



Information Item

2024 - 2029 Capital Program



Environment Committee: October 10, 2023

Kyle Colvin, Rene Heflin, Adam Gordon

Agenda



2024 Capital Program

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

Customer Level of Service

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's 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

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.

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 policies, rules, fees, projects, environmental performance & resolving competing Council policies/interests.



COLLABORATE WITH OTHERS
Optimize intergovernmental coordination in all MCES works 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

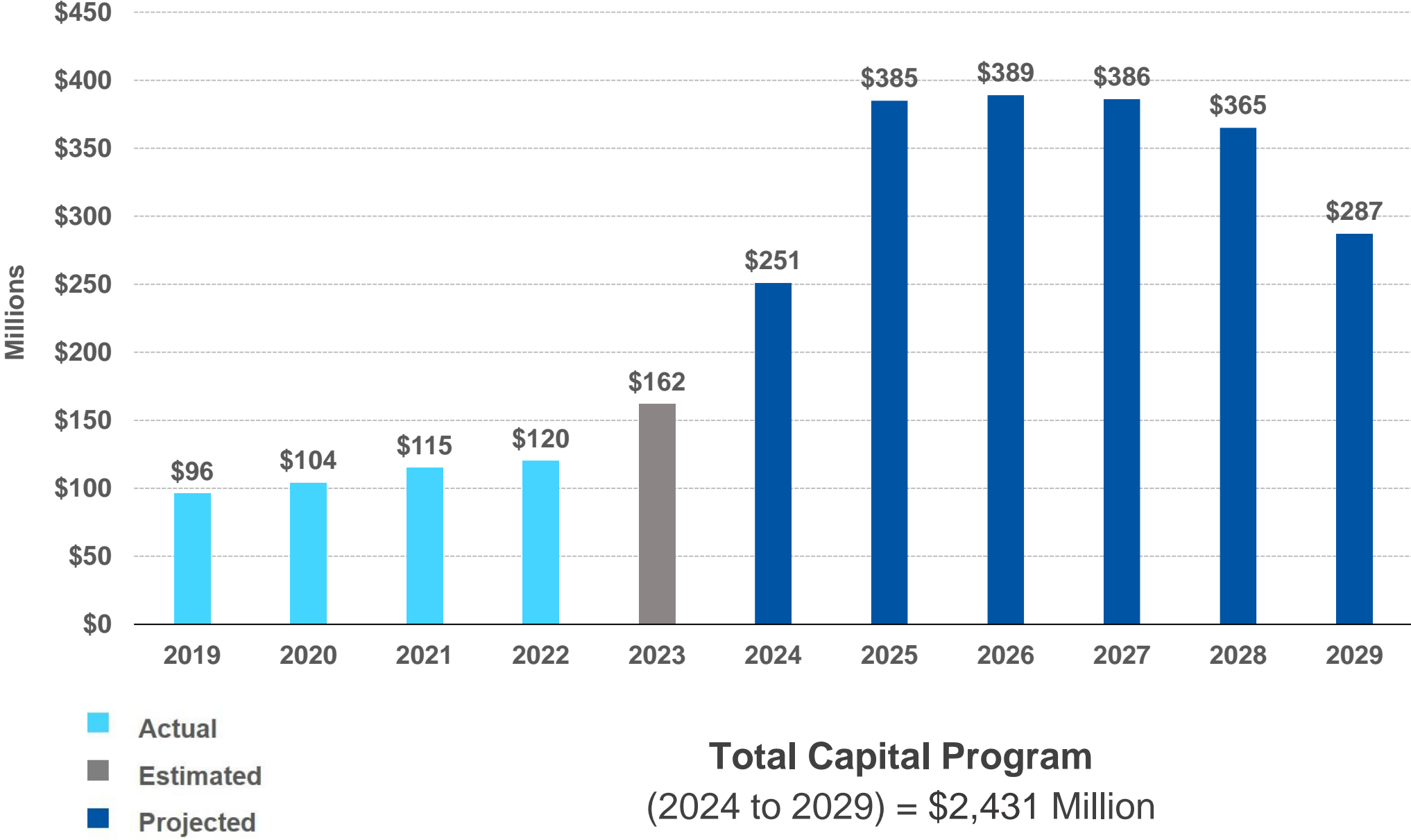
Amount from Authorized Capital Program that Council approves to be spent in upcoming year (2024).



