



PUBLIC WORKS WATER CAPITAL IMPROVEMENT PLAN OVERVIEW

**KEVIN KOTHE, P.E., DIRECTOR OF PUBLIC WORKS
COMMITTEE OF THE WHOLE – JUNE 19, 2023**



OUTLINE

- Water System History and Overview
- Capital Improvement Planning Process
- Capital Improvement Plan Components
- Rate Study
- Next Steps and Tentative Timeframes



Water System History and Overview

1 Water Treatment Plant

1 Pumping Pool (Mackinaw River)

2 Reservoirs (Lake Bloomington and Evergreen Lake)

- 22,900 acre-feet
- 1,560 surface acres
- 109 miles of watershed

5 Pump stations

6 Storage tanks

- 21.4 million gallons of finished water storage

450 miles of Watermains

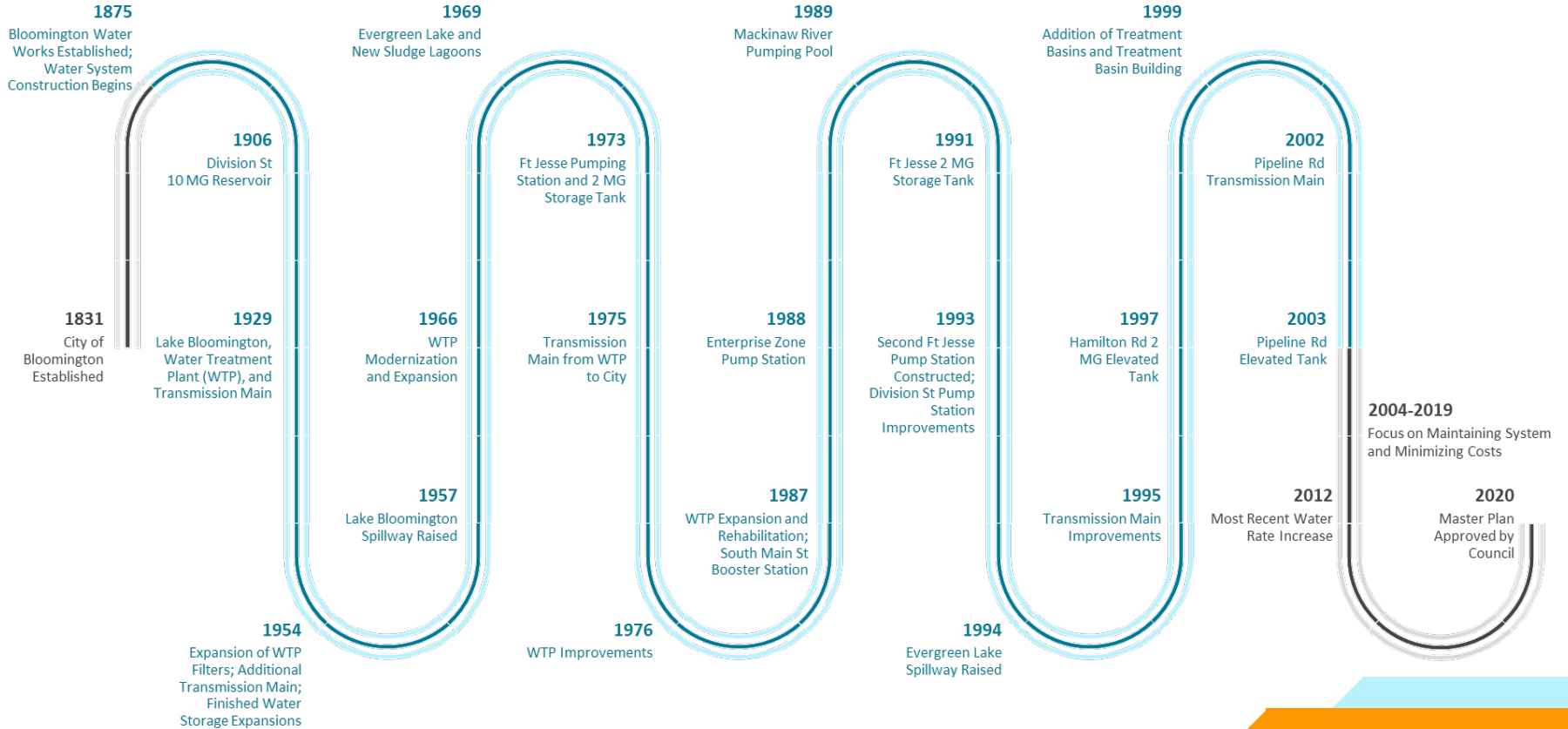
4,785 Fire hydrants

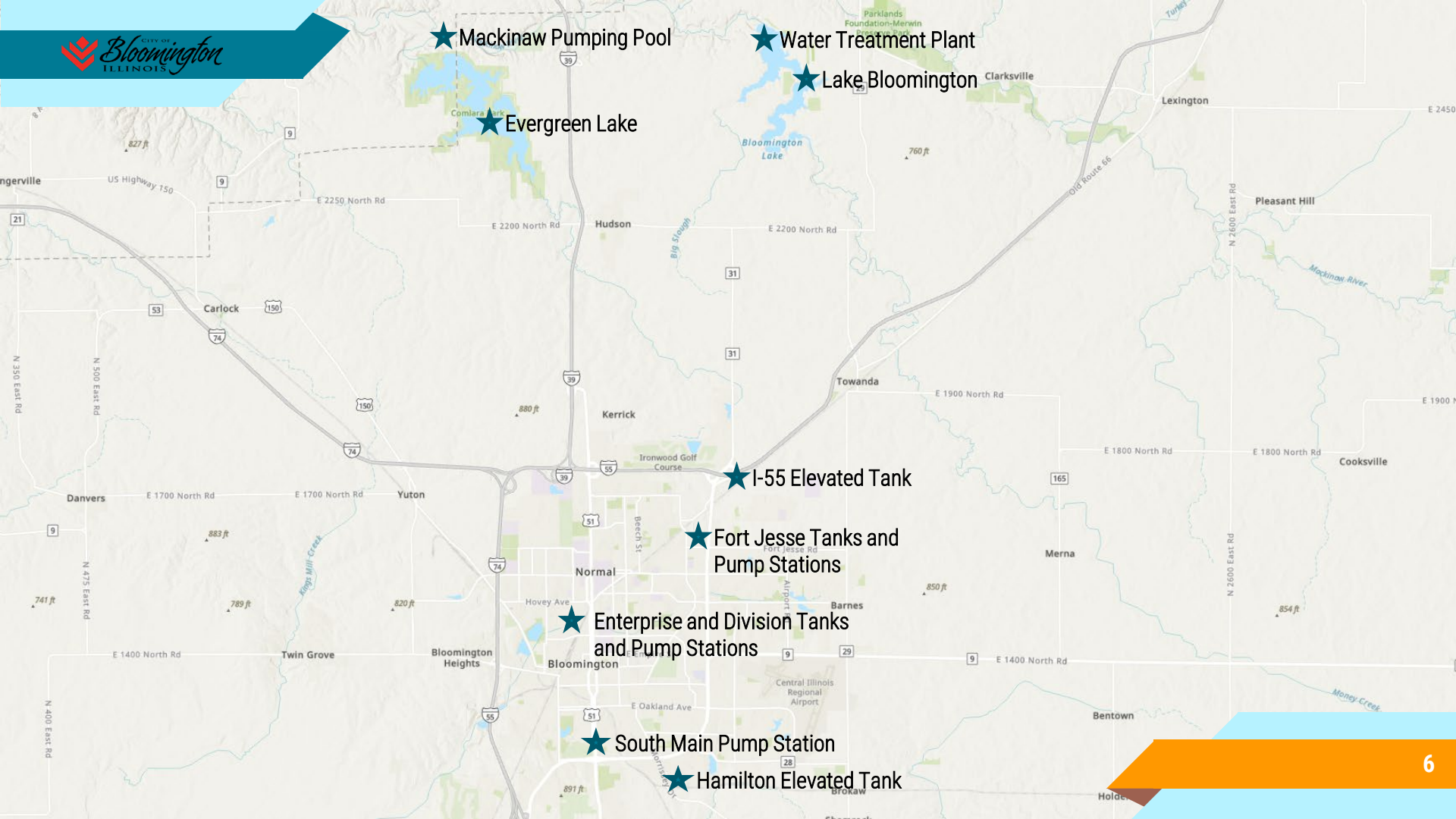
