MCES Lake Minnetonka Area Sewer Improvements Facility Plan Open House

Tim O'Donnell, Sr. Info. Coordinator, Project Citizen Liaison
Dan Fick, Principal Engineer, Project Manager
Chris Remus, Assistant Manager, Interceptor Engineering

Oct. 6 and Oct 8. Open Houses
Meet the presenters of the MCES Lake Minnetonka Area Sewer Improvements Facility Plan Open House.

Tim O’Donnell  
Dan Fick  
Chris Remus
Service Area and Facilities
Wastewater Treatment Plant Locations

WHO WE SERVE
7-county Twin Cities Metro Area
110 communities
3,000 square miles
2,700,000+ people

OUR FACILITIES
9 wastewater treatment plants
640 miles of interceptors
61 lift stations (pumping stations)
250 million gallons per day (average)
What is a Facility Plan?

MCES Facility Plan

This document is a prerequisite for federal funding on MCES projects. The MCES Facility Plan:

• Summarizes the current state of the existing MCES wastewater sewer system
• Identifies the need for rehabilitating existing facilities or constructing new facilities
• Determines the potential environmental impacts of new facilities
• Recommends a course of action
Definitions

**Wastewater Sewer System**
A system of underground pipes that carries wastewater (or sewage) away from buildings. Cities operate their own local wastewater sewer systems within a community. MCES operates the regional wastewater sewer system that carries wastewater from city systems to our treatment plants, similar to how a freeway system carries regional traffic.

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**MCES Interceptor**
The large underground pipes that make up the regional sewer system. These pipes can be either gravity pipes or forcemains.

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**Gravity Pipe**
A sloped pipe that carries wastewater downhill (by gravity) without mechanical assistance.

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**Forcemain**
A pipe that carries wastewater being pumped (or forced) uphill, as opposed to wastewater flowing by gravity.

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**Flow Meter**
A device MCES uses to measure the quantity of wastewater a customer (city) sends to the regional sewer system, similar to how a city water meter measures water usage in a home.
Lake Minnetonka Area Improvements

- Orono Interceptor 7113 Relocation Project
- Orono Lift Stations L46 and L49 Improvements
- Deephaven Lift Station L48 and Forcemain Project
- Shorewood/Excelsior Lift Station L20 Project
- Shorewood Lift Station L21 Project

Objectives/Goals

- Maintain reliability
- Preserve assets
- Improve operational flexibility, efficiency and safety
- Protect environment, health, safety and welfare of customers
- Partner with customers on construction where possible

Schedule

- 2020: Design
- 2021: Design/Construction
- 2023: Construction

$36.1 Million
Lake Minnetonka Area Facility Plan Project Areas

Projects

1. Orono Interceptor 7113 Relocation Project
2. Orono Lift Stations L46 and L49 Improvements
3. Deephaven Lift Station L48 and Forcemain Project
4. Shorewood/Excelsior Lift Station L20 Project
5. Shorewood Lift Station L21 Project

Map showing project areas and locations:

- Project Area
- Sanitary Sewer Pipe within Project Area
- Sanitary Sewer Pipe outside Project Area
- Municipal Boundaries
- Lift Station (Pumping Station)
Orono Interceptor 7113 Relocation Project

Project Goals

- Improve efficiencies and system reliability
- Reconstruct forcemain 7113 on a new alignment further away from Lake Minnetonka
- Reconnect City facilities to new pipe

Schedule

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<th>Year</th>
<th>2020</th>
<th>2022</th>
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Orono Lift Stations L46 and L49 Improvements

Project Goals

- Improve efficiencies and system reliability
- Condition-driven rehabilitation and replacement
- Rehabilitation of L46
- Replacement of L49 on new site
- Reconstruct forcemain

Schedule

2019*
Planning/Design

2021

2023

2025
Construction

*Continuation of previous project

$3.8 Million
Orono Lift Stations
L46 and L49 Improvements
Deephaven Lift Station L48 and Forcemain Project

**Project Goals**
- Improve efficiencies and system reliability
- Rehabilitation of L48
- Replace aging gravity pipe
- Construct new forcemain

**Schedule**

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$4.8 Million
Deephaven Lift Station L48 and Forcemain Project
Shorewood/Excelsior Lift Station L20 Project

Project Goals

• Improve efficiencies and system reliability
• Add gravity pipe between L19 and L20 to allow decommissioning of L20
• Decommission L20 and its forcemain
• Replace Flow Meter M417 to accommodate new pipe configuration
• Incorporate local infrastructure improvements

Schedule

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*Continuation of previous project

$8 Million
Shorewood/Excelsior Lift Station L20 Project
Shorewood Lift Station L21 Project

Project Goals

• Improve system reliability
• Increase pump capacity to improve operational flexibility
• Provide flow meters on both forcemain to improve accuracy

Schedule

2021 2022 2023
Design Construction
$5.5 Million
Shorewood Lift Station L21 Project

Pumping capacity, metering, electrical, and mechanical improvements
Design-Phase Considerations

Engineering studies will investigate:

- Traffic
- Parks and trails
- Topography challenges
- Buildings, utilities and other obstacles
- Coordination with local city projects
- School locations
- Community members and groups needing special accommodation

Mitigating Construction Impacts:

- Noise
- Dust
- Vibrations
- Odor
- Lighting
- Traffic closures
- Trail closures
- Detours
What’s next?

Facility Plan Schedule
- Fall 2020: Facility Plan Development
- Oct. 6 & Oct. 8, 2020: Open Houses
- Dec. 15, 2020: Public Hearing
- 2021: Final Facility Plan

Project Schedule
- 2020: Design
- 2021: Design/Construction
  - $36.1 Million
- 2023: Construction
- 2025:
Stay Informed

Share questions and comments

Email: comment@MCESLakeMtka.com
Call the Project Hotline: (952) 960-7765

Learn more about the project and review materials related to the December 15 Public Hearing

MetroCouncil.org/SewerConstruction/LakeMtkaFacilityPlan
How to participate in Q&A:

**Computer, Smartphone and Tablet Users:**

- Use the QA box to type in questions and comments
- Use the raise hand function to be unmuted and speak aloud
- Email your question or comment to comment@MCESLakeMtka.com

**Phone Users:**

- Call or text (952) 960-7765