

**Business Item 2019-259 JT:**  
**2019 Unified Budget Amendment – Third  
Quarter / 2020 Capital Program  
Authorization & Approval**

Jeannine Clancy, Assistant General Manager, Technical Services

Adam Gordon, Manager, Interceptor Engineering

Rene Heflin, Manager, Plant Engineering

Environment Committee: September 24, 2019





# Agenda



Program Overview



Wastewater Plants



Interceptors





# Customer Level of Service



**MCES Customer Level of Service is the foundation for the Capital Program.**

# Capital Program: Principles

## PARTNERSHIP



1



Treat customers and stakeholders respectfully

2



Leave the community with something better than they had prior to our project.

3



Plan and coordinate project with other public infrastructure work.

4



Keep every promise made during planning, design, and construction

5



Communicate in a manner as consistent as possible with each community's protocol.



# Capital Program Definitions

## Capital Program

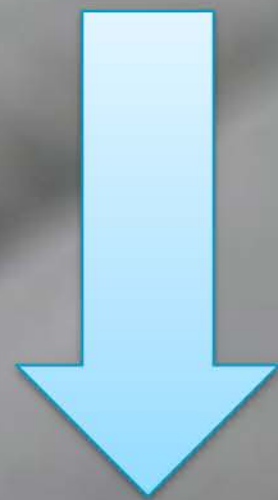
### Authorized Capital Program (ACP)

Multi-year authorization from Council to spend on projects where funding has been secured.



### Capital Improvement Program (CIP)

6-year capital investment plan where funding sources identified. Council has not authorized to proceed.



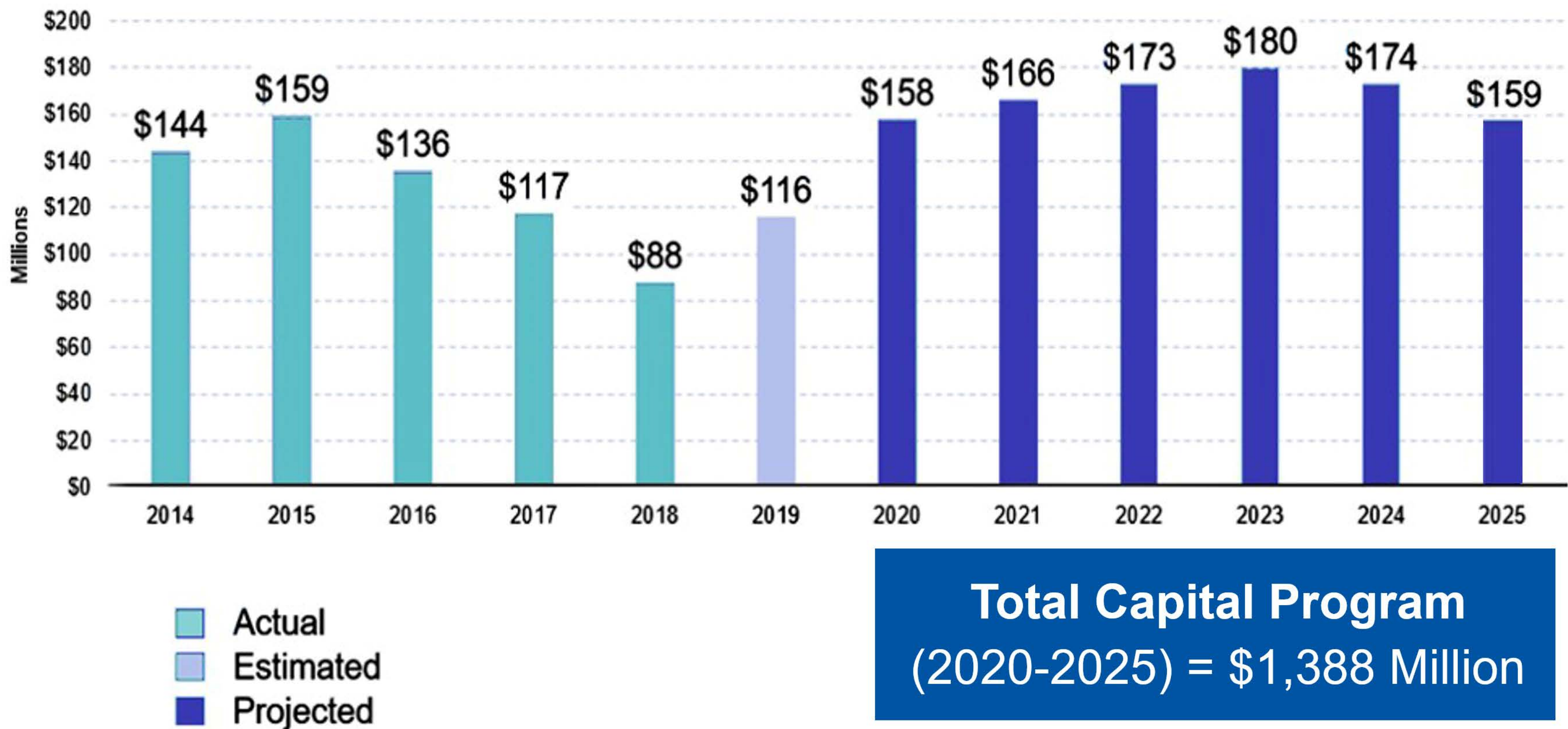
## Capital Budget

Amount from Authorized Capital Program that Council approves to be spent in upcoming year (2020).

