

# Information Item

2023 Capital Program



Environment Committee: September 13, 2022

Kyle Colvin, Rene Heflin, Adam Gordon

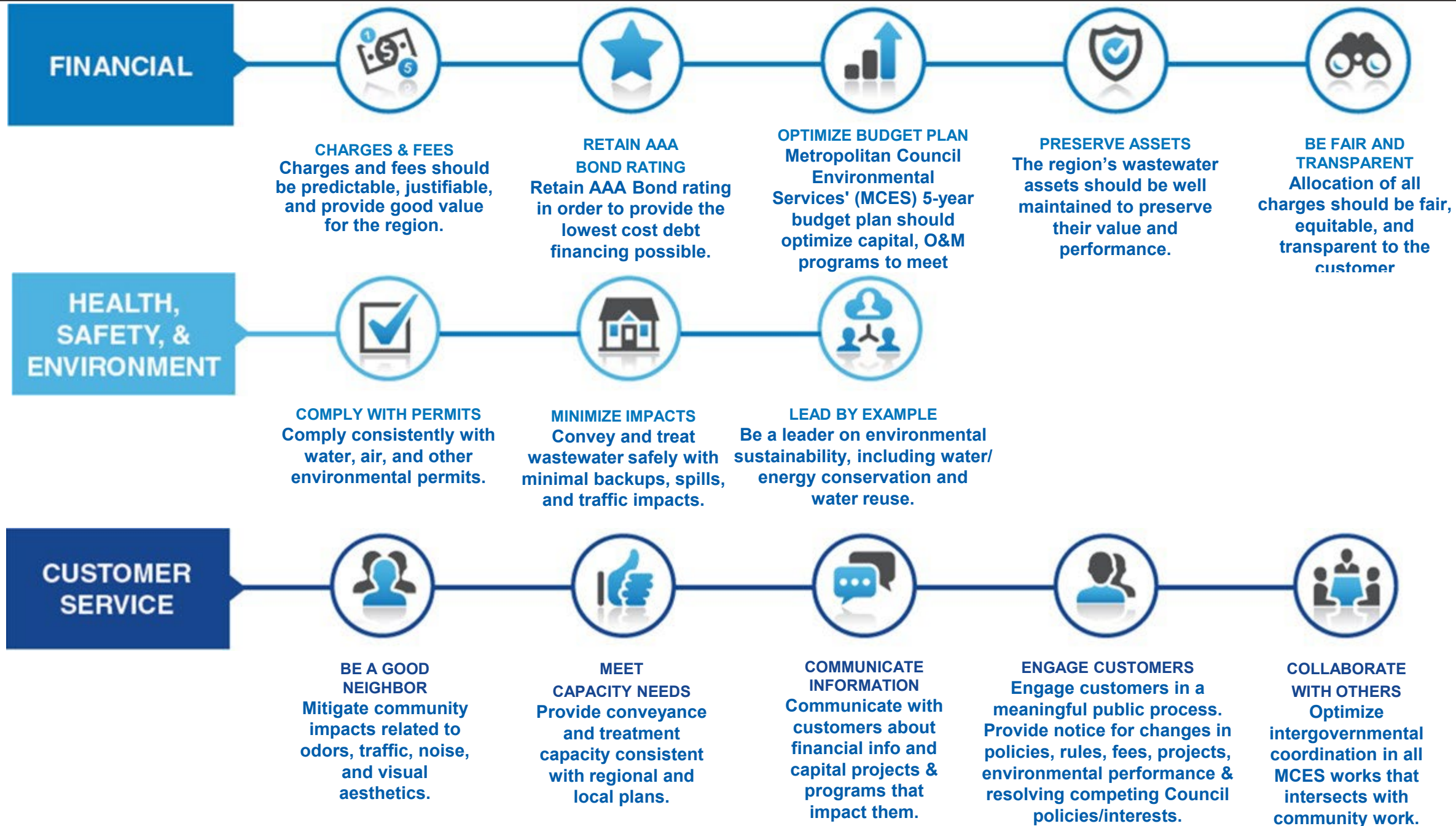
# Agenda



## 2023 Capital Program

- Program Overview
- Wastewater System Planning
- Treatment Plant Projects
- Interceptor Projects
- Schedule
- Questions

# Customer Level of Service



# Capital Program Definitions

## 6 Year Capital Program

### Authorized Capital Program (ACP)

Multi-year authorization for project spending where funding sources have been identified.

