# Program 8055 – Lift Station Improvements

L66 (Savage) dry well

## Description
Upgrades include improvements, reconstruction, and replacement work for forcemains and lift stations.

## Purpose and justification
Capacity and condition assessments are being conducted along with regulatory reviews to identify system-wide lift station upgrades. These upgrades extend the life of facilities, reduce the risk of spills, and improve the safety of staff who operate and maintain lift stations.

## Program location
The active projects within this program are in the following Council districts: All

## New program additions

| Category | Details |
|---|---|
| **Scope** | Capacity assessment, pumping and electrical improvements, and structural rehabilitation at 14 lift stations. |
| **Assets** | L31, L44, L45, L56, L01, L02, L26, L78, L04, L06, L19, L41, L57, L69 |
| **Communities** | St. Paul Park, Orono, Eagan, Forest Lake, Wayzata, White Bear Township, Centerville, White Bear Lake, Excelsior, New Hope, Lino Lakes |
| **Added budget** | $52,000,000 |
| **Construction years** | 2029 through 2031 |

## Active projects in program

| Project Number | Project Title |
|---|---|
| **805500** | Lift Station Rehabilitation (Parent Project) |
| **805502** | Lift Station Condition Assessments |
| **805506** | Forcemain and Siphon Inspections - Phase 1 |
| **805509** | L65 HVAC Improvements |
| **805511** | Lift Stations L50 and L51 Generator Upgrades |
| **805513** | Lift Station Electrical Rehabilitation (L01, L02, L03, L31) |
| **805515** | Lift Stations L35 and L42 Improvements |

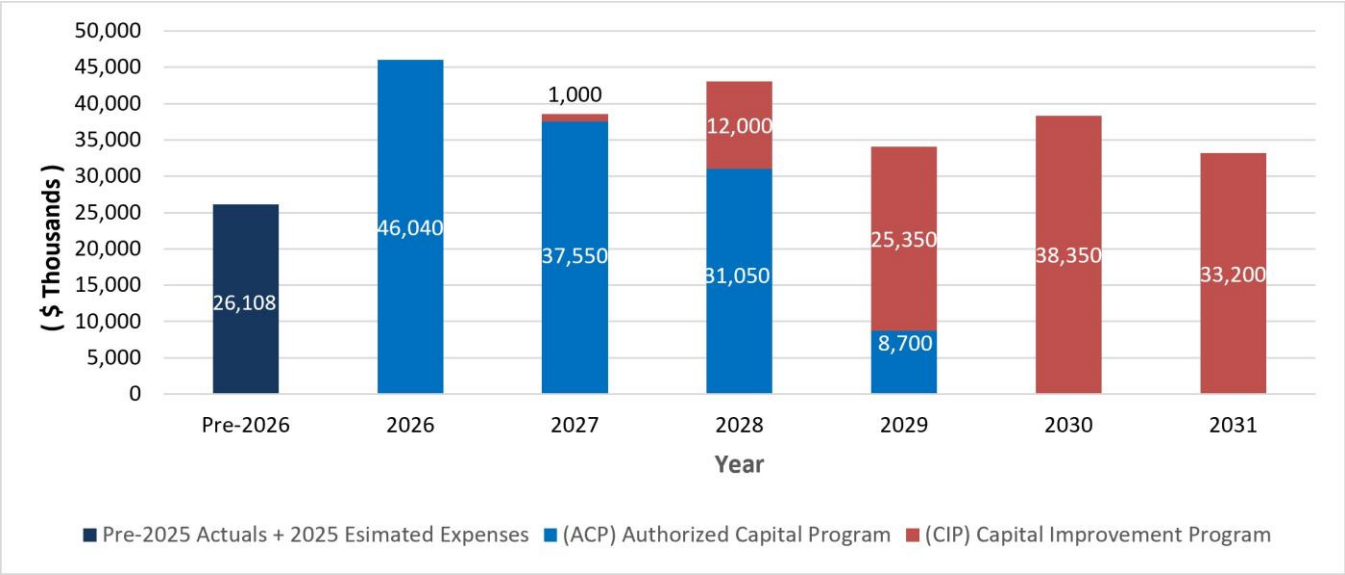
| Project Number | Project Title |
|---|---|
| **805516** | Lift Station L15 Rehabilitation |
| **805517** | Lift Station L75 Odor Control Improvements |
| **805518** | Lift Station L79 Odor Control Improvements |
| **805521** | Forcemain and Siphon Inspections – Phase 2 |
| **805531** | L71 Fats, Oils, and Greases (FOG) and Grit Removal |
| **805564** | Lift Station L66 Rehabilitation |
| **805568** | Lift Station L71 System Improvements |
| **805569** | Lift Station L73 Odor Control Improvements |
| **805576** | Lift Station L29 Rehabilitation |
| **805581** | Anoka-Champlin Forcemain Improvements |

