Metropolitan Council Environmental Services 2019-2024 Capital Program Highlights

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ACEC 2019 Forecasting Seminar





Agenda



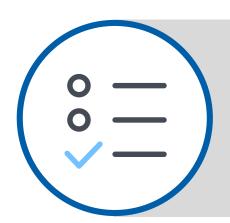
Overview



Plant Program



Interceptor Program

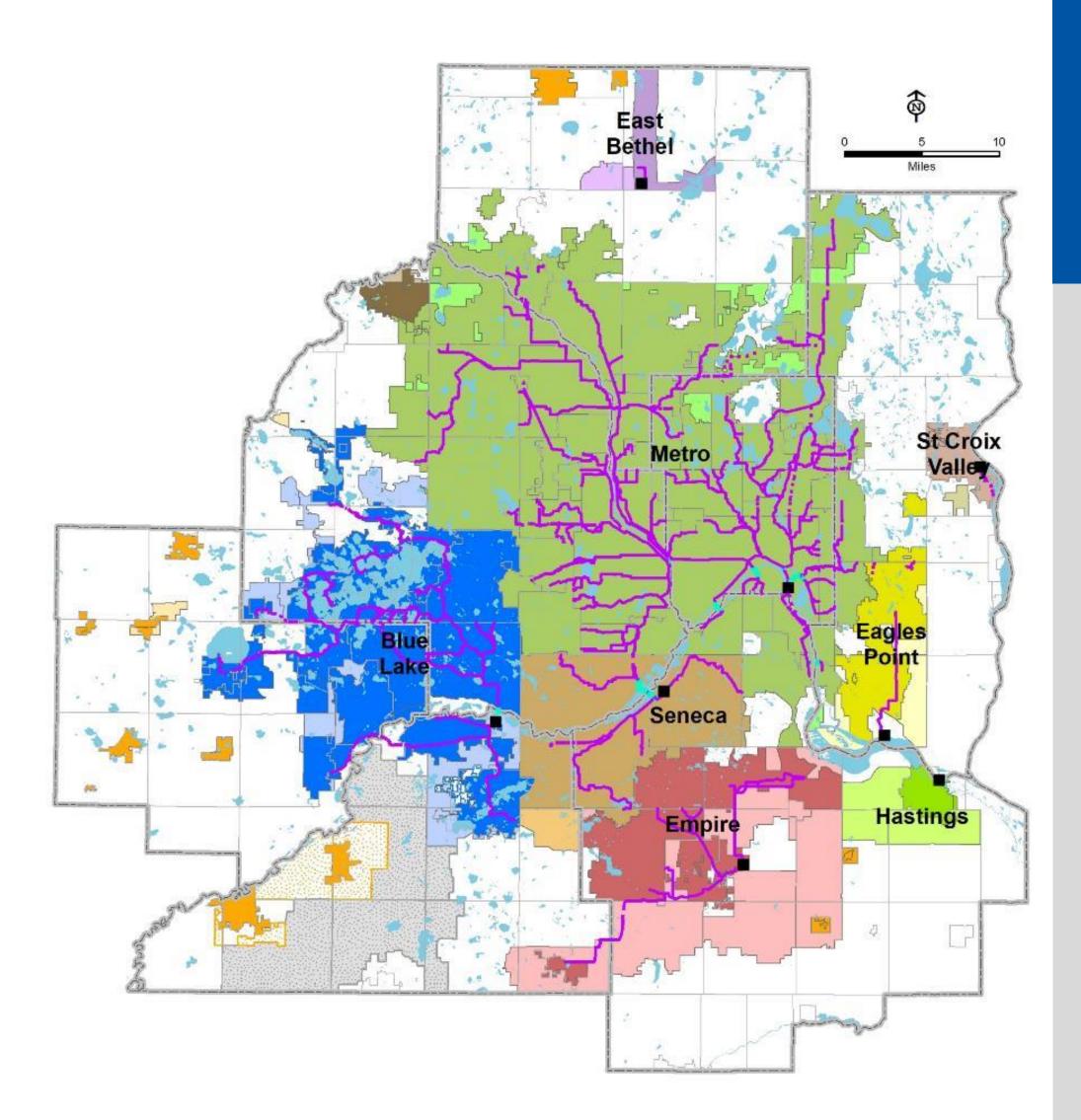


Questions