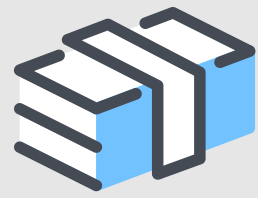


# Project Timing and Costs

## Cash Flow: 2014-2025



# Capital Program: Sources of Funds



## Public Facilities Authority (PFA) Loans

\$50 million annual loan  
1.5% interest rate discount

**2020:** \$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

**2020:** \$100 Million (est.)



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

Funds dedicated to paying for some capital expenses with current revenue

**2020:** \$11 Million

# 2020 ACP Breakdown



## Preserve Assets

Rehabilitate & replace assets to preserve value & performance

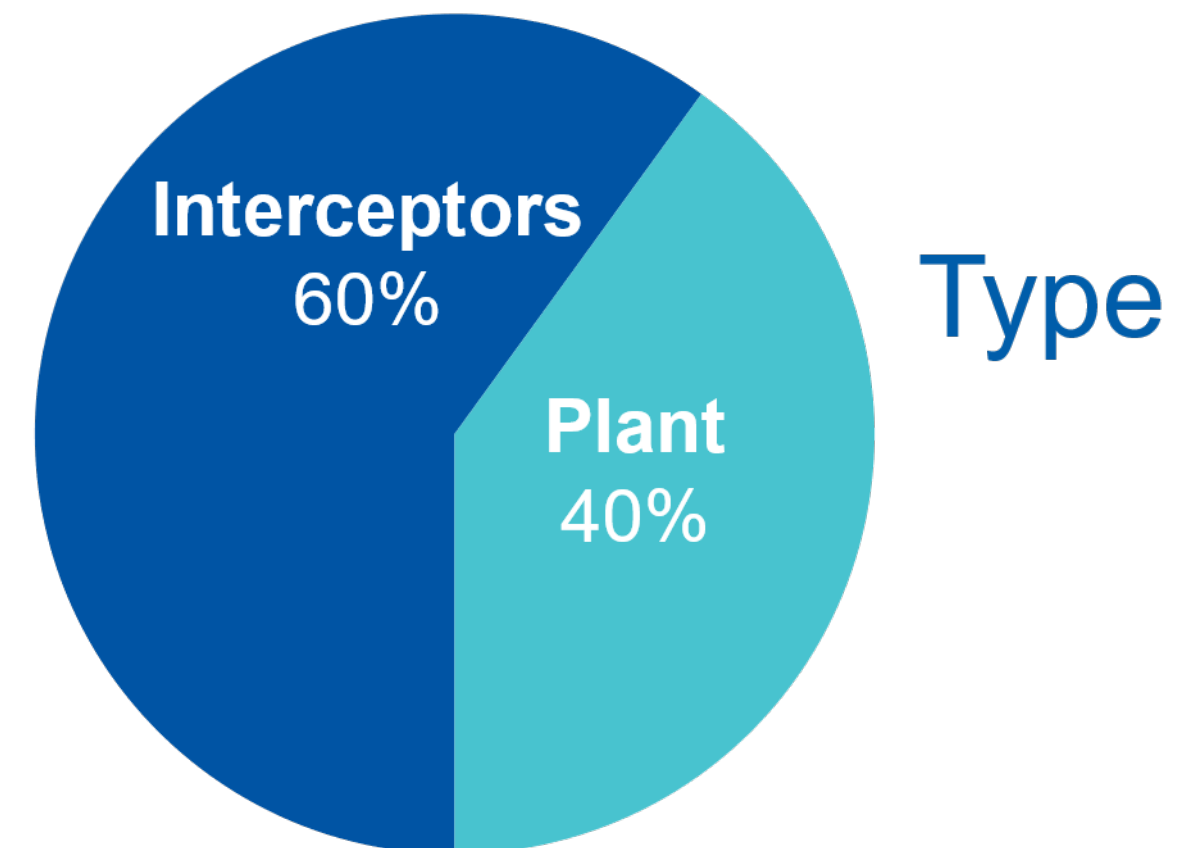
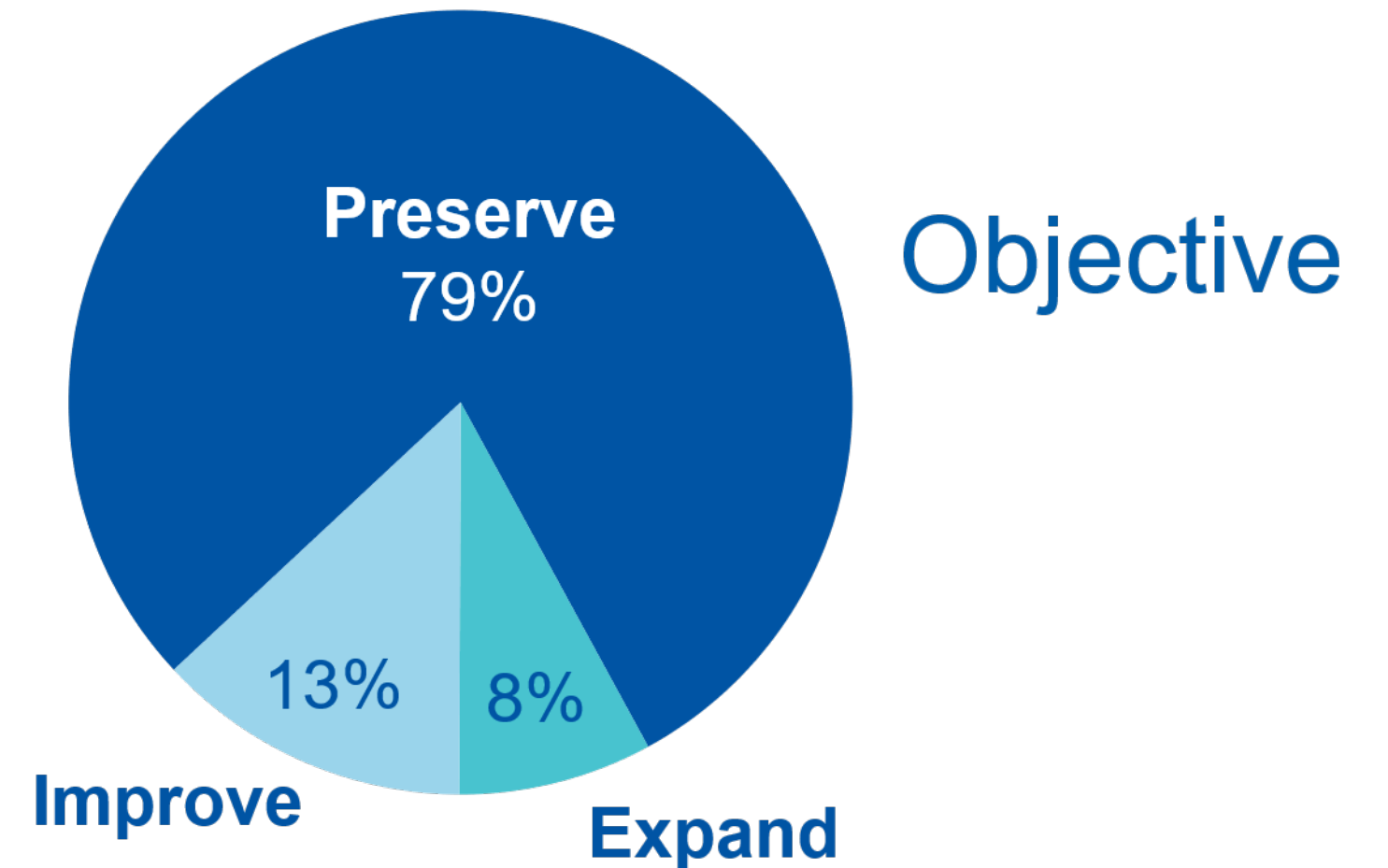


**Meet Capacity Needs** Expand system capacity through plant expansions & interceptor extensions or improvements



## Improve Quality

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





# Summary of Authorized Capital Program (ACP) Changes

Current Authorizations:	\$979,706,000
Adjustments: Existing Projects	-\$111,644,000
New Projects	+\$211,494,000
Closed Projects	<u>-\$99,371,000</u>
<b>Proposed 2020 Authorization</b>	<b>\$980,185,000</b>





