ES CAPITAL PROGRAM: 2025 THROUGH 2030

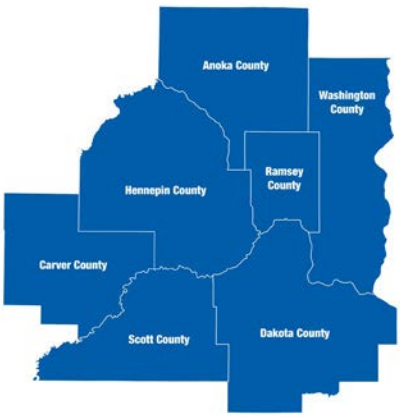
METROPOLITAN COUNCIL

Adopted December 11, 2024

The Council's mission is to foster efficient and economic growth for a prosperous metropolitan region.

Metropolitan Council Members

Charlie Zelle	Chair	Diego Morales	District 9
Judy Johnson	District 1	Peter Lindstrom	District 10
Reva Chamblis	District 2	Gail Cederberg	District 11
Tyronne Carter	District 3	Susan Vento	District 12
Deb Barber	District 4	Chai Lee	District 13
John Pacheco Jr.	District 5	W. Toni Carter	District 14
Robert Lilligren	District 6	Vacant	District 15
Yassin Osman	District 7	Wendy Wulff	District 16
Anjuli Cameron	District 8		



The Metropolitan Council is the regional planning organization for the seven-county Twin Cities area. The Council operates the regional bus and rail system, collects and treats wastewater, coordinates regional water resources, plans and helps fund regional parks, and administers federal funds that provide housing opportunities for low- and moderate-income individuals and families. The 17-member Council board is appointed by and serves at the pleasure of the governor.

On request, this publication will be made available in alternative formats to people with disabilities. Call Metropolitan Council information at 651-602-1140 or TTY 651-291-0904.

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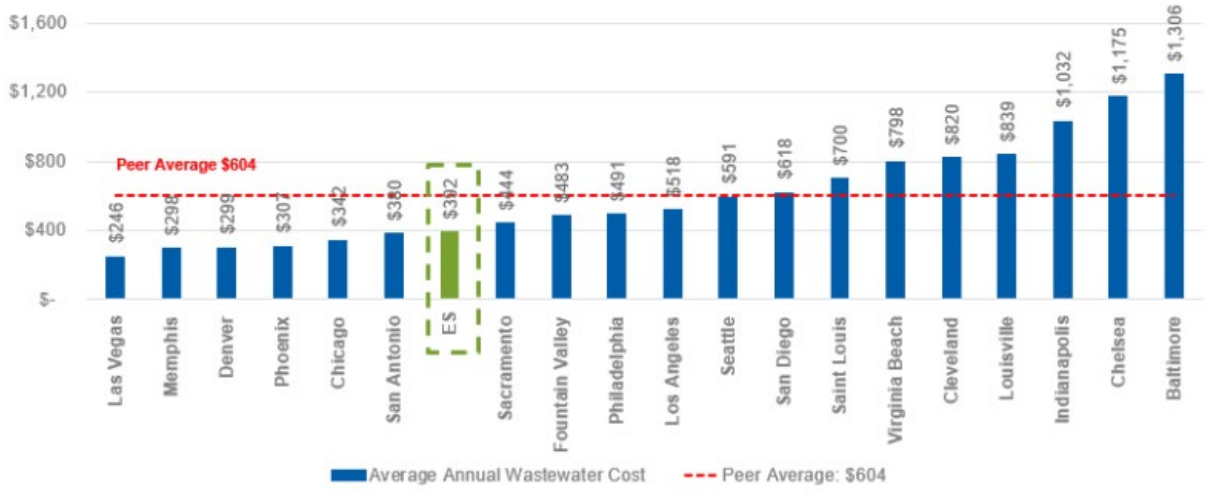
About Metropolitan Council Environmental Services

Metropolitan Council Environmental Services (ES) is responsible for operating and maintaining the regional wastewater system which protects public health, protects the environment, and fosters the economic growth of the seven-county Twin Cities Metropolitan Area. The regional wastewater system currently serves 111 communities and has an estimated replacement value of $9 billion. The organization employs about 640 staff (full-time equivalents) who are committed to clean water and a clean environment, both of which are essential to the quality of life for those who live and work in the region.

ES consistently achieves near-perfect compliance with federal and state water discharge standards while holding rates about 36% below the national average. ES is committed to sustainable operations through energy efficiency, use of renewable energy resources, use of technology, reducing air pollutant emissions, and resource recovery.

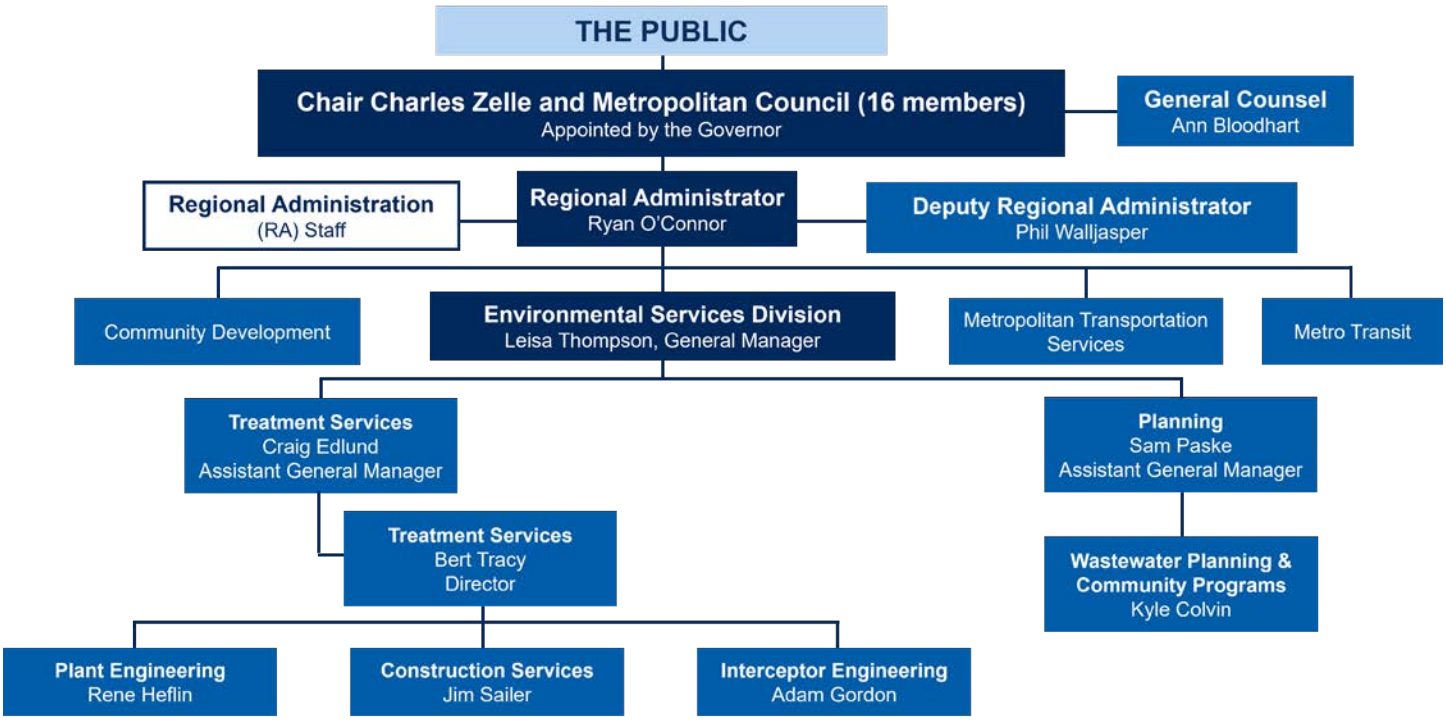
National Association of Clean Water Agencies (NACWA) 2024 peer agency rate survey results:



2023 rates (per 2024 NACWA Survey)

Peer agencies are those wastewater service providers that treat 100 million gallons per day (MGD) or more.

Environmental Services Organizational Chart



About the Environmental Services Capital Program Publication

The Environmental Services Capital Program is a component of the Council's unified budget plan. It is prepared, reviewed, and approved on a yearly basis to consider the new programs and/or adjustments to the plan. The capital program and key projects are presented to customers at the annual open house and budget workshops. Upon adoption of public comment in October, the Unified Operation and Capital Budget and Levies is formally adopted by Council in December.

Minnesota statute requires the Council to develop a capital program. Minnesota Pollution Control Agency (MPCA) references the ES Capital Program to confirm project funding, improvements necessary to meet regulatory requirements, and confirm projects requiring plan and specification review.

This publication is also used as a basis for the Tribal and Cultural Program. It ensures that Council policies align with the interests and concerns of Minnesota Tribal governments. Each project goes through archaeological and historic investigations so the Council can improve tribal collaboration and outreach. Through such efforts, the Council aims to foster improved collaboration with Tribal Nations and communities, facilitating the identification of projects that hold particular importance to them.

Project level expenses are current as of the Council's adoption date.

Extraordinary Facts by the Numbers!

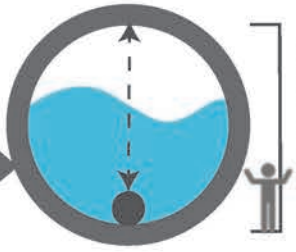
Environmental Services

moves and treats
250 million gallons
of wastewater each day

serving **2.7 million**
people in 110 communities in the
7-county Twin Cities metro area.

That wastewater moves through privately owned and city sewer pipes into

656 miles
of regional interceptor sewer mains



ranging in size from **9 inches** to **14 feet** in diameter and in age from 140 years old to brand new!

The wastewater also passes

231 meters
measuring how much water is flowing through the pipes.

60 lift stations
pumping water from lower elevation to higher elevation so gravity can help us move it.

on its way to

9 treatment plants
cleaning the water before it is returned to the environment.

Rev. 04.24.2025

Metropolitan Council Environmental Services
390 Robert Street North
Saint Paul, MN 55101-1805
metrocouncil.org

METROPOLITAN COUNCIL

Capital Program Overview

The Environmental Services Capital Program is a component of the Metropolitan Council's unified budget plan. The Environmental Services Division plans capital spending for new treatment plants, interceptors, and/or improvements to the metropolitan wastewater system. The capital program provides capital investments to preserve and rehabilitate existing wastewater infrastructure, meet more stringent water and air quality regulations, and expand the system capacity to meet regional growth needs. The Capital Program is prepared, reviewed, and approved on a yearly basis to consider new programs and/or adjustments to the plan. The Capital Program and key projects are presented to customers at the budget workshops held annually.

From 1970 to 2013, capital investment focused primarily on developing an efficient and effective wastewater system to meet the needs of a growing region. These investments included interceptor system capacity expansion and extension to serve the long-term service area (2040 and beyond), as well as consolidating, expanding capacity, and completing quality upgrades to the regional water resource recovery facilities between 2014 and 2020, capital investments shifted primarily to preserving the valuable regional wastewater infrastructure. The 2025 through 2030 program continues to have a strong emphasis on asset preservation and includes capacity improvements to support a thriving region. Noteworthy capacity projects and asset preservation projects in the plan include expansion of solids processing at the Metro Plant, the new Crow River wastewater treatment plant, a new lift station L32A in Fridley, and rehabilitation of the largest interceptor tunnel (1-MS-100) in the system.

Figure 1 – Regional Maintenance Facility (RMF) Expansion Project 809095 conceptual exterior design.

Figure 2 – Regional Maintenance Facility (RMF) Expansion Project 809095 exterior construction in progress.

Environmental Services 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' 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

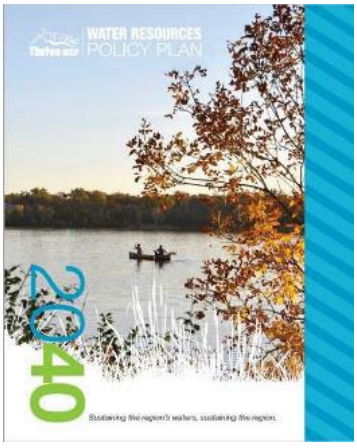
BE A GOOD NEIGHBOR
Mitigate community impacts related to odors, traffic, noise, and visual aesthetics.

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

COORDINATE WITH OTHERS
Optimize intergovernmental coordination in all MCES work that intersects with community work.



ES serves over 111 different customer communities and is committed to providing excellent customer service. We strive to make decisions that are fiscally: responsible, protect human health and the environment, work with our customers to ensure we plan for growth and coordinate our work in an efficient manner.

The Water Resources Policy Plan and the Customer Level of Service are the foundation for the Capital Program.

Authorized Capital Program (ACP)

The ACP provides multi-year authorization to spend on program costs where funding has been secured and the Council has given final approval to proceed. It is the total amount of all past and present approvals from the Council.

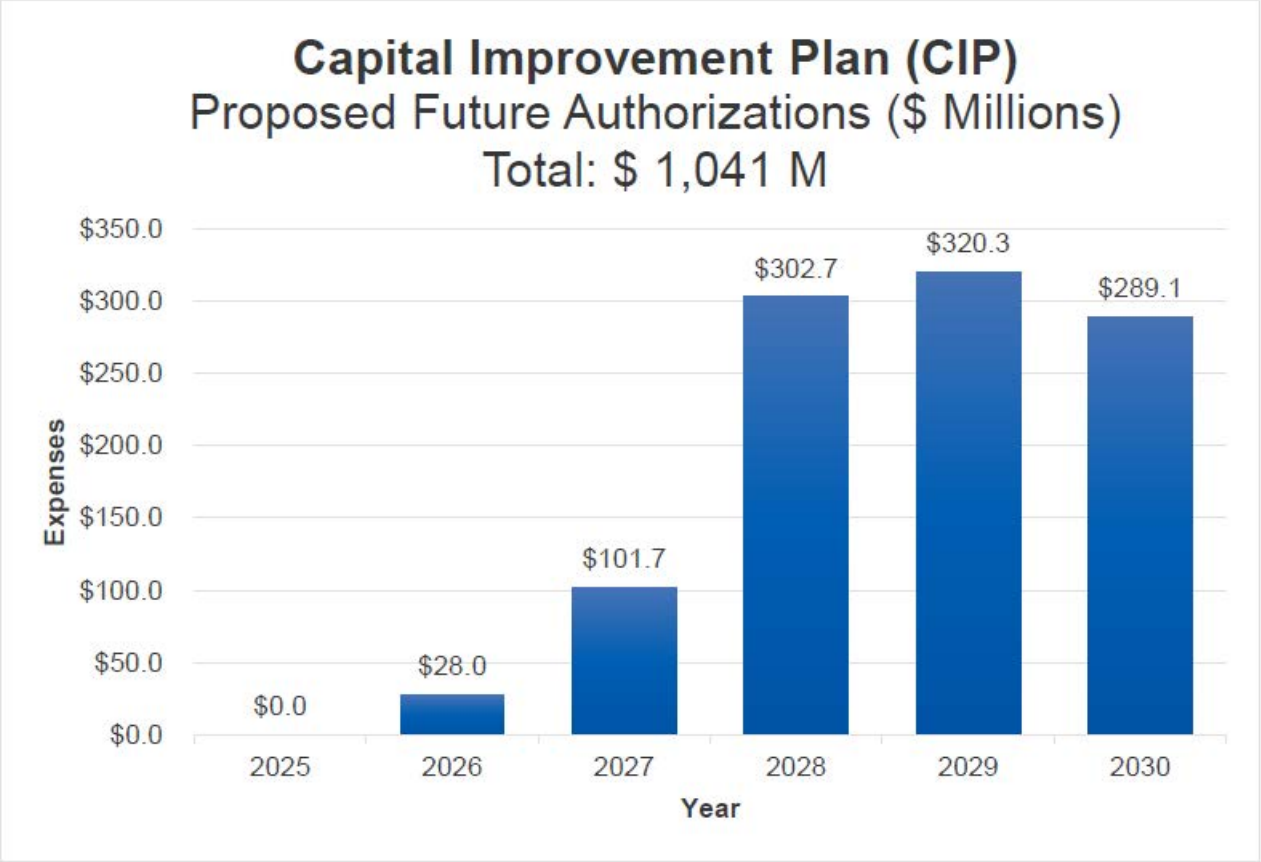
The 2025 ACP consists of the previously approved ACP; plus, the authorization of new programs; authorized adjustments to existing programs; and the deletion of completed and closed-out programs. The changes are summarized below.

Summary of Authorized Capital Program (ACP) Changes

Previous Authorized Capital Program (ACP)	$1,672,146,245
Adjustments to existing projects	$107,453,054
Closed projects	$(71,911,475)
New projects	$131,506,636
Total all changes	$167,048,215
Approved 2025 ACP	**$1,839,194,460**

Capital Improvement Plan (CIP)

The CIP is the six-year capital investment plan. The Council has not given final approval to these investments. These proposed investments and the year that it is anticipated that the Council will be asked to move them into the ACP is summarized below.



Capital Program

The Capital Program consists of the ACP plus the CIP. Table 10 from the Metropolitan Council's 2025 Unified Budget summarizes the ES 2025 through 2030 Capital Program:

CAPITAL PROGRAM ENVIROMENTAL SERVICES

TABLE 10 **($ IN 000'S)**

	Authorized Capital Program (ACP)			Capital Improvement Plan (CIP)							
	2024 Amended	Changes	2025 Adopted	2025	2026	2027	2028	2029	2030	Total	ACP + CIP Combined
Treatment Plant Projects											
8059 - Metro Rehabilitation & Facilities Improve	86,992	(15,669)	71,323	-	-	-	-	-	-	-	71,323
8062 - Metro Solids Improvements	239,289	60,969	300,258	-	-	-	-	-	-	-	300,258
8074 - Empire Plant Solids Improvements	43,882	2,733	46,615	-	-	-	-	-	-	-	46,615
8078 - Regional Plant Improvements	57,372	10,310	67,682	-	-	2,000	11,050	15,050	15,050	43,150	110,832
8089 - MWWTP Asset Renewal	283,861	(24,498)	259,363	-	2,500	16,200	31,260	49,700	49,700	149,360	408,723
8091 - Wastewater Reclamation Facilities	2,310	254	2,564	-	-	-	250	250	-	500	3,064
8097 - Blue Lake Solids Processing	83,987	(35,421)	48,566	-	15,000	15,000	27,000	24,000	24,000	105,000	153,566
8098 - Hastings WWTP	158,220	(155,744)	2,476	-	-	-	200	200	200	600	3,076
8099 - Crow River Wastewater Treatment Plant	1,510	10,500	12,010	-	10,000	40,000	40,000	43,000	33,000	166,000	178,010
8100 - Industrial Pretreatment Incentive Program	12,994	(2,000)	10,994	-	-	-	-	-	-	-	10,994
8101 - BPSI Allocation - Plants	5,102	-	5,102	-	-	-	-	-	-	-	5,102
8103 - Metro WRRF Renewal & Impr	-	2,500	2,500	-	-	-	3,500	7,000	7,500	18,000	20,500
8104 - Empire WRRF Renewal & Impr	-	1,100	1,100	-	-	-	500	1,000	1,000	2,500	3,600
TOTAL Treatment Plant Projects	975,519	(144,965)	830,554	-	27,500	73,200	113,760	140,200	130,450	485,110	1,315,664
Interceptor Projects											
8028 - Blue Lake System Improvements	75,289	59,453	134,742	-	-	-	10,701	10,701	10,701	32,103	166,845
8041 - Hopkins System Improvements	8,513	(1,219)	7,294	-	-	-	-	-	-	-	7,294
8055 - Lift Station Improvements	86,866	21,390	108,256	-	-	-	20,730	20,330	20,330	61,390	169,646
8056 - Meter Improvements	23,314	5,088	28,403	-	-	-	2,260	2,260	500	5,020	33,423
8076 - Mpls. Interceptor System Rehabilitation	9,559	(9,559)	-	-	-	-	-	-	-	-	-
8082 - St Bonifacius LS/FM Rehabilitation	25,637	(476)	25,162	-	-	-	-	-	-	-	25,162
8083 - Waconia LS/FM Rehabilitation	5,766	(59)	5,707	-	-	-	-	-	-	-	5,707
8086 - North Area Interceptor Rehabilitation	124,725	40,606	165,331	-	-	12,500	42,761	14,261	7,261	76,783	242,114
8088 - St Paul Interceptor System Rehabilitation	24,360	48,451	72,811	-	500	15,000	80,063	91,730	92,430	279,723	352,534
8090 - Interceptor Rehabilitation - Program	99,096	(9,963)	89,134	-	-	-	5,000	3,000	2,600	10,600	99,734
8092 - Mpls. Interceptor 1-MN-340 Rehabilitation	66,966	16,482	83,448	-	-	-	9,000	-	-	9,000	92,448
8093 - Brooklyn Park-Champlin Inter	690	(690)	-	-	-	-	-	-	-	-	-
8094 - Brooklyn Park L32	81,269	90,774	172,043	-	-	-	-	-	-	-	172,043
8095 - Coon Rapids-Fridley Area Inter	57,900	53,309	111,209	-	-	1,000	24,456	34,856	21,811	82,123	193,332
8096 - Northwest Area Interceptor Imp	1,573	(1,573)	-	-	-	-	-	-	-	-	-
8102 - BPSI Allocation - Interceptors	5,102	-	5,102	-	-	-	-	-	-	-	5,102
TOTAL Interceptor Projects	696,627	312,013	1,008,641	-	500	28,500	194,971	177,138	155,633	556,742	1,565,383
Total ES Capital Program	1,672,146	167,048	1,839,194	-	28,000	101,700	308,731	317,338	286,083	1,041,852	2,881,046

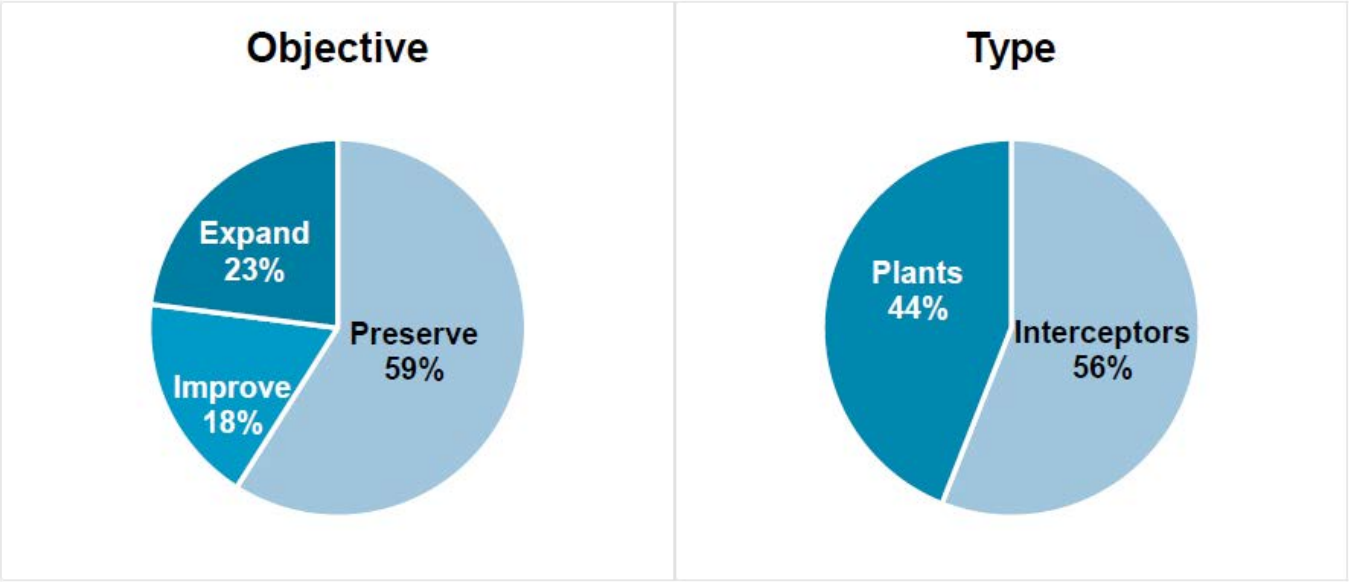
Capital Program Use of Funds

The three objectives of the capital program are:

- **Asset Preservation:** Preserve the existing Environmental Services infrastructure investment through rehabilitation and replacements.
- **System Expansion:** Expand the system capacity through treatment plant and interceptor expansions and interceptor extensions to meet the needs of a growing region.
- **Quality Improvements:** Improve the quality of service by responding to more stringent regulations, improving safety, reusing wastewater, increasing system reliability, and conserving and generating energy.

As indicated below, most of the funds are used for the preservation of the existing ES infrastructure investment. The breakdown by objectives for the 2025 ACP and the total Capital Program are as follows:

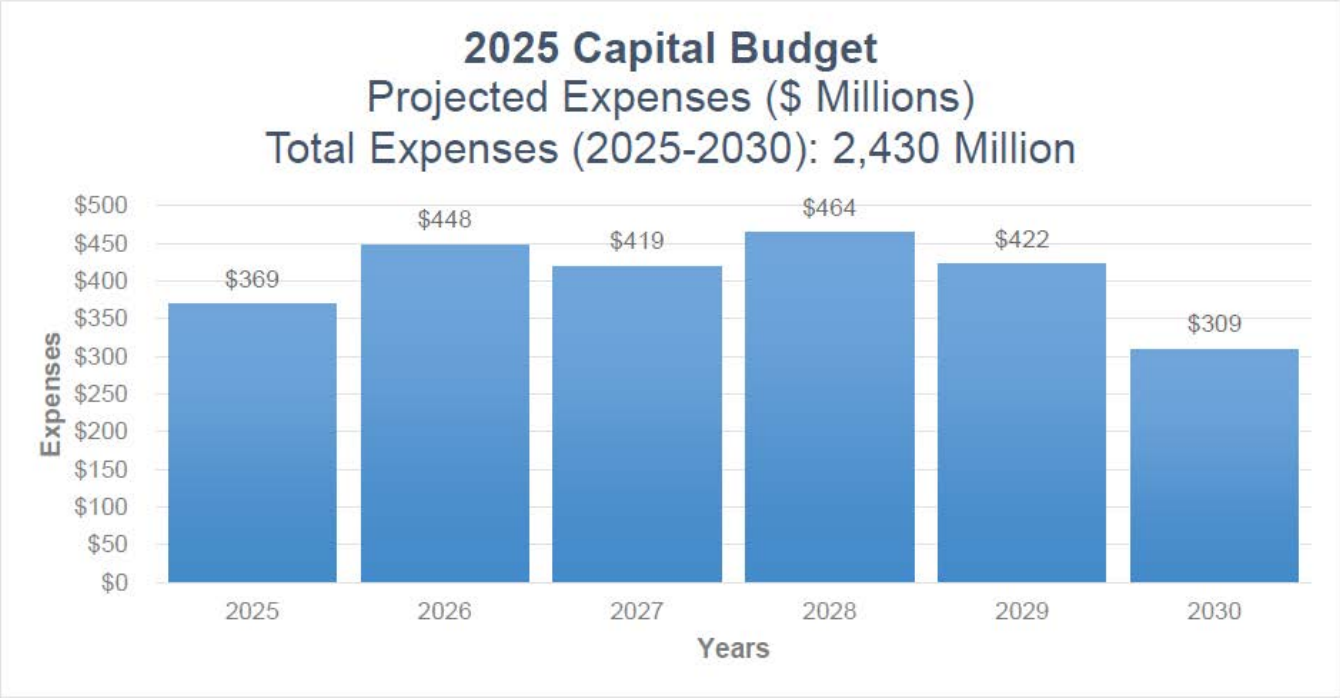
Capital Program (ACP) Objectives



The projects in Environmental Services program are driven by the objectives of asset preservation, capacity needs, or to improve performance in order to respond to more stringent water quality and air quality regulations, increasing system reliability and conserving or generating energy. In the 2025 Authorized Capital Program (ACP), 59% of the funding will be spent on preservation projects, 23% on expansion projects, and 18% on improvement projects. Furthermore, of the 2025 ACP, Interceptors will spend approximately 56% of the budget while Plants will spend approximately 44%.

Capital Budget and Projected Expenses

The Capital budget is the amount from the ACP that represents the estimated work to be completed in that given year. It cannot be exceeded without formal Metropolitan Council action. The adopted ES 2025 Capital Budget is $369 million. As depicted below, the projected capital expenses for the 2025 through 2030 timeframe are $2,430 million. The projected expenses are utilized in the development of the debt service numbers in the ES's Capital Finance Plan.



Environmental Services 2025 through 2030 Capital Program

Projected expenses by year (all costs in $1,000s)

Family	Project Name	2025	2026	2027	2028	2029	2030	2025-2030 Total
	Treatment Plants							
8059	Metro Rehabilitation and Facilities Improvements	18,900	5,300	0	0	0	0	**24,200**
8062	Metro Solids Improvements	42,500	56,500	56,500	56,500	56,500	20,000	**288,500**
8074	Empire Plant Solids Improvements	1,500	0	0	0	0	0	**1,500**
8078	Regional Plant Improvements	16,900	18,150	18,650	16,150	15,150	15,150	**100,150**
8089	MWWTP Asset Renewal	49,654	49,376	50,076	48,281	50,000	50,000	**297,387**
8091	Wastewater Reclamation Facilities	350	450	451	250	250	0	**1,751**
8097	Blue Lake Solids Processing	11,000	30,000	30,000	32,000	24,000	24,000	**151,000**
8098	Hastings WWTP	200	200	200	200	200	200	**1,200**
8099	Crow River Wastewater Treatment Plant	3,000	13,000	43,000	43,000	43,000	33,000	**178,000**
8100	Industrial Pretreatment Incentive Program	100	100	100	100	0	0	**400**
8101	BPSI Allocation - Plants	1,482	1,482	0	0	0	0	**2,964**
8103	Metro WRRF Restoration & Improvements	500	500	500	4,000	7,500	7,500	**20,500**
8104	Empire WRRF Recovery Facility Improvements	100	500	500	500	1,000	1,000	**3,600**
	Plant Totals	**146,186**	**175,558**	**199,977**	**200,981**	**197,600**	**150,850**	**1,071,152**
	Percent of Planned Expenses	**40%**	**39%**	**48%**	**43%**	**47%**	**49%**	**44%**
	Interceptor System							
8028	Blue Lake Interceptor System Improvements	42,540	27,174	22,924	21,701	11,701	10,701	**136,741**
8041	Hopkins System Improvements	500	0	0	0	0	0	**500**
8055	Lift Station Improvements	21,600	27,700	25,150	34,730	22,830	20,330	**152,340**
8056	Meter Improvements	13,180	3,850	700	2,260	2,260	500	**22,750**
8082	St Bonifacius LS/FM Rehabilitation	1,750	0	0	0	0	0	**1,750**
8083	Waconia LS/FM Rehabilitation	100	0	0	0	0	0	**100**
8086	North Area Interceptor Rehabilitation	49,973	60,557	44,107	42,861	14,261	7,261	**219,020**
8088	St Paul Interceptor System Rehabilitation	14,108	36,920	32,620	80,563	91,730	92,430	**348,371**
8090	Interceptor Rehabilitation	13,820	7,250	7,010	5,000	3,000	2,600	**38,680**
8092	Mpls Interceptor System Improvements	24,085	36,465	14,000	3,100	3,000	3,000	**83,650**
8093	Brooklyn Park-Champlin Interceptor Renewal	17,241	37,000	37,000	37,000	37,000	0	**165,241**
8095	South Area Interceptor Improvements	21,124	33,740	35,740	35,556	38,856	21,811	**186,827**
8102	BPSI Allocation - Interceptors	1,482	1,482	0	0	0	0	**2,964**
	Interceptor Totals	**221,503**	**272,138**	**219,251**	**262,771**	**224,638**	**158,633**	**1,358,934**
		60%	**61%**	**52%**	**57%**	**53%**	**51%**	**56%**
	Total	**367,689**	**447,696**	**419,228**	**463,752**	**422,238**	**309,483**	**2,430,086**

Six Year Cash Flow =	$2,430,086

Environmental Services 2025 Capital Program

Authorized Capital Program (ACP)