Metropolitan Council Environmental Services









Protects the environment



Fosters the economic growth of the region

WHO WE SERVE

7-county Twin Cities Metro Area109 communities2,700,000+ people

OUR FACILITIES

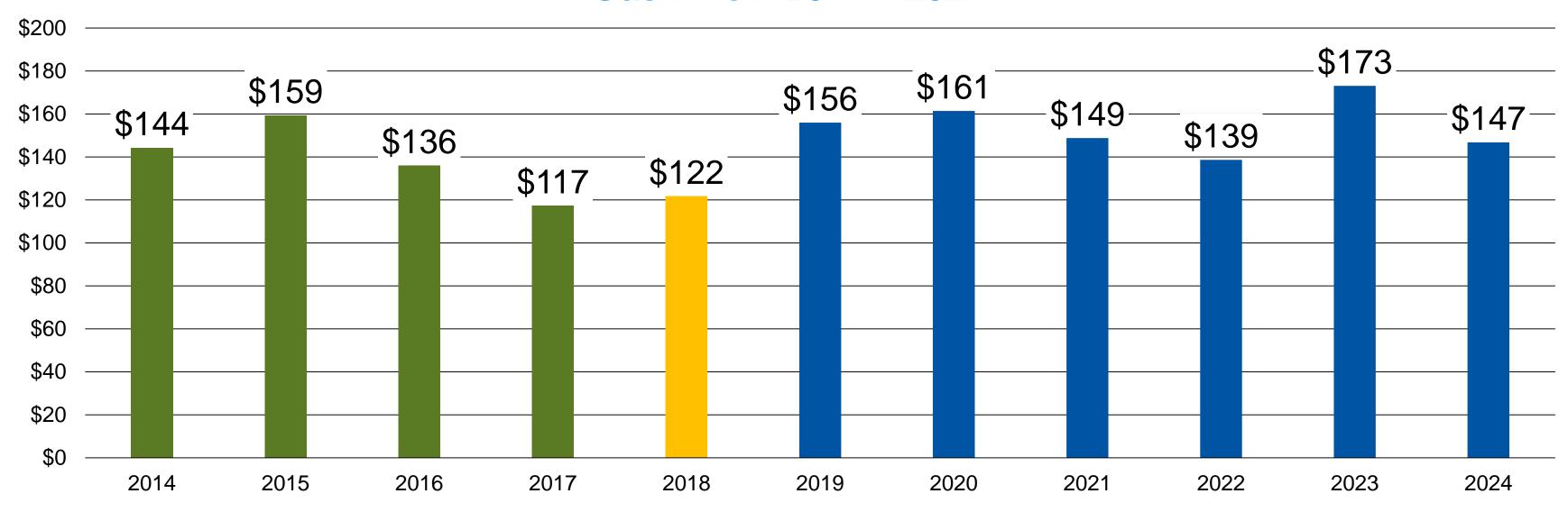
8 wastewater treatment plants610 miles of interceptors250 million gallons per day (avg)