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: 2019 to 2029

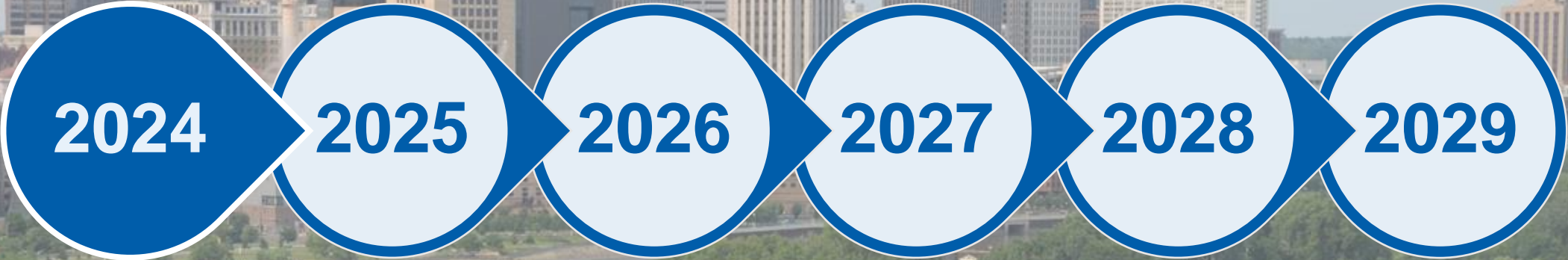


Summary of Authorized Capital Program (ACP) Changes

| | |
|-------------------------------------|------------------------|
| Current Authorizations: | \$1,292,922,758 |
| Adjustments Existing Projects: | + \$237,891,018 |
| New Projects: | + \$243,593,659 |
| Closed Projects | -\$102,261,190 |
| Proposed 2024 Authorization: | \$1,672,146,245 |



Proposed 2024 Capital Program



Capital Program ACP Objectives



Preserve Assets

Rehabilitate and replace assets to preserve value and performance



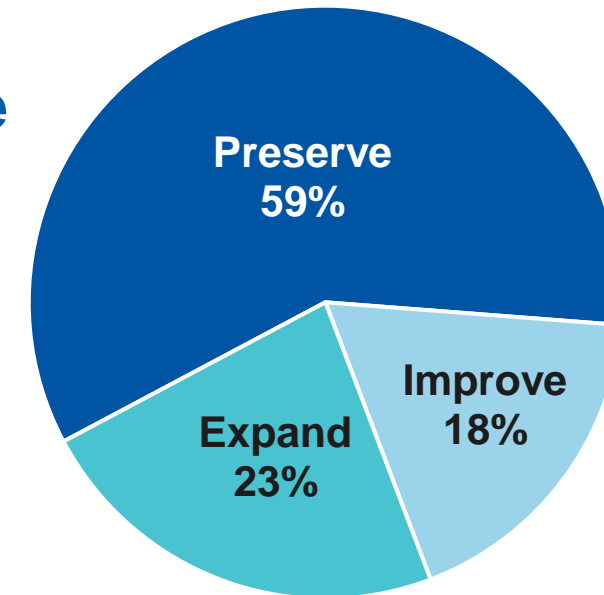
Meet Capacity Needs

Expand system capacity through plant expansions and interceptor extensions or improvements

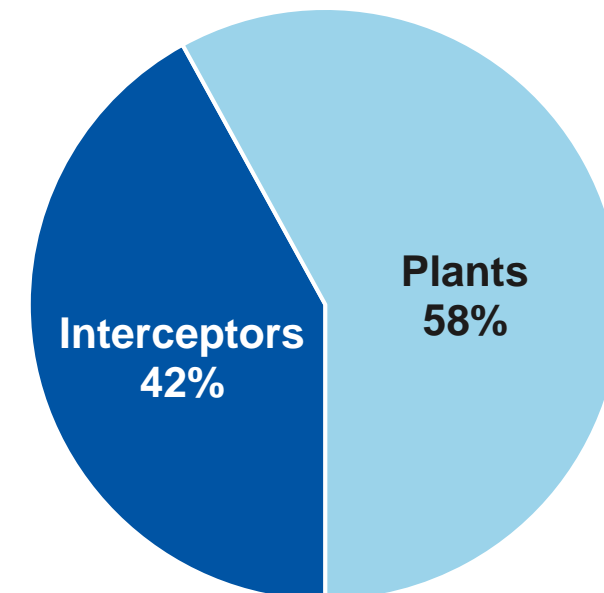


Improve Quality of service by responding to more stringent regulations, reusing wastewater, increasing system reliability, and conserving and generating energy

Objective



Type



Capital Program Financing

Public Facilities Authority (PFA) Loans

2023: \$45 million annual loan
1.59 % interest rate discount

2024: \$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.