34,098 Meters

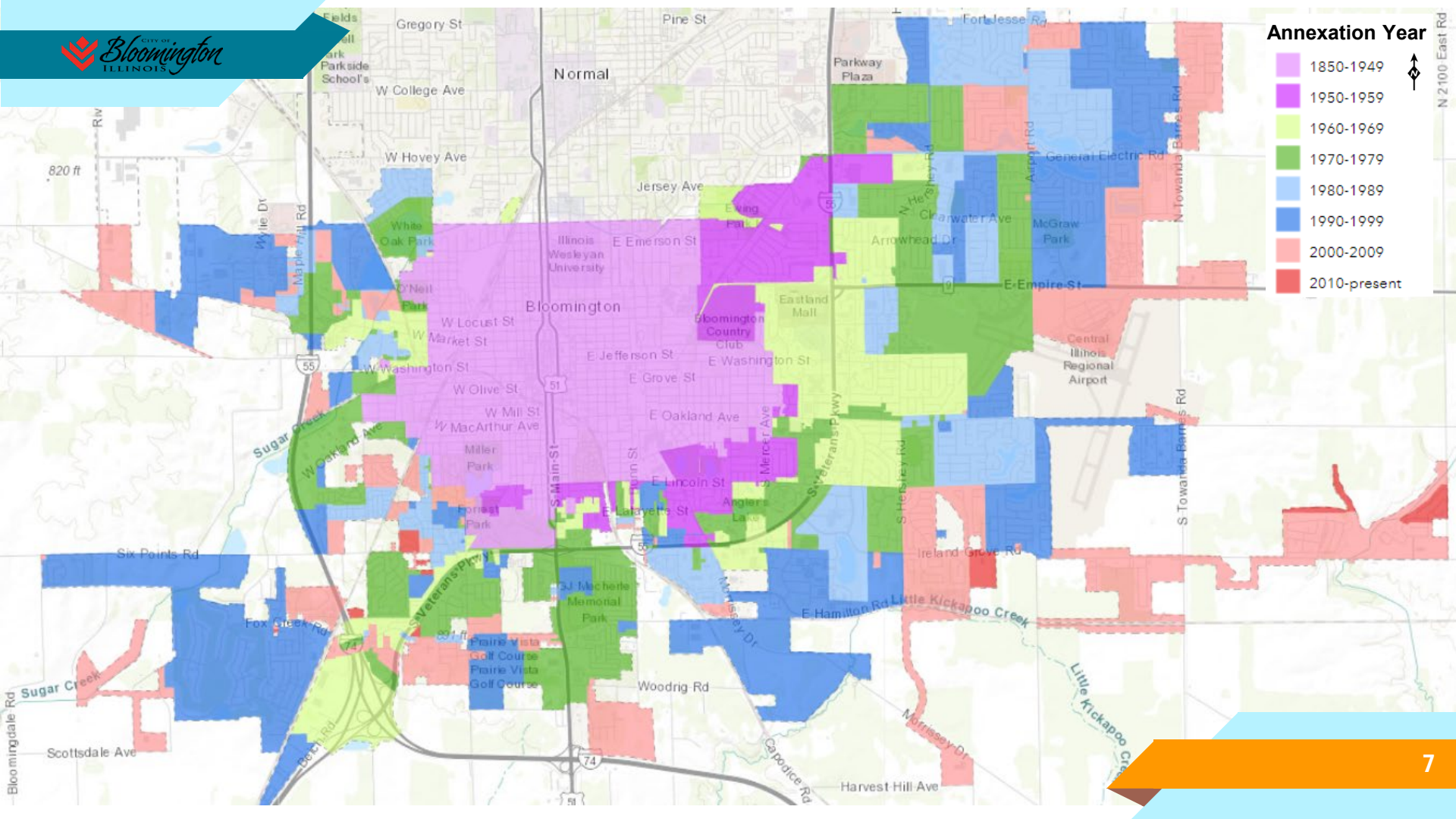
Serving Approximately 86,000 McLean County Residents

- 77,610 – City of Bloomington
- 8,578 – Multiple smaller water system supply connections

11 million gallons Average Daily Pumpage (May 2022 to March 2023)







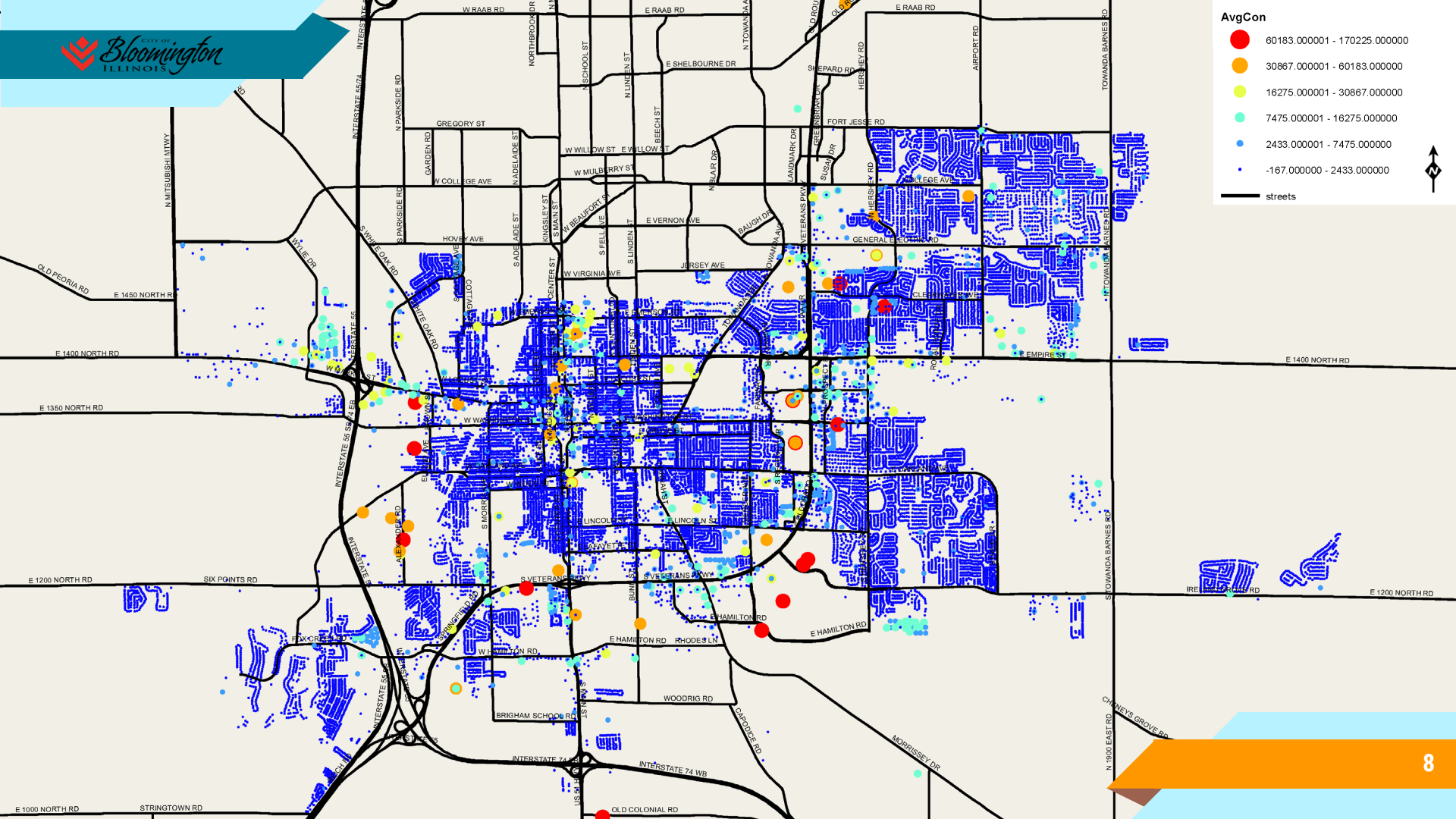
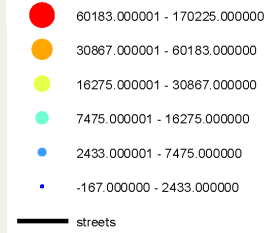
Annexation Year