OUR ORGANIZATION

600+ employees\$7 billion in valued assets\$150 million / yr capital program

Project Timing and Costs





ActualEstimatedProjected

Total Capital Improvement Program (2019 – 2024) = \$925 Million





2019 Capital Program Breakdown, by Objective



Preserve Assets

Rehabilitate & replace assets to preserve value & performance



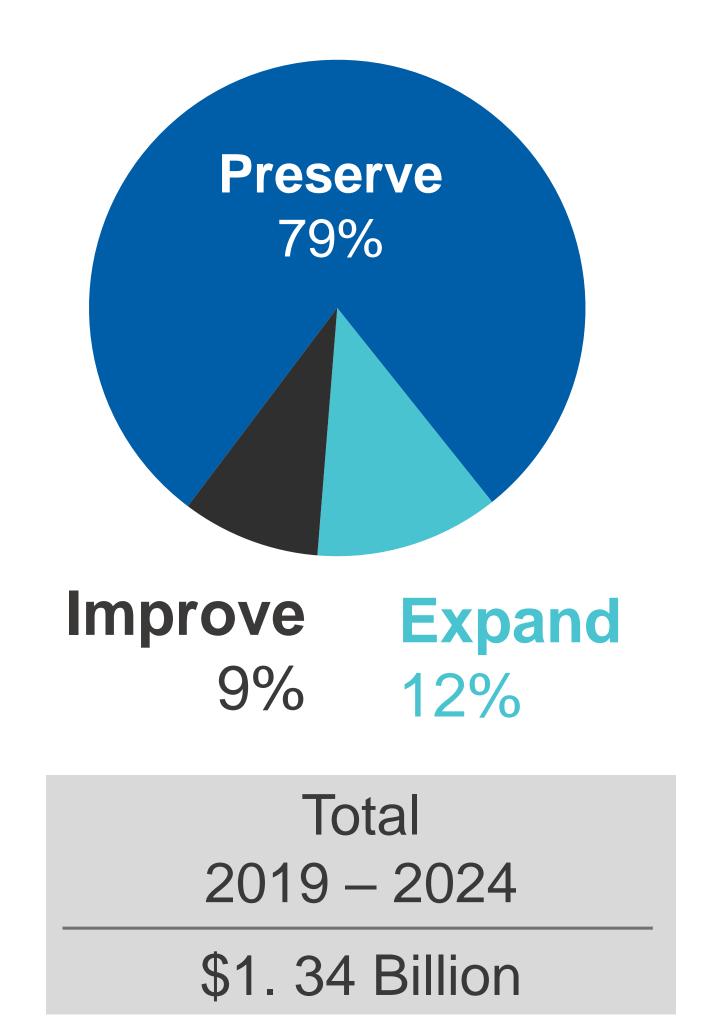
Meet Capacity Needs

Expand system capacity through plant expansions & interceptor extensions

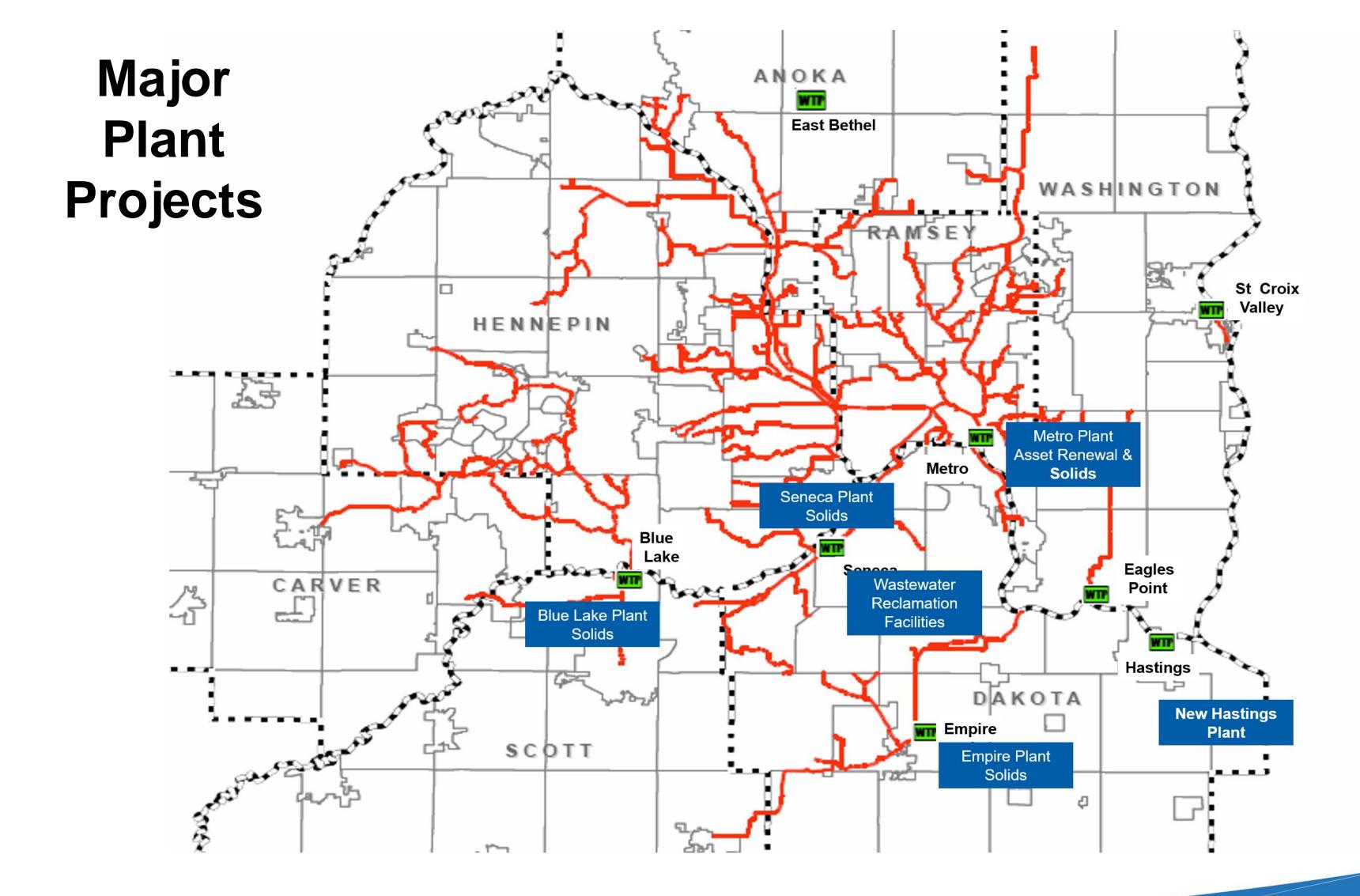


Improve Quality

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



79% of CIP is spent on asset preservation.