### Capital Budget

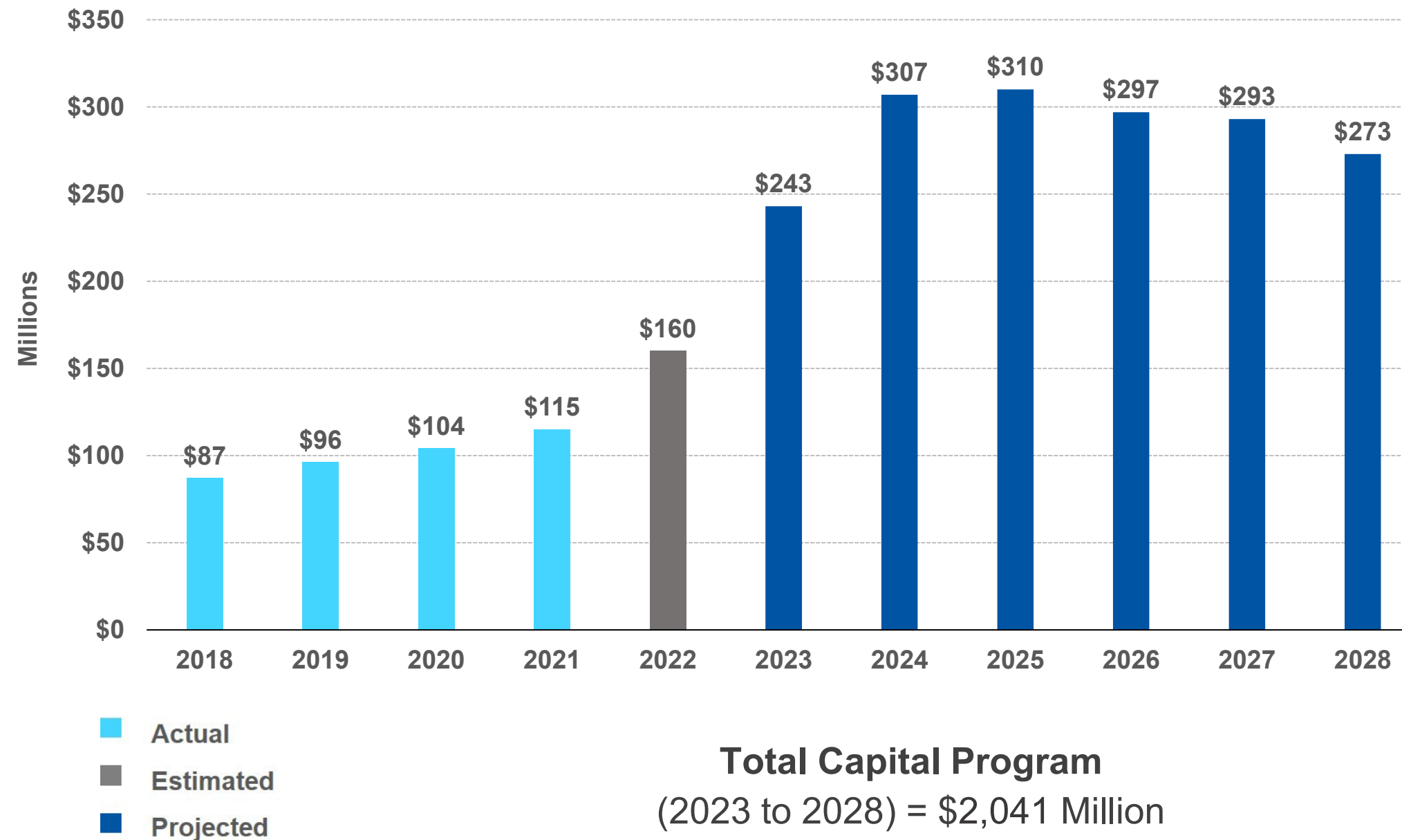
Amount from Authorized Capital Program that Council approves to be spent in upcoming year (2023).



### Capital Improvement Program (CIP)

Capital investment plan where funding sources have been identified but projects have not been authorized to proceed.

# Past Expenditures and Projected Program: 2018 to 2028



# Summary of Authorized Capital Program (ACP) Changes

Current Authorizations:	\$1,104,552,525
Adjustments Existing Projects:	+ \$223,296,628
New Projects:	+ \$55,010,896
Closed Projects	-\$119,593,291
<b>Proposed 2023 Authorization:</b>	<b>\$1,263,266,758</b>



# Capital Program ACP Objectives

## Preserve Assets

Rehabilitate and replace assets to preserve value and performance

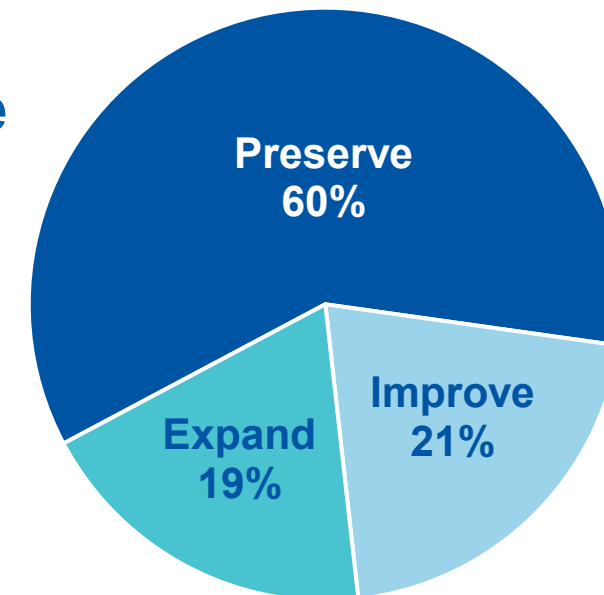
## Meet Capacity Needs

Expand system capacity through plant expansions and interceptor extensions or improvements