METROPOLITAN COUNCIL
CAPITAL PROGRAM
ENVIRONMENTAL SERVICES

	Authorized Capital Program (ACP)		
	2024 Amended	Changes	2025 Adopted
Treatment Plant Projects			
8059 - Metro Rehabilitation & Facilities Improve	86,992	-15,669	71,323
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8100 - Industrial Pretreatment Incentive Program	12,994	-2,000	10,994
8101 - BPSI Allocation - Plants	5,102	-	5,102
8103 - Metro WRRF Renewal & Impr	-	2,500	2,500
8104 - Empire WRRF Renewal & Impr	-	1,100	1,100
TOTAL Treatment Plant Projects	975,519	-144,965	830,554
Interceptor Projects			
8028 - Blue Lake System Improvements	75,289	59,453	134,742
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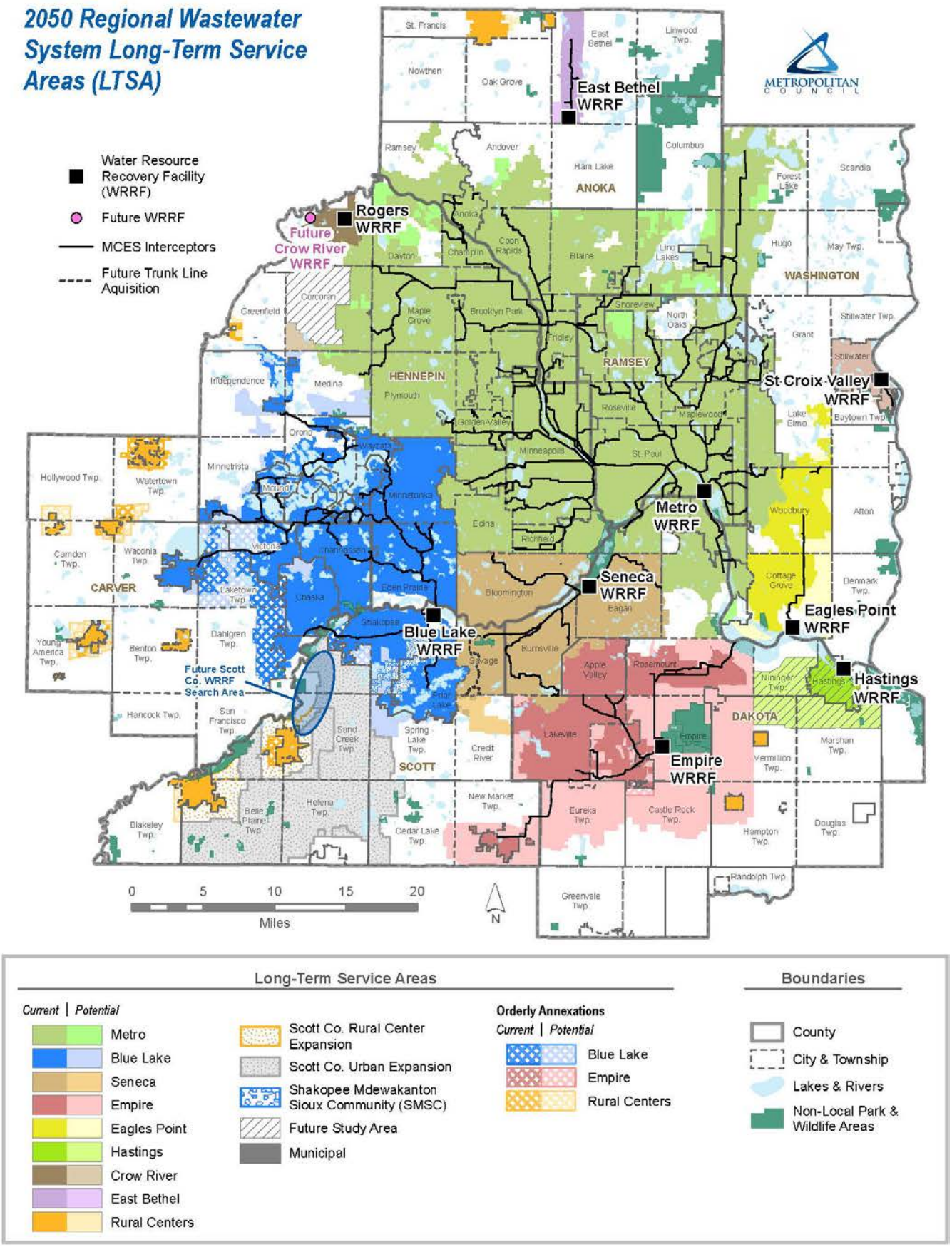
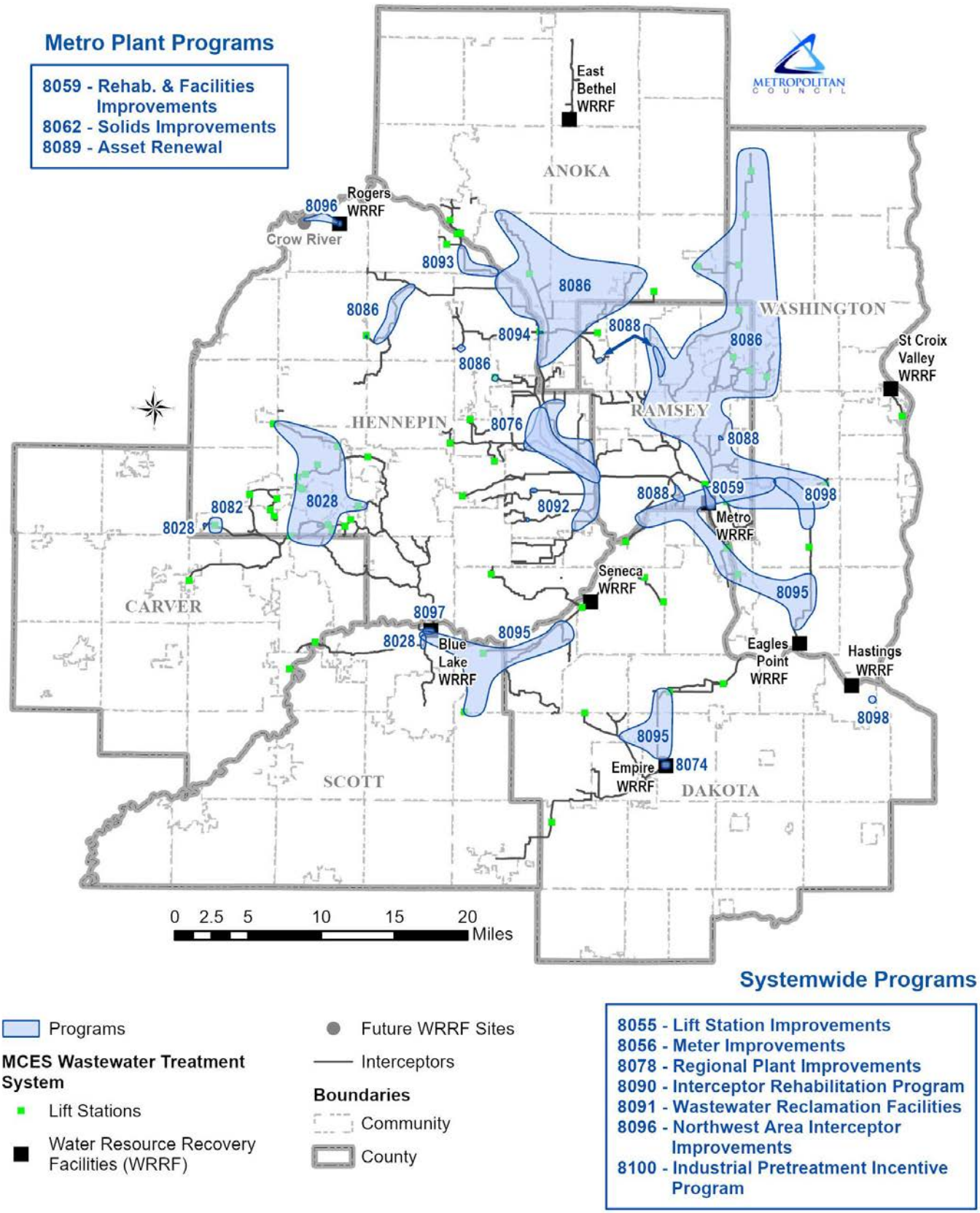
8093 - Brooklyn Park-Champlin Inter	690	-690	-
8094 - Brooklyn Park L32	81,269	90,774	172,043
8095 - Coon Rapids-Fridley Area Inter	57,900	53,309	111,209
8096 - Northwest Area Interceptor Imp	1,573	-1,573	-
8102 - BPSI Allocation - Interceptors	5,102	-	5,102
TOTAL Interceptor Projects	696,627	312,013	1,008,641
Total ES Capital Program	**1,672,146**	**167,048**	**1,839,194**

Environmental Services Long-Term Service Area Map



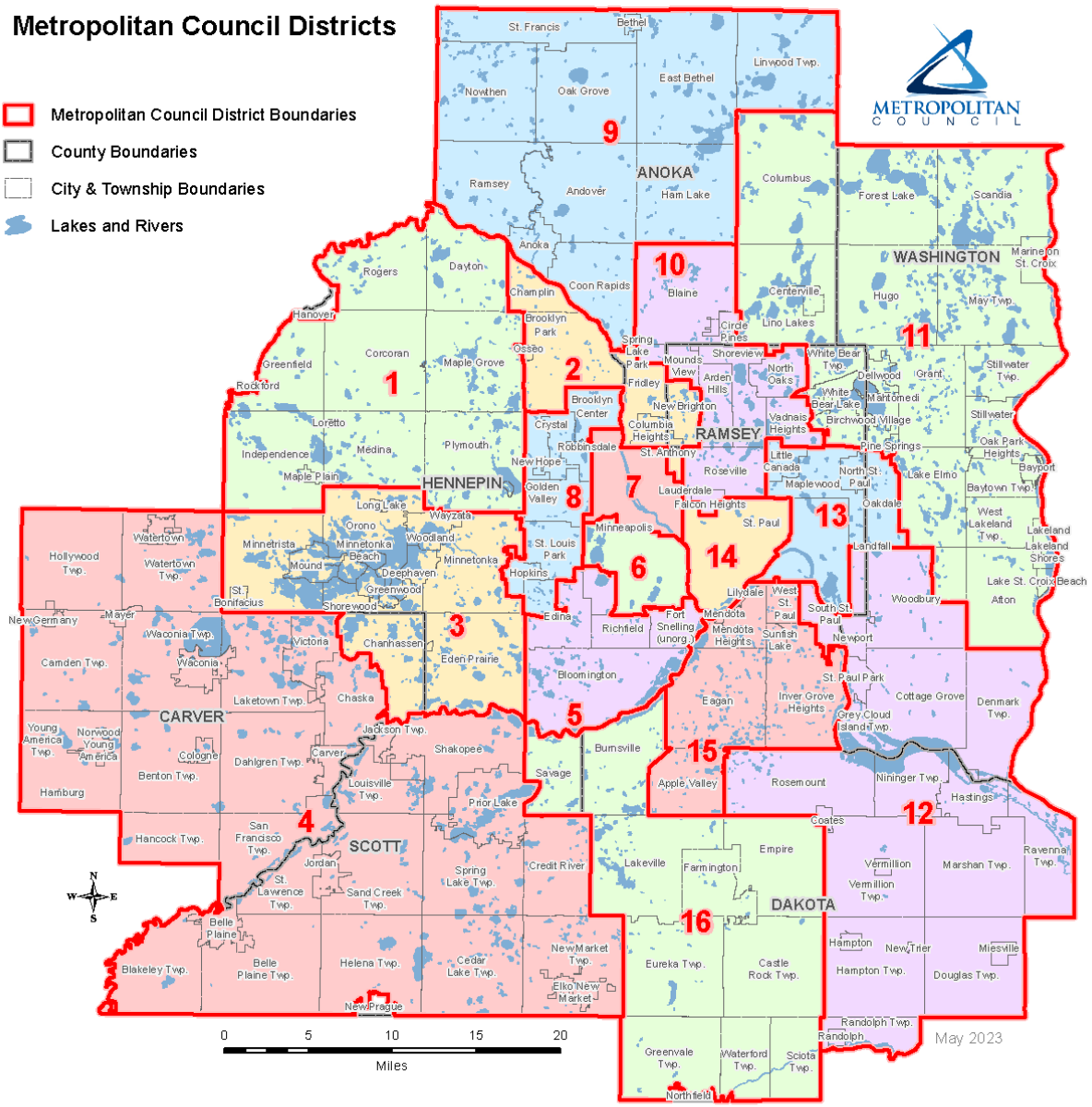
Environmental Services 2025 through 2030 Capital Program Project Location Map



Metropolitan Council Districts Map

Click on the district to learn more about projects located in that district.

District 1
District 2
District 3
District 4
District 5
District 6
District 7
District 8
District 9
District 10
District 11
District 12
District 13
District 14
District 15
District 16



Chair **Charlie Zelle**

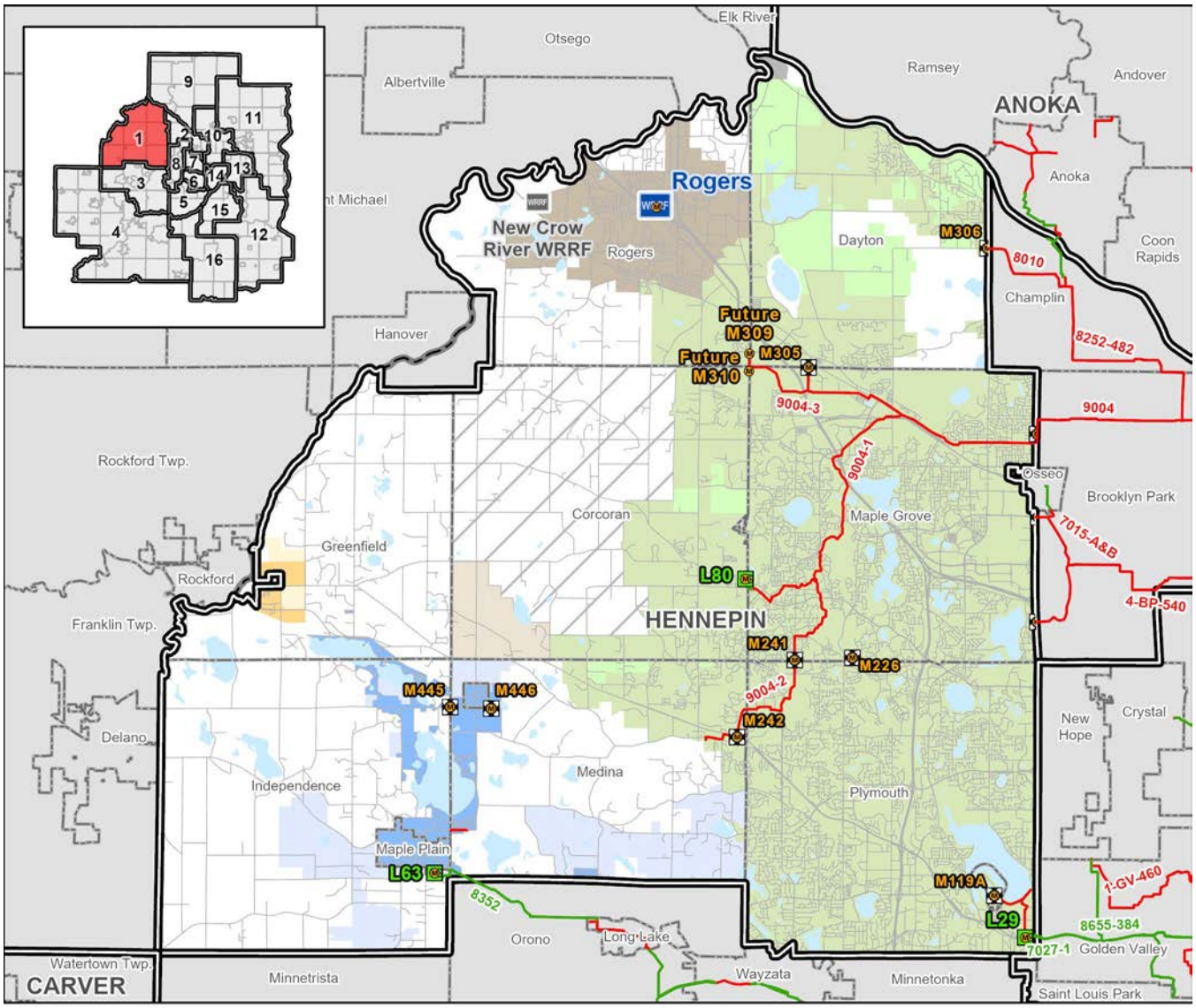
District		District	
1	Judy Johnson	9	Diego Morales
2	Reva Chamblis	10	Peter Lindstrom
3	Tyronne Carter	11	Gail Cederberg
4	Deb Barber	12	Susan Vento
5	John Pacheco Jr.	13	Chai Lee
6	Robert Lilligren	14	Toni Carter
7	Yassin Osman	15	Tenzin Dolkar
8	Anjuli Cameron	16	Wendy Wulff

Source: Metropolitan Council Redistricting Plan passed by the state legislature in May 2023. Boundaries re-aligned with municipal and county boundaries.

District 1

Capital Program and Projects

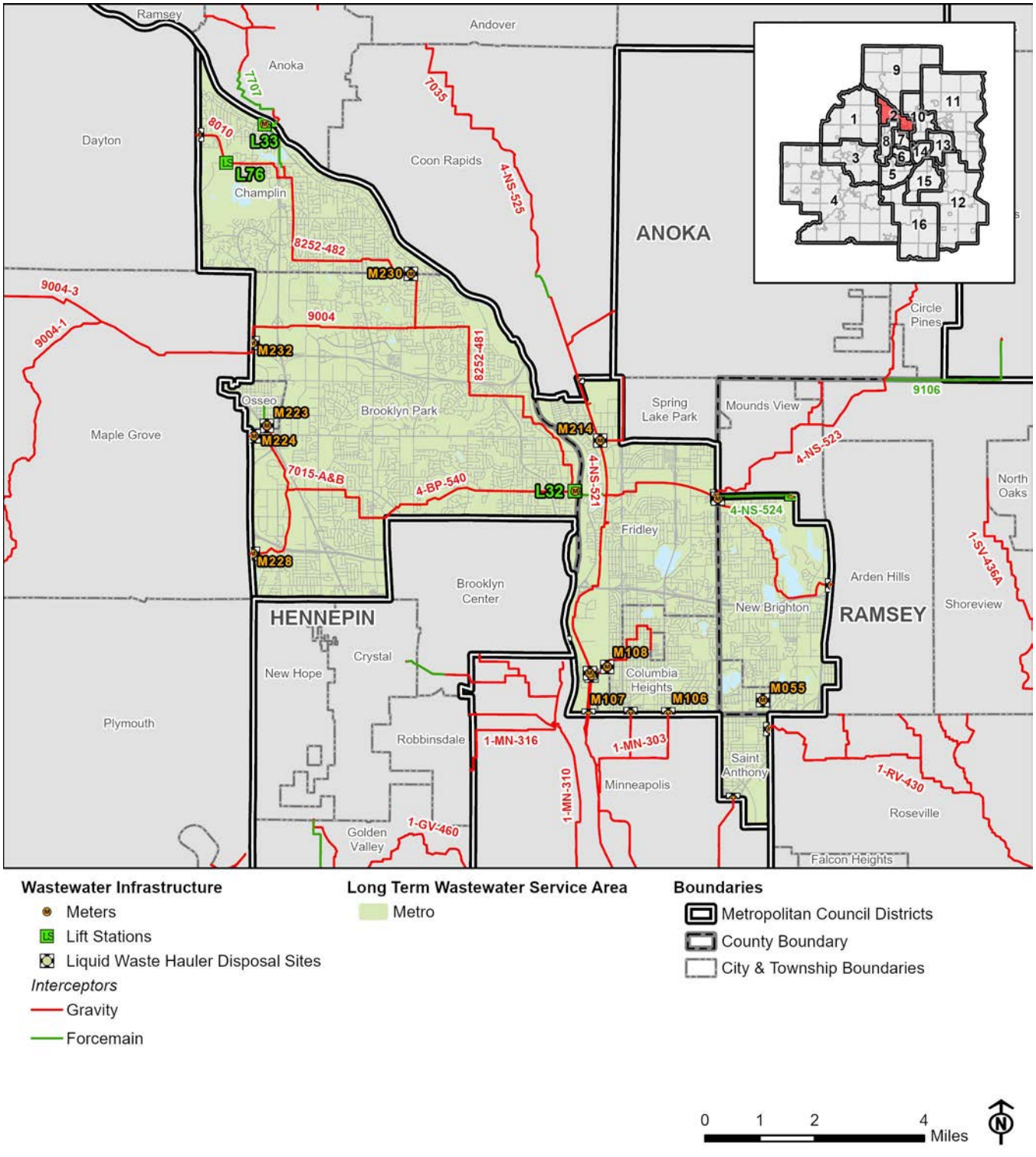
District 1 includes, in Hennepin County, the cities of Corcoran, Dayton, Greenfield, Independence, Loretto, Maple Grove, Maple Plain, Medicine Lake, Medina, Plymouth, and Rogers.



District 2

Capital Program and Projects

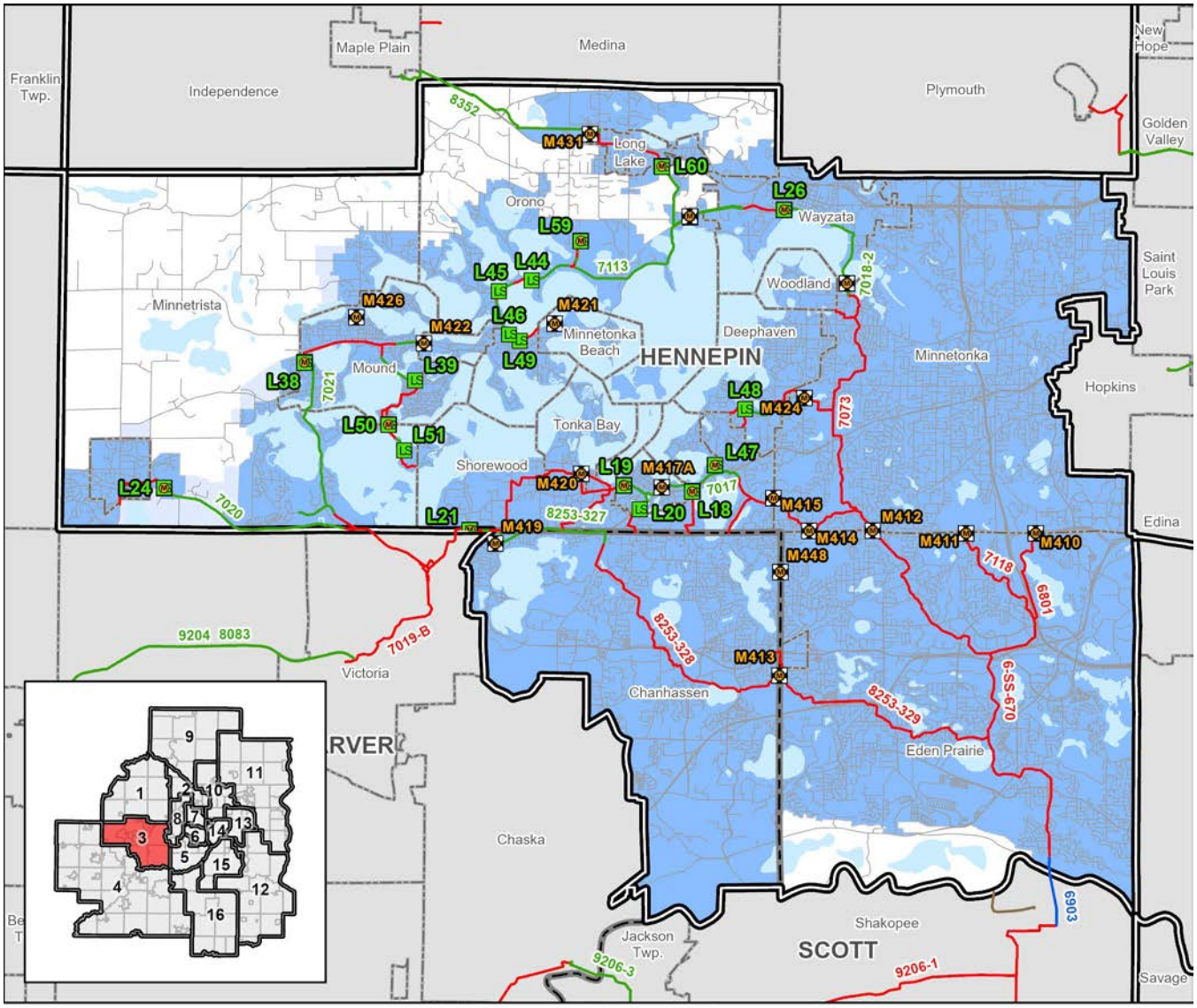
District 2 includes, in Anoka County, the cities of Columbia Heights, Fridley, and Hilltop; in Ramsey County, the city of New Brighton; in Hennepin County, the cities of Brooklyn Park, Champlin, and Osseo; and both the Ramsey and Hennepin County portions of the city of Saint Anthony.



District 3

Capital Program and Projects

District 3 includes, in Carver County, the city of Chanhassen; and in Hennepin County, the cities of Deephaven, Eden Prairie, Excelsior, Greenwood, Long Lake, Minnetonka Beach, Minnetonka, Minnetrista, Mound, Orono, Saint Bonifacius, Shorewood, Spring Park, Tonka Bay, Wayzata, and Woodland.



Wastewater Infrastructure

- Meters
- Lift Stations
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Blue Lake
- Potential Blue Lake

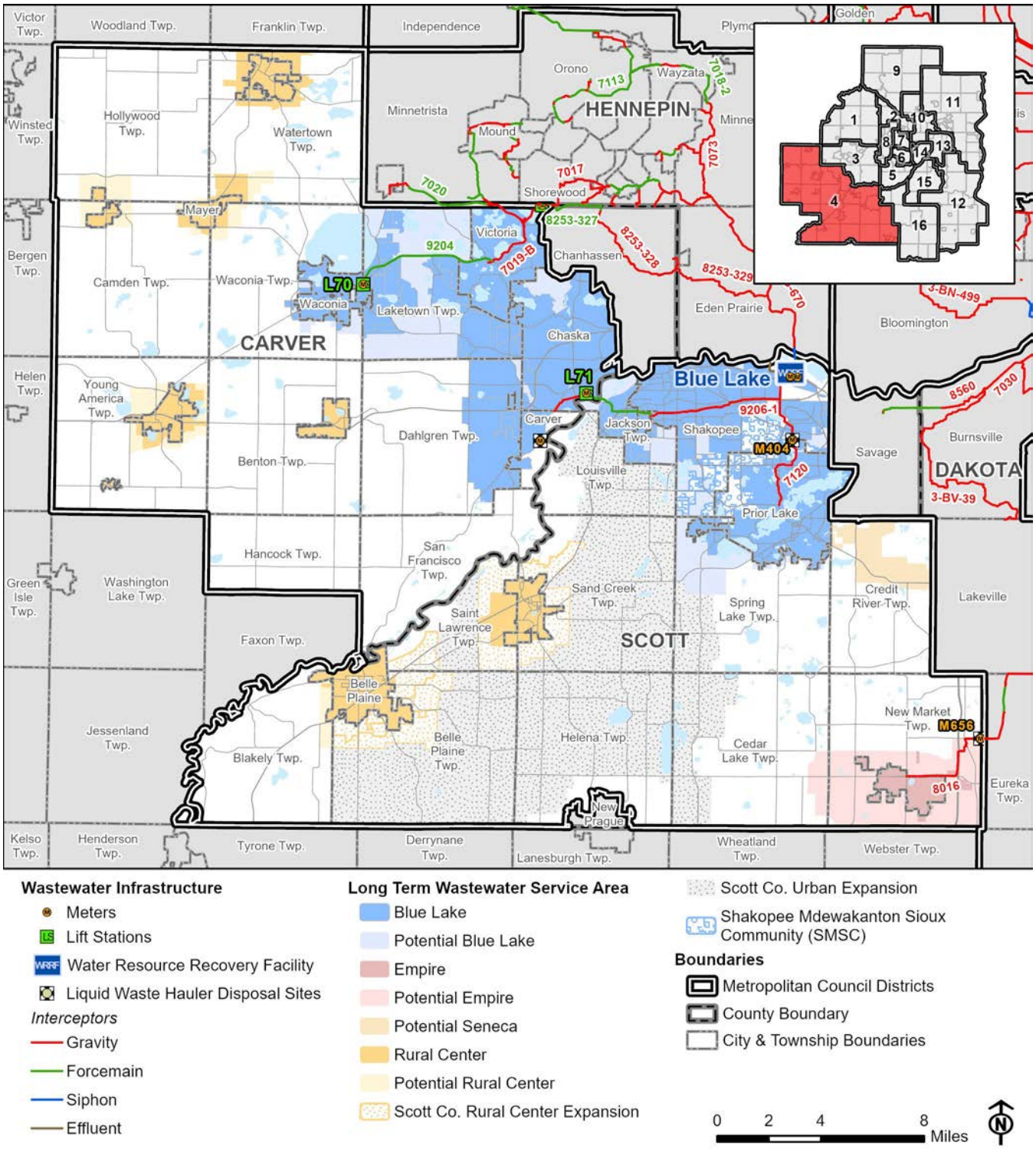
Boundaries

- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

District 4

Capital Program and Projects

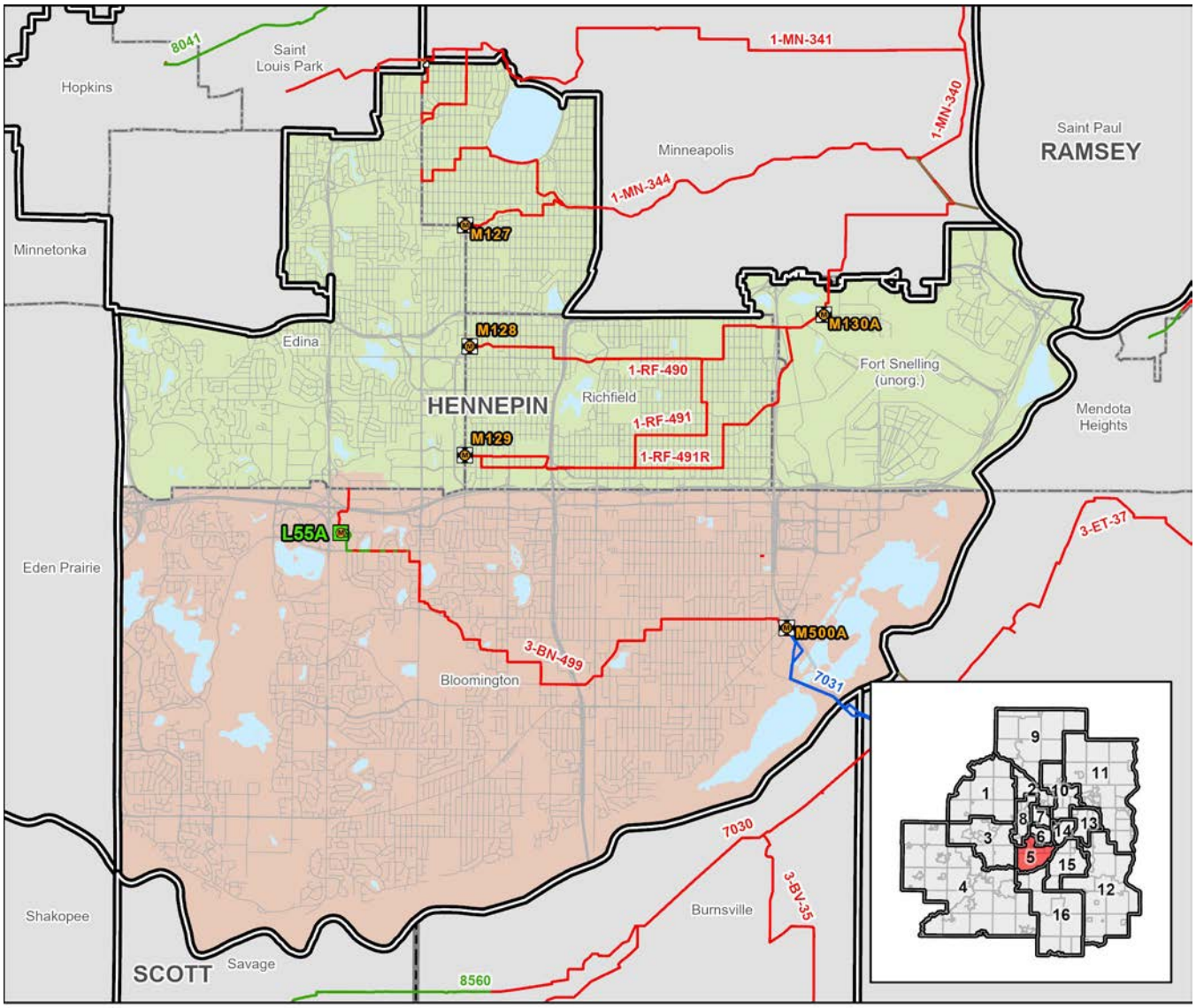
District 4 includes, in Carver County, the cities of Carver, Chaska, Cologne, Hamburg, Mayer, New Germany, Norwood Young America, Victoria, Waconia, and Watertown; and the townships of Benton, Camden, Dahlgren, Hancock, Hollywood, Laketown, San Francisco, Waconia, Watertown, and Young America. In Scott County, the cities of Belle Plaine, Elko New Market, Jordan, Prior Lake, and Shakopee; and the townships of Belle Plaine, Blakeley, Cedar Lake, Credit River, Helena, Jackson, Louisville, New Market, St. Lawrence, Sand Creek, and Spring Lake.



District 5

Capital Program and Projects

District 5 includes, in Hennepin County, the cities of Bloomington and Richfield; portions of the City of Edina, including the southern half of the city between I-494 and Minnesota Highway 62, and the northeastern quadrant of the city (just west of Minnesota Highway 100); and southwest corner of the city of Minneapolis: west of Lyndale Avenue, south of 42nd Street (east of Lake Harriet), south of Lake Harriet, and neighborhoods on the west side of Lake Harriet and south of 39th Street West. The district also includes the unorganized territory around Fort Snelling.



