

Information Item: **2022 Capital Program**

Jeannine Clancy, Assistant General Manager, Wastewater Planning & Capital Project Delivery
Kyle Colvin, Manager, Wastewater Planning and Community Programs
Adam Gordon, Manager, Interceptor Engineering
Rene Heflin, Manager, Plant Engineering

Environment Committee: August 24, 2021



Agenda

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



Customer Level of Service

HEALTH, SAFETY, & ENVIRONMENT



COMPLY WITH PERMITS

Comply consistently with water, air, and other environmental permits.



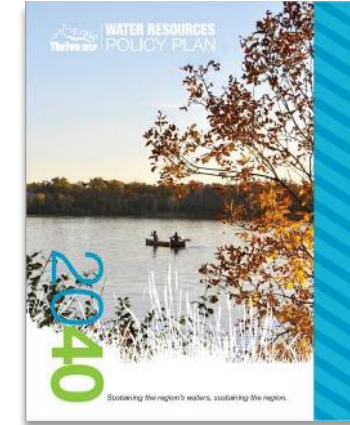
MINIMIZE IMPACTS

Convey and treat wastewater safely with minimal backups, spills, and traffic impacts.



LEAD BY EXAMPLE

Be a leader on environmental sustainability, including water/ energy conservation and water reuse.



FINANCIAL



CHARGES & FEES

Charges and fees should be predictable, justifiable, and provide good value for the region.



RETAIN AAA BOND RATING

Retain AAA Bond rating in order to provide the lowest cost debt financing possible.



OPTIMIZE BUDGET PLAN

MCES' 5-year budget plan should optimize capital, O&M programs to meet customer service goals.



PRESERVE ASSETS

The region's wastewater assets should be well maintained to preserve their value and performance.



BE FAIR AND TRANSPARENT

Allocation of all charges should be fair, equitable, and transparent to the customer.

CUSTOMER SERVICE



BE A GOOD NEIGHBOR

Mitigate community impacts related to odors, traffic, noise, and visual aesthetics.



MEET CAPACITY NEEDS

Provide conveyance and treatment capacity consistent with regional and local plans.



COMMUNICATE INFORMATION

Communicate with customers about financial info and capital projects & programs that impact them.



ENGAGE CUSTOMERS

Engage customers in a meaningful public process. Provide notice for changes in rules, fees, projects, environmental performance & resolving competing Council policies/interests.



COORDINATE WITH OTHERS

Optimize intergovernmental coordination in all MCES work that intersects with community work.