- 1850-1949
- 1950-1959
- 1960-1969
- 1970-1979
- 1980-1989
- 1990-1999
- 2000-2009
- 2010-present

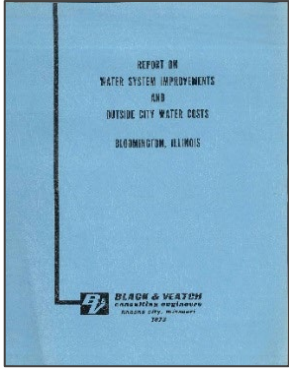


N 2100 East Rd

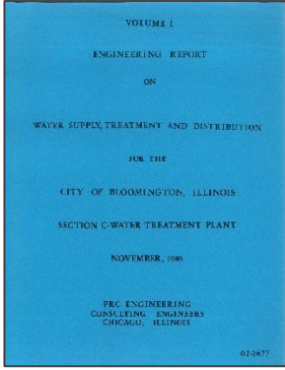
AvgCon



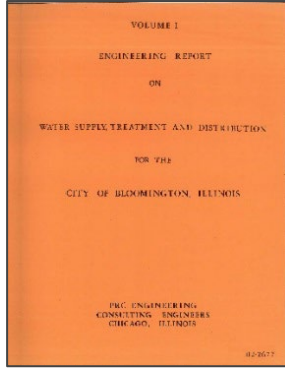
Capital Improvement Planning Process



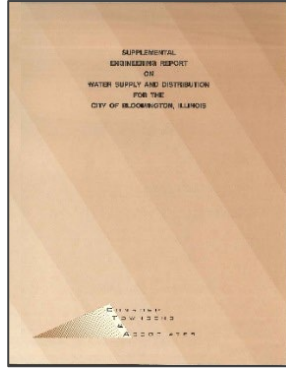
1973



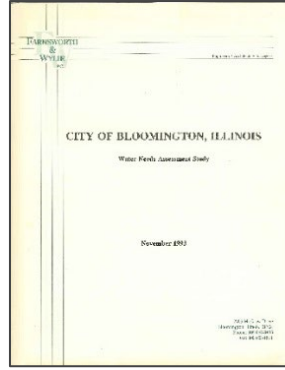
1985



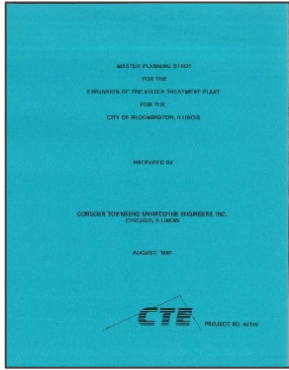
1988



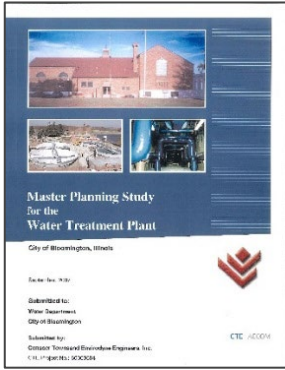
1991



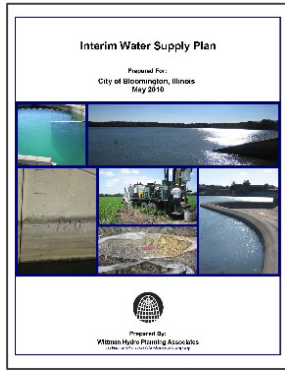
1993



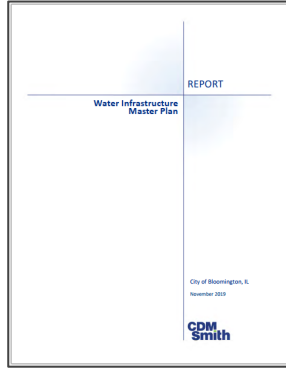
1997



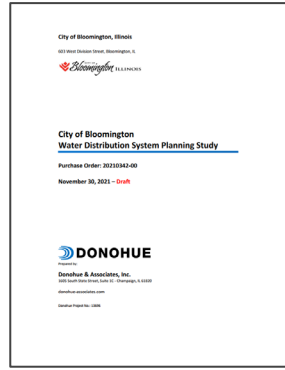
2007



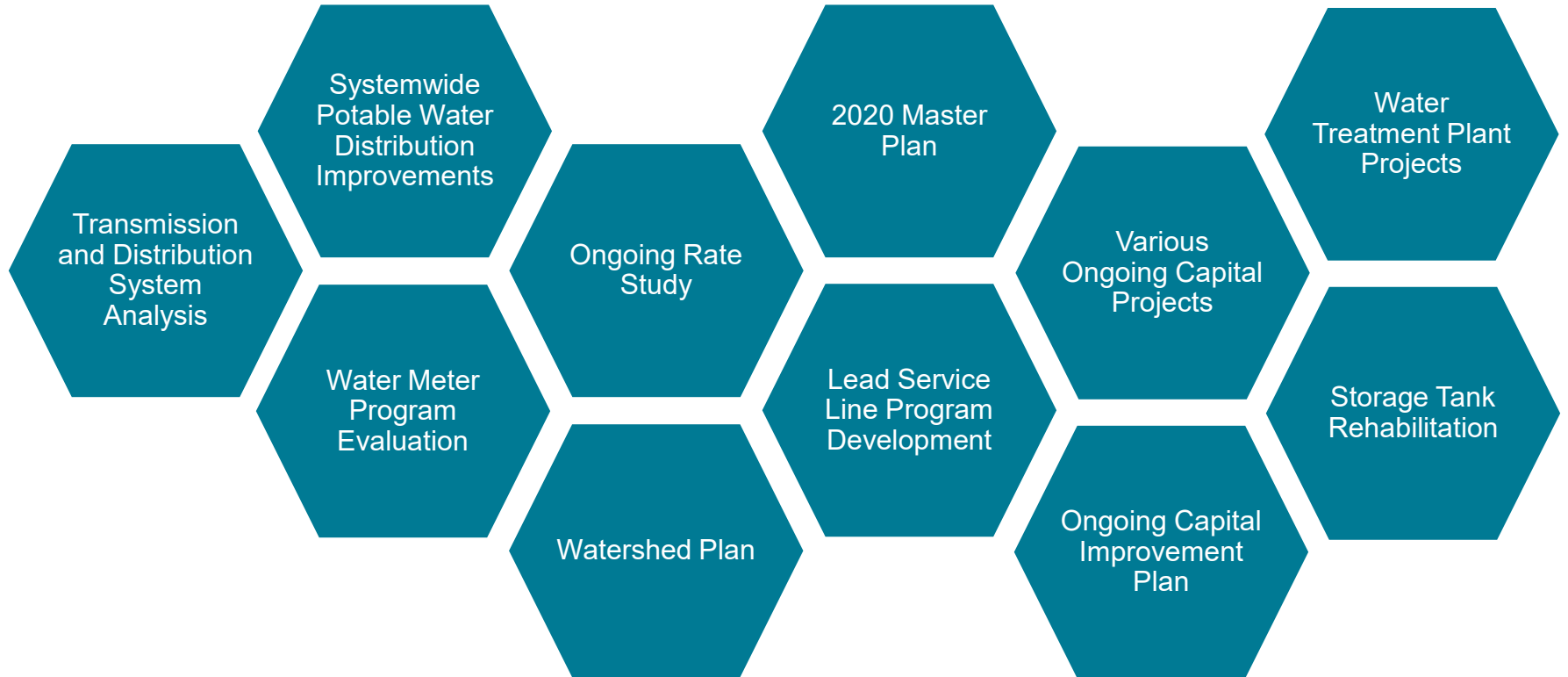
2010



2019



2021





CAPITAL IMPROVEMENT PROCESS

- Over \$9 million (68 items) from Master Plan have been completed or are in process.
 - WTP Buildings and Grounds Improvements
 - Pump Stations Buildings and Grounds Improvements
 - WTP Settled Water Piping Cleaning and Replacement
 - Chlorine Gas Scrubber Improvements
 - Ammonia Feed Improvements
 - Hamilton Road Elevated Tank Repainting
 - Fort Jesse Ground Storage Tanks Repainting
 - WTP Flow Meters Replacement
 - Pump Stations Electrical Improvements
 - SCADA Upgrades
 - Various Maintenance Items