Wastewater Infrastructure

- Meters
- Lift Stations
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon

Long Term Wastewater Service Area

- Metro
- Seneca

Boundaries

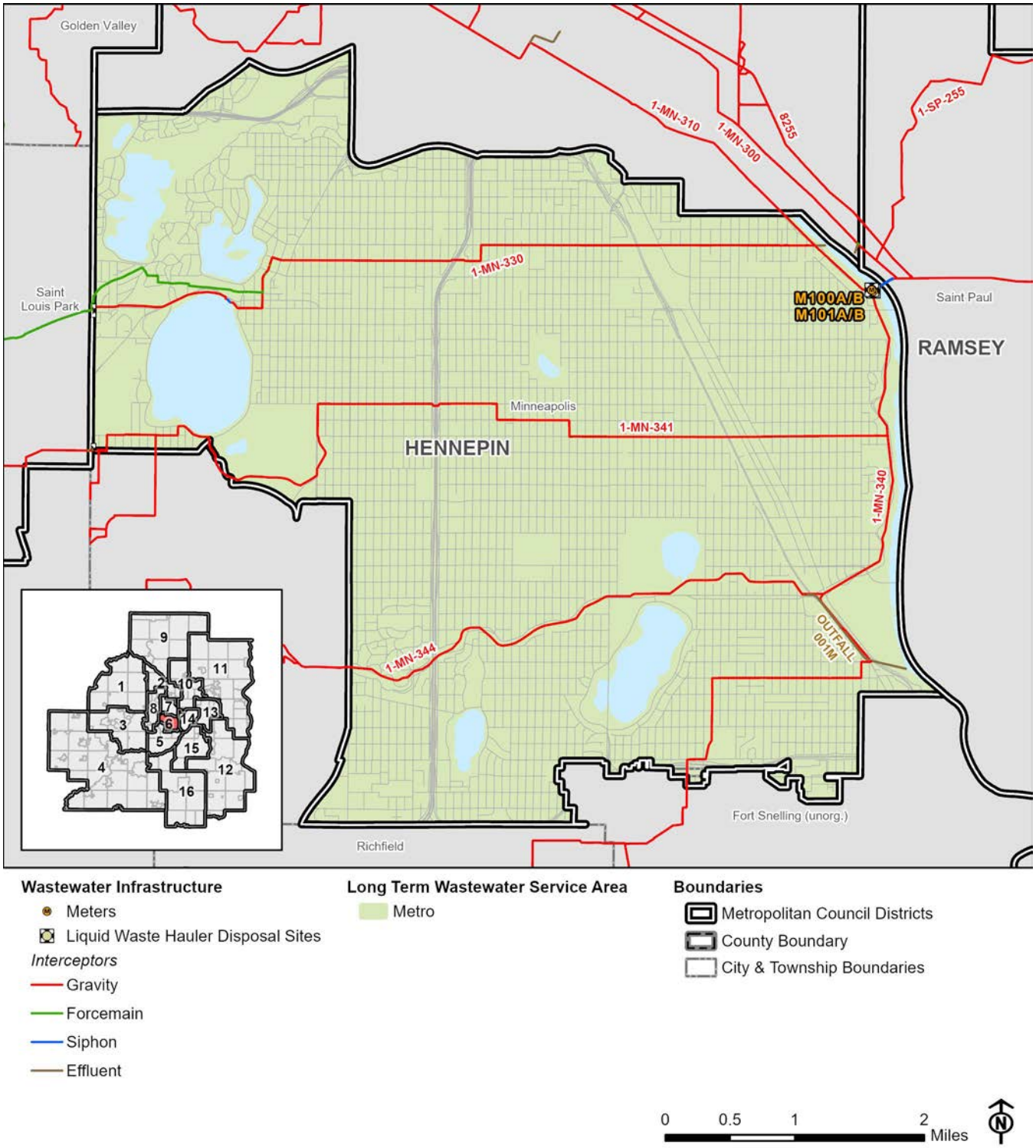
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

0 1 2 4 Miles

District 6

Capital Program and Projects

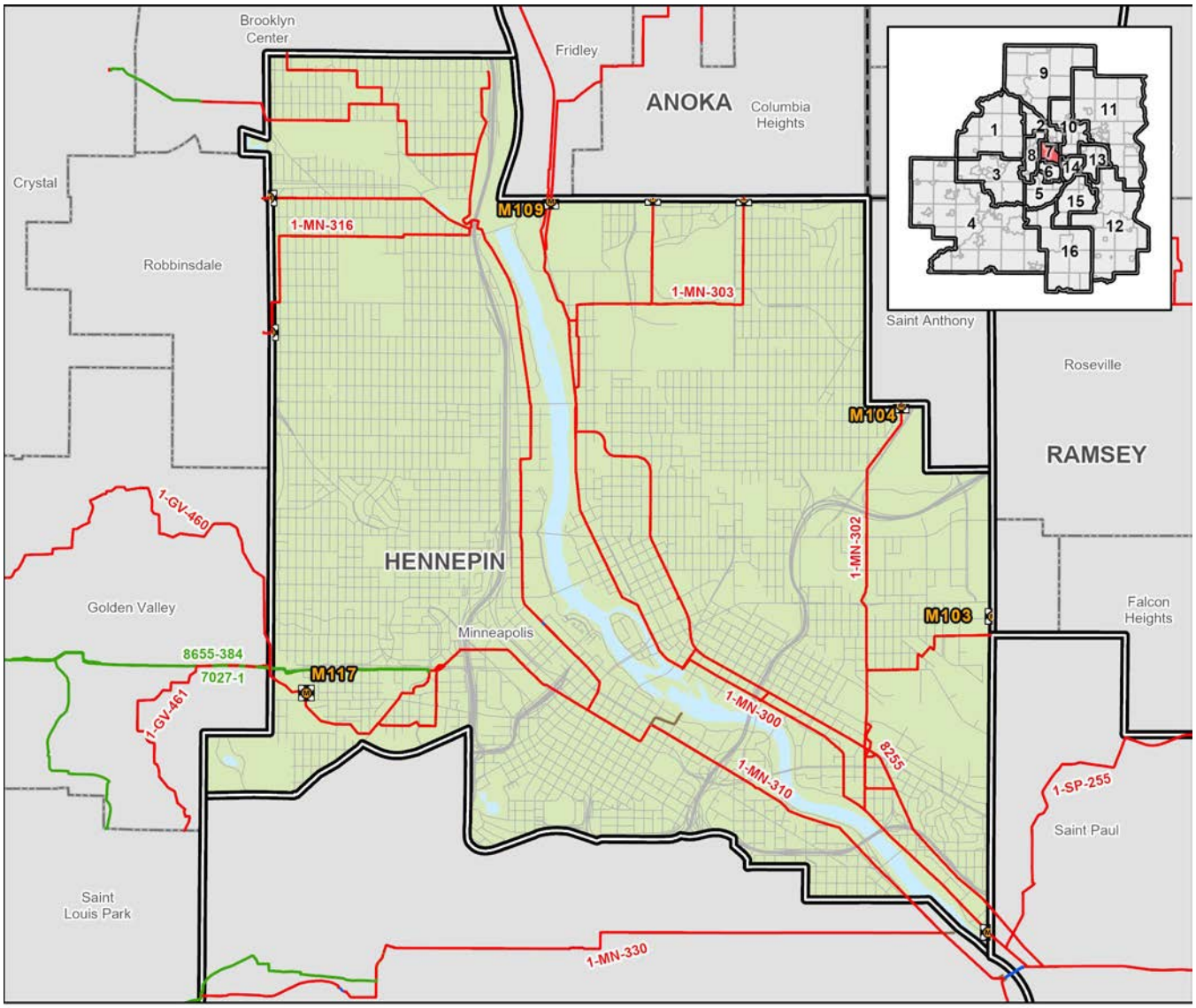
District 6 includes portions of the City of Minneapolis along I-35W, generally north to I-94 and I-394 (including the eastern Bryn Mawr neighborhood) along Franklin Avenue, bounded by the Mississippi River on the east, and southwest portions of the city of Minneapolis, east of Lyndale Avenue, north of 42nd Street (east of Lake Harriet), north of Lake Harriet, and neighborhoods on the west side of Lake Harriet and north of 39th Street West (around Bde Maka Ska).



District 7

Capital Program and Projects

District 7 includes portions of the City of Minneapolis north of I-394 (excluding the eastern Bryn Mawr neighborhood), east and north of I-94, except portions north of Franklin Avenue in south Minneapolis.



Wastewater Infrastructure

- Meters
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Metro

Boundaries

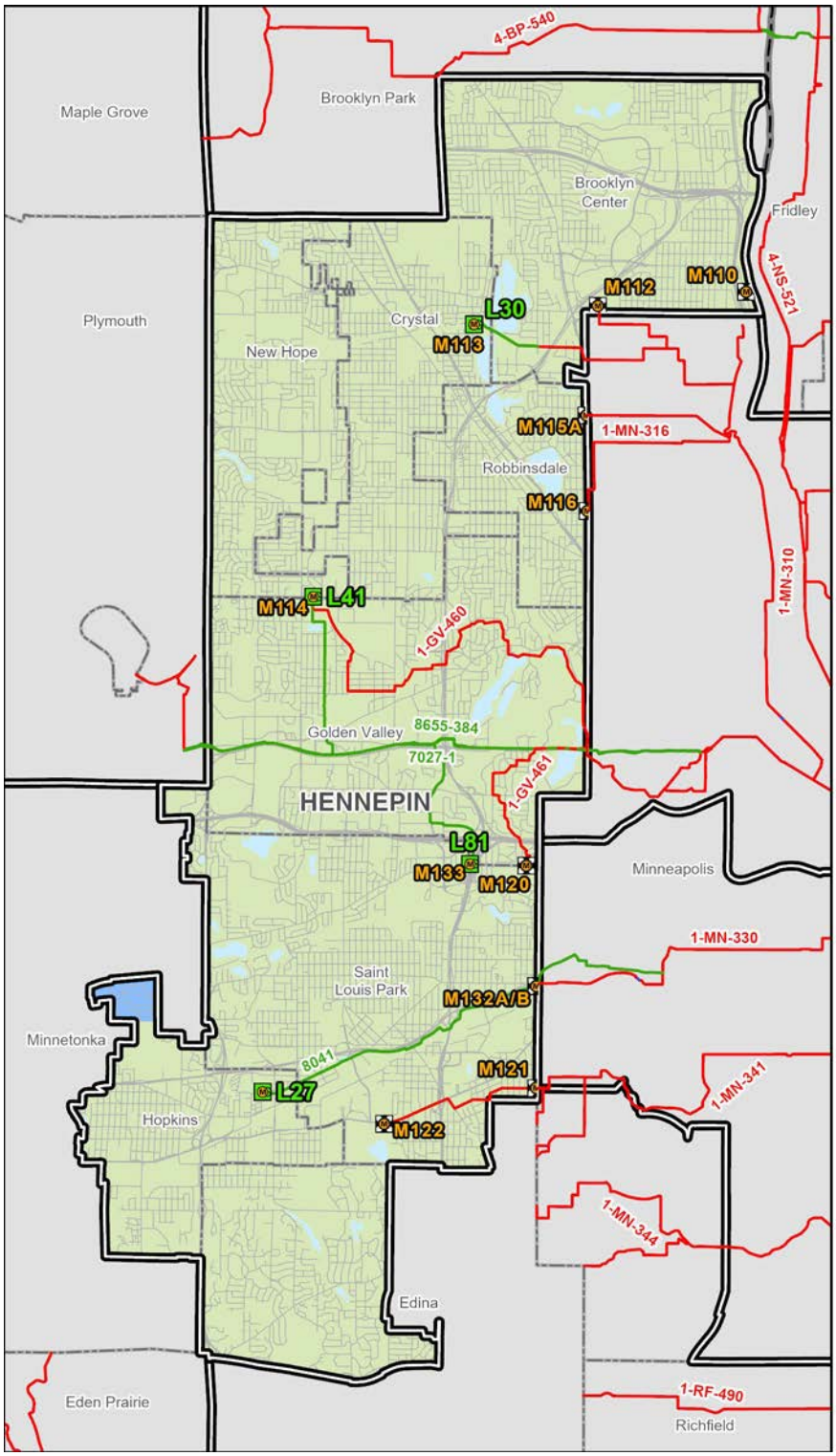
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

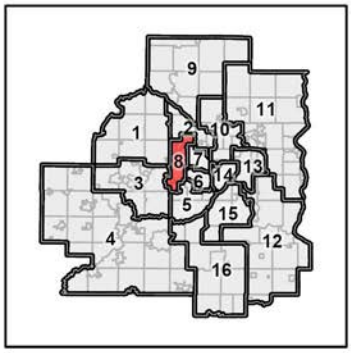
0 0.5 1 2 Miles

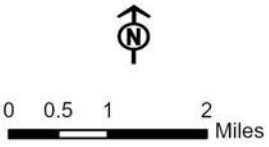
District 8

Capital Program and Projects

District 8 includes, in Hennepin County, the cities of Brooklyn Center, Crystal, Golden Valley, Hopkins, New Hope, Robbinsdale, St. Louis Park, and the northwestern quadrant of Edina (north of Minnesota Highway 62).







Wastewater Infrastructure

- Meters
- Lift Stations
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain

Long Term Wastewater Service Area

- Blue Lake
- Metro

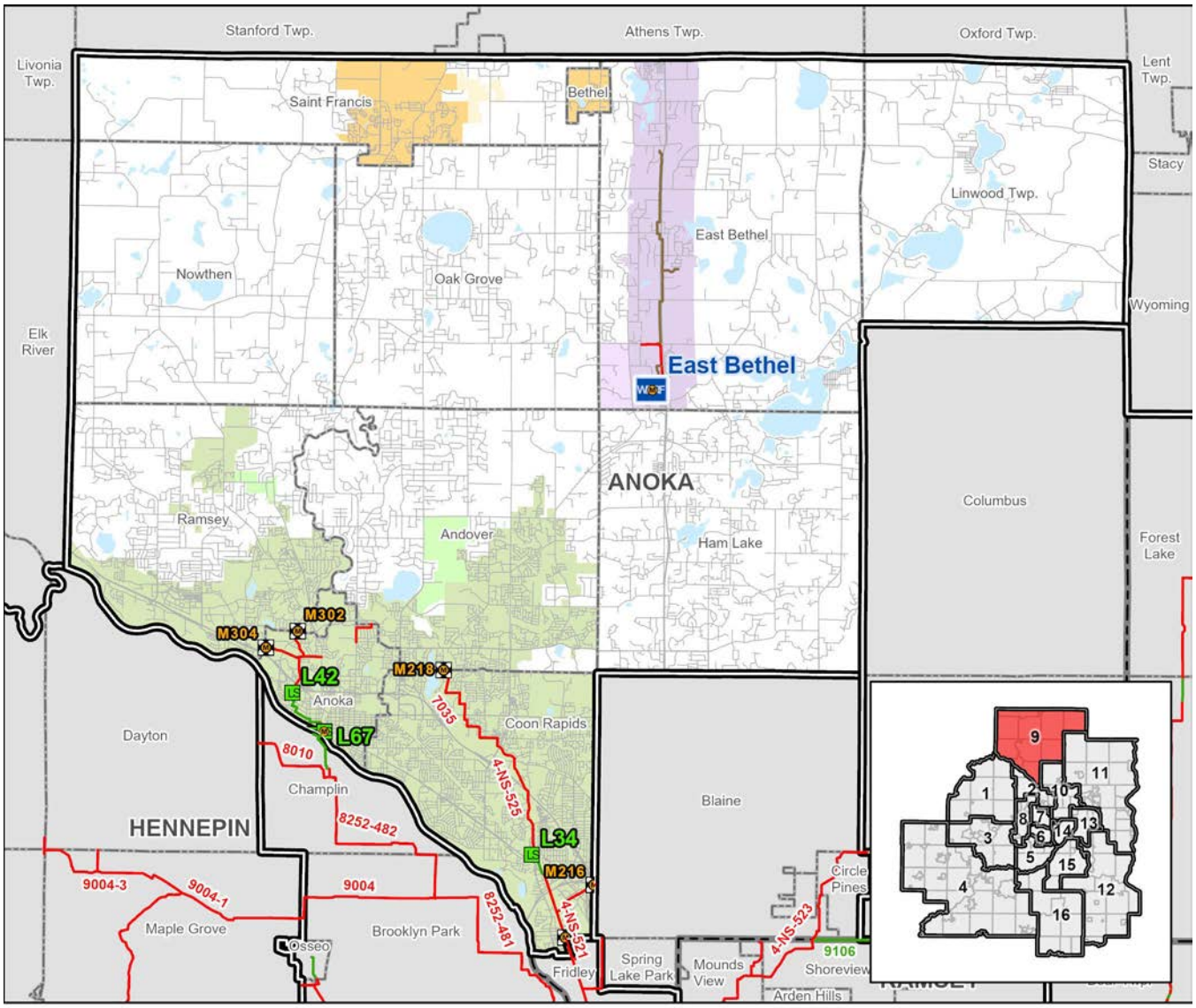
Boundaries

- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

District 9

Capital Program and Projects

District 9 includes, in Anoka County, the cities of Andover, Anoka, Bethel, Coon Rapids, East Bethel, Ham Lake, Nowthen, Oak Grove, Ramsey, St. Francis; and Linwood Township.



Wastewater Infrastructure

- Meters
- Lift Stations
- Water Resource Recovery Facility
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Effluent

Long Term Wastewater Service Area

- East Bethel
- Potential East Bethel
- Metro
- Potential Metro
- Rural Center
- Potential Rural Center

Boundaries

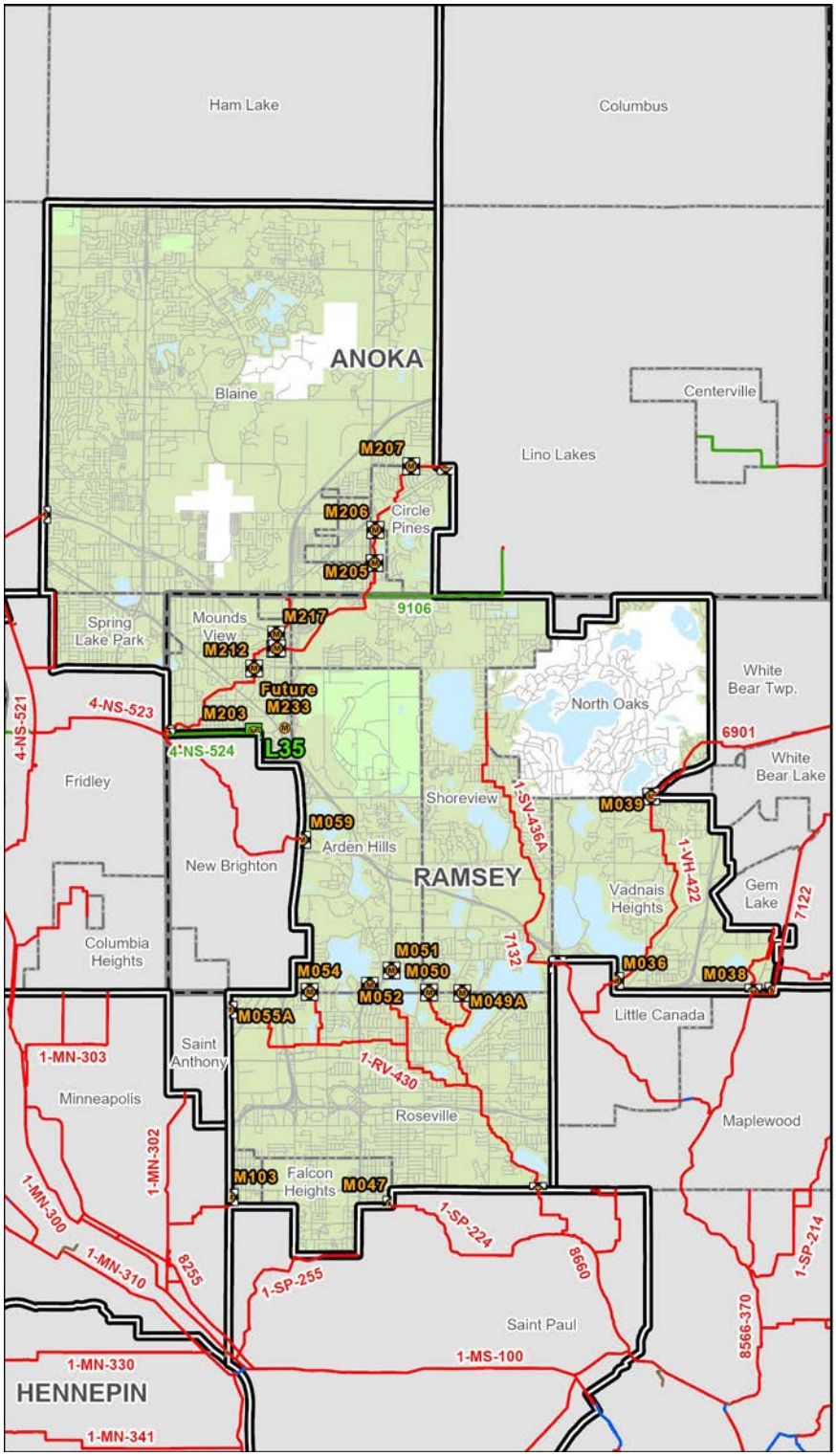
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

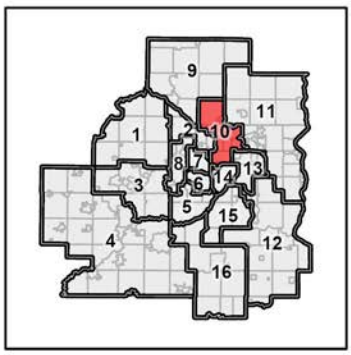
0 2 4 8 Miles

District 10

Capital Program and Projects

District 10 includes, in Anoka County, the cities of Blaine, Circle Pines, Lexington, and Spring Lake Park; and in Ramsey County, the cities of Arden Hills, Falcon Heights, Lauderdale, Mounds View, North Oaks, Roseville, Shoreview, and Vadnais Heights.





0 1 2 4 Miles

Wastewater Infrastructure

- Meters
- Lift Stations
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain

Long Term Wastewater Service Area

- Metro
- Potential Metro

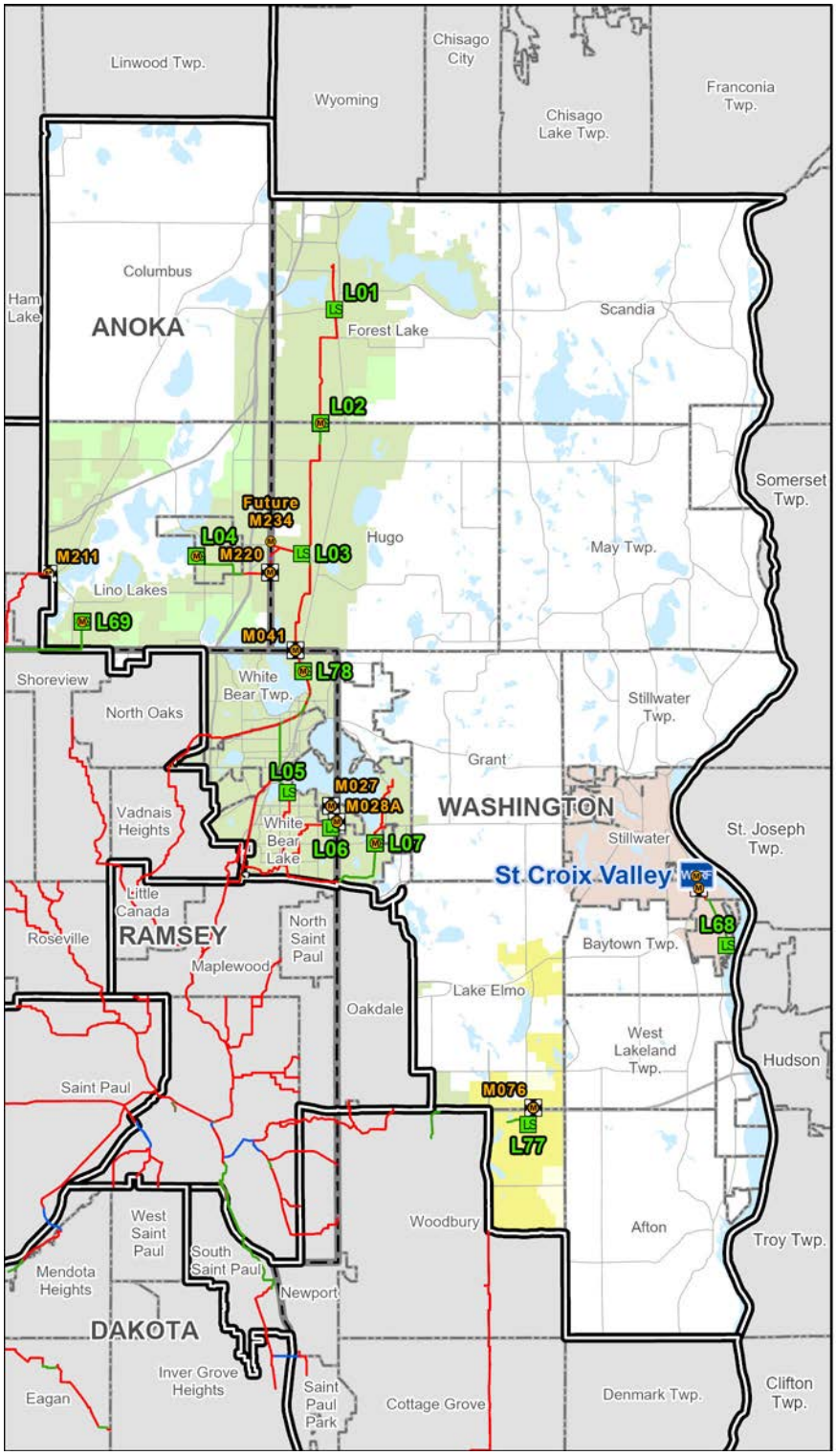
Boundaries

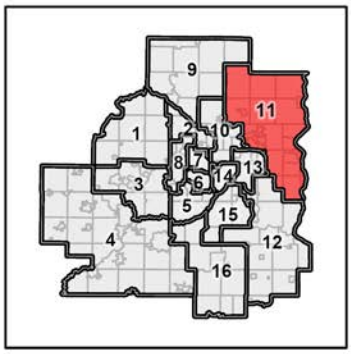
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

District 11

Capital Program and Projects

District 11 includes, in Anoka County, the cities of Centerville, Columbus, and Lino Lakes; in Ramsey County, the cities of Gem Lake and White Bear Lake; and in Washington County, the cities of Afton, Bayport, Birchwood Village, Dellwood, Forest Lake, Grant, Hugo, Lake Elmo, Lake St. Croix Beach, Lakeland, Lakeland Shores, Mahtomedi, Marine on St. Croix, May, Oak Park Heights, Pine Springs, St. Mary's Point, Scandia, Stillwater, White Bear Lake, Willernie, and the northeast quadrant of the City of Woodbury, south of I-94, east of Woodbury Drive, and north of Bailey Road; and the townships of Baytown, May, Stillwater, and West Lakeland.





N

0 1.75 3.5 7 Miles

Wastewater Infrastructure

- Meters
- Lift Stations
- Water Resource Recovery Facility
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Eagles Point
- Potential Eagles Point
- Metro
- Potential Metro
- St. Croix Valley
- Potential St. Croix Valley

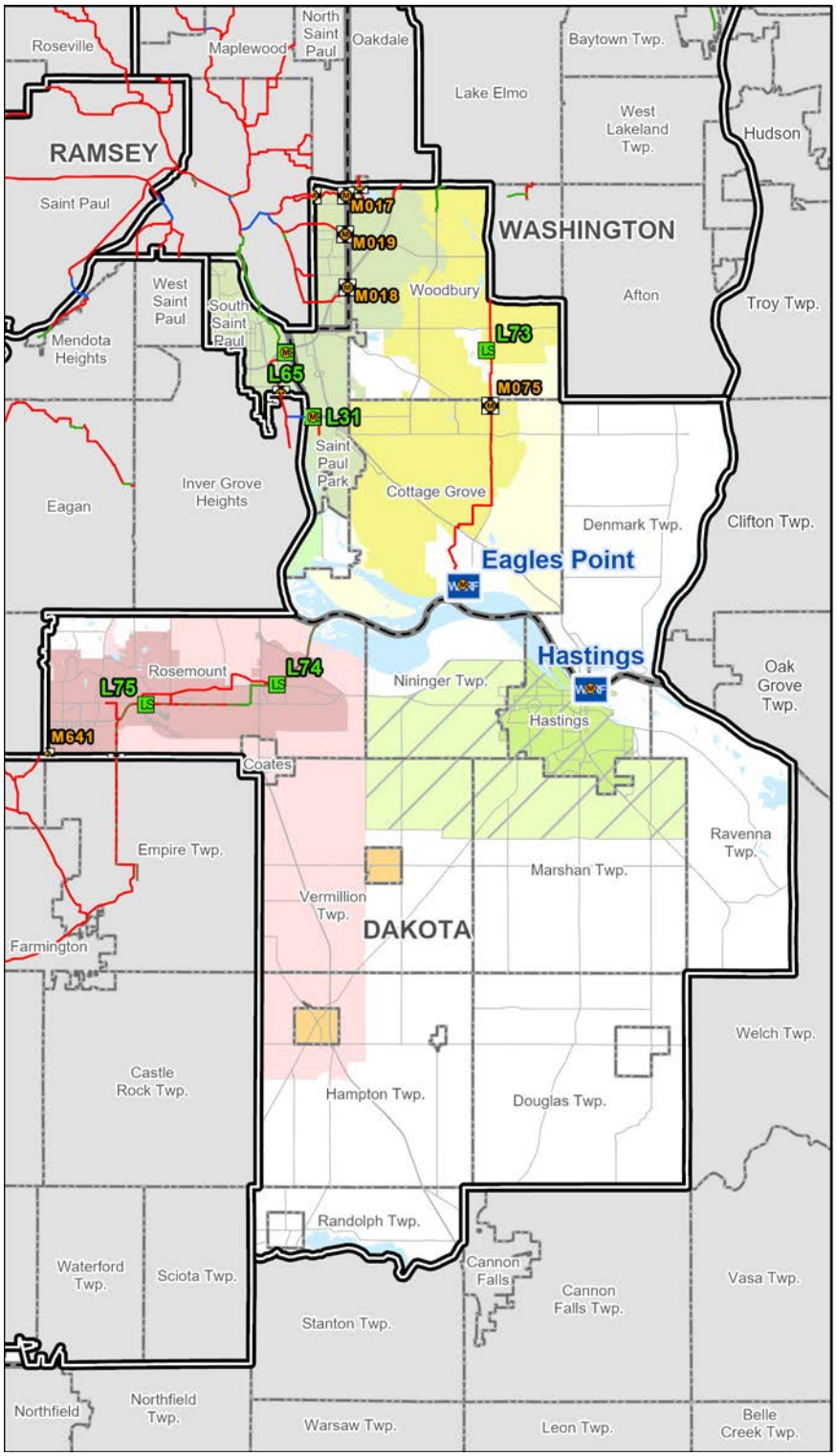
Boundaries

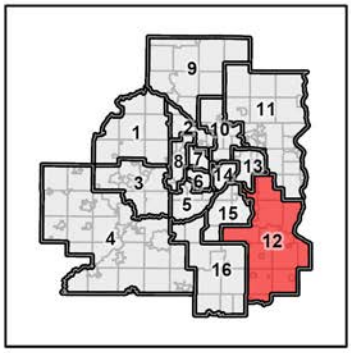
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

District 12

Capital Program and Projects

District 12 includes, in Dakota County, the cities of Coates, Hampton, Hastings, Miesville, New Trier, Randolph, Rosemount, South St. Paul, and Vermillion; and the townships of Douglas, Hampton, Marshan, Nininger, Randolph, Ravenna, and Vermillion; in Ramsey County, the portion of the city of Maplewood south of I-94; and in Washington County, the cities of Cottage Grove, Hastings, Newport, St. Paul Park, and the remaining two-thirds of the City of Woodbury west of Woodbury Drive and south of Bailey Road; and the townships of Denmark and Grey Cloud Island.





0 1 2 4 Miles

Wastewater Infrastructure

- Meters
- Lift Stations
- Water Resource Recovery Facility
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Eagles Point
- Potential Eagles Point
- Empire
- Potential Empire
- Hastings (Future Study Area)
- Potential Hastings (Future Study Area)
- Metro
- Potential Metro
- Rural Center

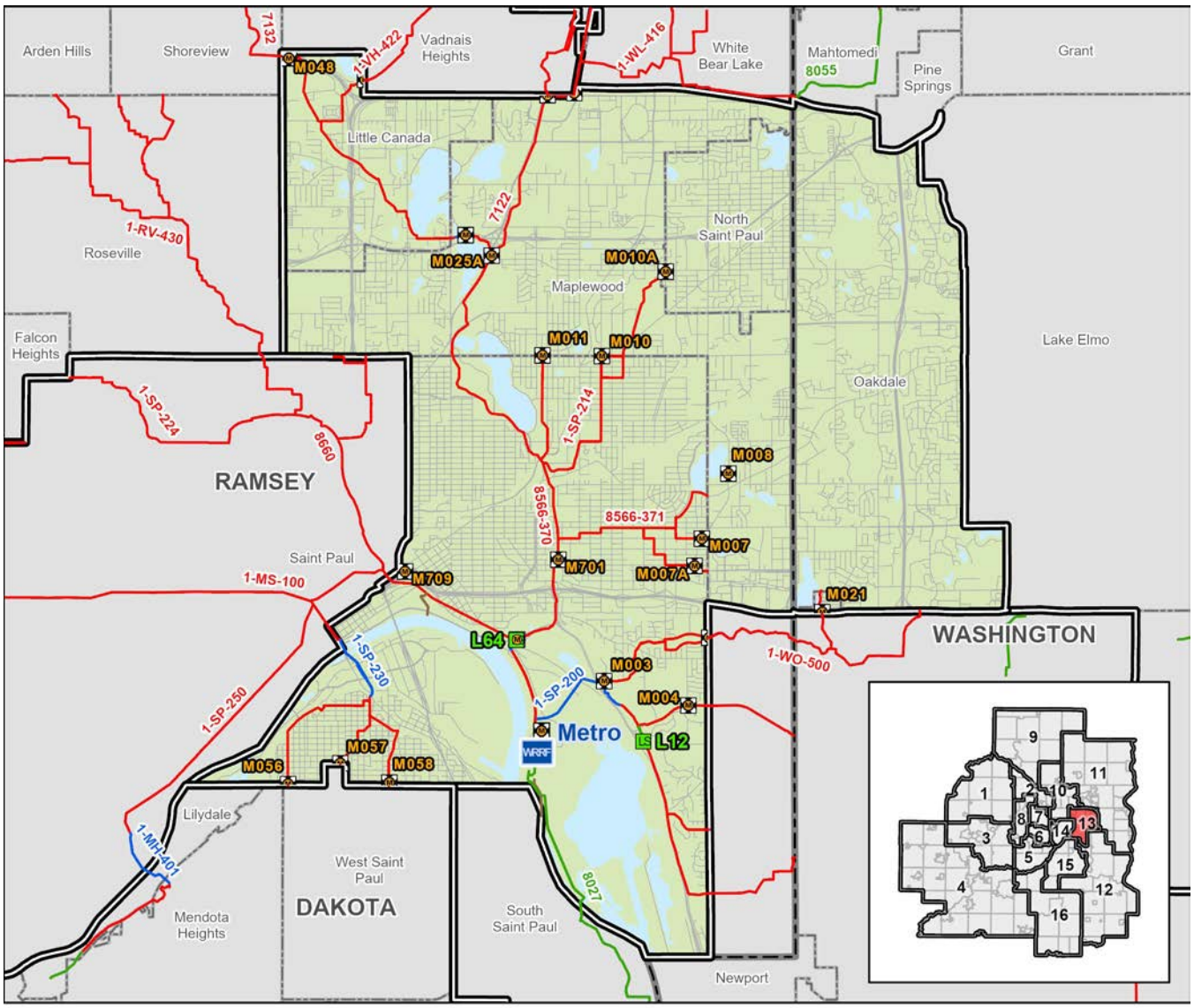
Boundaries

- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

District 13

Capital Program and Projects

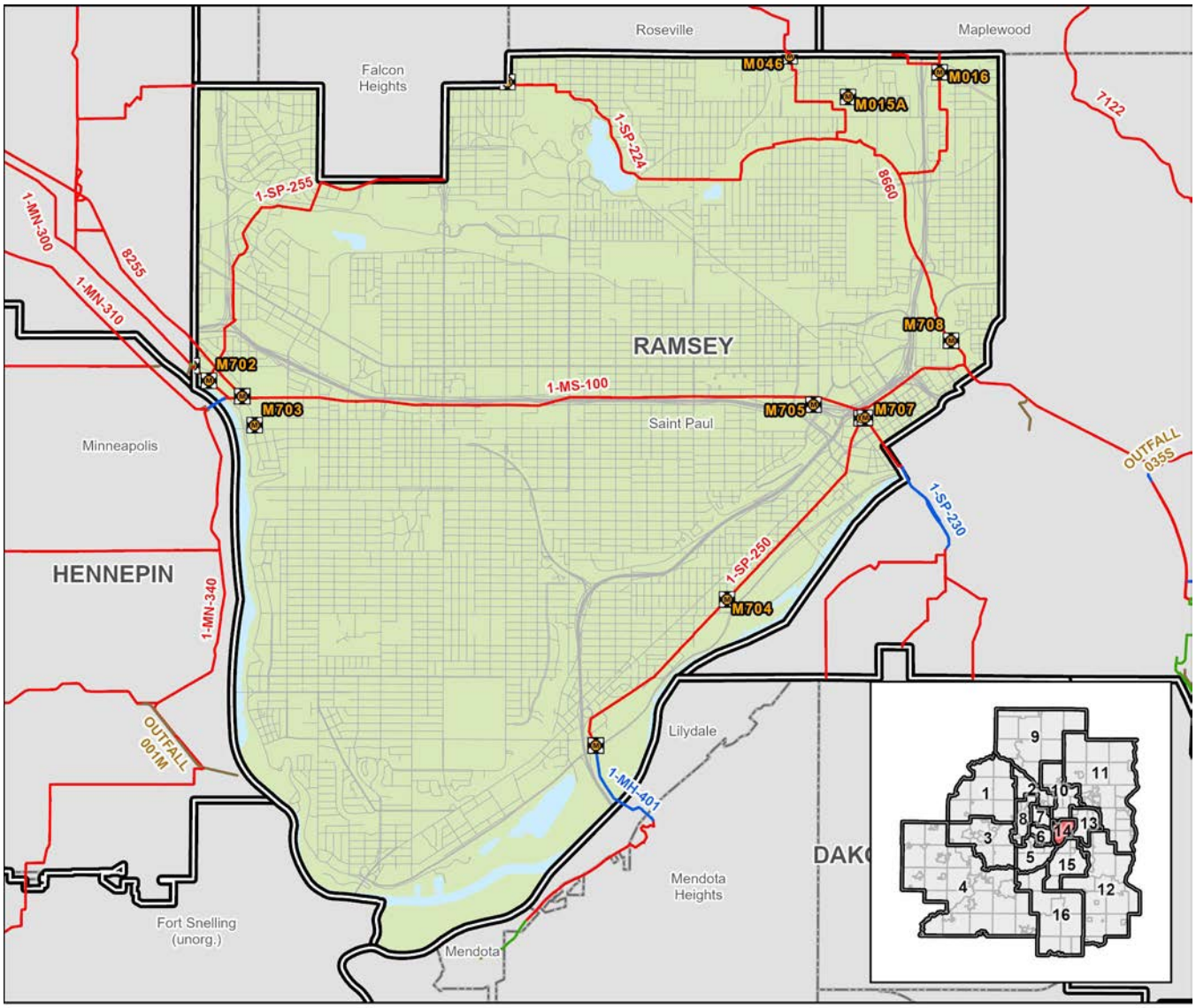
District 13 includes, in Ramsey County, the cities of Little Canada, North St. Paul, the portions of the City of Maplewood north of I-94, and the portions of the City of Saint Paul south of the Mississippi River and east of Edgerton Street; and in Washington County, the cities of Landfall and Oakdale.