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

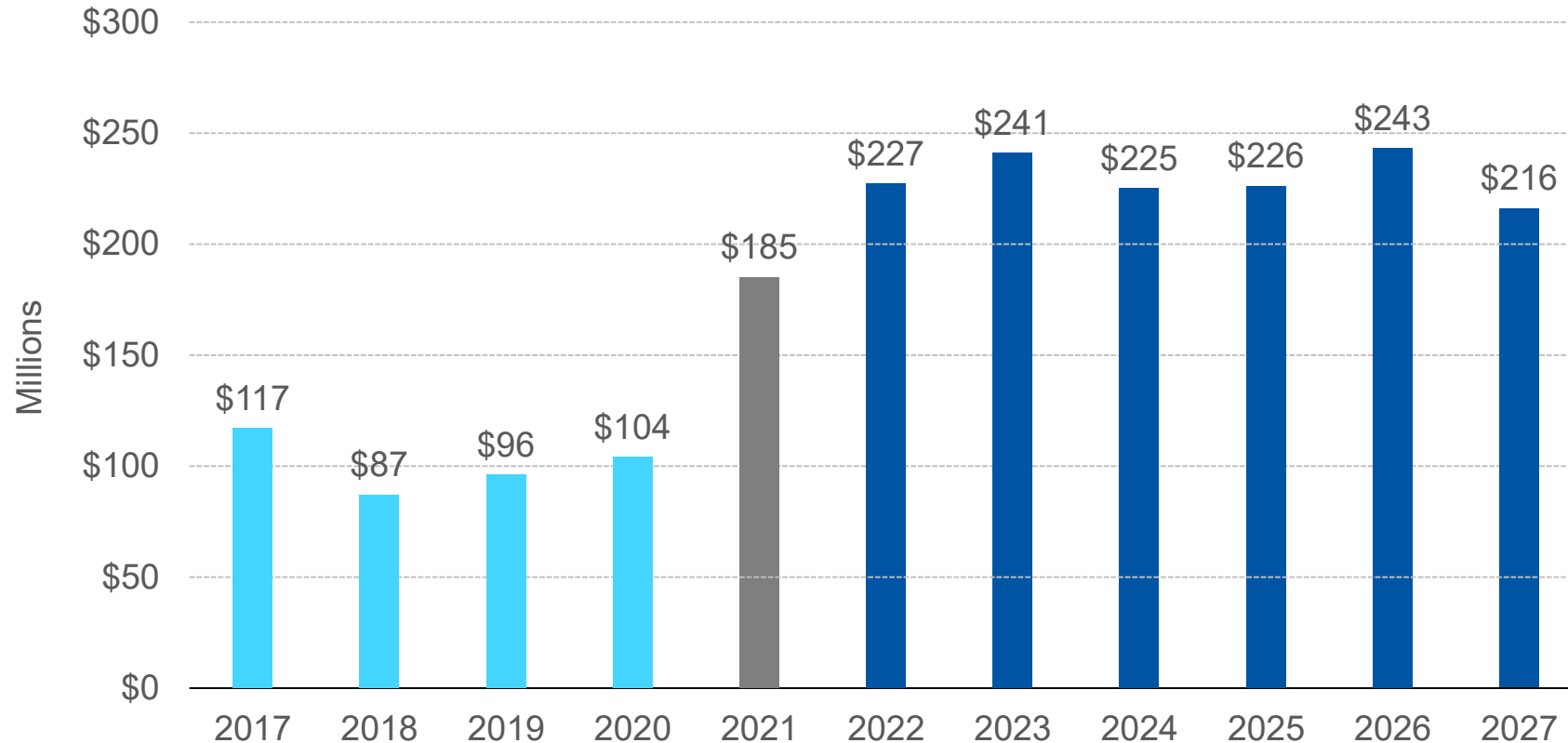
Amount from Authorized Capital Program that Council approves to be spent in upcoming year (2022).



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: 2017 to 2027



- Actual
- Estimated
- Projected

Total Capital Program
(2022-2027) = \$1,693 Million

Summary of Authorized Capital Program (ACP) Changes

Current Authorizations:	\$1,032,670,524
Adjustments Existing Projects:	+ \$154,364,058
New Projects:	+\$63,754,163
Closed Projects:	<u>-\$146,236,220</u>
Proposed 2022 Authorization:	\$1,104,552,525



Capital Program ACP Objectives

Preserve Assets

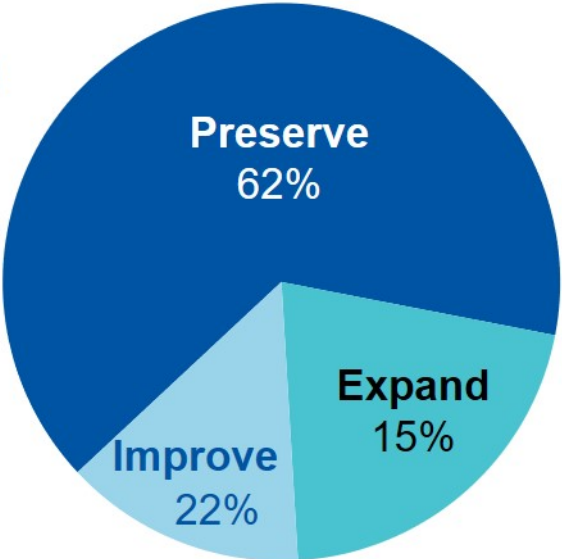
Rehabilitate and replace assets to preserve value and performance