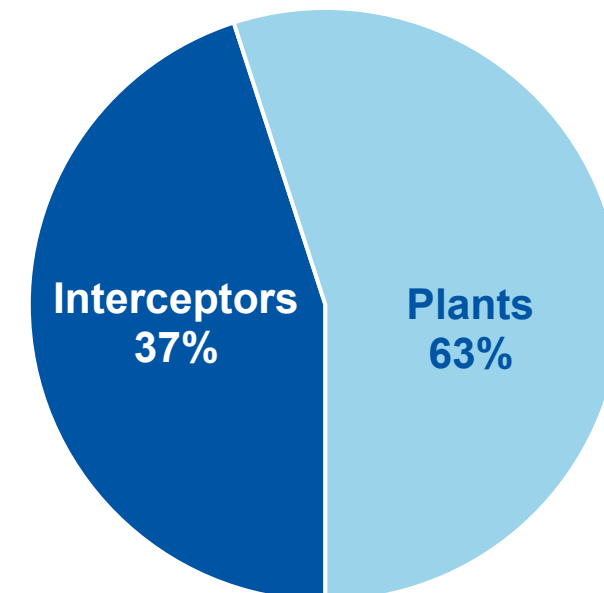
## Improve Quality

of service by responding to more stringent regulations, reusing wastewater, increasing system reliability, and conserving and generating energy

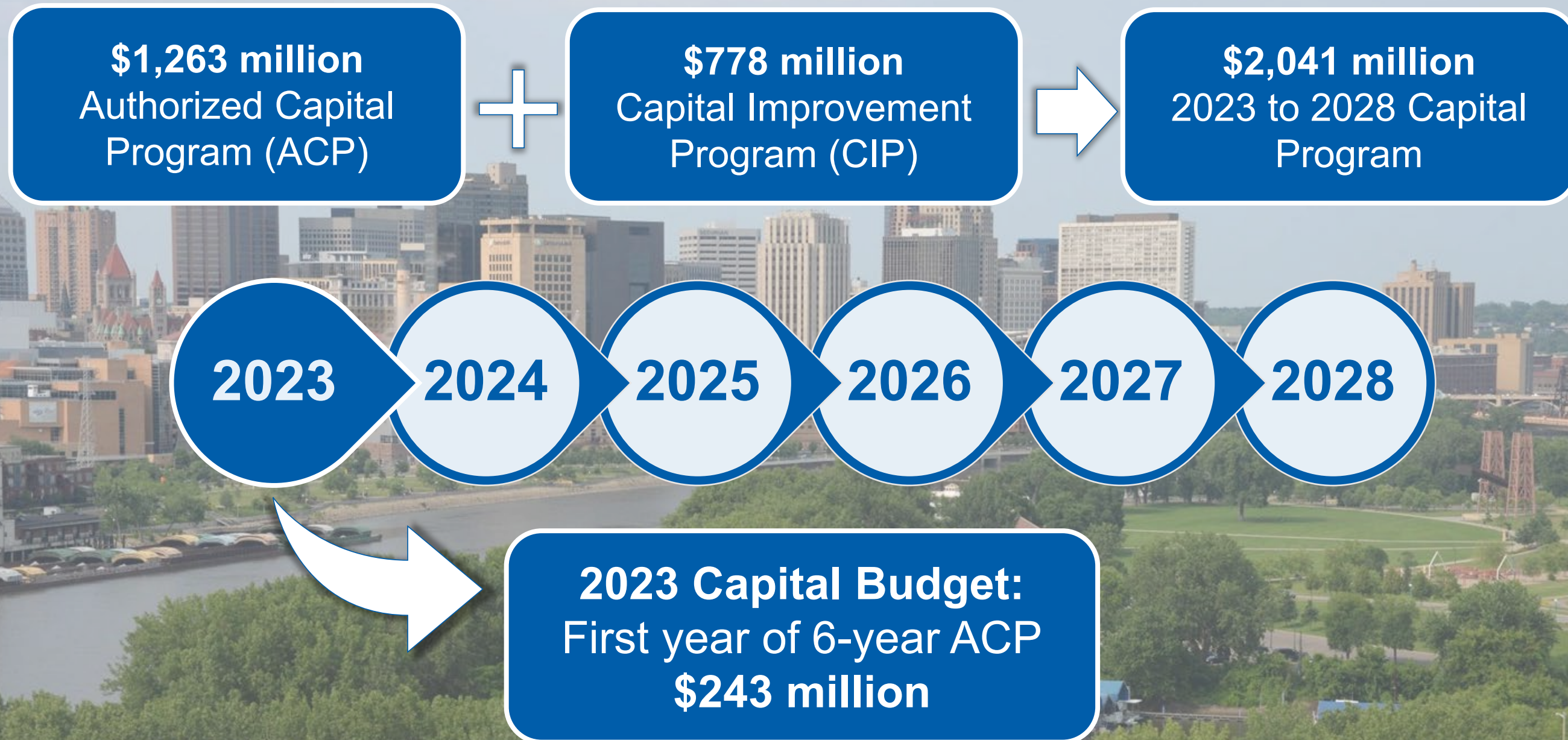
### Objective



### Type



# Proposed 2023 Capital Program



# Capital Program Financing

## Public Facilities Authority (PFA) Loans

\$50 million annual loan  
1.0% interest rate discount

**2023:** \$ 50 million loan  
(anticipated)

## Council General Obligation Bonds

The Council sells general obligation bonds. The Council has a AAA bond rating and receives low interest rates.

