wolancevich, a Yorkville resident, shared with the Council that she was glad to hear about the City wanting to redevelop the downtown area. The property in question tonight has been a big eye-sore. She also shared that there is a natural spring under the bank building. It goes through the parking lot straight down to the river. She stated Valerie Burd had an idea that should be opened up for a view of the running water and return the water to the river. The development of this downtown property would make the downtown worth more money. This would increase the look and feel of the downtown area and the number of people attending the downtown businesses. She applauds this idea and thinks it needs to be done. Mrs. Wolancevich also brought up the burial ground that was located at the construction site. The burial stones were moved to the Elmwood cemetery, but the bodies were not moved. They are currently looking through census records and matching them with stones.

PRESENTATIONS (cont'd)

Elected Officials Harassment Training

Attorney William Wake provided the annual harassment training to the elected officials.

EXECUTIVE SESSION

None.

ADJOURNMENT

Mayor Purcell entertained a motion to adjourn the City Council meeting. So moved by Alderman Corneils; seconded by Alderman Transier.

Motion unanimously approved by a viva voce vote.

Meeting adjourned at 8:39 p.m.

Minutes submitted by:

Jori Behland,
City Clerk, City of Yorkville, Illinois

UNITED CITY OF YORKVILLE

KENDALL COUNTY, ILLINOIS

CITY COUNCIL MEETING

PUBLIC HEARINGS

651 Prairie Pointe

Yorkville, Illinois

Tuesday, May 28, 2024

7:00 p.m.

PRESENT:

Mr. John Purcell, Mayor;

Mr. Dan Transier, Alderman;

Mr. Craig Soling, Alderman;

Mr. Chris Funkhouser, Alderman;

Mr. Matt Marek, Alderman;

Mr. Rusty Corneils, Alderman;

Mr. Seaver Tarulis, Alderman.

ALSO PRESENT:

Mr. Bart Olson, City Administrator;

Ms. Jori Behland, City Clerk;

Ms. Erin Willrett, Assistant City Administrator;

Ms. Kathleen Field Orr, City Attorney;

Mr. Rob Fredrickson, Finance Director;

Chief James Jensen, Yorkville Police Department;

Mr. Tim Evans, Parks and Recreation Director;

Ms. Krysti Barksdale-Noble, Community Development Director;

Mr. Brad Sanderson, City Engineer.

- - - - -

(WHEREUPON, the following proceedings were had in the public hearing portion of the meeting, commencing at 7:13 p.m.)

MAYOR PURCELL: The first one is the 2024 Water Bond, so I open the public hearing for the 2024 Water Bond issue. The public hearing -- Do I have to read this?

MR. OLSON: I believe so, yes.

MAYOR PURCELL: Okay. A public hearing is being held to receive public comments on the proposal to issue the revenue bonds of the City payable solely from the revenue derived from the operation of the City's water delivery system, (the "System"), and other such funds to be pledged, in the amount not to exceed $25,000,000 and bearing interest per annum at a rate not to exceed the maximum rate authorized by law at the such revenue bonds are sold, (the "Revenue Bonds"), or, in lieu thereof, its general obligation alternate revenue bonds in the amount not to exceed $25,000,000, (the "Alternate Bonds"), for the purpose of providing funds for the enhancement of the City's water delivery

system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System.

So the hearing is open. Are there any comments relating to the 2024 Water Bond public hearing?

(No response.)

MAYOR PURCELL: Hearing none, I will close the public hearing for the 2024 Water Bond.

Well, let's see here. Page 2, as Paul Harvey would say, we now have the WIFIA loan public hearing. I will open the WIFIA loan public hearing.

A public hearing is being held to receive public comments on the proposal to borrow a Water Infrastructure Finance and Innovation Act loan, lot of syllables, (a "WIFIA Loan"), from the United States Environmental Protection Agency, payable solely from the revenue derived from the operation of the City's water delivery system, (the "System"), in the amount not to exceed $160,000,000 and bearing interest per

annum at a rate not to exceed the maximum rate authorized by law at the time such WIFIA Loan is borrowed, (a "Revenue-Backed WIFIA Loan)", or, in lieu thereof, a general obligation alternate revenue WIFIA Loan in an amount not to exceed $160,000,000, (the "Alternate Revenue WIFIA Loan"), for the purpose of providing funds for the enhancement of the City's water delivery system, including, without limitation, replacing existing water mains, modifying the existing raw water system and water treatment plant and other capital improvements relating to the System, and for the construction of a new water supply line and connection to the DuPage Water Commission for a new source of water.

The public hearing is now open. Are there any comments related to the WIFIA Loan public hearing?

(No response.)

MAYOR PURCELL: Hearing and seeing none, I will close that public hearing and move on to -- this one is a little shorter actually. I am opening a public hearing for a Public Works and Parks Facility Bond.

A public hearing is being held to receive public comments on the proposal to issue revenue bonds of the City in an amount not to exceed $40,000,000 for the purpose of providing funds for, one, the acquisition of certain real property located within the City, including, without limitation, approximately 12 acres of the real property known as Lot 4 in the Yorkville Business Center located within the City; two, the construction of a new public works facility thereon; and, three, certain other capital infrastructure projects within the City.

Public hearing is now open. Are there any comments on the Public Works and Parks Facility Bond public hearing?

(No response.)

MAYOR PURCELL: Seeing and hearing none, I will close said public hearing. Thank you for the court reporter's patience while we read those off.

(Which were all the proceedings in the public hearing portion of the meeting, concluding at 7:06 p.m.)

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STATE OF ILLINOIS)
) SS:
COUNTY OF LASALLE)

I, CHRISTINE M. VITOSH, a Certified Shorthand Reporter of the State of Illinois, do hereby certify:

That the foregoing public hearing transcript, Pages 1 through 8, was reported stenographically by me by means of machine shorthand, was simultaneously reduced to typewriting via computer-aided transcription under my personal direction, and constitutes a true record of the testimony given and the proceedings had;

That the said public hearing was taken before me at the time and place specified;

That I am not a relative or employee or attorney or counsel, nor a relative or employee of such attorney or counsel for any of the parties hereto, nor interested directly or indirectly in the outcome of this action.

I further certify that my certificate attached hereto applies to the original transcript and copies thereof signed and certified under my hand only. I assume no

responsibility for the accuracy of any reproduced copies not made under my control or direction.

IN WITNESS WHEREOF, I do hereunto set my hand at Leland, Illinois, this 3rd day of June, 2024.

/s/ Christine M Vitosh

CHRISTINE M. VITOSH,
C.S.R. Certificate No. 084-02883



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Yorkville Flow of Funds

File Name:
C.8_Yorkville Flow of Funds

Description:
General Covenants and Flow of Funds for the United City of Yorkville's WIFIA Debt.

August 2024

General Covenants Regarding the Bonds

A. For the purpose of providing funds required to pay the interest on the Bonds promptly when and as the same falls due, and to pay and discharge the principal thereof at maturity, the City covenants and agrees with the purchasers and the owners of the Bonds that the City will deposit the Pledged Revenues into the Water Fund. The Pledged Revenues are pledged to the payment of the Bonds and the City will provide for, budget, collect and apply the Pledged Revenues to the payment of the Bonds and the provision of not less than an additional .25 times debt service.

B. The City will punctually pay or cause to be paid from the Alternate Bond and Interest Account (2023) and from the Bond Fund (as hereinafter defined) the principal and interest to become due in respect to the Bonds in strict conformity with the terms of the Bonds and the Bond Ordinance, and it will faithfully observe and perform all of the conditions, covenants and requirements thereof.

C. The City will pay and discharge, or cause to be paid and discharged, from the Alternate Bond and Interest Account (2023), the 2023 Pledged Revenues Account and the Bond Fund any and all lawful claims which, if unpaid, might become a lien or charge upon the Pledged Moneys, or any part thereof, or upon any funds in the hands of Amalgamated Bank of Chicago, Chicago, Illinois (the "Bond Registrar"), or which might impair the security of the Bonds. Nothing in the Bond Ordinance shall require the City to make any such payment so long as the City in good faith shall contest the validity of said claims.

D. The City will adopt a budget and approve appropriations for the Water Fund prior to the beginning of each Fiscal Year, subject to all applicable state laws, providing for the payment of all sums to be due in such Fiscal Year so as to comply with the terms of the Bond Ordinance. The budget may include in its estimate of income the use of available surplus moneys or other funds of the City appropriated for such purposes. If during such Fiscal Year there are extraordinary receipts or payments of unusual cost, the City will adopt an amended budget for the remainder of such Fiscal Year, providing for receipts or payments pursuant to the Bond Ordinance.

E. The City will preserve and protect the security of the Bonds and the rights of the registered owners of the Bonds, and will warrant and defend their rights against all claims and demands of all persons. From and after the sale and delivery of any of the Bonds by the City, the Bonds shall be incontestable by the City.

F. The City will adopt, make, execute and deliver any and all such further ordinances, resolutions, instruments and assurances as may be reasonably necessary or proper to carry out the intention of, or to facilitate the performance of, the Bond Ordinance, and for the better assuring and confirming unto the registered owners of the Bonds of the rights and benefits provided in the Bond Ordinance.

G. As long as any Bonds remain Outstanding, the City will take no action or fail to take any action which in any way would adversely affect the ability of the City to levy the Pledged Taxes and to collect and to segregate the Pledged Revenues and the Pledged Taxes. The City and its officers will comply with all present and future applicable laws in order to assure that the Pledged Taxes can be levied and extended and that the Pledged Revenues and the Pledged Taxes may be collected and deposited as provided in the Bond Ordinance.

H. Once issued, the Bonds shall be and forever remain until paid or defeased the general obligation of the City, for the payment of which its full faith and credit are pledged, and shall be payable, in addition to the Pledged Revenues, from the levy of the Pledged Taxes as provided in the Debt Reform Act.

Continuation of Water Fund Accounts and Flow of Funds

All Gross Revenues will be set aside as collected and be deposited into the Water Fund. The Water Fund will constitute a trust fund for the purpose, among others, of carrying out the covenants, terms, and conditions of the Bond Ordinance and any Future Bond Ordinances, and will be used only in paying Operation and Maintenance Expenses, paying the principal of and interest on all bonds and other debt of the City which by their terms are payable from the Net Revenues, providing an adequate depreciation fund, providing for the establishment of and expenditure from the respective accounts as hereinafter described, and for such other System-related purposes as may be provided by law and contract. In addition to the Gross Revenues, the revenues received from the collection of the Places for Eating Tax will be deposited into the Water Fund and credited thereto on or before the first day of each month by the City Treasurer beginning on February 1, 2024.

The Bond Ordinance continues, and/or creates, separate accounts in the Water Fund known as the "Operation and Maintenance Account," such other accounts as may be established under Future Bond Ordinances, the "Alternate Bond and Interest Account," the "Alternate Bond and Interest Account (2023)," the "Depreciation Account," the "Places for Eating Tax Account" and the "Surplus Account," to which there will be credited on or before the first day of each month by the City Treasurer, without any further official action or direction, in the order in which said accounts are hereinafter mentioned, all moneys held in the Water Fund, in accordance with the following provisions:

Operation and Maintenance Account. There will be deposited and credited to or retained in the Operation and Maintenance Account an amount sufficient, when added to the amount then on deposit in the Operation and Maintenance Account, to establish a balance equal to an amount not less than the amount necessary to pay Operation and Maintenance Expenses for the then current and the next succeeding month.

Alternate Bond and Interest Account (2023). There will next be deposited and credited to the Alternate Bond and Interest Account (2023) and held, in cash and investments, in each month a fractional amount of the interest becoming due on the next succeeding interest payment date on all Outstanding Bonds and also a fractional amount of the principal becoming due on the next succeeding principal maturity date of all of the Outstanding Bonds until there shall have been accumulated and held, in cash and investments, in the Alternate Bond and Interest Account (2023) on or before the last day of the month preceding such payment date of interest or maturity date of principal, an amount sufficient to pay such principal or interest, or both, of all Outstanding Bonds. Funds in the Places of Eating Tax Account will be transferred to the Alternate Bond and Interest Account (2023) from time to time in such amounts as the City may deem necessary for the purpose of paying principal or interest, or both, on any interest payment date or maturity date of principal on all Outstanding Bonds payable from the Pledged Revenues.

In computing the fractional amount to be set aside each month in the Alternate Bond and Interest Account (2023), the fraction shall be so computed that sufficient funds will be set aside in said Account (i) in order to abate the Pledged Taxes in accordance with the provisions of the Bond Ordinance and (ii) available for the prompt payment of such principal of and interest on all Outstanding Bonds as will become due and will be not less than one-fifth of the interest becoming due on the next succeeding interest payment date and not less than one-tenth of the principal becoming due on the next succeeding principal payment date on all Outstanding Bonds until there is sufficient money in the Alternate Bond and Interest Account to pay such principal or interest or both.

Credits to the Alternate Bond and Interest Account (2023) may be suspended in any Fiscal Year at such time as there shall be a sufficient sum, held in cash and investments, in said Account to meet principal and interest requirements in said Account for the balance of such Fiscal Year, but such credits shall be resumed at the beginning of the next Fiscal Year.

All moneys in the Alternate Bond and Interest Account (2023) shall be used only for the purpose of paying interest on and principal of Outstanding Bonds.

Pledged Taxes on deposit in the Alternate Bond and Interest Account (2023) shall be fully spent to pay the principal of and interest on the Bonds for which such taxes were levied and collected prior to use of any other moneys on deposit in said Account. Pledged Taxes on deposit in the Alternate Bond and Interest Account (2023) shall only be used to pay the principal of and interest on the Bonds.

Depreciation Account. There will be deposited in and credited to the Depreciation Account in each month after the required payments have been made into the accounts described above, such amounts as the City may deem necessary in order to provide an adequate deprecation for the System.

Amounts to the credit of the Depreciation Account will be used for (i) the payment of the costs of extraordinary maintenance, necessary repair and replacements, or contingencies, the payment for which no other funds are available, in order that the System may at all times be able to render efficient service and (ii) the payment of principal of or interest and applicable premium on any Outstanding Bonds at any time when there are no other funds available for that purpose in order to prevent a default and such amounts shall be transferred to the Alternate Bond and Interest Account (2023) or IEPA Loan Account, as applicable, for such purpose.

Whenever an amount is withdrawn from such Account for the purpose stated in clause (ii) of the preceding paragraph, the amount so transferred will be added to the amount to be next and thereafter credited to said Depreciation Account until full reimbursement to said Account has been made. Each expenditure to be made from such Account for a purpose stated in clause (i) of the preceding paragraph will be made only after a registered professional engineer employed for that purpose has certified that such expenditure is necessary to the continued effective and efficient operation of the System.

Places for Eating Tax Account. There will be deposited into and credited to the Places for Eating Tax Account in each month the collections from the Places for Eating Tax, which collection will commence on January 1, 2024. Amounts in said Account shall be used only for the purpose of paying principal or interest, or both, on any interest payment date or maturity date of principal on any Outstanding Bonds payable from the Pledged Revenues, and shall be transferred to the Alternate Bond and Interest Account (2023) from time to time in such amounts as the City may deem necessary for such purpose.

Surplus Account. At the end of the Fiscal Year, all moneys remaining in the Water Fund, after crediting the required amounts to the respective accounts described above, and after making up any deficiency in the Operating and Maintenance Account, the Alternate Bond and Interest Account (2023) and the Depreciation Account, will be credited to the Surplus Account and used first, to make up any subsequent deficiencies in any of the accounts described above; and then, for the remainder of all surplus Revenues, at the discretion of the City, for one or more of the following purposes without any priority among them:

1. For the purpose of constructing or acquiring repairs, replacements, improvements or extensions to the System; or

2. For making transfers to the Water Fund generally to be applied and treated as Net Revenues when transferred; or

3. For the purpose of calling and redeeming Outstanding Bonds which are callable at the time; or

4. For the purpose of purchasing Outstanding Bonds at the time at a price of not to exceed par and accrued interest to the date of purchase and the then applicable redemption premium, if any, thereon; or

5. For the purpose of paying principal of and interest on any subordinate bonds or obligations issued for the purpose of acquiring or constructing repairs, replacements, improvements or extensions to the System; or

6. For any other lawful System purpose.

Money to the credit of the Water Fund may be invested pursuant to any authorization granted to municipal corporations by Illinois statute or court decision.

Future Bond Ordinances. The City may, at its discretion, adopt Future Bond Ordinances which create additional accounts in the Water Fund for the payment and security of water revenue bonds. Amounts in the Water Fund will be credited to and transferred from said accounts in accordance with the terms of the Future Bond Ordinances.

Additional Bonds, Subordinate Bonds and Future Bond Ordinances

The City reserves the right to issue Additional Bonds from time to time payable from the Pledged Revenues, and any such Additional Bonds will share ratably and equally in the Pledged Revenues with the Bonds; provided, however, that no Additional Bonds will be issued except in accordance with the provisions of the Debt Reform Act as the Debt Reform Act is written at this time and demonstrating that the coverage required under the Debt Reform Act for the issuance of alternate bonds payable from the Pledged Revenues shall have been met for the Outstanding Bonds.

The City reserves the right to issue Additional IEPA Loans from time to time payable from the Pledged Revenues, and any such Additional IEPA Loans may either be subordinate to or share ratably and equally in the Pledged Revenues with the Bonds, the Additional Bonds and the IEPA Loans.

The City also reserves the right to issue revenue bonds from time to time payable from the Revenues that are subordinate to the Bonds, the Additional Bonds, IEPA Loans and Additional IEPA Loans, and are payable from the money remaining in the Surplus Account after making required deposits into the Alternate Bond and Interest Account (2023).

The City reserves the right to adopt Future Bond Ordinances to provide for the funding of accounts in the Water Fund having a prior and superior lien on Revenues to the lien of the Alternate Bond and Interest Account (2023). Such accounts may include an account or a series of accounts for the payment of and reserves for the Additional Bonds, the IEPA loans, the Additional IEPA loans or other bonds or obligations of the City payable from Pledged Revenues; operating reserve accounts; renewal, replacement, depreciation, emergency reserve and the like accounts; rate stabilization and like accounts; or capital project accounts. Any such Future Bond Ordinances, or if not applicable, future ordinances of the City, may provide for the Bonds (and Additional Bonds) to be payable from such other or renamed account of the fund or funds related to the System as may be therein described, *provided, however,* that, in all events, the covenant to provide sufficient Pledged Revenues accumulating as herein provided shall continue to be met.

Abatement of Pledged Taxes

Whenever funds are available to pay any principal of or interest on the Bonds when due, so as to enable the abatement of the Pledged Taxes levied for the same, the City will direct the deposit of such funds into the Water Fund in an amount sufficient to pay such principal and interest on the Bonds and will direct the abatement of the Pledged Taxes. **The City pledges to abate the levy for the Bonds only to the extent of the funding of the Water Fund from Pledged Revenues or other available funds.**

Bond Fund

The Bond Ordinance created a fund known as the "2023 Alternate Bond Fund" (the "Bond Fund"). The purpose of the Bond Fund is to provide a fund to receive and disburse the Pledged Taxes for any (or all) of the Bonds. The Bond Fund constitutes a trust fund established for the purpose of carrying out the covenants, terms and conditions imposed upon the City by the Bond Ordinance. Any Pledged Taxes received by the City will promptly be deposited into the Bond Fund.

2023A Pledged Revenues Account

The Bond Ordinance created a special fund of the City, which fund will held separate and apart from all other funds and accounts of the City and shall be known as the "2023A Pledged Revenues Account" (the "2023A Pledged Revenues Account"). The purpose of the 2023A Pledged Revenues Account is to provide a fund to receive and disburse the Pledged Revenues from time to time for the payment of the Bonds. All payments with respect to the Bonds from the Pledged Taxes shall be made directly from the Bond Fund. The 2023A Pledged Revenues Account constitutes a trust fund established for the purpose of carrying out the covenants, terms and conditions imposed upon the City by the Bond Ordinance.

Pledged Revenues, other than that portion of the Pledged Revenues required for the payment of the Series 2014C Bonds, will be withdrawn from the Water Fund by the City from time to time and shall be deposited into the Series 2023A Pledged Revenues Account in a timely fashion to permit the abatement of Pledged Taxes as described above and to provide for the timely payment of the principal of and interest on the Bonds.

Treatment of Bonds as Debt

The Bonds will be payable from the Pledged Revenues and will not constitute an indebtedness of the City within the meaning of any constitutional or statutory limitation, unless the Pledged Taxes will have been extended pursuant to the general obligation, full faith and credit promise supporting the Bonds, in which case the amount of the outstanding Bonds will be included in the computation of indebtedness of the City for purposes of all statutory provisions or limitations until such time as an audit of the City shows that the Bonds have been paid from the Pledged Revenues for a complete fiscal year, in accordance with the Debt Reform Act.

Certain Risk Factors

The ability of the City to pay the Bonds from the Pledged Revenues may be limited by circumstances beyond the control of the City. There is no guarantee that the Pledged Revenues will continue to be available at current levels.

To the extent that Pledged Revenues may be insufficient to pay the Bonds, the Bonds are to be paid from the Pledged Taxes. If the Pledged Taxes are ever extended for the payment of the Bonds, the amount of the Bonds then outstanding will be included in the computation of indebtedness of the City for purposes of all statutory provisions or limitations until such time as an audit of the City shows that the Bonds have been paid from the Pledged Revenues for a complete Fiscal Year.

Subordinate Debt

In addition to the Bonds and the Series 2014C Bonds, the City has an outstanding additional loan from the IEPA which is payable from the Net Revenues. However, the lien of that loan on the Net Revenues is subordinate to the lien of the Bonds from Pledged Revenues.



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2023-20

File Name:
C.9a_Ordinance 2023-20

Description:
Ordinance Authorizing the Assuance of Water Revenue bonds or, in lieu thereof, General Obligation Alternate Revenue Bonds, of the United City of Yorkville, Kendall County, Illinois.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2023-20

ORDINANCE AUTHORIZING THE ISSUANCE OF WATER REVENUE BONDS OR, IN LIEU THEREOF, GENERAL OBLIGATION ALTERNATE REVENUE BONDS, OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS IN AN AGGREGATE PRINCIPAL AMOUNT NOT TO EXCEED $11,000,000 PURSUANT TO SECTION 15 OF THE LOCAL GOVERNMENT DEBT REFORM ACT OF THE STATE OF ILLINOIS, AS AMENDED, AND THE MUNICIPAL CODE OF THE STATE OF ILLINOIS, AS AMENDED, FOR THE PURPOSE OF PAYING THE COST OF ENHANCING THE CITY'S WATER DELIVERY SYSTEM

Adopted by the City Council on the
30th day of May, 2023

MINUTES of a regular public meeting of the City Council of the United City of Yorkville, Kendall County, Illinois, held in the City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, at 7 o'clock P.M., on the 30th day of May, 2023.

The Mayor called the meeting to order and directed the City Clerk to call the roll.

Upon the roll being called, John Purcell, the City Mayor, and the following Aldermen were physically present at said location: Koch, Transier, Plocher, Soling, Funkhouser, Marek, Tarulis, and Corneils.

The following Aldermen were allowed by a majority of the Aldermen of the City Council in accordance with and to the extent allowed by rules adopted by the City Council to attend the meeting by video or audio conference: not applicable.

No Alderman was not permitted to attend the meeting by video or audio conference.

The following Aldermen were absent and did not participate in the meeting in any manner or to any extent whatsoever: none.

The Mayor announced that, in view of the need to provide funds for the enhancement of the City's water delivery system, the City Council would consider the adoption of an ordinance authorizing the issuance of its water revenue bonds or, in lieu thereof, its general obligation alternate revenue bonds pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, and directing the publication of a notice setting forth the determination of the City Council to issue such bonds.

Whereupon Mayor Purcell presented and read by title an Ordinance as follows, a copy of which was provided to each Alderman prior to said meeting and to everyone in attendance at said meeting who requested a copy:

Ordinance 2023-20

AN ORDINANCE authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $11,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.

* * * * *

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the *"City"*), is a duly organized and existing municipality incorporated and existing under the provisions of the laws of the State of Illinois, and is now operating under the provisions of Illinois Municipal Code, as amended (the "*Code*"), and all laws amendatory thereof and supplementary thereto, including without limitation the Local Government Debt Reform Act of the State of Illinois, as amended (the *"Debt Reform Act"*); and

WHEREAS, the City has owned and operated a municipally-owned water supply system (the "*System*") under and pursuant to the provisions of Division 129 of Article 11 of the Code; and

WHEREAS, the Mayor and the City Council of the City (the "*City Council*") have determined that it is advisable, necessary and in the best interests of the public health, safety, welfare and convenience of the City to enhance the System, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System (collectively, the "*Project*"), all in accordance with the preliminary plans and estimates of costs therefor heretofore presented to the City Council and

WHEREAS, the estimated costs of the Project, including, without limitation, legal, financial, bond discount, bond registrar, paying agent and other related banking fees, printing and publication costs and other expenses, does not exceed $11,000,000, but the City does not currently have sufficient funds on hand and lawfully available to pay such costs; and

WHEREAS, pursuant to Article 8 and Article 11 of the Code, the City is authorized to issue its water revenue bonds payable solely from the revenue derived from the operation of the System to pay the costs of the Project (the "*Revenue Bonds*"), subject to right of backdoor petition for referendum; and

WHEREAS, pursuant to the provisions of Section 15 of the Debt Reform Act, whenever the City has been authorized under applicable law (as defined in the Debt Reform Act) to issue revenue bonds under the Code, the City may issue its general obligation alternate bonds (as defined in the Debt Reform Act) in lieu of such revenue bonds; and

WHEREAS, it is necessary and for the best interests of the City that the Project be undertaken, and, in order to finance the cost thereof, it will be necessary for the City to issue (a) the Revenue Bonds in an aggregate amount not to exceed $11,000,000 payable from the revenue derived from the operation of the System, or (b) in lieu thereof, its general obligation alternate revenue bonds (the "*Alternate Bonds*"), which Alternate Bonds shall be in an aggregate amount not to exceed $11,000,000 and be payable from (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund (the "*Water Fund*"), and (iii) certain moneys on deposit from time to time in the funds and accounts held within the Water Fund (collectively, the "*Pledged Revenues*"), as authorized to be issued at this time pursuant to the Debt Reform Act; and

WHEREAS, as provided in the Debt Reform Act, if the Pledged Revenues are insufficient to pay the principal and interest on the Alternate Bonds, ad valorem property taxes levied upon all taxable property in the City without limitation as to rate or amount are authorized to be extended and collected to pay the principal of and interest on the Alternate Bonds; and

WHEREAS, the costs of the Project are expected to be paid for from the proceeds of the Alternate Bonds which are authorized to be issued pursuant to the Debt Reform Act, subject to the right of backdoor petition for referendum; and

WHEREAS, pursuant to and in accordance with the provisions of Section 15 of the Debt Reform Act, and in lieu of the issuance of its Revenue Bonds, the City is authorized to issue its Alternate Bonds in an aggregate principal amount not to exceed $11,000,000 for the purpose of providing funds to pay the costs of the Project; and

WHEREAS, before Revenue Bonds or, in lieu thereof, the Alternate Bonds may be issued for said purpose, Division 129 of Article 11 of the Code and Section 15 of the Debt Reform Act require that the City Council must first adopt an Ordinance authorizing the issuance of the Revenue Bonds or, in lieu thereof, the Alternate Bonds for said purpose and directing that notice of such authorization be published as provided by law.

NOW, THEREFORE, Be It and It Is Hereby Ordained by the City Council of the United City of Yorkville, Kendall County, Illinois, as follows:

Section 1. **Incorporation of Preambles**. The City Council hereby finds that all of the recitals contained in the preambles to this Ordinance are full, true and correct and does incorporate them into this Ordinance by this reference.

Section 2. **Determination to Issue Bonds**. It is necessary and in the best interests of the public health, safety, welfare and convenience of the City to undertake the Project in accordance with the estimate of costs as hereinabove described, and that for such purpose there are hereby authorized to be issued and sold by the City its Revenue Bonds in an aggregate principal amount not to exceed $11,000,000 or, in lieu thereof, its Alternate Bonds in an aggregate principal amount not to exceed $11,000,000. The issuance of the Revenue Bonds or, in lieu thereof, the

Alternate Bonds shall be subject to the right of backdoor petition for referendum as set forth herein and the adoption of a bond ordinance setting forth the terms for the issuance and sale thereof.

Section 3. **Publication**. This Ordinance, together with a notice in the statutory form as set forth herein in Section 4 (the "*Notice*"), shall be published at least once within ten (10) days after passage hereof by the City Council in the *Beacon-News,* the same being a newspaper of general circulation in the City, and if no petition, signed by not less than 1,531 registered voters of the City (being the number of registered voters equal to ten percent (10%) of the registered voters of the City), asking that the question of the Project, as provided in this Ordinance, and the issuance of the Revenue Bonds therefor be submitted to the electors of this City is filed with the City Clerk within thirty (30) days after the date of the publication of this Ordinance and the Notice, then the Revenue Bonds shall be authorized to be issued. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this Ordinance and the Notice, an election on the proposition to issue the Revenue Bonds shall be held on the 19th day of March, 2024 (being the next election held in accordance with the general election law of the State of Illinois). The City Clerk shall make a petition form available to anyone requesting one.

If no petition, signed by not less than 1,148 registered voters of the City (being the number of registered voters equal to the greater of (a) seven and one-half percent (7.5%) of the registered voters of the City, or (b) the lesser of (i) fifteen percent (15%) of the registered voters of the City, or (ii) 200 registered voters), asking that the issuance of the Alternate Bonds be submitted to referendum, is filed with the City Clerk within thirty (30) days after the date of the publication of this Ordinance and the Notice, then the Alternate Bonds shall be authorized to be issued. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this Ordinance and the Notice, an election on the proposition to issue the Alternate Bonds shall be held on the 19th day of March, 2024 (being the next election held in accordance with the general election

law of the State of Illinois). The City Clerk shall make a petition form available to anyone requesting one.