Meet Capacity Needs

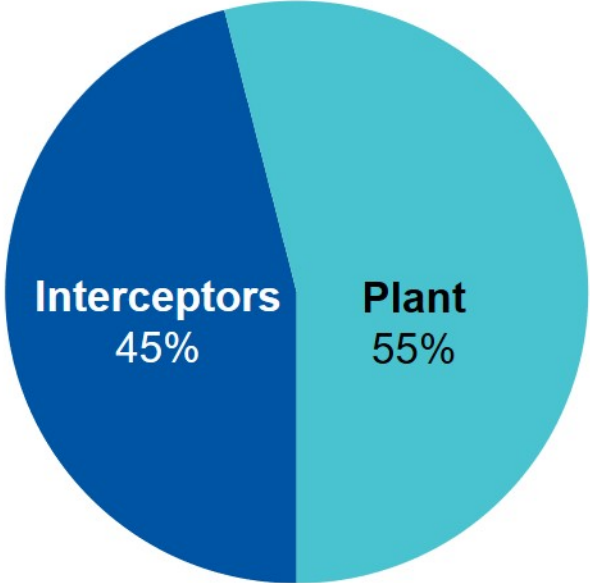
Expand system capacity through plant expansions and interceptor extensions or improvements

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

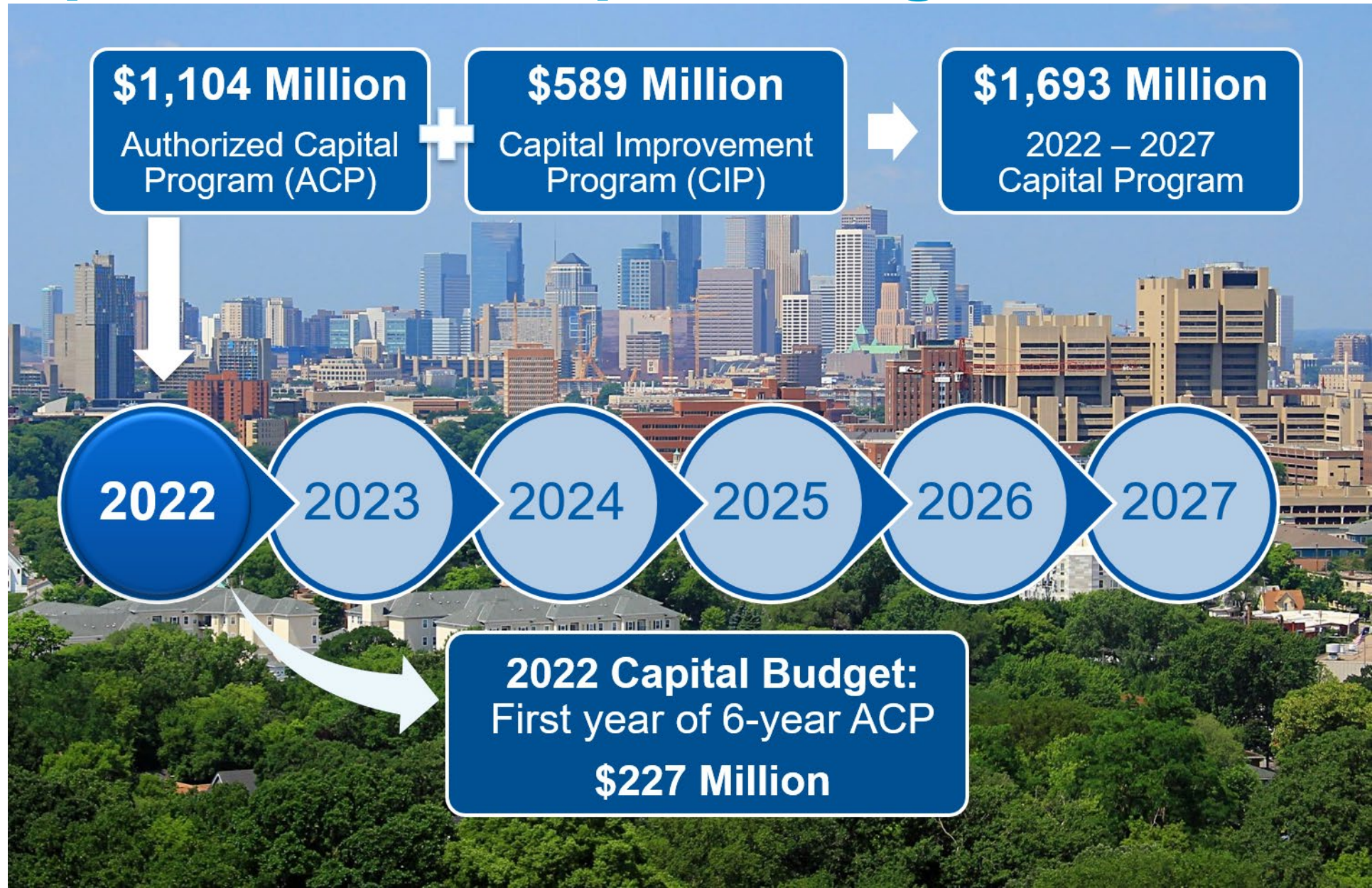
Objective



Type



Proposed 2022 Capital Program



Capital Program Financing

Public Facilities Authority (PFA) Loans

\$50 million annual loan
1.0% interest rate discount

2022: \$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: \$80 Million
2022: TBD

Pay-As-You-Go (PAYGO)

Funds dedicated to paying for some capital expenses with current revenue

2022: \$11 Million

Wastewater System Planning

Kyle Colvin, Manager, Wastewater Planning and Community Programs



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

Statute 473.175, 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.

Treatment Plant Projects

Rene Heflin, Manager, Plant Engineering



Metro WWTP Rehabilitation & Asset Preservation

Objectives

- Preserve WWTP infrastructure
- Optimize & improve performance

Construction within 5 Years

- Solids renewal & improvements (\$18M)
 - Renew incineration & sludge loadout facilities
- Secondary treatment (\$35M)
 - Rehabilitate aeration system
- Electrical distribution renewal – Phase 3 (\$40M)
 - Expand primary substation
 - Replace unit substations & MCCs
- Services Building (\$35M)
 - Expand laboratory services building



Schedule

2021 to 2023	Solids Renewal
2022 to 2025	Secondary Treatment Renewal
2022 to 2024	Electrical Distribution Renewal
2022 to 2024	Services Building

Metro Plant Electrical Renewal Program



Transformer Upgrade
Phase 1



Compressor Motor Rehab
Phase 2