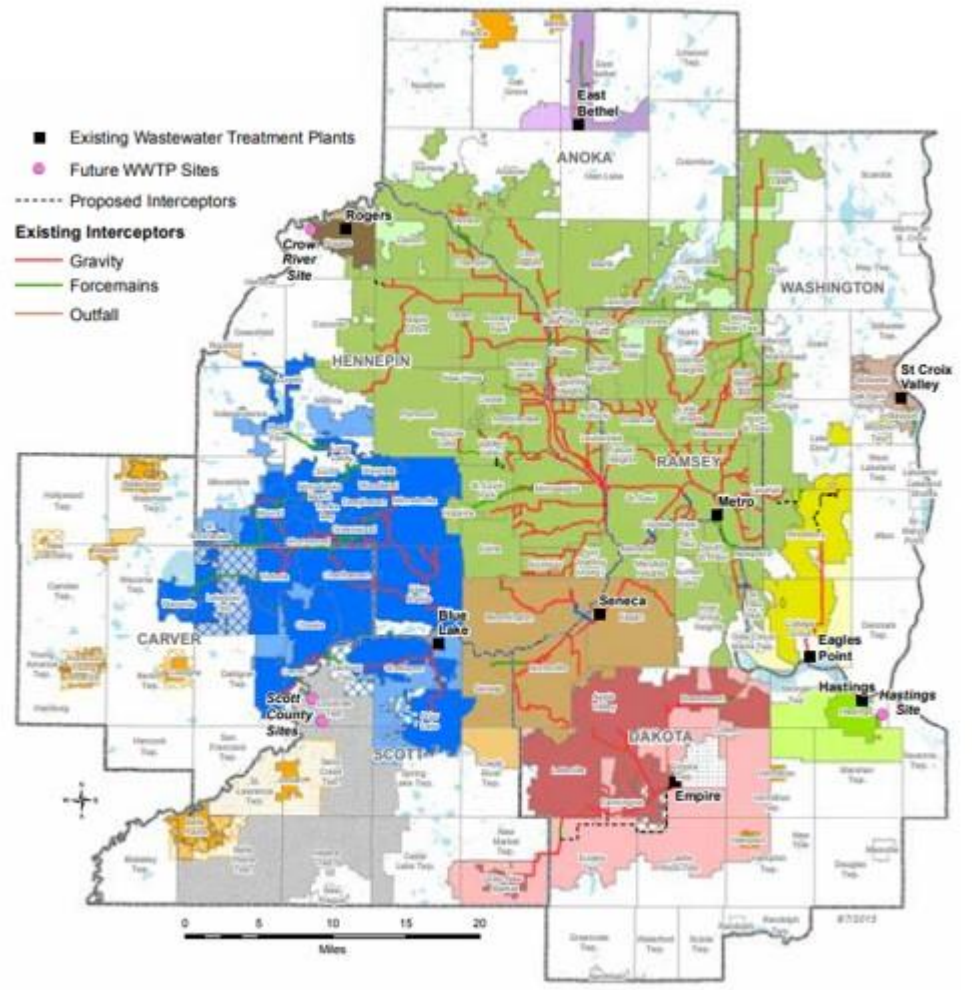
2023: \$40 million @ 3.36%
2024: TBD

Pay-As-You-Go (PAYGO)

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

2024: \$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, 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 (WWTP)
- Miscellaneous small system improvements