It is expressly provided that in the event there shall be filed with the City Clerk in a timely manner a petition, asking that the issuance of the Revenue Bonds be submitted to a referendum, the Alternate Bonds shall not be authorized to be issued until such time as the issuance of the Revenue Bonds shall have been submitted to the electors of the City and a majority of votes cast on such question shall have been in favor thereof.

Section 4. **Form of Notice**. The notice of the intention to issue the Revenue Bonds or, in lieu thereof, the Alternate Bonds shall be in substantially the following form:

NOTICE OF INTENT OF
THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS
TO ISSUE $11,000,000 REVENUE BONDS OR, IN LIEU THEREOF,
$11,000,000 ALTERNATE REVENUE BONDS
AND RIGHT TO FILE PETITION

PUBLIC NOTICE is hereby given that pursuant to an Ordinance (the "*Ordinance*") adopted on the 30th day of May, 2023 by the City Council (the *"City Council"*) of the United City of Yorkville, Kendall County, Illinois (the *"City"*), the City intends to issue its revenue bonds, payable solely from the revenue derived from the operation of the City's water delivery system (the "*System*"), in an aggregate amount of not to exceed $11,000,000 and bearing interest per annum at a rate not to exceed the maximum rate authorized by law at the such revenue bonds are sold (the "*Revenue Bonds*") or, in lieu thereof, its general obligation alternate revenue bonds in an aggregate amount of not to exceed $11,000,000 (the "*Alternate Bonds*"), for the purpose of providing funds for the enhancement of the City's water delivery system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating to the System.

The revenue sources for the payment of the Alternate Bonds will be (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the City's Water Fund. If these revenue sources are insufficient to pay the Alternate Bonds, the City will also levy ad valorem property taxes upon all taxable property in the City without limitation as to rate or amount to pay the principal of and interest on the Alternate Bonds. This notice is incorporated into the Ordinance.

Notice is hereby further given that a petition may be filed with the City Clerk (the *"City Clerk"*) within thirty (30) days after the date of publication of the Ordinance and this notice, signed by not less than 1,531 registered voters of the City (being the number of registered voters equal to ten percent (10%) of the registered voters of the City) asking that the question of the Project, as provided in the Ordinance, and the issuance of the Revenue Bonds be submitted to the voters of the City. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this notice, an election on the proposition to issue the Revenue Bonds shall be held on the 19th day of March, 2024. Forms of petitions for such purposes are available to any individual requesting one from the office of the City Clerk.

The Circuit Court may declare that an emergency referendum should be held prior to said election date pursuant to the provisions of Section 2A-1.4 of the Election Code of the State of Illinois, as amended. If no such petition is filed within said thirty (30) day period, then the City shall thereafter be authorized to issue the Revenue Bonds for the purpose hereinabove provided.

Notice is further hereby further given that a petition may be filed with the City Clerk within thirty (30) days after the date of publication of the Ordinance and this notice, signed by not less than 1,148 registered voters of the City (being the number of registered voters equal to the greater of (a) seven and one-half percent (7.5%) of the registered voters of the City, or (b) the lesser of (i) fifteen percent (15%) of the registered voters of the City, or (ii) 200 registered voters) asking that the issuance of the Alternate Bonds be submitted to the voters of the City. If such petition is filed with the City Clerk within thirty (30) days after the date of publication of this notice, an election

on the proposition to issue the Alternate Bonds shall be held on the 19th day of March, 2024. Forms of petitions for such purposes are available to any individual requesting one from the office of the City Clerk.

The Circuit Court may declare that an emergency referendum should be held prior to said election date pursuant to the provisions of Section 2A-1.4 of the Election Code of the State of Illinois, as amended. If no such petition is filed within said thirty (30) day period, then the City shall thereafter be authorized to issue the Alternate Bonds for the purpose hereinabove provided.

By order of the City Council of the United City of Yorkville, Kendall County, Illinois.

DATED this 30th day of May, 2023.

Jori Behland
City Clerk
United City of Yorkville, Kendall County,
Illinois

Note to Publisher: Please be certain that this notice appears over the name of the City Clerk.

Section 5. **Additional Ordinances**. If no petition with respect to the issuance of the Revenue Bonds or, in lieu thereof, the Alternate Bonds and meeting the requirements of applicable law is filed during the petition period hereinabove referred to, then the City Council may adopt additional ordinances or proceedings supplementing or amending this Ordinance providing for the issuance and sale of the Revenue Bonds or, in lieu thereof, the Alternate Bonds and prescribing all the details of the Revenue Bonds or, in lieu thereof, the Alternate Bonds, so long as the maximum amount of the Revenue Bonds or, in lieu thereof, the Alternate Bonds as set forth in this Ordinance is not exceeded and there is no material change in the Project described herein. Such additional ordinances or proceedings shall in all instances become effective immediately without publication or posting or any further act or requirement. This Ordinance, together with such additional ordinances or proceedings, shall constitute complete authority for the issuance of the Revenue Bonds or, in lieu thereof, the Alternate Bonds under applicable law.

Section 6. **Severability**. If any section, paragraph, clause or provision of this Ordinance shall be held to be invalid or unenforceable for any reason, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance.

(This space is intentionally blank)

Section 7. **Repealer and Effective Date**. All Ordinances and parts of Ordinances in conflict herewith be and the same are hereby repealed and that this Ordinance be in full force and effect forthwith upon its adoption.

ADOPTED by the City Council on the 30th day of May, 2023, pursuant to a roll call vote as follows:

DANIEL V. TRANSIER	AYE	KEN KOCH	AYE
MATT MAREK	AYE	ARDEN JOE PLOCHER	AYE
CHRIS FUNKHOUSER	AYE	SEAVER TARULIS	AYE
CRAIG SOLING	AYE	RUSTY CORNEILS	AYE

APPROVED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, the 30th day of May, 2023.

MAYOR

PASSED by the City Council of the United City of Yorkville, Kendall County, Illinois, the 30th day of May, 2023.

CITY CLERK

Alderman Tarulis moved and Alderman Corneils seconded the motion that said Ordinance as presented and read by title be adopted.

After a full and complete discussion thereof, the Mayor directed the City Clerk to call the roll for a vote upon the motion to adopt said Ordinance.

Upon the roll being called, the following Aldermen voted AYE: Marek, Funkhouser, Tarulis, Transier, Soling, Marek, Corneils, and Koch.

The following Aldermen voted NAY: None.

Whereupon the Mayor declared the motion carried and said Ordinance adopted, and in open meeting approved and signed said Ordinance and directed the City Clerk to record the same in full in the records of the City Council of the United City of Yorkville, Kendall County, Illinois, which was done.

Other business not pertinent to the adoption of said Ordinance was duly transacted at said meeting.

Upon motion duly made, seconded and carried, the meeting was adjourned.

City Clerk

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

CERTIFICATION OF MINUTES AND ORDINANCE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and that as such official I am the keeper of the records and files of the City and of the City Council thereof (the *"City Council"*).

I do further certify that the foregoing constitutes a full, true and complete transcript of the minutes of the meeting of the City Council held on the 30th day of May, 2023, insofar as same relates to the adoption of Ordinance No. 2023-20 entitled:

> AN ORDINANCE authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $11,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.

a true, correct and complete copy of which said Ordinance as adopted at said meeting appears in the foregoing transcript of the minutes of said meeting.

I do further certify that the deliberations of the City Council on the adoption of said Ordinance were conducted openly, that the vote on the adoption of said Ordinance was taken openly, that said meeting was held at a specified time and place convenient to the public, that notice of said meeting was duly given to all of the news media requesting such notice, that an agenda for said meeting was posted at the location where said meeting was held and at the principal office of the City Council at least 96 hours in advance of the holding of said meeting and on a day that was not a Saturday, Sunday or legal holiday in the State of Illinois, that a true, correct and complete copy of said agenda as so posted is attached hereto as *Exhibit A,* that said meeting was called and held in strict compliance with the provisions of the Public Code of the State of Illinois, as amended, the Open Meetings Act of the State of Illinois, as amended, and the Local Government Debt Reform Act of the State of Illinois, as amended, and that the City Council has complied with all of the provisions of said Acts and with all of the procedural rules of the City Council in the conduct of said meeting and in the adoption of said Ordinance.

IN WITNESS WHEREOF, I hereunto affix my official signature, this 30th day of May, 2023.

(SEAL)

City Clerk, United City of Yorkville, Kendall County, Illinois

[Attach Agenda as Exhibit A]

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

PETITION –REVENUE BONDS

We, the undersigned, do hereby certify that we are registered voters of United City of Yorkville, Kendall County, Illinois, and as such voters, we do hereby petition you to cause that the following question be submitted to the voters of said City: "Shall the City Council of United City of Yorkville, Kendall County, Illinois, be authorized to issue not to exceed $11,000,000 revenue bonds to provide funds for the enhancement of the City's water delivery system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto, as provided for by the Ordinance adopted by the City Council of said City on the 30th day of May, 2023, with the revenue sources to be used to pay the principal of and interest on said revenue bonds to be the revenues of the City's water delivery system?"; and we do hereby further request that the City Clerk certify said proposition to the County Clerk of The County of Kendall, Illinois, for submission to said City voters at the election to be held on the 19th day of March, 2024:

SIGNATURE	STREET ADDRESS OR RURAL ROUTE NUMBER	CITY, CITY OR TOWN	COUNTY
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois

The undersigned, being first duly sworn, deposes and certifies that he or she is at least 18 years of age, his or her residence address is _____ (Street Address), Yorkville, Kendall County, Illinois, that he or she is a citizen of the United States of America, that the signatures on the foregoing petition were signed in his or her presence and are genuine, that to the best of his or her knowledge and belief the persons so signing were at the time of signing said petition registered voters of said City and that their respective residences are correctly stated therein.

_____

Signed and sworn to before me this
_____ day of _____, 2023.

_____
Illinois Notary Public

My commission expires _____

(NOTARY SEAL)

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

NO PETITION CERTIFICATE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and as such official I do further certify that pursuant to an Ordinance entitled:

> AN ORDINANCE authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $11,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system,

duly adopted by the City Council of the City (the *"City Council"*) on the 30th day of May, 2023, notice of authorization of the City to issue not to exceed $11,000,000 Revenue Bonds was published on the 2nd day of June, 2023, in the *Beacon-News,* the same being a newspaper of general circulation in the City, and was not posted electronically on the City's World Wide Web pages.

I do further certify that no petition has ever been filed in my office as City Clerk or has ever been presented to me as such official requesting that the proposition to issue said revenue bonds be submitted to the voters of the City, but that I provided a petition form regarding the same to every individual requesting one.

IN WITNESS WHEREOF, I hereunto affix my official signature, this 27th day of July, 2023.

City Clerk

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

PETITION – ALTERNATE REVENUE BONDS

We, the undersigned, do hereby certify that we are registered voters of United City of Yorkville, Kendall County, Illinois, and as such voters, we do hereby petition you to cause that the following question be submitted to the voters of said City: "Shall the City Council of United City of Yorkville, Kendall County, Illinois, be authorized to issue not to exceed $11,000,000 general obligation alternate revenue bonds to provide funds for the enhancement of the City's water delivery system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto, as provided for by the Ordinance adopted by the City Council of said City on the 30th day of May, 2023, with the revenue sources to be used to pay the principal of and interest on said bonds to be (i) the net revenues derived from the operation of the City's water delivery system, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the City's Water Fund, unless said revenue sources are insufficient to pay said bonds, in which case ad valorem property taxes levied upon all taxable property in said City without limitation as to rate or amount are authorized to be extended for such purpose?"; and we do hereby further request that the City Clerk certify said proposition to the County Clerk of The County of Kendall, Illinois, for submission to said City voters at the election to be held on the 19th day of March, 2024:

SIGNATURE	STREET ADDRESS OR RURAL ROUTE NUMBER	CITY, CITY OR TOWN	COUNTY
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois
_____	_____,	Yorkville,	Kendall County, Illinois

The undersigned, being first duly sworn, deposes and certifies that he or she is at least 18 years of age, his or her residence address is _____ (Street Address), Yorkville, Kendall County, Illinois, that he or she is a citizen of the United States of America, that the

signatures on the foregoing petition were signed in his or her presence and are genuine, that to the best of his or her knowledge and belief the persons so signing were at the time of signing said petition registered voters of said City and that their respective residences are correctly stated therein.

_____

Signed and sworn to before me this
_____ day of _____, 2023.

_____
Illinois Notary Public

My commission expires _____

(NOTARY SEAL)

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

NO PETITION CERTIFICATE

I, the undersigned, do hereby certify that I am the duly qualified and acting City Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and as such official I do further certify that pursuant to an Ordinance entitled:

> AN ORDINANCE authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $11,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system,

duly adopted by the City Council of the City (the *"City Council"*) on the 30th day of May, 2023, notice of authorization of the City to issue not to exceed $11,000,000 Alternate Revenue Bonds was published on the 2nd day of June, 2023, in the *Beacon-News,* the same being a newspaper of general circulation in the City, and was not posted electronically on the City's World Wide Web pages.

I do further certify that no petition has ever been filed in my office as City Clerk or has ever been presented to me as such official requesting that the proposition to issue said bonds be submitted to the voters of the City, but that I provided a petition form regarding the same to every individual requesting one.

IN WITNESS WHEREOF, I hereunto affix my official signature, this 27th day of JULY, 2023.

Jennifer Bernard
City Clerk

United City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois 60560
Telephone: 630-553-4350
www.yorkville.il.us

AGENDA
SPECIAL CITY COUNCIL MEETING
Tuesday, May 30, 2023
7:00 p.m.
City Hall Council Chambers
651 Prairie Pointe Drive, Yorkville, IL

Call to Order:

Pledge of Allegiance:

Roll Call by Clerk:

WARD I	WARD II	WARD III	WARD IV
Ken Koch	Arden Joe Plocher	Chris Funkhouser	Seaver Tarulis
Dan Transier	Craig Soling	Matt Marek	Rusty Corneils

Establishment of Quorum:

Amendments to Agenda:

Presentations:

1. Police Commissioner Bob Johnson Recognition

Public Hearings:

1. Bristol Ridge Solar Farm 105 & 106 Annexation Agreement Amendment

Citizen Comments on Agenda Items:

Consent Agenda:

1. Bill Payments for Approval
   - $ 2,309,790.70 (vendors – FY 23)
   - $ 504,053.71 (vendors – FY 24)
   - $ 2,971.98 (wire payments)
   - $ 388,055.12 (payroll period ending 05/12/2023)
   - $ 3,204,871.51 (total)
2. PW 2023-42 Easement for Contract A Water Main – 1308 Game Farm Road – *accept the easement and authorize the Mayor, City Clerk, and City Engineering to execute*
3. PW 2023-46 Grande Reserve Unit 13 – Release of Guarantee – *authorize the release of the remaining performance security in the amount of $87,600*
4. PW 2023-47 Grande Reserve Unit 14 – Release of Guarantee – *authorize the release of the remaining performance security in the amount of $125,600*

Consent Agenda (cont'd):

5. PW 2023-48 Grande Reserve Unit 23 – Release of Guarantee – *authorize the release of the remaining performance security in the amount of $520,410.95*

Mayor's Report:

1. CC 2023-23 Resolution Approving an Intergovernmental Agreement Between Yorkville Community Unit School District No. 115 and the United City of Yorkville for Pre-closing Possession of 800 Game Farm Road
2. CC 2023-25 Appointment to Boards and Commissions
3. CC 2023-30 Chief of Police Employment Contract
4. CC 2023-33 Ordinance Amending the Traffic Schedule and Index (East Main St. and McHugh Rd.)
5. CC 2023-34 Resolution Approving an Intergovernmental Agreement Between the Village of Oswego and the United City of Yorkville Regarding Joint Employment of a Training Coordinator
6. CC 2023-35 2023 Website Redesign – Design Concept Review
7. CC 2023-36 Parks and Recreation Playground Purchases
    a. Approval of Parks and Recreation Playground Purchases
    b. Ordinance Authorizing the Second Amendment to the Annual Budget of the United City of Yorkville, for the Fiscal Year Commencing on May 1, 2023 and Ending on April 30, 2024
8. CC 2023-37 Ordinance authorizing the issuance of water revenue bonds or, in lieu thereof, general obligation alternate revenue bonds, of the United City of Yorkville, Kendall County, Illinois in an aggregate principal amount not to exceed $11,000,000 pursuant to Section 15 of the Local Government Debt Reform Act of the State of Illinois, as amended, and the Municipal Code of the State of Illinois, as amended, for the purpose of paying the costs of enhancing the City's water delivery system.
9. CC 2023-38 Green Door
    a. Ordinance Approving a Memorandum of Understanding Between the United City of Yorkville, Kendall County, Illinois and Yorkville Nexus, LLC Relating to Engineering Services for Infrastructure Projects
    b. Ordinance Approving a Memorandum of Understanding Between the United City of Yorkville, Kendall County, Illinois and Yorkville Nexus, LLC, Relating to the Construction of Water and Sanitary Services
    c. Agreement for Professional Services Lincoln Prairie Water Main, Agreement for Professional Services Lincoln Prairie Sanitary Sewer – Corneils, and Agreement for Professional Services Lincoln Prairie Sanitary Sewer – South

Public Works Committee Report:

1. PW 2023-43 Heartland Meadows – Consideration of Acceptance
2. PW 2023-44 2023 Sanitary Sewer Lining – Design and Construction Engineering Agreement
3. PW 2023-45 2024 Water Main Replacement – Design Engineering Agreements

Public Works Committee Report (cont'd):

4. PW 2023-49 Supplemental MFT Resolution for Bulk Rock Salt
5. PW 2023-50 Purchase and Sale of Public Works Vehicles
    a. Approval of the Purchase and Sale of Public Works Vehicles
    b. Ordinance Authorizing the First Amendment to the Annual Budget of the United City of Yorkville, for the Fiscal Year Commencing on May 1, 2023 and Ending on April 30, 2024

Economic Development Committee Report:

Public Safety Committee Report:

Administration Committee Report:

Park Board:

Planning and Zoning Commission:

City Council Report:

City Clerk's Report:

Community and Liaison Report:

Staff Report:

Mayor's Report (cont'd):

10. CC 2021-04 City Buildings Updates
11. CC 2021-38 Water Study Update

Additional Business:

Citizen Comments:

Executive Session:

Adjournment:

COMMITTEES, MEMBERS AND RESPONSIBILITIES

ADMINISTRATION: June 21, 2023 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Marek	Finance	Library
Vice-Chairman:	Alderman Plocher	Administration	
Committee:	Alderman Koch		
Committee:	Alderman Corneils		

COMMITTEES, MEMBERS AND RESPONSIBILITIES (cont'd):

ECONOMIC DEVELOPMENT: June 6, 2023 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Plocher	Community Development	Planning & Zoning Commission
Vice-Chairman:	Alderman Funkhouser	Building Safety & Zoning	Kendall Co. Plan Commission
Committee:	Alderman Transier		
Committee:	Alderman Tarulis		

PUBLIC SAFETY: July 6, 2023 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Transier	Police	School District
Vice-Chairman:	Alderman Tarulis		
Committee:	Alderman Soling		
Committee:	Alderman Funkhouser		

PUBLIC WORKS: June 20, 2023 – 6:00 p.m. – East Conference Room #337

Committee		Departments	Liaisons
Chairman:	Alderman Koch	Public Works	Park Board
Vice-Chairman:	Alderman Soling	Engineering	YBSD
Committee:	Alderman Marek	Parks and Recreation	
Committee:	Alderman Corneils		

ORDER calling a public hearing concerning the intent of the City Council of the United City of Yorkville, Kendall County, Illinois, to sell not to exceed $11,000,000 General Obligation Alternate Revenue Bonds.

* * *

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the *"City"*), is a duly organized and existing municipality incorporated and existing under the provisions of the laws of the State of Illinois, and is now operating under the provisions of Illinois Municipal Code, as amended, and all laws amendatory thereof and supplementary thereto, including the Local Government Debt Reform Act of the State of Illinois, as amended (the *"Debt Reform Act"*); and

WHEREAS, the City Council of the City (the *"City Council"*) intends to sell bonds in the amount of not to exceed $11,000,000 (the *"Bonds"*) for the purpose of providing funds for the enhancement of the City's water supply system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto; and

WHEREAS, the Bond Issue Notification Act of the State of Illinois, as amended, requires the City Council to hold a public hearing concerning the City Council's intent to sell the Bonds before adopting an ordinance providing for the sale of the Bonds and further requires that the governing body or the presiding officer of the governing body set the date, time, and location of such public hearing:

NOW, THEREFORE, Be It and It Is Hereby Ordered by the Mayor of the United City of Yorkville, Kendall County, Illinois, as follows:

1. **Public Hearing**. I hereby call a public hearing to be held at 7:00 o'clock P.M. on the 13th day of June, 2023, in the City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois, concerning the City Council's intent to sell the Bonds and to receive public comments regarding the proposal to sell the Bonds (the *"Hearing"*).

2. **Notice**. I hereby direct the City Clerk (the *"City Clerk"*) to (i) publish notice of the Hearing at least once in the *Beacon-News*, the same being a newspaper of general circulation in the City, not less than seven (7) nor more than thirty (30) days before the date of the Hearing and (ii) post at least 48 hours before the Hearing a copy of said notice at the principal office of the City Council.

3. **Form of Notice**. Notice of the Hearing shall appear above the name of the City Clerk and shall be in substantially the following form:

NOTICE OF PUBLIC HEARING CONCERNING THE INTENT OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS TO SELL NOT TO EXCEED $11,000,000,000 GENERAL OBLIGATION ALTERNATE REVENUE BONDS

PUBLIC NOTICE IS HEREBY GIVEN that the United City of Yorkville, KendallCounty, Illinois (the *"City"*), will hold a public hearing on the 13th day of June, 2023, at 7:00 o'clock P.M. The hearing will be held in the City Hall, 651 Prairie Pointe Drive, Yorkville, Illinois. The purpose of the hearing will be to receive public comments on the proposal to sell general obligation alternate revenue bonds of the City in the amount of not to exceed $11,000,000 for the purpose of providing funds for the enhancement of the City's water supply system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto.

In accordance with Public Act 101-0640 and Gubernatorial Disaster Proclamation issued by Governor Pritzker pursuant to the powers vested in the Governor under the Illinois Emergency Management Agency Act, the City is encouraging social distancing by allowing remote attendance to the public hearing. Public comments on such proposal may be emailed to jbehland@yorkville.il.us. The City publishes a remote participation meeting link for every City meeting at https://www.yorkville.il.us/520/Agendas-Minutes-Packets. Each meeting generally has a phone number for audio call-in, or a video meeting link. Residents who attend the meeting via phone or computer through the methods above, may speak during the public hearing.

By order of the Mayor of the United City of Yorkville, Kendall County, Illinois.

DATED the 30th day of May, 2023.

Jori Behland
City Clerk
United City of Yorkville, Kendall County,
Illinois

Note to Publisher: Please be certain that this notice appears above the name of the City Clerk.

4. **Hearing Requirements**. At the Hearing, the City Council shall explain the reasons for the proposed bond issue and permit persons desiring to be heard an opportunity to present written or oral testimony within reasonable time limits. The City Council shall not adopt an ordinance selling the Bonds for a period of seven (7) days after the final adjournment of the Hearing.

ORDERED by me, as Mayor of the United City of Yorkville, Kendall County, Illinois, the 30th day of May, 2023.

MAYOR



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Ordinance 2023-24

File Name:
C.9b_Ordinance 2023-24

Description:
An ordinance authorizing and providing for the issuance of General Obligation Bonds (Alternate Revenue Sources), Series 2023A, of the United City of Yorkville, Kendall County, Illinois.

August 2024

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

ORDINANCE NO. 2023-24

AN ORDINANCE authorizing and providing for the issuance of General Obligation Bonds (Alternate Revenue Sources), Series 2023A, of the United City of Yorkville, Kendall County, Illinois, in the aggregate principal amount not to exceed $11,000,000, for the purpose of providing for certain enhancements to the City's water supply system, authorizing the execution of one or more bond orders and providing for the imposition of taxes to pay principal of and interest on such bonds

Adopted by the City Council on the
11th day of July, 2023

MINUTES of a regular public meeting of the City Council of the United City of Yorkville, Kendall County, Illinois, held at the City Council Chambers of the City Hall, located at 651 Prairie Pointe Drive, Yorkville, Illinois, in said City at 7 o'clock P.M., on the 11th day of July, 2023.

* * *

The Mayor called the meeting to order and directed the City Clerk to call the roll.

Upon roll call, the Mayor and the following Aldermen answered present at said location:

Koch, Transier, Plocher, Soling, Funkhouser, Marek, Tarulis, and Corneils .

The following were absent None. The Mayor announced that the next item of business before the City Council was the consideration of an ordinance authorizing the issuance of not to exceed $11,000,000 General Obligation Bonds (Alternate Revenue Source), Series 2023A for the purposes of (a) providing funds for the enhancement of the City's water supply system, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto; and (b) paying the costs of issuance thereof. Thereupon, Mayor Purcell presented, and there was made available to the Aldermen and interested members of the public the following ordinance (the "*Bond Ordinance*"):

AN ORDINANCE authorizing and providing for the issuance of General Obligation Bonds (Alternate Revenue Source), Series 2023A, of the United City of Yorkville, Kendall County, Illinois, in the aggregate principal amount not to exceed $11,000,000, for the purpose of providing for certain enhancements to the City's water supply system, authorizing the execution of one or more bond orders and providing for the imposition of taxes to pay principal of and interest on such bonds.

Alderman Transier moved and Alderman Soling seconded the motion that the Bond Ordinance as presented be adopted.

A City Council discussion of the matter followed. During the City Council discussion, the Mayor gave a public recital of the nature of the matter, which included a reading of the title of the Bond Ordinance and statements that (a) the Bond Ordinance provided for the issuance of alternate bonds for the purpose of providing funds for certain capital improvement projects for the City's water supply system; (b) the bonds are issuable without referendum pursuant to the Illinois Municipal Code, as amended, and the Local Government Debt Reformed Act, as amended; (c) the Bond Ordinance provides for the levy of taxes to pay the bonds, although the intent of the City is that the bonds will be paid by certain water supply system revenues; and (d) that the Bond Ordinance provides certain details for the bonds, including tax-exempt status covenants for the bonds, provisions for terms and form of the bonds, and appropriations.

After a full and complete discussion thereof, the Mayor directed that the roll be called for a vote upon the motion to adopt the Bond Ordinance.

Upon the roll being called, the following Aldermen:
Plocher, Funkhouser, Tarulis, Transier, Soling, Marek, Corneils, and Koch

voted AYE, and the following Aldermen: None voted NAY.

Whereupon the Mayor declared the motion carried and the Bond Ordinance adopted, and approved and signed the same in open meeting and directed the City Clerk to record the same in full in the records of the City Council of the United City of Yorkville, Kendall County, Illinois.

Other business not pertinent to the adoption of said ordinance was duly transacted at said meeting.

Upon motion duly made and seconded, the meeting was adjourned.

Jori Behland, City Clerk
United City of Yorkville,
Kendall County, Illinois

ORDINANCE NO. 2023-24

AN ORDINANCE authorizing and providing for the issuance of General Obligation Bonds (Alternate Revenue Source), Series 2023A, of the United City of Yorkville, Kendall County, Illinois, in the aggregate principal amount not to exceed $11,000,000, for the purpose of providing for certain enhancements to the City's water supply system, authorizing the execution of one or more bond orders and providing for the imposition of taxes to pay principal of and interest on such bonds.