Substation Building Rehab
Phase 3



Arc Flash Risk Reduction

Program Overview

- Phase 1
- Phase 2
- Phase 3

Schedule

2017 to 2019	Phase 1 Construction (\$7.2M)
2019 to 2021	Phase 2 Construction (\$6.1M)
2021 to 2023	Phase 3 Construction (\$38.9M)

Metro Plant Solids Management Improvements

Objectives

- Increase solids treatment capacity
 - Serve growth through 2050
 - Preserve wastewater treatment plant infrastructure

Program Overview

- Fourth incinerator (\$150M)
- Renewal (\$30M)

Schedule

2015 to 2019	Planning
2019 to 2024	Fourth Incinerator Permitting / Procurement Preliminary Design
2024 to 2026	Fourth Incinerator Design Build Construction
2027 to 2029	Existing Incinerators Renewal Design & Construction



Empire Solids Improvements

Objectives

- Increase solids treatment capacity
- Preserve WWTP infrastructure
- Optimize & improve performance

Program Overview

- Phase 1
 - Cover north biosolids pad
 - Renew boiler system
 - Add biogas treatment facilities (partial)
- Phase 2
 - Modify & rehabilitate existing digesters
 - Add biogas treatment facilities (complete)
 - Add biogas storage tank
 - Add combined heat & power engine generator



Schedule

2012 to 2019	Planning/Design
2020 to 2022	Construct Phase 1 (\$23.7M)
2022 to 2024	Construct Phase 2 (\$15.6M)

Hastings WWTP

Objectives

- Eliminate site constraints that inhibit renewal and expansion of WWTP facilities

Program Overview

- Renewal (\$2.5M)
 - Rehabilitate aeration tanks (4/8 tanks)
 - Repair outfall
 - Rehabilitate HVAC systems
- Relocation (\$80M)
 - Construct new WWTP
 - Construct new outfall
 - Construct new interceptor & lift station
 - Decommission existing WWTP