Treatment Plant Projects

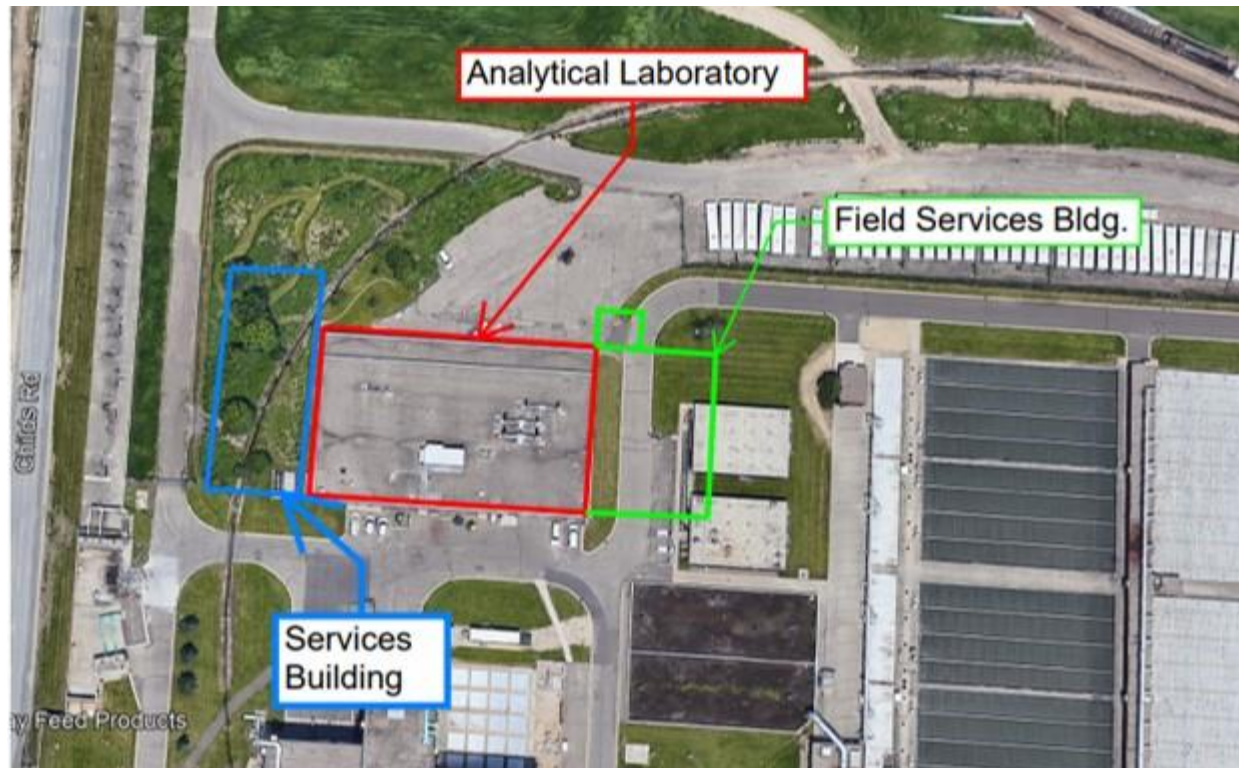
Rene Heflin
Manager, Plant Engineering

Metro Plant Rehabilitation and Facilities Improvements

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 Asset Renewal

Objective

- Preserve assets



Secondary Renewal (\$32 million)
Construction 2021 through 2025



Electrical Distribution Renewal – Phase 3 (\$47 million)
Construction 2021 through 2024



Water System Improvements – Phase I (\$40 million)
Construction 2023 through 2027