* * *

WHEREAS, the United City of Yorkville, Kendall County, Illinois (the *"City"*), is a duly organized and existing municipality incorporated and existing under the provisions of the laws of the State of Illinois, is now operating under the provisions of the Illinois Municipal Code, as amended (the *"Municipal Code"*), and all laws amendatory thereof and supplementary thereto, including, without limitation, the Local Government Debt Reform Act, 30 Illinois Compiled Statues 350, as amended (the *"Debt Reform Act"*); and

WHEREAS, the City has for many years owned and operated a municipally-owned water supply system (the "*System*") under and pursuant to the provisions of Division 129 of Article 11 of the Municipal Code; and

WHEREAS, the City by its City Council (the *"Corporate Authorities"*) has determined that it is advisable, necessary and in the best interests of the City to finance the enhancement of the System, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto (hereinafter collectively referred to as the "*Project*"), all in accordance with the preliminary plans and estimates of costs therefor heretofore presented to the Corporate Authorities; and

WHEREAS, the estimated costs of the Project, including, without limitation, legal, financial, bond discount, bond registrar, paying agent and other related banking fees, printing and publication costs and other expenses and costs, are estimated by the Corporate Authorities to be not more than $11,000,000, but the City does not currently have sufficient funds on hand and lawfully available to pay such costs, nor does it expect to have sufficient funds on hand and lawfully available to pay such costs; and

WHEREAS, it is necessary and for the best interests of the City that the Project be constructed; and

WHEREAS, pursuant to Article 8 and Article 11 of the Municipal Code, the City is authorized to issue its water revenue bonds payable solely from the revenue derived from the operation of the System to pay the costs of the Project, subject to right of backdoor petition for referendum; and

WHEREAS, pursuant to the provisions of Section 15 of the Debt Reform Act, whenever the City has been authorized under applicable law (as defined in the Debt Reform Act) to issue revenue bonds under the Municipal Code, the City may issue its general obligation alternate bonds (as defined in the Debt Reform Act) in lieu of such revenue bonds; and

WHEREAS, for the purpose of providing funds to pay the costs of the Project and in accordance with the provisions of Division 129 of Article 11 of the Municipal Code, the Corporate Authorities adopted Ordinance No. 2023-20 on May 30, 2023 (the "*Authorizing Ordinance*"), authorizing the issuance of the City's water revenue bonds (the "*Revenue Bonds*"), as provided in the Municipal Code, in an aggregate principal amount not to exceed $11,000,000, and further authorizing the issuance of its general obligation alternate revenue bonds (the "*Alternate Bonds*")

in lieu of the Revenue Bonds, as provided in the Debt Reform Act, in an aggregate principal amount not to exceed $11,000,000; and

WHEREAS, on the 2nd day of June, 2023, notices of the adoption of the Authorizing Ordinance (the "*Notices*"), in statutory form, were published in the *Aurora Beacon-News,* the same being a newspaper of general circulation in the City, and an affidavit evidencing the publication of the Notices has heretofore been presented to the Corporate Authorities and made a part of the permanent records of the City; and

WHEREAS, on the 2nd day of June, 2023, the Authorizing Ordinance was published in the *Aurora Beacon-News,* the same being a newspaper of general circulation in the City, and an affidavit evidencing the publication of the Authorizing Ordinance has heretofore been presented to the Corporate Authorities and made a part of the permanent records of the City; and

WHEREAS, more than thirty (30) days have expired since the date of publication of the Authorizing Ordinance and the Notices, and no petitions with the requisite number of valid signatures thereon have been filed with the City Clerk requesting that the question of the issuance of the Revenue Bonds or the Alternate Bonds be submitted to referendum; and

WHEREAS, the Project constitutes a lawful corporate purpose within the meaning of the Debt Reform Act; and

WHEREAS, the Corporate Authorities are now authorized to issue the Revenue Bonds to the amount of $11,000,000 or, in lieu thereof, the Alternate Bonds to the amount of $11,000,000 in accordance with the provisions of the Debt Reform Act, and the Corporate Authorities hereby determine that it is necessary and desirable that there be issued at this time the entire authorized amount, being $11,000,000 of the Alternate Bonds so authorized, for the purpose of providing funds to pay the costs of the Project; and

WHEREAS, the Alternate Bonds to be issued will be payable from (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the City's Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the City's Water Fund (collectively, the "*Pledged Revenues*"), and, if the Pledged Revenues are insufficient to pay the Alternate Bonds, payable also from ad valorem property taxes upon all taxable property in the City without limitation as to rate or amount (the "*Pledged Taxes*"); and

WHEREAS, the Corporate Authorities have heretofore and do hereby determine in accordance with the provisions of the Debt Reform Act that the Pledged Revenues will be sufficient to provide for or pay in each year to final maturity of the Alternate Bonds all of the following: (1) costs of operation and maintenance of the System, but not including depreciation, (2) debt service on all outstanding revenue bonds payable from the Pledged Revenues, (3) all amounts required to meet any fund or account requirements with respect to such outstanding revenue bonds, (4) other contractual or tort liability obligations, if any, payable from the Pledged Revenues, and (5) in each year, an amount not less than 1.25 times debt service on all (i) alternate bonds payable from the Pledged Revenues previously issued and outstanding, and (ii) the Alternate Bonds proposed to be issued; and

WHEREAS, such determination of the sufficiency of the Pledged Revenues is supported by reference to the report dated the date hereof (the "*Report*"), of Speer Financial, Inc., Chicago, Illinois ("*Speer*"), which Report has been presented to and accepted by the Corporate Authorities and is now on file with the City Clerk; and

WHEREAS, pursuant to and in accordance with the provisions of the Bond Issue Notification Act of the State of Illinois, the Mayor, on the 30th day of May, 2023, called a public hearing (the

"*Hearing*") for the 13th day of June, 2023, concerning the intent of the Corporate Authorities to sell not to exceed $11,000,000 Alternate Bonds; and

WHEREAS, notice of the Hearing was given (i) by publication at least once not less than seven (7) nor more than thirty (30) days before the date of the Hearing in the *Aurora Beacon-News,* the same being a newspaper of general circulation in the City, and (ii) by posting at least forty-eight (48) hours before the Hearing a copy of said notice at the principal office of the Corporate Authorities, which notice was continuously available to the public for the 48-hour period preceding the Hearing; and

WHEREAS, the Hearing was opened on the 13th day of June, 2023, and at the Hearing, the Corporate Authorities explained the reasons for the proposed bond issue and permitted persons desiring to be heard an opportunity to present written or oral testimony within reasonable time limits; and

WHEREAS, the Hearing was finally adjourned on the 13th day of June, 2023, and not less than seven (7) days have passed since the final adjournment of the Hearing; and

WHEREAS, pursuant to and in accordance with the provisions of the Debt Reform Act, the City is authorized to issue its General Obligation Bonds (Alternate Revenue Source), Series 2023A (the "*Bonds*") in the aggregate principal amount of not to exceed $11,000,000 for the purpose of providing funds to pay the costs of the Project and all related costs and expenses incidental thereto, and the Corporate Authorities hereby determine that it is necessary and desirable that the Bonds be issued in the aggregate principal amount of not to exceed $11,000,000; and

WHEREAS, the Bonds will be issued on a parity with the Series 2014C Bonds (as hereinafter defined), and will be secured ratably and equally by a portion of the Pledged Revenues with such

Series 2014C Bonds, which Series 2014C Bonds are the only outstanding obligations of the City payable from a portion of the Pledged Revenues on a parity basis with the Bonds;

WHEREAS, the Series 2014C Bonds were issued pursuant to the Series 2014C Bond Ordinance (as hereinafter defined), in which the City expressly reserved the right to issue "Additional Bonds" as therein defined, provided that certain conditions are met; and

WHEREAS, the Property Tax Extension Limitation Law of the State of Illinois, as amended ("*PTELL*"), imposes certain limitations on the "aggregate extension" of certain property taxes levied by the City, but provides that the definition of "aggregate extension" contained in PTELL does not include extensions made for any taxing district subject to PTELL to pay interest or principal on bonds issued under Section 15 of the Debt Reform Act; and

WHEREAS, the County Clerk of the County of Kendall, Illinois is therefore authorized to extend and collect said property taxes so levied for the payment of the Bonds, as alternate bonds, without limitation as to rate or amount; and

WHEREAS, the Corporate Authorities deem it necessary and desirable at this time to authorize the sale of one or more series of the Bonds and to authorize the Mayor and the Treasurer of the City to provide for the sale thereof and thereupon to execute one or more Bond Orders (each, a *"Bond Order"*), all subject to the limitations hereinafter set forth; and

WHEREAS, the City shall further set forth the terms of each series of Bonds as provided in the relevant Bond Order.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE UNITED CITY OF YORKVILLE, KENDALL COUNTY, ILLINOIS, AS FOLLOWS:

Section 1. Definitions The following words and terms used in this Ordinance shall have the following meanings unless the context or use clearly indicates another or different meaning is intended:

"Act" means the Local Government Debt Reform Act of the State of Illinois, as amended.

"Additional Bonds" means (i) any revenue bonds to be issued subsequent in time to the Bonds in accordance with the provisions of the Municipal Code, and (ii) any alternate bonds to be issued subsequent in time to the Bonds in accordance with the provisions of the Act, in either case on a parity with and sharing ratably and equally in all or a portion of the Pledged Revenues with the Bonds and the Series 2014C Bonds.

"Additional IEPA Loans" means any revenue bonds payable from the Net Revenues issued subsequent in time to the Bonds in connection with an IEPA Loan, issued either subordinate to or on a parity with, and sharing ratably and equally in, the Net Revenues with the IEPA Loans, the Bonds or the Additional Bonds.

"Alternate Bond and Interest Account (2023)" means the Alternate Bond and Interest Account (2023) established hereunder and further described by Section 11 of this Ordinance.

"Bond" or *"Bonds"* means one or more, as applicable, of the not to exceed $11,000,000 General Obligation Bonds (Alternate Revenue Source), Series 2023A, authorized to be issued by the City pursuant to this Ordinance or such other designation as set forth in the relevant Bond Order.

"*Bond Fund*" means the 2023 Alternate Bond Fund established hereunder and further described in Section 15 of this Ordinance.

"Bond Order" means any written Bond Order hereinafter authorized to be executed by the Designated Officers and setting forth certain details of the Bonds as hereinafter provided.

"Bond Register" means the books of the City kept by the Bond Registrar to evidence the registration and transfer of the Bonds.

"Bond Registrar" means Amalgamated Bank of Chicago, Chicago, Illinois, a bank or trust company having trust powers, or a successor thereto or a successor designated as Bond Registrar hereunder.

"City" means the United City of Yorkville, Kendall County, Illinois.

"Clerk" means the Clerk of the City.

"Code" means the Internal Revenue Code of 1986, as amended.

"Corporate Authorities" means the City Council of the City.

"County Clerk" means the County Clerk of the County of Kendall, Illinois.

"Depository" means The Depository Trust Company, New York, New York, its successors, or a successor depository qualified to clear securities under applicable state and federal laws.

"Designated Officers" means the Mayor, the Treasurer, or the Clerk, or any of them acting together, and their respective successors and assigns.

"Expense Fund" means the fund established hereunder and further described by Section 16 of this Ordinance.

"Fiscal Year" means a twelve-month period beginning May 1 of the calendar year and ending on the next succeeding April 30.

"Future Bond Ordinances" means the ordinances to be from time to time adopted by the Corporate Authorities authorizing the issuance of bonds or other debt payable from the Net Revenues, but not including this Ordinance or any other ordinance authorizing the issuance of Additional Bonds.

"Gross Revenues" means all income from whatever source derived from the System, including, without limitation, (i) investment income; (ii) connection, permit and inspection fees and the like; and (iii) penalties and delinquency charges; but expressly excluding (a) non-recurring income from the sale of property of the System; (b) governmental or other grants; (c) advances from or grants made to the City; (d) capital development, reimbursement, or recovery charges and the like; and (e) annexation or pre-annexation charges insofar as designated by the Corporate Authorities as paid for System connection or service; and as otherwise determined in accordance with generally accepted accounting principles for municipal enterprise funds.

"*IEPA*" means the Illinois Environmental Protection Agency, or any successor agency under the laws of the State.

"*IEPA Loans*" means, collectively, all from time to time Outstanding loans to the City from the IEPA.

"*IEPA Loan Account*" means any loan account established under any ordinance adopted by the Corporate Authorities from time to time with respect to an IEPA Loan or an Additional IEPA Loan.

"*Insurer*" means any issuer of a municipal bond insurance or financial guaranty policy relating to the Bonds as so identified in any Bond Order.

"Mayor" means the Mayor of the City.

"Municipal Code" means the Illinois Municipal Code, as amended, and all laws amendatory thereof and supplementary thereto.

"Net Revenues" means Gross Revenues minus Operation and Maintenance Expenses.

"Operation and Maintenance Expenses" means all expenses of operating, maintaining and routine repair of the System, including wages, salaries, costs of materials and supplies, power, fuel, insurance, purchase of water (including all payments by the City pursuant to long term contracts

for such services as and to the extent provided in such contracts); but excluding debt service, depreciation, or any reserve requirements; and otherwise determined in accordance with generally accepted accounting principles for municipal enterprise funds.

"*Ordinance*" means this Ordinance, numbered as set forth on the title page hereof, passed by the Corporate Authorities on the 11th day of July, 2023, as supplemented and amended.

"*Outstanding*" and "*Outstanding Bonds*", when used with reference to any of the Bonds, the Series 2014C Bonds, the Additional Bonds, the IEPA Loans or the Additional IEPA Loans, means such of those Bonds, the Series 2014C Bonds, the Additional Bonds, the IEPA Loans or the Additional IEPA Loans which are outstanding and unpaid; *provided, however*, such term shall not include any of the Bonds, the Series 2014C Bonds, the Additional Bonds, the IEPA Loans or the Additional IEPA Loans (i) which have matured and for which moneys are on deposit with proper paying agents, or are otherwise properly available, sufficient to pay all principal and interest thereon, or (ii) the provision for payment of which has been made by the City by the deposit in an irrevocable trust or escrow of funds direct, full faith and credit obligations of the United States of America, the principal and interest of which will be sufficient to pay at maturity or as called for redemption all the principal of and interest and applicable premium, if any, on the Bonds, the Series 2014C Bonds, the Additional Bonds, the IEPA Loans and the Additional IEPA Loans.

"*Paying Agent*" means Amalgamated Bank of Chicago, Chicago, Illinois, a bank or trust company having trust powers, or a successor thereto or a successor designated as Paying Agent hereunder.

"*Places for Eating Tax*" means the non-home rule sales tax on the gross receipts for prepared food and beverages sold at retail establishments for immediate consumption imposed by the City pursuant to an ordinance adopted by the Corporate Authorities on June 27, 2023, the revenues from which are to be deposited into the Water Fund.

"*Pledged Moneys*" means the Pledged Revenues and the Pledged Taxes, as such terms are defined herein.

"*Pledged Revenues*" means, collectively, (i) the Net Revenues, (ii) all collections of the Places for Eating Tax, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the Water Fund.

"*Pledged Taxes*" means the ad valorem taxes levied against all the taxable property within the City without limitation as to rate or amount, pledged hereunder by the City as security for the Bonds.

"*Policy*" means a municipal bond or financial guaranty insurance policy issued by an Insurer.

"*Project*" means, collectively, the enhancement of the System, including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto.

"*Project Fund*" means the Project Fund established hereunder and further described in Section 16(c) of this Ordinance.

"*Purchase Price*" means not less than 97% of par (not including original issue discount) as set forth in the relevant Bond Order.

"*Purchaser*" means Robert W. Baird and Co., Incorporate, Naperville, Illinois or such other purchaser or purchasers of the Bonds as described in Section 8 of this Ordinance and identified in the relevant Bond Order, provided that such other purchaser or purchasers shall be a bank or financial institution listed in the Dealers & Underwriters or Municipal Derivatives sections of the most recent edition of *The Bond Buyer's Municipal Marketplace*.

"*Series 2014C Bond Ordinance*" means Ordinance Number 2014-32 adopted by the Corporate Authorities on July 22, 2014 authorizing the issuance of the Series 2014C Bonds.

"*Series 2014C Bonds*" means the $1,290,000 original aggregate principal amount General Obligation (Alternate Revenue Source) Refunding Bonds, Series 2014C issued by the City pursuant to the Series 2014C Bond Ordinance, less any of said bonds that are no longer "Outstanding" hereunder.

"*State*" means the State of Illinois.

"*Treasurer*" means the Treasurer of the City.

"*Water Fund*" means the Water Fund of the City continued hereunder and further described in Section 10 of this Ordinance.

Section 2. Incorporation of Preambles; Acceptance of Report. The Corporate Authorities hereby find that all of the recitals contained in the preambles to this Ordinance are full, true and correct and do incorporate them into this Ordinance by this reference thereto. The Report is hereby accepted and approved by the Corporate Authorities, and it is hereby found and determined that Speer is a feasibility analyst having a national reputation for expertise in such matters as the Report.

Section 3. Determination to Issue Bonds. It is hereby found and determined that it is necessary and in the best interests of the City to construct the Project for the public health, safety and welfare, in accordance with the estimate of costs, as described, and to borrow money and to issue the Bonds in the amount of not to exceed $11,000,000 pursuant to the Municipal Code and the Act for the purpose of paying for the Project and all related costs and expenses incidental thereto, and that such borrowing of money is necessary for the welfare of the government and affairs of the City, is a public purpose and is in the public interest.

Section 4. Bond Details. For the purpose of providing for the payment of the costs of the Project and all related costs and expenses incidental thereto, there shall be issued and sold the Bonds in one or more series in the aggregate principal amount of not to exceed $11,000,000. The

Bonds shall each be designated "General Obligation Bonds (Alternate Revenue Source), Series 2023A", shall be dated as provided in a Bond Order (such date being the *"Dated Date"*), and shall also bear the date of authentication thereof, shall be in fully registered form, shall be in denominations of $5,000 each and authorized integral multiples thereof (but no single Bond shall represent installments of principal maturing on more than one date), shall be numbered R-1 and upward and shall bear interest to be payable semiannually on June 30 and December 30 in each year, commencing on December 30, 2023, or on such other dates as may be provided in the relevant Bond Order.

The Bonds shall mature serially and/or as Term Bonds (subject to the right of prior redemption hereinafter stated) on December 30 (or on such other dates as may be provided in the relevant Bond Order) of each of the years and in the amounts and bearing interest at the rates percent per annum as shall be set forth in the relevant Bond Order, *provided, however,* that (i) no Bond shall mature on a date which is later than December 30, 2053, (ii) no Bond shall bear interest at a rate percent per annum which is in excess of six percent (6%), and (iii) the aggregate amount of principal payments on the Bonds shall not exceed $675,000 in any year.

The Bonds shall bear interest from the Dated Date or from the most recent interest payment date to which interest has been paid or duly provided for, until the principal amount of the Bonds is paid or duly provided for, such interest (computed upon the basis of a 360-day year of twelve 30-day months). Interest on each Bond shall be paid by check or draft of the Paying Agent or wire transfer, payable in lawful money of the United States of America, to the person in whose name such Bond is registered at the close of business on the 15th day of the month next preceding the interest payment date. The principal of the Bonds shall be payable in lawful money of the United States of America at the principal office maintained for the purpose by the Paying Agent in Chicago, Illinois, or at successor Paying Agent and address.

The Bonds shall be signed by the manual or duly authorized facsimile signature of the Mayor, and shall be attested by the manual or duly authorized facsimile signature of the Clerk, and the corporate seal of the City shall be affixed thereto or printed thereon, and in case any officer whose signature shall appear on any Bond shall cease to be such officer before the delivery of such Bond, such signature shall nevertheless be valid and sufficient for all purposes, the same as if such officer had remained in office until delivery.

All Bonds shall have thereon a certificate of authentication substantially in the form hereinafter set forth duly executed by the Bond Registrar as authenticating agent of the City for this issue and showing the date of authentication. No Bond shall be valid or obligatory for any purpose or be entitled to any security or benefit under this Ordinance unless and until such certificate of authentication shall have been duly executed by the Bond Registrar by manual signature, and such certificate of authentication upon any such Bond shall be conclusive evidence that such Bond has been authenticated and delivered under this Ordinance. The certificate of authentication on any Bond shall be deemed to have been executed by the Bond Registrar if signed by an authorized officer of the Bond Registrar, but it shall not be necessary that the same officer sign the certificate of authentication on all of the Bonds issued hereunder.

Section 5. Redemption.

(a) *Optional Redemption.* If so provided in the Bond Order(s), the Bonds of a series may be subject to redemption prior to maturity at the option of the City, from any available funds, in whole or in part, in any order of their maturity as determined by the City (less than all of the Bonds of a single maturity to be selected by the Bond Registrar and within any maturity by lot), on the date of redemption provided in the applicable Bond Order (which date of optional redemption shall not be later than December 30, 2033), and on any date thereafter, at the redemption price of par plus accrued interest to the redemption date.

(b) *Mandatory Redemption.* The Bonds of a series may be subject to mandatory redemption as Term Bonds as set forth in the Bond Order(s). The City covenants that it will redeem any Term Bonds pursuant to any mandatory redemption requirement for such Term Bonds and levy taxes accordingly.

(c) *Additional Bonds.* Additional Bonds hereinafter issued pursuant to the terms hereof may be redeemable at such times and upon such terms as may be determined at the time of authorization thereof.

(d) *Redemption Procedure.* Any Bonds of a series that may be subject to optional or mandatory redemption as set forth in the Bond Order(s) shall be redeemed by the City pursuant to such procedures as set forth in such Bond Order.

Section 6. Registration of Bonds; Persons Treated as Owners. (a) General. The City shall cause the Bond Register as provided in this Ordinance to be kept at the principal office maintained for the purpose by the Bond Registrar in Chicago, Illinois, which is hereby constituted and appointed the registrar of the City for this issue. The City is authorized to prepare, and the Bond Registrar shall keep custody of, multiple Bond blanks executed by the City for use in the transfer and exchange of Bonds.

Any Bond may be transferred or exchanged, but only in the manner, subject to the limitations, and upon payment of the charges as set forth in this Ordinance or any Bond Order. Upon surrender for transfer or exchange of any Bond at the principal corporate trust office maintained for the purpose by the Bond Registrar, duly endorsed by, or accompanied by a written instrument or instruments of transfer or exchange in the form attached to the Bond and duly executed by the registered owner or an attorney for such owner duly authorized in writing, the City shall execute and the Bond Registrar shall authenticate, date and deliver in the name of the transferee or transferees or, in the case of an exchange, the registered owner, a new fully registered

Bond or Bonds of the same maturity of authorized denominations, for a like aggregate principal amount. The execution by the City of any fully registered Bond shall constitute full and due authorization of such Bond and the Bond Registrar shall thereby be authorized to authenticate, date and deliver such Bond, *provided, however*, the principal amount of outstanding Bonds of each maturity authenticated by the Bond Registrar shall not exceed the authorized principal amount of Bonds for such maturity less previous retirements.

The Bond Registrar shall not be required to transfer or exchange any Bond during the period beginning at the close of business on the fifteenth (15th) day of the month next preceding any interest payment date on such Bond and ending at the opening of business on such interest payment date, nor to transfer or exchange any Bond after notice calling such Bond for redemption has been mailed, nor during a period of fifteen (15) days next preceding mailing of a notice of redemption of any Bonds.

The person in whose name any Bond shall be registered shall be deemed and regarded as the absolute owner thereof for all purposes, and payment of the principal of or interest on any Bond shall be made only to or upon the order of the registered owner thereof or the legal representative of such owner. All such payments shall be valid and effectual to satisfy and discharge the liability upon such Bond to the extent of the sum or sums so paid.

No service charge shall be made for any transfer or exchange of Bonds, but the City or the Bond Registrar may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any transfer or exchange of Bonds except in the case of the issuance of a Bond or Bonds for the unredeemed portion of a Bond surrendered for redemption.

(b) *Global Book-Entry System.* The Bonds shall be initially issued in the form of a separate single fully registered Bond for each of the maturities of the Bonds as set forth in the

Bond Order. Upon initial issuance, the ownership of each such Bond shall be registered in the Bond Register in the name of *"Cede & Co."*, or any successor thereto, as nominee of the Depository. All of the Bonds from time to time shall be registered in the Bond Register in the name of Cede & Co., as nominee of the Depository, except as hereinafter provided. Any officers of the City who is a signatory on the Bonds is authorized to execute and deliver on behalf of the City such letters to or agreements with the Depository as shall be necessary to effectuate such book-entry system (any such letter or agreement being referred to herein as the *"Representation Letter"*). Without limiting the generality of the authority given with respect to entering into such Representation Letter, it may contain provisions relating to (a) payment procedures, (b) transfers of the Bonds or of beneficial interests therein, (c) redemption notices and procedures unique to the Depository, (d) additional notices or communications, and (e) amendment from time to time to conform with changing customs and practices with respect to securities industry transfer and payment practices.

With respect to Bonds registered in the Bond Register in the name of Cede & Co., as nominee of the Depository, the City and the Bond Registrar shall have no responsibility or obligation to any broker-dealer, bank or other financial institution for which the Depository holds Bonds from time to time as securities depository (each such broker-dealer, bank or other financial institution being referred to herein as a *"Depository Participant"*) or to any person on behalf of whom such a Depository Participant holds an interest in the Bonds. Without limiting the meaning of the immediately preceding sentence, the City and the Bond Registrar shall have no responsibility or obligation with respect to (a) the accuracy of the records of the Depository, Cede & Co., or any Depository Participant with respect to any ownership interest in the Bonds, (b) the delivery to any Depository Participant or any other person, other than a registered owner of a Bond as shown in the Bond Register, of any notice with respect to the Bonds, including any notice of redemption, or

(c) the payment to any Depository Participant or any other person, other than a registered owner of a Bond as shown in the Bond Register, of any amount with respect to principal of or interest on the Bonds.

The City and the Bond Registrar may treat and consider the person in whose name each Bond is registered in the Bond Register as the absolute owner hereof for the purpose of payment of principal and interest with respect to such Bond, for the purpose of giving notices of redemption and other matters with respect to such Bond, for the purpose of registering transfers with respect to such Bond, and for all other purposes whatsoever. The Bond Registrar shall pay all principal of and interest on the Bonds only to or upon the order of the respective registered owner of the Bonds, as shown in the Bond Register, or their respective attorneys duly authorized in writing, and all such payments shall be valid and effective to fully satisfy and discharge the City's obligations with respect to the payment of the principal of and interest on the Bonds to the extent so paid.

No person other than a registered owner of a Bond as shown in the Bond Register shall receive a Bond evidencing the obligation of the City to make payments of principal and interest with respect to any Bond. Upon delivery by the Depository to the Bond Registrar of written notice to the effect that the Depository has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions hereof with respect to the payment of interest to the registered owners of Bonds at the close of business on the applicable record date, the name *"Cede & Co."* in this Ordinance shall refer to such new nominee of the Depository.

In the event that (a) the City determines that the Depository is incapable of discharging its responsibilities described herein and in the Representation Letter, (b) the agreement among the City, the Bond Registrar and the Depository evidenced by the Representation Letter shall be terminated for any reason or (c) the City determines that it is in the best interests of the City or of the beneficial owners of the Bonds that they be able to obtain certificated Bonds, the City shall

notify the Depository and the Depository Participants of the availability of Bond certificates, and the Bonds shall no longer be restricted to being registered in the Bond Register in the name of Cede & Co., as nominee of the Depository. At that time, the City may determine that the Bonds shall be registered in the name of and deposited with a successor depository operating a book-entry system, as may be acceptable to the City, or such depository's agent or designee, and if the City does not select such alternate book-entry system, then the Bonds may be registered in whatever name or names registered owners of Bonds transferring or exchanging Bonds shall designate, in accordance with the provisions hereof.

Notwithstanding any other provision of this Ordinance to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of the Depository, all payments with respect to principal of and interest on such Bond and all notices with respect to such Bond shall be made and given, respectively, in the manner provided in the Representation Letter.

Section 7. Form of Bond The Bonds shall be prepared in substantially the following form:

(Form of Bond)

REGISTERED
NO. _____

REGISTERED
$_____

UNITED STATES OF AMERICA
STATE OF ILLINOIS
COUNTY OF KENDALL
UNITED CITY OF YORKVILLE
GENERAL OBLIGATION BOND (ALTERNATE REVENUE SOURCE),
SERIES 2023A

Interest	Maturity	Dated	
Rate: _____%	Date: December 30, ____	Date: _____, 2023	CUSIP:_____

Registered Owner: Cede & Co.

Principal Amount: _____

KNOW ALL PERSONS BY THESE PRESENTS, that the United City of Yorkville, Kendall County, Illinois, a municipality and political subdivision of the State of Illinois (the *"City"*), hereby acknowledges itself to owe and for value received promises to pay to the Registered Owner identified above, or registered assigns as hereinafter provided, on the Maturity Date identified above, the Principal Amount identified above and to pay interest (computed on the basis of a 360-day year of twelve 30-day months) on such Principal Amount from the Dated Date of this Bond or from the most recent interest payment date to which interest has been paid at the Interest Rate per annum set forth above on June 30 and December 30 of each year, commencing December 30, 2023, until said Principal Amount is paid or duly provided for. The principal of this Bond is payable in lawful money of the United States of America upon presentation hereof at the principal office maintained for the purpose by Amalgamated Bank of Chicago, Chicago, Illinois, as paying agent and bond registrar (the "*Bond Registrar*"). Payment of interest shall be made to the Registered Owner hereof as shown on the registration books of the City maintained by the Bond Registrar. Payment of the installments of interest shall be made to the Registered Owner hereof as shown on the registration books of the City maintained by the Bond Registrar, at the close of

business on the 15th day of the month next preceding the interest payment date and shall be paid by check or draft of the Bond Registrar or by wire transfer, payable in lawful money of the United States of America, mailed to the address of such Registered Owner as it appears on such registration books or at such other address furnished in writing by such Registered Owner to the Bond Registrar.

This bond and the bonds of the series of which it forms a part (*"Bond"* and *"Bonds"* respectively) are part of an authorized issue of _____ Dollars ($_____) of like date and tenor, and are issued pursuant to the Illinois Municipal Code, as amended (the *"Municipal Code"*), and all laws amendatory thereof and supplementary thereto, and the Local Government Debt Reform Act of the State of Illinois, as amended (the "*Act*"). The Bonds are issued pursuant to the Act for the purpose of providing for the enhancement of the City's water supply system (the "*System*"), including replacing existing water mains, constructing a new well, modifying the existing raw water main and water treatment plant and other capital improvements relating thereto and paying expenses incidental thereto.

The Bonds are issued pursuant to an authorizing ordinance passed by the City Council of the City (the "*Corporate Authorities*") on the 30th day of May, 2023 and pursuant to Ordinance No. 2023-20, passed by the Corporate Authorities on the 11th day of July, 2023 (together with and as supplemented by a Bond Order executed by the Mayor, the *"Bond Ordinance"*), to which reference is hereby expressly made for further definitions and terms and to all the provisions of which the owner by the acceptance of this Bond assents.

The Bonds are "alternate bonds" issued pursuant to Section 15 of Act and are payable from (a) (i) the net revenues derived from the operation of the System, (ii) all collections of any non-home rule "places for eating" sales tax imposed by the City and deposited into the Water Fund, and (iii) certain moneys on deposit from time to time in the funds and accounts held within the

Water Fund (collectively, the "*Pledged Revenues*"), and (b) ad valorem taxes levied against all of the taxable property in the City without limitation as to rate or amount (the "*Pledged Taxes*") (the Pledged Revenues and the Pledged Taxes being collectively called the "*Pledged Moneys*"), all in accordance with the provisions of the Act and the Municipal Code.

The Bonds are issued on a parity with the City's currently outstanding General Obligation (Alternate Revenue Source) Refunding Bonds, Series 2014C. The City may issue future revenue bonds, alternate bonds or other debt payable from the Pledged Revenues pursuant to the terms of the Bond Ordinance, which bonds or other debt may be issued on a parity with the Bonds and share ratably and equally in the Pledged Revenues with the Bonds, pursuant to the terms of the Bond Ordinance, provided provisions of the Act have been satisfied.