## Environmental Services 2026 through 2031 Capital Program

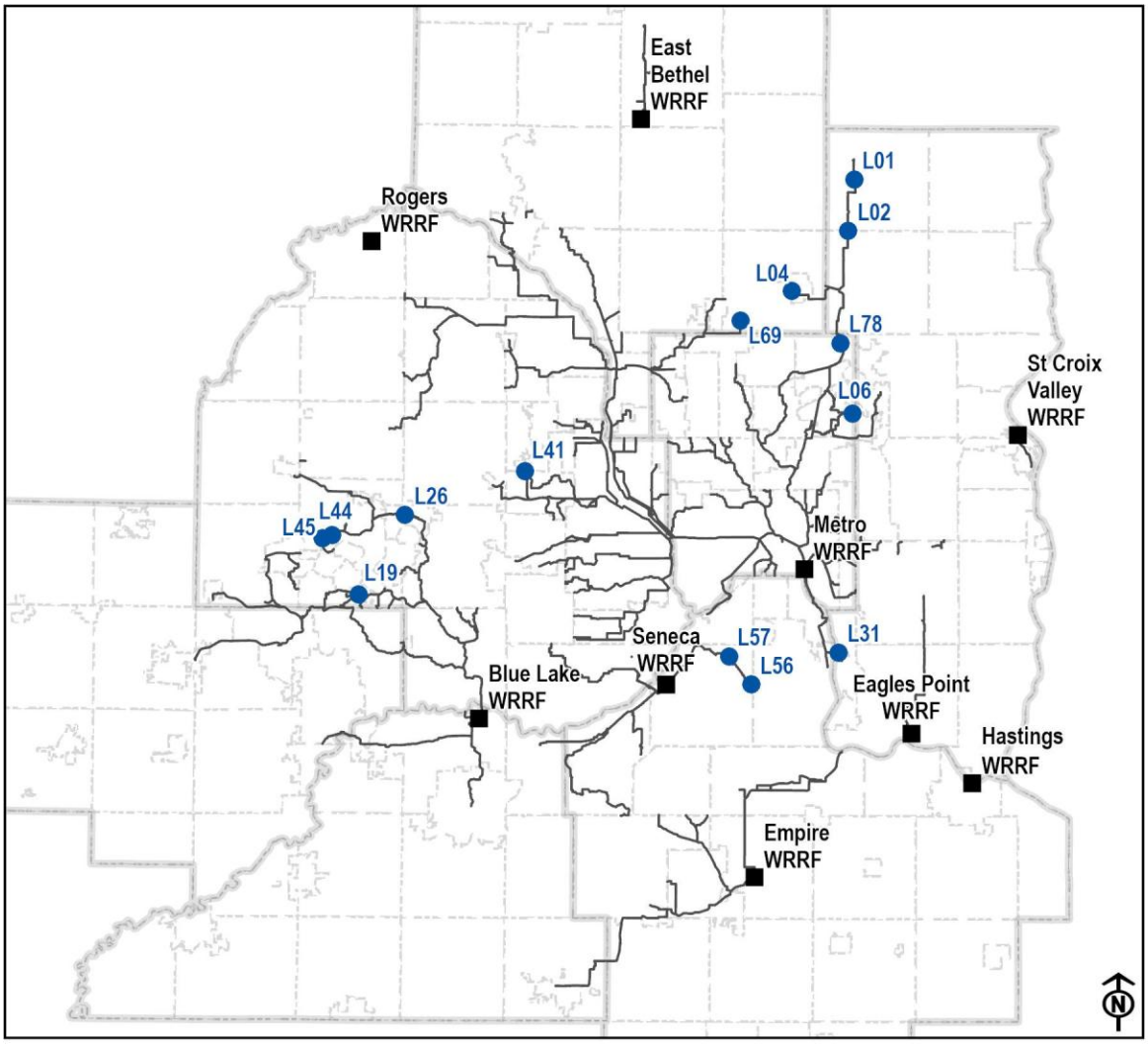
- Authorized Capital Program (ACP): $149,448,302
- Capital Improvement Plan (CIP): $109,900,000

## Estimated program cash flow from 2026 through 2031

Note: the ACP is the total amount of all past and present authorizations including pre-2026 expenses.



## Lift Station Program Map – New Projects




### Lift Station Capital Improvement Projects (CIP)

**MCES Wastewater Treatment System**

- Lift Stations with CIP
- Water Resource Recovery Facilities (WRRF)
- Interceptors