District 14

Capital Program and Projects

District 14 includes portions of the City of Saint Paul north of the Mississippi River and west of Edgerton Street.



Wastewater Infrastructure

- Meters
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Metro

Boundaries

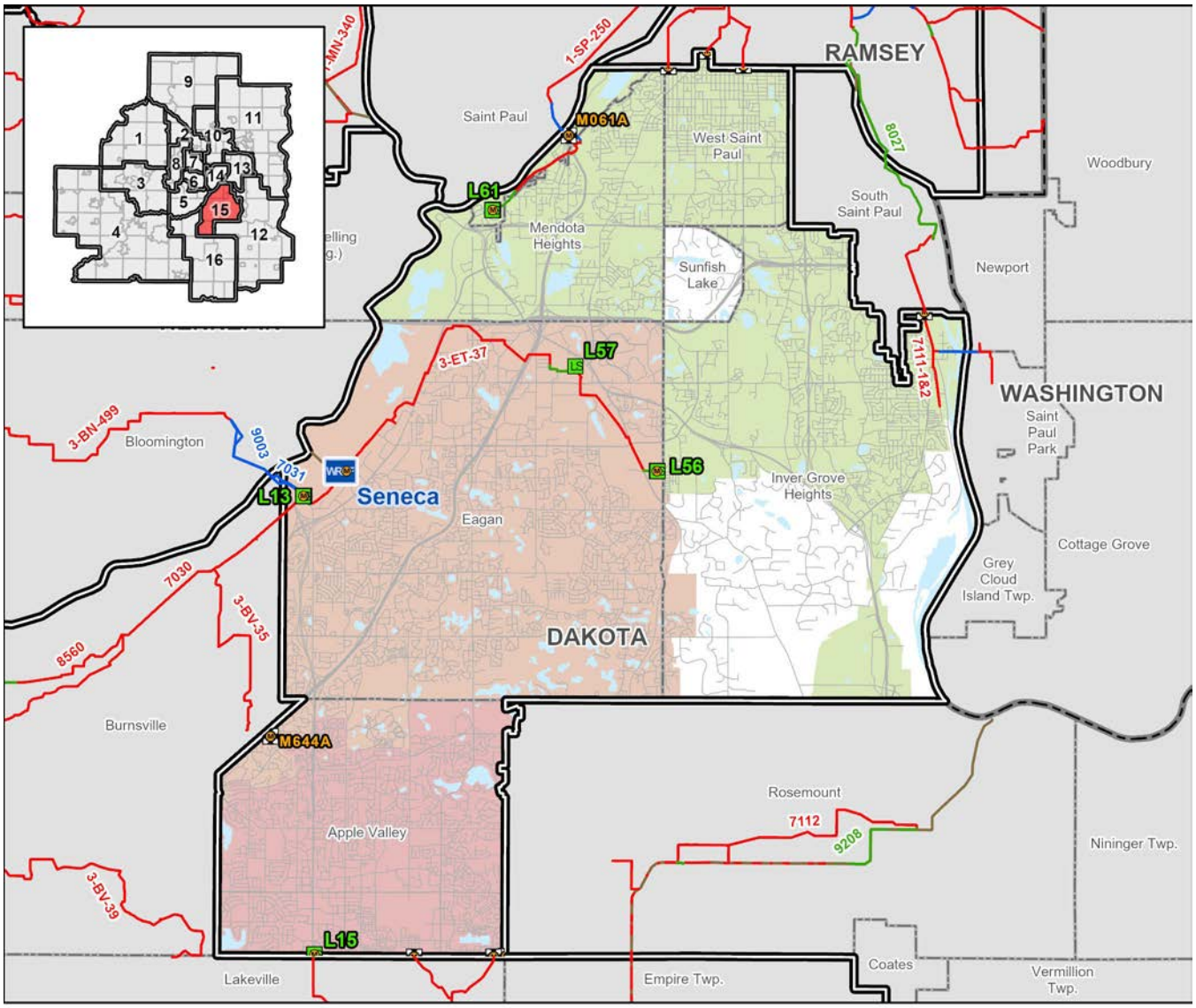
- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

0 0.5 1 2 Miles

District 15

Capital Program and Projects

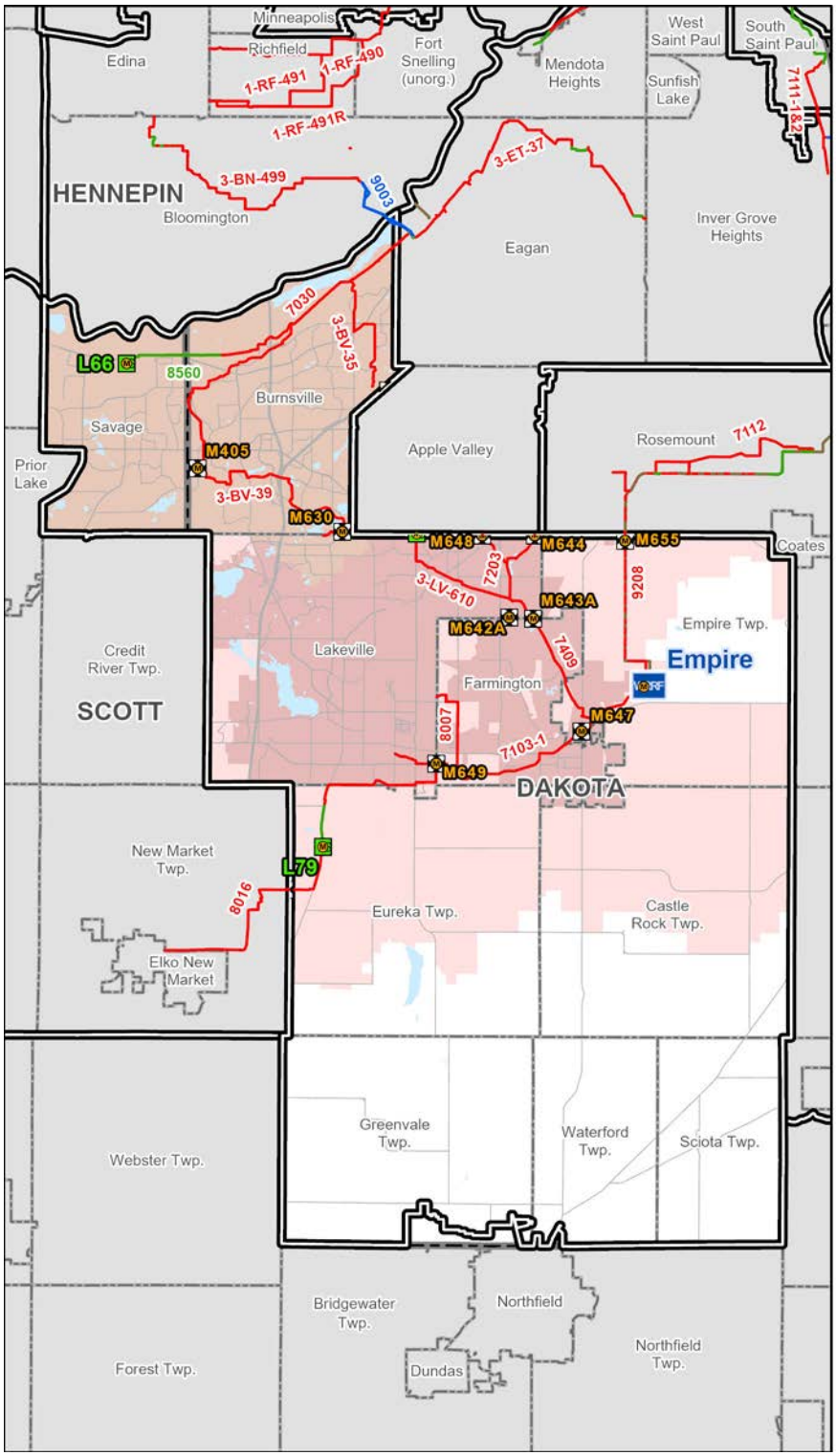
District 15 includes, in Dakota County, the cities of Apple Valley, Eagan, Inver Grove Heights, Lilydale, Mendota, Mendota Heights, Sunfish Lake, and West St. Paul.

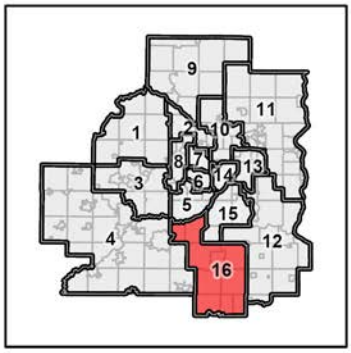


District 16

Capital Program and Projects

District 16 includes, in Dakota County, the cities of Burnsville, Empire, Farmington, and Lakeville; and the townships of Castle Rock, Eureka, Greenvale, Sciota, and Waterford; and in Scott County, the city of Savage.





0 1 2 4 Miles

Wastewater Infrastructure

- Meters
- Lift Stations
- Water Resource Recovery Facility
- Liquid Waste Hauler Disposal Sites

Interceptors

- Gravity
- Forcemain
- Siphon
- Effluent

Long Term Wastewater Service Area

- Empire
- Potential Empire
- Seneca

Boundaries

- Metropolitan Council Districts
- County Boundary
- City & Township Boundaries

Appendix A: Project Summaries by Program – Treatment Plant

Program 8059 – Metro Rehabilitation and Facilities Improvements

View of Metropolitan Water Resource Recovery Facility (WRRF)

Description

This program provides funding for planning and implementation of a plant-wide renewal program at the Metropolitan Water Resource Recovery Facility (Metro WRRF). This program will end upon final completion of 805998 Metro WRRF Services Building; the project was substantially completed in December 2024. This program will be closed in 2026.

Purpose and justification

Projects in this program address renewal needs for continued reliable and sustainable wastewater service at the Metro WRRF through the year 2030.

Program location

This program, which implemented multiple projects in Council District 13, will end upon final completion of 805998 Metro WRRF Services Building; the project was substantially completed in December 2024. This program will be closed in 2026.

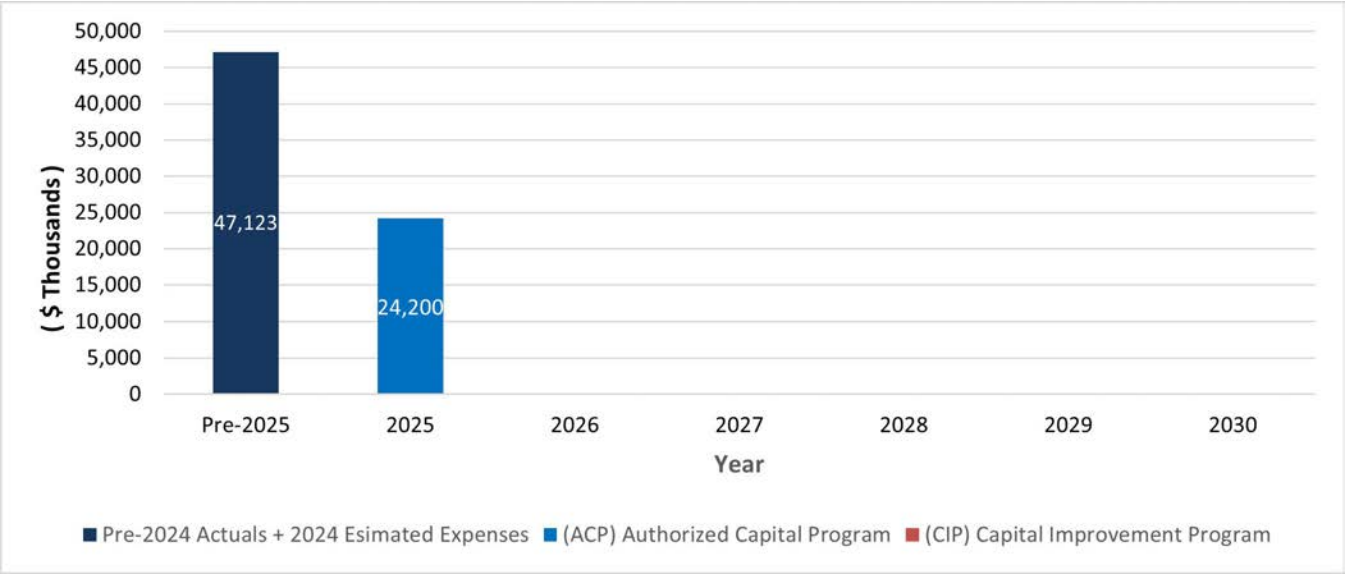
Active projects in program: None

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $71,322,739
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8062 – Metro WRRF Solids Improvements

Metropolitan Water Resource Recovery Facility (WRRF) Solids Management Building (SMB)

Description

This program provides funding for planning and implementation of improvements to wastewater solids processing facilities at the Metropolitan Water Resource Recovery Facility (Metro WRRF).

Purpose and justification

Planning work is documented in the Metro WRRF Solids Management Improvements Facility Plan (January 2019). The facility plan, which includes the addition of a fourth incinerator followed by renewal of the three existing incinerators at the Metro Facility, did not qualify for PFA funding. (The project to renew the existing three incinerators is relocated to Program 8103 Metro WRRF Restoration and Improvements.)

Projects in this program address capacity and renewal needs for continued reliable and sustainable wastewater solids processing at the Metro WRRF through the year 2050.

Program location

The active projects within this program are Council District: 13

Active projects in program

Project Number	Project Title
806211	Metro WRRF Backup Fuel Service Addition, Primary Heat Exchanger Rehabilitation and Auxiliary Condenser Improvements
806230	Metro WRRF Fourth Incinerator

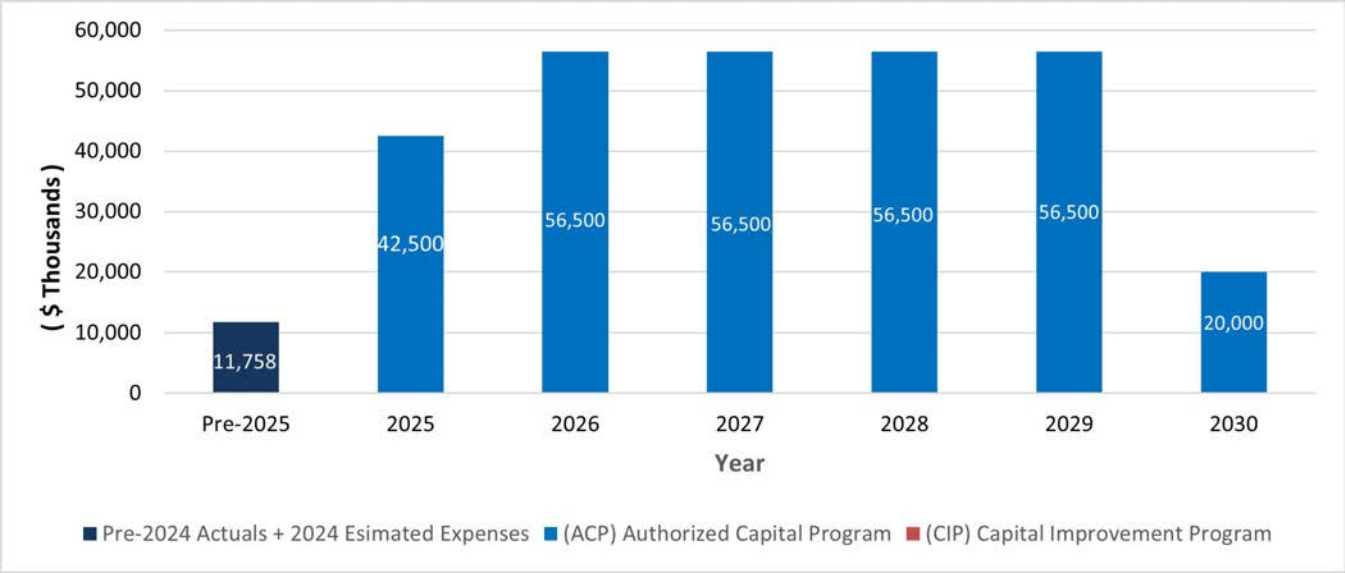
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $300,258,193
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Metro WRRF Backup Fuel Service Addition, Primary Heat Exchanger Rehabilitation and Auxiliary Condenser Improvements

Program family 8062 **Project #806211**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Existing Primary Heat Exchanger to be Rehabilitated

Existing Auxiliary Condenser to be Relocated

Project type
Facility

Objectives
Asset Preservation and Quality Improvements

Scope
This project includes installing a backup fuel source, reduction in effluent water pressure, relocating auxiliary condensers, rehabilitating primary heat exchangers, demolishing fuel oil tanks, installing oxygen meters, installing effluent water softening, and installing a sand reuse system.

Project need
This project is needed to renew existing equipment, reduce annual costs, and increase reliability.

Planning: 2011 through 2019	Design: 2025 through 2026	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$2,000,000
Current ACP:	$26,000,000
2025 through 2030 cash flow :	$26,000,000
Total project cost:	$26,000,000

Metro WRRF Fourth Incinerator

Program family 8062 **Project #806230**

Project location: Council District #13, City of Saint Paul, Metro WRRF

3D rendering design of future Fourth Incinerator at Metro WRRF

Project type
Facility

Objectives
System Expansion and Asset Preservation

Scope
Expand the Metro WRRF Solids Management Building and install a fourth incinerator train next to the existing three. The fourth train will include energy recovery, air pollution control, and related solids processing equipment.

Project need
The Metro WRRF needs additional solids treatment capacity to preserve existing wastewater infrastructure and to serve regional population growth through the year 2050.

Project schedule:

Planning:	Preliminary Design:	Design-Build Construction:
2011 through 2019	2020 through 2024	2025 through 2027

Financial analysis

2025 cash flow:	$40,000,000
Current ACP:	$260,000,000
2025 through 2030 cash flow:	$260,000,000
Total project cost:	$260,000,000

Program 8074 – Empire WRRF Solids Improvements

Aerial view of Empire Water Resource Recovery Facility (WRRF)

Description

This program provides funding for planning and implementation of improvements to the wastewater solids processing facilities at the Empire Water Resource Recovery Facility (WRRF).

This program will end upon final completion of 807401 Empire WRRF Solids Improvements Phase II; project substantial completion is anticipated to be in December 2025. This program is anticipated to close in 2026.

Purpose and justification

Projects in this program address capacity constraints and improve performance for wastewater solids processing at the Empire WRRF.

Program location

The active projects within this program are in Council District: 16

Active projects in program

Project Number	Project Title
807401	Empire WRRF Solids Improvements Phase II

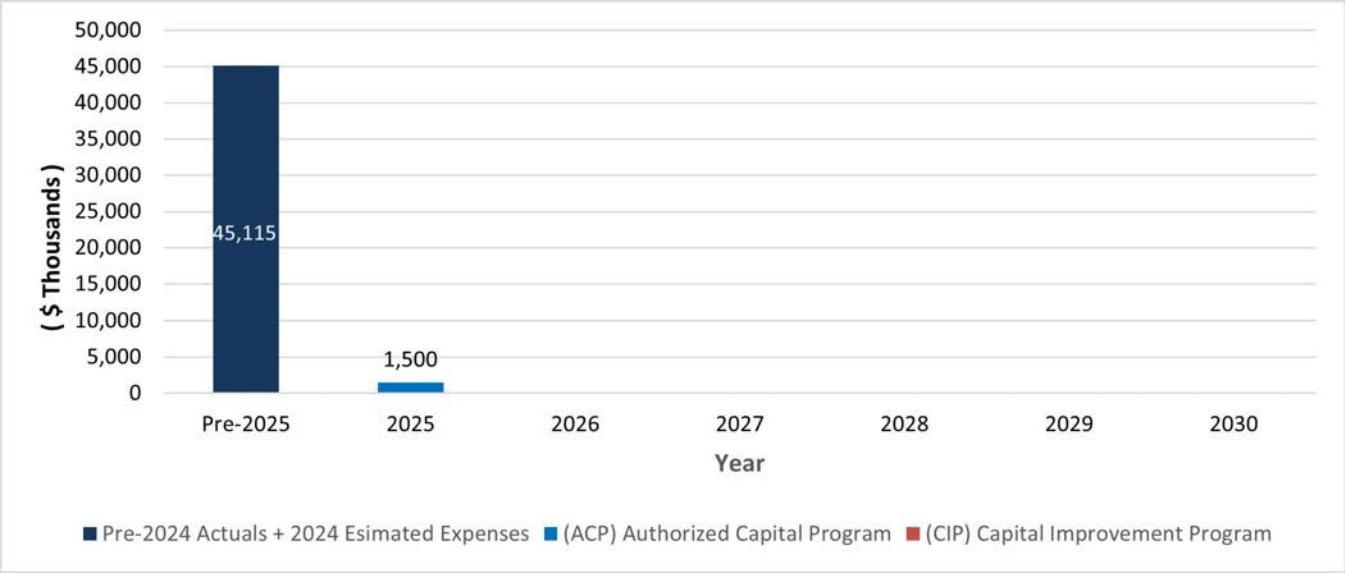
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $46,614,967
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Empire WRRF Solids Improvements Phase II

Program family 8074 **Project #807401**

Project location: Council District #16, City of Empire, Empire WRRF

Biogas flare and Digesters 4 and 5 at Empire WRRF

Project type
Facility

Objectives
Asset Preservation, Quality Improvements

Scope
Modify existing digesters to increase solids processing capacity. Add advanced biogas treatment to remove hydrogen sulfide and siloxanes from biogas prior to use as fuel in a combined heat and power (CHP) engine generator. CHP will generate heat and electricity for onsite use.

Project need
Solids treatment capacity at the Empire Facility must be increased to accommodate future growth in the service area. CHP will generate approximately one third of the plant's heat and power demand utilizing biogas generated onsite as fuel.

Project schedule:

Planning: 2011 through 2013	Design: 2019 through 2020	Construction: 2021 through 2025

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$17,902,000
2025 through 2030 cash flow:	$1,000,000
Total project cost:	$17,902,000

Program 8078 – Regional WRRFs Improvements

Aerial view of the Rogers Water Resource Recovery Facility acquired by ES in 2018

Description

This program provides funding to complete planning activities and near-term capital improvements (not otherwise included in a separate program) at 8 regional Water Resource Recovery Facilities (WRRF).

Purpose and justification

Projects in this program provide component and system renewal needs and improvements at the regional WRRFs. These projects are outside of the realm of major plant expansion. The projects may also be in response to items that were not fully optimized in other major regional plant rehabilitation/renewal projects.

Program location

The active projects within this program are in the following Council Districts: All

Active projects in program

Project Number	Project Title
807803	Blue Lake WRRF Administration Building.
807805	East Bethel WRRF Improvements.
807811	St. Croix Valley WRRF Upgrades
807863	Rogers WWTF Pond Solids Removal.
807864	Seneca Piping and Site Rehabilitation
807865	Regional WRRFs PLC Renewal
807899	Regional Facility Planning
8078XX	Hastings WRRF Liquids Treatment and Plant-Wide Systems Rehabilitation

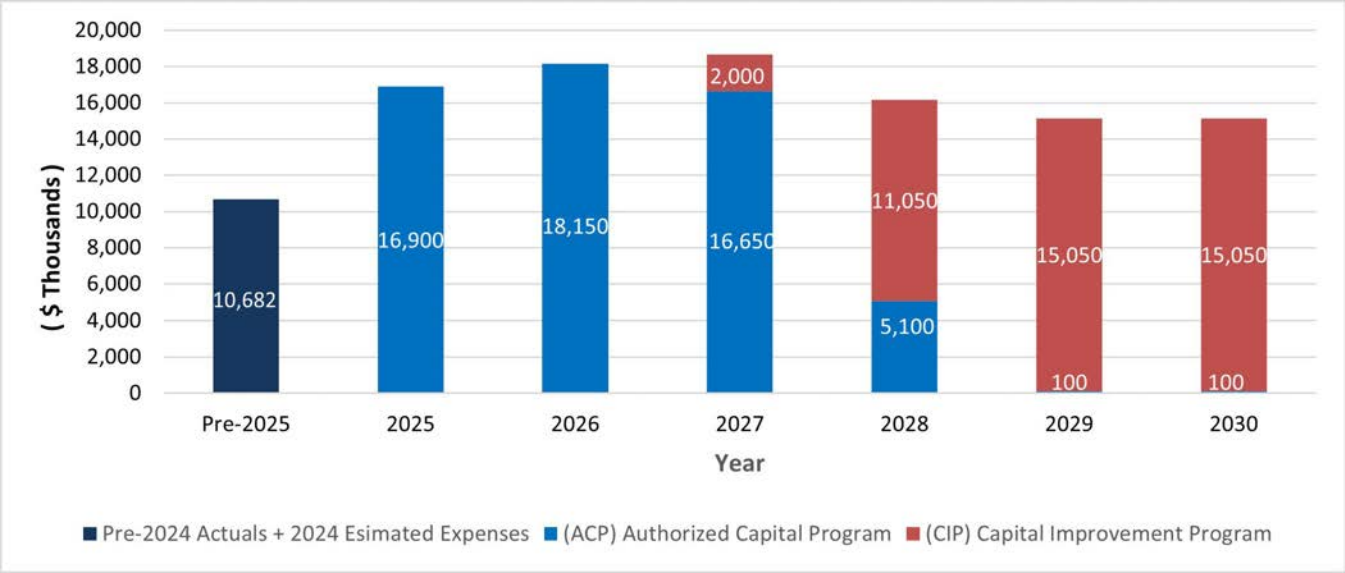
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $67,681,963
- Capital Improvement Plan (CIP): $43,150,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Blue Lake WRRF Administration Building

Program family 807800 **Project #807803**

Project location: Council District #4, City of Shakopee, Blue Lake WRRF

Blue Lake WRRF Administration Building

Project type
Facility

Objectives
Asset Preservation, Quality Improvements

Scope
Based on building assessments, modify space and/or construct an addition to the Administration Building to better accommodate staff, tours, and training.

Project need
The Administration Building is not well suited for meetings and school field trips. The Administration Building needs restroom Americans with Disabilities Act (ADA) accessibility improvements.

Project schedule:

Planning: 2020 through 2026	Design: TBD	Construction: TBD

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$5,000,000
Total project cost:	$5,000,000

East Bethel WRRF Improvements

Program family 807800 **Project #807805**

Project location: Council District #9, City of East Bethel, East Bethel WRRF

East Bethel Water Resource Recovery (WRRF) Facility

Project type
Facility

Objectives
Quality Improvements

Scope
There are multiple process tanks that will be mechanically and electrically connected to the process flow for the first time, including new blowers and electrical transfer equipment.

Project need
East Bethel was brought online in 2014 at less than 10% of design flow. Now that flows have increased, the plant requires the remaining tanks and blowers to be commissioned, as well as electrical and generator upgrades.

Project schedule:

Planning: 2017 through 2019	Design: 2020 through 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$2,700,000
2025 through 2030 cash flow:	$2,000,000
Total project cost:	$2,700,000

St. Croix Valley WRRF Upgrades

Program family 807800 **Project #807811**

Project location: Council District #11, City of Oak Park Heights, St. Croix Valley WRRF

St. Croix Valley WRRF

Project type
Facility

Objectives
Asset Preservation

Scope
Renew metals and improve access and ventilation at the gravity thickener. Replace obsolete ultraviolet disinfection system. Renew bar screen and provide system redundancy. Replace obsolete electrical and HVAC equipment. Reconstruct roads. Replace alum storage and feed system. Install three stormwater best management practices (BMP) improvements. Add variable frequency drives (VFDs) to three aeration blowers. Install fall protection system for the odor control vessels. Install safety gates and dissolved oxygen (DO) probes in the aeration basins. Replace three primary sludge pumps.

Project need
Rehabilitate treatment and auxiliary systems to increase reliability of operation of the St. Croix Valley WRRF and reconstruct roads.

Project schedule:

Planning: 2023	Design: 2024 through 2025	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$1,500,000
Current ACP:	$16,694,000
2025 through 2030 cash flow:	$16,500,000
Total project cost:	$16,694,000

Rogers WWTF Pond Solids Removal

Program family 807800 **Project #807863**

Project location: Council District #1, City of Rogers, Rogers WWTF

Photo of Rogers Wastewater Treatment Facility (WWTF)

Project type
Facility

Objectives
Quality Improvements

Scope
Remove solids from the solids holding pond and remove grit from the oxidation ditches.

Project need
Removal of solids holding pond solids and grit accumulation at the Rogers WWTF recovers capacity needed for continued reliable operation.

Project schedule:

Planning: 2022	Design: 2022	Construction: 2024 through 2025

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$2,832,000
2025 through 2030 cash flow:	$1,000,000
Total project cost:	$2,832,000

Seneca Piping and Site Rehabilitation

Program family 807800 **Project #807864**

Project location: Council District #15, City of Eagan, Seneca WRRF

Aerial View of Seneca WRRF

Project type
Facility

Objectives
Asset Preservation

Scope
The project includes replacement of the final section of the return activated sludge (RAS) pipe returning to the aeration basins as well as rehabilitation of the main influent channel into the plant. There will also be some site drainage improvements.

Project need
The main influent channel to the plant was poured along with the Administration Building foundation and has been labeled as a level 5 (poorest) condition by the interceptor group. Also, the RAS pipe is corroded and needs to be replaced.

Project schedule:

Planning: 2021	Design: 2022 through 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$2,500,000
Current ACP:	$9,016,000
2025 through 2030 cash flow:	$7,000,000
Total project cost:	$7,516,000

Regional WRRFs PLC Renewal

Program family 807800 **Project #807865**

Project location: Regional

Photo taken inside a typical Programmable Logic Controller (PLC)

Project type
Facility

Objectives
Asset Preservation

Scope
Replace out-of-date process control systems at regional Water Resource Recovery Facilities (WRRFs).

Project need
Key elements in the process control system for regional WRRFs are out of date and in need of replacement to continue to provide reliable treatment process control at the regional facilities.