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 |

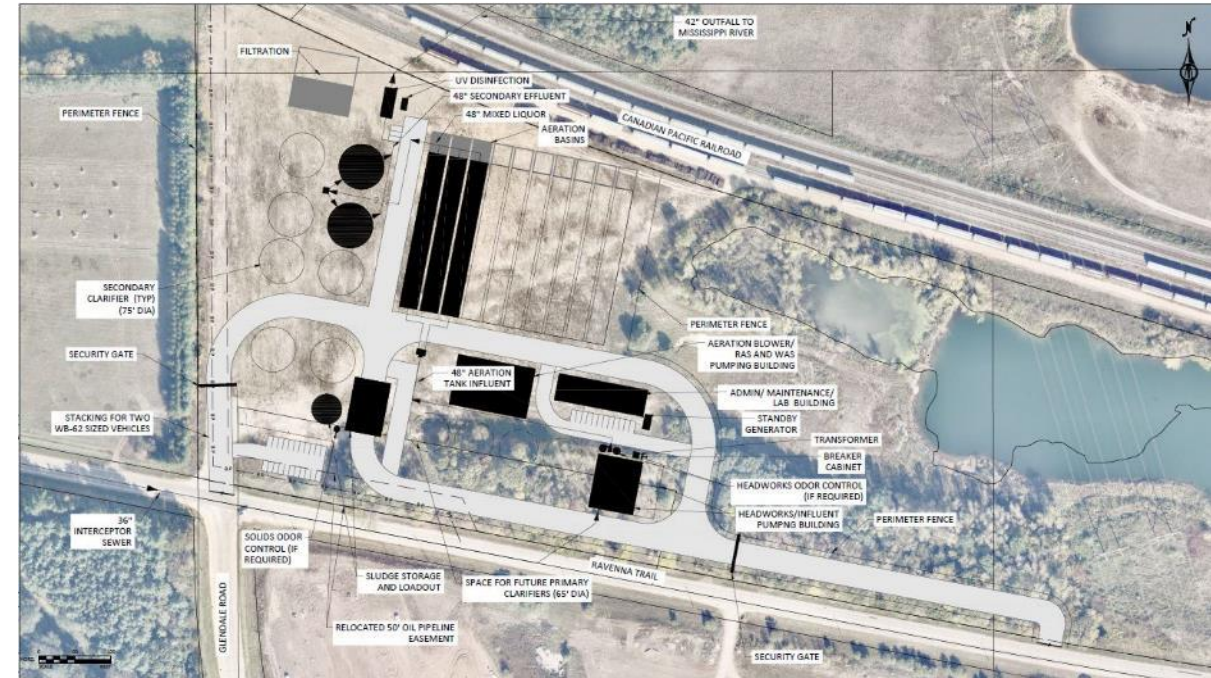
Hastings Wastewater Treatment Plant

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.