**Boundaries**

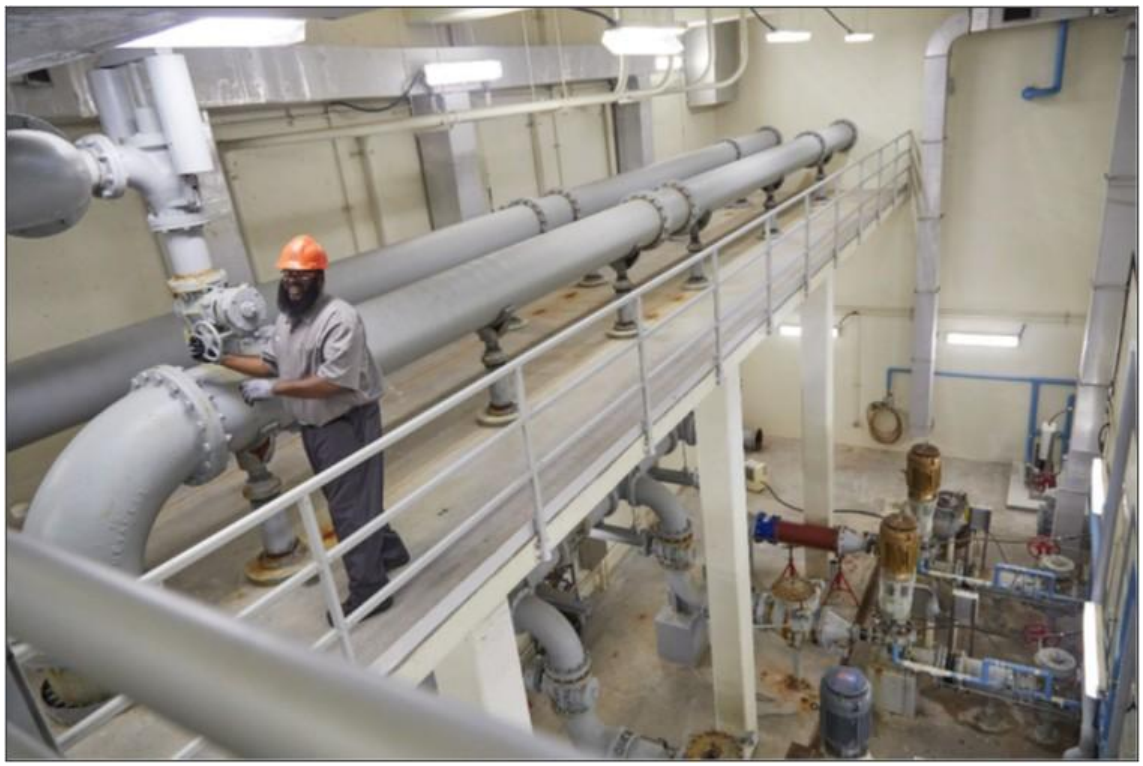
- County
- Community

0 3 6 12 18 24 Miles

## Lift Station Condition Assessments

**Program family 8055** **Project #805502**

Project location: Council districts #1 to 16, regional project



**Interceptor service worker inspects the Rosemount Lift Station (L74)**

### Project type
Condition Assessment

### Objectives
Asset Preservation

### Scope
Evaluate and report the condition of lift stations.

### Project need
The condition assessments are needed to prioritize and plan lift station repairs and improvements.

### Project schedule:

| Planning: 2018 through 2027 | Design: N/A | Construction: N/A |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $300,000 |
| Current ACP: | $1,600,000 |
| 2026 through 2031 cash flow: | $900,000 |
| Total project cost: | $2,171,000 |

## Forcemain and Siphon Inspections - Phase 1

**Program family 8055** **Project #805506**

Project location: Districts #13, City of Saint Paul; #15, City of Eagan; #8, City of Golden Valley; and #11, City of Centerville

**Project #805506 Inspection of the Seneca outfall.**

### Project type
Interceptor Condition Assessment

### Objectives
Asset Preservation

### Scope
Inspection of the Seneca outfall, 1-MS-100 siphon under Warner Road, lift station L41 forcemain (7114), and lift station 7651 forcemain (7651).

### Project need
Programmatic evaluation of assets in accordance with the 2022 Forcemain-Siphon-River Crossing-Outfall Inspection Program Manual.

| Planning: 2022 | Design: 2024 | Construction: 2024 through 2026 |
|---|---|---|

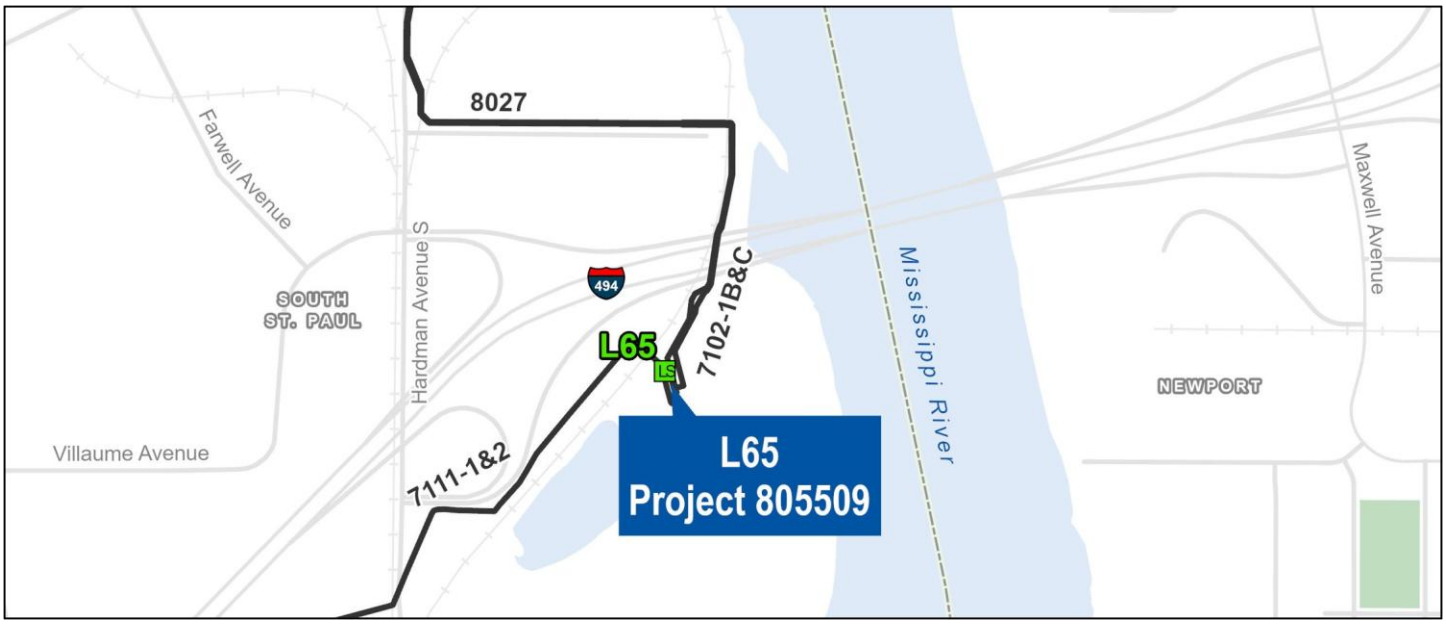
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $5,000,000 |
| Current ACP: | $6,750,000 |
| 2026 through 2031 cash flow: | $30,000,000 |
| Total project cost: | $34,517,000 |