Project schedule:

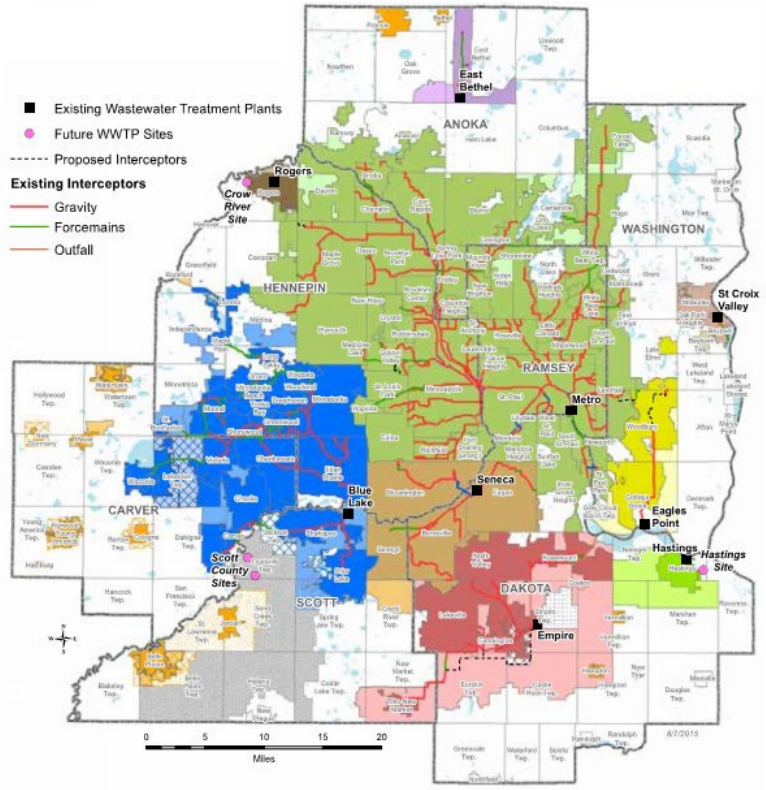
Planning: 2021 through 2022	Design: 2022 through 2027	Construction: 2023 through 2028

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$4,842,000
2025 through 2030 cash flow:	$1,500,000
Total project cost:	$6,842,000

Regional WRRFs Planning
Program family 807800 **Project #807899**

Project location: Regional



Map of ES Water Resource Recovery Facilities (WRRFs) and existing and proposed interceptors in the seven-county metropolitan area

Project type
Facility

Objectives
Asset Preservation, Quality Improvements

Scope
This project provides for planning activities at the regional facilities. Design and construction of approved rehabilitations and/or improvements will be budgeted separately. Current planning activities include arc flash studies, road condition assessments, sustainable landscape planning, roof condition assessments, real estate appraisal needs, and various business case evaluations, as requested.

Project need
Effective and efficient wastewater treatment requires that condition and operation of facilities be periodically evaluated.

Project schedule:

Planning: 2024 - 2029

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$838,000
2025 through 2030 cash flow:	$600,000
Total project cost:	$838,000

Hastings WRRF Liquids Treatment and Plant-Wide Systems Rehabilitation

Program family 807800 **Project #8078XX**

Project location: Council District #12, Hastings, Hastings WRRF

Aeration Tank (left) and Electrical Motor Control Center (right) in need of Rehabilitation

Project type
Facility

Objectives
Asset Preservation

Scope
The project rehabilitates critical liquids treatment and plant-wide systems for continued reliable service. Liquids treatment elements include bar screens, aerated grit system, primary clarifiers, aeration tanks, final clarifiers, chemical disinfection, and outfall. Critical plant-wide systems include electrical distribution, instrumentation and control, emergency overflow system, and flood protection.

Project need
The last major renewal occurred in the 1980s. Rehabilitation of critical systems is required to continue reliable service.

Planning: 2024	Design: 2025 through 2026	Construction: 2027 through 2029

Financial analysis

2025 cash flow:	$7,000,000
Current ACP:	$21,000,000
2025 through 2030 cash flow :	$28,000,000
Total project cost:	$28,000,000

Program 8089 – Metro WRRF Asset Renewal

Metropolitan Water Resource Recovery Facility (WRRF)

Description

This program provides funding to continue the facility-wide renewal program at the Metropolitan Water Resource Recovery Facility (Metro WRRF), which was initiated under Program 8059 Metro WRRF Rehabilitation and Facilities Improvements. Funds are for planning and implementation of capital improvements to the liquids processing and facility-wide facilities at the Metro WRRF.

Purpose and justification

Planning work is documented in the Metro WRRF Asset Renewal Facility Plan (December 2015).

Projects in this program address renewal needs for continued, reliable, and sustainable wastewater service at the Metro WRRF through the year 2040.

Program location

The active projects within this program are in the following Council District: 13

Active projects in program

Project Number	Project Title
808915	Metro WRRF Electrical Distribution Renewal Phase 2
808916	Metro WRRF Electrical Distribution Renewal Phase 3
808917	Metro WRRF Secondary Conduit and Conductor Replacement
808918	Metro WRRF Flood Control Improvements
808919	Metro WRRF 408 and F&I #2 Building Envelope Rehabilitation
808925	Metro WRRF PLC Renewal
808927	Metro WRRF Steam Improvements and Turbine Rehabilitation
808928	Metro WRRF Effluent Pump Station Rehabilitation and West Secondary Improvements

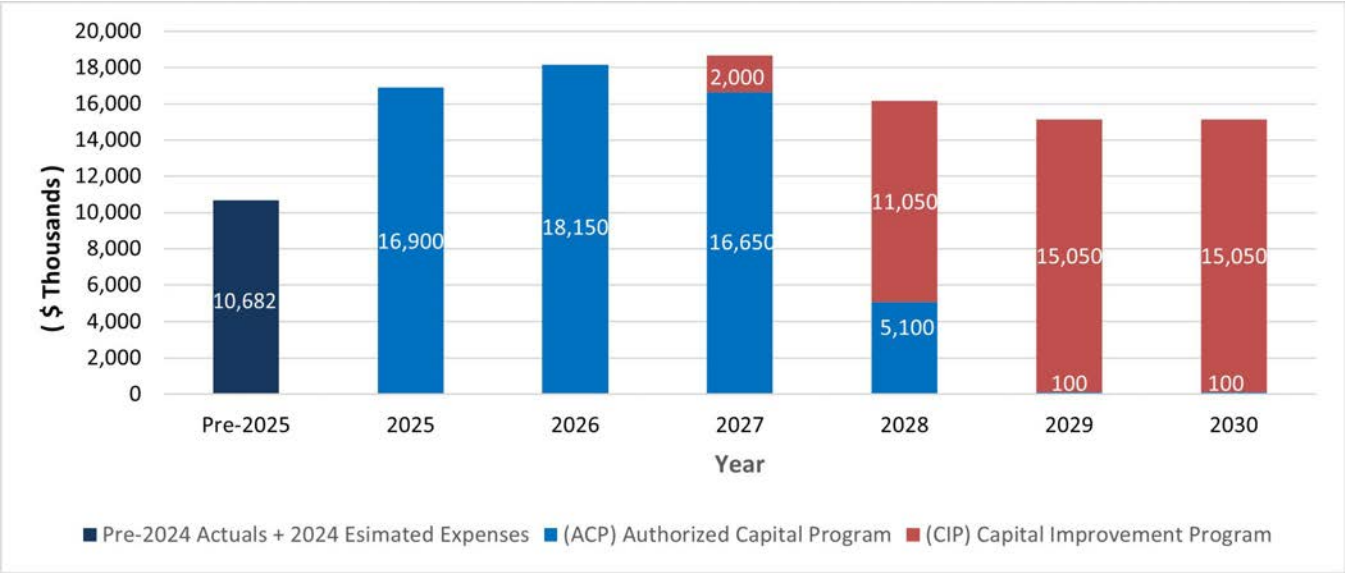
Project Number	Project Title
808929	Metro WRRF Solids Control Room Improvements
808930	Metro WRRF Secondary Renewal
808933	Metro WRRF Electrical Distribution Renewal Phase 4
808935	Metro WRRF Primary and Secondary Renewal Phase 1
808963	Metro WRRF Water Systems Renewal and Improvements Phase 1: Distribution System Renewal
8089XX	Metro WRRF Primary and Secondary Renewal Phase 2
8089XX	Metro WRRF Water Systems Renewal and Improvements Phase 2: City Water

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $259,363,442
- Capital Improvement Plan (CIP): $149,360,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Metro WRRF Electrical Distribution Renewal Phase 2

Program family 8089 **Project #808915**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Aeration Compressor

Project type
Facility

Objectives
Asset Preservation

Scope
Maintenance staff will coordinate the rehabilitation of seven compressor motors through specialty contracted services and install temperature and vibration monitoring for the motors.

Project need
The aeration compressors are critical to the continued performance of the aeration process and inspections by Maintenance staff indicate the compressor motors need to be replaced or rehabilitated to extend service life.

Project schedule:

Planning: 2010 through 2015	Design: 2018 through 2020	Construction: 2020 through 2025

Financial analysis

2025 cash flow:	$300,000
Current ACP:	$5,186,000
2025 through 2030 cash flow:	$1,800,000
Total project cost:	$5,186,000

Metro WRRF Electrical Distribution Renewal Phase 3

Program family 8089 **Project #808916**

Project location: Council District #13, City of Saint Paul, Metro WRRF

New unit substations to be installed

Project type
Facility

Objectives
Asset Preservation, System Expansion, and Quality Improvements

Scope
Replace electrical distribution equipment (unit substations, switchgear, and motor control centers) with new equipment. Upgrade and expand the existing Main Substation Building to provide space for new equipment and to improve worker safety during maintenance.

Project need
Condition assessments determined that electrical equipment in the Main Substation Building and at various buildings throughout the facility are nearing the end of useful service life and need to be replaced.

Project schedule:

Planning: 2010 through 2015	Design: 2018 through 2021	Construction: 2022 through 2026

Financial analysis

2025 cash flow:	$12,000,000
Current ACP:	$69,504,000
2025 through 2030 cash flow:	$22,800,000
Total project cost:	$69,504,000

Metro WRRF Secondary Conduit and Conductor Replacement

Program family 8089 **Project #808917**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Electrical Conduit for Secondary Collector Motors

Project type
Facility

Objectives
Asset Preservation

Scope
The project replaces electrical conduit and conductors for secondary collector motors, which are embedded in concrete, with new above-ground conduit and conductors.

Project need
The east and west secondary collector motor conduits and conductors, which were installed over 40 years ago, are corroded and need to be replaced.

Project schedule:

Planning: 2010 through 2015	Design: 2023	Construction: 2023 through 2025

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$2,616,000
2025 through 2030 cash flow:	$1,000,000
Total project cost:	$2,616,000

Metro WRRF Flood Control Improvements

Program family 8089 **Project #808918**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Location of the flood control measure at the Metro WRRF

Project type
Facility

Objectives
Asset Preservation

Scope
Increase the road elevation at the intersection of Pig's Eye Lake Road and 5th Avenue to the existing levee height.

Project need
There is a need to install an additional flood control measure to address a 500-year flood event.

Project schedule:

Planning: 2010 through 2015	Design: 2023 through 2025	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$600,000
Current ACP:	$1,100,000
2025 through 2030 cash flow:	$600,000
Total project cost:	$1,100,000

Metro WRRF 408 and F&I #2 Building Envelope Rehabilitation

Program family 8089 **Project #808919**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Left: 408 Building looking west. Right: F&I #2 building looking east.

Project type
Facility

Objectives
Asset Preservation

Scope
This project rehabilitates or demolishes portions of the 408 and Filtration & Incineration (F&I) #2 buildings based on condition assessments and a business case evaluation.

Project need
The 408 and F&I #2 buildings are over 45 years old and need to be rehabilitated or demolished.

Project schedule:

Planning: 2010 through 2015	Design: 2022 through 2023	Construction: 2024 through 2026

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$5,000,000
Total project cost:	$15,000,000

Metro WRRF PLC Renewal

Program family 8089 **Project #808925**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Photo taken inside a typical Programmable Logic Controller (PLC)

Project type
Facility

Objectives
Asset Preservation

Scope
Replace out-of-date process control systems at the Metropolitan Water Resource Recovery Facility (Metro WRRF).

Project need
Key elements in the process control system for the Metro WRRF are out of date and in need of replacement to continue to provide reliable treatment process control at this facility.

Project schedule:

Planning: 2010 through 2015	Design: 2023 through 2027	Construction: 2024 through 2028

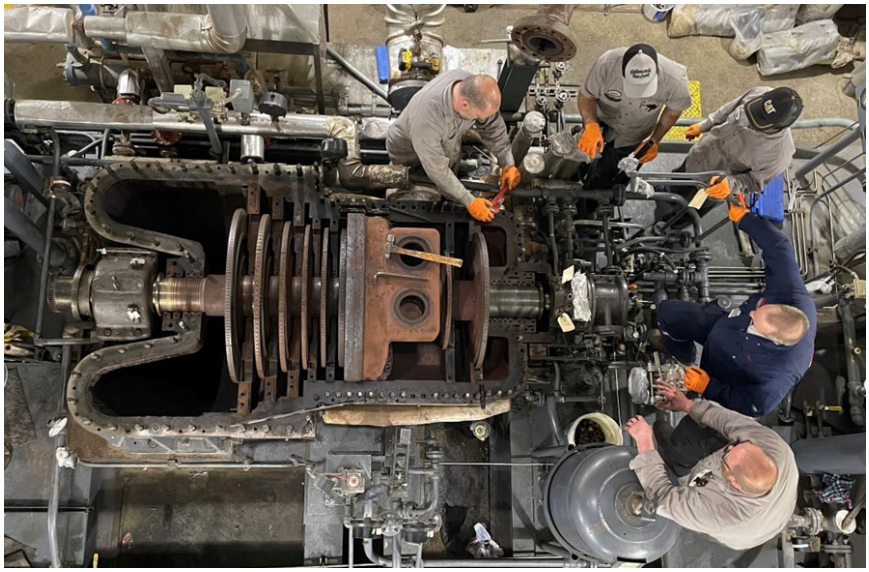
Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$1,500,000
Total project cost:	$4,876,000

Metro WRRF Steam System Improvements and Turbine Rehabilitation

Program family 8089 **Project #808927**

Project location: Council District #13, City of Saint Paul, Metro WRRF



Metro Facility staff performing maintenance on the G7 steam turbine generator.

Project type
Facility

Objectives
Asset Preservation

Scope
This project will rehabilitate the existing steam turbine generator and make improvements to boiler feedwater chemistry, instrumentation and controls, moisture mitigation, steam traps, and structural modifications to get an additional 7 to 10 years of service from G7 steam turbine generator.

Project need
Rehabilitation and improvements to the G7 steam turbine generator system is needed since G7 can save the Metro Facility roughly $1,000,000 per year in purchased electricity.

Project schedule:

Design: 2023 through 2025	Construction: 2025 through 2026

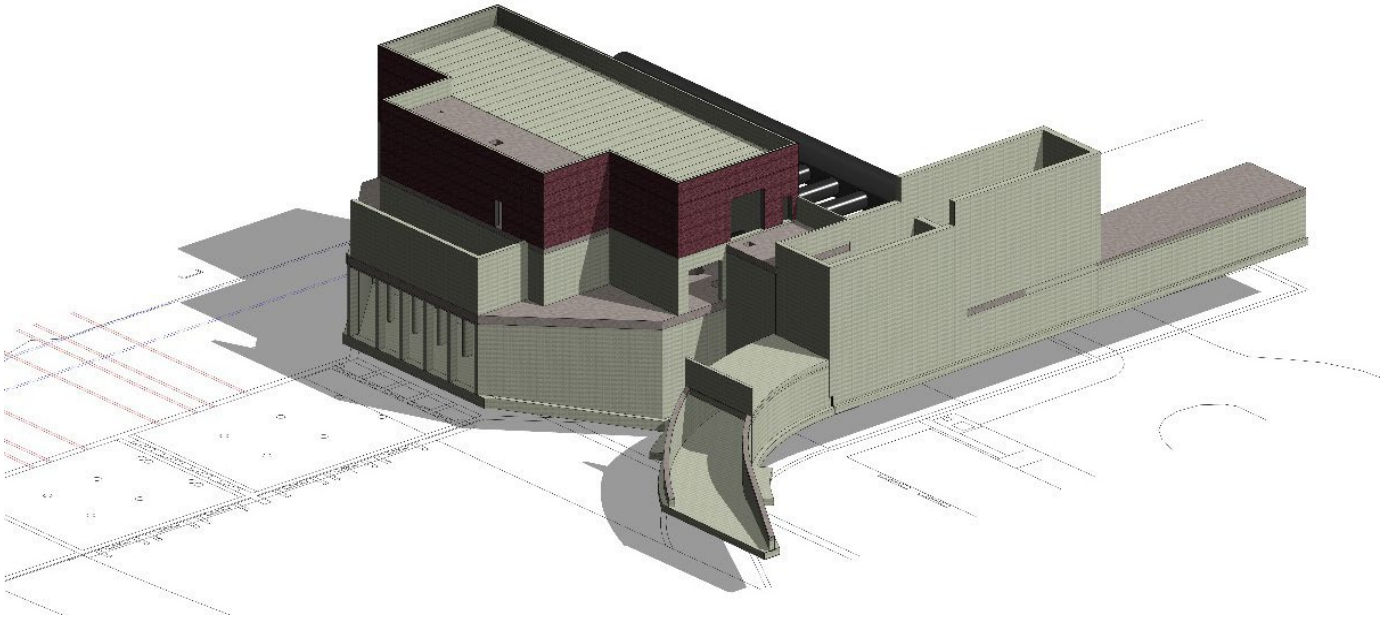
Financial analysis

2025 cash flow:	$2,500,000
Current ACP:	$11,156,000
2025 through 2030 cash flow:	$10,500,000
Total project cost:	$11,156,000

Metro WRRF Effluent Pump Station Rehabilitation and West Secondary Improvements

Program family 8089 **Project #808928**

Project location: Council District #13, City of Saint Paul, Metro WRRF



Effluent Pump Station 3-Dimensional Model

Project type
Facility

Objectives
Asset Preservation

Scope
This project rehabilitates the effluent pump station (EPS), including pump renewal, concrete repairs, pipe repairs, HVAC improvements, rehabilitation of the building envelope, replacement of switchgear, transformers, MCCs, and other electrical equipment. This project includes limited demolition of unused structures and decommissioned processes.

This project provides upgrades for the West Secondary Building (WSE2), including HVAC replacement, rehabilitation of the building envelope, and fiber optic network replacement.

Project need
The EPS has experienced problems with service availability and needs to be renewed to recover system reliability. There is a need to rehabilitate the EPS and WSE2 buildings to preserve infrastructure.

Project schedule:

Planning: 2010 through 2015	Design: 2021 through 2025	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$3,221,000
Current ACP:	$21,480,000
2025 through 2030 cash flow:	$21,480,000
Total project cost:	$21,480,000

Metro WRRF Solids Control Room Improvements

Program family 8089 **Project #808929**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Existing Metropolitan Water Resource Recovery Facility (Metro WRRF) Solids Management Building Control Room built in 2004.

Project type
Facility

Objectives
Quality Improvement

Scope
This project replaces the solids management building control room, conference room, and sludge storage operator control area. The project also includes ergonomic improvements to the centrifuge operator control area, ash loadout operator control area, business unit coordinator's office, and other offices in the Solids Management Building.

Project need
The Metro WRRF solids management building control room, conference room, offices, and operator control areas are almost 20 years old and in need of ergonomic, performance monitoring, and work environment improvements.

Project schedule:

Design: 2023 through 2024

Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$2,004,000
2025 through 2030 cash flow:	$2,000,000
Total project cost:	$2,004,000

Metro WRRF Secondary Renewal

Program family 8089 **Project #808930**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Left: Demolition of diffusers - Metro Facility's secondary treatment. Right: Installation of diffusers - Metro Facility's secondary treatment.

Project type
Facility

Objectives
Asset Preservation

Scope
This project replaces the aeration tank diffusers, installs aeration control upgrades, rehabilitates underdrains and meter pits, and installs final settling tank backfill gates and air header leak assemblies.

Project need
The aeration system equipment has been in place since the early 2000s and needs to be replaced. The new aeration equipment will result in significant energy savings due to improvements in air transfer efficiency.

Project schedule:

Planning: 2010 through 2015	Design: 2020 through 2021	Construction: 2021 through 2025

Financial analysis

2025 cash flow:	$4,500,000
Current ACP:	$36,770,000
2025 through 2030 cash flow:	$4,500,000
Total project cost:	$36,770,000

Metro WRRF Electrical Distribution Renewal Phase 4

Program family 8089 **Project #808933**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Motor control center

Project type
Facility

Objectives
Asset Preservation, System Expansion, and Quality Improvements

Scope
This project replaces electrical distribution equipment (unit substations, switchgear, and motor control centers) with new equipment and installs a generator “common bus” to create a looped distribution system that shares availability of diesel generator power. This project could include installation of new generators and/or the decommission of existing generators.

Project need
Condition assessment determined that electrical equipment in various buildings throughout the Facility are near the end of useful service life and need to be replaced. There are no means to share emergency power between process areas. Each generator is local to the equipment.

Planning: 2010 through 2015	Design: 2023 through 2024	Construction: 2024 through 2027

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow :	$35,000,000
Total project cost:	$45,000,000

Metro WRRF Primary and Secondary Renewal Phase 1

Program family 8089 **Project #808935**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Rendition of EPT addition

Project type
Facility

Objectives
Asset Preservation

Scope
The following improvements are included: East Pretreatment (EPT) Improvements and building expansion, sluice gate replacements, road improvements, East Primary and Compressor building and equipment improvements, concrete repairs, and PLC replacements.

Project need
Primary and Secondary equipment and infrastructure are approaching 40 years old and need replacement. Condition assessment determined that roofs and roads are at or nearing the end of useful service life and need to be replaced.

Project schedule:

Planning: 2010 through 2015	Design: 2021 through 2024	Construction: 2025 through 2029

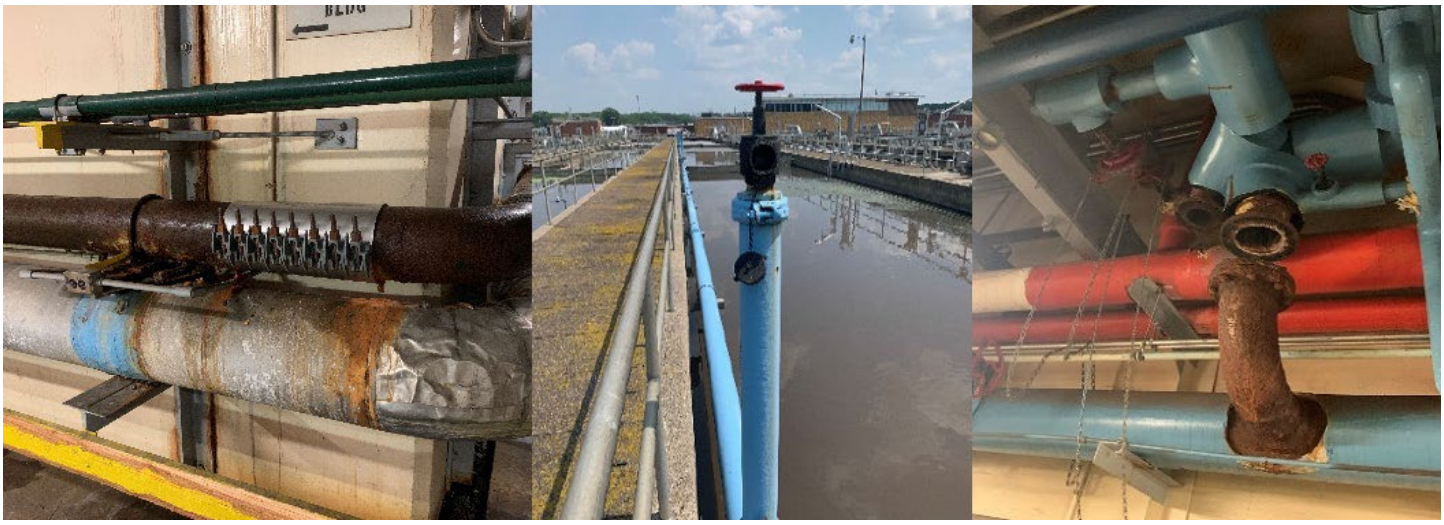
Financial analysis

2025 cash flow:	$6,000,000
Current ACP:	$28,129,000
2025 through 2030 cash flow:	$28,000,000
Total project cost:	$28,129,000

Metro WRRF Water Systems Renewal and Improvements Phase 1: Distribution System Renewal

Program family 8089 **Project #808963**

Project location: Council District #13, City of Saint Paul, Metro WRRF



Left: Deteriorated service water piping to be renewed/replaced. Center: Aeration tank spray water piping to be repurposed. Right: Abandoned/obsolete process piping to be removed.

Project type
Facility

Objectives
Asset Preservation

Scope
The project replaces the service water piping network throughout the facility with a new piping network in preparation for a future reclaimed water system.

Project need
Rehabilitate and repurpose Metro Facility water systems and reduce withdrawal of water from the Prairie du Chien Aquifer.

Project schedule:

Planning: 2006 through 2008	Design: 2020 through 2023	Construction: 2024 through 2027

Financial analysis

2025 cash flow:	$11,000,000
Current ACP:	$48,798,000
2025 through 2030 cash flow:	$40,500,000
Total project cost:	$48,798,000

Metro WRRF Primary and Secondary Renewal Phase 2

Program family 8089 **Project #8089xx**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Existing East Pretreatment Biofilter

Project type
Facility

Objectives
Asset Preservation

Scope
The following improvements are planned: odor control improvements at East Pretreatment and Sludge Storage.

Project need
The odor control systems for pretreatment and sludge storage need to be rehabilitated to mitigate odors.

Project schedule:

Planning: 2010 through 2015	Design: 2026	Construction: 2027 through 2028

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$5,000,000
Total project cost:	$5,000,000

Metro WRRF Water Systems Renewal and Improvements Phase 2: City Water

Program family 8089 **Project #8089xx**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Left: One of two water metering stations which is located near East Primary. Right: City water hydrant and isolation valve at final sedimentation tanks.

Project type
Facility

Objectives
Asset Preservation

Scope
This project replaces the city water piping network throughout the facility with a new piping network.

Project need
Rehabilitate the Metro water system that was installed beginning in the 1930s.

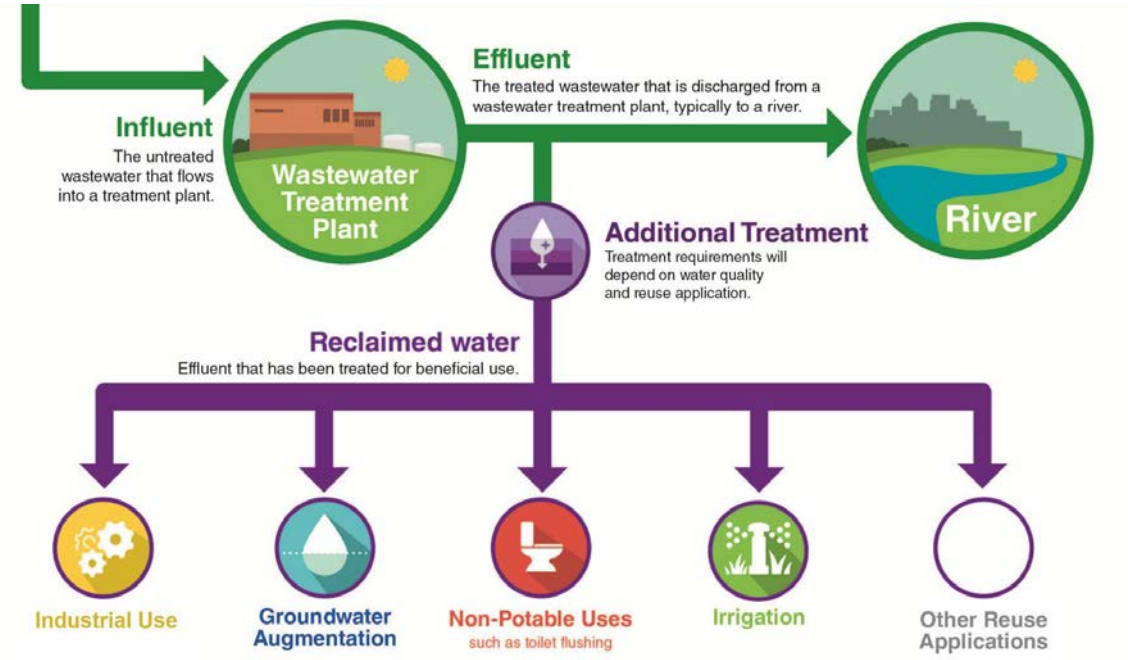
Project schedule:

Planning: 2006 through 2008	Design: 2024 through 2025	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$0
Current ACP:	$1,000,000
2025 through 2030 cash flow:	$11,000,000
Total project cost:	$21,000,000

Program 8091 – Wastewater Reclamation Facilities



Wastewater reclamation process infographic

Description

This program provides funding for planning activities needed to support the Council's overall wastewater reuse initiative.

Purpose and justification

The Water Resources Policy Plan directs Environmental Services to pursue wastewater reuse where it is economically feasible to promote sustainable water resources. Drivers include:

- Alleviating future regional conveyance pipe capacity constraints
- Conserving and supplementing groundwater and surface water
- Projects to reduce the future issuance of a water appropriation due to concerns about the area's long-term water supply
- Projects driven by future regulatory requirements that result in effluent quality being closer to reuse standards

Program location

The active studies and projects within this program are relevant to all Council districts.

Active projects in program

None

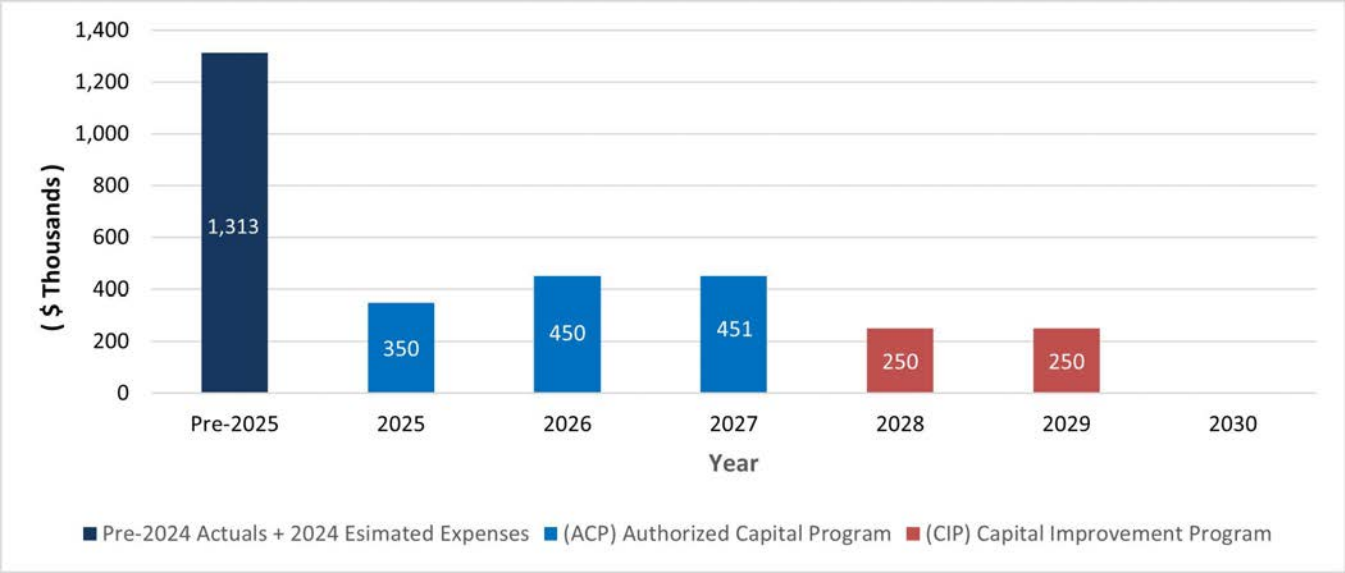
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $2,564,199
- Capital Improvement Plan (CIP): $500,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8097 – Blue Lake WRRF Improvements

Blue Lake Water Resource Recovery Facility (WRRF)

Description

This program provides funding for planning and implementation of projects to address renewal, capacity, and future permit needs at the Blue Lake Water WRRF.

Purpose and justification

Planning work is documented in the Blue Lake WRRF Improvements Facility Plan (February 10, 2021).

Projects in this program address renewal, capacity, and quality needs for continued reliable and sustainable wastewater service at the Blue Lake WRRF through the year 2050.

Program location

The active projects within this program are in the following Council district: 4

Active projects in program

Project Number	Project Title
809710	Blue Lake WRRF Dryer Renewal
809720	Blue Lake WRRF Digester 5
8097xx	Blue Lake WRRF Liquids Process Upgrades
8097xx	Blue Lake WRRF Dewatering and Drying

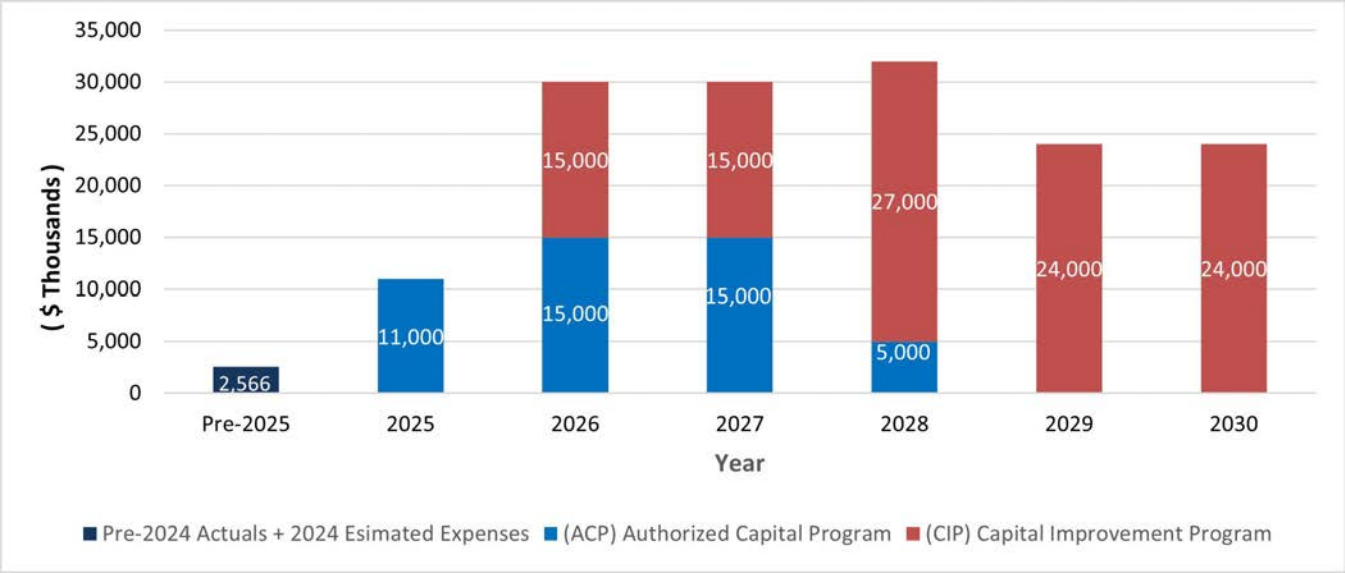
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $48,565,885
- Capital Improvement Plan (CIP): $105,000,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Blue Lake WRRF Dryer Renewal

Program family 8097 **Project #809710**

Project location: Council District #4, City of Shakopee, Blue Lake WRRF

Delivery of new dryer drum to the Blue Lake Water Resource Recovery Facility (WRRF)

Project type
Plants

Objectives
Asset Preservation

Scope
Replace the dryer drum. Modify the Final Stabilization Facility (FSF) Building structurally and electrically as needed to install the new drum.