This Bond does not and will not constitute an indebtedness of the City within the meaning of any constitutional provision or limitation, unless the Pledged Taxes shall be extended pursuant to the general obligation, full faith and credit promise supporting the Bonds, in which case the amount of the Bonds then outstanding shall be included in the computation of indebtedness of the City for purposes of all statutory provisions or limitations until such time as an audit of the City shall show that the Bonds shall have been paid from the Pledged Revenues for a complete fiscal year, in accordance with the Act.

The Bonds of this issue may be subject to redemption prior to maturity at the option of the City as set forth in the Bond Order.

[Bonds maturing on and after _____, __, shall be subject to redemption prior to maturity at the option of the City, from any available funds, in whole or in part, in integral multiples of $5,000, in any order of their maturity as determined by the City (less than all of the Bonds of a single maturity to be selected by the Bond Registrar and within any maturity by lot), on

_____, and on any date thereafter, at the redemption price of par plus accrued interest to the redemption date.]

[Bonds due on _____ and _____, are subject to mandatory redemption, in integral multiples of $5,000 selected by lot by the Bond Registrar, at a redemption price of par plus accrued interest to the redemption date, without premium, on _____ 30 of the years and in the amounts as follows:

For the Term Bonds due _____ 30, 20___:

YEAR	AMOUNT ($)
20___	
20___	

with $_____ remaining to be paid at maturity in 20__.]

This Bond is transferable by the registered owner hereof in person or by his or her attorney duly authorized in writing at the principal office maintained for the purpose by the Bond Registrar in Chicago, Illinois, but only in the manner, subject to the limitations and upon payment of the charges provided in the Bond Ordinance, and upon surrender and cancellation of this Bond. Upon such transfer a new Bond or Bonds of authorized denominations of the same maturity and for the same aggregate principal amount will be issued to the transferee in exchange therefor.

The Bonds are issued in fully registered form in the denomination of $5,000 each or authorized integral multiples thereof. This Bond may be exchanged at the principal office maintained for the purpose by the Bond Registrar for a like aggregate principal amount of Bonds of the same maturity of other authorized denominations, upon the terms set forth in the Bond Ordinance. The Bond Registrar shall not be required to transfer or exchange any Bond during the period beginning at the close of business on the fifteenth (15th) day of the month next preceding any interest payment date on such Bond and ending at the opening of business on such interest

payment date, nor to transfer or exchange any Bond after notice calling such Bond for redemption has been mailed, nor during a period of fifteen (15) days next preceding mailing of a notice of redemption of any Bonds.

The City and the Bond Registrar may deem and treat the registered owner hereof as the absolute owner hereof for the purpose of receiving payment of or on account of principal hereof and interest due hereon and for all other purposes and neither the City nor the Bond Registrar shall be affected by any notice to the contrary.

It is hereby certified and recited that all conditions, acts and things required to be done precedent to and in the issuance of this Bond, have existed and have been properly done, happened and been performed in regular and due form and time as required by law; that the indebtedness of the City, represented by the Bonds, does not exceed any limitation imposed by law; and that provision has been made for the collection of the Pledged Revenues, the levy and collection of the Pledged Taxes, and the segregation of the Pledged Moneys to pay the interest hereon as it falls due and also to pay and discharge the principal hereof at maturity; and that the City hereby covenants and agrees that it will properly account for said Pledged Moneys and will comply with all the covenants of and maintain the funds and accounts as provided by the Ordinance.

This Bond shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been signed by the Bond Registrar.

IN WITNESS WHEREOF, said United City of Yorkville, Kendall County, Illinois, by its City Council, has caused this Bond to be signed by the manual or duly authorized facsimile signature of the Mayor of the City and attested by the manual or duly authorized facsimile signature of the Clerk of said City, and its corporate seal to be affixed hereto or printed hereon, all as of the Dated Date identified above.

(Facsimile Signature)
Mayor

(SEAL)
Attest:

(Facsimile Signature)
City Clerk

Date of Authentication: _____, 2023

Bond Registrar and Paying Agent:
Amalgamated Bank of Chicago,
Chicago, Illinois

CERTIFICATE
OF
AUTHENTICATION

This Bond is one of the Bonds described in the within mentioned ordinance and is one of the General Obligation Bonds (Alternate Revenue Source), Series 2023A, of the United City of Yorkville, Kendall County, Illinois.

Amalgamated Bank of Chicago, as Bond Registrar

By ___ (Manual Signature)
Authorized Officer

(Assignment)

FOR VALUE RECEIVED, the undersigned sells, assigns and transfers unto _____

_____

(Name and Address of Assignee)

the within Bond and does hereby irrevocably constitute and appoint _____

_____

attorney to transfer the said Bond on the books kept for registration thereof with full power of substitution in the premises.

Dated: _____ _____

Signature guaranteed: _____

NOTICE: The signature to this assignment must correspond with the name of the registered owner as it appears upon the face of the within Bond in every particular, without alteration or enlargement or any change whatever.

[End of Form of Bond]

Section 8. Sale of Bonds. The Bonds shall be executed as in this Ordinance provided as soon after the passage hereof as may be, shall be deposited with the Treasurer, and shall be by the Treasurer delivered to the Purchaser, upon receipt of the Purchase Price therefor and upon the terms provided herein and in the Bond Order. Authority is hereby delegated to the Mayor and the Treasurer to sell all, but not less than all, of the Bonds to the Purchaser at a negotiated sale and at a purchase price of not less than 97% of par upon their finding that the terms of the Bonds are fair and reasonable in view of current conditions in the bond markets and that the Bonds meet the terms and requirements of this Ordinance. The sale of the Bonds shall be evidenced by a Bond Order which shall be signed by the Mayor or Treasurer. The Clerk is further directed to make available to the Corporate Authorities a copy of the executed Bond Order at the first regularly scheduled meeting of the Corporate Authorities following the execution of the same, but such action shall be for information purposes only, and the Corporate Authorities shall have no right or authority at such time to approve or reject such sale as evidenced in the Bond Order. Nothing in this Section 8 shall require the Designated Officers to sell the Bonds if in their judgment the conditions in the bond markets shall have markedly deteriorated from the time of adoption hereof, but the Designated Officers shall have the authority to sell the Bonds in any event so long as the limitations set forth in this Ordinance and the conditions of this Section shall have been met.

The Mayor or the Treasurer are authorized and directed to execute one or more bond purchase agreements (the "*Purchase Contract*") in connection with the sale of the Bonds, in the name of and on behalf of the City. The Purchase Contract shall be substantially in the form of bond purchase agreements commonly used in transactions similar to that described in this Ordinance, with such changes as necessary to reflect the terms and provisions of the Bonds, this Ordinance and such other changes as the Mayor or Treasurer shall determine are necessary or desirable in connection with the sale of the Bonds, including whether to purchase bond insurance and the

related terms. No person holding any office of the City, either by election or appointment, shall, to the best of the knowledge and belief of the Corporate Authorities, after due inquiry, be in any manner financially interested, either directly in his or her own name or indirectly in the name of any other person, association, trust or corporation, in the Purchase Contract.

The use by the Purchaser of any Preliminary Official Statement and any Official Statement relating to the Bonds (the "*Official Statement*") is hereby ratified, approved and authorized; the execution and delivery of the Official Statement is hereby authorized; and the officers of the Corporate Authorities are hereby authorized to take any action as may be required on the part of the City to consummate the transactions contemplated by the Purchase Contract, this Ordinance, the Bond Order, the Preliminary Official Statement and the Official Statement.

The selection and retention of Saul Ewing LLP, Chicago, Illinois, to serve as bond counsel in connection with the issuance of the Bonds is hereby ratified, confirmed and approved.

Section 9. Treatment of Bonds as Debt. The Bonds shall be payable from the Pledged Moneys and shall not constitute an indebtedness of the City within the meaning of any constitutional provision or limitation, unless the Pledged Taxes shall be extended pursuant to the general obligation, full faith and credit promise supporting the Bonds, as set forth herein, in which case the amount of the Bonds then Outstanding shall be included in the computation of indebtedness of the City for purposes of all statutory provisions or limitations until such time as an audit of the City shall show that the Bonds shall be been paid from the Pledged Revenues for a complete Fiscal Year, in accordance with the Act.

Section 10. Continuation of Water Fund and Accounts Thereof. Upon the issuance of any of the Bonds, the System shall be operated on a Fiscal Year basis. All of the Gross Revenues shall be set aside as collected and be deposited in a separate fund and in an account in a bank to be designated by the Corporate Authorities, which fund is hereby continued and is designated as the

"Water Fund" (the *"Water Fund"*) of the City, which shall constitute a trust fund for the purpose, among others, of carrying out the covenants, terms, and conditions of this Ordinance and any Future Bond Ordinances, and shall be used only in paying Operation and Maintenance Expenses, providing an adequate depreciation fund, paying the principal of and interest on all bonds and other debt of the City which by their terms are payable from the Net Revenues, providing for the continuation or establishment of and expenditure from the respective accounts as hereinafter described, and for such other System-related purposes as may be provided by law and contract. In addition to the Gross Revenues, the revenues received from the collection of the Places for Eating Tax shall be deposited into the Water Fund and credited thereto on or before the first (1st) day of each month by the Treasurer, beginning on February 1, 2024.

Section 11. Flow of Funds in Water Fund. There shall be and there are hereby continued or created, as the case may be, separate accounts in the Water Fund to be known as the "Operation and Maintenance Account," the "Alternate Bond and Interest Account (2023)," the "Depreciation Account," the "Places for Eating Tax Account," and the "Surplus Account," to which there shall be credited on or before the first (1st) day of each month by the Treasurer, without any further official action or direction, in the order in which said accounts are hereinafter mentioned, all moneys held in the Water Fund, in accordance with the following provisions:

(a) *Operation and Maintenance Account*: There shall be deposited and credited to or retained in the Operation and Maintenance Account an amount sufficient, when added to the amount then on deposit in said Account, to establish or maintain a balance to an amount not less than the amount considered necessary to pay Operation and Maintenance Expenses for the then current and the next succeeding month.

(b) *Alternate Bond and Interest Account (2023)*: There next shall be deposited and credited to the Alternate Bond and Interest Account (2023) and held, in cash and investments, in each month a fractional amount of the interest becoming due on the next succeeding interest payment date on all Outstanding Bonds and also a fractional amount of the principal becoming due on the next succeeding principal maturity date of all of the Outstanding Bonds until there shall have been accumulated and held, in cash and investments, in the Alternate Bond and Interest Account (2023) on or before the last day

of the month preceding such payment date of interest or maturity date of principal, an amount sufficient to pay such principal or interest, or both, of all Outstanding Bonds. Pursuant to Section 11(d), funds in the Places of Eating Tax Account shall be transferred to the Alternate Bond and Interest Account (2023) from time to time in such amounts as the City may deem necessary for the purpose of paying principal or interest, or both, on any interest payment date or maturity date of principal on all Outstanding Bonds payable from the Pledged Revenues.

In computing the fractional amount to be set aside each month in the Alternate Bond and Interest Account (2023), the fraction shall be so computed that sufficient funds will be set aside in said Account (i) in order to abate the Pledged Taxes in accordance with the provisions of this Ordinance, and (ii) be available for the prompt payment of such principal of and interest on all Outstanding Bonds as will become due and shall be not less than one-fifth of the interest becoming due on the next succeeding interest payment date and not less than one-tenth of the principal becoming due on the next succeeding principal payment date on all Outstanding Bonds until there is sufficient money in said Account to pay such principal or interest, or both.

Credits to the Alternate Bond and Interest Account (2023) may be suspended in any Fiscal Year at such time as there shall be a sufficient sum, held in cash and investments, in said Account to meet principal and interest requirements in said Account for the balance of such Fiscal Year, but such credits shall again be resumed at the beginning of the next Fiscal Year.

All moneys in said Account shall be used only for the purpose of paying interest and principal of Outstanding Bonds.

Pledged Taxes on deposit in the Alternate Bond and Interest Account (2023) shall be fully spent to pay the principal of and interest on the Bonds for which such taxes were levied and collected prior to use of any other moneys on deposit in said Account. Pledged Taxes on deposit in the Alternate Bond and Interest Account (2023) shall only be used to pay the principal of and interest on the Bonds.

(c) *Depreciation Account*: There shall be deposited in and credited to the Depreciation Account in each month after the required payments have been made into the accounts described above, such amounts as the City may deem necessary in order to provide an adequate depreciation for the System.

Amounts to the credit of said Depreciation Account shall be used for (i) the payment of the cost of extraordinary maintenance, necessary repairs and replacements, or contingencies, the payment for which no other funds are available, in order that the System may at all times be able to render efficient service, and (ii) the payment of principal of or interest on any Outstanding Bonds at any time when there are no other funds available for that purpose in order to prevent a default and shall be transferred to the Alternate Bond and Interest Account (2023) or an IEPA Loan Account, as applicable, for such purpose.

Whenever an amount is withdrawn from such Account for the purpose stated in clause (ii) of the preceding paragraph, the amount so transferred shall be added to the amount to be next and thereafter credited to said Depreciation Account until full reimbursement to said Account has been made. Each expenditure to be made from such Account for a purpose stated in clause (i) of the preceding paragraph shall be made only after a registered professional engineer employed for that purpose has certified that such expenditure is necessary to the continued effective and efficient operation of the System.

(d) *Places for Eating Tax Account*: There shall be deposited into and credited to the Places for Eating Tax Account in each month the collections from the Places for Eating Tax, which collections shall commence on January 1, 2024. Amounts in said Account shall be used only for the purpose of paying principal or interest, or both, on any interest payment date or maturity date of principal on any Outstanding Bonds payable from the Pledged Revenues, and shall be transferred to the Alternate Bond and Interest Account (2023) from time to time in such amounts as the City may deem necessary for such purpose.

(e) *Surplus Account*: At the end of the Fiscal Year, all moneys remaining in the Water Fund, after crediting the required amounts to the respective accounts hereinabove provided for, and after making up any deficiency in the accounts described in subsections (a) to (c), inclusive, shall be credited to the Surplus Account. Funds in the Surplus Account shall first be used first to make up any subsequent deficiencies in any of the accounts hereinabove named and then, at the discretion of the Corporate Authorities, shall be used for one or more of the following purposes without any priority among them:

(1) For the purpose of making transfers to the Water Fund generally to be applied and treated as Net Revenues when transferred; or

(2) For the purpose of constructing or acquiring repairs, replacements, renewals, improvements or extensions to the System; or

(3) For the purpose of calling and redeeming Outstanding Bonds which are callable at the time; or

(4) For the purpose of purchasing Outstanding Bonds at the time at a price of not to exceed par and accrued interest to the date of purchase and the then applicable redemption premium, if any, thereon; or

(5) For the purpose of paying principal of and interest on any subordinate bonds or obligations issued for the purpose of acquiring or constructing repairs, replacements, renewals, improvements and extensions to the System; or

(6) For any other lawful System purpose.

(f) *Investments*. Money to the credit of the Water Fund prior to the monthly accounting and to the credit of the Operations and Maintenance Account may be invested pursuant to any authorization granted to municipal corporations by Illinois statute or court

decision. All interest on any funds so invested may be credited to the Water Fund and is hereby deemed and allocated as expended with the next expenditure(s) of money from the Water Fund, or may be credited to the account for which the investment was made; *provided, however*, the City shall credit such interest in such manner as to not cause the Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code and the related Treasury Regulations.

(g) *Future Bond Ordinances*. The Corporate Authorities may, at their discretion, adopt Future Bond Ordinances which create additional accounts in the Water Fund for the payment and security of water revenue bonds. Amounts in the Water Fund shall be credited to and transferred from said accounts in accordance with the terms of such Future Bond Ordinances.

Section 12. Additional Bonds, Subordinate Bonds and Future Bond Ordinances. Notwithstanding anything in this Ordinance to the contrary, the City reserves the right to:

(a) issue Additional Bonds from time to time payable from the Pledged Revenues, and any such Additional Bonds shall share ratably and equally in the Pledged Revenues with the Bonds; provided, however, that no Additional Bonds shall be issued except in accordance with the provisions of the Act as the Act is written at this time and demonstrating that the coverage required under the Act for the issuance of alternate bonds payable from the Pledged Revenues shall have been met for the Outstanding Bonds;

(b) issue Additional IEPA Loans from time to time payable from the Pledged Revenues, and any such Additional IEPA Loans may either be subordinate to or share ratably and equally in the Pledged Revenues with the Bonds, the Additional Bonds and the IEPA Loans;

(c) issue revenue bonds from time to time payable from the Pledged Revenues that are subordinate to the Bonds, the Additional Bonds, IEPA Loans and Additional IEPA, and are payable from the money remaining in the Surplus Account after making required deposits into the Alternate Bond and Interest Account (2023); and

(d) adopt Future Bond Ordinances to provide for the funding of accounts in the Water Fund having a prior and superior lien on the Pledged Revenues to the lien of the Alternate Bond and Interest Account (2023). Such accounts may include an account or a series of accounts

for the payment of and reserves for the Additional Bonds, the IEPA loans, the Additional IEPA loans or other obligations of the City payable from the Pledged Revenues; operating reserve accounts; renewal, replacement, depreciation, emergency reserve and the like accounts; rate stabilization and like accounts; or capital project accounts. Any such Future Bond Ordinances, or if not applicable, future ordinances of the City, may provide for the Bonds (and Additional Bonds) to be payable from such other or renamed account of the fund or funds related to the System as may be therein described, provided, however, that, in all events, the covenant to provide sufficient Pledged Revenues accumulating as herein provided shall continue to be met.

Section 13. General Covenants Regarding the System. The City covenants and agrees with the owners of the Outstanding Bonds, so long as there are any Outstanding Bonds, as follows:

(a) The City will maintain the System in good repair and working order, will operate the same efficiently and faithfully, and will punctually perform all duties with respect thereto required by the Constitution and laws of the State and of the United States of America.

(b) The City will establish and maintain at all times reasonable fees, charges and rates for the use and service of the System, and will provide for the collection thereof and the segregation and application of the revenues of the System in the manner provided by this Ordinance, sufficient at all times to pay Operation and Maintenance Expenses, to provide an adequate depreciation fund, to pay the principal of and interest on all bonds of the City which by their terms are payable solely from the revenues of the System, and to provide for the creation and maintenance of the respective accounts as provided in this Ordinance; provided, however, that the City need not charge itself for such services if in the previous Fiscal Year, Pledged Revenues, not including any payments made by the City, shall have met the requirements of this Ordinance.

(c) There shall be charged against all users of the System such rates and amounts for water services as shall be adequate to meet the requirements of this subsection.

(d) Whenever the coverage requirement in (b) above is not achieved or Pledged Taxes are extended and collected as provided in this Ordinance, the City covenants to have prepared as soon as practicable a rate and management study for the System by an independent engineer or consultant (experienced with respect to the System) employed for that purpose.

(e) The City from time to time will make all needful and proper repairs, replacements, additions, and betterments to the System so that it may at all times be operated properly and advantageously; and when any necessary equipment or facility shall have been worn out, destroyed, or otherwise is insufficient for proper use, it shall be promptly replaced so that the value and efficiency of the System shall be at all times fully maintained.

(f) The City will establish such rules and regulations for the control and operation of the System necessary for the safe, lawful, efficient and economical operation thereof.

(g) The City will make and keep proper books and accounts (separate and apart from all other records and accounts of said City), in which complete entries shall be made of all transactions relating to the System, and hereby covenants that within ninety (90) days following the close of each Fiscal Year, it will cause the books and accounts of the System to be audited by independent certified public accountants. Said audit will be available for inspection by the owners of any of the Bonds. Each such audit, in addition to whatever matters may be thought proper by the accountants to be included therein, shall, without limiting the generality of the foregoing, include the following:

(i) A statement in detail of income and expenditures of the System for such Fiscal Year.

(ii) A balance sheet as of the end of such Fiscal Year, including a statement of the amount held in each of the accounts of the Water Fund.

(iii) A list of all insurance policies in force at the end of the Fiscal Year, setting out as to each policy the amount of the policy, the risks covered, the name of the insurer, and the expiration date of the policy.

(iv) The number of System customers and users served by the System at the end of the Fiscal Year, the quantity of water supplied by the System and a summary of rates in effect at the end of such Fiscal Year for services of the System and any changes in such rates effective during such Fiscal Year.

(v) The accountant's comment regarding the manner in which the City has carried out the accounting requirements of this Ordinance, and the accountant's recommendations for any changes or improvements in the operation of the System.

(h) The City will keep the books and accounts for the System in accordance with generally accepted fund reporting practices for municipal enterprise funds; *provided, however*, that the monthly credits to the Alternate Bond and Interest Account (2023), the IEPA Loan Account and the Depreciation Account shall be in cash and said funds shall be held separate and apart in cash and investments. For the purpose of determining whether sufficient cash and investments are on deposit in such accounts under the terms and requirements of this Ordinance, investments shall be valued at the lesser of cost or the

market price on the valuation date thereof, which valuation date shall be not less frequently than annually.

(i) The City will take no action in relation to the System which would unfavorably affect the security of the Outstanding Bonds or the prompt payment of the principal and interest thereon. Any amounts received from the sale of property of the System shall be deposited to the credit of the Depreciation Account.

(j) Any owner of a Bond may proceed by civil action to compel performance of all duties required by law and this Ordinance, including the making and collecting of sufficient charges and rates for the services supplied by the System and the application of the income and revenue therefrom.

(k) The City will carry insurance on the System of the kinds and in the amounts which are usually carried by private parties operating similar properties, covering such risks as shall be recommended by a competent consulting engineer or insurance consultant employed by the City for the purpose of making such recommendations. All moneys received for loss under such insurance policies shall be deposited into the Depreciation Account and used in making good the loss or damage in respect of which they were paid, either by repairing the property damaged or making replacement of the property destroyed, or for other necessary capital improvements and provision for making good such loss or damage shall be made within ninety (90) days from the date of the loss. The payment of premiums for all insurance policies required under the provisions of this covenant shall be considered an Operation and Maintenance Expense. The proceeds derived from any and all policies for workers' compensation or public liability shall be paid into the Operation and Maintenance Account and used in paying the claims on account of which they were received.

(l) The City covenants, to the extent permitted by law, that the City will not grant a franchise or other rights for the operation of any competing water system within the City or the area served by the System.

(m) Upon request, the City will provide annual financial statements, including the comprehensive annual financial report, if one is prepared, to any registered owner of the Bonds and the Outstanding Bonds.

Section 14. General Covenants Regarding the Bonds. The City covenants and agrees with the owners of the Bonds, so long as there are any Outstanding Bonds, as follows:

(a) For the purpose of providing funds required to pay the interest on the Bonds promptly when and as the same falls due, and to pay and discharge the principal thereof at maturity, the City covenants and agrees with the purchasers and the owners of the Bonds that the City will deposit the Pledged Revenues into the Water Fund. The Pledged Revenues are hereby pledged to the payment of the Bonds and the City covenants and agrees to provide for, budget, collect and apply the Pledged Revenues to the payment of

the Bonds and the provision of not less than an additional .25 times debt service, all in accordance with Section 15 of the Act.

(b) The City will punctually pay or cause to be paid from the Alternate Bond and Interest Account (2023) and from the Bond Fund (as hereinafter defined) the principal and interest to become due in respect to the Bonds in strict conformity with the terms of the Bonds and this Ordinance, and it will faithfully observe and perform all of the conditions, covenants and requirements thereof and hereof.

(c) The City will pay and discharge, or cause to be paid and discharged, from the Alternate Bond and Interest Account (2023), the 2023 Pledged Revenues Account and the Bond Fund any and all lawful claims which, if unpaid, might become a lien or charge upon the Pledged Moneys, or any part thereof, or upon any funds in the hands of the Bond Registrar, or which might impair the security of the Bonds. Nothing contained herein shall require the City to make any such payment so long as the City in good faith shall contest the validity of said claims.

(d) The City will adopt a budget and approve appropriations for the Water Fund prior to the beginning of each Fiscal Year, subject to all applicable State laws, providing for the payment of all sums to be due in such Fiscal Year so as to comply with the terms of this Ordinance. The budget may include in its estimate of income the use of available surplus moneys or other funds of the City appropriated for such purposes. If during such Fiscal Year there are extraordinary receipts or payments of unusual cost, the City will adopt an amended budget for the remainder of such Fiscal Year, providing for receipts or payments pursuant hereto.

(e) The City will preserve and protect the security of the Bonds and the rights of the registered owners of the Bonds, and will warrant and defend their rights against all claims and demands of all persons. From and after the sale and delivery of any of the Bonds by the City, the Bonds shall be incontestable by the City.

(f) The City will adopt, make, execute and deliver any and all such further ordinances, resolutions, instruments and assurances as may be reasonably necessary or proper to carry out the intention of, or to facilitate the performance of, this Ordinance, and for the better assuring and confirming unto the registered owners of the Bonds of the rights and benefits provided herein.

(g) As long as any Bonds are Outstanding, the City will take no action or fail to take any action which in any way would adversely affect the ability of the City to levy the Pledged Taxes and to collect and to segregate the Pledged Revenues and the Pledged Taxes. The City and its officers will comply with all present and future applicable laws in order to assure that the Pledged Taxes can be levied and extended and that the Pledged Moneys may be collected and deposited as provided in this Ordinance.

(h) Once issued, the Bonds shall be and forever remain until paid or defeased the general obligation of the City, for the payment of which its full faith and credit are pledged,

and shall be payable, in addition to the Pledged Revenues, from the levy of the Pledged Taxes as provided in the Act.

Section 15. 2023A Pledged Revenues Account. There is hereby created a special fund of the City, which fund shall held separate and apart from all other funds and accounts of the City and shall be known as the "2023A Pledged Revenues Account" (the "*2023A Pledged Revenues Account*"). The purpose of the 2023A Pledged Revenues Account is to provide a fund to receive and disburse the Pledged Revenues from time to time for the payment of the Bonds. All payments with respect to the Bonds from the Pledged Taxes shall be made directly from the 2023A Bond Fund (as hereinafter defined). The 2023A Pledged Revenues Account constitutes a trust fund established for the purpose of carrying out the covenants, terms and conditions imposed upon the City by this Ordinance.

Pledged Revenues, other than that portion of the Pledged Revenues required for the payment of the Series 2014C Bonds pursuant to the Series 2014C Bond Ordinance, shall be withdrawn from the Water Fund by the City from time to time and shall be deposited into the Series 2023A Pledged Revenues Account in a timely fashion to permit the abatement of Pledged Taxes as described in Section 20 of this Ordinance and to provide for the timely payment of the principal of and interest on the Bonds.

Section 16. Use of Bond Proceeds. The proceeds derived from the sale of the Bonds shall be used as follows:

(a) Accrued interest, if any, received by the City upon the sale of the Bonds shall be remitted by the Treasurer for deposit into the 2023A Pledged Revenues Account and used to pay first interest coming due on the Bonds.

(b) The City shall then allocate from the Bond proceeds the sum necessary for expenses incurred in the issuance of the Bonds which shall be deposited into an "*Expense Fund*" to be maintained by the Treasurer and disbursed for such issuance expenses from time to time in accordance with usual City procedures for the disbursement of funds, which disbursements are hereby expressly authorized. Moneys not disbursed from the Expense Fund within six (6) months shall be transferred by the City for deposit into the Project Fund, and any deficiencies in the Expense Fund shall be paid by disbursement from the Project Fund.

(c) The remaining Bond proceeds shall be set aside in a separate fund hereby created and designated as the "Project Fund" (the "*Project Fund*"), which the City shall maintain as a separate and segregated account. Moneys in said fund shall be withdrawn and disbursed by the City from time to time as needed for the payment of costs of the Project, and paying the fees and expenses incidental thereto not paid out of the Expense Fund.

(d) Funds on deposit in the Project Fund may be invested by the Treasurer in any lawful manner. All investment earnings in the Project Fund shall first be reserved and transferred to such other account as and to the extent necessary to pay any "excess arbitrage profits" or "penalty in lieu of rebate" under Section 148 of the Code to maintain the tax-exempt status of the Bonds, and the remainder shall be retained in the Project Fund and for payment of costs of the Project.

(e) If the Project has been completed and accepted, the engineer or architect or City officer in responsible charge of the Project shall certify to the Corporate Authorities the fact that the work has been completed and accepted, and upon approval of such certification by the Corporate Authorities, funds (if any) remaining in the Project Fund shall be credited by the Treasurer to the Bond Fund for payment of the Bonds; and the Project Fund shall be closed.

Section 17. 2023 Alternate Bond Fund. There is hereby created a special fund of the City, which fund shall be held by the Paying Agent separate and apart from all other funds and accounts of the City and shall be known as the "2023 Alternate Bond Fund" (the "*Bond Fund*"). The purpose of the Bond Fund is to provide a fund to receive and disburse the Pledged Taxes for any (or all) of the Bonds. The Bond Fund constitutes a trust fund established for the purpose of carrying out the covenants, terms and conditions imposed upon the City by this Ordinance. Any Pledged Taxes received by the City shall promptly be deposited into the Bond Fund.

Section 18. Pledged Taxes; Tax Levy. For the purpose of providing additional funds required to pay the interest and principal on the Bonds promptly when and as the same falls due, and to pay and discharge the principal thereof at maturity, and as provided in Section 15 of the Act, there is hereby levied upon all of the taxable property within the City, in the years for which any of the Bonds are outstanding, a direct annual tax sufficient for that purpose; and there be and there hereby is hereby levied on all of the taxable property in the City the direct annual taxes as

provided in the relevant Bond Order; provided, however, that the aggregate amount of Pledged Taxes levied for any one year shall not exceed the amount of $700,000.