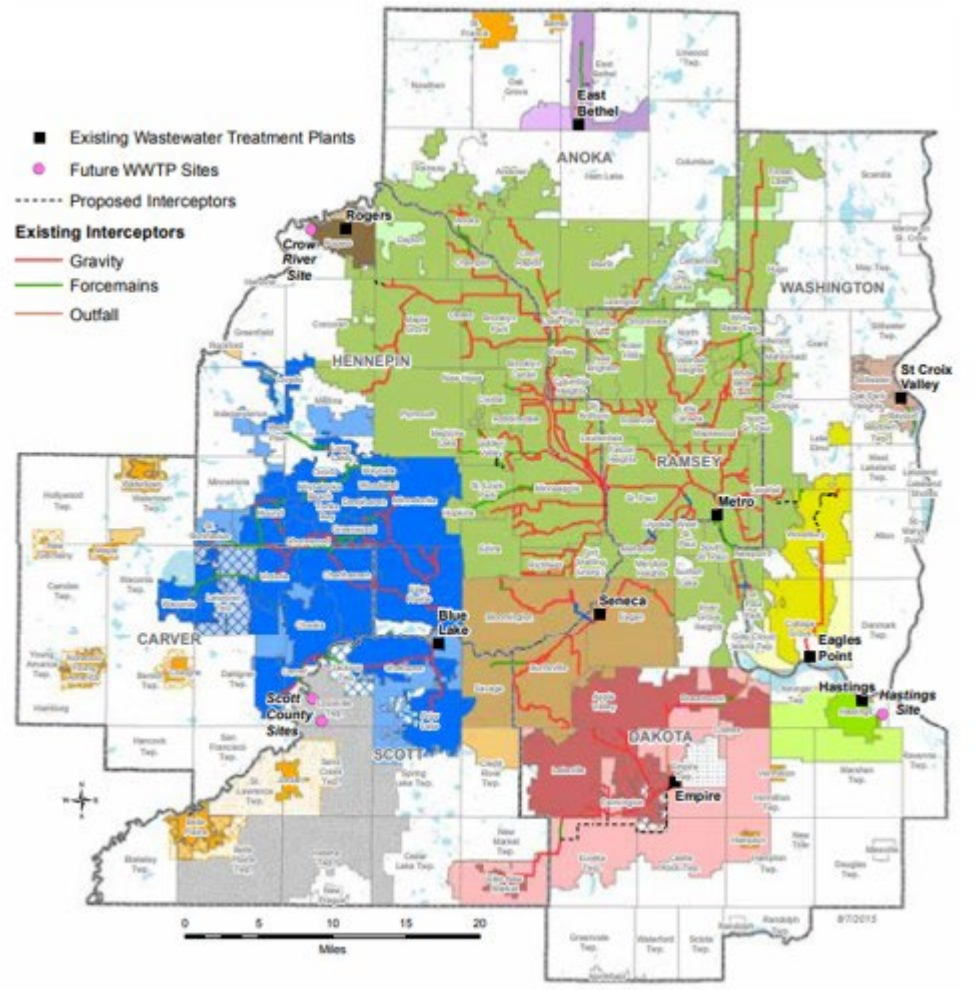
**2022:** \$48 million  
**2023:** To Be Determined (TBD)

## Pay-As-You-Go (PAYGO)

Funds dedicated to paying for some capital expenses with current revenue.

**2023:** \$11 million

# Wastewater System Planning



Kyle Colvin

Manager, Wastewater Planning  
and Community Programs

# Statutory Authority

## Statutory Authority to Require and Review Local Comprehensive Sewer Plans for Regional System Conformance:

### Statute 473.175, Subdivision (Subd.) 1:

To review local comprehensive plans to determine compatibility with each other and conformity with metropolitan system plans.

Require a local governmental unit to modify any comprehensive plan if the plan is more likely than not to have a substantial impact on or contain a substantial departure from metropolitan system plans.

### Statute 473.513:

Construction of new sewers or substantial alterations or improvements of existing sewers, shall not be undertaken by any local government unit unless said project is found to be in accordance with its comprehensive plan as approved by the Council.

The Council shall review all local Minnesota Pollution Control Agency permit applications for alterations or improvements to its disposal system for consistency with the local comprehensive sewer plan as approved by the Council.

# New Projects (Local Comprehensive Plans)

- Blaine Relief Interceptor
- Savage Trunk Sewer Acquisition (Credit River)
- Crow River Wastewater Treatment Plant
- Miscellaneous small system improvements