Capital Improvement Plan Components



CAPITAL IMPROVEMENT PLAN COMPONENTS

Systemwide Potable
Water Distribution
Improvements

Lead Service Line
Replacement
Program

Watermain and Meter
Modernization

Water Treatment
Plant Projects

Lake Maintenance
and Watershed
Projects



SYSTEMWIDE IMPROVEMENTS PROJECT TIMELINE

Division and Enterprise Pump Station Planning Study approved by Council

Division and Enterprise Pump Station Planning Study First Amendment to study location alternatives approved by Council

Systemwide Potable Water Distribution Improvements Preliminary Design contract approved by Council

Anticipated future design contract to be submitted to Council for approval

JAN 2020

JULY 2020

JAN 2021

JULY 2021

APRIL 2022

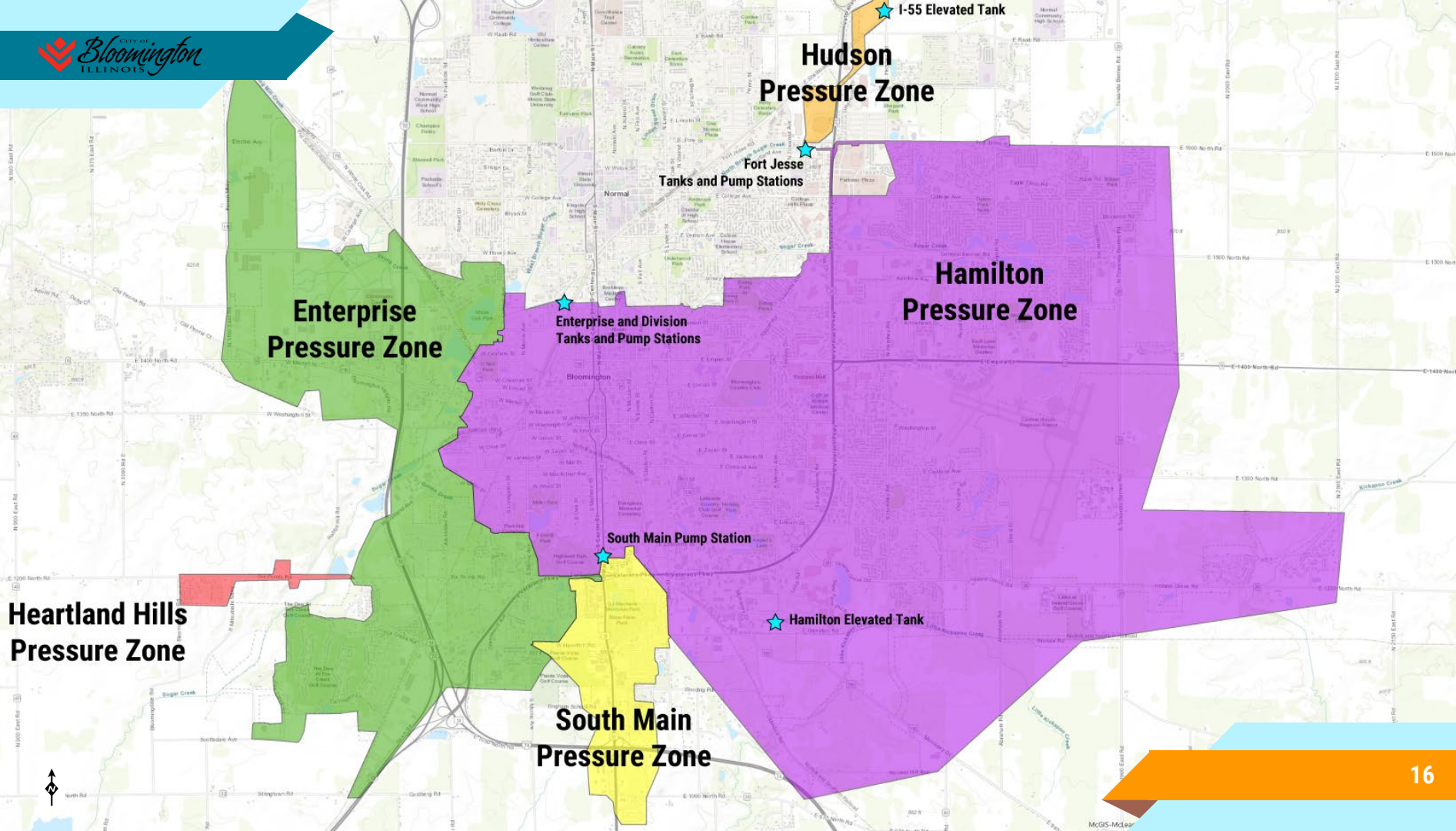
APRIL 2022 TO CURRENT

SUMMER 2023

Water Infrastructure Master Plan approved by Council

Division and Enterprise Pump Station Planning Study completed with a base alternative to build Hamilton Zone Pump Station project

Ongoing planning and design work for the Systemwide Potable Water Distribution Improvements