Schedule - Renewal

2021 Design

2022 to 2023 Construction



Schedule - Relocation

2019 to 2023

Planning & Design

2024 to 2026

Construction

2027

Performance Demonstration

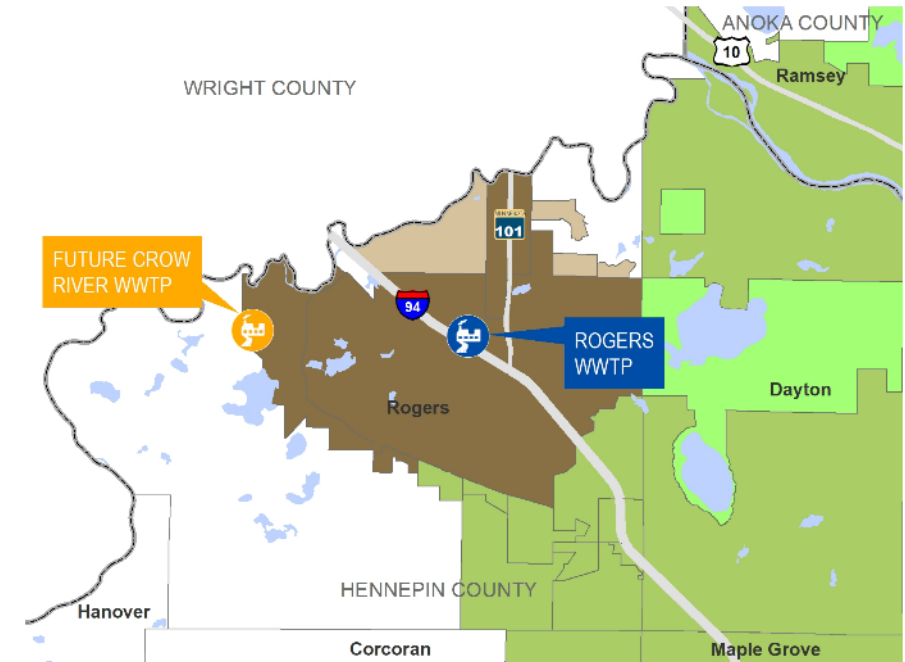
Crow River WWTP

Objectives

- Construct a new WWTP to serve growth by 2030
- Recover interceptor capacity for urban growth

Program Overview

- Rogers WWTF (\$1.8M)
 - Add perimeter security & process control system
 - Add standby generator
 - Provide office & locker rooms
- New Crow River WWTP (\$100M)
 - Construct new WWTP
 - Construct new outfall
 - Construct new interceptor & lift station
 - Decommission existing WWTF



Schedule

2019 to 2020	Acquire Rogers WWTF
2020 to 2021	Construct Rogers WWTF Improvements
2021 to 2028	Construct Crow River WWTP
2030 to 2031	Decommission Rogers WWTF

Blue Lake WWTP Improvements

Objectives

- Implement improvements, as identified in the Blue Lake WWTP Improvements Facility Plan

Program Overview

- Phase 1 (\$159M)
 - Modify aeration tanks
 - Add 2 secondary clarifiers
 - Add 1 digester
- Phase 2 (\$140M)
 - New primary treatment complex
 - Add tertiary filters
- Phase 3 (\$114M)
 - Add 1 aeration tank
 - Expand effluent pumping
 - Renew digester complex
 - Renew thickening & dewatering



Schedule

2018 to 2022	Planning
2022 to 2025	Design
2025 to 2030	Phase I Construction
2030 to 2035	Phase II Construction
2035 to 2040	Phase III Construction