Project need
The recent condition assessment of the current drum showed a dramatic loss in wall thickness, and pieces of the drum have been found in the outlet duct, showing that the dryer drum is at its end of life.

Planning: 2020 through 2022	Design: 2023 through 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$1,000,000
2025 through 2030 cash flow:	$1,000,000
Total project cost:	$1,000,000

Blue Lake WRRF Digester 5

Program family 809700 **Project #809720**

Project location: Council District #4, City of Shakopee, Blue Lake WRRF

Blue Lake Water Resource Recovery Facility (WRRF) digester complex

Project type
Facility

Objectives
System Expansion

Scope
There are currently three digesters and a sludge storage tank for regulating gas production. This project will add a fourth digester to increase capacity. This project will also install plant-wide electrical improvements and install stream bank erosion control at the outfall.

Project need
The recommended minimum 15-day solids retention time (SRT) cannot be met at the current flows during digester maintenance or at future flows during normal operation.

Project schedule:

Planning: 2020 through 2022	Design: 2024 through 2025	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$33,000,000
Current ACP:	$33,000,000
2025 through 2030 cash flow:	$33,000,000
Total project cost:	$33,000,000

Blue Lake WRRF – Liquids Process Upgrades

Program family 809700 **Project #8097xx**

Project location: Council District #4, City of Shakopee, Blue Lake WRRF

Blue Lake Water Resource Recovery Facility (WRRF) liquid treatment

Project type
Facility

Objectives
System Expansion, Quality Improvements

Scope
The project includes aeration basin improvements for improved Dissolved Oxygen (DO) control and air distribution. The secondary clarification process will also be expanded with two new tanks and improved baffling for flow distribution.

Project need
The aeration system is near the end of its service life and the plant is having difficulty maintaining DO while reducing energy in the system. The secondary clarifiers have reached design capacity, and more tanks are needed to accommodate growth in the region.

Project schedule:

Planning: 2020 through 2022	Design: 2024 through 2025	Construction: 2025 through 2027

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$50,000,000
Total project cost:	$50,000,000

Blue Lake WRRF Dewatering and Drying

Program family 809700 **Project #8097xx**

Project location: Council District #4, City of Shakopee, Blue Lake WRRF

Blue Lake Water Resource Recovery Facility (WRRF) solids treatment area

Project type
Facility

Objectives
System Expansion

Scope
A second building with a second dryer train and dewatering equipment will be added to provide capacity for regional growth.

Project need
A second dryer will be needed in 2032 and will meet capacity needs through the year 2050.

Project schedule:

Planning: 2020 through 2022	Design: 2023 through 2026	Construction: 2026 through 2030

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$33,000,000
Total project cost:	$42,000,000

Program 8098 – Hastings WRRF

Aerial view of existing Hastings Water Resource Recovery Facility

Description

This program, which provides funding for planning and implementation of a new Hastings Water Resource Recovery Facility (WRRF) at 2445 Ravenna Trail in Hastings is anticipated to close in 2025.

The Met Council has determined to reinitiate planning activities to identify and evaluate a broader range of alternatives to serve the southeast region.

Purpose and justification

The existing plant site cannot be expanded to meet the needs of the long-term service area, which may include land areas currently in the townships of Marshan, Nininger, and Vermillion.

Program location

The active projects within this program are in the following Council District: 12

Active projects in program

None

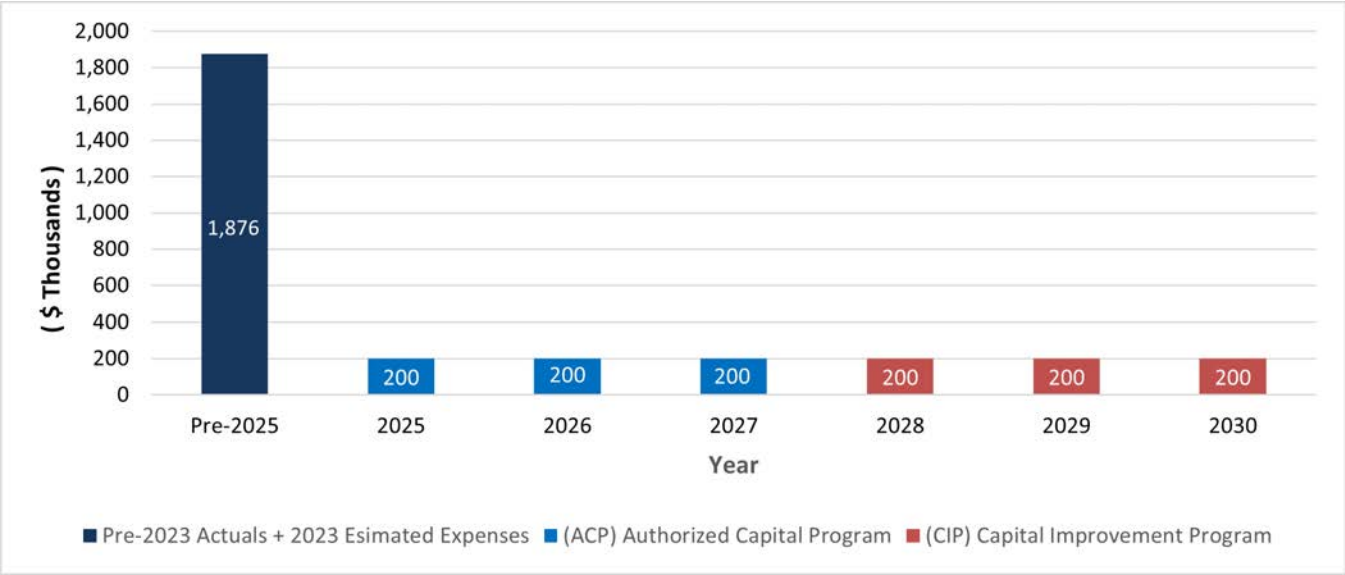
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

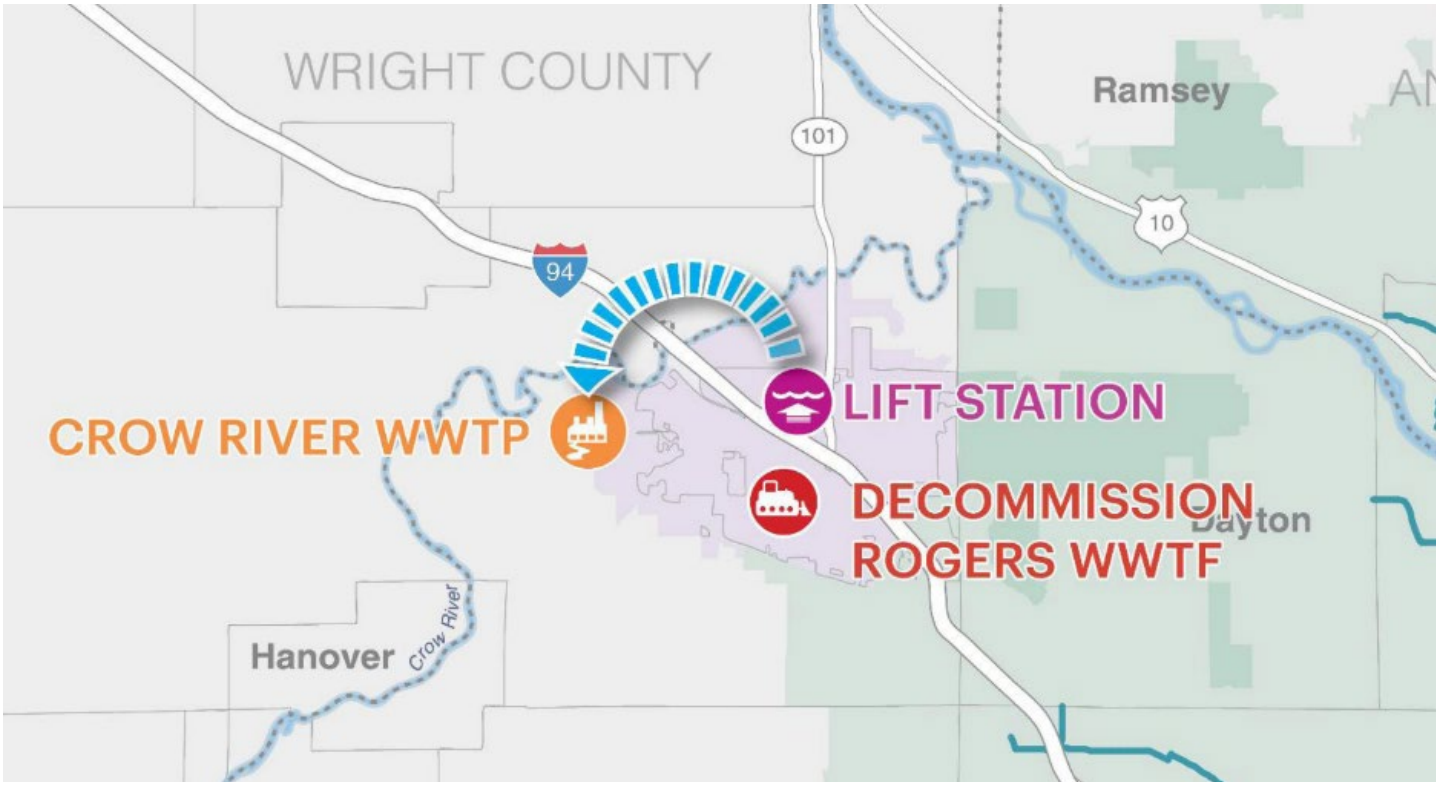
- Authorized Capital Program (ACP): $2,475,916
- Capital Improvement Plan (CIP): $600,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8099 – Crow River WRRF



Map showing location of future Crow River Water Resource Recovery Facility (WRRF) southwest of Interstate 94 in Rogers

Description

This program provides funding for planning and implementation of a new Crow River WRRF located at 25940 141st Avenue North, Rogers, MN 55374. It will serve the City of Rogers as well as portions of Dayton and Corcoran.

Purpose and justification

Planning work is documented in the Crow River WRRF Facility Plan (March 5, 2025).

The Crow River WRRF is needed to free up capacity for urban core growth in the Elm Creek interceptor, which currently serves a rapidly expanding portion of Rogers. This facility will serve 2050's projected growth in the communities of Rogers, Dayton, Corcoran, and in the surrounding area.

Program location

The active projects within this program are in the following Council districts: 1

Active projects in program

Project Number	Project Title
8099XX	Crow River WRRF

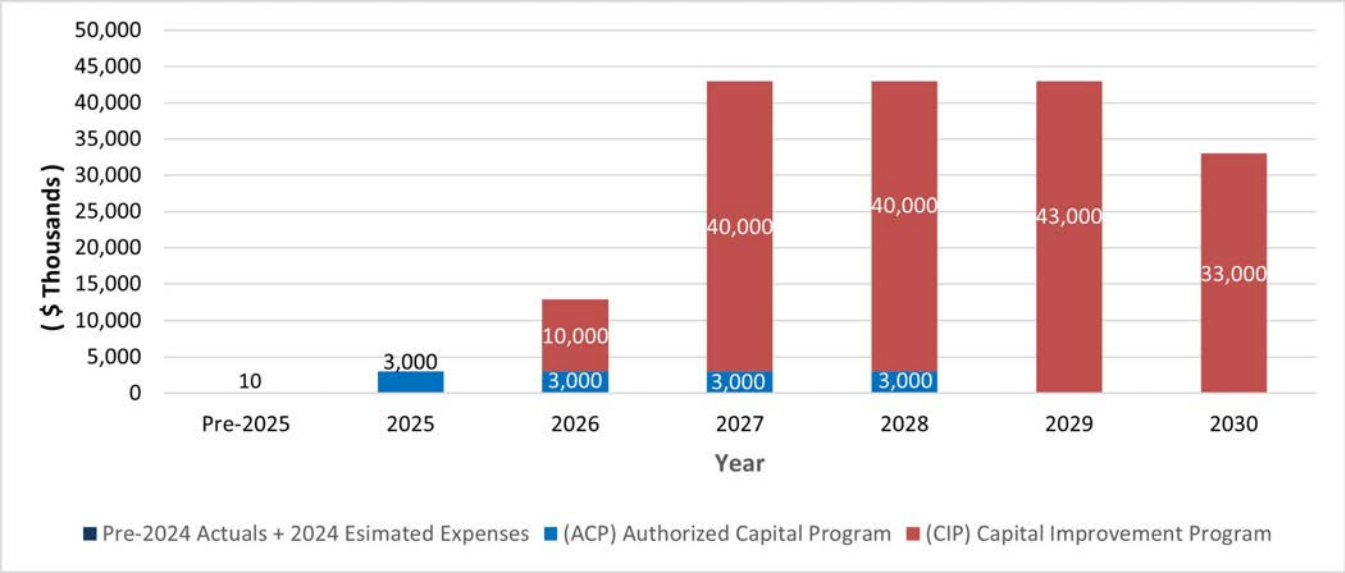
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $12,010,000
- Capital Improvement Plan (CIP): $166,000,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8100 – IPIP

Northern Star staff observe a new pretreatment system. Right: High Strength Waste enters a holding tank at Empire WRRF

Description

Industrial Pretreatment Incentive Program (IPIP) provides financial incentives to assist high-strength industrial wastewater dischargers to pretreat the wastewater at their site, reducing or eliminating the high-strength discharge and reducing Environmental Services' (ES) cost to treat that discharge.

New pretreatment facilities have been installed under this program at Northern Star, industrial waste discharger to the Blue Lake WRRF, and at Kemps, industrial waste discharger to Empire WRRF. It is anticipated that this program will be closed in 2026.

Purpose and justification

This innovative public-private partnership yields benefits to ES ratepayers, private industry, and the environment. The Council and its ratepayers benefit by avoiding operating costs (e.g. energy) to treat high-strength waste, improve the ability to generate electricity by better handling of high-strength waste, and potentially delay or eliminate the need for water resource recovery facility expansion. Industries benefit by having access to low-cost loans to install treatment equipment, reducing or eliminating strength charges, and enhancing ability to grow.

Program location

Environmental Services is reviewing project applications.

Active projects in program

None

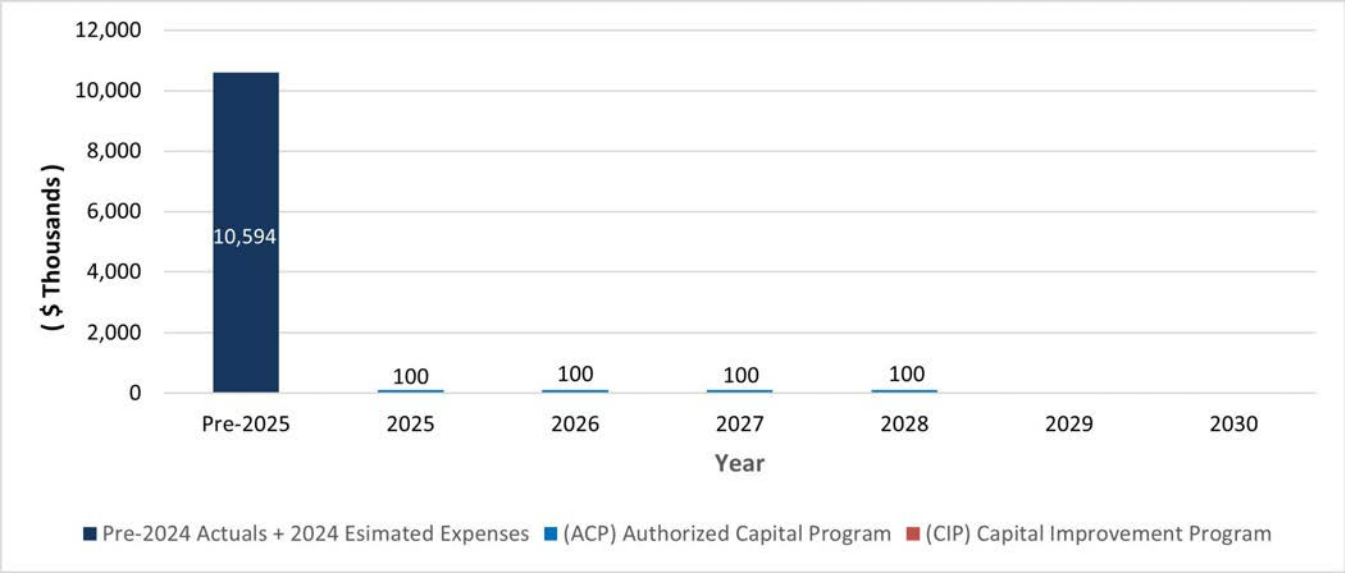
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $10,994,469
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8103 – Metro WRRF Restoration & Improvements

Metropolitan Water Resource Recovery Facility (WRRF)

Description

This program provides funding for planning and implementation of projects to address renewal and future permit needs at the Metropolitan Water Resource Recovery Facility (Metro WRRF). The renewal work continues from two previous programs, 8059 Metro WRRF Rehabilitation and Facilities Improvements and 8089 Metro WRRF Asset Renewal.

Purpose and justification

Planning work is based on condition assessments of liquids processing, solids processing and system-wide facilities, and anticipated future permit requirements.

Program location

The active projects within this program are in the following Council Districts: 13

Active projects in program

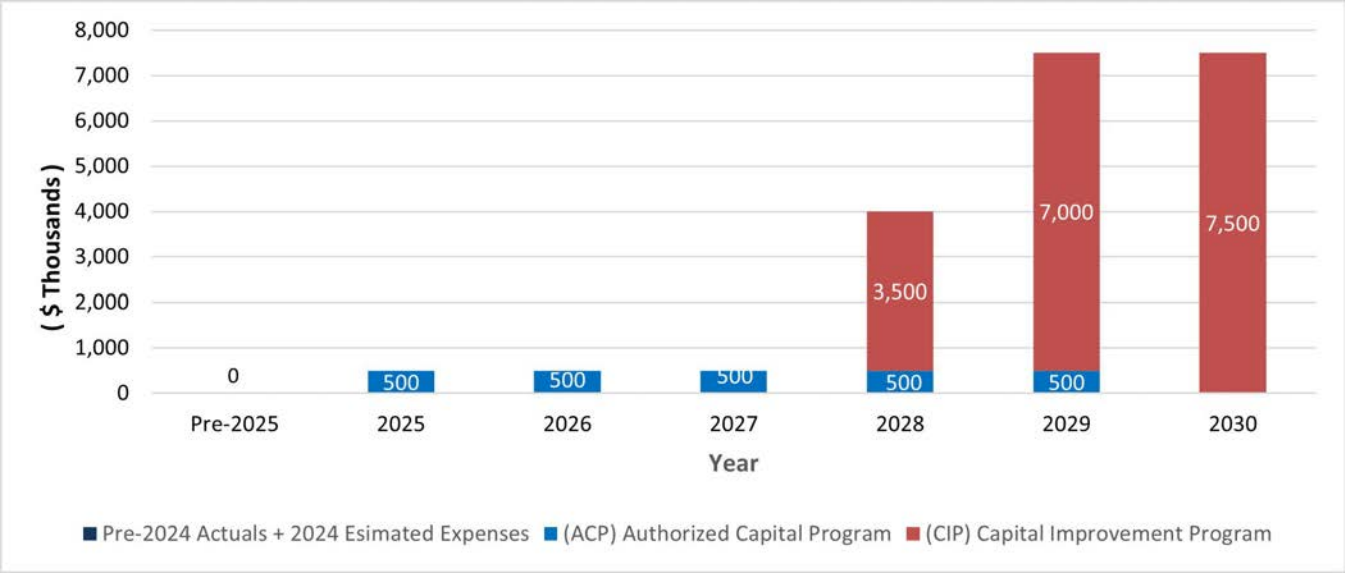
Project Number	Project Title
8103XX	Fluidized Bed Reactor (FBR) 1-3 Renewal

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $2,500,000
- Capital Improvement Plan (CIP): $18,000,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



FBR 1-3 Renewal

Program 8103 **Project #8103XX**

Project location: Council District #13, City of Saint Paul, Metro WRRF

Gravity Thickening Metal Repair

Cake Bin Material Improvements

Incinerator Refractory Rehabilitation

Project type
Facility

Objectives
Asset Preservation

Scope
This project will include renewal of solids processing systems at the Metropolitan Water Resource Recovery Facility (WRRF). Systems to be renewed will include thickening, sludge storage, dewatering, incineration, and support systems.

Project need
A major renewal of the incineration system is needed as components of the incinerator system will be over 20 years old and at the end of their useful life. Renewal is needed to extend the service life of assets and increase service availability.

Planning: 2025 through 2026	Design: 2027 through 2028	Construction: 2029 through 2031

Financial analysis

2025 cash flow:	$0
Current ACP:	$0
2025 through 2030 cash flow:	$17,500,000
Total project cost:	$21,000,000

Program 8104 – Empire Water Resource Recovery Facility Improvements

Empire Water Resource Recovery Facility (WRRF)

Description

This program provides funding for planning and implementation of projects to address renewal and future permit needs at the Empire Water Resource Recovery Facility (WRRF).

Purpose and justification

Planning work is based on condition assessments of liquids processing, solids processing and system-wide facilities, and anticipated future permit requirements.

Program location

The active projects within this program are in the following Council Districts: 16

Active projects in program

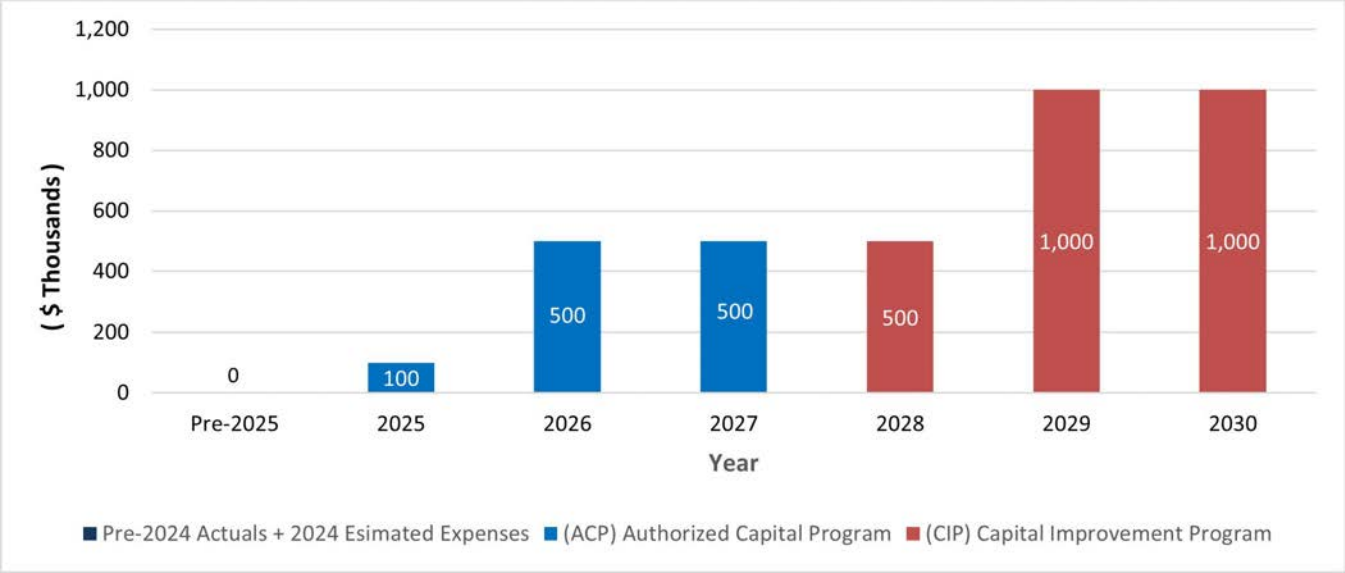
Project Number	Project Title
8104XX	TBD

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $1,100,000
- Capital Improvement Plan (CIP): $2,500,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Appendix B: Project Summaries by Program – Interceptor

Program 8028 – Blue Lake Interceptor Improvements

Contractor installation of 7071 Forcemain

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. The major project areas are located in Victoria, Excelsior, Orono, and Deephaven.

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 sewershed 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 the following Council districts: 1, 3, and 4

Active projects in program

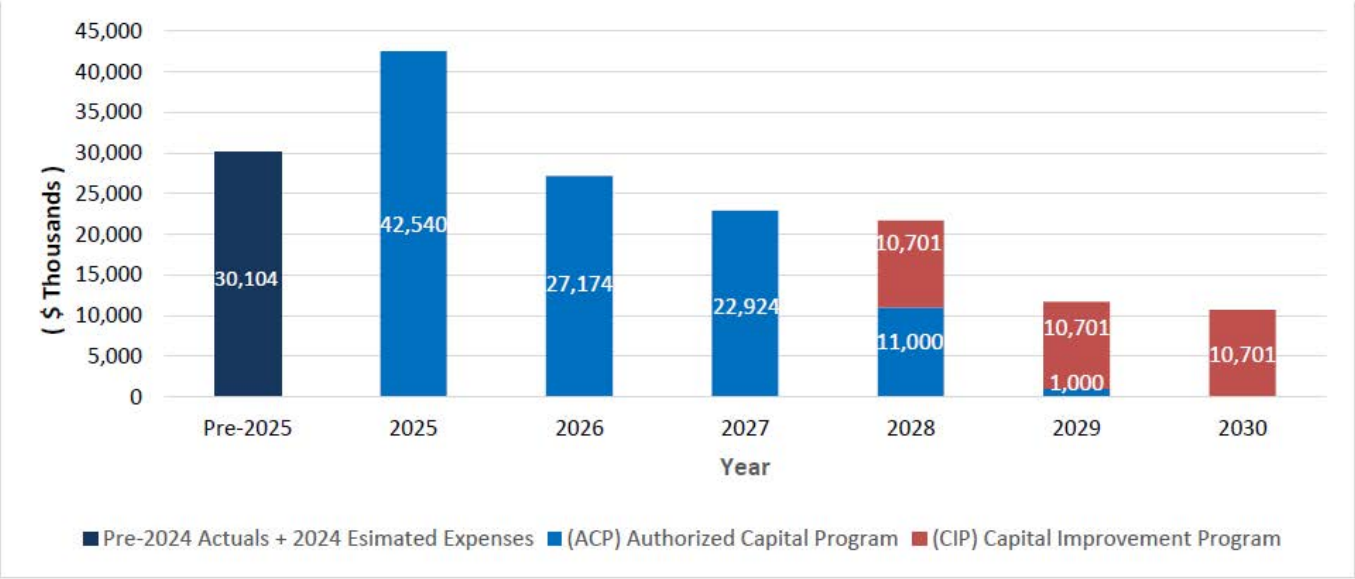
Project Number	Project Title
802800	Lake Minnetonka Area (Parent Project)
802803	8352 Forcemain Improvements
802806	Interceptor 8253-327 Forcemain Improvements
802809	Shakopee Interceptors 9206-1 and 7120 Rehabilitation
802831	Orono Lift Stations L46 and L49 Improvements
802835	L48 Rehabilitation and 6-DH-645 Forcemain Replacement
802856	Excelsior Area Lift Station L20
802863	Orono 8567 Channel Crossings Replacement
802897	Orono Interceptor 7113 Forcemain Replacement
802819	Long Lake 8352A Gravity Capacity Improvements

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $134,741,938
- Capital Improvement Plan (CIP): $32,103,000

Estimated program cash flow from 2025 through 2030

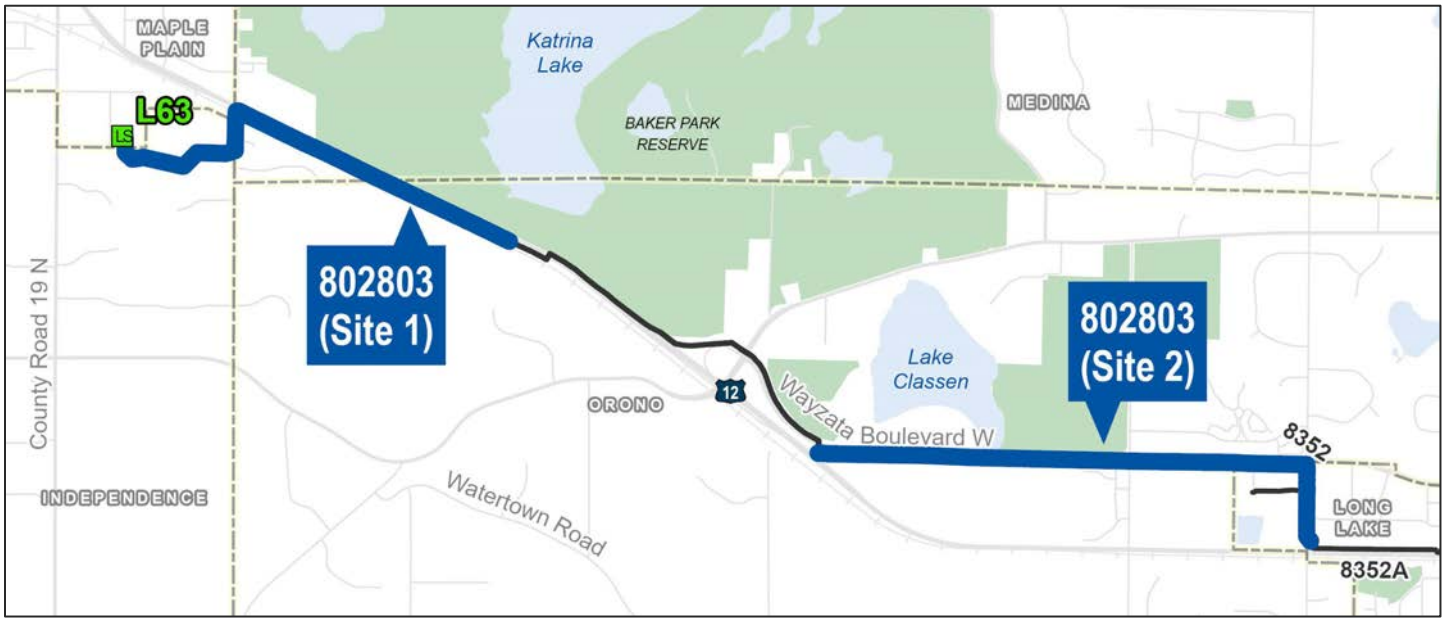
Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



8352 Forcemain Improvements

Program family 8028 **Project #802803**

Project location: Council districts #1 and #3, Cities of Maple Plain, Orono, Medina, and Long Lake



Map of Project #802801 Site 2 locations in north Orono and southwest Medina

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Project includes rehabilitation and/or replacement of approximately 4.1 miles of forcemain due to deterioration of pipe walls along with installation of redundant forcemain to provide system reliability.

Project need
Forcemain 8352 was constructed in 1985 as a single-barrel, 12-inch ductile iron pipe which runs approximately 5.1 miles from L63 in the City of Maple Plain to the discharge MH-172 in Long Lake. A one-mile segment of the forcemain at the intersection of MN Highway 12 and County Road 6 was replaced in 2011 with dual barrel 14-inch HDPE pipes. Forcemain 8352 was evaluated using ultrasonic testing in 2021 and determined to have wall thickness loss. This reduction in wall thickness will require rehabilitation to extend forcemain service life. Reliability and future flow needs will be evaluated as part of this project.

Project schedule:

Planning: 2022 through 2025	Design: 2025 through 2027	Construction: 2028 through 2030

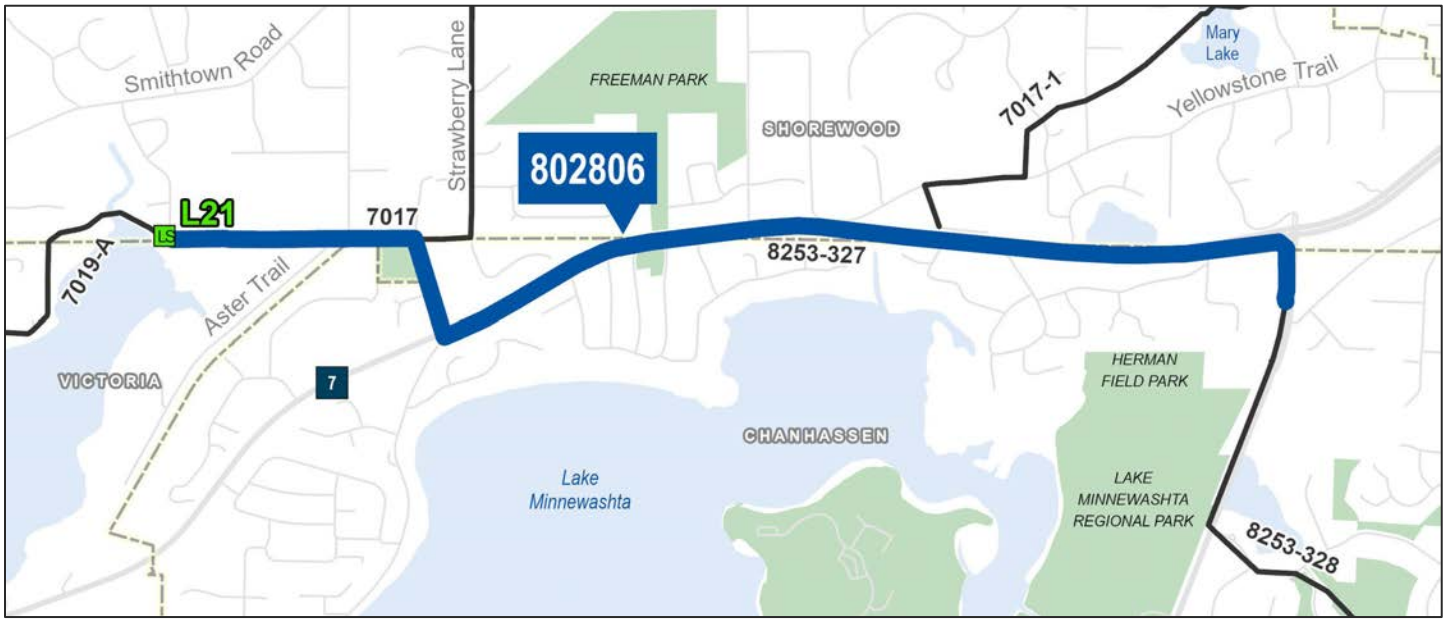
Financial analysis

2025 cash flow:	$100,000
Current ACP:	$3,100,000
2025 through 2030 cash flow:	$20,600,000
Total project cost:	$21,000,000

Interceptor 8253-327 Forcemain Improvements

Program family 8028 **Project #802806**

Project location: Council district #3, Cities of Shorewood and Chanhassen



Map of Project #802806 location north of Lake Minnewashta

Project type
Interceptor Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
Rehabilitate existing forcemain due to pipe corrosion and increase system reliability by installing a second redundant forcemain.