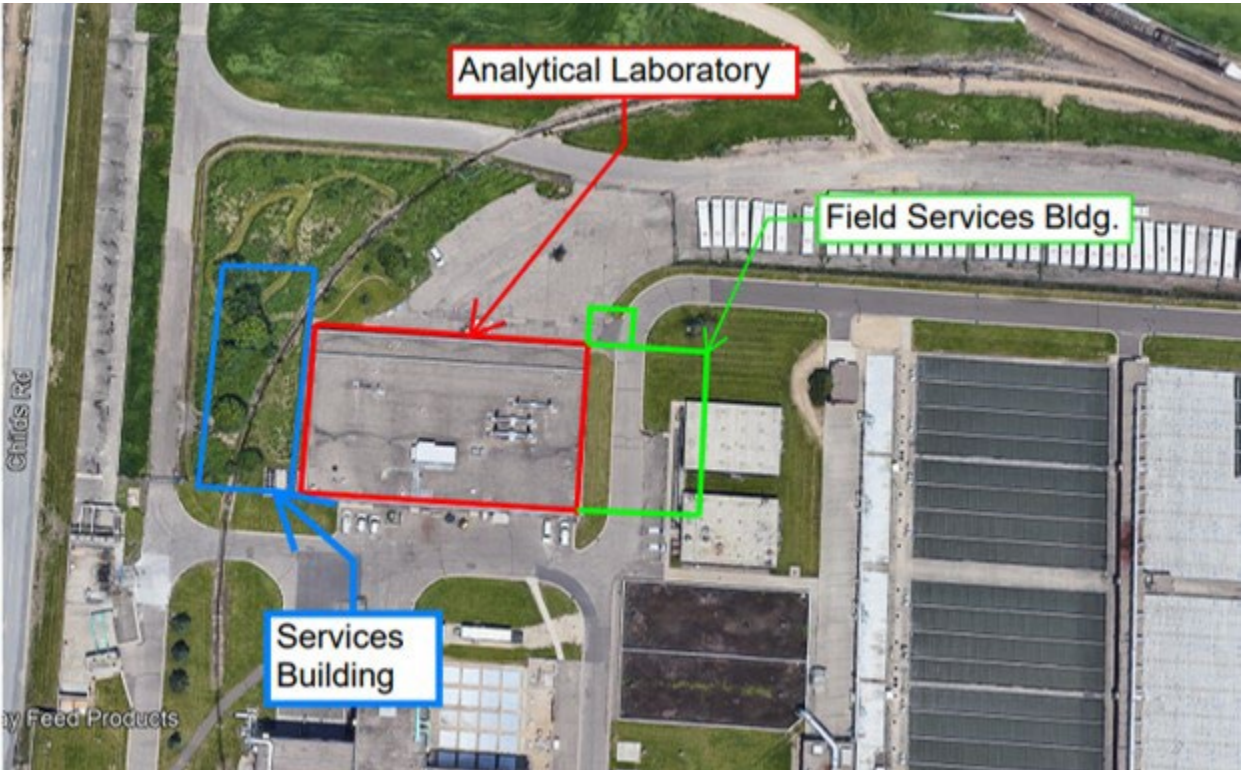
# Treatment Plant Projects

Rene Heflin  
Manager, Plant Engineering

# Metro Services Building & Site Improvements

## Objective

- Improve Quality



## Details/Overview

- Remodel 18,100 square feet (s.f.) within 30,265 s.f. analytical Laboratory
- Construct 27,000 s.f. two-story addition on the west side of the existing analytical laboratory
- Construct 19,000 s.f. field services annex on the east side of the existing Laboratory

## Schedule

Date	Milestone
2019 to 2020	Planning
2020 to 2021	Preliminary Design
2021 to 2022	Procurement
2022 to 2024	Design Build Construction

# Metro Plant Fourth Incinerator

## Objectives

- Preserve assets
- Meet capacity needs

## Details/Overview

- Construct fourth incinerator train, with energy recovery & air pollution control equipment, next to the existing three incinerators in a 21,200 s.f. expansion to the Solids Management Building
- Install a new, larger steam turbine generator in a separate 3,125 s.f. building addition
- Expand auxiliary systems to support operation of the fourth incinerator



## Schedule

Date	Milestone
2015 to 2019	Planning
2019 to 2022	Preliminary Design
2022 to 2023	Procurement
2023 to 2026	Design Build Construction

# Programmable Logic Controller (PLC) Renewal

## Objective

- Preserve Assets



## Details/Overview

- PLC parts will not be available after 2022.
- Replace 150 PLCs at 8 wastewater treatment plants (Rogers is complete).

## Schedule

Date	Milestone
2021 to 2022	Planning
2022 to 2026	Design
2023 to 2027	Construction

# Blue Lake Wastewater Treatment Plant Improvements Phase 1

## Objectives

- Preserve assets
- Meet capacity needs
- Improve quality



## Details/Overview

- Phase 1 improvements are required within the next 10 years to meet level of service objectives
  - Renew solids treatment facilities
  - Add fifth digester
  - Hydraulic and liquid process improvements

## Schedule

Date	Milestone
2018 to 2021	Planning
2022 to 2026	Design
2024 to 2027	Construction

