Description:
This project provides improvements to meet the long-term conveyance capacity, reliability, and rehabilitation/replacement needs of the Blue Lake Interceptor System. This system includes gravity sewers, 29 lift stations, and forcemains from each lift station. Where cost effective, some lift stations will be replaced by deep gravity sewers using tunnel construction methods. The remaining lift stations will be rehabilitated and/or replaced as necessary. Single forcemains will be upgraded to dual forcemains where criteria support’s this strategy. Gravity sewers will be rehabilitated as necessary. River crossings will be inspected and rehabilitated as necessary. The major project areas are Victoria, Excelsior, Mound, and Wayzata, and the gravity sewers in Chanhassen, Eden Prairie, Minnetonka, Prior Lake, and Shakopee.

Purpose and Justification:
Evaluation of the Blue Lake Area Interceptor System indicates that the existing facilities cannot convey all the wastewater that will ultimately be generated from within the Blue Lake sewer shed due to growth. In addition, many of the sewers, lift stations, and associated forcemains need to be rehabilitated to ensure system reliability and to address odor and corrosion control.

Program Location:
The active projects within this program are in Council Districts: 3 and 4

Active Projects in Program:

<table>
<thead>
<tr>
<th>Project Number</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>802800</td>
<td>Lake Minnetonka Area (Parent Project)</td>
</tr>
<tr>
<td>802829</td>
<td>Mound Area Improvements – Interceptor 7021</td>
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</tbody>
</table>
MCES 2020 – 2025 Capital Program:

Authorized Capital Program (ACP) $93,483,920

Capital Improvement Plan (CIP) $27,200,000

Estimated Program Cash Flow 2020 - 2025:

Note: The ACP is the total amount of all past and present authorizations including Pre-2020 Expenses.
Mound Area Improvements – Interceptor 7021

**PROJECT TYPE:** Interceptor

**OBJECTIVES:** Preserve and Improve

**CUSTOMER LEVEL OF SERVICE:** Minimize Impacts, Lead by Example, Be A Good Neighbor, Meet Capacity Needs, Engage Customers, Coordinate with Others and Preserve Assets

**SCOPE:** Install dual 18” forcemain to replace an aged, single 24” forcemain, line a portion of the downstream gravity pipe and rehabilitate coinciding maintenance holes. Through cooperative agreements, project will install city watermain, provide storm drainage improvements, local forcemain improvements and upgrade two city lift stations.

**PROJECT NEED:** The current Mound 7021 forcemain was constructed as a single 24” steel forcemain in 1973, commencing at the L38 lift station and running approximately 15,400 feet. This is an aged system that lacks redundancy and is adjacent to Lake Minnetonka.

**PROJECT SCHEDULE**

- **Planning:** N/A
- **Design:** 2015-2017
- **Construction:** 2018-2021

**FINANCIAL ANALYSIS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Current ACP</th>
<th>2020 – 2025 Cash Flow</th>
<th>Total Project Cost</th>
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<td>2020 Cash Flow</td>
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$1,000,000
Project Location:
Council District # 3
City Orono

Program Family: 8028
Project # 802831

Otano Lift Stations L46 and L49
Improvements

PROJECT TYPE: Interceptor

OBJECTIVES: Preserve and Improve

CUSTOMER LEVEL OF SERVICE: Comply with Permits, Minimize Impacts, Lead by Example, Be A Good Neighbor, Meet Capacity Needs, Communicate Information, Engage Customers, Coordinate with Others and Preserve Assets

SCOPE: Rehabilitate L46 through replacement of pumps and mechanical equipment, and site improvements for safety.

PROJECT NEED: Both L46 and L49 were included in recent condition assessments and were the subject of a 2009 study evaluating needed improvements. L49 is at the end of its useful life and has inadequate capacity to meet current peak flow rates. Its location is also difficult to access for maintenance. Land has been purchased to relocate the lift station across the street to provide easier access. L46 requires pump and valve replacement, electrical panel upgrades, as well as site improvements to protect existing equipment from traffic.

PROJECT SCHEDULE

Planning
2009-2019

Design
2022-2023

Construction
2024-2025

FINANCIAL ANALYSIS

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**Excelsior Area Lift Station L20**

**Project Location:**
- Council District # 3
- City of Excelsior

**Program Family:** 8028
**Project #** 802856

**PROJECT TYPE:** Interceptor

**OBJECTIVES:** Improve

**CUSTOMER LEVEL OF SERVICE:** Comply with Permits, Minimize Impacts, Be A Good Neighbor, Engage Customers and Coordinate with Others

**SCOPE:** Replace existing lift station L20 with a gravity pipe to lift station L19.

**PROJECT NEED:**
- The existing L20 was constructed in 1970 and is at the end of its service life.
- The 2009 Lake Minnetonka Area Facility Plan determined that L20 should be abandoned and replaced with a gravity pipe connection to L19.

**PROJECT SCHEDULE**

<table>
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<tr>
<th>Planning</th>
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<tbody>
<tr>
<td>2008-2019</td>
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**FINANCIAL ANALYSIS**

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</table>
Chanhassen Interceptor 8253-328 Rehabilitation

Project Location:
- Council District # 3
- City of Chanhassen
- West of Lake Lucy

PROJECT TYPE: Interceptor
OBJECTIVES: Preserve
CUSTOMER LEVEL OF SERVICE: Comply with Permits, Minimize Impacts, Communicate Information, Engage Customers, Coordinate with Others and Preserve Assets

SCOPE:
Rehabilitation of approximately 2,900 feet of concrete gravity sewer, ranging in size from 30-inch to 42-inch and installation of 10 fiberglass manhole inserts. MCES has a cooperative construction agreement to rehabilitate 1100 LF of 12” concrete gravity pipe owned by the City with the MCES construction project. The owner of the property along the alignment of the proposed rehabilitation has an approved preliminary plat and approved phase 1 site development plan. Rehabilitation either before or in conjunction with the development of the property will simplify construction and reduce construction costs.

PROJECT NEED:
The concrete sewer pipe has significant section loss of the interior wall. Delays in rehabilitating this pipe could result in a collapse of the sewer.

PROJECT SCHEDULE

<table>
<thead>
<tr>
<th>Planning</th>
<th>Design</th>
<th>Construction</th>
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</thead>
<tbody>
<tr>
<td>2018</td>
<td>2019</td>
<td>Winter / Spring 2020</td>
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FINANCIAL ANALYSIS

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Orono Interceptor 7113 Improvements

**PROJECT TYPE:** Interceptor

**OBJECTIVES:** Preserve

**CUSTOMER LEVEL OF SERVICE:** Minimize Impacts, Engage Customers, Coordinate with Others and Preserve Assets

**SCOPE:** Replace existing forcemain at Tanager bridge with new forcemain alignment due to Hennepin County bridge replacement.

**PROJECT NEED:** Forcemain 7113 was built in 1979 and runs from L59 in the City of Orono to the junction with forcemain 7113A approximately 3 miles to the east. Reconstruction of the Tanager Lake bridge by Hennepin County presents an opportunity to replace the old forcemain 7113 and remove any conflicts from bridge construction.

**PROJECT SCHEDULE**

<table>
<thead>
<tr>
<th>Planning</th>
<th>Design</th>
<th>Construction</th>
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**FINANCIAL ANALYSIS**

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**Estimated. MCES share of project costs are currently being negotiated with Hennepin County.**