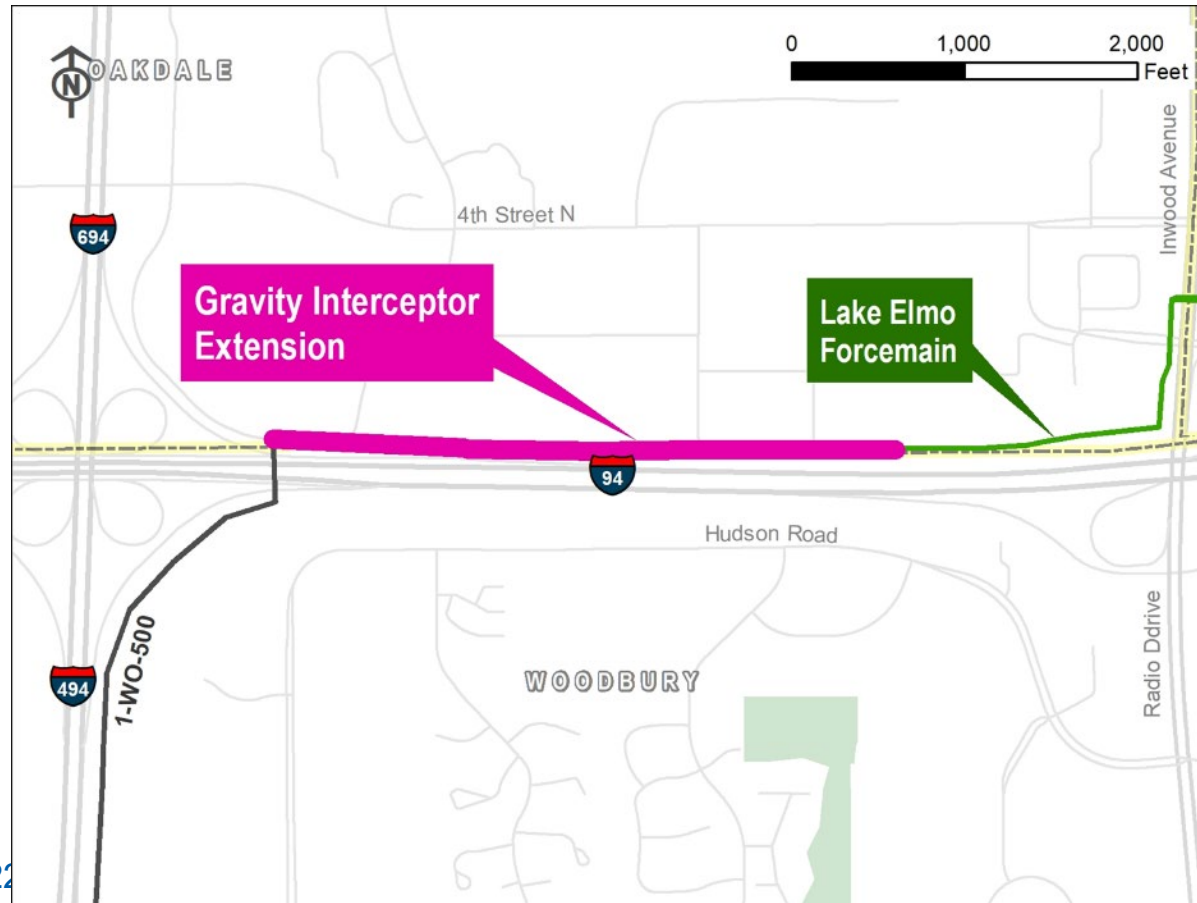
Interceptor Projects

Adam Gordon, Manager, Interceptor Engineering

Lake Elmo Southwest Connection

Scope (\$12M)

- Construct larger diameter interceptor to service developing southwest Lake Elmo



Objectives

- Meet Capacity Needs

Schedule

2021 to 2021 Planning/Design
2022 to 2023 Construction

L66 (Savage) Rehabilitation

Scope (\$6M)

- Rehabilitate deteriorated concrete in wetwell
- Upgrade undersized HVAC system
- Replace aging/undersized pumps and valves



Lift Station 66



L66's Corroded Concrete Wetwell (2018)

Objectives

- Preserve Assets
- Minimize Impacts
 - Increased reliability and safety
- Meet Capacity Needs