**Hudson
Pressure Zone**

**Fort Jesse
Tanks and Pump Stations**

**Enterprise
Pressure Zone**

**Enterprise and Division
Tanks and Pump Stations**

**Hamilton
Pressure Zone**

South Main Pump Station

Hamilton Elevated Tank

**Heartland Hills
Pressure Zone**

**South Main
Pressure Zone**



CAPITAL IMPROVEMENT PLAN COMPONENTS: LEAD SERVICE LINE REPLACEMENT PROGRAM

- Replacing disturbed lead service lines
- Providing customer notices
- Evaluating and planning
- Assembling service line inventory
- Continuing water quality testing
- Developing additional tracking mechanisms

INVENTORY AND REPLACEMENT PLAN TIMELINE

April 15, 2022 – Initial Material Inventory Completed

April 15, 2023 – Updated Material Inventory Submitted to Illinois Environmental Protection Agency (IEPA)

April 15, 2024 – Final Material Inventory and Initial Replacement Plan Submitted to IEPA*

April 15, 2025 – April 15, 2027 – Updated Replacement Plan Submitted to IEPA by April 15 Annually

April 15, 2027 – Final Replacement Plan Submitted to IEPA

*Community water suppliers may apply for an extension for submission of the final material inventory to IEPA, but must do so no later than January 15, 2024, to be considered.