## L65 HVAC Improvements

**Program family 8055** **Project #805509**

Project location: Council district #12, City of South Saint Paul




**Map of project #805509 near the western shore of the Mississippi River in the City of South Saint Paul.**

### Project type
Lift Station

### Objectives
Asset Preservation

### Scope
Rehabilitation of existing HVAC system of the dry side of the facility. Improvements include equipment relocation, new equipment, new HVAC control system, and gas monitoring.

### Project need
Portions of L65 HVAC system require frequent maintenance and are approaching the end of their life cycle. Corrosive sewer gases around the facility are also causing corrosion of HVAC equipment.

| Planning: 2022 through 2024 | Design: 2024 through 2025 | Construction: 2026 through 2026 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $100,000 |
| Current ACP: | $800,000 |
| 2026 through 2031 cash flow: | $100,000 |
| Total project cost: | $1,014,000 |

## Lift Stations L50 and L51 Generator Upgrades

**Program family 8055** **Project #805511**

Project location: Council district #3, City of Minnetrista

**Maps and Figures of Project #805511 Lift Stations 50 and 51 Generator Upgrades**

### Project type
Lift Station Improvements

### Objectives
Quality Improvements

### Scope
To upgrade electrical, instrumentation, and controls (EIC) equipment at the sites. This includes the purchase of new permanent generators at the sites to provide backup power generation at critical times.

### Project need
This project is driven by a lack of system reliability. The existing L50 and L51 are serviced by portable generators and have poor access.

### Project schedule:

| Planning: N/A | Design: 2025 through 2026 | Construction: 2027 through 2028 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $2,000,000 |
| Current ACP: | $3,781,000 |
| 2026 through 2031 cash flow: | $6,500,000 |
| Total project cost: | $6,708,000 |

## Lift Station Electrical Rehabilitation (L01, L02, L03, L31)

**Program family 8055** **Project #805513**

Project location: Council districts #11, Cities of Forest Lake and Hugo, and #12, City of St. Paul Park

**Existing motor control centers (MCCs) at lift station L31.**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation

### Scope
At lift stations sites L01 (Forest Lake), L02 (Hugo), L03 (Hugo), and L31 (St. Paul Park), replace MCC (Motor Control Center), add new enclosures, replace main breakers, replace manual transfer switches with automatic transfer switches, and install permanent generators in outdoor enclosures.

### Project need
The electrical condition assessment reports, preventative maintenance data, and arc flash study results were reviewed and prioritized by ES engineering, electrical, and ISBU staff. Each site is identified as a site needing rehabilitation as soon as possible. The sites have many components in poor shape or obsolete.

### Project schedule:

| Planning: 2022 through 2023 | Design: 2023 through 2025 | Construction: 2026 through 2027 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $5,000,000 |
| Current ACP: | $12,487,000 |
| 2026 through 2031 cash flow: | $8,500,000 |
| Total project cost: | $10,500,000 |

## Lift Stations L35 and L42 Improvements

**Program family 8055** **Project #805515**

Project location: Council district #10 and #9, Cities of Mounds View and Anoka

**Lift Station L35 wet well**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation

### Scope
The lift station improvements will include pump replacement, wet well rehabilitation, odor control upgrades, HVAC upgrades, and electrical upgrades for each of the two respective lift stations. The L35 Forcemain 4-NS-524 and L42 Forcemain 7707A will be assessed to confirm necessary forcemain and appurtenance improvements.

### Project need
L35 was originally constructed in 1965 and hasn't received any significant improvements since then. L42 was evaluated in 2023 and found to have deficiencies in electrical, mechanical, and structural systems in addition to inoperable air release valves on the forcemain. **Project schedule:**

| Planning: 2025 | Design: 2026 through 2027 | Construction: 2028 through 2030 |
|---|---|---|