These taxes shall be in addition to and in excess of all other taxes levied by the City. Following any extension of Pledged Taxes, interest or principal coming due at any time when there are insufficient funds on hand from the Pledged Taxes to pay the same shall be paid promptly when due from current funds on hand in advance of the collection of the Pledged Taxes levied pursuant to the Bond Order; and when the Pledged Taxes shall have been collected, reimbursement shall be made to said funds in the amount so advanced.

The City covenants and agrees with the Purchaser and registered owners of the Bonds that so long as any of the Bonds remain outstanding, the City will take no action or fail to take any action which in any way would adversely affect the ability of the City to collect the Pledged Revenues or to levy and collect the Pledged Taxes. The City and its officers will comply with all present and future applicable laws in order to assure that the Pledged Revenues will be available and that the Pledged Taxes will be levied, extended and collected as provided herein and in the relevant Bond Order, and deposited into the Bond Fund.

Section 19. Filing with County Clerk. Promptly, as soon as this Ordinance and each Bond Order becomes effective, a copy of this Ordinance, as certified by the City Clerk, shall be filed with the County Clerk; and said County Clerk shall in and for each of the levy years as provided in the relevant Bond Order ascertain the rate percent required to produce the aggregate Pledged Taxes hereinbefore provided to be levied in each of said years; and said County Clerk shall extend the same for collection on the tax books in connection with other taxes levied in said years in and by the City for general corporate purposes of the City; and the County Clerk, or other appropriate officer or designee, shall remit the Pledged Taxes for deposit to the credit of the Bond Fund, and in said years the Pledged Taxes shall be levied and collected by and for and on behalf of the City

in like manner as taxes for general corporate purposes for said years are levied and collected, and in addition to and in excess of all other taxes. The Pledged Taxes are hereby irrevocably pledged to and shall be used only for the purpose of paying principal of and interest on the Bonds. It is hereby expressly provided that in the event there shall be moneys both to the credit of the Alternate Bond and Interest Account (2023) and the Bond Fund, the Bond Fund shall be fully depleted before moneys to the credit of the Alternate Bond and Interest Account (2023) shall be used to pay principal of and interest on the Bonds.

Section 20. Abatement of Pledged Taxes. Whenever funds are or will be available to pay any principal of or interest on the Bonds when due, so as to enable the abatement of the Pledged Taxes levied for the same, the Corporate Authorities shall direct the deposit of such funds into the Water Fund in an amount sufficient to pay such principal of or interest on the Bonds and shall direct the abatement of the Pledged Taxes. Proper notification of such abatement shall be filed with the County Clerk in a timely manner to effect such abatement. The Corporate Authorities covenant that they will abate the levy of the Pledged Taxes only to the extent of the funding of the Water Fund from the Pledged Revenues or other available funds.

Section 21. Defeasance. Any Bond which (a) is paid and cancelled, (b) which has matured and for which sufficient sums been deposited with the Bond Registrar to pay all principal and interest due thereon, or (c) for which sufficient United States of America dollars and direct United States Treasury obligations have been deposited with the Bond Registrar or similar institution to pay, taking into account investment earnings on such obligations, all principal of and interest on the Bond when due at maturity or as called for redemption, if applicable, pursuant to an irrevocable escrow or trust agreement, shall cease to have any lien on or right to receive or be paid from the Pledged Revenues or the Pledged Taxes and shall no longer have the benefits of any covenant for the registered owner of the outstanding Bond as set forth herein as such relates to lien

and security of the outstanding Bond in the Pledged Revenues or the Pledged Taxes. All covenants relative to the tax-exempt status of the Bond; and payment, registration, transfer, and exchange, are expressly continued for the Bond whether an outstanding Bond or not.

Section 22. Continuing Disclosure Undertaking. Any Designated Officer is hereby authorized, empowered and directed to execute and deliver a Continuing Disclosure Undertaking, in customary form as approved by Bond Counsel and approved by the City Attorney, to effect compliance with Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended. When such Continuing Disclosure Undertaking is executed and delivered on behalf of the City, it will be binding on the City and the officers, agents, and employees of the City, and the same are hereby authorized and directed to do all such acts and things and to execute all such documents as may be necessary to carry out and comply with the provisions of such Continuing Disclosure Undertaking as executed and delivered. Notwithstanding any other provisions hereof, the sole remedies for failure to comply with such Continuing Disclosure Undertaking shall be the ability of the beneficial owner of any Bond to seek mandamus or specific performance by court order, to cause to the City to comply with its obligations thereunder.

Section 23. General Tax Covenants. The City agrees to comply with, and as of the date hereof reasonably expects that it will comply with, all provisions of the Code which, if not complied with by the City, would cause the Bonds not to be tax-exempt. As used herein, "*tax-exempt*" means, with respect to the Bonds, the status of interest paid and received thereon as not includible in the gross income of the owners thereof under the Code for federal income tax purposes except to the extent that such interest is taken into account in computing an adjustment used in determining the federal alternative minimum tax. It shall not be an event of default under this Ordinance if the interest on any of the Bonds is not tax-exempt pursuant to any provision of

the Code which is not currently in effect and in existence on the date of the issuance of the Bonds.

In furtherance of the foregoing provisions, but without limiting their generality, the City agrees: (a) through its officers, to make such further specific covenants, representations as shall be truthful, and assurances as may be necessary or advisable; (b) to comply with all representations, covenants and assurances contained in certificates or agreements as may be prepared by counsel approving the Bonds, including, without limitation, a Tax Certificate; (c) to consult with such counsel and to comply with such advice as may be given; (d) to file such forms, statements and supporting documents as may be required and in a timely manner; and (e) if deemed necessary or advisable by its officers, to employ and pay fiscal agents, financial advisors, attorneys and other persons to assist the City in such compliance.

The City further certifies and covenants as follows with respect to the requirements of Section 148(f) of the Code, relating to the rebate of "excess arbitrage profits" (the "*Rebate Requirement*") to the United States:

(A) Unless an applicable exception to the Rebate Requirement is available to the City, the City will meet the Rebate Requirement.

(B) Relating to applicable exceptions, the Treasurer or the Mayor is hereby authorized to make such elections under the Code as either such officer shall deem reasonable and in the best interests of the City. If such election may result in a "penalty in lieu of rebate" as provided in the Code, and such penalty is incurred (the "*Penalty*"), then the City shall pay such Penalty.

(C) The officers of the City shall cause to be established, at such time and in such manner as they may deem necessary or appropriate hereunder, a "2023 Bonds Rebate [or Penalty, if applicable] Fund" (the "*148 Compliance Fund*") for the Bonds, and such officers shall further, not less frequently than annually, cause to be transferred to the 148 Compliance Fund the amount

determined to be the accrued liability under the Rebate Requirement or Penalty. Said officers shall cause to be paid to the United States Treasury, without further order or direction from the Corporate Authorities, from time to time as required, amounts sufficient to meet the Rebate Requirement or to pay the Penalty.

(D) Interest earnings in the Bond Fund are hereby authorized to be transferred, without further order or direction from the Corporate Authorities, from time to time as required, to the 148 Compliance Fund for the purposes herein provided; and proceeds of the Bonds and other funds of the City are also hereby authorized to be used to meet the Rebate Requirement or to pay the Penalty, but only if necessary after application of investment earnings as aforesaid and only as appropriated by the Corporate Authorities.

The Corporate Authorities also certify and further covenant with the Purchaser and the holders and registered owners of the Bonds from time to time outstanding that so long as any of the Bonds remain unpaid, moneys on deposit in any fund or account in connection with the Bonds, whether or not such moneys were derived from the proceeds of the sale of the Bonds or from any other source, will not be used in a manner which will cause the Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code, and any lawful regulations promulgated thereunder, as the same presently exist, or may from time to time hereafter be amended, supplemented or revised. The Corporate Authorities reserve the right, however, to make any investment of moneys on deposit in any fund or account in connection with the Bonds permitted by state law, if, when and to the extent that said Section 148 or regulations promulgated thereunder shall be repealed or relaxed or shall be held void by final decision of a court of competent jurisdiction, but only if any investment made by virtue of such repeal, relaxation or decision would not, in the opinion of an attorney at law or a firm of attorneys of nationally recognized standing in

matters pertaining to tax-exempt bonds, result in the inclusion of interest on the Bonds in gross income for federal income tax purposes.

The Corporate Authorities are hereby authorized and directed to make such further covenants, estimates, representation, or assurances as may be necessary or advisable to the end that the Bonds not be "arbitrage bonds" as aforesaid.

Section 24. Not Private Activity Bonds. None of the Bonds is or shall be a "private activity bond" as defined in Section 141(a) of the Code. In support of such conclusion, the City certifies, represents and covenants as follows:

(a) Not more than five percent (5%) of the net proceeds and investment earnings of the Bonds is to be used, directly or indirectly, in any activity carried on by any person other than a state or local governmental unit.

(b) Not more than five percent (5%) of the amounts necessary to pay the principal of and interest on the Bonds will be derived, directly or indirectly, from payments with respect to any private business use by any person other than a state or local governmental unit.

(c) None of the proceeds of the Bonds is to be used, directly or indirectly, to make or finance loans to persons other than a state or local governmental unit.

(d) No user of the Project other than the City or another governmental unit will use the same on any basis other than the same basis as the general public; and no person, other than the City or another governmental unit, will be a user of the Project as a result of (i) ownership or (ii) actual or beneficial use pursuant to a lease, a management or incentive payment contract other than as expressly permitted by the Code, or (iii) any other arrangement.

Section 25. Not Arbitrage Bonds. The Bonds shall not be "arbitrage bonds" under Section 148 of the Code; and the Code certifies, represents, and covenants as follows:

(a) With respect to the Project, the City has heretofore incurred or within six (6) months after delivery of the Bonds expects to incur substantial binding obligations to be paid for with money received from the sale of the Bonds, said binding obligations comprising binding contracts for the Project in not less than the amount of five percent (5%) of the proceeds of the Bonds allocable to the Project.

(b) More than eighty-five percent (85%) of the proceeds of the Bonds allocable to the Project will be expended on or before three (3) years for the purpose of paying the costs of the Project.

(c) All of the principal proceeds of the Bonds allocable to the Project and investment earnings thereon will be used, needed, and expended for the purpose of paying the costs of the Project including expenses incidental thereto.

(d) Work on the Project is expected to proceed with due diligence to completion.

(e) Except for the Bond Fund, the City has not created or established and will not create or establish any sinking fund reserve fund or any other similar fund to provide for the payment of the Bonds. The Bond Fund has been established and will be funded in a manner primarily to achieve a proper matching of revenues and debt service and will be depleted at least annually to an amount not in excess of $1/12^{th}$ the particular annual debt service on the Bonds. Money deposited into the Bond Fund will be spent within a thirteen (13) month period beginning on the date of deposit, and investment earnings in the Bond Fund will be spent or withdrawn from the Bond Fund within a one (1) year period beginning on the date of receipt.

(f) Amounts of money related to the Bonds required to be invested at a yield not materially higher than the yield on the Bonds, as determined pursuant to such tax certifications or agreements as the City officers may make in connection with the issuance of the Bonds, shall be so invested; and appropriate City officers are hereby authorized to make such investments.

Section 26. Registered Form. The City recognizes that Section 149(a) of the Code requires the Bonds to be issued and to remain in fully registered form in order to be and remain tax-exempt. In this connection, the City agrees that it will not take any action to permit the Bonds to be issued in, or converted into, bearer or coupon form.

Section 27. List of Bondholders. The Bond Registrar shall maintain a list of the names and addresses of the owners of all Bonds and upon any transfer shall add the name and address of the new owner and eliminate the name and address of the transferor owner.

Section 28. Opinion of Counsel Exception. The City reserves the right to use or invest moneys in connection with the Bonds in any manner, notwithstanding the tax-related covenants set forth herein, *provided* it shall first have received an opinion from Saul Ewing LLP, or any other attorney or a firm of attorneys of nationally recognized standing as bond counsel, to the effect that

use or investment of such moneys as contemplated is valid and proper under applicable law and this Ordinance and, further, will not adversely affect the tax-exempt status for the Bonds.

Section 29. Duties of Bond Registrar. If requested by the Bond Registrar or the Paying Agent, or both, any Designated Officer is authorized to execute the Bond Registrar's standard form of agreement between the City and the Bond Registrar or Paying Agent with respect to the obligations and duties of the Bond Registrar hereunder which may include the following:

(a) to act as bond registrar, paying agent, authenticating agent and transfer agent as provided herein;

(b) to maintain a list of the owners of the Bonds as set forth herein and to furnish such list to the City upon request, but otherwise to keep such list confidential;

(c) to give notice of redemption of Bonds as provided herein;

(d) to cancel and/or destroy Bonds which have been paid at maturity or upon earlier redemption or submitted for exchange or transfer;

(e) to furnish the City at least annually a certificate with respect to Bonds cancelled and/or destroyed; and

(f) to furnish the City at least annually an audit confirmation of Bonds paid, Bonds outstanding and payments made with respect to interest on the Bonds.

Section 30. Provisions a Contract. The provisions of this Ordinance shall constitute a contract between the City and the owners of the outstanding Bonds and no changes, additions, or alterations of any kind shall be made hereto, except as herein provided, so long as there are any outstanding Bonds. No consent or waiver, express or implied, to or of any breach or default in the performance of any obligation under this Ordinance shall constitute a consent or waiver to or of any other breach or default in the performance of the same or any other obligation.

Section 31. Insurance. Upon a finding by the Authorized Officers that the purchase of a Policy for all or any portion of the Bonds is likely to facilitate the marketing and sale of the Bonds and permit completion of such sale in a timely fashion, and that such Policy is available at an

acceptable premium, as set forth in the Bond Order, the Designated Officers are hereby expressly authorized to accept the commitment of an Insurer to issue a commitment to provide a Policy in connection with the issuance and delivery of the Bonds. The terms, provisions, conditions and requirements of said Insurer set forth in said commitment as a condition to its issuance of such Policy shall be as attached to the Bond Order as Exhibit A thereto and shall thereupon be incorporated into this Ordinance by this reference as if set out at this place in full.

Section 32. Severability. If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the other provisions of this Ordinance.

Section 33. Repealer. All ordinances, resolutions or orders, or parts thereof, in conflict with the provisions of this Ordinance are to the extent of such conflict hereby repealed.

Section 34. Effective Date. This Ordinance shall be in full force and effect forthwith and immediately upon its passage.

Passed by the Corporate Authorities on July 11, 2023 by a roll call vote as follows:

AYES: Plocher, Funkhouser, Tarulis, Transier, Soling, Marek, Corneils, and Koch

NAYS: _____

ABSENT: _____

UNITED CITY OF YORKVILLE,
KENDALL COUNTY, ILLINOIS

By: _____
Mayor

APPROVED this 11th day of July, 2023.

Attest:

_____
City Clerk

STATE OF ILLINOIS)
) SS
COUNTY OF KENDALL)

CERTIFICATION OF ORDINANCE AND MINUTES

I, the undersigned, do hereby certify that I am the duly qualified and acting Clerk of the United City of Yorkville, Kendall County, Illinois (the *"City"*), and as such officer I am the keeper of the books, records, files, and journal of proceedings of the City and of the City Council thereof (the *"City Council"*).

I do further certify that the foregoing constitutes a full, true and complete transcript of the minutes of the meeting of the City Council held on the 11th day of July, 2023, insofar as same relates to the adoption of Ordinance No. 2023-24 entitled:

> AN ORDINANCE authorizing and providing for the issuance of General Obligation Bonds (Alternate Revenue Source), Series 2023, of the United City of Yorkville, Kendall County, Illinois, in the aggregate principal amount not to exceed $11,000,000, for the purpose of providing for certain enhancements to the City's water supply system, authorizing the execution of one or more bond orders and providing for the imposition of taxes to pay principal of and interest on such bonds,

a true, correct and complete copy of which said ordinance as adopted at said meeting appears in the foregoing transcript of the minutes of said meeting.

I do further certify that the deliberations of the City Council on the adoption of said ordinance were taken openly, that the vote on the adoption of said ordinance was taken openly, that said meeting was held at a specified time and place convenient to the public, that notice of said meeting was duly given to all of the news media requesting such notice, that said meeting was called and held in strict accordance with the provisions of the Illinois Municipal Code, as amended, and the Open Meetings Act of the State of Illinois, as amended, and that the City Council has complied with all of the applicable provisions of said Code and said Act and its procedural rules in the adoption of said ordinance.

IN WITNESS WHEREOF, I hereunto affix my official signature and the seal of the City, this 11th day of July, 2023.

Clerk, United City of Yorkville,
Kendall County, Illinois

(SEAL)

WIFIA PEA Questionnaire

General Information

The Programmatic Environmental Assessment (PEA) Environmental Questionnaire helps verify the applicability of the PEA for a Water Infrastructure Finance and Innovation Act (WIFIA)-funded project. Compliance with other federal and state environmental laws and regulations is required, as appropriate and applicable. These could include, for example, those requiring site-specific consultations with other federal, state, Tribal governments and agencies (such as consultation under the Endangered Species Act (ESA) or National Historic Preservation Act (NHPA)); completing National Environmental Policy Act (NEPA)-like requirements of the state; or complying with certain state requirements for water and wastewater systems.

Completing the PEA questionnaire can be an iterative process. The document may be revised after its initial submittal following project changes or clarifying questions made by EPA.

The borrower should submit a completed PEA questionnaire including all relevant information and supporting documents listed in this checklist.

General Instructions

All questions should be answered fully based on all available information. All resources impacts should be evaluated. All supporting documentation should be attached. Attach or provide project maps of the entire project and each project component. Additional maps may be provided for clarify. Maps should be labeled appropriately with relevant streets and roadways; map surroundings should be visible. Provide ArcGIS shapefiles of project components, as applicable.

Worksheet 1. Project Questions 1-4

COLUMNS A-B (Project Name/ Description): Include each of the project components or subprojects outlined in the WIFIA Application Section E.

COLUMN C (New/Replacement/Rehabilitation): Identify if components are new, replacements or rehabilitation.

COLUMN D (Stage of Design): Select the stage of design associated with that project component.

COLUMN E (Street Address or nearest intersection): Identify the street address for the project component, if no street address is available provide the nearest intersection.

COLUMN F (Site coordinates): Provide site latitude and longitude in decimal degrees.

COLUMN G (Current/past site use): Describe the current and past use of the project site.

COLUMN H (Landcover/vegetation): Describe the landcover or vegetation occuring at the project site.

Worksheet 2. Q5 Permit Table

COLUMNS A-F (Q5): Describe any environmental permits or approvals necessary for the proposed project (e.g., federal, state, local) and describe the status of any permits and approvals.

Worksheet 3. Q6 Ground Disturbance

COLUMNS A-D (Q6): Identify the estimated amount of ground-disturbing work for each project component or element, include the estimated maximum depth of ground-disturbance and area of ground disturbance. Note: The excel formatted PEA Questionnaire may be alternatively used as well.

Worksheets A-M. Impact Assessment

Assess anticipated impacts for each environmental resource. For each resource select from the drop-down if there are no impacts, less than significant impacts, or potentially significant impact as described in each resource section in the PEA.

- No Impact: Select “no impact, no potential to affect” if there is no potential for the project to affect a resource (e.g. the replacement of a valve doesn't involve ground disturbance, geology or soils), or select "no impact, not present" when the resource type is not present (e.g., the project falls outside a coastal zone), or select "no impact, present but not affected" when the resource is present but not be affected the proposed action (e.g. there are wetlands on site but they are being fully avoided).
- Less Than Significant Impact: Select “less than significant impact” if the resource identify will be impacted by the project or if the incorporation of mitigation measures will reduce an effect from “potentially significant impact” to “less than significant impact”.
- Potentially Significant Impact: Select “potentially significant impact” if impacts remain significant despite the incorporation of mitigation measures, or if impacts fall outside the scope of those considered in the PEA. Select this response for a proposed action that is likely to have significant effects or when the significance of the effects is unknown.

PEA EXAMPLES TO REDUCE RESOURCE IMPACTS: Select from the drop-down if the example measures to reduce impacts are not applicable to the project component, not incorporated into the project component or have been incorporated into the project component. These example measures are not exhaustive. Additional measures to reduce impacts beyond the examples should be included in the narrative description.

NARRATIVE DESCRIPTION: Provide a narrative for each selected “less than significant impact” or “potentially significant impact”. Narrative descriptions should Include a description of the impact(s) (both construction and operational impacts), provide acreages or linear footage of impacts as appropriate to describe the amount of impact, if known. Include a description of associated mitigation measures, Best Management Practices (BMPs), and/or Standard Operating Procedures (SOPs) incorporated into the project to avoid, minimize or compensate for impacts (include only those not already addressed in the PEA Examples to Reduce Resource Impacts section).
Provide adequate supporting references and citations for impact and mitigation assessments.

Q1 WIFIA Borrower:	United City of Yorkville
Q2 WIFIA Project Name:	Yorkville WaterLink Project
Q3 Identify which project type(s) best describe the project:	Drinking Water Project

		Q4		
Project Component	Project Description	New/Replacement/Rehabilitation	Current Stage of Design	***If under construction,*** *what v*
North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	This project consists of the North DWC Delivery Station required to connect to/receive supply from DWC (separate building owned by DWC, constructed by City), new components to be constructed at the BP/PRV and Receiving Station which is separate from the DWC controlled Delivery Station (same site). Items include above ground pumping and chlorine station, additional structure and piping associated with receiving station at BPS, architectural components, electrical, connection to existing water main, associated water main piping and valves, SCADA upgrades, and generator. Also includes new Altitude Valve for NE EWST.	New	Planning/Early Design	N/A
North Receiving Station Ground Storage Tank (2.0 MG)	This project consists of the dome roof, prestressed wirewound concrete tank (assumes no special construction for aesthetic features), mixing system, yard piping and site work, SCADA implementation, electrical service, landscaping and security fencing. The tank capacity is assumed to be two million gallons (2 MG).	New	Planning/Early Design	N/A
South Delivery Station and Receiving Station (BPS)	This project consists of the South DWC Delivery Station required to connect to/receive supply from DWC (separate building owned by DWC, constructed by City), new components to be constructed at the BP/PRV and Receiving Station which is separate from the DWCcontrolled Delivery Station (same site). Items include above ground pumping and chlorine station, additional structure and piping associated with receiving station at BPS, architectural components, electrical, connection to existing water main, associated water main piping and valves, SCADA upgrades, and generator. Also includes new electrical service, security fencing, and Land Acquisition.	New	Planning/Early Design	N/A
South Receiving Station Ground Storage Tank (2.0 MG)	This project consists of the dome roof, prestressed wirewound concrete tank (assumes no special construction for aesthetic features), mixing system, yard piping and site work, SCADA implementation, electrical service, landscaping and security fencing. The tank capacity is assumed to be two million gallons (2 MG).	New	Planning/Early Design	N/A
Blue Stem Drive Water Main Improvements	This project consists of replacing an estimated 716 LF of existing 8" water main with 16" water main along Bluestem Drive, between McHugh Road and Prairie Rose Lane, which is the minimum recommended water main improvements for hydraulics to ensure adequate distribution from the North Receiving Station.	Replacement	Planning/Early Design	N/A
Montgomery Interconnect	This project consists of construction water main and valves to provide an interconnection with the Village of Montgomery. This is recommended to reduce risks in case of emergency. An IGA will be needed.	New	Planning/Early Design	N/A
2024 Water Main Replacement	This project consists of replacing existing water main. This project is needed to assist the City in achieving a reduction in water loss.	Replacement	Final Design	N/A
2025 Water Main Replacement	This project consists of replacing existing water main. This project is needed to assist the City in achieving a reduction in water loss.	Replacement	Planning/Early Design	N/A
2026 Water Main Replacement	This project consists of replacing existing water main. This project is needed to assist the City in achieving a reduction in water loss.	Replacement	Planning/Early Design	N/A
2027 Water Main Replacement	This project consists of replacing existing water main. This project is needed to assist the City in achieving a reduction in water loss.	Replacement	Planning/Early Design	N/A
Well No. 7 Standby Generator	New Standby Generator for Well No. 7, which has a 400 HP motor, and Water Treatment Plant. Would allow operation of the well and Water Treatment Plant during a power outage.	New	Final Design	N/A
DWC Water Transmission Mains	This project consists of design and construction of the water transmission mains from DWC to both connection points on Yorkville's system (total cost to be shared between Yorkville, Montgomery, and Oswego - costs below reflect Yorkville's share of the total costs).	New	Planning/Early Design	N/A

				Attachments
Street Address or Nearest Intersection	Site Coordinates (in Decimal Degrees)	Current/Past Site Use	Site Land Cover or Vegetation	
3099 Lehman Crossing, Yorkville, IL 60560	41.693180, -88.396106	The North Receiving Station improvements are located entirely within the property of an existing previously developed municipal water treatment site which is owned and maintained by the United City of Yorkville, and which is comprised of an existing water treatment plant building and elevated water storage tank.	Urban Developed	
3099 Lehman Crossing, Yorkville, IL 60560	41.693180, -88.396106	The North Receiving Station improvements are located entirely within the property of an existing previously developed municipal water treatment site which is owned and maintained by the United City of Yorkville, and which is comprised of an existing water treatment plant building and elevated water storage tank.	Unvegetated Land	
To Be Determined - The City is currently negotiating a new site and associated land acquisition due to results of the """	N/A	To Be Determined	To Be Determined	
To Be Determined - The City is currently negotiating a new site and associated land acquisition.	N/A	To Be Determined	To Be Determined	
Water Main on Bluestem Dr between Prairie Rose Ln and McHugh Rd	41.668958, -88.431480	The project area is developed and in an urban setting.	Paved	
Located at the intersection of Galena Rd and Cannonball Trl	41.700167, -88.421084	The location of the water main is adjacent to previously developed areas including a residential subdivision and roadways, as well as along a road realignment currently being completed to improve the intersection of Galena Road, Cannonball Trail and Dickson Road for improved traffic safety.	Urban Developed	
The location of the proposed water main replacements are in the downtown area of the United City of Yorkville	41.630797, -88.447852	The project area is developed and in an urban setting.	Urban Developed	
The location of the proposed water main replacements are in the downtown area of the United City of Yorkville	41.641515, -88.449418	The project area is developed and in an urban setting.	Urban Developed	
The location of the proposed water main replacements are in the downtown area of the United City of Yorkville	41.641313, -88.444778	The project area is developed and in an urban setting.	Urban Developed	
The location of the proposed water main replacements are in the downtown area of the United City of Yorkville	41.637729, -88.452611	The project area is developed and in an urban setting.	Urban Developed	
2224 Tremont Ave, Yorkville, IL 60560	41.615537, -88.424689	The project area is within an existing water treatment facility	Unvegetated Land	
Intersection of Book Rd and 75th St, Napervi	41.746817, -88.185248		Urban Developed	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alteration of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Lake Michigan Allocation Permit		Illinois Department of Natural Resources	Received	9/18/2023 (Draft)
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	9/13/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	7/19/2023

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
North Receiving Station Ground Storage Tank (2.0 MG)	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	9/13/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	7/19/2023
	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
South Delivery Station and Receiving Station (BPS)	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Lake Michigan Allocation Permit		Illinois Department of Natural Resources	Received	9/18/2023 (Draft)
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	9/13/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	7/19/2023
	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
South Receiving Station Ground Storage Tank (2.0 MG)	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Received	9/19/2023
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	9/13/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	7/19/2023
	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
Blue Stem Drive Water Main Improvements	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
Montgomery Interconnect	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
2024 Water Main Replacement	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
2025 Water Main Replacement	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
2026 Water Main Replacement	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
2027 Water Main Replacement	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Not Applicable	
	Clean Water Act Section 401	Water quality certification	EPA/State	Not Applicable	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
Well No. 7 Standby Generator	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Not Applicable	
	Clean Water Act Section 402		EPA/State	Not Applicable	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Not Applicable	
	Floodplain Permit		State/Local	Not Applicable	
	Farmland Policy Protection Act		USDA	Not Applicable	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Not Applicable	
	Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties	Cultural Resources	Illinois Department of Natural Resources	Received	8/25/2023
	Endangered Species Protection and Natural Areas Preservation (Part 1075) - (Consultation Under 17 Ill. Adm. Code Part 1075 and 1090)	Ecological Compliance Assessment Tool	Illinois Department of Natural Resources	Received	8/3/2023
	Clean Water Act Section 404	Impacts to US wetlands and waters	USACE/State	Unclear if needed at this time	
	Clean Water Act Section 401	Water quality certification	EPA/State	Unclear if needed at this time	
	Section 10 of the Rivers and Harbors Act of 1899 and/or Section 103 of the Marine Protection, Research, and Santuaries Act	Impacts to navigable waters	USACE	Unclear if needed at this time	

Permit Table

Q5					
Project Component	Permit/Authorization	Purpose	Responsible Agency	Status	Date Issued/Application Date/Expected Approval Date
DWC Water Transmission Mains	Clean Water Act Section 402		EPA/State	Unclear if needed at this time	
	Section 408 (Section 14 of the Rivers and Harbors Act of 1899)	Permission for alternation of USACE owned or operated assets	USACE	Unclear if needed at this time	
	Floodplain Permit		State/Local	Unclear if needed at this time	
	Farmland Policy Protection Act		USDA	Unclear if needed at this time	
	Coastal Zone Permit/Approval		State Coastal Zone Management Agency	Unclear if needed at this time	

Q6			
Project Component	Estimated Volume of Ground Disturbance	Estimate Maximum Depth of Excavation	Estimated Area (*length x width*) of Ground Disturbance
North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	1,270 cu ft	0.33 ft	40 ft x 40 ft for Delivery Station and 45 ft x 50 ft for BPS
North Receiving Station Ground Storage Tank (2.0 MG)	2,750 cu ft	0.33 ft	Diameter: 103 ft
South Delivery Station and Receiving Station (BPS)	1,270 cu ft	0.33 ft	40 ft x 40 ft for Delivery Station and 45 ft x 50 ft for BPS
South Receiving Station Ground Storage Tank (2.0 MG)	2,478 cu ft	0.33 ft	Diameter: 103 ft
Blue Stem Drive Water Main Improvements	18,616 cu ft	6.5 ft	Length: 716 ft, Width: 4 ft
Montgomery Interconnect	19,760 cu ft	6.5 ft	Length: 760 ft, Width: 4 ft
2024 Water Main Replacement	268,372 cu ft	6.5 ft	Length: 10,322 ft, Width: 4 ft
2025 Water Main Replacement	235,716 cu ft	6.5 ft	Length: 9,066 ft, Width: 4 ft
2026 Water Main Replacement	168,740 cu ft	6.5 ft	Length: 6,490 ft, Width: 4 ft
2027 Water Main Replacement	180,362 cu ft	6.5 ft	Length: 6,937 ft, Width: 4 ft
Well No. 7 Standby Generator	760 cu ft	5 ft	Length: 19 ft, Width: 8 ft
DWC Water Transmission Mains	4,362,644 cu ft	6.5 ft	Length: 167,794 ft, Width: 4 ft

A.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)
Land Use		
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	No Impact- Not Present	No Impact- Not Present
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Land Use Impacts:		
Compatibility with state and local government and private programs and policies.	Not Applicable	Not Applicable
Measures agreed upon in coordination with stakeholders.	Not Applicable	Not Applicable
Narrative Description		
A1		
A2		

A.