# Proposed 2020 Capital Program





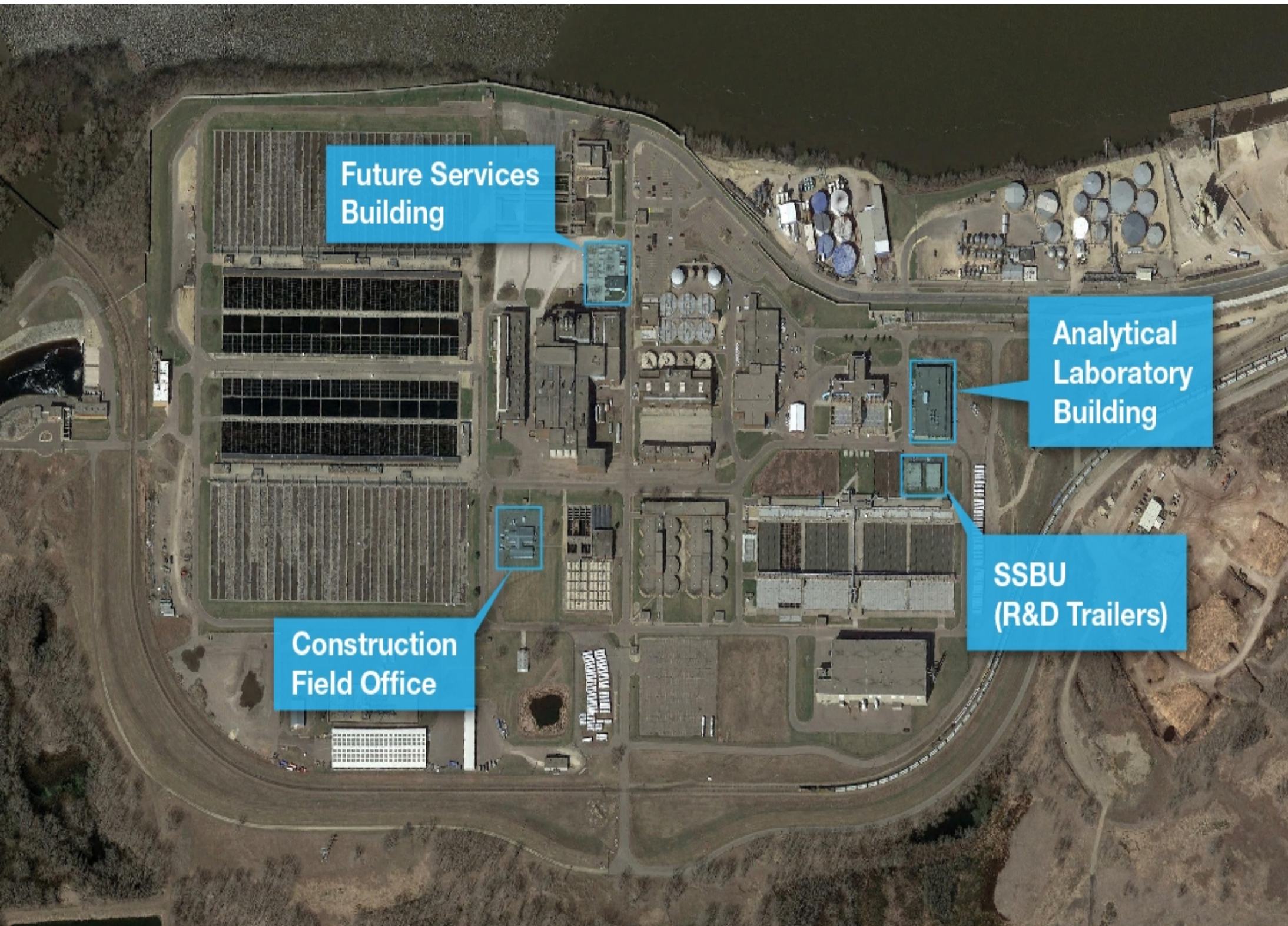
# Major Plant Projects

East Bethel Water Reclamation Facility





# Services and Analytical Laboratory Buildings Project



## Objectives/Goals

- Assemble work groups in close proximity to improve efficiency and effectiveness
- Discontinue use of rental space and temporary trailers
- Design the Services Building to accommodate industrial & community customers meetings
- Enhance the Metro Plant entrance to integrate Council's Mission/ Vision/Values



## Schedule

2019



2020



2021

Select Engineer/Prelim Design

Construction

\$20 Million



# Metro Plant Solids Management Improvements



## Objectives/Goals

- **Preserve Existing Wastewater Treatment Plant Infrastructure**  
*Planned renewal projects will require extended downtime of the existing incinerators.*
- **Serve Regional Population Growth**  
*50,000 new residents in the Metro Plant service area in the Twin Cities by 2050.*



## Schedule & Cost

2019



2021



2024



2027

**IMPROVEMENTS PROJECT**  
\$20 million

**FOURTH INCINERATOR**  
\$150 million

**RENEWAL PROJECT**  
\$30 million

***The Metro Plant processes 75% of the region's wastewater solids including solids from four other treatment plants.***



# Rogers WWTF Modifications

## Crow River WWTP Construction



### Objectives/Goals

- Extend Life of Existing Wastewater Treatment Facility Infrastructure**  
*MCES acquired the City of Rogers WWTF July 1, 2019. MCES will use existing capacity in Rogers WWTF until Crow River WWTP is built in 2030.*
- Serve Regional Population Growth**  
*NW Hennepin County is growing rapidly. A new regional facility is needed to free interceptor capacity for downstream communities.*