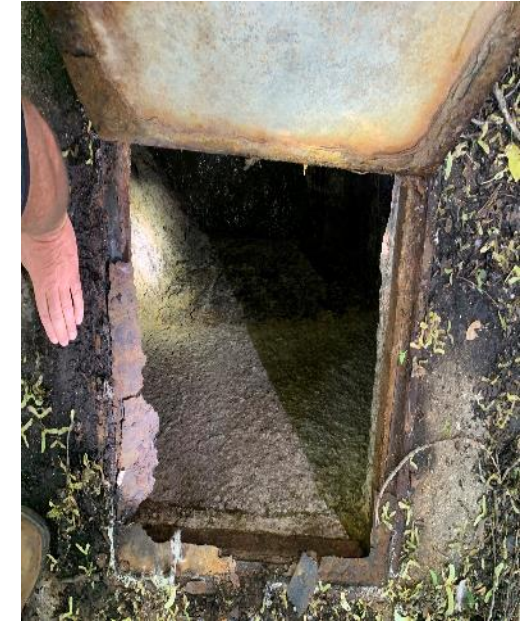
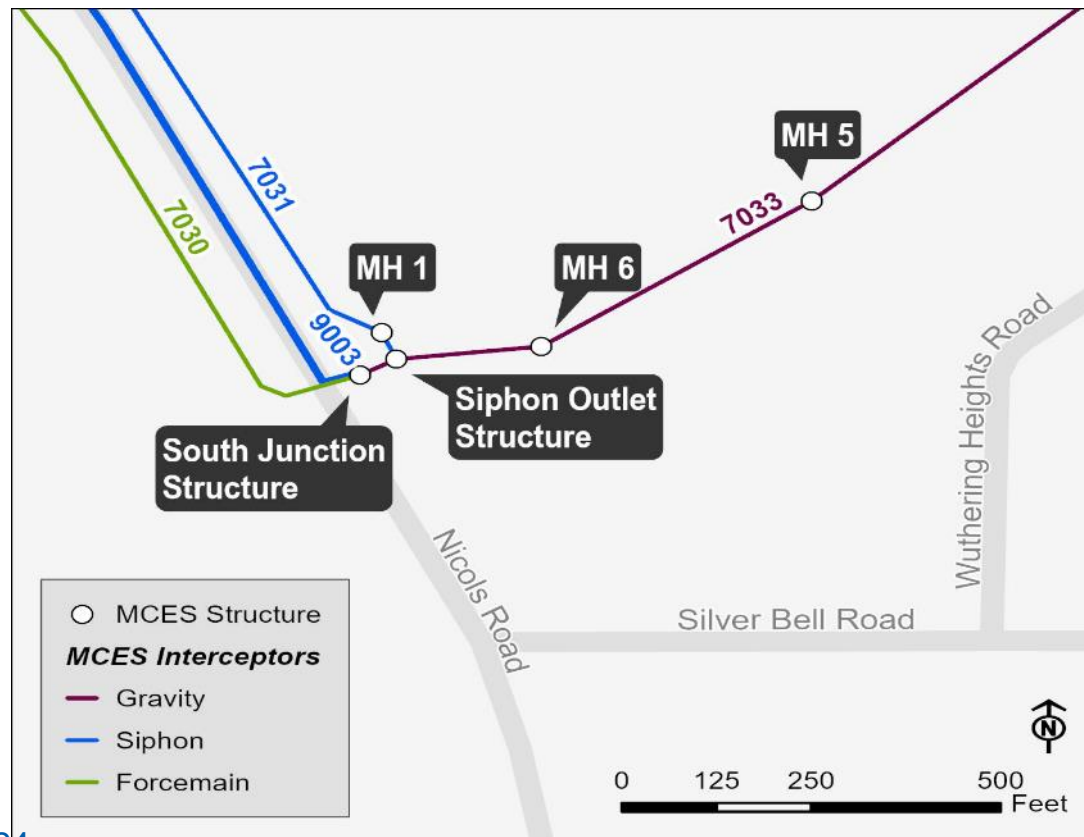
Schedule

2020 to 2021 Planning/Design
2021 to 2023 Construction

7031/9003 Siphon Structure Improvements

Scope (\$500,000)

- Rehabilitate or replace corroded siphon outlet structure and nearby manholes



Objectives

- Minimize impacts
 - Increased reliability and safety
- Preserve assets

Schedule

2021 to 2022 Planning/Design
2022 to 2023 Construction

Regional Maintenance Facility Expansion Project

Scope (\$12M)

- Construction of adequate space for existing and future staff, visitors, Air Quality, Odor Lab and Construction Services
- Upgrade HVAC system