System Wide Projects: Regional Plant Improvements



Services and Analytical Laboratory Buildings Project



Business Objectives and 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

Enhance the Metro Plant entrance to integrate Council's Mission/Vision/Values

Schedule

2019 2020



2021

Select Engineer/Prelim Design

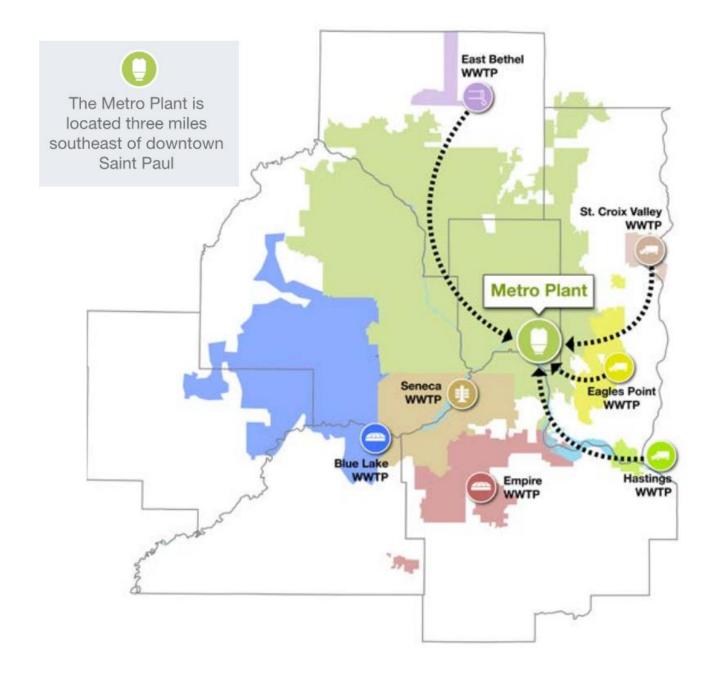
\$15M - \$20M





Metro Plant Solids Management Improvements

Location



Business Objectives and Goals



Preserve Existing Wastewater Treatment Plant Infrastructure

Planned renewal projects will require extended downtime of the existing incinerators.



Serve Regional Population Growth

500,000 new residents in the Metro Plant service area in the Twin Cities by 2050.

Cost and Schedule

2019



2021



2024



2027

\$20 million

FOURTH INCINERATOR \$150 million

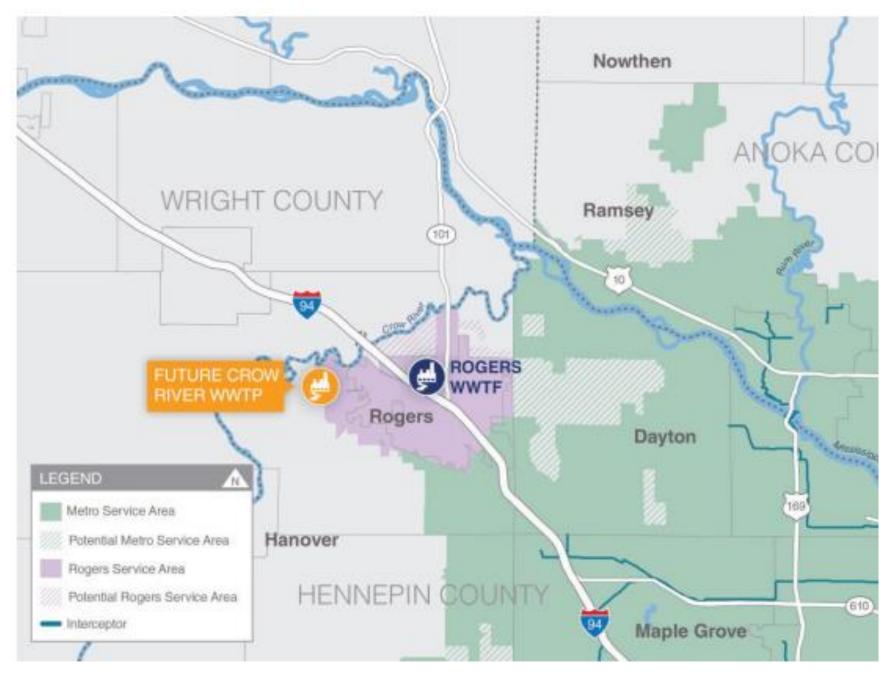
\$30 million

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



Rogers WWTF Acquisition Crow River WWTP Construction

LOCATION



BUSINESS OBJECTIVES AND GOALS





Serve Regional Population Growth

NW Hennepin County is growing rapidly. A new regional facility is needed to free interceptor capacity for downstream communities.