### Schedule & Cost





# Empire Solids Improvements



## Objectives/Goals

- Increase solids digestion and pad storage capacity.
- Add combined heat/power system to convert digester gas to electricity.
- Renew boiler system

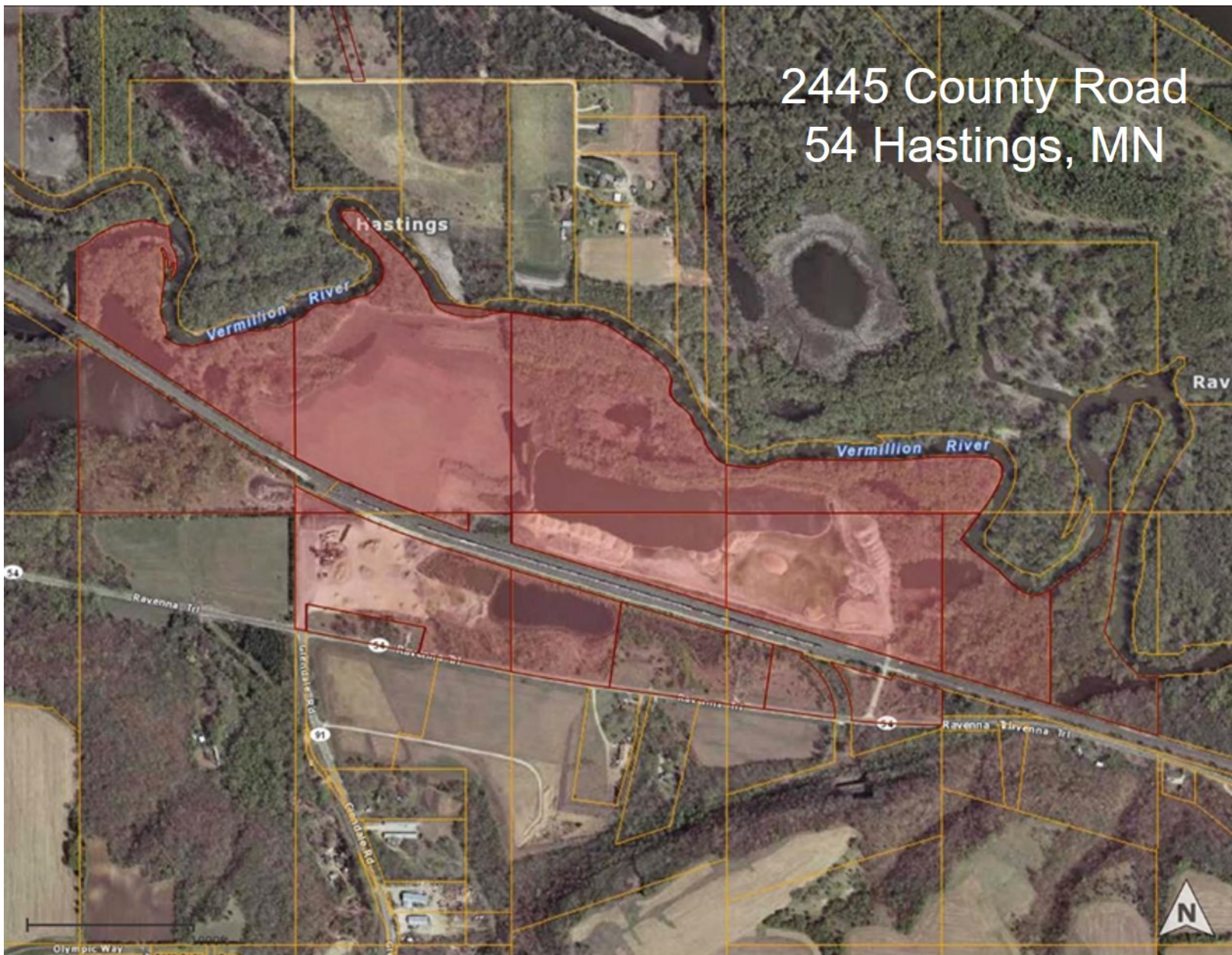


## Schedule





# Planning for New Hastings WWTP



## Objectives/Goals

- Provide adequate wastewater treatment plant capacity
- Develop capital replacement schedule based on financial analysis



## Schedule

2019



2022

2023



2025

Planning/Design

Construction

Renew/Replace



# Metro Plant Wastewater Reuse



## Objectives/Goals

- Reduce groundwater withdrawal from the bedrock aquifer by shifting plant service water uses to wastewater reuse
- Protect infrastructure from high groundwater levels