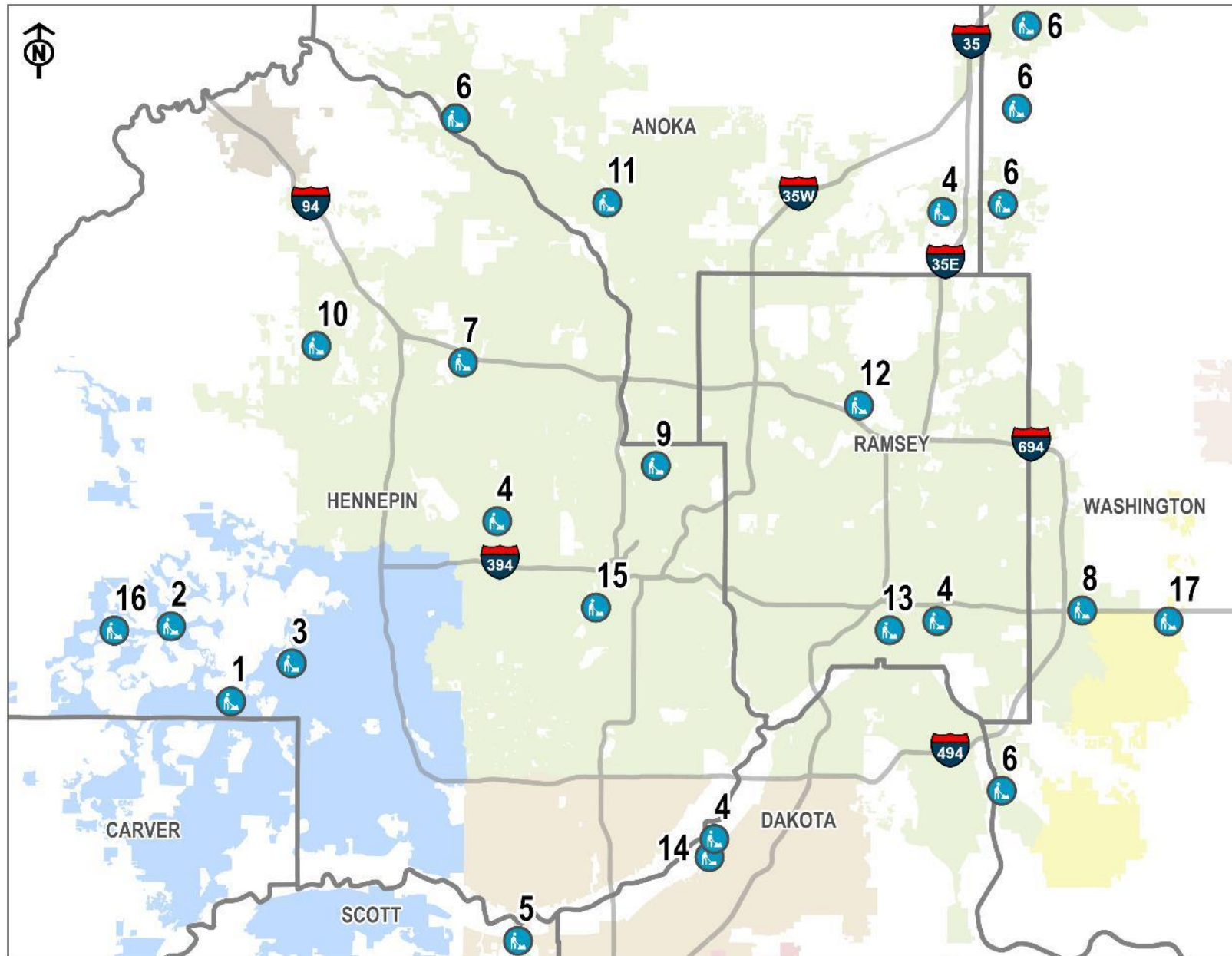
Schedule

| 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

2023 Interceptor Projects (Design/Const.)



1. 802856 Excelsior Area Lift Stations
2. 802831 Orono Lift Stations L46 and L49 Improvements
3. 802834 L48 Rehab and 6-DH-645 FM replacement
4. 805504 Inspection Program – 7114 FM, 7561 FM, Outfall 7003, and 1-MS-100 Siphon at Warner Rd
5. 805564 L66 Rehabilitation
6. 805566 Electrical Rehab – L01, L02, L03, L31, L42
7. 805636 Meter Station M228A and Interceptor 7015-C
8. 806325 Southwest Lake Elmo Service Extension
9. 807641 1-MN-303 Improvements
10. 808622 Interceptor 900416 Replacement
11. 808685 Coon Rapids 4-NS-525 Phase 1
12. 808861 Grass Lake Interceptor Rehabilitation
13. 808883 Riverview Siphon Cleaning
14. 819017 7031-9003 Siphon Outlet Structure
15. 819020 HSI - East Isles FM, Contract H
16. 819022 6-MO-650 Rehab
17. 806302 Lift Station L77 Improvements

Lift Station L77 Improvements

Scope (\$9.6M)

- Replace pump in existing lift station to increase capacity.
- Electrical and mechanical improvements to the lift station building to accommodate larger pumping capacity.
- Forcemain improvements.



Objectives

- Meet Capacity Needs
- Improve Quality

Schedule

- 2021 to 2023 Planning/Design
- 2023 to 2025 Construction

Forcemain-Siphon-River Crossing-Outfall Inspection Program - Forcemain 7114

Scope (\$2.8M)

- Isolate, dewater, clean, and inspect two miles of forcemain in Golden Valley and
- Repair/replace assets requiring immediate attention based on inspection results



Objectives

- Preserve Assets

Schedule

- 2023 to 2023 Planning/Design
- 2023 to 2024 Construction

West Area Rehabilitation – Forcemain 8352

Scope (\$3.8M)

- Rehabilitation and/or replacement of approximately 17 structures and 4.1 miles of forcemain due to deterioration of pipe walls.
- Evaluate the system's future capacity and reliability.