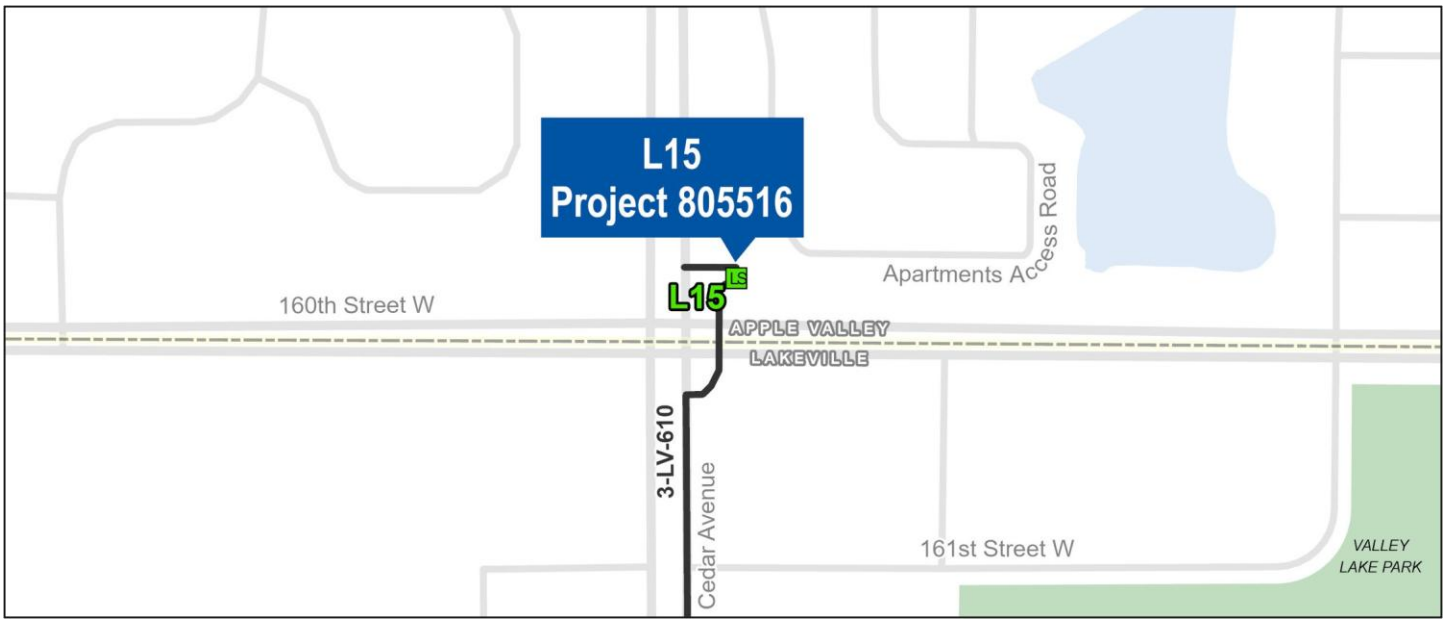
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $1,000,000 |
| Current ACP: | $3,141,000 |
| 2026 through 2031 cash flow: | $34,000,000 |
| Total project cost: | $35,500,000 |

## Lift Station L15 Rehabilitation

**Program family 8055** **Project #805516**

Project location: Council district #15, City of Apple Valley




**Project #805516 L15 location in Apple Valley near the intersection of 160th Street West and Cedar Avenue**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation

### Scope
There are many updates needed to replace corroded electrical and mechanical equipment, concrete walls, and civil work.

### Project need
L15 has outdated and deteriorating mechanical, HVAC, and electrical equipment that needs to be replaced and improved.

### Project schedule:

| Planning: 2025 | Design: 2025 through 2027 | Construction: 2027 through 2029 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $200,000 |
| Current ACP: | $1,950,000 |
| 2026 through 2031 cash flow: | $13,200,000 |
| Total project cost: | $16,300,000 |

## Lift Station L75 Odor Control Improvements

**Program family 8055** **Project 805517**

Project location: Council district 12 City of Rosemount

**Lift Station L75**

### Project type
Odor Control

### Objectives
Quality Improvements

### Scope
Upgrading the existing odor control unit.

### Project need
Encroaching development has resulted in odor complaints and the need to improve odor control at the site.

| Planning: 2026 through 2027 | Design: 2027 | Construction: 2027 through 2028 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $200,000 |
| Current ACP: | $0 |
| 2026 through 2031 cash flow: | $5,000,000 |
| Total project cost: | $5,000,000 |

## Lift Station L79 Odor Control Improvements

**Program family 8055** **Project #805518**

Project location: Council district 16, Eureka Township

**Location of Lift Station L79.**

### Project type
Odor Control

### Objectives
Asset Preservation

### Scope
Remove and replace an existing odor control system.

### Project need
Ventilation and odor control systems need to be upgraded to meet current NFPA and Ten States Standards.

| Planning: 2025 through 2026 | Design: 2026 | Construction: 2026 through 2028 |
|---|---|---|

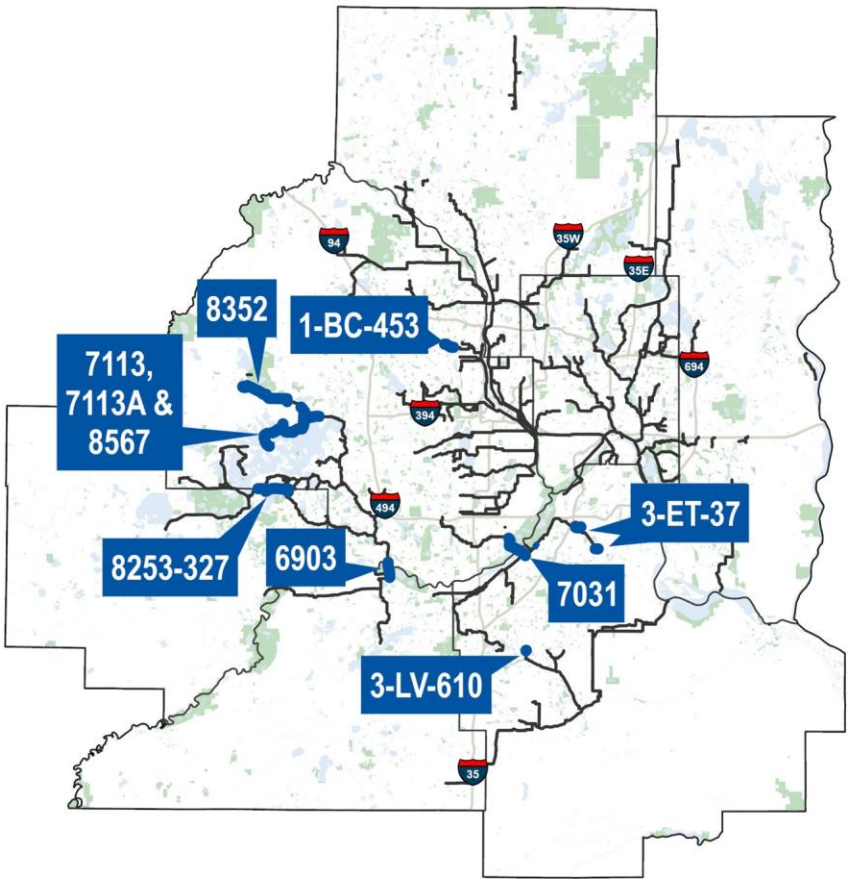
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $200,000 |
| Current ACP: | $2,695,000 |
| 2026 through 2031 cash flow: | $3,800,000 |
| Total project cost: | $4,000,000 |