Project need
Forcemain 8253-327 was built in 1988 and runs from L21 in the City of Shorewood to the discharge approximately 3 miles to the east. An external ultrasonic thickness gauge survey conducted in 2021 found locations of pipe loss. Additional planning will be conducted to recommend reliability improvements.

Project schedule:

Planning: 2022 through 2024	Design: 2025 through 2026	Construction: 2027 through 2028

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$750,000
2025 through 2030 cash flow:	$25,000,000
Total project cost:	$25,000,000

Shakopee Interceptors 9206-1 and 7120 Rehabilitation

Program family 8028 **Project #802809**

Project location: Council district #4, City of Shakopee

Map of project #802809 location near Quarry Lake Park in Shakopee

Project type
Interceptor Rehabilitation

Objectives
Asset Preservation

Scope
Provide cured-in-place pipe (CIPP) lining to over 3,500 linear feet of 72-inch Interceptor 7120 and 31 linear feet to 72-inch Interceptor 9206-1. The work also includes rehabilitating maintenance structures and a junction box along the interceptor.

Project need
A 2020 condition assessment revealed that Interceptor 7120 had a condition rating of 4 and Interceptor 9206-1 had a condition rating of 5.

Project schedule:

Planning: 2024	Design: 2024 through 2025	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$1,050,000
2025 through 2030 cash flow:	$5,950,000
Total project cost:	$5,950,000

Orono Lift Stations L46 and L49 Improvements

Program family 8028 **Project #802831**

Project location: Council District #3, City of Orono

Map of Project #802831 location along Shadywood Road in Orono

Project type
Lift Station Improvements

Objectives
Quality Improvements

Scope
Replace L49 at neighboring property and fully rehabilitate L46 through replacement of pumps, mechanical equipment, and site improvements for safety.

Project need
A 2009 study evaluating L46 and L49 revealed L49 is at the end of its useful life and has inadequate capacity to meet current peak flow rates. Its current location is also difficult to access for maintenance. Land has been purchased adjacent to the existing lift station to provide easier access. L46 requires pump and valve replacement, electrical panel upgrades, and site improvements to protect existing equipment from traffic.

Project schedule:

Planning: 2019 through 2020	Design: 2020 through 2023	Construction: 2024 through 2026

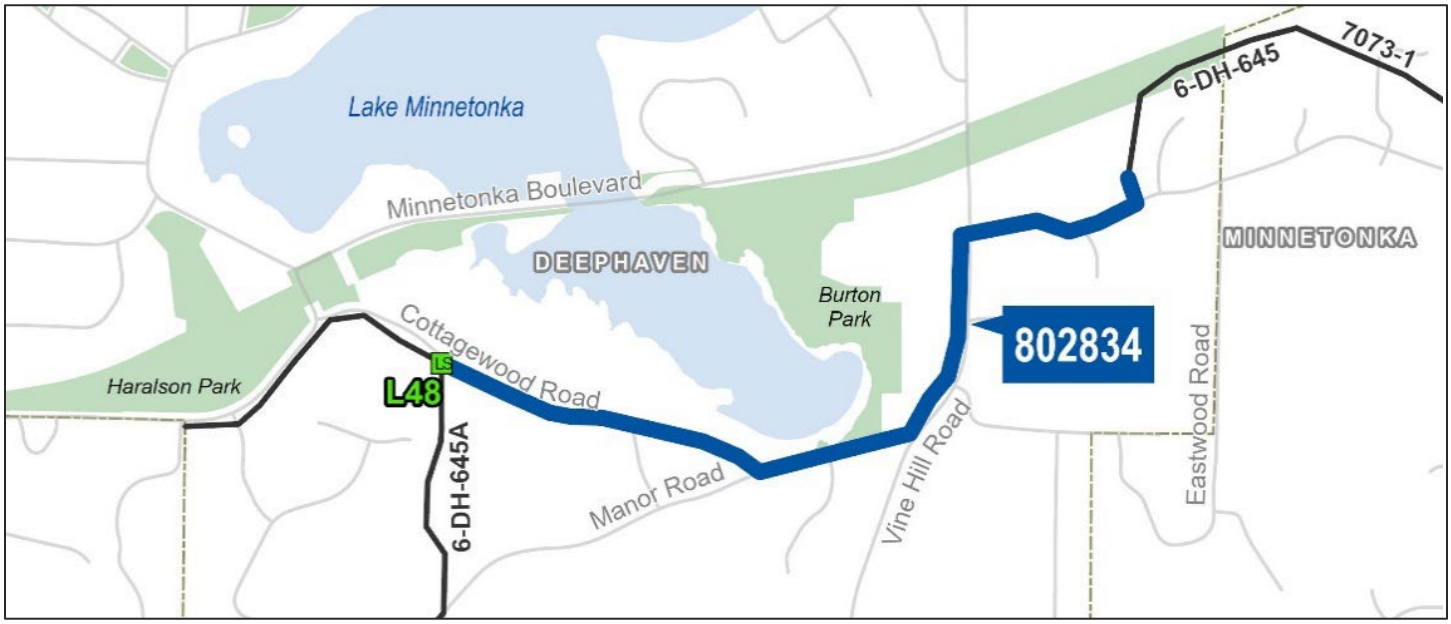
Financial analysis

2025 cash flow:	$3,600,000
Current ACP:	$6,500,000
2025 through 2030 cash flow:	$5,450,000
Total project cost:	$6,500,000

L48 Rehabilitation and 6-DH-645 Forcemain Replacement

Program family 8028 **Project #802834**

Project location: Council district #3, City of Deephaven



Map of Project #802834 location in the Burton Park area in Deephaven

Project type
Lift Station and Interceptor Improvements

Objectives
Asset Preservation

Scope
The rehabilitation of L48 will include a new valve vault, pumps and valves, electrical and site work, forcemain replacement, and replacement of the gravity discharge pipe.

Project need
The 16-feet-deep buried valves are broken outside of the station. A buried temporary conveyance system was installed to convey around the broken valves. The forcemain was built in 1970, is over 50 years old, and is reaching the end of its service life.

Project schedule:

Planning: N/A	Design: 2021 through 2022	Construction: 2023 through 2026

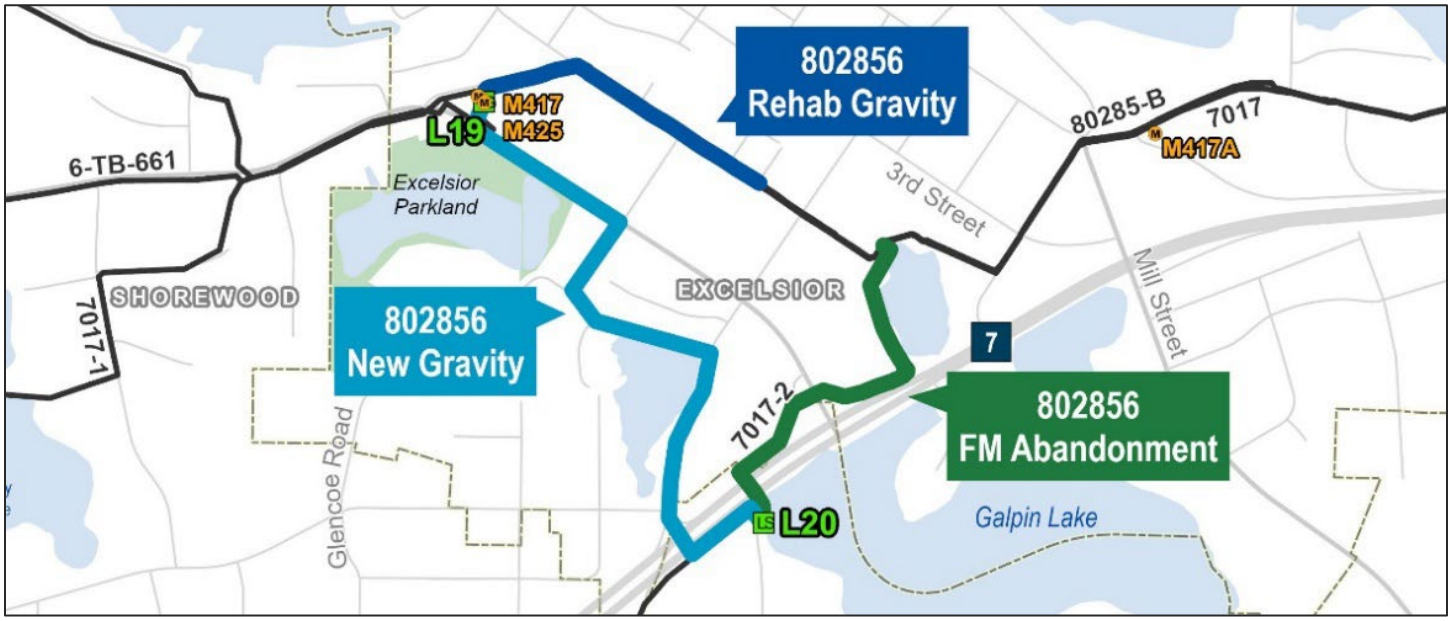
Financial analysis

2025 cash flow:	$6,000,000
Current ACP:	$7,367,000
2025 through 2030 cash flow:	$7,500,000
Total project cost:	$8,558,000

Excelsior Area Lift Station L20

Program family 8028 **Project #802856**

Project location: Council district #3, City of Excelsior



Map of Project #802856 in Excelsior showing new and rehabilitated gravity sewer and forcemain abandonment

Project type
Interceptor Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
Remove existing lift station L20 and install 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 2021 Lake Minnetonka Facility Plan determined that L20 should be abandoned and replaced with a gravity pipe connection to L19.

Project schedule:

Planning: 2008 through 2019	Design: 2019 through 2022	Construction: 2023 through 2026

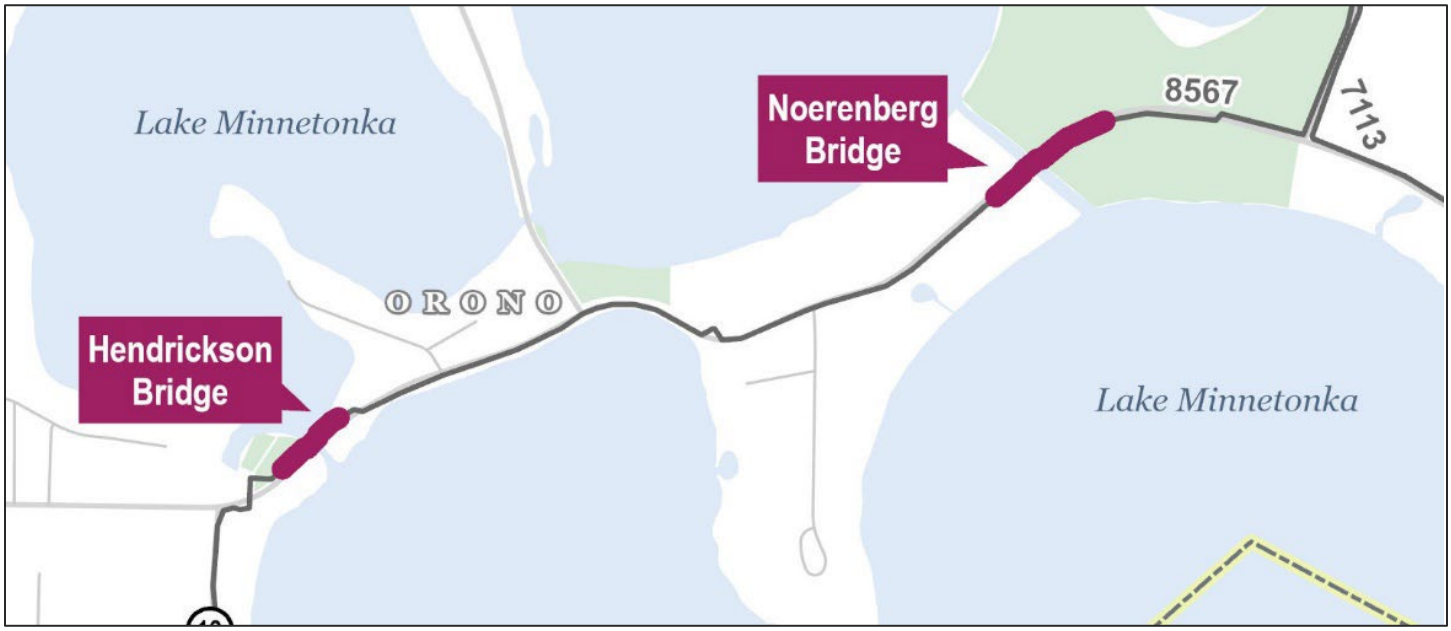
Financial analysis

2025 cash flow:	$2,000,000
Current ACP:	$14,300,000
2025 through 2030 cash flow:	$2,250,000
Total project cost:	$13,037,000

Orono 8567 Channel Crossings Replacement

Program family 8028 **Project #802863**

Project location: Council district #3, City of Orono



Map of Project #802863 location at the Hendrickson and Noerenberg Bridges in Orono

Project type
Interceptor Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
To minimize future risk, a redundant parallel HDPE pipe is proposed at each channel crossing. Directional drilling will be used to complete the redundant pipe along with new connection structures.

Project need
In 2022, Hennepin County replaced the Noerenberg and Hendrickson bridges on North Shore Drive. Interceptor Forcemain 8567 was suspended on the bridges and partially relocated under the Lake Minnetonka channels. This project will finish the relocation, installing a parallel crossing on each channel and four structures.

Project schedule:

Planning: 2020	Design: 2021	Construction: 2022 through 2027

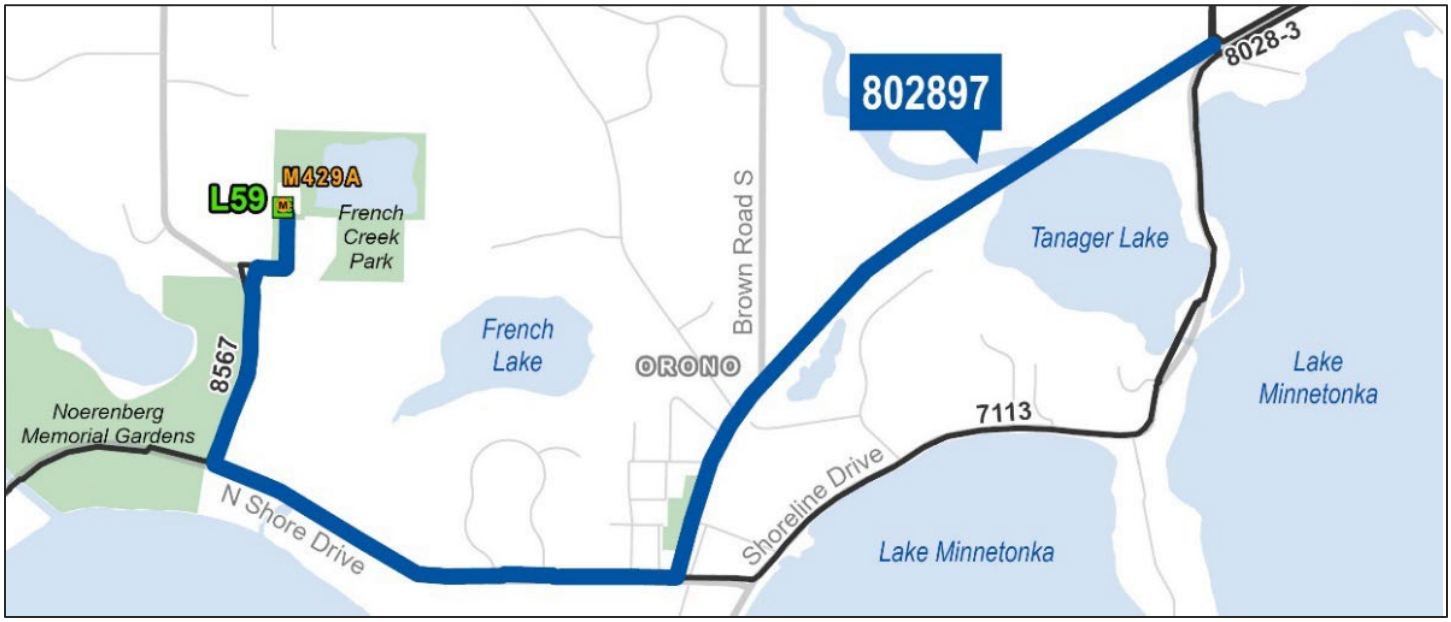
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$6,000,000
2025 through 2030 cash flow:	$3,050,000
Total project cost:	$3,760,000

Orono Interceptor 7113 Forcemain Replacement

Program family 8028 **Project #802897**

Project location: Council district #3, City of Orono



Map of Project #802897 location along Shadywood Road in Orono

Project type
Interceptor Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
Construction of a redundant forcemain along 7113 and the HCRAA trail corridor and rehabilitation of the existing forcemain.

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. Forcemain 7113 is approaching the end of its service life and needs replacement or rehabilitation. A new redundant forcemain is proposed to increase reliability and allow the existing forcemain in Shoreline Drive to be inspected and rehabilitated or replaced.

Project schedule:

Planning: 2019 through 2022	Design: 2022 through 2025	Construction: 2026 through 2029

Financial analysis

2025 cash flow:	$600,000
Current ACP:	$3,070,000
2025 through 2030 cash flow:	$27,100,000
Total project cost:	$29,000,000

Long Lake 8352A Capacity Improvements

Program family 8028 **Project #802819**

Project location: Council district #3, City of Long Lake

Map of project #802819 location running parallel to MnDOT Highway 12 in Long Lake.

Project type
Interceptor Improvements

Objectives
Expansion

Scope
Construction of new gravity pipe to provide future capacity and reliability of the system

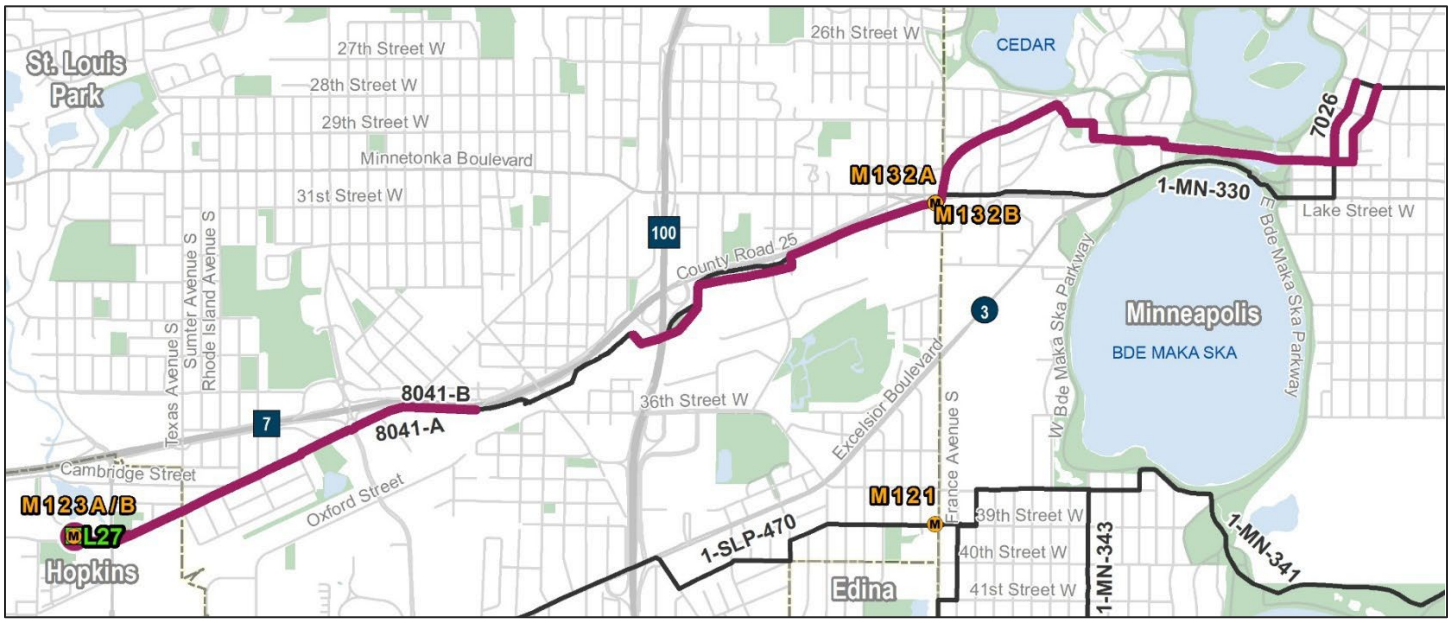
Project need
The project will evaluate capacity and rehabilitation/replacement alternatives of approximately 7,000 linear feet of 12- 18- and 24-inch DI gravity pipe between MH 171 and the L60 Lift Station.

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

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$2,940,000
2025 through 2030 cash flow:	$12,100,000
Total project cost:	$12,100,000

Program 8041 – Hopkins System Improvements



Program 8041 project areas from Lift Station 27 in Hopkins northeast to the area north of Bde Maka Ska

Description

The program provides for the replacement of a 5-mile-long forcemain, known as the Hopkins forcemain, and lift station L27, located in the city of Hopkins. The forcemain is a single 24- to 30-inch interceptor pipe that begins in Hopkins at the intersection of Blake Road and Lake Street and passes through St. Louis Park and Minneapolis, where it discharges to the 1-MN-330 gravity interceptor sewer. The system serves the cities of Hopkins, St. Louis Park, and Minneapolis. The new forcemain system is constructed as a dual 18- to 24-inch pipe system. The new 6.3 MGD lift station is constructed 700 feet to the west of the existing lift station.

Purpose and justification

These facilities are over 40 years old, have significant condition issues, and lack redundancy. The existing forcemain is constructed as pre-stressed concrete cylinder pipe, which is susceptible to internal and external corrosion. In 2000, a corroded section of the forcemain collapsed within the Dean neighborhood of Minneapolis. In addition, the existing lift station is undersized, with little storage. This presented an operational limitation to addressing malfunctions at the lift station without causing backups to homes or spills.

Program location

The active projects within this program are in the following Council districts: 6

Active projects in program

Due to funding shortages in this program, the last two construction projects in Minneapolis are planned to be funded under the Interceptor Rehabilitation Program 809000. The Hopkins System Improvements family is only used for funding the consultants and the cooperative construction agreements on the two remaining Minneapolis projects.

Project Number	Project Title
804100	Hopkins Systems Improvements (Parent Project)

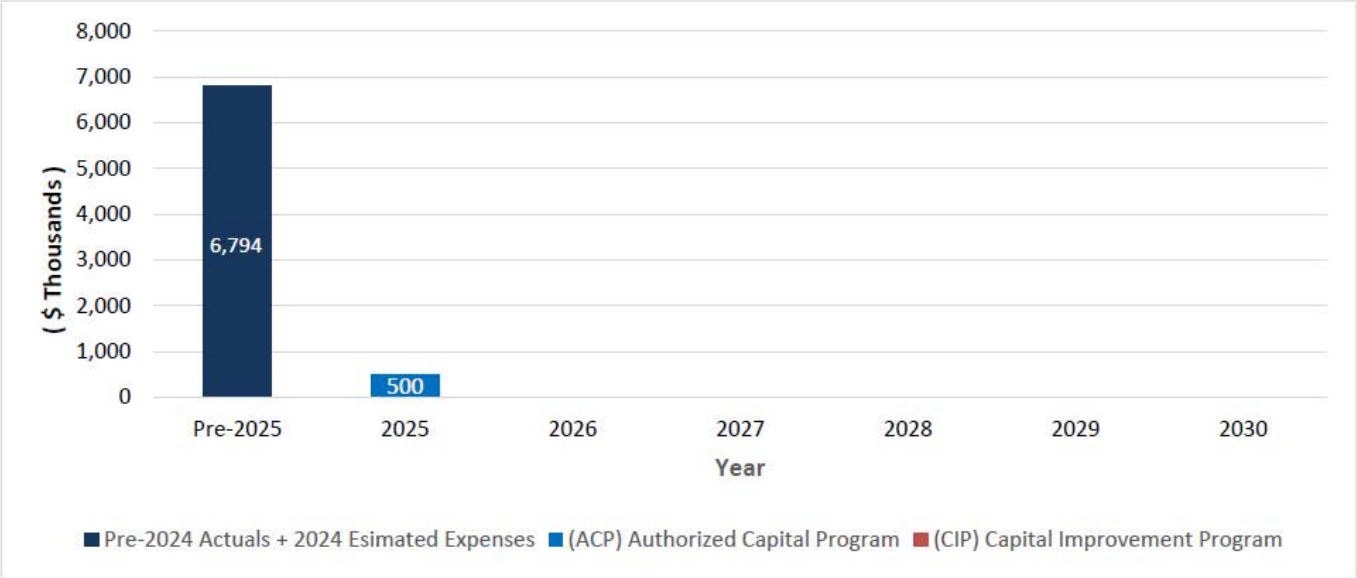
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $7,294,142
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8055 – Lift Station Rehabilitation

L66 (Savage) dry well

Description
Upgrades include 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

Active projects in program

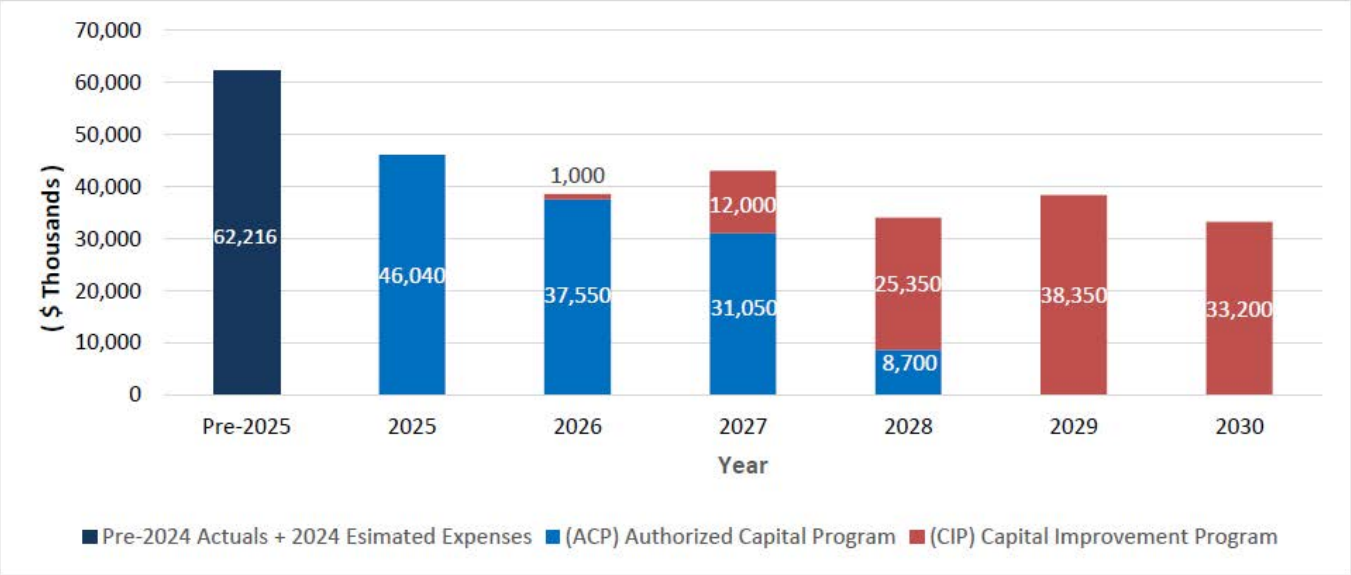
Project Number	Project Title
805500	Lift Station Rehabilitation (Parent Project)
805502	Lift Station Condition Assessments
805503	Lift Station L13 HVAC Improvements
805506	FM-Siphon-Rx-Outfall Inspection Phase 1
805511	Lift Stations L50 and L51 Generator Upgrades
805515	Lift Stations L35 and L42 Rehabilitation
805516	Lift Station L15 Rehabilitation
805564	Lift Station L66 Rehabilitation
805566	Lift Station Electrical Rehabilitation (L01, L02, L03, L31)
805568	Lift Station L71 System Improvements
805569	Lift Station L73 Odor Control Improvements
805576	Lift Station L29 Rehabilitation
805581	

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $108,256,444
- Capital Improvement Plan (CIP): $61,390,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



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

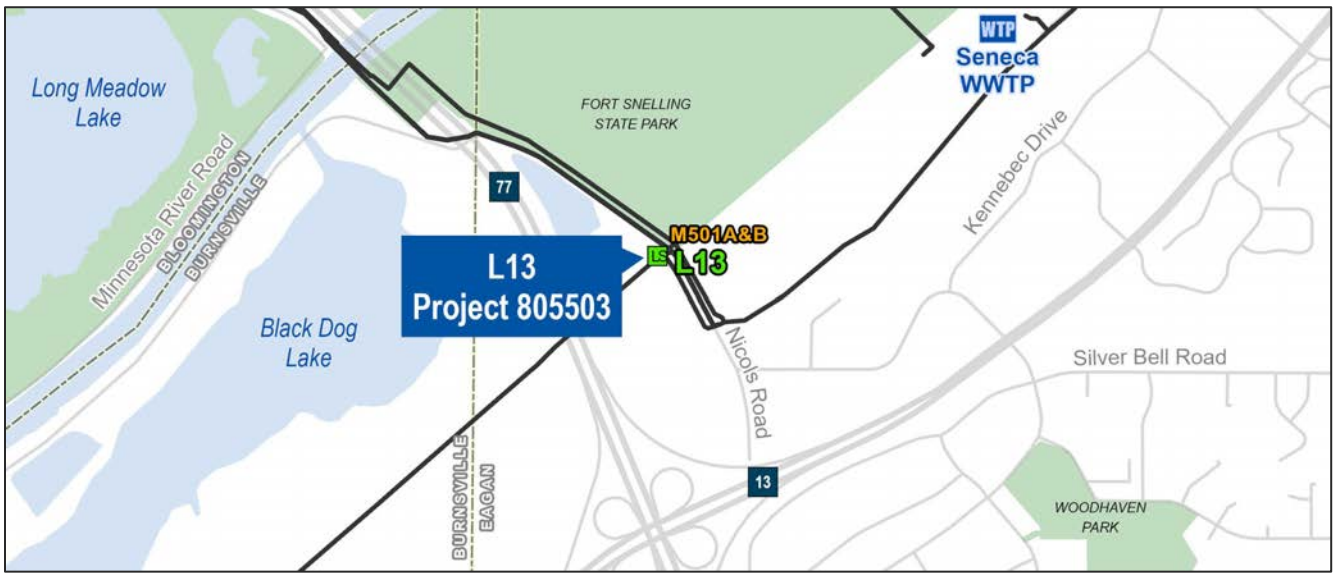
Financial analysis

2025 cash flow:	$300,000
Current ACP:	$1,600,000
2025 through 2030 cash flow:	$1,200,000
Total project cost:	$2,171,000

Lift Station L13 HVAC Improvements

Program family 8055 **Project #805503**

Project location: Council district #15, City of Eagan



Map of project #805503 location near Nicols Road and Silver Bell Road in Eagan

Project type
Lift Station Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
Design and construct odor control systems that reduce odors and preserve the function of the existing lift station including a study of hydrogen sulfide sources in the tributary area and options to mitigate them.

Project need
High hydrogen sulfide levels will continue to cause corrosion within the lift station that can compromise station reliability. In addition, odors from the lift station are leaving the lift station site. The odor and potential disruption of service to our customers does not meet the Council's Level of Service goals.

Project schedule:

Planning: 2025 through 2026	Design: 2026 through 2027	Construction: 2028 through 2029

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$1,114,550
2025 through 2030 cash flow:	$5,400,000
Total project cost:	$5,450,000

FM-Siphon-Rx-Outfall Inspection 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 2029

Financial analysis

2025 cash flow:	$2,500,000
Current ACP:	$6,750,000
2025 through 2030 cash flow:	$25,700,000
Total project cost:	$34,517,000

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 along with five portable generators to use throughout the system 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	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$786,000
2025 through 2030 cash flow: Total project cost:	$6,700,000 $6,708,000

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. The primary findings of need are: no flow metering; no standardized flushing procedure; no VFD control for existing pumps; insufficient wet well volume for peak conditions; and existing air release valves are inoperable.

Project schedule:

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

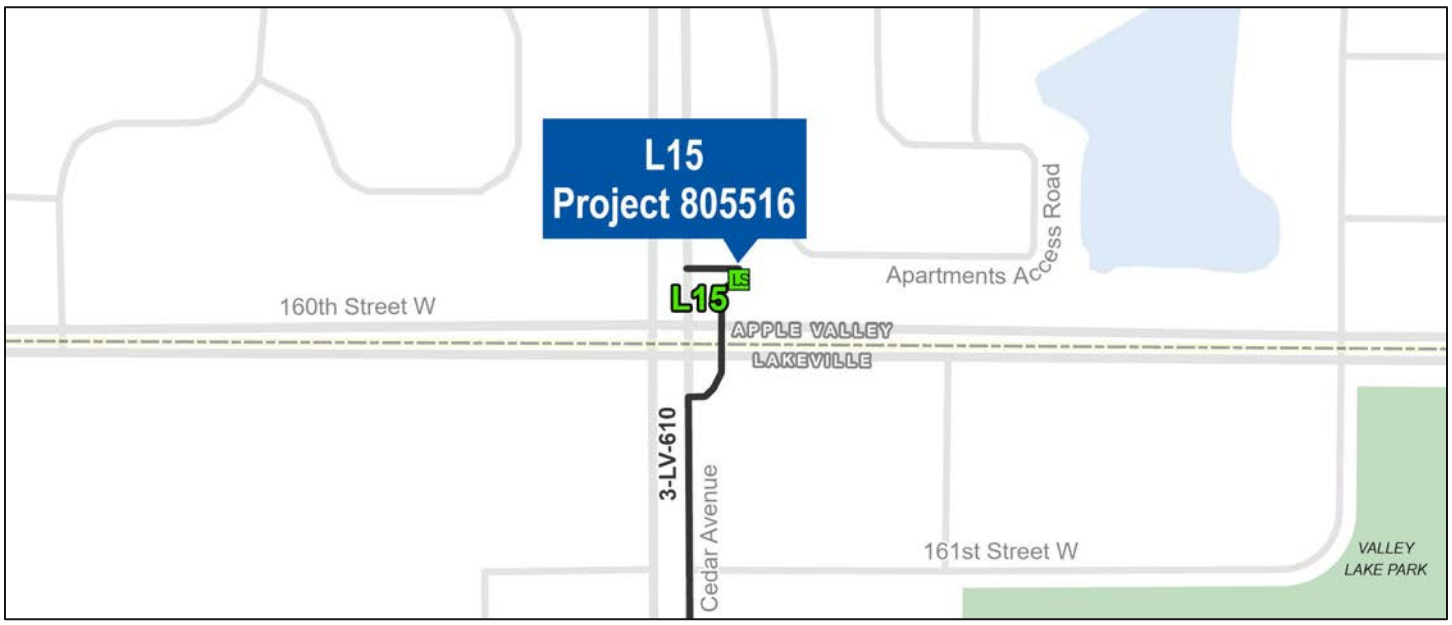
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$300,000
2025 through 2030 cash flow:	$29,500,000
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 corroded equipment and concrete walls. There is outdated HVAC, mechanical, and electrical equipment that needs to be replaced.