## Schedule

2019



2020

2021



2022

Planning/Design

Construction

**\$10 Million**



Metro Plant Service Water Pump

Service Water uses at the Metro Plant total 1/2 – 1 1/2 million gallons per day and includes pump seal water, wash water, and equipment cooling



# Major Interceptor Projects

Interceptor



Lift Station

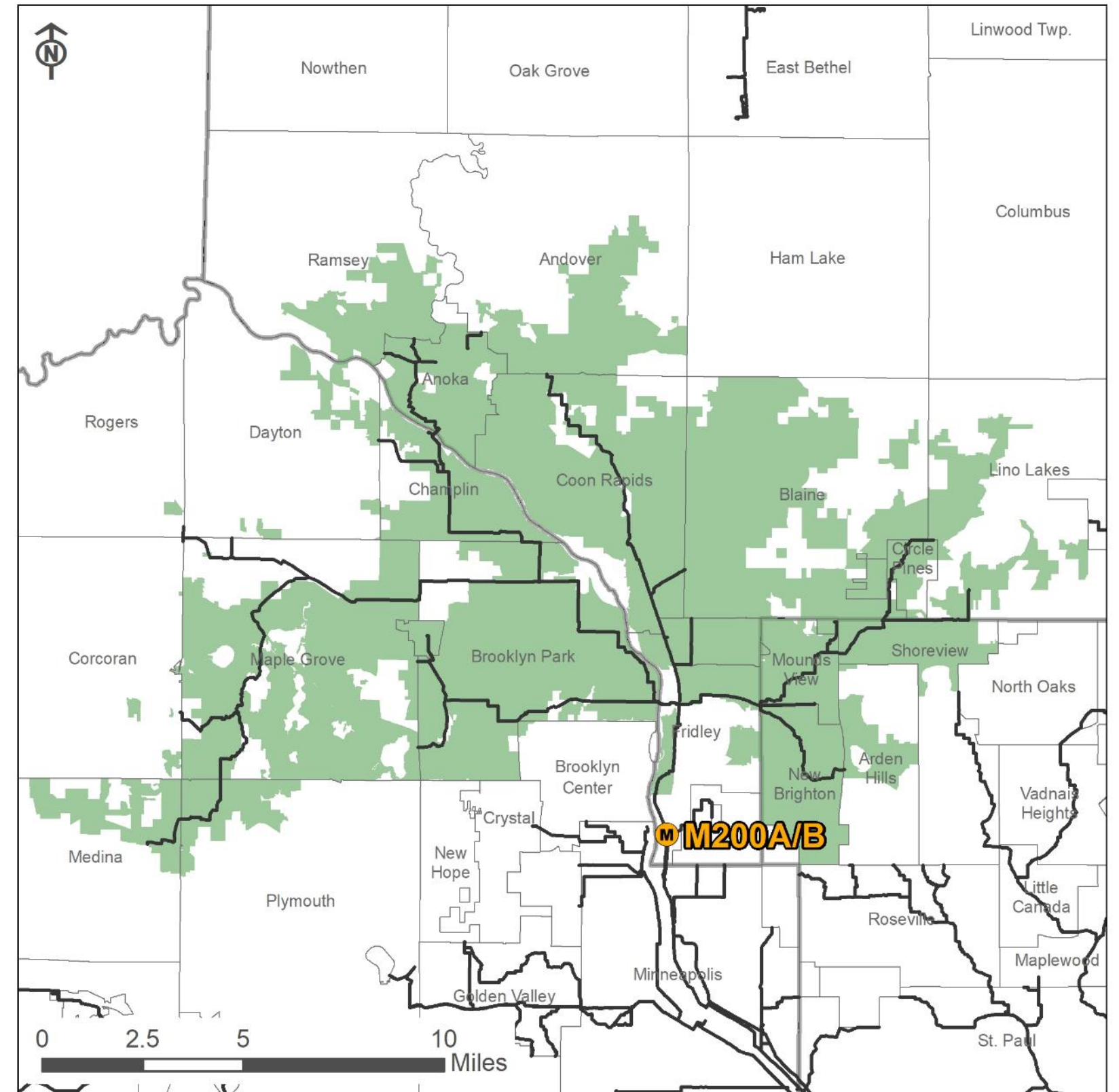




# Northwest Area Interceptor Improvements

## Planning Scope:

- Assess capacity constraints and condition issues
- Determine ultimate service area (e.g. Elm Creek interceptor and new Crow River plant)
- Screen alternatives for potential river crossings and lift stations
- Prioritize future projects
- Develop implementation schedule and costs



## Objectives/Goals

- Address Condition Deficiencies
- Capacity for Planned Growth
- Coordination with local partners



## Schedule

Jan 2019



Dec 2021

Post 2025



Planning/Design

Construction



# New Lift Station L-32



## Objectives/Goals

- Replace Deteriorated Facility
- Increase Capacity for Planned Growth
- Improve Efficiencies & System Reliability