	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)	Blue Stem Drive Water Main Improvements
Land Use			
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Land Use Impacts:			
Compatibility with state and local government and private programs and policies.	Not Applicable	Not Applicable	Not Applicable
Measures agreed upon in coordination with stakeholders.	Not Applicable	Not Applicable	Not Applicable
Narrative Description			
A1			
A2			

A.

	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Land Use	**Anticipated Impact**		
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Land Use Impacts:			
Compatibility with state and local government and private programs and policies.	Not Applicable	Not Applicable	Not Applicable
Measures agreed upon in coordination with stakeholders.	Not Applicable	Not Applicable	Not Applicable
Narrative Description			
A1			
A2			

A.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator
Land Use			
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Land Use Impacts:			
Compatibility with state and local government and private programs and policies.	Not Applicable	Not Applicable	Not Applicable
Measures agreed upon in coordination with stakeholders.	Not Applicable	Not Applicable	Not Applicable
Narrative Description			
A1			
A2			

A.

DWC Water Transmission Mains

Land Use	
1. Conversions of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), to non-agricultural use as defined under the Farmland Protection Act 7 U.S.C. 4201 et seq.	No Impact- Not Present
2. Conflicts with any applicable land use plan, policy, act, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, habitat conservation plan, specific plan, local plan, or zoning ordinance).	No Impact- Not Present

PEA Examples to Reduce Land Use Impacts:	
Compatibility with state and local government and private programs and policies.	Not Applicable
Measures agreed upon in coordination with stakeholders.	Not Applicable

Narrative Description
A1
A2

B.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)
Air Quality		
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

B.

	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Air Quality		
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

B.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect
Air Quality		**Anticipat**
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

B.

	2024 Water Main Replacement	2025 Water Main Replacement
Air Quality	**ed Impact**	
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

B.

	2026 Water Main Replacement	2027 Water Main Replacement
Air Quality		
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

B.

	Well No. 7 Standby Generator	DWC Water Transmission Mains
Air Quality		
1. Conflicts with or delays in implementation of any applicable federal, state, or local air quality plan.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Violations of any federal air quality standards or contributions to an existing or projected air quality violation (including protected areas designated as mandatory Federal "Class I").	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Increases in any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Releases of objectionable odors, such as hydrogen sulfide.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Air Quality Impacts:		
Odor minimizing facility design or emission control devices.	Not Applicable	Not Applicable
Use of energy efficient technologies, such as anti-idling measures for construction vehicles.	Not Applicable	Not Applicable
Use of dust suppression techniques, such as water for dust suppression, reducing vehicle speeds, cover truck loads during transit, rumble strips, truck washing stations during construction.	Not Applicable	Not Applicable

C.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Noise and Vibration	Anticipated Impact			
1. Generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or generation of noise resulting in public health impacts.	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected
2. Permanent increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Generation of vibration that could increase the risk of structural damage.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Noise Impacts:				
Compliance with local ordinances and land use designations.	Incorporated	Incorporated	Incorporated	Incorporated
Placing intakes and exhausts facing away from sensitive receivers.	Incorporated	Incorporated	Incorporated	Incorporated
Attenuation of fan noise and pump and motor noise.	Incorporated	Incorporated	Incorporated	Incorporated
Use of general noise reduction measures.	Incorporated	Incorporated	Incorporated	Incorporated

Narrative Description				
C1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
C2	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.

C.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Noise and Vibration				
1. Generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or generation of noise resulting in public health impacts.	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected
2. Permanent increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Generation of vibration that could increase the risk of structural damage.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Noise Impacts:				
Compliance with local ordinances and land use designations.	Incorporated	Incorporated	Incorporated	Incorporated
Placing intakes and exhausts facing away from sensitive receivers.	Incorporated	Incorporated	Incorporated	Incorporated
Attenuation of fan noise and pump and motor noise.	Incorporated	Incorporated	Incorporated	Incorporated
Use of general noise reduction measures.	Incorporated	Incorporated	Incorporated	Incorporated

Narrative Description				
C1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
C2	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.

C.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Noise and Vibration				
1. Generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or generation of noise resulting in public health impacts.	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected	No Impact- Present but Not Affected
2. Permanent increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Temporary or periodic increases in ambient noise levels in the project vicinity above levels existing without the project.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Generation of vibration that could increase the risk of structural damage.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Noise Impacts:				
Compliance with local ordinances and land use designations.	Incorporated	Incorporated	Incorporated	Incorporated
Placing intakes and exhausts facing away from sensitive receivers.	Incorporated	Incorporated	Incorporated	Incorporated
Attenuation of fan noise and pump and motor noise.	Incorporated	Incorporated	Incorporated	Incorporated
Use of general noise reduction measures.	Incorporated	Incorporated	Incorporated	Incorporated

Narrative Description				
C1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
C2	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.	All engines and engine driven equipment used in relation to this project shall be equipped with an adequate muffler in constant operation and properly maintained to prevent excessive noise. Construction shall not be permitted between the hours of 7:00 p.m. to 7:00 a.m. during standard weekdays (excluding holidays). These hours shall be amended to 5:00 p.m. to 7:00 a.m. on Saturdays and no work on Sundays or Holidays. Any requested variations to these hours shall be approved by the City in writing, in advance of any operations outside of the hours detailed above.

D.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Geology and Soils				
1. Exposure of people or structures to hazards from unstable soils, landslide, lateral spreading, subsidence, liquefaction or collapse.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Increase in soil erosion or loss of topsoil.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Loss of economic viable mineral deposits, scientifically significant paleontological resources, or unique geological features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Geology and Soil:				
Use of erosion control and site stabilization BMPs.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of a stormwater pollution prevention plan and fugitive dust control plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Narrative Description				
D1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
D2	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.
D3				

D.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Geology and Soils	**Anticipated Impact**			
1. Exposure of people or structures to hazards from unstable soils, landslide, lateral spreading, subsidence, liquefaction or collapse.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Increase in soil erosion or loss of topsoil.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Loss of economic viable mineral deposits, scientifically significant paleontological resources, or unique geological features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Geology and Soil:				
Use of erosion control and site stabilization BMPs.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of a stormwater pollution prevention plan and fugitive dust control plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Narrative Description				
D1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
D2	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.
D3				

D.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Geology and Soils				
1. Exposure of people or structures to hazards from unstable soils, landslide, lateral spreading, subsidence, liquefaction or collapse.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Increase in soil erosion or loss of topsoil.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Loss of economic viable mineral deposits, scientifically significant paleontological resources, or unique geological features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Geology and Soil:				
Use of erosion control and site stabilization BMPs.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of a stormwater pollution prevention plan and fugitive dust control plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Narrative Description			
D1	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
D2	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.
D3			

E.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Water Resources				
1. Violations of any federal water quality standards or waste discharge requirements, including degradation of water quality.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Depletion or contamination of groundwater supplies (including sole-source aquifers) or negatively interfere with groundwater recharge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Alteration of the drainage pattern of a water resource that would result in an increase in erosion or flooding on- or off-site.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Soil erosion or stormwater runoff that increases sediment, pollutants, or contaminates into streams, rivers, or other water resources.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
5. Floodplain modification, development within, or redirection, as defined by Executive Order 11988.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
6. Increase in flood risk affecting loss on human safety, health, and welfare.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
7. Loss, degradation, or destruction of wetlands and waterbodies through direct removal, filling, hydrological interruption, or other means.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Alteration of wild and scenic rivers as defined by the Wild and Scenic River Act 16 U.S.C. 1271 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Conflicts with the Rivers and Harbors Act, 33 U.S.C. 403.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

11. Conflicts with the enforceable policies of a state's federally approved coastal management program (the Coastal Zone Management Act, 16 U.S.C. 1451 et seq.).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Water Resources:				
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Narrative Description				
E1				
E2	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:	The following requirements will be added to the contract documents:
E3	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to final acceptance and at such times during construction as necessary to maintain drainage and protect adjacent property.	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to	Erosion control measures shall be required as stated on the Plans or as deemed necessary by the Engineer and shall be in compliance with the most recent revisions to the Illinois Urban Manual. It should be noted that inlet protection is required at all open grate inlets tributary to disturbed areas and shall be periodically monitored for silt build up and should be emptied once the baskets are over half full. All areas disturbed during construction shall be seeded as soon as possible after final grading. The Contractor will be responsible for cleaning the pavement, drainage structures, swales, storm sewers and culverts prior to

E.

Water Resources	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
	Anticipated Impact			
1. Violations of any federal water quality standards or waste discharge requirements, including degradation of water quality.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Depletion or contamination of groundwater supplies (including sole-source aquifers) or negatively interfere with groundwater recharge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Alteration of the drainage pattern of a water resource that would result in an increase in erosion or flooding on- or off-site.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Soil erosion or stormwater runoff that increases sediment, pollutants, or contaminates into streams, rivers, or other water resources.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
5. Floodplain modification, development within, or redirection, as defined by Executive Order 11988.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
6. Increase in flood risk affecting loss on human safety, health, and welfare.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
7. Loss, degradation, or destruction of wetlands and waterbodies through direct removal, filling, hydrological interruption, or other means.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Alteration of wild and scenic rivers as defined by the Wild and Scenic River Act 16 U.S.C. 1271 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Conflicts with the Rivers and Harbors Act, 33 U.S.C. 403.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

11. Conflicts with the enforceable policies of a state's federally approved coastal management program (the Coastal Zone Management Act, 16 U.S.C. 1451 et seq.).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Water Resources:				
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Narrative Description				
E1				
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E.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Water Resources				
1. Violations of any federal water quality standards or waste discharge requirements, including degradation of water quality.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Depletion or contamination of groundwater supplies (including sole-source aquifers) or negatively interfere with groundwater recharge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Alteration of the drainage pattern of a water resource that would result in an increase in erosion or flooding on- or off-site.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
4. Soil erosion or stormwater runoff that increases sediment, pollutants, or contaminates into streams, rivers, or other water resources.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
5. Floodplain modification, development within, or redirection, as defined by Executive Order 11988.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
6. Increase in flood risk affecting loss on human safety, health, and welfare.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
7. Loss, degradation, or destruction of wetlands and waterbodies through direct removal, filling, hydrological interruption, or other means.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Alteration of wild and scenic rivers as defined by the Wild and Scenic River Act 16 U.S.C. 1271 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Conflicts with the Rivers and Harbors Act, 33 U.S.C. 403.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the Coastal Barrier Resources Act, 16 U.S.C. 3501 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

11. Conflicts with the enforceable policies of a state's federally approved coastal management program (the Coastal Zone Management Act, 16 U.S.C. 1451 et seq.).	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Water Resources:				
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Use of appropriate erosion and sediment control measures, BMPs, and site stabilization.	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
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F.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Biological Resources				
1. Jeopardizes the continued existence of any federally threatened or endangered species as identified by the U.S. Fish and Wildlife Service (USFWS) or National Marines Fisheries Service (NMFS) in the Endangered Species Act 16 U.S.C. Ch. 35 § 1531 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Adversely modify, fragment, or degrade of critical habitat by the USFWS or NMFS.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Modification, fragmentation, or degradation of biological sensitive areas other than designated critical habitat.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Harm to fauna, including mammals, birds, reptiles, amphibians, fish, and invertebrates.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Changes in vegetation type (native to the region), particularly if the vegetation type in the region is already highly fragmented because of human activity.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
6. Potential to injure or disturb marine mammals in U.S. waters as protected under Marine Mammal Protection Act as defined under 16 U.S.C 1361-1407.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

7. Reduction in the quality or quantity of Essential Fish Habitat as designated in accordance with the Magnuson Stevens Fisheries Conservation and Management Act.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Disturbances to Bald or Golden Eagles as defined under 16 U.S.C. 668 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Disturbances to migratory birds as defined under 16 U.S.C. 703-712 as amended.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the provisions of an adopted Habitat Conservation Plan as approved under section 10 (a) (1) (B) of the ESA or other federal habitat conservation plan.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
11. Introduction or spread of invasive species as identified under Executive Order 13112.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
12. Loss of or damage to wildlife resources due to the control or modification of any stream or other body of water protected by the Fish and Wildlife Coordination Act 16 U.S.C. 661-667e	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Biological Resources:				
Implementation of avoidance and minimization measures, and BMPs.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Adoption of recommendations and conservation measures from USFWS, NMFS and/or the National Oceanic and Atmospheric Administration.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Prevention of spills and leaks from vehicles and equipment.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of measures to minimize soil compaction and the transportation of noxious, invasive and pest species.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

F.

Biological Resources	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
	Anticipated Impact			
1. Jeopardizes the continued existence of any federally threatened or endangered species as identified by the U.S. Fish and Wildlife Service (USFWS) or National Marines Fisheries Service (NMFS) in the Endangered Species Act 16 U.S.C. Ch. 35 § 1531 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Adversely modify, fragment, or degrade of critical habitat by the USFWS or NMFS.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Modification, fragmentation, or degradation of biological sensitive areas other than designated critical habitat.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Harm to fauna, including mammals, birds, reptiles, amphibians, fish, and invertebrates.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Changes in vegetation type (native to the region), particularly if the vegetation type in the region is already highly fragmented because of human activity.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
6. Potential to injure or disturb marine mammals in U.S. waters as protected under Marine Mammal Protection Act as defined under 16 U.S.C 1361-1407.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

7. Reduction in the quality or quantity of Essential Fish Habitat as designated in accordance with the Magnuson Stevens Fisheries Conservation and Management Act.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Disturbances to Bald or Golden Eagles as defined under 16 U.S.C. 668 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Disturbances to migratory birds as defined under 16 U.S.C. 703-712 as amended.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the provisions of an adopted Habitat Conservation Plan as approved under section 10 (a) (1) (B) of the ESA or other federal habitat conservation plan.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
11. Introduction or spread of invasive species as identified under Executive Order 13112.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
12. Loss of or damage to wildlife resources due to the control or modification of any stream or other body of water protected by the Fish and Wildlife Coordination Act 16 U.S.C. 661-667e	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Biological Resources:				
Implementation of avoidance and minimization measures, and BMPs.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Adoption of recommendations and conservation measures from USFWS, NMFS and/or the National Oceanic and Atmospheric Administration.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Prevention of spills and leaks from vehicles and equipment.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of measures to minimize soil compaction and the transportation of noxious, invasive and pest species.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

F.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Biological Resources				
1. Jeopardizes the continued existence of any federally threatened or endangered species as identified by the U.S. Fish and Wildlife Service (USFWS) or National Marines Fisheries Service (NMFS) in the Endangered Species Act 16 U.S.C. Ch. 35 § 1531 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Adversely modify, fragment, or degrade of critical habitat by the USFWS or NMFS.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Modification, fragmentation, or degradation of biological sensitive areas other than designated critical habitat.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Harm to fauna, including mammals, birds, reptiles, amphibians, fish, and invertebrates.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Changes in vegetation type (native to the region), particularly if the vegetation type in the region is already highly fragmented because of human activity.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
6. Potential to injure or disturb marine mammals in U.S. waters as protected under Marine Mammal Protection Act as defined under 16 U.S.C 1361-1407.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present

7. Reduction in the quality or quantity of Essential Fish Habitat as designated in accordance with the Magnuson Stevens Fisheries Conservation and Management Act.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
8. Disturbances to Bald or Golden Eagles as defined under 16 U.S.C. 668 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
9. Disturbances to migratory birds as defined under 16 U.S.C. 703-712 as amended.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
10. Conflicts with the provisions of an adopted Habitat Conservation Plan as approved under section 10 (a) (1) (B) of the ESA or other federal habitat conservation plan.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
11. Introduction or spread of invasive species as identified under Executive Order 13112.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
12. Loss of or damage to wildlife resources due to the control or modification of any stream or other body of water protected by the Fish and Wildlife Coordination Act 16 U.S.C. 661-667e	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Biological Resources:				
Implementation of avoidance and minimization measures, and BMPs.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Adoption of recommendations and conservation measures from USFWS, NMFS and/or the National Oceanic and Atmospheric Administration.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Prevention of spills and leaks from vehicles and equipment.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of measures to minimize soil compaction and the transportation of noxious, invasive and pest species.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

G.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Cultural Resources				
1. Potential adverse effects to federally listed and eligible historical properties, including prehistoric and historic sites, historic districts and traditional cultural properties, as defined in 36 CFR part 800.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modification of unique paleontological resources or site or unique geologic features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Disturbance of human remains, including those interred outside of formal cemeteries.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Conflicts with Native American Graves Protection and Repatriation Act, as defined in 25 U.S.C. § 3001 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Conflicts with the Archaeological Resources Protection Act, as defined in 16 U.S.C. §§ 470AA-MM	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Cultural Resources:				
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of avoidance and minimization measures identified in consultation with the State Historic Preservation (SHPO) and/or Tribal Historic Preservation Officer (THPO).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Conduct surveys prior to construction.	Not Applicable	Not Applicable	Incorporated	Incorporated
Development of an unanticipated discoveries plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

G.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Cultural Resources	**Anticipated Impact**			
1. Potential adverse effects to federally listed and eligible historical properties, including prehistoric and historic sites, historic districts and traditional cultural properties, as defined in 36 CFR part 800.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modification of unique paleontological resources or site or unique geologic features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Disturbance of human remains, including those interred outside of formal cemeteries.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Conflicts with Native American Graves Protection and Repatriation Act, as defined in 25 U.S.C. § 3001 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Conflicts with the Archaeological Resources Protection Act, as defined in 16 U.S.C. §§ 470AA-MM	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Cultural Resources:				
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of avoidance and minimization measures identified in consultation with the State Historic Preservation (SHPO) and/or Tribal Historic Preservation Officer (THPO).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Conduct surveys prior to construction.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Development of an unanticipated discoveries plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

G.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Cultural Resources				
1. Potential adverse effects to federally listed and eligible historical properties, including prehistoric and historic sites, historic districts and traditional cultural properties, as defined in 36 CFR part 800.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modification of unique paleontological resources or site or unique geologic features.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Disturbance of human remains, including those interred outside of formal cemeteries.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Conflicts with Native American Graves Protection and Repatriation Act, as defined in 25 U.S.C. § 3001 et seq.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
5. Conflicts with the Archaeological Resources Protection Act, as defined in 16 U.S.C. §§ 470AA-MM	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Cultural Resources:				
Implementation of effective site selection and design.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of avoidance and minimization measures identified in consultation with the State Historic Preservation (SHPO) and/or Tribal Historic Preservation Officer (THPO).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Conduct surveys prior to construction.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Development of an unanticipated discoveries plan.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

H.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)
Socioeconomic and Environmental Justice			
1. Changes to the demographics around project location, such as population growth.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modifications to economic factors such as per capita income, unemployment rate, or poverty.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Alterations to social assets, such as housing or public services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Disproportionate high and adverse human health environmental effects on minority population and low-income populations as defined under Executive Order 12898.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Socioeconomic and Environmental Justice Impacts:			
Implementation of construction mitigation measures.	Not Applicable	Not Applicable	Not Applicable
Measures identified as a result of conducting meaningful public engagement to environmental justice communities.	Not Applicable	Not Applicable	Not Applicable

H.

	South Receiving Station Ground Storage Tank (2.0 MG)	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Socioeconomic and Environmental Justice	Anticipated Impact				
1. Changes to the demographics around project location, such as population growth.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modifications to economic factors such as per capita income, unemployment rate, or poverty.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Alterations to social assets, such as housing or public services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Disproportionate high and adverse human health environmental effects on minority population and low-income populations as defined under Executive Order 12898.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Socioeconomic and Environmental Justice Impacts:					
Implementation of construction mitigation measures.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Measures identified as a result of conducting meaningful public engagement to environmental justice communities.	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

H.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Socioeconomic and Environmental Justice				
1. Changes to the demographics around project location, such as population growth.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Modifications to economic factors such as per capita income, unemployment rate, or poverty.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
3. Alterations to social assets, such as housing or public services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
4. Disproportionate high and adverse human health environmental effects on minority population and low-income populations as defined under Executive Order 12898.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Socioeconomic and Environmental Justice Impacts:				
Implementation of construction mitigation measures.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Measures identified as a result of conducting meaningful public engagement to environmental justice communities.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

l.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)	Blue Stem Drive Water Main Improvements
Transportation and Traffic					
1. Changes to traffic patterns around the project area including, but not limited to, the arrival and departure of construction workers, vehicles hauling equipment and materials to the site, road closures or detours, and slower movement and larger turning radii of truck going to project site.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	Less Than Significant Impact
PEA Examples to Reduce Transportation and Traffic Impacts:					
Mitigation measures identified in coordination with local agencies.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Use of warning signage, flag persons.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Use of lane closures and detours as necessary.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated

l.

	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement	2026 Water Main Replacement
Transportation and Traffic	**Anticipated Impact**			
1. Changes to traffic patterns around the project area including, but not limited to, the arrival and departure of construction workers, vehicles hauling equipment and materials to the site, road closures or detours, and slower movement and larger turning radii of truck going to project site.	Less Than Significant Impact	Less Than Significant Impact	Less Than Significant Impact	Less Than Significant Impact
PEA Examples to Reduce Transportation and Traffic Impacts:				
Mitigation measures identified in coordination with local agencies.	Incorporated	Incorporated	Incorporated	Incorporated
Use of warning signage, flag persons.	Incorporated	Incorporated	Incorporated	Incorporated
Use of lane closures and detours as necessary.	Incorporated	Incorporated	Incorporated	Incorporated

I.

	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Transportation and Traffic			
1. Changes to traffic patterns around the project area including, but not limited to, the arrival and departure of construction workers, vehicles hauling equipment and materials to the site, road closures or detours, and slower movement and larger turning radii of truck going to project site.	Less Than Significant Impact	No Impact- Not Present	Less Than Significant Impact
PEA Examples to Reduce Transportation and Traffic Impacts:			
Mitigation measures identified in coordination with local agencies.	Incorporated	Incorporated	Incorporated
Use of warning signage, flag persons.	Incorporated	Incorporated	Incorporated
Use of lane closures and detours as necessary.	Incorporated	Incorporated	Incorporated

J.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Utilities and Community Services				
1. Changes to electric, cable, gas, sewer, water, stormwater, and other existing utility services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Changes to community services, such as open space, recreational and cultural facilities.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Utilities and Community Services:				
Identification and avoidance of utilities.	Incorporated	Incorporated	Incorporated	Incorporated
Coordination with service providers and minimization of service interruption.	Incorporated	Incorporated	Incorporated	Incorporated
Mitigation measures identified in coordination with park and recreational resource managers/agencies.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Narrative Description				

J1

J2

J.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Utilities and Community Services	**Anticipated Impact**			
1. Changes to electric, cable, gas, sewer, water, stormwater, and other existing utility services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Changes to community services, such as open space, recreational and cultural facilities.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Utilities and Community Services:				
Identification and avoidance of utilities.	Incorporated	Incorporated	Incorporated	Incorporated
Coordination with service providers and minimization of service interruption.	Incorporated	Incorporated	Incorporated	Incorporated
Mitigation measures identified in coordination with park and recreational resource managers/agencies.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Narrative Description

J1

J2

J.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Utilities and Community Services				
1. Changes to electric, cable, gas, sewer, water, stormwater, and other existing utility services.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
2. Changes to community services, such as open space, recreational and cultural facilities.	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present	No Impact- Not Present
PEA Examples to Reduce Impacts to Utilities and Community Services:				
Identification and avoidance of utilities.	Incorporated	Incorporated	Incorporated	Incorporated
Coordination with service providers and minimization of service interruption.	Incorporated	Incorporated	Incorporated	Incorporated
Mitigation measures identified in coordination with park and recreational resource managers/agencies.	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Narrative Description

J1

J2

K.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Hazardous & Toxic Materials and Waste				
1. Accidental releases, spills, or improper storage and disposal of hazardous materials.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Conflicts with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Solid Waste Disposal Act, Toxic Substances Control Act, and Emergency Planning and Community Right-to-Know Act.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Generation or increase in the amount of sewage sludge that is not in compliance with EPA standards for the use or disposal of sewage sludge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Hazardous & Toxic Materials and Waste Impacts:				
Mitigation measures identified through compliance with applicable hazardous and toxic materials laws and regulations.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of environmental protection measures, BMPs, and Standard Operating Procedures (SOPs).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Development or Adoption of an Emergency Plan/Emergency Response Plan (or similar).	Not Applicable	Not Applicable	Not Applicable	Not Applicable

K.

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement
Hazardous & Toxic Materials and Waste	**Anticipated Impact**			
1. Accidental releases, spills, or improper storage and disposal of hazardous materials.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Conflicts with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Solid Waste Disposal Act, Toxic Substances Control Act, and Emergency Planning and Community Right-to-Know Act.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Generation or increase in the amount of sewage sludge that is not in compliance with EPA standards for the use or disposal of sewage sludge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Hazardous & Toxic Materials and Waste Impacts:				
Mitigation measures identified through compliance with applicable hazardous and toxic materials laws and regulations.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of environmental protection measures, BMPs, and Standard Operating Procedures (SOPs).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Development or Adoption of an Emergency Plan/Emergency Response Plan (or similar).	Not Applicable	Not Applicable	Not Applicable	Not Applicable

K.

	2026 Water Main Replacement	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Hazardous & Toxic Materials and Waste				
1. Accidental releases, spills, or improper storage and disposal of hazardous materials.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Conflicts with Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Solid Waste Disposal Act, Toxic Substances Control Act, and Emergency Planning and Community Right-to-Know Act.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Generation or increase in the amount of sewage sludge that is not in compliance with EPA standards for the use or disposal of sewage sludge.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Hazardous & Toxic Materials and Waste Impacts:				
Mitigation measures identified through compliance with applicable hazardous and toxic materials laws and regulations.	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Implementation of environmental protection measures, BMPs, and Standard Operating Procedures (SOPs).	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Development or Adoption of an Emergency Plan/Emergency Response Plan (or similar).	Not Applicable	Not Applicable	Not Applicable	Not Applicable

L.

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)	Blue Stem Drive Water Main Improvements
Human Health & Safety					
1. Creating occupational health hazards for workers during construction or operation.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Creating or contributing to environmental health or public health risks and safety risks that may disproportionately affect children, consistent with Executive Order 13045.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Creating or contributing to public health risk of immediate injury or long-term health hazards.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Human Health and Safety Impacts:					
Implementation of a health and safety plan.	Not Applicable	Incorporated	Incorporated	Incorporated	Incorporated
Limiting site access to authorized personnel only.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of fugitive dust minimization measures.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Narrative Description					
L1					
L2					
L3					

L.

	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement	2026 Water Main Replacement	2027 Water Main Replacement
Human Health & Safety	**Anticipated Impact**				
1. Creating occupational health hazards for workers during construction or operation.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Creating or contributing to environmental health or public health risks and safety risks that may disproportionately affect children, consistent with Executive Order 13045.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Creating or contributing to public health risk of immediate injury or long-term health hazards.	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Human Health and Safety Impacts:					
Implementation of a health and safety plan.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Limiting site access to authorized personnel only.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Implementation of fugitive dust minimization measures.	Incorporated	Incorporated	Incorporated	Incorporated	Incorporated
Narrative Description					
L1					
L2					
L3					

L.