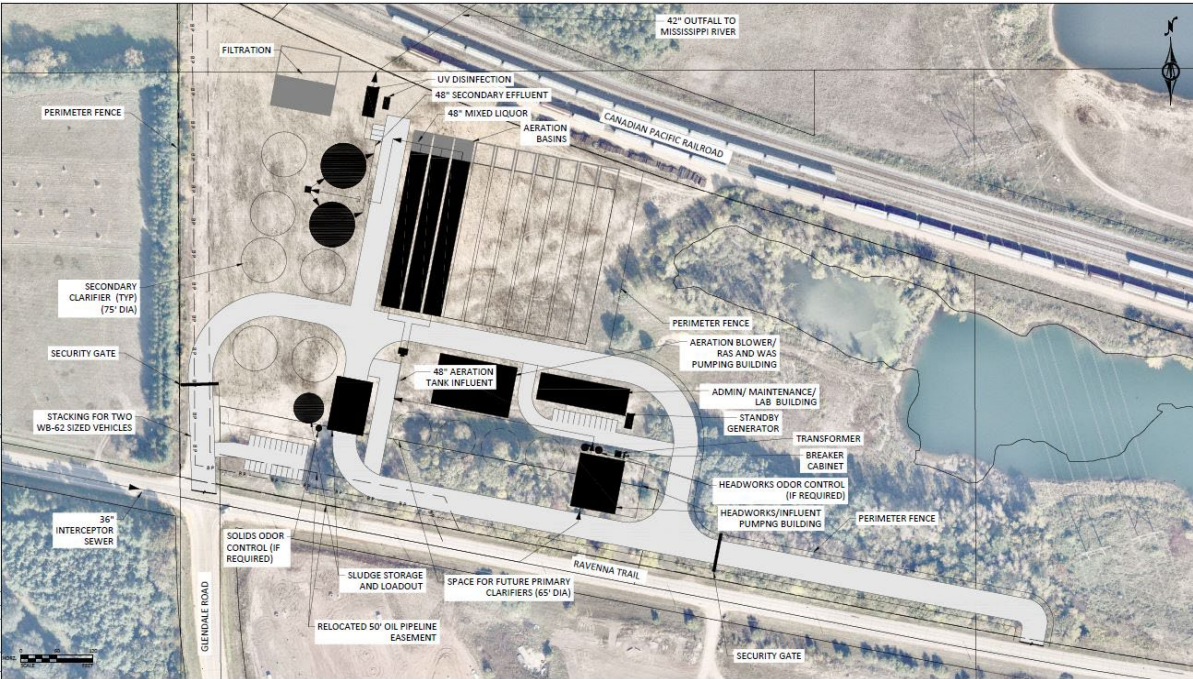
# Hastings Wastewater Treatment Plant

## Objectives

- Meet capacity needs
- Improve quality

## Details/Overview

- The existing plant has a design capacity of 2.34 million gallons per day (mgd) and is located on 3.65 acres with no ability to expand.
- The new plant will have a treatment capacity of 3 mgd, and will be expandable to 10 mgd
- The proposed site plan consolidates new facilities on 10 acres of the 221-acre site and is an efficient use of the site.



## Schedule

Date	Milestone
2021 to 2022	Planning
2022 to 2023	Preliminary Design
2023 to 2024	Procurement
2024 to 2027	Design Build Construction

# Crow River Wastewater Treatment Plant

## Objectives

- Meet capacity needs
- Improve quality

## Details/Overview

- Crow River must be operational by December 31, 2030, per intergovernmental agreement with the City of Rogers
- The new plant will have a treatment capacity of 3 million gallons per day (mgd), and will be expandable to 16 mgd
- The plant will free up interceptor capacity for urban core growth.



## Schedule

Date	Milestone
2021 to 2023	Planning
2023 to 2025	Preliminary Design
2025 to 2026	Procurement
2026 to 2028	Design Build Construction