## Forcemain and Siphon Inspections – Phase 2

**Program family 8055** **Project #805521**

Project location: Council districts 1, 2, 3, 4, 5, 15, and 16; Cities of Apple Valley, Bloomington, Brooklyn Center, Eagan, Eden Prairie, Excelsior, Lakeville, Long Lake, Maple Plain, Orono, Shakopee, Spring Park, & Wayzata




**Project locations across the seven-county Twin Cities metropolitan area**

### Project type
Interceptor

### Objectives
Asset Preservation

### Scope
Inspect ductile iron pipe forcemains using electromagnetic technology.

### Project need
Aging facilities need to be inspected to assess existing conditions and the need for upgrades.

| Planning: 2025 through 2026 | Design: 2026 | Construction: 2027 through 2028 |
|---|---|---|

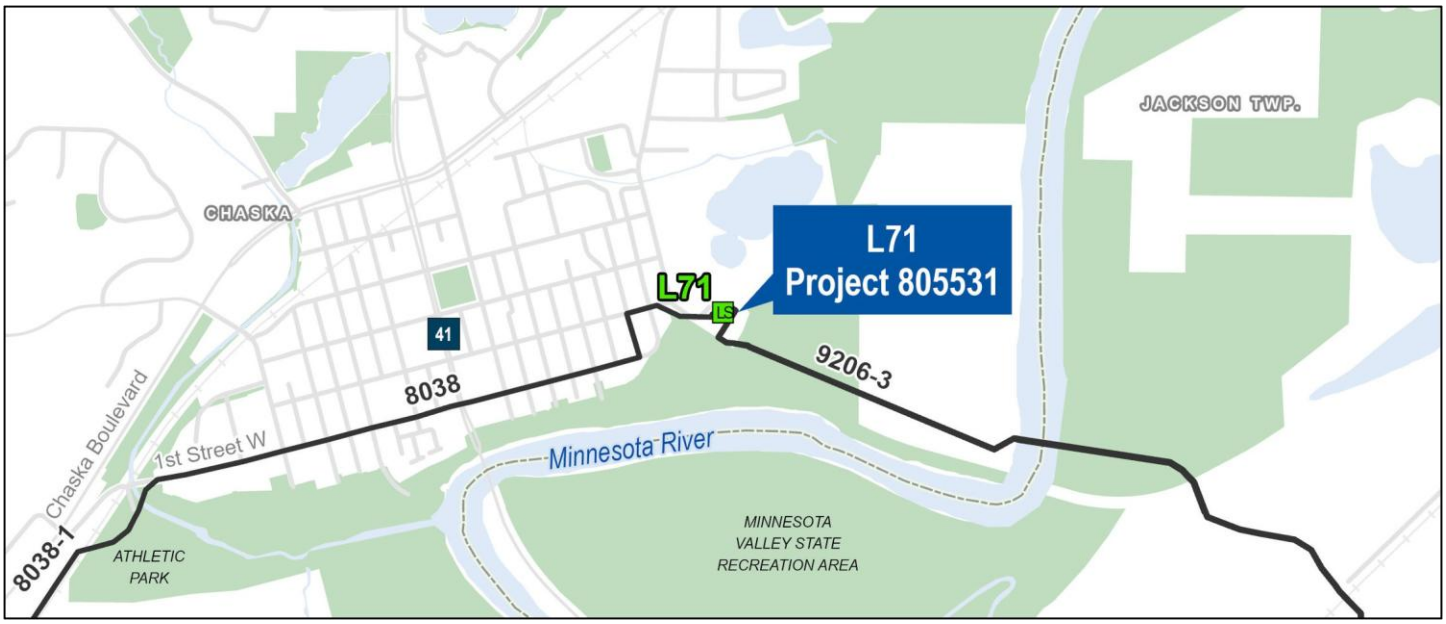
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $200,000 |
| Current ACP: | $5,635,000 |
| 2026 through 2030 cash flow: | $8,200,000 |
| Total project cost: | $8,200,000 |

## L71 Fats, Oils, and Greases (FOG) and Grit Removal

**Program family 8055** **Project #805531**

Project location: Council district 4, City of Chaska.