	Well No. 7 Standby Generator	DWC Water Transmission Mains
Human Health & Safety		
1. Creating occupational health hazards for workers during construction or operation.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
2. Creating or contributing to environmental health or public health risks and safety risks that may disproportionately affect children, consistent with Executive Order 13045.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
3. Creating or contributing to public health risk of immediate injury or long-term health hazards.	No Impact- No Potential to Affect	No Impact- No Potential to Affect
PEA Examples to Reduce Human Health and Safety Impacts:		
Implementation of a health and safety plan.	Incorporated	Incorporated
Limiting site access to authorized personnel only.	Incorporated	Incorporated
Implementation of fugitive dust minimization measures.	Incorporated	Incorporated
Narrative Description		
L1		
L2		
L3		

The following pages are from Yorkville Project Plan (dated August 2023)

	North Delivery Station and Receiving Station (BPS) and NE EWST Altitude Valve	North Receiving Station Ground Storage Tank (2.0 MG)	South Delivery Station and Receiving Station (BPS)	South Receiving Station Ground Storage Tank (2.0 MG)
Environmental Documentation	Pages 58,59,61-71,80-84,91-96	Pages 58,59,61-71,80-84,91-96	Pages 58,59,61-71,80-84,91-96	Pages 58,59,61-71,80-84,91-96
Location Exhibit	Pages 18,19	Pages 18,19	Pages 20,21	Pages 20,21
Project Description	Page 12	Page 12	Page 12	Page 12

The following pages are from Yorkvi

	Blue Stem Drive Water Main Improvements	Montgomery Interconnect	2024 Water Main Replacement	2025 Water Main Replacement	2026 Water Main Replacement
Environmental Documentation	Pages 58,59,72-78, 85-90	Pages 58,59,72-78, 85-90	Pages 58,59,72-78, 85-90	Pages 58,59,72-78, 85-90	Pages 58,59,72-78, 85-90
Location Exhibit	Page 27	Page 27	Page 27	Page 27	Page 27
Project Description	Page 24	Page 17	Page 24	Page 24	Page 24

The following pages are from Yorkvi

	2027 Water Main Replacement	Well No. 7 Standby Generator	DWC Water Transmission Mains
Environmental Documentation	Pages 58,59,72-78, 85-90	Pages 58,59,61-71,80-84,91-96	
Location Exhibit	Page 27	Pages 20,21	
Project Description	Page 24	Page 13	



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
United City of Yorkville IEPA Project Plan Approval

File Name:
D.3_United City of Yorkville IEPA Project Plan Approval

Description:
Illinois Environmental Protection Agency confirmation of Preliminary Environmental Impacts Determination

August 2024

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/782-2027 MAR 31 2024

Mr. Bart Olson, City Administrator
City of Yorkville
651 Prairie Pointe Drive
Yorkville, Illinois 60560

Re: Yorkville/L176788, L176789, & L176790
Project Plan Approvals

Dear Mr. Olson:

In accordance with the provisions of Title 35 Illinois Administrative Code Part 662.330, the Agency hereby confirms the findings of the Preliminary Environmental Impacts Determination for the above referenced project plan. Having provided adequate opportunity for public comment on the proposed project and having received none, the Agency finds that no modification to either the project plan or the Agency's assessment is required. The Agency therefore grants approval of the project plan.

This Planning Approval is an important step toward obtaining Public Water Supply Loan Program (PWSLP) funding; however, several additional requirements must be met before a loan commitment is achieved. Prior to bidding construction contracts, you should be in direct contact with your IEPA project manager to assure that progress has been made towards satisfying these additional requirements as defined in Section 662.350 of the Loan Rules.

Funds are reserved for projects either appearing on the annual Intended Funding List (IFL) or having a Letter of Commitment (LOC) from the Agency. Bidding of construction contracts without a LOC or appearing on the annual IFL puts the applicant at risk of having to fund the project without the possibility of Agency financing.

Please review the enclosed informational document. We also ask that you complete the enclosed "Estimated Project Schedule Form" and return it to the Agency. All schedules are subject to the availability of funds and the Agency's funding cycle. If you have any questions, please contact your project manager, Bill Jankousky, at 217/782-2027.

Sincerely,

Gary Bingenheimer, P.E.
Manager
Infrastructure Financial Assistance Section
Bureau of Water

n:\bow\grants\com_docs\jankousky\tm24032901.docx

Attachments

cc: City Clerk n/a
Cons. Engr., Trotter and Associates, Inc. (St. Charles) n/a



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
SHPO Response Letter - Yorkville Water Main Projects

File Name:
D.4a_SHPO Response Letter - Yorkville Water Main Projects

Description:
State Historic Preservation Office response to the United City of Yorkville's Submission on its Water Main Replacement Projects.

August 2024

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Kendall County
Yorkville
Various locations
IEPA LOAN
*Water main replacement, water source switch

PLEASE REFER TO: SHPO LOG #008080323

August 25, 2023

Christopher Walton
Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554

We have reviewed the documentation submitted for the referenced project in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two (2) years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Remains Protection Act (20 ILCS 3440).

If you are an applicant, please submit a copy of this letter to the state or federal agency from which you obtain any permit, license, grant, or other assistance. If further assistance is needed contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer
CLM



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
SHPO Response Letter - Yorkville North & South Stations

File Name:
D.4b_SHPO Response Letter - Yorkville North & South Stations

Description:
State Historic Preservation Office response to the United City of Yorkville's Submission on its North and South Receiving Stations.

August 2024

Illinois Department of Natural Resources
JB Pritzker, Governor • Natalie Phelps Finnie, Director
One Natural Resources Way • Springfield, Illinois 62702-1271
www.dnr.illinois.gov

Kendall County
Yorkville
North Station: 3099 Lehman Crossing,
Section:11-Township:37N-Range:7E,
South Station: 2224 Tremont Avenue,
Section:10-Township:36N-Range:7E,
EEI-YO2230, IEPA LOAN
New construction, two receiving stations

PLEASE REFER TO: SHPO LOG #025071823

SURVEY REQUEST-
South Station ONLY

September 13, 2023

Christopher Walton
Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, IL 60554

Thank you for requesting comments from our office concerning the possible effects of the project referenced above on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966 (16 USC 470), as amended, and its implementing regulations, 36 CFR 800: Protection of Historic Properties.

The project area may contain significant archaeological resources. Accordingly, a Phase I archaeological reconnaissance survey to locate, identify, and record all archaeological resources within the project area will be required. In addition to the survey we will also need clear photographs of all structures in, or adjacent to, the current project area. This decision is based upon our understanding that there has not been any large-scale disturbance of the ground surface (excluding agricultural activities) such as major construction activity within the project area which would have destroyed existing cultural resources prior to your project. If the area has been heavily disturbed prior to your project, please contact our office with the appropriate written and/or photographic evidence.

The area(s) that need(s) to be surveyed include(s) all area(s) that will be developed as a result of the issuance of the federal agency permit or the granting of the federal grants, funds, or loan guarantees that have prompted this review. In addition to the archaeological survey, please provide clear photographs of all structures in, or adjacent to, the current project area as part of the archaeological survey report.

A list of archaeological contracting services, maintained as a courtesy, is available on our website. The SHPO Log Number or a copy of this letter should be provided to the selected professional archaeological contractor to ensure that the survey results are connected to your project.

If you have further questions, please contact Jeff Kruchten, Principal Archaeologist, at 217/785-1279 or jeff.kruchten@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer, AIA
Deputy State Historic
Preservation Officer



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
IDNR EcoCat Reviews

File Name:
D.4c_IDNR EcoCat Reviews

Description:
Illinois Department of Natural Resources Ecological Compliance Review of the United City of Yorkville's WaterLink Projects.

August 2024

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2400984
Date: 07/19/2023

Project: North Lake Michigan Receiving Station
Address: 3099 Lehman Crossing, Yorkville

Description: The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include construction of two receiving stations (North and South Receiving Stations) including the associated components. This review request is for the North Receiving Station. The EcoCAT review request for the South Receiving Station will be submitted in a separate submittal.

The North Receiving Station improvements are located entirely within the property of an existing previously developed municipal water treatment site which is owned and maintained by the United City of Yorkville, and which is comprised of an existing water treatment plant building and elevated water storage tank. The site is located at 3099 Lehman Crossing, Yorkville, IL 60560.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Rusty Patched Bumble Bee *(Bombus affinis)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

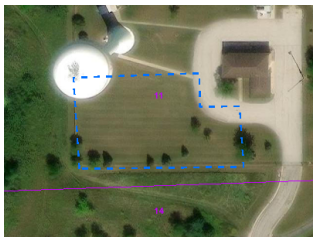
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
37N, 7E, 11



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

Disclaimer

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor
Natalie Phelps Finnie, Director

July 19, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: North Lake Michigan Receiving Station
Project Number(s): 2400984
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2400985
Date: 07/19/2023

Project: South Lake Michigan Receiving Station
Address: 2224 Tremont Ave, Yorkville

Description: The United City of Yorkville is planning to switch its water supply source from the deep aquifer system (groundwater) to Lake Michigan. The improvements necessary to connect to and receive supply from the DuPage Water Commission (DWC) include construction of two receiving stations (North and South Receiving Stations) including the associated components. This review request is for the South Receiving Station. The EcoCAT review request for the North Receiving Station was submitted today (7/19/2023) as well and the IDNR project number for North Receiving Station is 2400984.

The South Receiving Station improvements will be directly adjacent to an existing municipal water treatment site which is owned and maintained by the United City of Yorkville, and which includes an existing water treatment facility and an elevated water storage tank. The approximate site address of the South Receiving Station is 2224 Tremont Ave, Yorkville, IL 60560.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location. **Therefore, consultation under part 1075 is terminated.**

Wetland Review (Part 1090)

The Illinois Wetlands Inventory does not show wetlands within 250 feet of the project location. **Therefore, the wetland review under Part 1090 is terminated.**

This review is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, Natural Areas, or wetlands are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Termination does not imply IDNR's authorization or endorsement.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
36N, 7E, 10



IL Department of Natural Resources
Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

Disclaimer

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Terms of Use

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EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2402237
Date: 08/03/2023

Project: 2024 Water Main Replacement Part 1
Address: In and around central Yorkville, Yorkville

Description: The 2024 water main replacement includes replacing existing older mains in the downtown area of the United City of Yorkville. The locations of the proposed water main replacement are in previously developed areas in and around central Yorkville previously disturbed for original construction of the existing water main.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Fox River INAI Site
Yorkville Seep INAI Site
Mottled Sculpin *(Cottus bairdii)*
River Redhorse *(Moxostoma carinatum)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

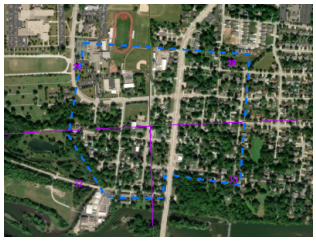
An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
37N, 7E, 28
37N, 7E, 29
37N, 7E, 32
37N, 7E, 33



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor

Natalie Phelps Finnie, Director

August 04, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: 2024 Water Main Replacement Part 1
Project Number(s): 2402237
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

Consultation for Part 1075 is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary. Consultation for Part 1090 (Interagency Wetland Policy Act) is valid for three years.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: United City of Yorkville
Contact: Christopher R. Walton, P.E.
Address: 610 Tower Ln
Yorkville, IL 60560

IDNR Project Number: 2402240
Date: 08/03/2023

Project: 2024-2027 Water Main Replacement
Address: In and around central Yorkville, Yorkville

Description: The 2024 (Part 2) and 2025-2027 Water Main Replacements includes replacing existing older mains in the downtown area of the United City of Yorkville. The locations of the proposed water main replacement are in previously developed areas in and around central Yorkville previously disturbed for original construction of the existing water main.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

Fox River INAI Site
Yorkville Seep INAI Site
Mottled Sculpin *(Cottus bairdii)*
River Redhorse *(Moxostoma carinatum)*

Wetland Review (Part 1090)

The Illinois Wetlands Inventory shows wetlands within 250 feet of the project location.

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Kendall

Township, Range, Section:
36N, 7E, 4
36N, 7E, 5
37N, 7E, 32
37N, 7E, 33



IL Department of Natural Resources Contact
Adam Rawe
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
IL Environmental Protection Agency
Christopher R. Walton
52 Wheeler Rd
Sugar Grove, Illinois 60554

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Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
http://dnr.state.il.us

JB Pritzker, Governor
Natalie Phelps Finnie, Director

August 04, 2023

Christopher R. Walton, P.E.
United City of Yorkville
610 Tower Ln
Yorkville, IL 60560

RE: 2024-2027 Water Main Replacement
Project Number(s): 2402240
County: Kendall

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 and 1090 is terminated.

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The natural resource review reflects the information existing in the Illinois Natural Heritage Database and the Illinois Wetlands Inventory at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Adam Rawe
Division of Ecosystems and Environment
217-785-5500



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Certification Regarding Lobbying

File Name:
D.7a_Certification Regarding Lobbying

Description:
Certification Regarding Lobbying: Certification for Contracts, Grants, Loans, and Cooperative Agreements.

August 2024

United States
ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

OMB Control No. 2030-0020
Approval expires 04/30/2021

_____
EPA Project Control Number

CERTIFICATION REGARDING LOBBYING

CERTIFICATION FOR CONTRACTS, GRANTS, **LOANS AND COOPERATIVE AGREEMENTS**

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including sub-contracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31 U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

_____
Typed Name & Title of Authorized Representative

_____
Signature and Date of Authorized Representative

The public reporting and recordkeeping burden for this collection of information is estimated to average 15 minutes per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

EPA Form 6600-06 (Rev. 06/2014) Previous editions are obsolete.

DISCLOSURE OF LOBBYING ACTIVITIES

Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013
Expiration Date: 02/28/2022

1. * Type of Federal Action:
- [ ] a. contract
- [ ] b. grant
- [ ] c. cooperative agreement
- [x] d. loan
- [ ] e. loan guarantee
- [ ] f. loan insurance

2. * Status of Federal Action:
- [ ] a. bid/offer/application
- [x] b. initial award
- [ ] c. post-award

3. * Report Type:
- [x] a. initial filing
- [ ] b. material change

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

** Name:* United City of Yorkville

** Street 1:* 651 Prairie Pointe Drive *Street 2:*

** City:* Yorkville *State:* IL: Illinois *Zip:* 60560

Congressional District, if known:

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:

US Environmental Protection Agency

7. * Federal Program Name/Description:

Water Infrastructure and Finance and Innovation Act (WIFIA)

CFDA Number, *if applicable:*

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*

$ 127,128,740.00

10. a. Name and Address of Lobbying Registrant:

Prefix: Mr. ** First Name:* Jeff *Middle Name:*

** Last Name:* Markey *Suffix:*

** Street 1:* 440 1st St NW, Suite 550 *Street 2:*

** City:* Washington *State:* DC: District of Columbia *Zip:* 20001

b. Individual Performing Services (including address if different from No. 10a)

Prefix: Mr. ** First Name:* Jeff *Middle Name:*

** Last Name:* Markey *Suffix:*

** Street 1:* 440 1st St NW, Suite 550 *Street 2:*

** City:* Washington *State:* DC: District of Columbia *Zip:* 20001

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

*** Signature:**

***Name:** *Prefix:* ** First Name:* *Middle Name:*

** Last Name:* *Suffix:*

Title: **Telephone No.:** **Date:**

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Standard Form - LLL (Rev. 7-97)

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Complete this form to disclose lobbying activities pursuant to 31 U.S.C.1352

OMB Number: 4040-0013
Expiration Date: 02/28/2022

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- [ ] a. contract
- [ ] b. grant
- [ ] c. cooperative agreement
- [x] d. loan
- [ ] e. loan guarantee
- [ ] f. loan insurance

2. * Status of Federal Action:
- [ ] a. bid/offer/application
- [x] b. initial award
- [ ] c. post-award

3. * Report Type:
- [x] a. initial filing
- [ ] b. material change

4. Name and Address of Reporting Entity:

[x] Prime [ ] SubAwardee

*Name: United City of Yorkville

*Street 1: 651 Prairie Pointe Drive Street 2:

*City: Yorkville State: IL: Illinois Zip: 60560

Congressional District, if known:

5. If Reporting Entity in No.4 is Subawardee, Enter Name and Address of Prime:

6. * Federal Department/Agency:

US Environmental Protection Agency

7. * Federal Program Name/Description:

Water Infrastructure and Finance and Innovation Act (WIFIA)

CFDA Number, *if applicable:*

8. Federal Action Number, *if known:*

9. Award Amount, *if known:*

$ 127,128,740.00

10. a. Name and Address of Lobbying Registrant:

Prefix: Mr. *First Name: David Middle Name:

*Last Name: Dring Suffix:

*Street 1: 151 North Franklin Street Street 2:

*City: Chicago State: IL: Illinois Zip: 60606

b. Individual Performing Services (including address if different from No. 10a)

Prefix: Mr. *First Name: David Middle Name:

*Last Name: Dring Suffix:

*Street 1: 440 1st St NW, Suite 550 Street 2:

*City: Chicago State: IL: Illinois Zip: 60606

11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when the transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

*** Signature:**

***Name:** Prefix: * First Name: Middle Name:

* Last Name: Suffix:

Title: **Telephone No.:** **Date:**

Federal Use Only:

Authorized for Local Reproduction
Standard Form - LLL (Rev. 7-97)



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
Pre-award Compliance Review Report

File Name:
D.7d_Preaward Compliance Review Report

Description:
Pre-award Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance.

August 2024

Approved By OMB: No. 2030-0020 Expires 06-30-2017

U.S. ENVIRONMENTAL PROTECTION AGENCY
Washington, DC 20460

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read instructions on other side before completing form.

I.	Applicant/Recipient (Name, Address, State, Zip Code).	DUNS No.

II. Is the applicant currently receiving EPA assistance?

The applicant is not currently receiving EPA assistance

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7. See instructions on reverse side.)

N/A

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective action taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7. See instructions on reverse side.)

N/A

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

N/A

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

✔ Yes ☐ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b). ✔ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. § 7.70) applies. ☐ Yes ☐ No

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its programs or activities? (40 C.F.R. § 5.140 and § 7.95) ✔ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing? ✔ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications? ☐ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator? ☐ Yes ☐ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. § 7.85(a))

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)

X. If the applicant/recipient is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.

XI. If the applicant/recipient is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet address for, or a copy of, the procedures.

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official	B. Title of Authorized Official	C. Date

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized EPA Official See * note on reverse side	B. Title of Authorized EPA Official	C. Date

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General

Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.

Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment).

Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities.

Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities.

The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission.

Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution.

40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972.

40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973.

The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items

"Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25.

"Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25.

"Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed.

"Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability.

Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission.

If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable."

In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification.

* Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

Approval indicates, in the reviewer's opinion, questions I – VI of Form 4700-4 comply with the preaward administrative requirements for EPA assistance.

"Burden Disclosure Statement"

EPA estimates public reporting burden for the preparation of this form to average 30 minutes per response. This estimate includes the time for reviewing instructions, gathering and maintaining the data needed and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to U.S. EPA, Attn: Collection Strategies Division (MC 2822T), Office of Information Collection, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

The information on this form is required to enable the U.S. Environmental Protection Agency to determine whether applicants and prospective recipients are developing projects, programs and activities on a nondiscriminatory basis as required by the above statutes and regulations.



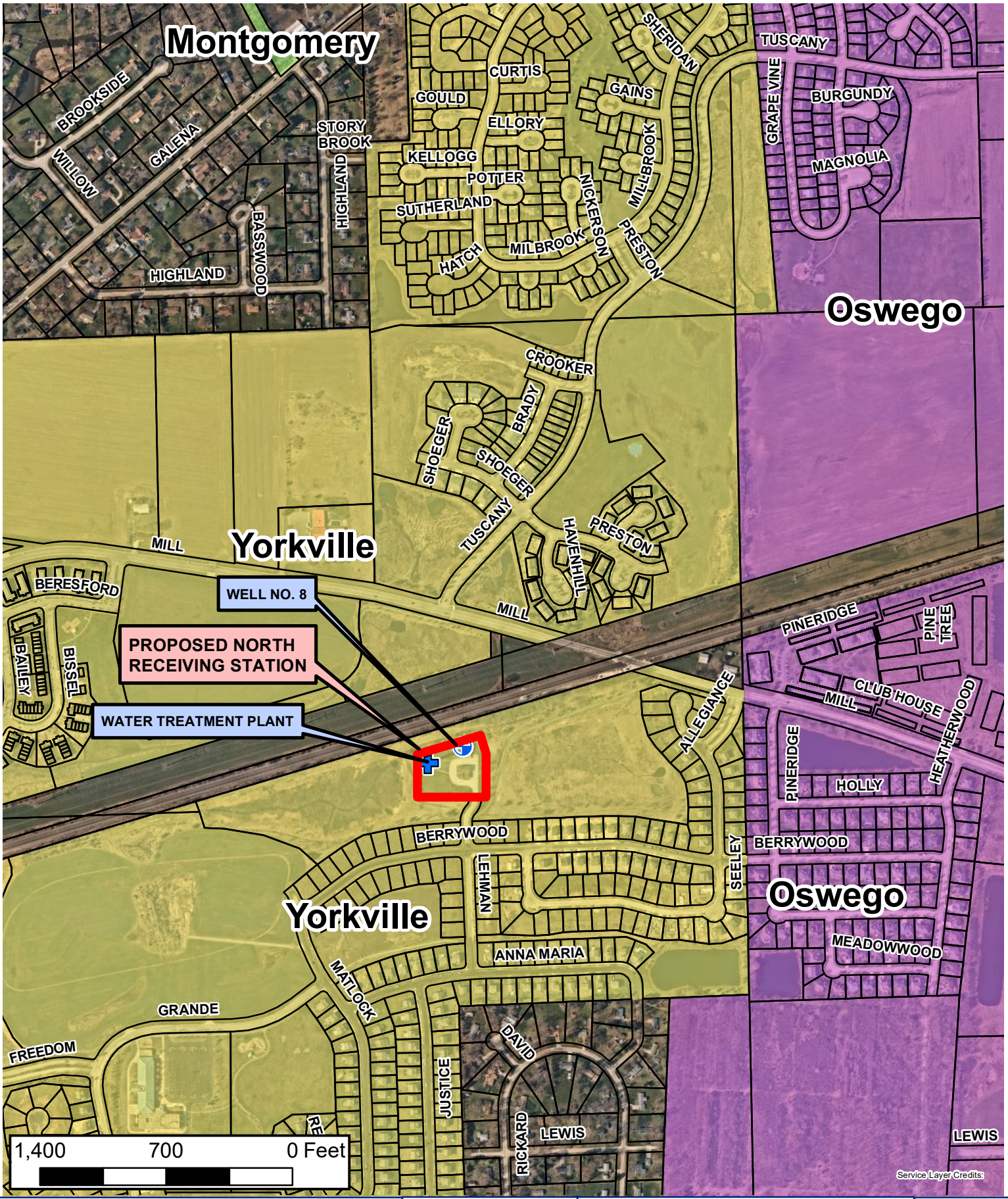
United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
LM09 Project Location Map

File Name:
E.LM09_Project Location Map

Description:
Project Map for North Receiving Station

August 2024



Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed_NRS_Receiving Station Overall

EXHIBIT B: PROPOSED NORTH RECEIVING STATION LOCATION MAP

N



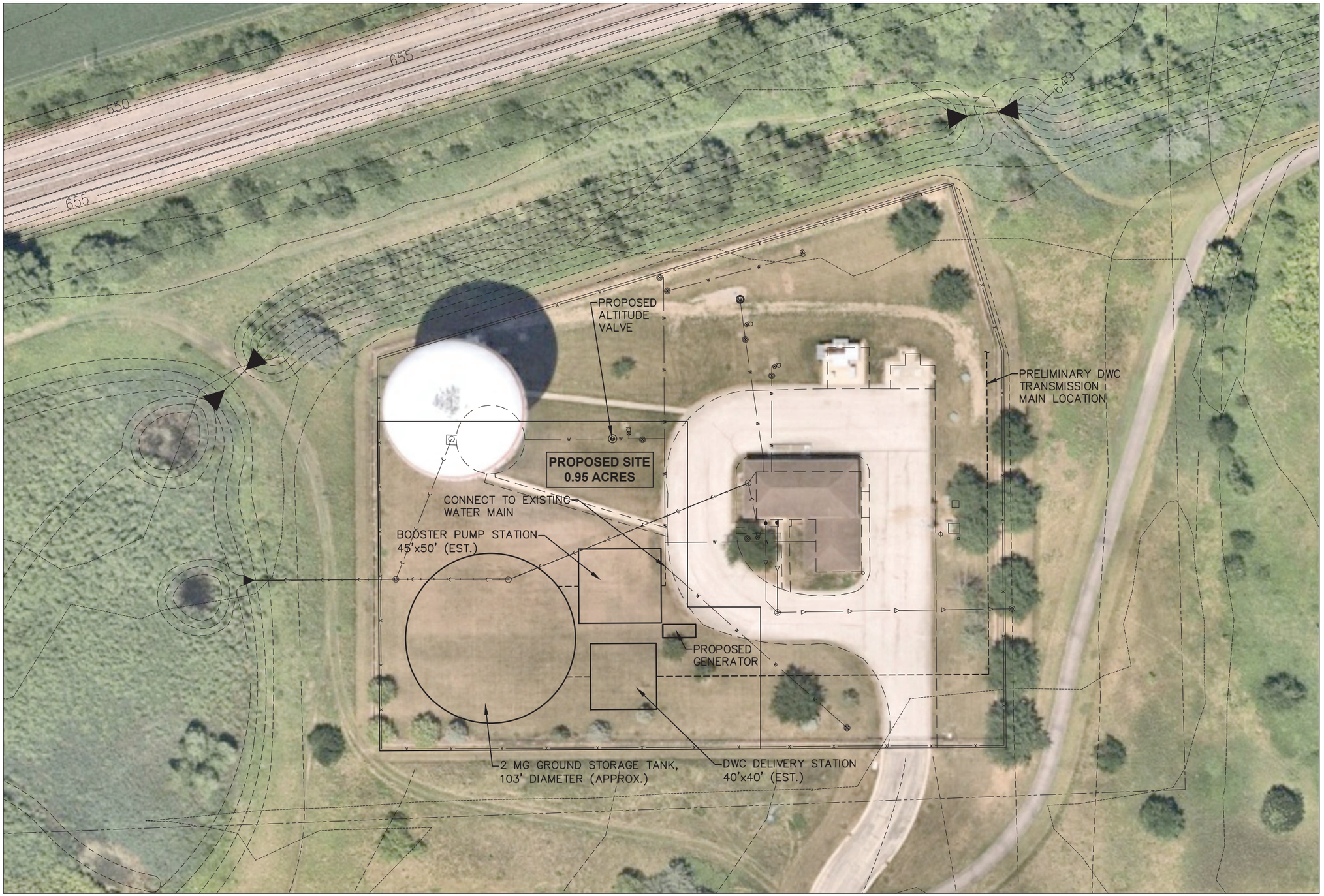
United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
LM09 Project Site Plans

File Name:
E.LM09_Project Site Plans

Description:
Preliminary Site Plans for North Receiving Station

August 2024



0 30' 60'
SCALE FEET

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Engineering Enterprises, Inc.
CONSULTING ENGINEERS
52 Wheeler Road
Sugar Grove, Illinois 60554
630.466.6700 / www.eeiweb.com

UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

EXHIBIT C: PROPOSED NORTH DELIVERY STATION SITE PLAN (PRELIMINARY)

DATE:	AUGUST 2023
PROJECT NO:	YO2230
FILE:	YO2230-SITES
SHEET	1 OF 2

Plotted: August 15, 2023 @ 9:10 AM By: Matt Taylor – Tab: North Site – 22x34

Path: H:\SDSKPROJ\YO_YORKVILLE\2022\YO2230\DWG EXHIBIT\YO2230-SITES



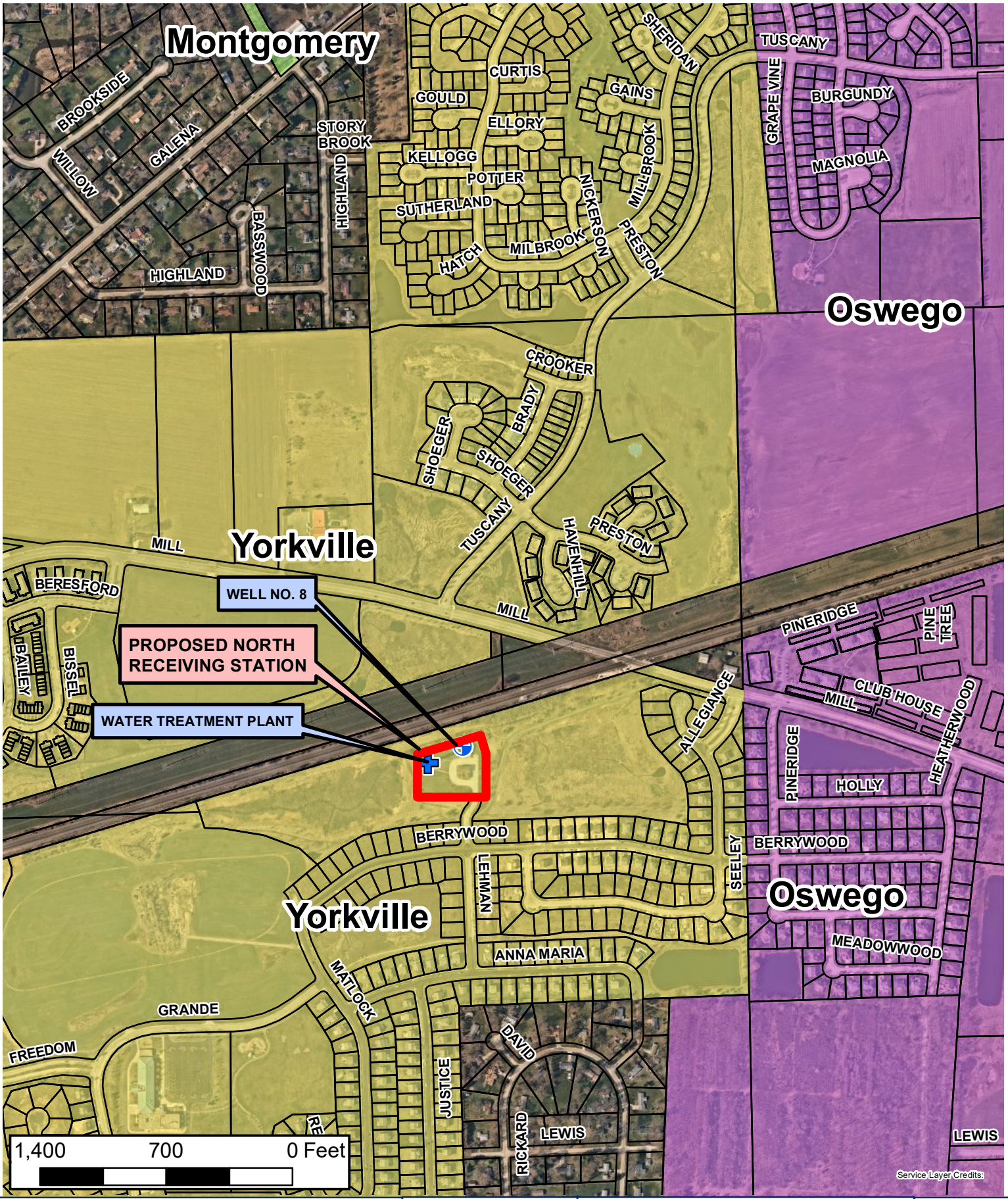
United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
LM10 Project Location Map