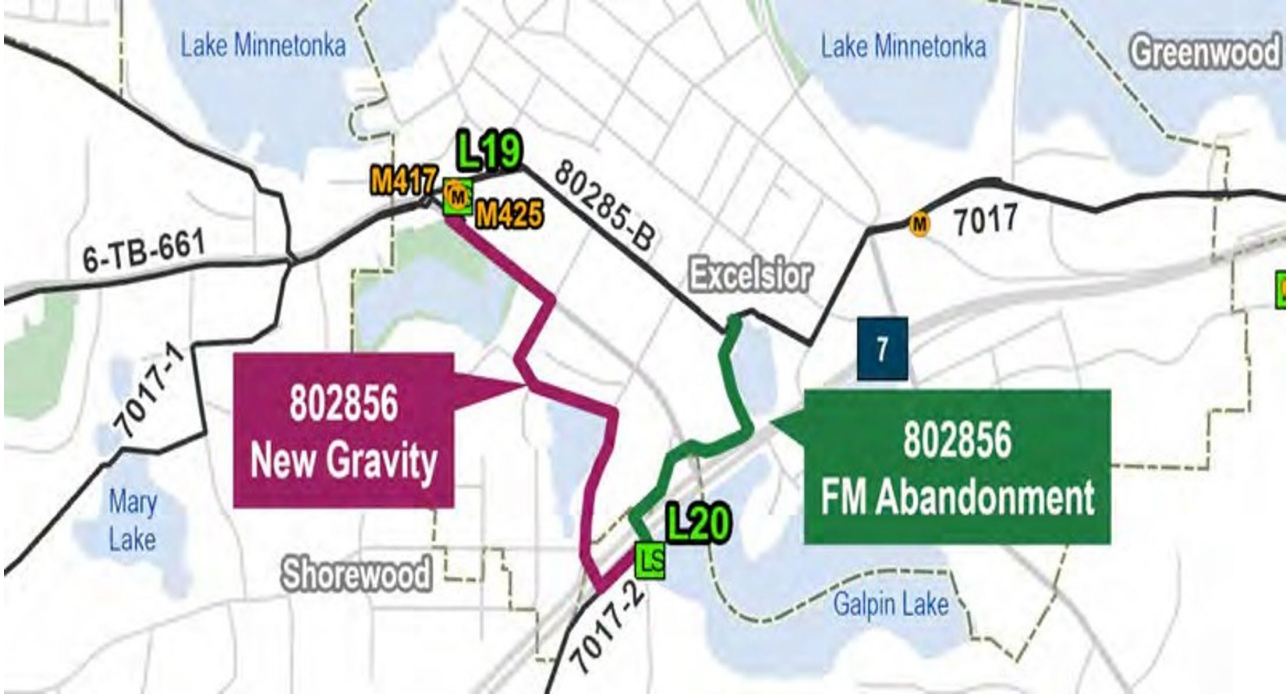
# Interceptor Projects

Adam Gordon  
Manager, Interceptor Engineering

# Excelsior Area Lift Station L20

## Objectives

- Preservation and Quality Improvement



## Details/Overview

- Lift Station L20 was constructed in 1970 and is at the end of its service life.
  - Remove existing lift station L20 and abandon Forcemain 7017-2
  - Install a gravity pipe from L20 to L19.
  - Construct City infrastructure improvements concurrently with MCES work.

## Schedule

Date	Milestone
2022 to 2023	Final Design and Bidding
2023 to 2025	Construction

# Coon Rapids 4-NS-525 Rehabilitation

## Objective

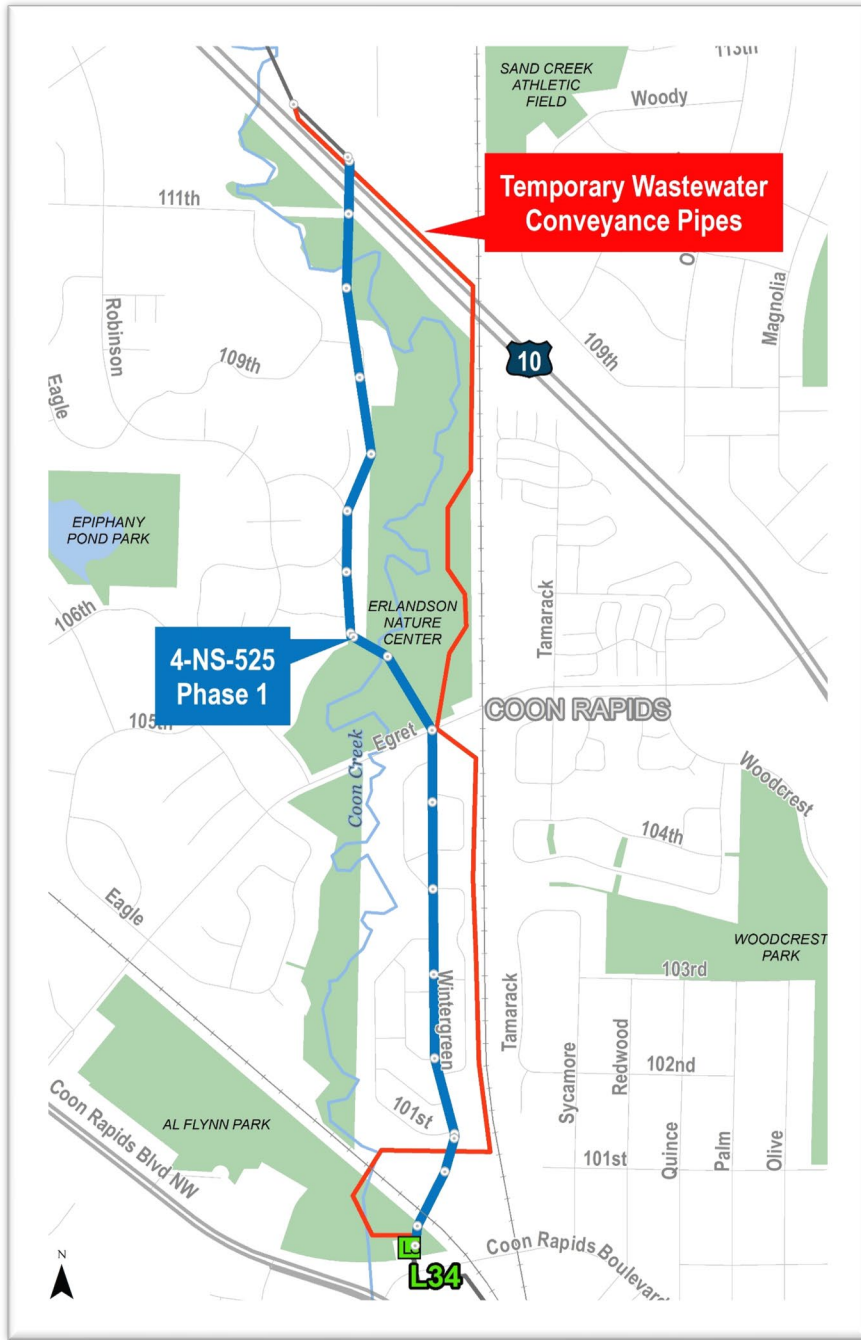
- Preservation

## Details/Overview

- Rehabilitate 1.5 miles of poor and severe condition 48-inch gravity interceptor with Cured-in Place Pipelining (CIPP)
- Rehabilitate 20 MHs with cured-in-place liners