COST AND SCHEDULE

2019



2020



2021



2028



2030



2031

MCES ACQUIRES ROGERS WWTF \$800,000 IMPROVEMENTS PROJECT
ROGERS WWTF
\$1.5 - \$2.5 Million

PLANNING FOR CROW RIVER WWTP CONSTRUCTION OF CROW RIVER WWTP \$30 -\$100 Million

DECOMMISSION ROGERS WWTF

From MCES 2040 Water Resources Policy Plan, Urban Area Wastewater Service Policy:

"Acquire wastewater treatment plants from suburban communities outside the current service area, based upon request through the comprehensive plan and comprehensive sewer plan process, after soliciting customer input and conducting a public hearing on the request"



Empire Solids Improvements



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



Planning 2012 - 2013

Phase 1



Design

2014 - 2018



Construction \$9M

2019 - 2021

Phase 2



Design

2014 - 2020



Construction \$10M



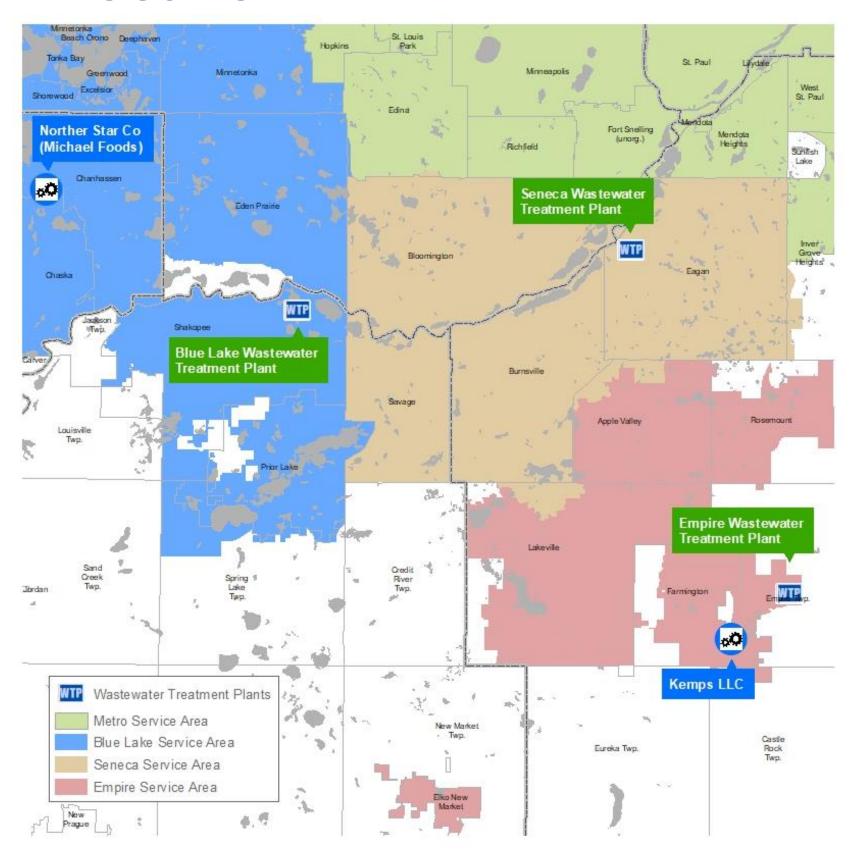




Industrial Waste Pretreatment Incentive Program (IPIP)