Objectives

- Preserve Assets

Schedule

- 2023 to 2024 Planning/Design
- 2024 to 2025 Construction

809214 1-MN-346 Rehabilitation Phase 1

Scope (\$3.5M)

- Line approximately 1,800 ft of 54-inch concrete gravity pipe due to deterioration of pipe walls
- Install 7 fiberglass reinforced plastic inserts in existing maintenance holes



Objectives

- Preserve Assets

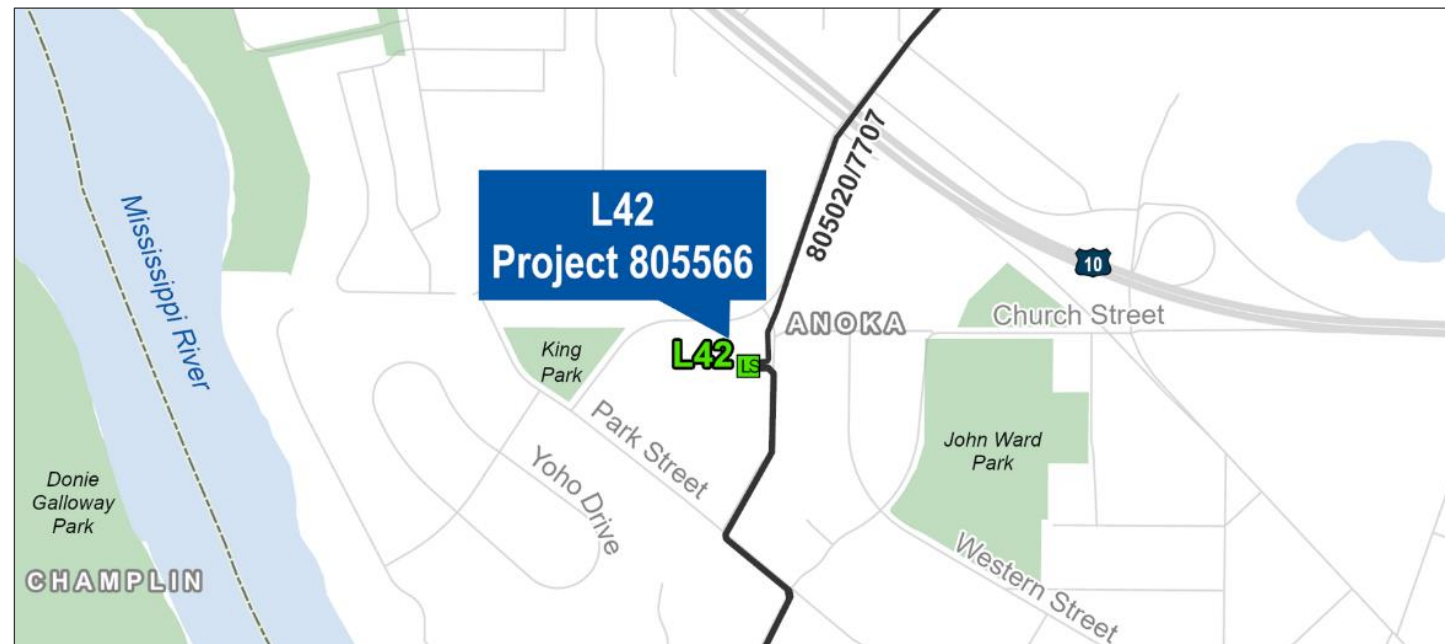
Schedule

- 2022 to 2023 Planning/Design
- 2024 to 2025 Construction

Lift Station Electrical Rehabilitation (L42)

Scope (\$0.8M)

- Replace electrical gear that is at its design life
- Improve the arc flash safety category
- Maintain and update the onsite generator
- One of five lift stations in a combined project



Objectives

- Maintain Reliability
- Improve Safety
- Asset Preservation

Schedule

- 2023 to 2024 Planning/Design
- 2024 to 2025 Construction

Capital Program Schedule

| Task | Date |
|--|--------------------|
| Council Presentation of Preliminary Budget (Budget in Brief) | August 9, 2023 |
| Adoption of Preliminary Unified Operating Budget and Levies | August 23, 2023 |
| Informational Item Presentation to Environment Committee | September 26, 2023 |
| Division-level Capital Program presentation | October |
| Adoption of public comment draft budgets | October 25, 2023 |
| Adoption of final 2024 budgets and levies | December 13, 2023 |



Questions

Kyle Colvin

Manager, Wastewater Planning & Community Programs
651-602-1151
kyle.colvin@metc.state.mn.us

Rene Heflin

Manager, Plant Engineering
651-602-1077
rene.heflin@metc.state.mn.us

Adam Gordon

Manager, Interceptor Engineering
651-602-4503
adam.gordon@metc.state.mn.us