## Schedule

Date	Milestone
2022	Land and Permit Acquisition, Procurement
2023	Construction



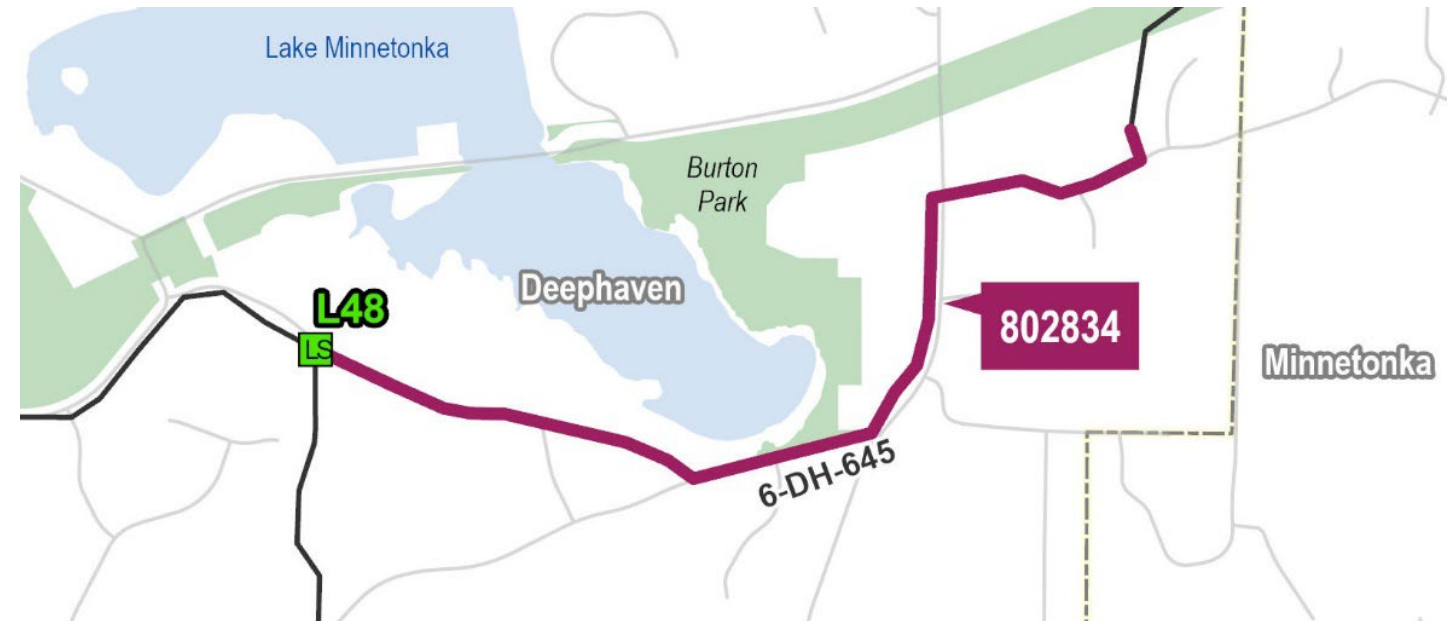
# 802834– L48 Rehabilitation and 6-DH-645 Force main Replacement

## Objective

- Preservation

## Details/Overview

- Lift Station Rehabilitation
  - Construct valve vault to replace buried gate valves
  - Replace pumps, piping and electrical
- Forcemain Replacement
  - Directionally drill 10-inch High Density Polyethylene forcemain
- Gravity Pipe Replacement
  - Open cut construction to install new 15-inch Polyvinyl Chloride



## Schedule

Date	Milestone
Winter 2022	Design
Winter 2022	Bidding
Summer 2023	Start Construction
Winter 2025	End Construction

# L46 and L49 Lift Station Improvements

## Objectives

- Preservation and Quality Improvement



## Details/Overview

- Replacement of L49 Lift Station
  - Driven by condition, safety, and reliability
  - Moving out of road right-of-way
  - Adding third pump and emergency generator
- Rehabilitation of L46 Lift Station
  - Adding third pump, site safety improvements

## Schedule

Date	Milestone
2019 to 2022	Planning and Design
2023 to 2025	Construction

# 1-MN-310 Rehab between 23rd & 33rd Ave. N.

## Objective

- Preservation



## Details/Overview

- Rehabilitate 4,872 linear feet of poor and severe condition 54-inch gravity interceptor with CIPP
- Rehabilitate 13 maintenance holes(MHs)

## Schedule

Date	Milestone
2022	Design
2023	Construction

# Capital Program Schedule

Task	Date
Division-level budget presentation	August 10, 2022
Adoption of Preliminary Unified Operating Budget and Levies	August 2022
Informational Item Presentation to Environment Committee	September 13, 2022
Division-level Capital Program presentation	October 2022
Adoption of public comment draft budgets	October 2022
Adoption of final 2022 budgets and levies	December 2022



# Questions

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