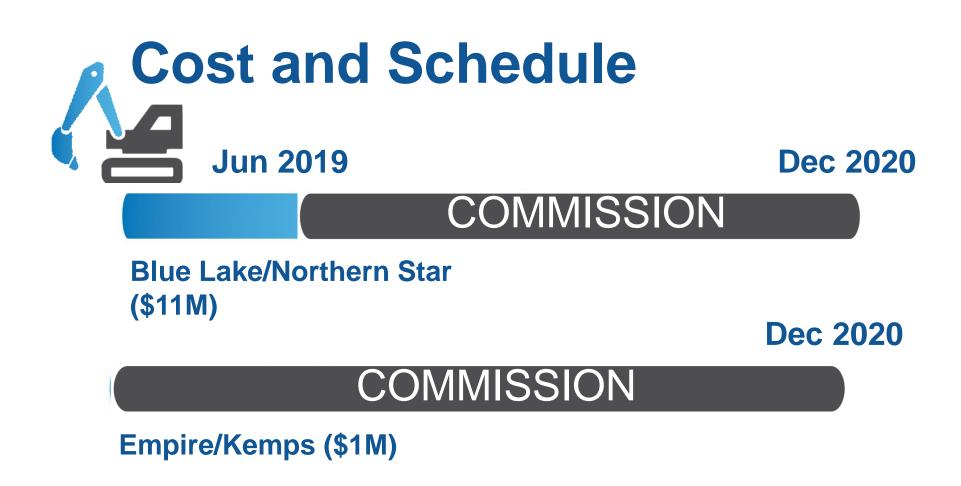
Location



Business Objectives and Goals

Pretreat wastewater to retain system capacity and provide economic benefit for the region

Planned projects will reduce organic loading to Blue Lake (25%) and Empire (30%)

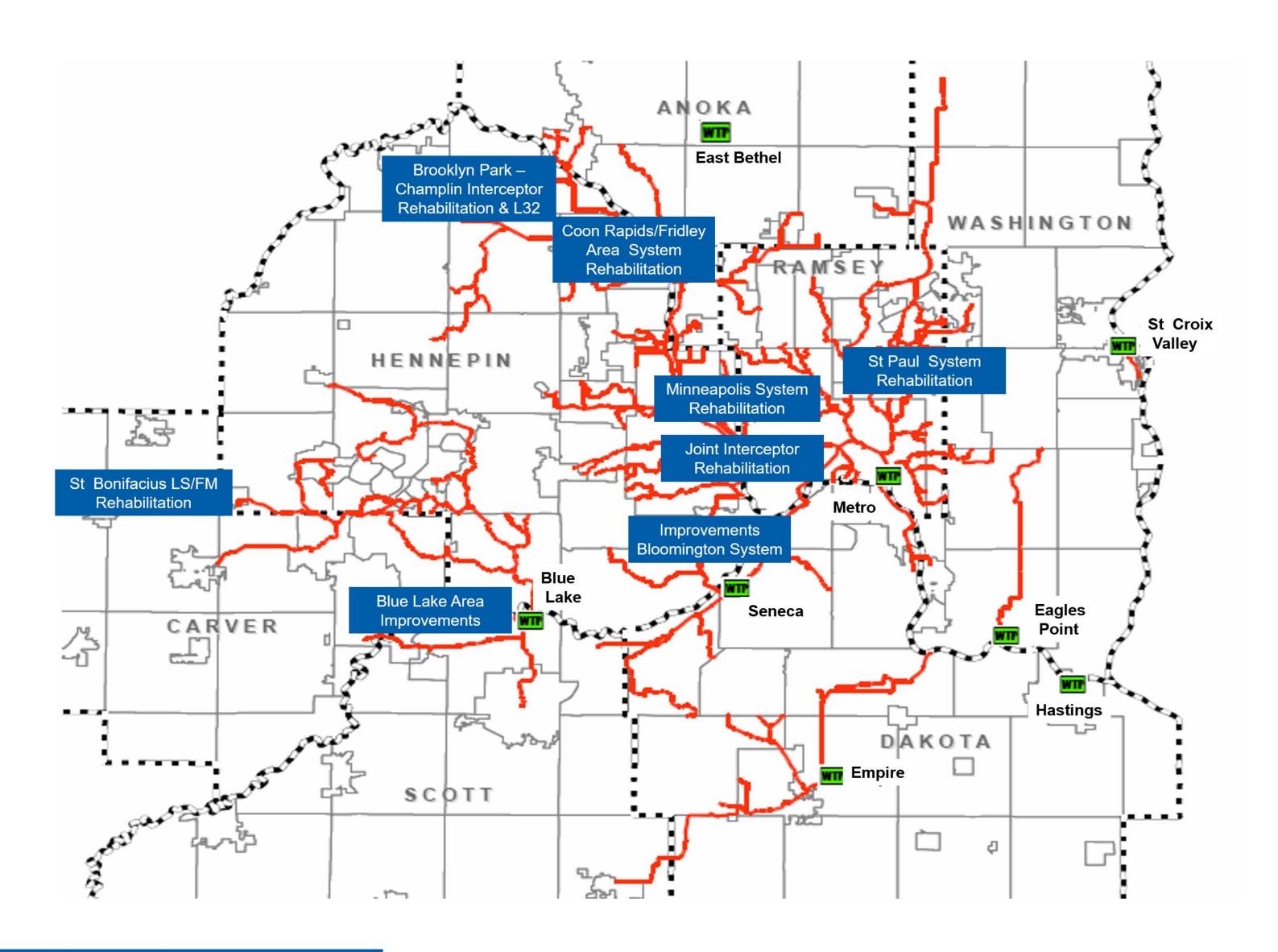


Provides low interest loans to Michael Food & Kemps for capital financing

IPIP is a private-public partnership.