## Schedule





# Minneapolis Interceptor Improvements Phase 2



Pipe in pipe



Pipe in pipe damage



## Objectives/Goals

- Address Condition Deficiencies
- Capacity for Planned Growth
- Coordination with local partners



## Schedule

Jan 2020



Dec 2021

Jan 2023



Dec 2024

Planning/Design

Construction

\$131 Million



# Hopkins System, East Isles Forcemain Replacement



## Objectives/Goals

- Address Condition Deficiencies
- System Reliability



## Schedule

Jan 2019



May 2020

Jan 2021



Nov 2021

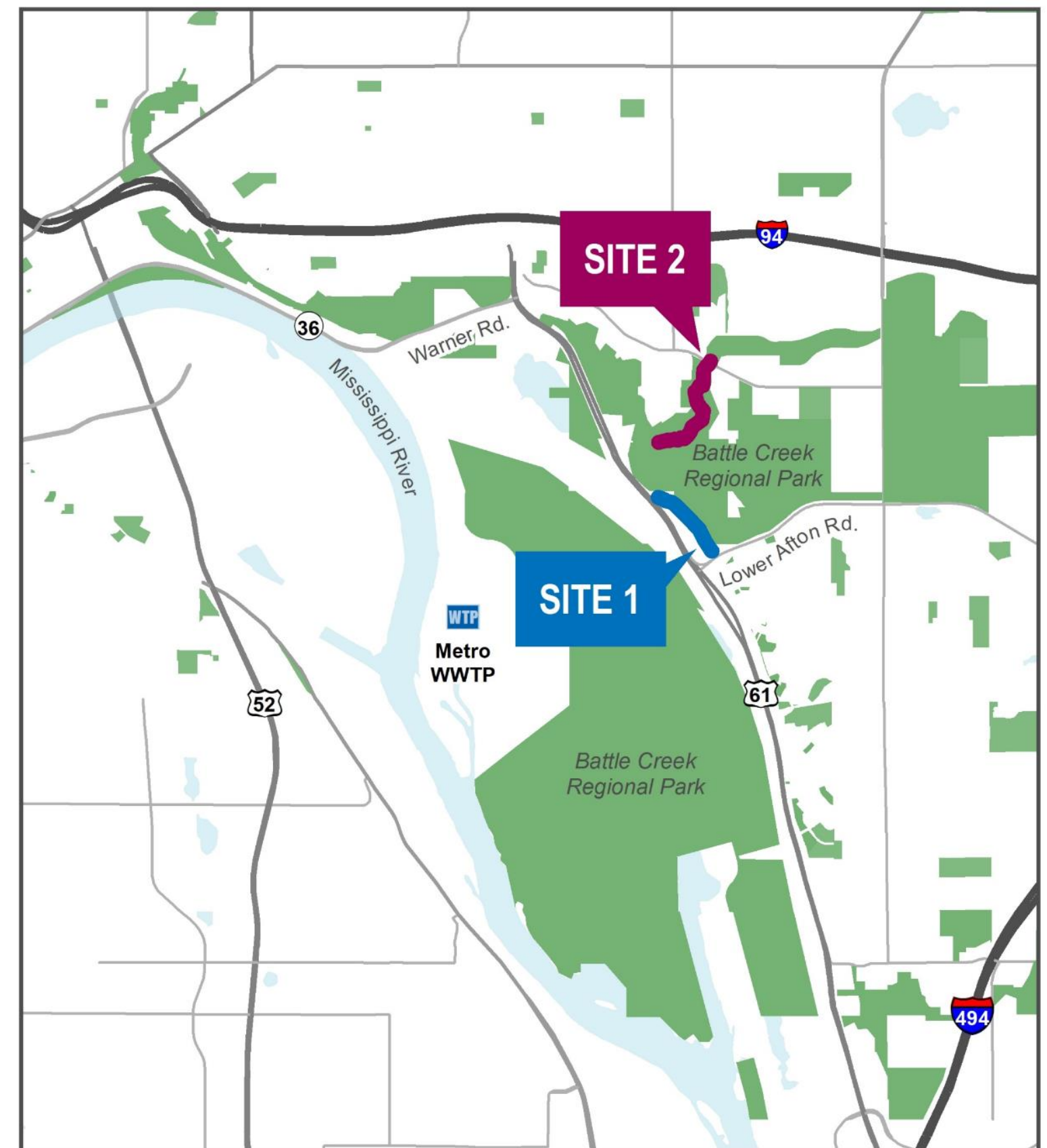
Planning/Design

Construction

\$5.3 Million



# Interceptors 1-SP-200 and 1-SP-201 Battle Creek Rehabilitation



## Objectives/Goals

- Asset preservation
- Condition-driven rehabilitation



## Schedule

Feb 2019



Jan 2020

Oct 2020



July 2022

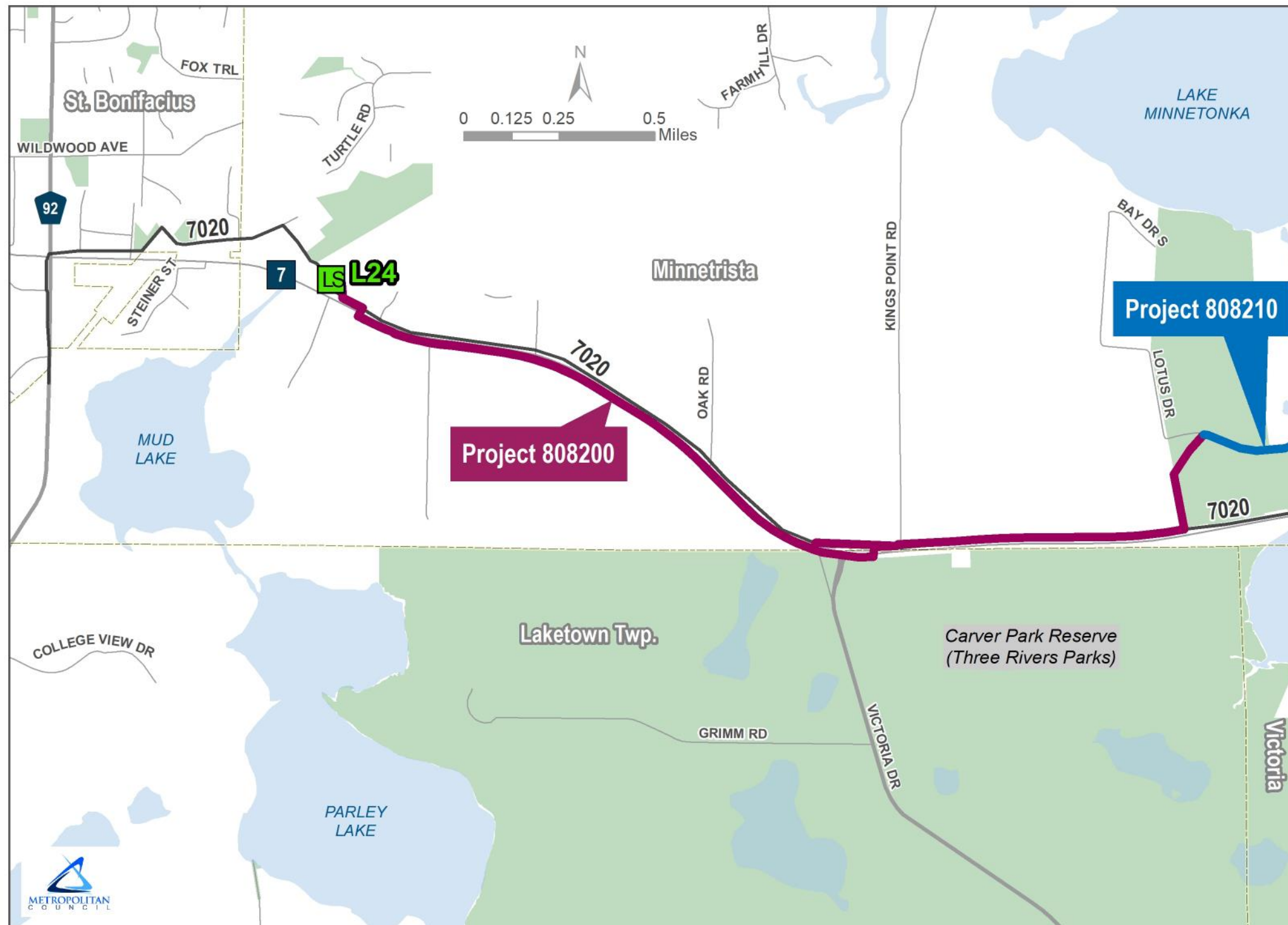
Planning/Design

Construction

\$8.3 Million



# L24 Lift Station and Forcemain 7020 Replacement



## Objectives/Goals

- Address Condition Deficiencies
- Capacity for Planned Growth
- Coordination with local partners



## Schedule

Sept 2013



July 2020

Oct 2020



June 2022

Planning/Design

Construction

\$25 Million



# Capital Program Schedule

**Aug 8**

**Aug 22**

**Sept 24**

**Oct 9**

**Oct 24**

**Dec 11**



Division Level  
Budget  
Presentation

Adoption of  
Preliminary  
Unified Operating  
Budget and Levies

MCES Capital  
Program and  
Budget

Division Level  
Capital  
Program  
Presentation

Adoption of  
Public  
Comment  
Draft Budgets

Adoption of  
Final 2020  
Budgets and  
Levies



# Proposed Action

That the Metropolitan Council authorize the 2019 Unified Budget in accordance with the tables attached to the business item.



# Questions

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