Objectives

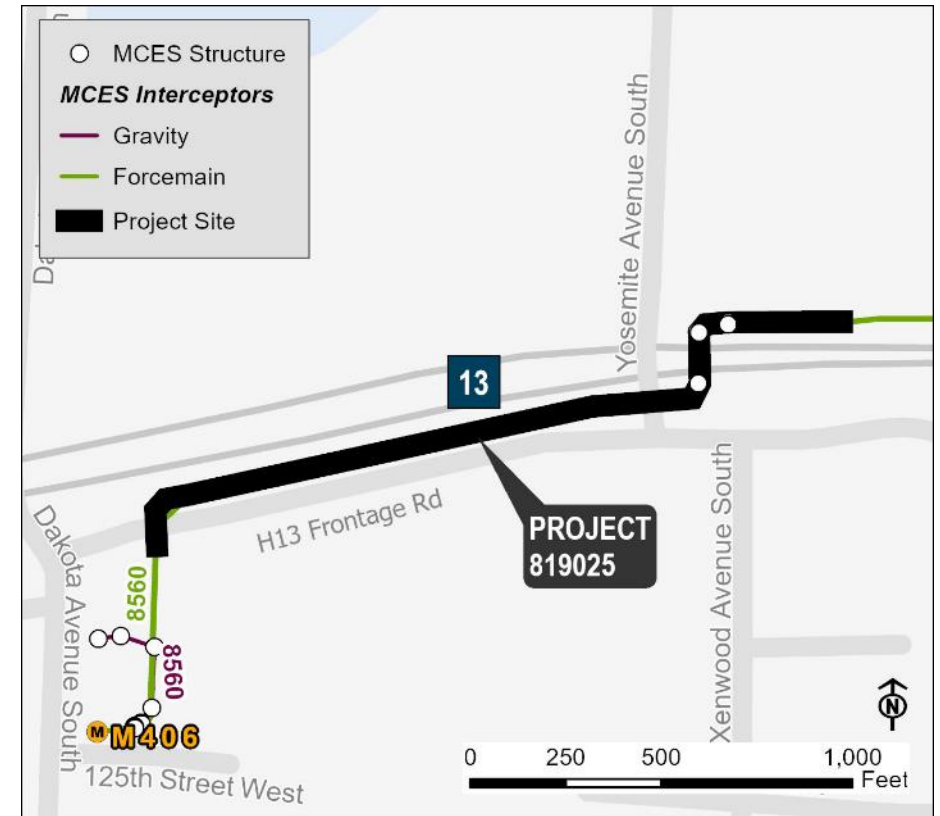
- Leading by Example
 - Improved energy conservation
- Optimize Budget Plan
 - Office workforce to meet customer service goals

Schedule

2020 to 2021	Planning/Design
2022 to 2023	Construction



TH 13 Forcemain – MnDOT Coordination



Scope (\$3.5M)

- Accommodate MnDOT Improvements on Hwy 13 at Dakota Avenue
- Install casings where L66 force main crosses new highway interchange travel lanes

Objectives

- Coordination with Others
- Minimize Impacts
 - Increased reliability

Schedule

2021 to 2022	Planning/Design
2022	Construction

Long Lake Rehabilitation Project



Scope (\$1.4M)

- CIPP repair of deteriorated section of interceptor

Objectives

- Coordination with Others
- Minimize Impacts
 - Increased reliability
 - Maintain lake access during repair



Schedule

2020 to 2021	Planning/Design
2022 to 2023	Construction

Capital Program Schedule

Task	Date
Division Level Budget Presentation	May 11, 2021
Presentation to Environment Committee	August 24, 2021
Adoption of Preliminary Unified Operating Budget and Levies	August 2021
Division Level Capital Program Presentation	October 2021
Adoption of Public Comment Draft Budgets	October 2021
Adoption of Final 2022 Budgets and Levies	December 2021

Questions

Jeannine Clancy, Assistant General Manager, Wastewater Planning & Capital Project Delivery

651-602-1210

jeannine.clancy@metc.state.mn.us

Kyle Colvin, Manager, Wastewater Planning and Community Programs

651-602-1151

kyle.colvin@metc.state.mn.us

Adam Gordon, Manager, Interceptor Engineering

651-602-4503

adam.gordon@metc.state.mn.us

Rene Heflin, Manager, Plant Engineering

651-602-1077

rene.heflin@metc.state.mn.us