**L71 Project Location**

### Project type
Lift Station

### Objectives
Quality Improvements

### Scope
Install a grit removal chamber upstream of the lift station wet well.

### Project need
Grit removal improvements are needed to extend pump life and minimize lift station and forcemain system maintenance.

| Planning: 2026 through 2027 | Design: 2027 | Construction: 2028 through 2029 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $150,000 |
| Current ACP: | $900,000 |
| 2026 through 2031 cash flow: | $15,800,000 |
| Total project cost: | $15,950,000 |

## Lift Station L66 Rehabilitation

**Program family 8055** **Project #805564**

Project location: Council district #16, City of Savage

**Map of project #805564 location south of Highway 13 and north of Savage Fen in Savage**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation and Quality Improvements

### Scope
The lift station rehabilitation will include HVAC upgrades, a carbon tank, a new generator, wet well rehabilitation, pump replacement, and electrical upgrades.

### Project need
Wet well rehabilitation is needed due to the substantial concrete deterioration. The station also needs new pumps to accommodate for projected 2040 flows. The HVAC is not up to code and needs replacement.

### Project schedule:

| Planning: N/A | Design: 2017 through 2025 | Construction: 2025 through 2027 |
|---|---|---|

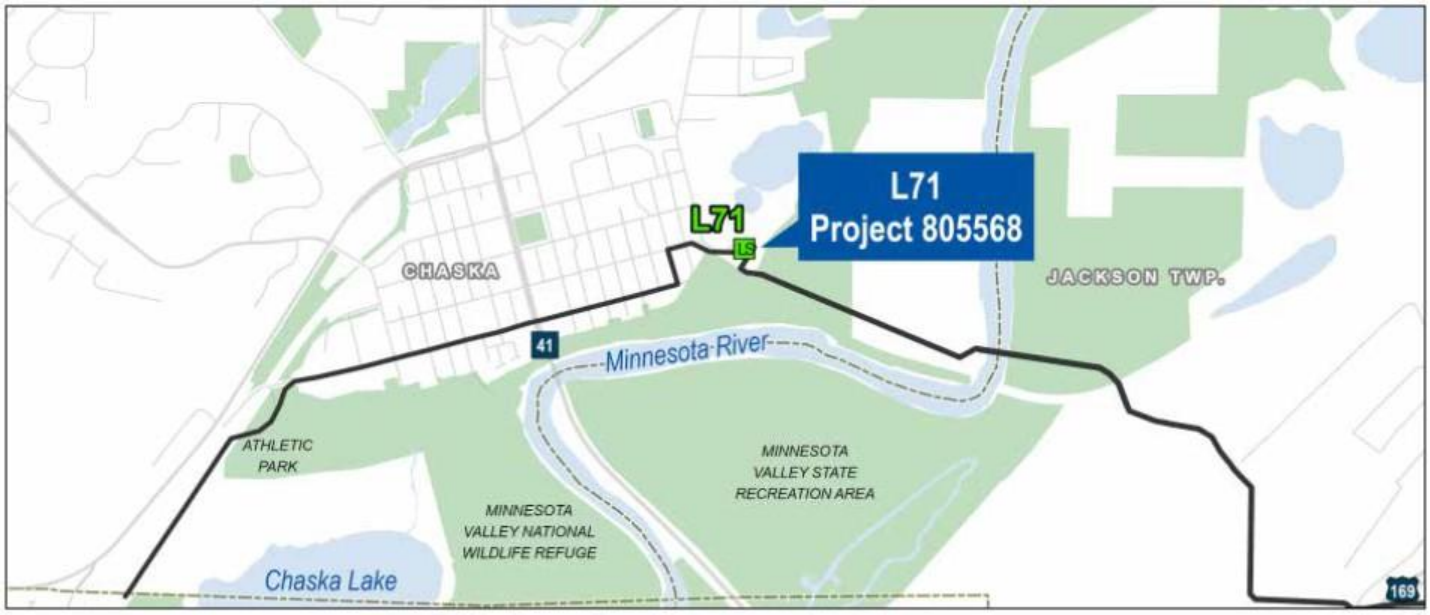
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $8,000,000 |
| Current ACP: | $13,422,000 |
| 2026 through 2031 cash flow: | $8,750,000 |
| Total project cost: | $11,512,000 |

## Lift Station L71 System Improvements

**Program family 8055** **Project #805568**

Project location: Council district #4, City of Chaska, 600 4th Street East and eastward into Shakopee




**Project #805568 L71 location north of the Minnesota River in Chaska**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation

### Scope
Ongoing investigations of upstream contributions and results of pump testing and odor treatment will be evaluated to determine the scope of work. Preliminary indications are that fats, oils, and greases (FOG) pre-treatment, forcemain modifications, and odor control will be needed.

### Project need
L71 receives high-strength wastewater containing significant volumes of FOG. The FOG impacts the lift station and forcemain operations. This has resulted in decreased capacity and creates odors.