Major Interceptor Projects





Brooklyn Park – Champlin Interceptor Renewal



- Site 1 in Champlin had condition 4 pipes
- Sites 2 and 3 in Brooklyn Park had condition 4 and
 5 pipes near the Mississipi River



Part 1



Planning/Design

Aug 2016 – Jul 2018



Construction
Jan 2019 – Jul 2020

Part 2



Planning/Design

Aug 2016 – Jul 2018



Construction
Jan 2019 – Jul 2020





Interceptor 1-MN-344 Tunnel and Emergency Relief Structure ERS04







This segment includes an uncontrolled 40-foot drop and two City sewer connections. This section of the tunnel has extensive section loss to the concrete walls of the tunnel and need repair.



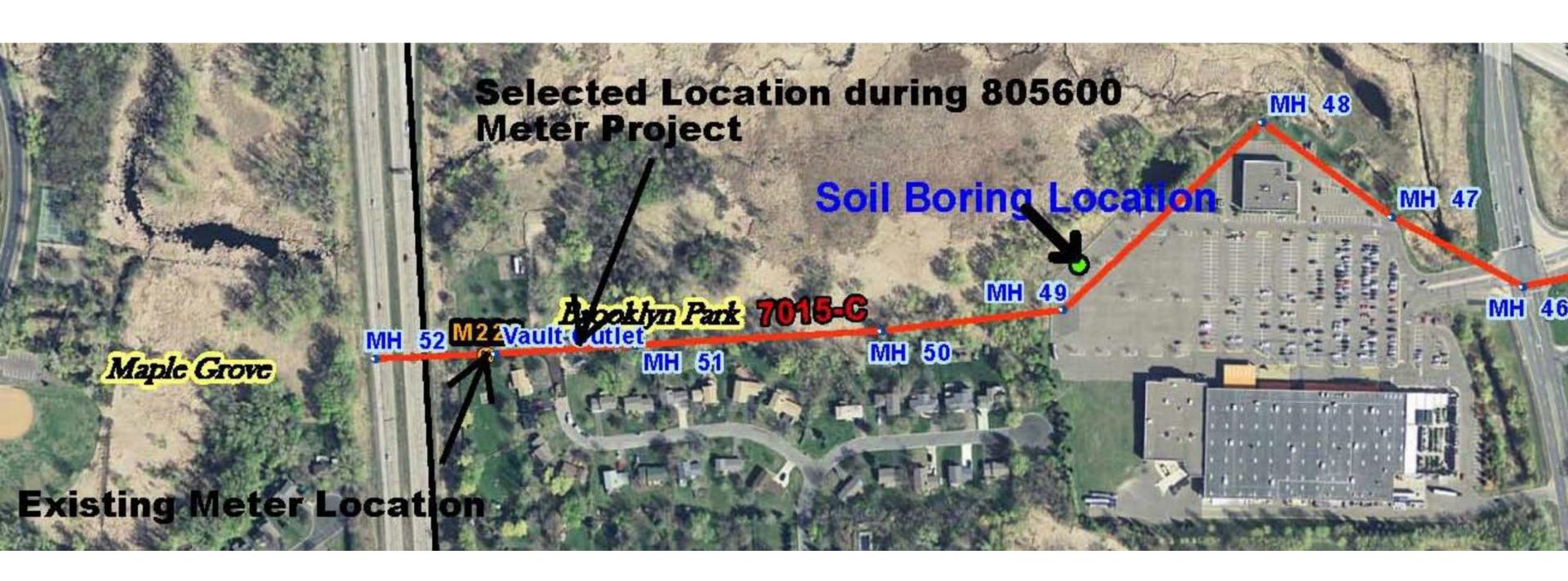
Planning/Design **Complete Jan 2019**



Jul 2019 - Feb 2022



Replacement Meter Vault M228







M228 needs to be rehabbed due to the corrosion and access issues in the vault



Planning/Design Jun 2016 - Feb 2018



Construction Jul 2018 - Jun 2019



Coon Rapids L34 Improvements



- L34 facilities need to be rehabilitated to recover useful life and provide reliability.
- The influent interceptor is condition 5
- The wet well is in need of structural rehabilitation
- All four pumps are in need of major repair or replacement.