File Name:
E.LM10_Project Location Map

Description:
Project Map for North Receiving Station Storage

August 2024

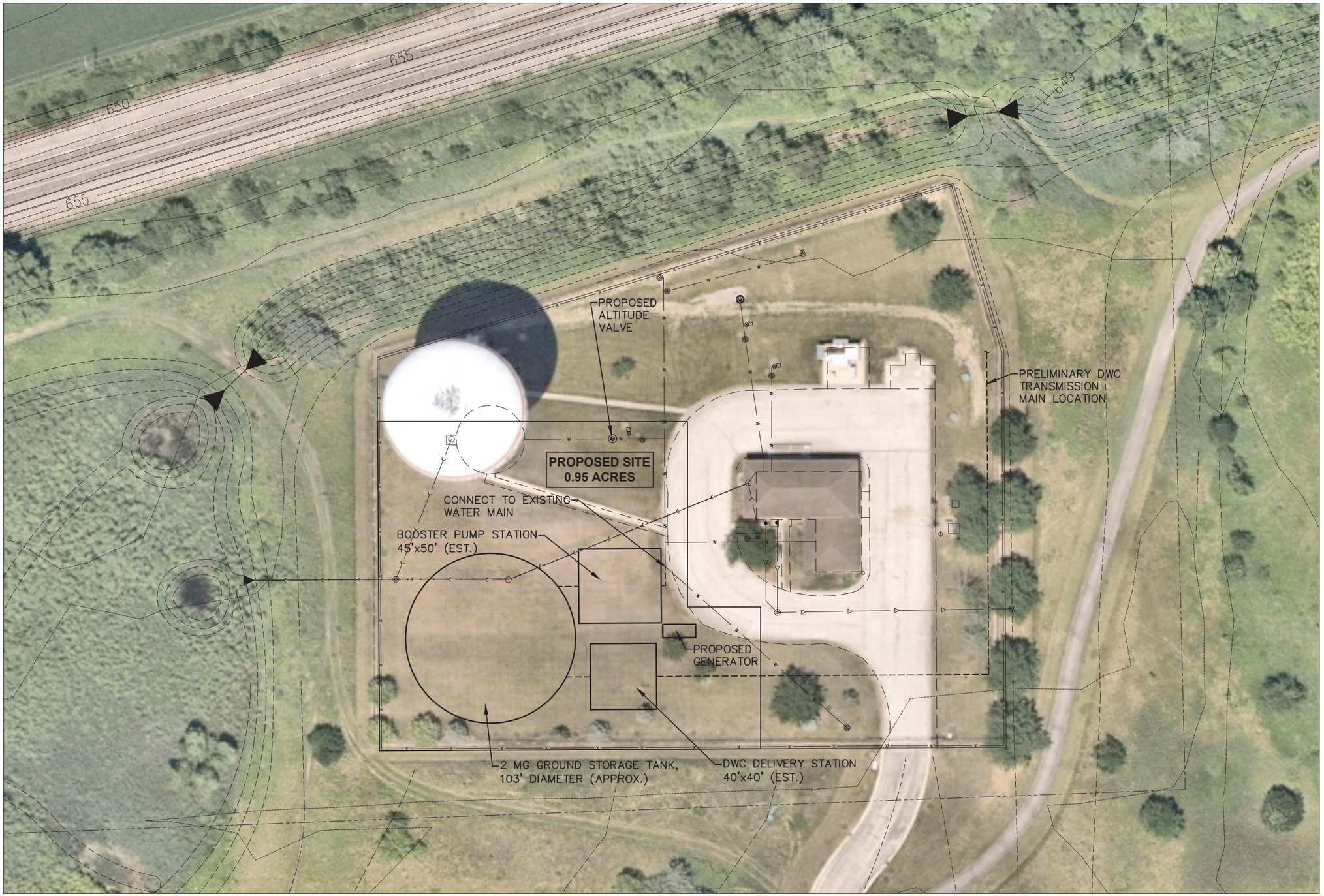


Engineering Enterprises, Inc.
52 Wheeler Road
Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

DATE:	MAY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\
FILE:	YO2230_Proposed_North_Receiving Station Overall

EXHIBIT B: PROPOSED NORTH RECEIVING STATION LOCATION MAP

N



0 30' 60'
SCALE FEET

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CONSULTING ENGINEERS
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Sugar Grove, Illinois 60554
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UNITED CITY OF YORKVILLE
KENDALL COUNTY, ILLINOIS

0 1
Bar represents 1"at FULL size plotted scale. Percentage to 1" to be applied to stated scales.

NO.	DATE	REVISIONS

LAKE MICHIGAN CONNECTION
PRELIMINARY ENGINEERING

EXHIBIT C: PROPOSED NORTH DELIVERY STATION SITE PLAN (PRELIMINARY)

DATE:	AUGUST 2023
PROJECT NO:	YO2230
FILE:	YO2230-SITES
SHEET	1 OF 2

Plotted: August 15, 2023 @ 9:10 AM By: Matt Taylor – Tab: North Site – 22x34

Path: H:\SDSKPROJ\YO_YORKVILLE\2022\YO2230\DWG EXHIBIT\YO2230-SITES



United City of Yorkville, Illinois
WIFIA Application Attachment

Title:
LM13 Project Location Map

File Name:
E.LM13_Project Location Map

Description:
Project Map for Rt. 126 Water Main Improvements.

August 2024

2025-2029 Capital Project Sheet

Project # **LM13**

Project Description **Rt 126 Water Main Improvements**

Project summary, justification and alignment to Strategic Plan

This project consists of water main improvement along Route 126 to connect South Receiving Station, South Pressure Zone, and South Central Pressure Zone.

Cost Summary	New	Maintenance	Replacement	Expansion	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Future Years	TOTAL
Design Engineering			X		67,000	209,000					**276,000**
Construction Engineering			X			70,000	217,000				**287,000**
Land Acquisition						25,000					**25,000**
Infrastructure			X			772,000	2,401,000				**3,173,000**
Building											**-**
Machinery/Equipment											**-**
Other/Miscellaneous											**-**
TOTAL COST					67,000	1,076,000	2,618,000	-	-	-	**3,761,000**

Funding Source(s)

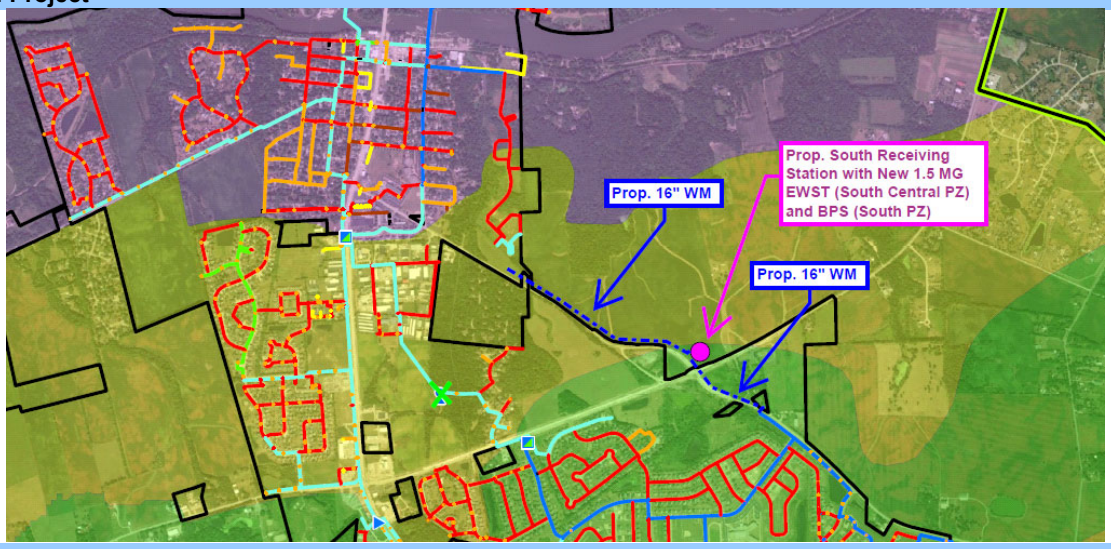
								-
								-
								-
								-
TOTAL FUNDING SOURCES	-	-	-	-	-	-	-	**-**

Project status and completed work

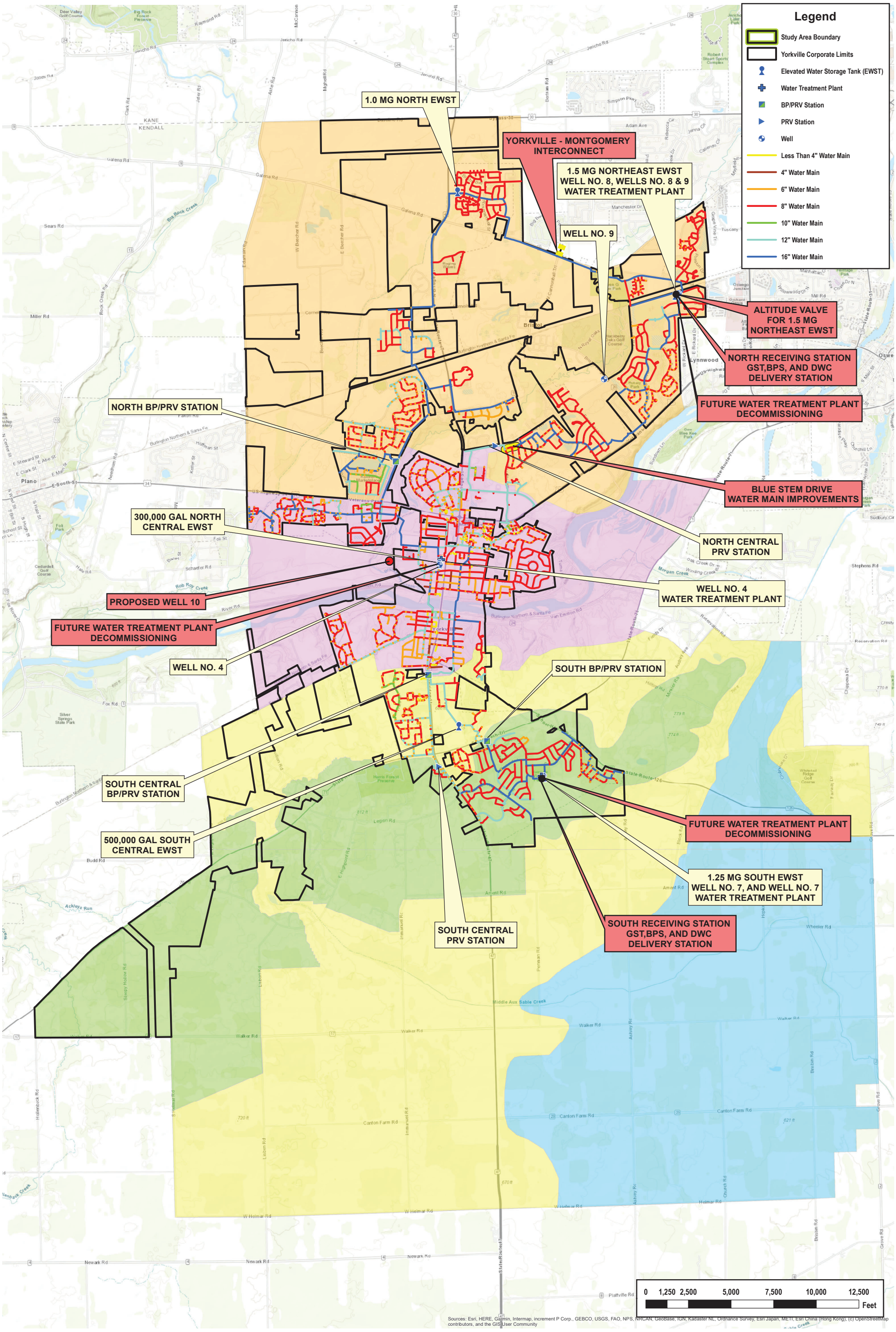
Grants (funded or applied for) related to the project.

	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Future Yrs	TOTAL
Project Costs							**-**

Map/Pictures of Project



Department: Public Works



Engineering Enterprises, Inc.
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Sugar Grove, Illinois 60554
(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL 60560

DATE:	AUGUST 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:\GIS\PUBLIC\YORKVILLE\2022\YO2230
FILE:	

LAKE MICHIGAN CONNECTION PRELIMINARY ENGINEERING
UNITED CITY OF YORKVILLE, ILLINOIS

EXHIBIT G
PROPOSED IMPROVEMENTS

NORTH

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

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(630) 466-6700
www.eeiweb.com

United City of Yorkville
800 Game Farm Road
Yorkville, IL, 60560
(630) 553-7575
www.yorkville.il.us

DATE:	JULY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:/GIS/PUBLIC/YORKVILLE/2022
FILE:	YO2230- OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

EXHIBIT I: 2024 -2027 WATER MAIN REPLACEMENT PROJECTS

N W E S

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

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United City of Yorkville
800 Game Farm Road
Yorkville, IL, 60560
(630) 553-7575
www.yorkville.il.us

DATE:	JULY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:/GIS/PUBLIC/YORKVILLE/2022
FILE:	YO2230- OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

EXHIBIT I: 2024 -2027 WATER MAIN REPLACEMENT PROJECTS

N W E S

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

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www.yorkville.il.us

DATE:	JULY 2023
PROJECT NO.:	YO2230
BY:	MJT
PATH:	H:/GIS/PUBLIC/YORKVILLE/2022
FILE:	YO2230 - OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

EXHIBIT I: 2024 -2027 WATER MAIN REPLACEMENT PROJECTS

	Elevation Range	TCL
North Pressure Zone	625-690	810
North Central Pressure Zone	580-660	763
South Central Pressure Zone	660-715	850
South Pressure Zone	715-790	920
Southeast Pressure Zone	615-665	800

Legend

- Existing Water Main
- 2024 Water Main Replacement
- 2025 Water Main Replacement
- 2026 Water Main Replacement
- 2027 Water Main Replacement

0 2,000 4,000 Feet

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DATE: JULY 2023
PROJECT NO.: YO2230
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FILE: YO2230- OPTION 3 WATER MAIN REPLACEMENT.MXD

ALTERNATIVE WATER SOURCE STUDY UPDATE
YORKVILLE, ILLINOIS

EXHIBIT I: 2024 -2027 WATER MAIN REPLACEMENT PROJECTS

N W E S

OMB Control No. 2040-0292
EPA Form No. 6100-054
Approval expires 4/24/2023

Section E

General Project Information (Columns A-I)

COLUMN A (Project Component Name): Replace "Project Component X" with the project component name.

COLUMN B (Project Component Description): Describe each of the Project components including dimensions, quantities, capacities, square footage, etc. Indicate whether the contract involves the construction of new facilities or the renovation or replacement of existing ones.

COLUMN C (Project Component Location): Describe the location of the project(s); specify if the location is within an existing facility.Include location address(es), and/or latitude and longitude details for all project components or sub-projects included in the contract. Attach a project map(s) for all project components or sub-projects included in the contract, if available.

COLUMN D (Contract Name/Number): Replace "Contract X" with the contract name and/or number.

COLUMN E (Contract Scope of Work): Describe each of the contract components including dimensions, quantities, capacities, square footage, etc. Indicate whether the contract involves the construction of new facilities or the renovation or replacement of existing ones.

COLUMN F (Design Criteria/Useful Life): Provide design criteria and useful life information for all contract components.

COLUMN G (Project Delivery Method): Pick your project delivery method. If your project delivery method is not on the drop-down list, type your response in the project cell for Column E.

COLUMN H (Name of Technical Reports/Design Documentation): List the file names of technical reports (such as Plannning Documents, Preliminary Design Reports or Conceptual Design Reports) and design documentation (such as executed or draft contract documents). For alternative project delivery method contracts (i.e., design-build, construction manager at-risk, design-bid-build), provide the file names of procurement documentation (including contractor selection materials such as Request for Qualifications and Request for Proposals) available for review. Attach all listed documents.

COLUMN I (Name of Environmental Report/Documentation): List the file names of environmental reports (such as Biological Resource Survey Reports, Cultural Resource Survey Reports) and environmental documentation (such as NEPA documents completed by another federal agency or reviews completed for the State Revolving Fund or under a State environmental review process, such as CEQA). Attach all listed documents.

COLUMNS J-O (Schedule Columns): Present the overall project schedule start and end dates for key milestones in Columns G-N. Attach the detailed project schedule for each contract

COLUMN P (Schedule Notes): Provide additional notes about the schedule, if needed.

Cost Information (Columns Q-Z)

COLUMNS Q-W (Cost Columns): Present the overall project costs in the Columns Q-V. For Column T (% Contingency included in Construction Cost), indicate the percent contingency that is included in the construction cost provided in Column S. For Column U (Project Management Cost), include any additional non-construction related costs related to the implementation of the project element.

COLUMN R (Design Cost): Provide the file name for the Engineer's Cost Estimate or similar, which verify the costs listed in Columns N-Q. The estimate should include quantities, unit prices, and total costs. Attach the cost estimate for each contract (required).

COLUMN Y (Previously Incurred Costs): If previously incurred costs are included in the overall project cost, indicate the amount. Attach the executed contract documents.

COLUMN Z (Project Management): Describe the process the applicant implements for overseeing scope/schedule/costs of projects. Attach Project Management Plan or similar document,

COLUMN AA (Cost Notes): Provide additional notes about the project costs, if needed.

Other Project Information (Columns AB-AF)

COLUMN AB (Operations and Maintenance Plan): Describe how the applicant has developed a plan for operating, maintaining, and repairing the project over the useful life of the project. Attach either existing operations and maintenance plans or professional service contracts or similar evidence that a plan will be developed.

COLUMN AC (Operations and Maintenance Contracts): For loans which include assets to be operated and/or maintained by a third party, provide the file names for any contractual arrangements that the applicant plans to execute for the operation and maintenance of the project(s), key performance indicators, insurance policies that may be used to cover the project(s), and reserves that will be set aside for the maintenance of the project(s). List out contracts where they are applicable for the future operation of the assets covered by the loan.

COLUMN AD (Risk Mitigation Plan): Choose the risk mitigation strategies implemented for this project from the drop-down list. Sample risks might include construction schedule delays, cost escalation, delayed approvals, and litigation. If you chose "Risk Mitigation Plan and/or Project Mgmt Plan has been developed", attach the plans. If you chose "Risk Mitigation Plan and/or Project Mgmt Plan has not been developed," explain how the applicant intends to mitigate major risks for the project.

COLUMN AE (Agency Reviews): List any state or local agencies conducting reviews of the project design that must review final plans and specifications prior to construction. Describe any applicable statutory references and expected timelines.

COLUMN AF (Notes): Use Column Z to provide any additional notes in the Other Project Information section.

Bid Specifications (Columns AG-AH)

COLUMN AG (Active Bids/Construction Contracts): Select the correct response to indicate the status of federal requirements language in active bids. Attach sample of final bid specifications with required language.

COLUMN AH (Federal Requirements): Select the correct response to indicate the implementation of federal requirements for past projects.

General Project Inf

Project Component Name	Project Component Description	Project Component Location	Contract Name/Number
WM09: 2025 Water Main Replacement	This project consists of replacing existing water main. Note - Costs include roadway improvements. The plan is to target pre-1970 water main and areas of high breaks. This project is needed to assist the City in achieving a reduction in water loss.	**E.WM09_Project Location**	Not Available
WM10: 2026 Water Main Replacement	This project consists of replacing existing water main. Note - Costs include roadway improvements. The plan is to target pre-1970 water main and areas of high breaks. This project is needed to assist the City in achieving a reduction in water loss.	**E.WM10_Project Location**	Not Available
WM11: 2027 Water Main Replacement	This project consists of replacing existing water main. Note - Costs include roadway improvements. The plan is to target pre-1970 water main and areas of high breaks. This project is needed to assist the City in achieving a reduction in water loss.	**E.WM11_Project Location**	Not Available
WM12: 2028 Water Main Replacement	This project consists of replacing existing water main. Note - Costs include roadway improvements. The plan is to target pre-1970 water main and areas of high breaks. This project is needed to assist the City in achieving a reduction in water loss.	**E.WM12_Project Location**	Not Available
LM09: North Receiving Station	This project consists of a station required to connect to receive supply from DWC. Items include above ground pumping and chlorine station, additional structure and piping associated with receiving station at BPS, architectural components, electrical, connection to existing water main, associated water main piping and valves, SCADA upgrades, and generator. Also includes new Altitude Valve for NE EWST.	**E.LM09_Project Location**	Not Available
LM10: NW Elevated Water Storage Tank (1.5 MG)	This project consists of the waterspheroid elevated water storage tank, mixing system, yard piping and site work, SCADA implementation, electrical service, landscaping and security fencing. The tank capacity is assumed to be 1.5 million gallons.	**E.LM10_Project Location**	Not Available
LM13: Rt 126 Water Main Improvements	This project consists of water main improvement along Route 126 to connect South Receiving Station, South Pressure Zone, and South Central Pressure Zone.	**E.LM13_Project Location**	Not Available
LM16: Water Treatment Plant Decommissioning	Decommissioning of all three (3) Cation Exchange WTPs, including: Well 4 WTP, Well 7 WTP, and Wells 8 & 9 WTP. Construction will not begin until after all other DWC-LM improvements are completed and Yorkville begins receiving LM supply from DWC.	**E.LM16_Project Location**	Not Available

Note: Add more components as applicable

Note: Add more contracts as a

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Contract Scope of Work	Design Criteria/Useful Life	Project Delivery Method	Names of Technical Reports/Design Documentation	Names of Environmental Reports/ Documentation
Not Available	50 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 23-27)**	**D.4a_ SHPO Response Letter - Yorkville Water Main Projects** **D.4c_IDNR EcoCat Reviews**
Not Available	50 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 23-27)**	**D.4a_ SHPO Response Letter - Yorkville Water Main Projects** **D.4c_IDNR EcoCat Reviews**
Not Available	50 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 23-27)**	**D.4a_ SHPO Response Letter - Yorkville Water Main Projects** **D.4c_IDNR EcoCat Reviews**
Not Available	50 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 23-27)**	**D.4a_ SHPO Response Letter - Yorkville Water Main Projects** **D.4c_IDNR EcoCat Reviews**
Not Available	50 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 11-22)** **E.LM09_Project Site Plans**	**A.4c_Yorkville Lake Michigan Allocation Order** **D.4b_SHPO Response Letter - Yorkville North & South Stations** **D.4c_IDNR EcoCat Reviews**
Not Available	25 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 11-22)** **E.LM10_Project Site Plans**	**A.4c_Yorkville Lake Michigan Allocation Order** **D.4b_SHPO Response Letter - Yorkville North & South Stations** **D.4c_IDNR EcoCat Reviews**
Not Available	25 Years	Design-Bid-Build	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 11-22)**	**D.4a_ SHPO Response Letter - Yorkville Water Main Projects** **D.4c_IDNR EcoCat Reviews**
Not Available	Indefinite	N/A	**B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 16 & 22)**	

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Schedule						
Planning Start	Planning End	Design Start	Design End	Construction Start	Construction End Date	Schedule Notes
5/1/2022	4/30/2024	5/1/2024	2/28/2025	3/1/2025	4/30/2026	
5/1/2023	4/30/2024	3/1/2025	2/28/2026	3/1/2026	4/30/2027	
5/1/2024	4/30/2024	3/1/2026	2/28/2027	3/1/2027	4/30/2028	
5/1/2025	4/30/2024	3/1/2027	2/28/2028	3/1/2028	4/30/2029	
5/1/2021	4/30/2023	7/1/2024	4/30/2026	5/1/2026	12/1/2028	
5/1/2021	4/30/2023	7/1/2024	10/1/2025	11/1/2025	12/1/2027	
1/1/2024	4/30/2024	7/1/2024	12/31/2025	1/1/2026	7/1/2027	
1/1/2025	12/31/2026	1/1/2027	4/30/2028	5/1/2028	12/31/2029	

Cost Information							
Planning Cost	Design Cost	Construction Cost	% Contingency included in Construction Cost	Project Management Cost	Other Cost	Total Cost	Names of Attached Cost Documents
	$ 320,000.00	$ 3,916,000.00	20%	N/A		$ 3,452,800.20	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
	$ 250,000.00	$ 3,078,000.00	20%	N/A		$ 2,712,400.20	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
	$ 280,000.00	$ 3,411,000.00	20%	N/A		$ 3,008,800.20	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
	$ 155,000.00	$ 1,872,000.00	20%	N/A		$ 1,652,600.20	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
	$ 314,000.00	$ 3,953,000.00	30%	N/A		$ 3,081,100.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
	$ 250,000.00	$ 9,724,000.00	30%	N/A		$ 7,056,800.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
$ 25,000.00	$ 276,000.00	$ 3,460,000.00	30%	N/A		$ 2,723,000.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
		$ 881,000.00	30%	N/A		$ 616,700.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
$ 25,000.00	$ 1,845,000.00	$ 30,295,000.00				$ 24,304,202.00	

Previously Incurred Costs	Project Management	Cost Notes	Operations and Maintenance Plan (Please select from dropdown list)
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
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	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	

Other Project Information			
Operations and Maintenance Contracts	Risk Mitigation Plan	Agency Reviews	Notes

Bid Specifications	
Active Bids/Construction Contracts (Please select from dropdown list)	Federal Requirements (Please select from dropdown list)
No active bids/construction contracts currently for the project, but federal requirements language will be included in the packages.	Borrower has implemented similar federal requirements in the past for other federally funded projects.
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Project Component Name	Project Component Description	Project Component Location
LM07: DWC Transmission Mains	This project consists of design and construction of the water transmission mains from DWC to both connection points on Yorkville's system (total cost to be shared between Yorkville, Montgomery, and Oswego - costs below reflect Yorkville's estimated share of the total costs). Costs also include two (2) Metering Stations, with one to be constructed at each Yorkville Connection Point, owned and maintained by DWC.	**Final Location Maps To Be Determine**
LM11: South Receiving Station	This project consists of a station required to connect to receive supply from DWC. Items include above ground pumping and chlorine station, additional structure and piping associated with receiving station at BPS, architectural components, electrical, connection to existing water main, associated water main piping and valves, SCADA, and generator. Also includes new electrical service, security fencing, and land acquisition (Land Acq included under South Rec'g Station Tank Standpipe). The location of the South Receiving Station is still be finalized making the previous maps, permits, and site plans no longer applicable.	**Final Location Map To Be Determine**
LM12: South Receiving Station Standpipe (1.5 MG)	This project consists of the standpipe, mixing system, yard piping and site work, SCADA implementation, electrical service, landscaping and security fencing at the proposed South Receiving Station. The tank capacity is assumed to be 1.50 million gallons. The location of the South Receiving Station is still be finalized making the previous maps, permits, and site plans no longer applicable.	**Final Location Map To Be Determine**
Note: Add more components as applicable		

General Project Information			
Contract Name/Number	Contract Scope of Work	Design Criteria/Useful Life	Project Delivery Method
Not Available	Not Available	50 Years	Design-Bid-Build
Not Available	Not Available	50 Years	Design-Bid-Build
Not Available	Not Available	25 Years	Design-Bid-Build

Note: Add more contracts as applicable

Names of Technical Reports/Design Documentation	Names of Environmental Reports/ Documentation	Planning Start	Planning End
TBD	**A.4c_Yorkville Lake Michigan Allocation Order**	6/1/2023	3/30/2024
B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 11-22)	**A.4c_Yorkville Lake Michigan Allocation Order**	5/1/2021	4/30/2023
B.8c_Yorkville Lake Michigan Connection Preliminary Engineering Report FINAL (pg. 11-22)	**A.4c_Yorkville Lake Michigan Allocation Order**	5/1/2021	4/30/2023

Schedule						
Design Start	Design End	Construction Start	Construction End Date	Schedule Notes	Planning Cost	Design Cost
4/1/2024	12/31/2025	1/1/2026	12/31/2028		$ 7,280,000.00	$ 9,013,000.00
7/1/2024	4/30/2026	5/1/2026	12/1/2028			$ 275,000.00
7/1/2024	4/30/2025	5/1/2025	12/1/2027		$ 270,000.00	$ 250,000.00
					$ 7,550,000.00	$ 9,538,000.00

Cost Information					
Construction Cost	% Contingency included in Construction Cost	Project Management Cost	Other Cost	Total Cost	Names of Attached Cost Documents
$ 92,463,000.00	25%	N/A		$ 85,640,250.25	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
$ 3,304,000.00	30%	N/A		$ 2,587,800.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
$ 5,678,000.00	30%	N/A		$ 4,494,600.30	*B.5e_Yorkville Combined Capital Improvement Program FY25-29*
$ 101,445,000.00				$ 92,722,650.85	

Previously Incurred Costs	Project Management	Cost Notes	Operations and Maintenance Plan (Please select from dropdown list)
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	
	N/A	$7,712,925 Contingency Added to Total Project Costs (See Sources & Uses)	

Other Project Information			
Operations and Maintenance Contracts	Risk Mitigation Plan	Agency Reviews	Notes

Bid Specifications	
Active Bids/Construction Contracts (Please select from dropdown list)	Federal Requirements (Please select from dropdown list)
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