### Project schedule:

| Planning: 2023 through 2024 | Design: 2025 | Construction: 2026 through 2027 |
|---|---|---|

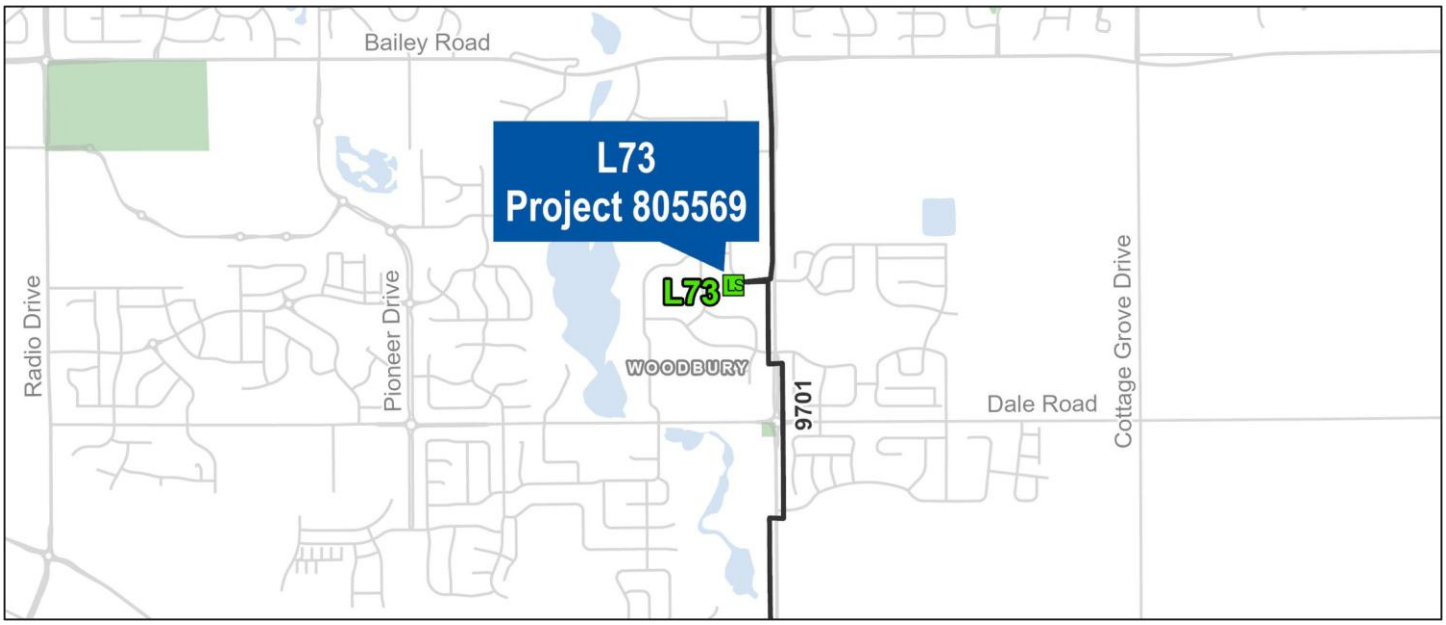
### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $7,000,000 |
| Current ACP: | $6,100,000 |
| 2026 through 2031 cash flow: | $24,000,000 |
| Total project cost: | $24,356,000 |

## Lift Station L73 Odor Control Improvements

**Program family 8055** **Project #805569**

Project location: Council district #12, City of Woodbury




**L73 location north of Dale road in Woodbury**

### Project type
Lift Station Improvements

### Objectives
Quality Improvements

### Scope
Replace an existing biofilter odor control system with a carbon odor control unit.

### Project need
Improvements are needed to better control odor emissions from the lift station following development of neighboring properties.

| Planning: 2023 | Design: 2024 | Construction: 2025 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $250,000 |
| Current ACP: | $3,250,000 |
| 2026 through 2031 cash flow: | $250,000 |
| Total project cost: | $2,798,000 |

## Lift Station L29 Rehabilitation

**Program family 8055** **Project #805576**

Project location: Council district #1, City of Plymouth

**Project #805576 location in Plymouth**

### Project type
Lift Station Improvements

### Objectives
Asset Preservation and Quality Improvements

### Scope
A planning study is reviewing capacity, current condition, and system reliability for both the lift station and associated forcemain.

### Project need
Operational issues and a lack of redundancy in the station pumping equipment have presented issues for maintenance of the lift station. Condition assessments for the over 50-year-old forcemain piping are necessary to maintain reliability.

### Project schedule:

| Planning: 2024 through 2025 | Design: 2025 through 2026 | Construction: 2027 through 2028 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $600,000 |
| Current ACP: | $1,200,000 |
| 2026 through 2031 cash flow: | $600,000 |
| Total project cost: | $1,336,000 |

## Anoka-Champlin Forcemain Improvements

**Program family 8055** **Project #805581**

Project location: Council districts #2 and 9, Cities of Anoka and Champlin, north and south sides of the Mississippi River at Highway 169

**Project #805581 location on either side of the Mississippi River in Anoka and Champlin**

### Project type
Lift Station and Interceptor Improvements

### Objectives
Asset Preservation and Quality Improvements

### Scope
Results of pump testing will be evaluated to determine the scope of work. Preliminary indications are that a second forcemain will be needed.

### Project need
L33, L42, L67, and their respective forcemains are interconnected. Forcemain 8751, downstream of all three lift stations, is an aging single 24-inch barrel. Installation of a redundant forcemain will be evaluated for system reliability and to complete future maintenance.

### Project schedule:

| Planning: 2023 through 2024 | Design: 2026 and 2027 | Construction: 2027 through 2029 |
|---|---|---|

### Financial analysis

| | |
|---|---|
| 2026 cash flow: | $6,500,000 |
| Current ACP: | $4,290,000 |
| 2026 through 2031 cash flow: | $15,000,000 |
| Total project cost: | $17,182,000 |