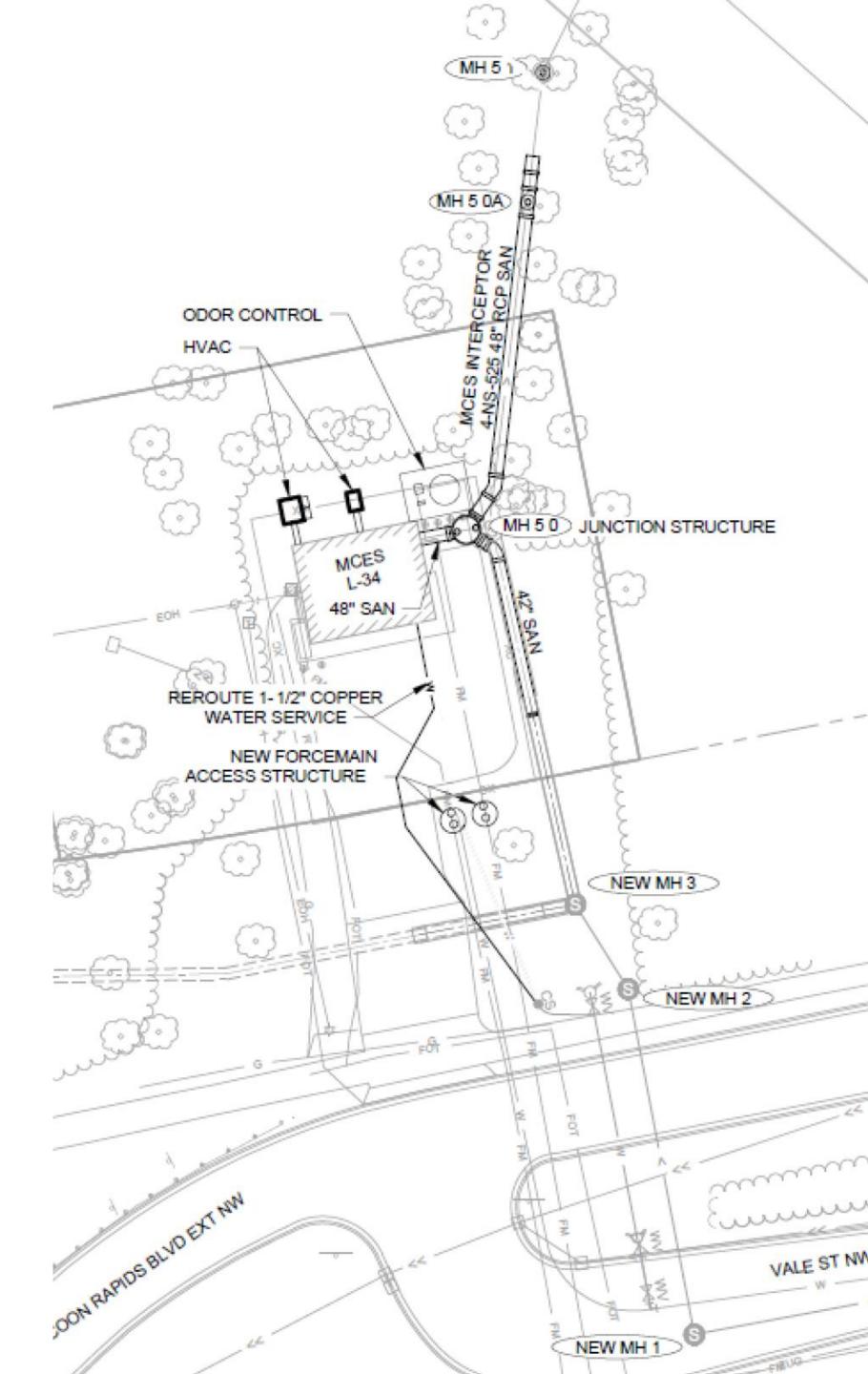




Planning/Design
Sep 2015 – Oct 2018



Construction
Jun 2019 – Dec 2020





Waconia Forcemain METROPOLITAN 7508 Phase 2 Replacement



Forcemain 7508 is need of replacement due to age and to provide future capacity











Orono Area Lift Station & Force Main Improvements (2 Projects)





Questions