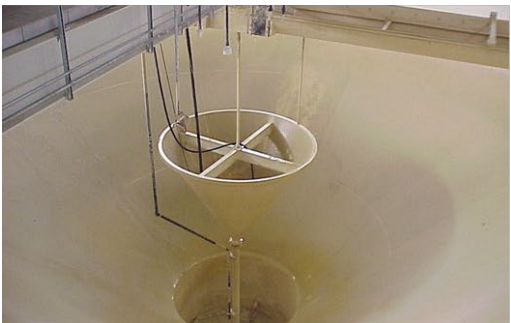


CAPITAL IMPROVEMENT PLAN COMPONENTS: WATERMAIN AND METER MODERNIZATION





CAPITAL IMPROVEMENT PLAN COMPONENTS: WATER TREATMENT PLANT PROJECTS





CAPITAL IMPROVEMENT PLAN COMPONENTS: LAKE MAINTENANCE AND WATERSHED PROJECTS



Rate Study



RATE STUDY

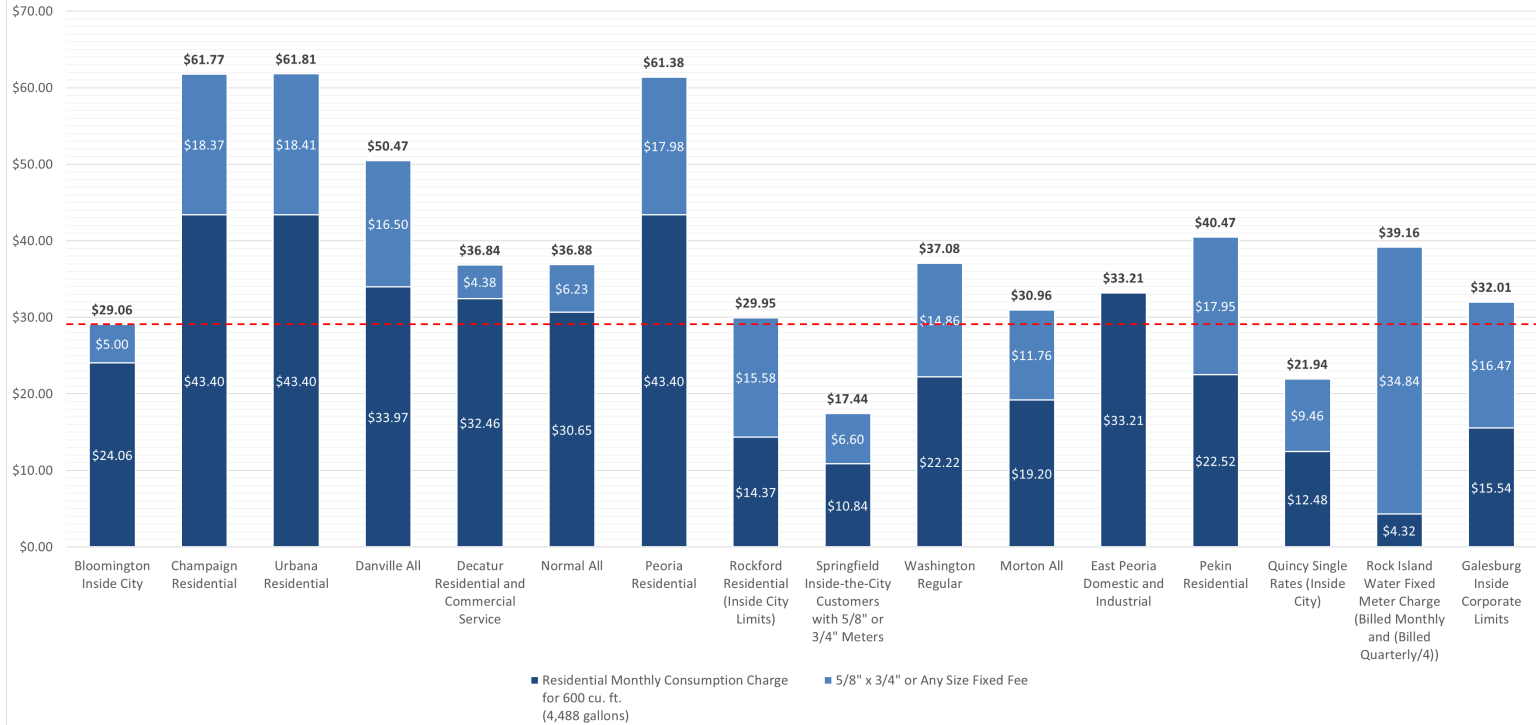
Goals

- ▶ Sustainably Fund Operations and Capital Improvements
- ▶ Improve Equity and Affordability

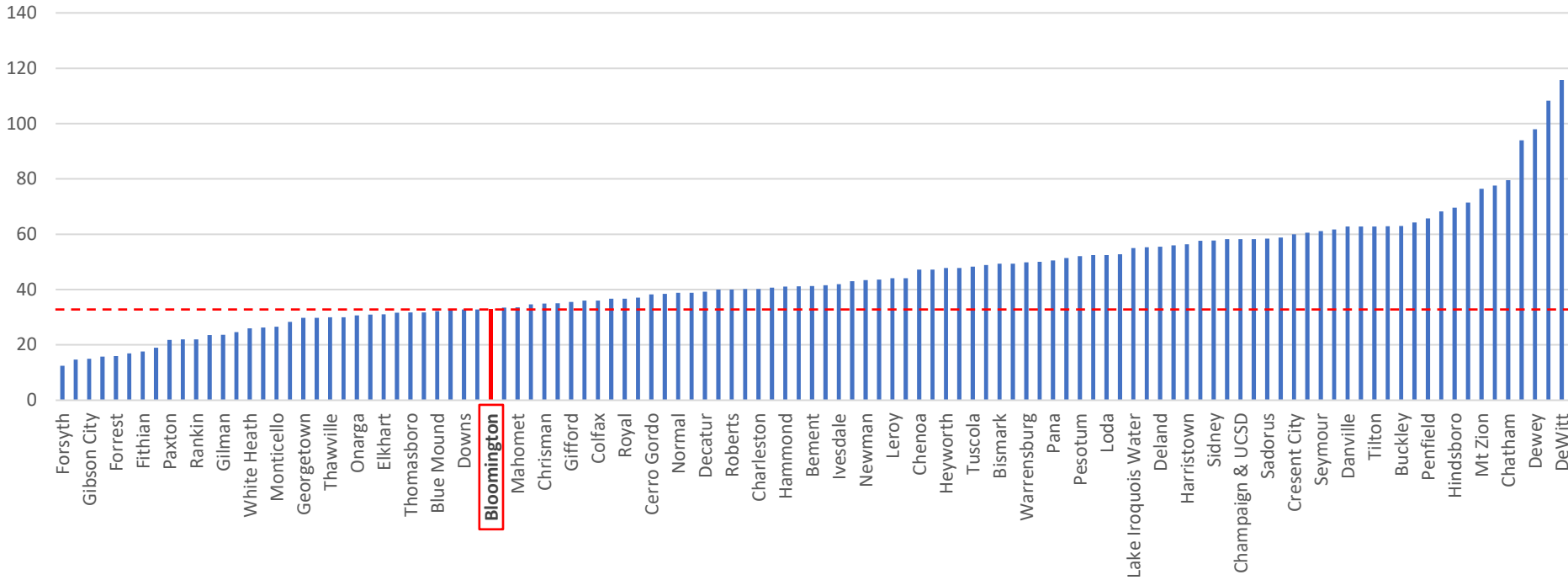
Information Opportunities

- ▶ Public Outreach Committee
- ▶ Council Discussions and Presentations
- ▶ Public Meetings
- ▶ Project Microsite and Press Releases

Residential Monthly Consumption Charge for 600 cu. ft. (4,488 gallons)
and 5/8" x 3/4" or Any Size Fixed Fee (No Taxes or Additional Fees) by Municipality as of January 1, 2023



Monthly Water Charge Data from Survey of 115 Central Illinois Communities by Berns, Clancy, & Associates



Next Steps and Tentative Timeframes



NEXT STEPS AND TENTATIVE TIMEFRAMES

Summer 2023

Design contract to
continue Systemwide
Potable Water
Distribution
Improvements

Summer 2023

Design contract for
inventory and program
development for Lead
Service Line
Replacement Program

Summer / Fall 2023

Presentation and
additional Rate Study
information

Fall / Winter 2023

Construction contract
for Meadowbrook
Subdivision
Watermain & Street
Improvements



THANKS!

Any questions?
Kevin Kothe, P.E.
Director of Public Works