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

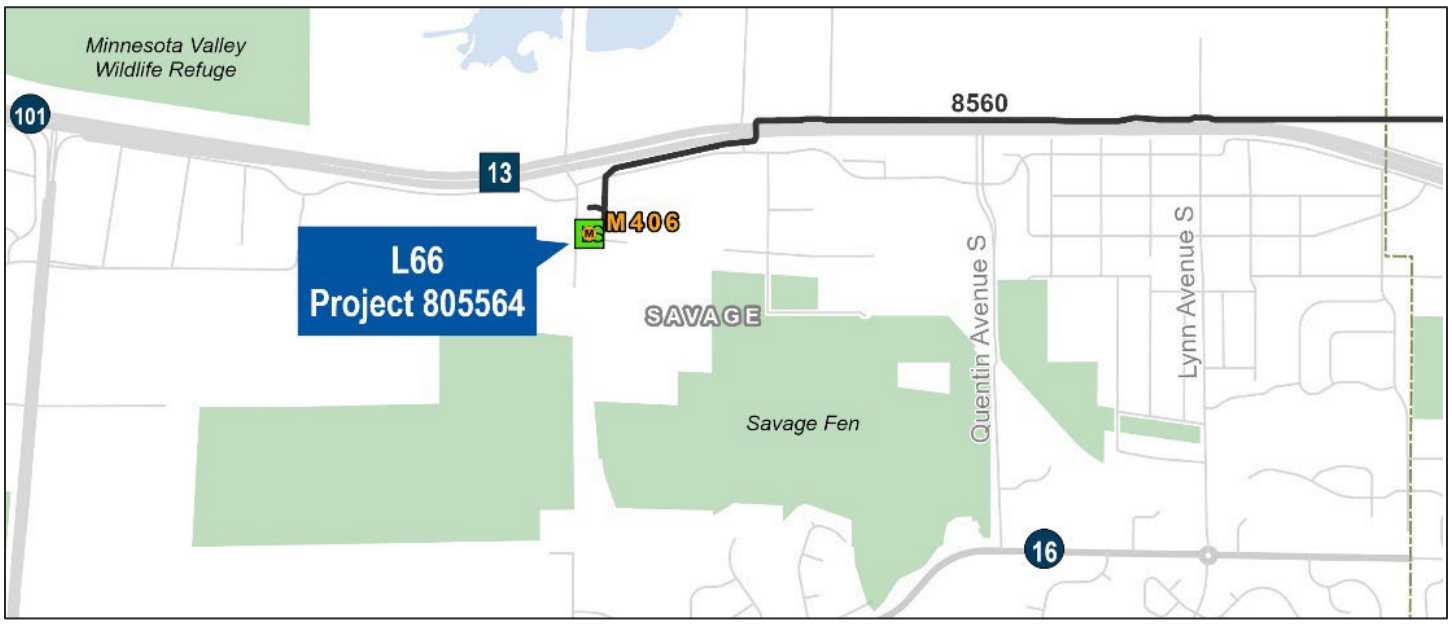
Financial analysis

2025 cash flow:	$100,000
Current ACP:	$1,950,000
2025 through 2030 cash flow:	$15,300,000
Total project cost:	$16,300,000

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

2025 cash flow:	$2,500,000
Current ACP:	$11,512,000
2025 through 2030 cash flow:	$11,250,000
Total project cost:	$11,512,000

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

Program family 8055 **Project #805566**

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: 2025 through 2026

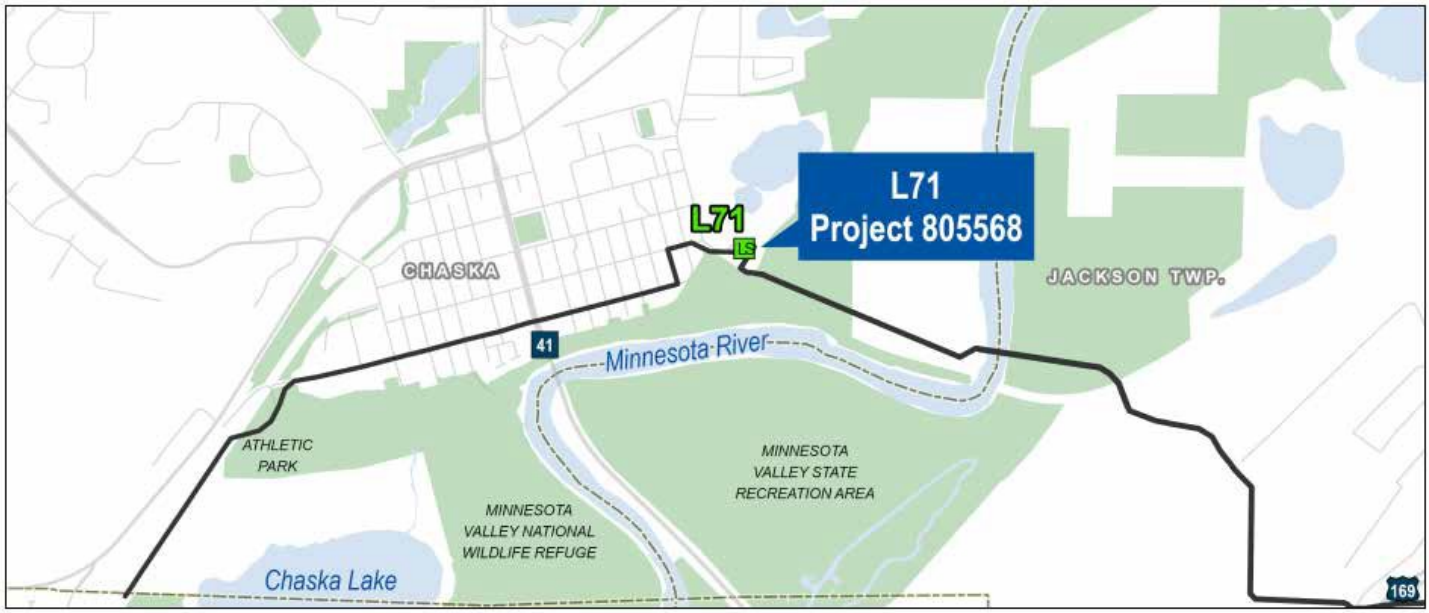
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$1,350,000
2025 through 2030 cash flow:	$4,100,000
Total project cost:	$4,968,000

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 fats, oils, and greases. The FOGs impact 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

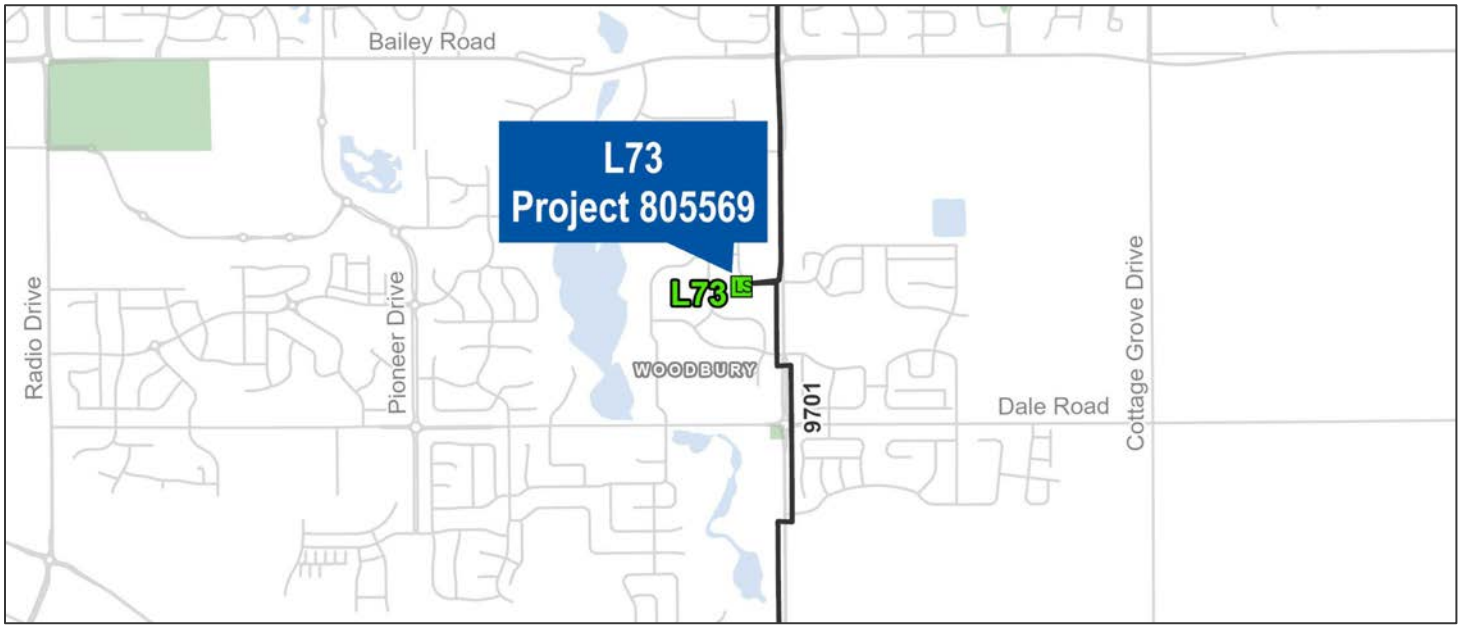
Financial analysis

2025 cash flow:	$150,000
Current ACP:	$600,000
2025 through 2030 cash flow:	$24,150,000
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

2025 cash flow:	$1,400,000
Current ACP:	$2,798,000
2025 through 2030 cash flow:	$1,650,000
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 or the over 50-year-old forcemain piping are necessary to maintain reliability.

Project schedule:

Planning: 2024 through 2025	Design: 2025 through 2026	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$600,000
Current ACP:	$2,800,000
2025 through 2030 cash flow:	$1,200,000
Total project cost:	$2,800,000

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. Air release valves on the forcemain are inoperable and are impacting the forcemain capacity. The forcemain and air releases cannot be inspected or repaired without major temporary conveyance.

Project schedule:

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

Financial analysis

2025 cash flow:	$2,000,000
Current ACP:	$3,004,000
2025 through 2030 cash flow:	$17,000,000
Total project cost:	$17,182,000

Program 8056 – Meter Improvements

Photo of typical flow meter

Description

This program provides funding to upgrade Environmental Services' (ES) ability to measure flows for billing, operational, and planning purposes and standardize meter equipment at similar facilities. Meter improvements include meter rehabilitation or replacement, planning meter installation, and new meter installation.

Purpose and justification

Accurate flow metering is the basis of the ES's billing system. It is essential that our customers trust the reliability and accuracy of the flow metering system. The project provides a systematic approach for capital improvements to the flow metering system. Increases in flow, greater emphasis on capturing peak flows stemming from ES's infiltration/inflow program, normal facility rehabilitation needs, and the need for additional flow metering locations for system planning purposes are driving this meter improvements project.

Program location

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

Active projects in program

Project Number	Project Title
805600	Meter Improvements (Parent Project)
805603	Flow Meter Program Support
805607	Meter M127 Improvements
805608	Meter M500A Improvements
805609	Meters M413, M643A, and M657 Improvements
805611	Meter 112 Rehab
805612	Meters M641 and M644 Improvements
805613	Chanhassen Eden Prairie Meter M448 Improvements

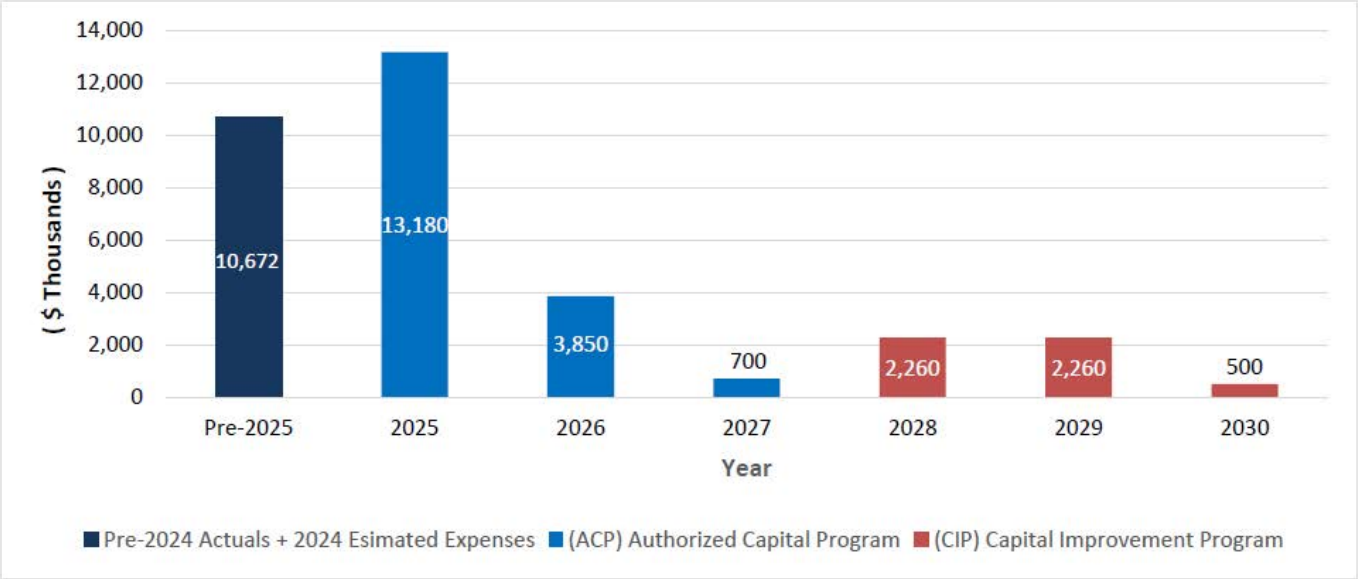
Project Number	Project Title
805615	Meter M106 Rehabilitation
805636	Replacement Meter Vault M228

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $28,402,609
- Capital Improvement Plan (CIP): $5,020,000

Estimated program cash flow from 2025 through 2030

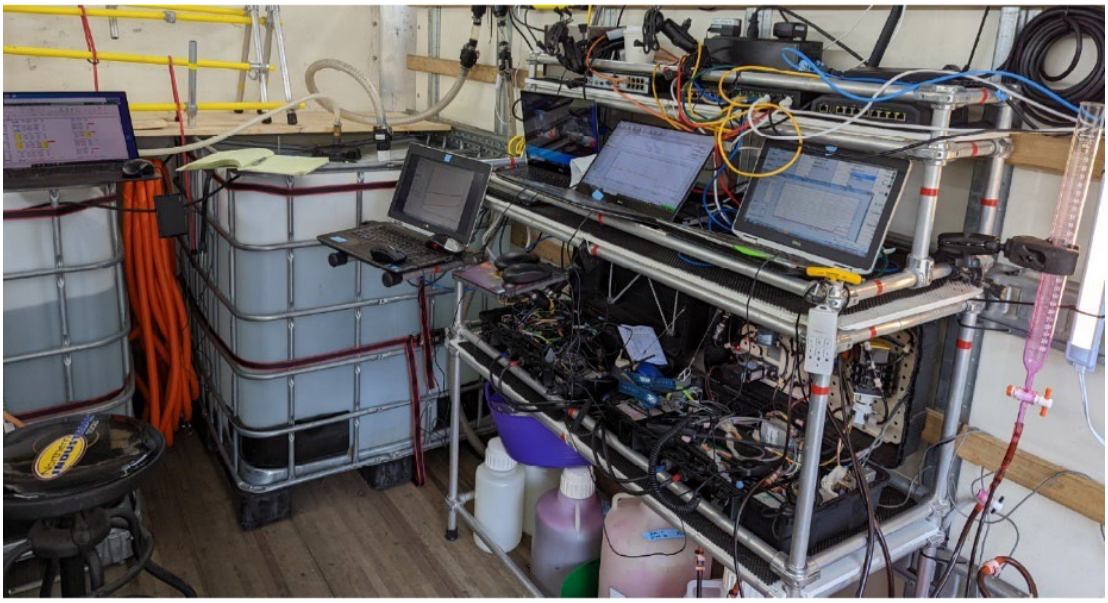
Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Flow Meter Program Support

Program family 8056 **Project #805603**

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



Dilution dye testing mobile laboratory for verification and calibration of ES Flow meters.

Project type
Condition Assessment and Study

Objectives
Asset Preservation

Scope
Perform annual flow meter calibration tests to verify accuracies.

Project need
The ES cost allocation program relies extensively on the performance and accuracy of wastewater flow meters for billing, and many meters have never had their accuracy tested.

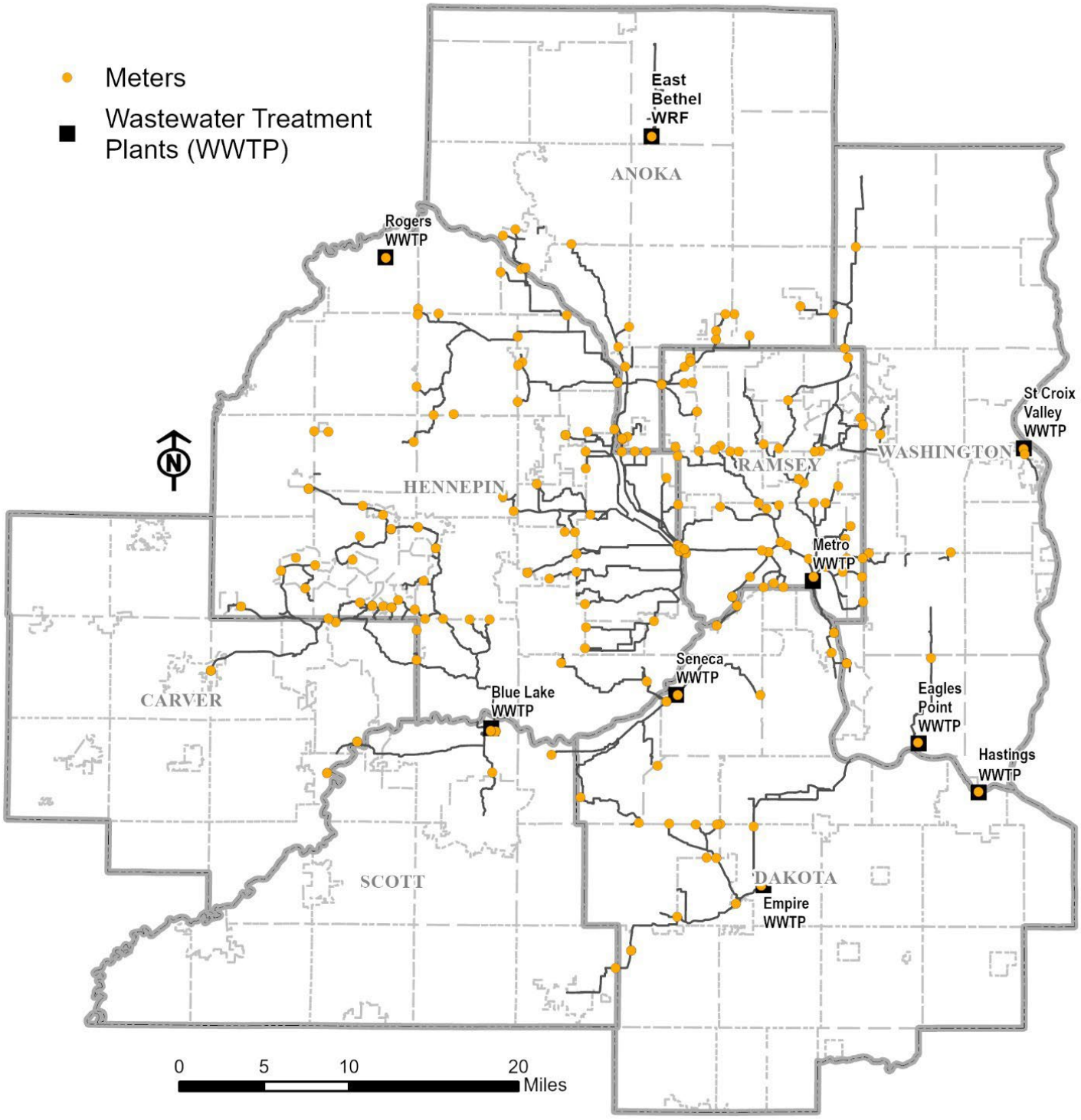
Project schedule:

Planning: 2020 through 2025	Design: N/A	Construction: N/A

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$2,736,000
2025 through 2030 cash flow:	$3,000,000
Total project cost:	$5,661,000

MCES Project 805603



Meter M127 Improvements

Program family 8056 **Project #805607**

Project location: Council district #5, City of Edina, Xerxes Avenue South and 54th Street West

Map of project #805607 location near Minnehaha Creek in Edina.

Project type
Meter Improvements

Objectives
Quality Improvements

Scope
M127 is a Parshall flume meter that has known capacity issues. Because of this, the meter is intended to be replaced, and improvements are planned to be made to the upstream and downstream interceptors.

Project need
M127 was found to be improperly sized, which leads to consistent surcharging of the meter. Additionally, the upstream and downstream pipes were found to have a negative slope through the meter, which has worsened the surcharging issue. Both problems need to be addressed so that the meter can function properly without surcharge.

Planning: 2024 through 2025	Design: 2025 through 2026	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$835,000
2025 through 2030 cash flow:	$3,184,000
Total project cost:	$3,184,000

Meter M500A Improvements

Program family 8056 **Project #805608**

Project location: Council district #5, City of Bloomington, Near Old Shakopee Road East

Map of project #805608 location near Old Shakopee Road East in Bloomington.

Project type
Meter Improvements

Objectives
Quality Improvements

Scope
M500A will be replaced with a new Parshall flume meter to provide more accurate flow metering. Additionally, odor issues upstream of the meter will be addressed specifically through reconfiguring Special MH-3.

Project need
M500A is a Parshall flume meter that was found to be improperly sized. To provide better flow metering, the meter should be replaced with a flume that is appropriately sized for the flow conditions in the area. Additionally, there have been ongoing odor complaints in the area, which are likely caused by a drop in Special MH-3 that will be reconfigured to reduce the release of hydrogen sulfide (H_2S).

Planning: 2023 through 2025	Design: 2025 through 2026	Construction: 2027 through 2028

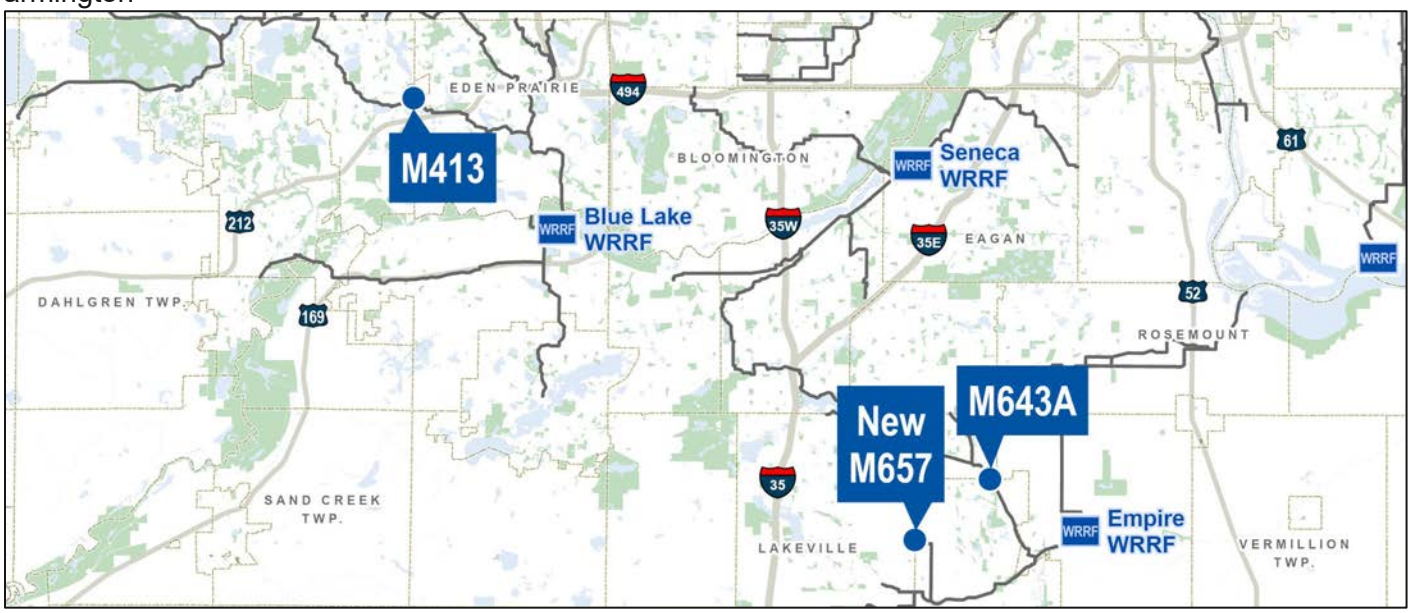
Financial analysis

2025 cash flow:	$75,000
Current ACP:	$1,050,000
2025 through 2030 cash flow:	$1,050,000
Total project cost:	$1,050,000

Meters M413, M643A, and M657 Improvements

Program family 8056 **Project #805609**

Project location: Council districts #3, Cities of Chanhassen and Eden Prairie; #16, Cities of Lakeville and Farmington



Map of Project #805609 locations in cities of Chanhassen, Eden Prairie, Lakeville, and Farmington

Project type
Meter Improvements

Objectives
Asset Preservation and System Expansion

Scope
The M413 site work will consist of meter vault and flume improvements, the addition of a new maintenance structure at the junction of interceptors 7138 and 7025-1, gravity sewer rehabilitations and replacement, and maintenance structure rehabilitation. The M643A site work will consist of meter vault and flume improvements, gravity sewer rehabilitation, and maintenance structure rehabilitation. The new meter M657 site work will consist of constructing a new billing meter vault with flume, driveway, and maintenance structure reconstruction.

Project need
Nest flumes in M413 and M643A are in poor condition, have poor hydraulics that make accurate measurement of flow impossible, and have inadequate max flow rate ratings for measuring forecasted future flows. This project is needed to improve these facilities so that ES meets its financial Customer Level of Service.

Planning: 2024	Design: 2024 through 2025	Construction: 2025 through 2027

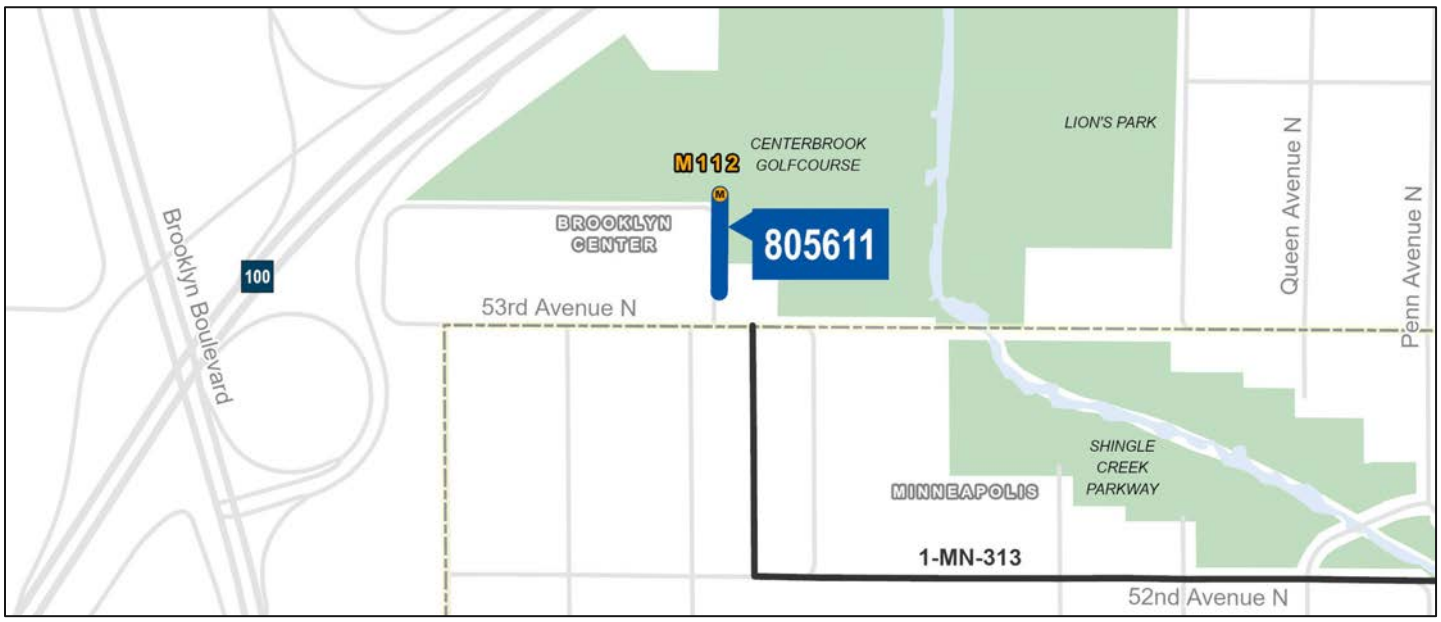
Financial analysis

2025 cash flow:	$150,000
Current ACP:	$1,925,000
2025 through 2030 cash flow:	$5,600,000
Total project cost:	$5,685,000

Meter 112 Rehab

Program family 8056 **Project #805611**

Project location: Council district #2, City of Brooklyn Center, in Centerbrook Golf Course



Map of Meter M112 in Centerbrook Golf Course.

Project type
Meter Improvements

Objectives
Quality Improvements

Scope
The Meter M112 project will replace the existing meter vault and Parshall flume and upstream and downstream piping. The city sewer upstream and downstream of the pipe replacement area will be rehabilitated with cured-in-place pipe (CIPP) as part of a cooperative agreement.

Project need
A 2021 condition assessment of the meter assessed the overall site condition as poor (condition 4). The condition assessment found the Parshall flume is not a standard size, is separating from the surrounding concrete floor and walls, and has suboptimal hydraulics, severe corrosion of the vault, and deteriorated upstream and downstream pipes. Metering problems resulting from these issues could result in reduced accuracy, extended loss of billing data, and damage to customer relations.

Planning: 2025	Design: 2025	Construction: 2026

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$2,482,000
2025 through 2030 cash flow:	$2,850,000
Total project cost:	$2,892,000

Meters M641 and M644 Improvements

Program family 8056 **Project #805612**

Project location: Council districts 12 and 16, Cities of Rosemount and Lakeville

Location of Meters M644 and M641

Project type
Meter Improvements

Objectives
Asset Preservation and Quality Improvements,

Scope
Work to include vault rehabilitation and flume improvements.

Project need
Condition Assessments of M64 and M644 found significant grit deposits. A 2021 condition assessment of the meters assessed the overall site conditions as poor (condition 4). The condition assessment found significant grit deposits, suboptimal hydraulics, and corrosion of the vault. Metering problems resulting from these issues could result in reduced accuracy, extended loss of billing data, and damage to customer relations.

Planning: 2025	Design: 2026	Construction: 2027

Financial analysis

2025 cash flow:	$50,000
Current ACP:	$0
2025 through 2030 cash flow:	$3,000,000
Total project cost:	$3,000,000

Chanhassen Eden Prairie Meter M448 Improvements

Program family 8056 **Project #805613**

Project location: Council District #3, Cities of Chanhassen and Eden Prairie

Map of Project #805613 location

Project type
Meter Improvements

Objectives
Quality Improvements

Scope
M448 Improvements will include construction of a new meter maintenance structure in the immediate vicinity of existing meter M448.

Project need
Dye dilution testing and condition assessments confirmed poor hydraulics through the meter that make accurate measurement of flow in the existing setup impossible.

Planning: 2024 through 2025	Design: 2025	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$50,000
Current ACP:	$200,000
2025 through 2030 cash flow:	$450,000
Total project cost:	$450,000

Meter M106 Rehabilitation

Program family 8056 **Project #805615**

Project location: Meter station M106, Council districts #2 and 7, Cities of Columbia Heights and Minneapolis

Map of project # 805615, located at the intersection of 37th Avenue NE and Central Avenue NE in Columbia Heights.

Project type
Meter Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
The project will involve removing and replacing the existing Parshall flume and flow measurement equipment, as well as replacing the ladder and other structural components within the structure, if necessary. It will also include temporary flow conveyance, traffic control, and improvements to any hydraulic deficiencies to ensure accurate flow measurements.

Project need
Meter M106 is equipped with a non-standard, metal-fabricated 6-inch Parshall flume that lacks a proper diverging section. The upstream measurement point has accumulated over 3 inches of grit, along with minor surface waves and undulations, which is not ideal for the flume performance. A dye test conducted in 2022 and 2023 revealed a discrepancy of over 11% between actual flow data and dye test results. To ensure accurate flow measurement, the flume within the structure should be replaced with a standard Parshall flume, and the underlying hydraulic issues must be addressed.

Planning: 2022 through 2023	Design: Spring 2025-Fall 2025	Construction: Winter 2025 through Summer 2026

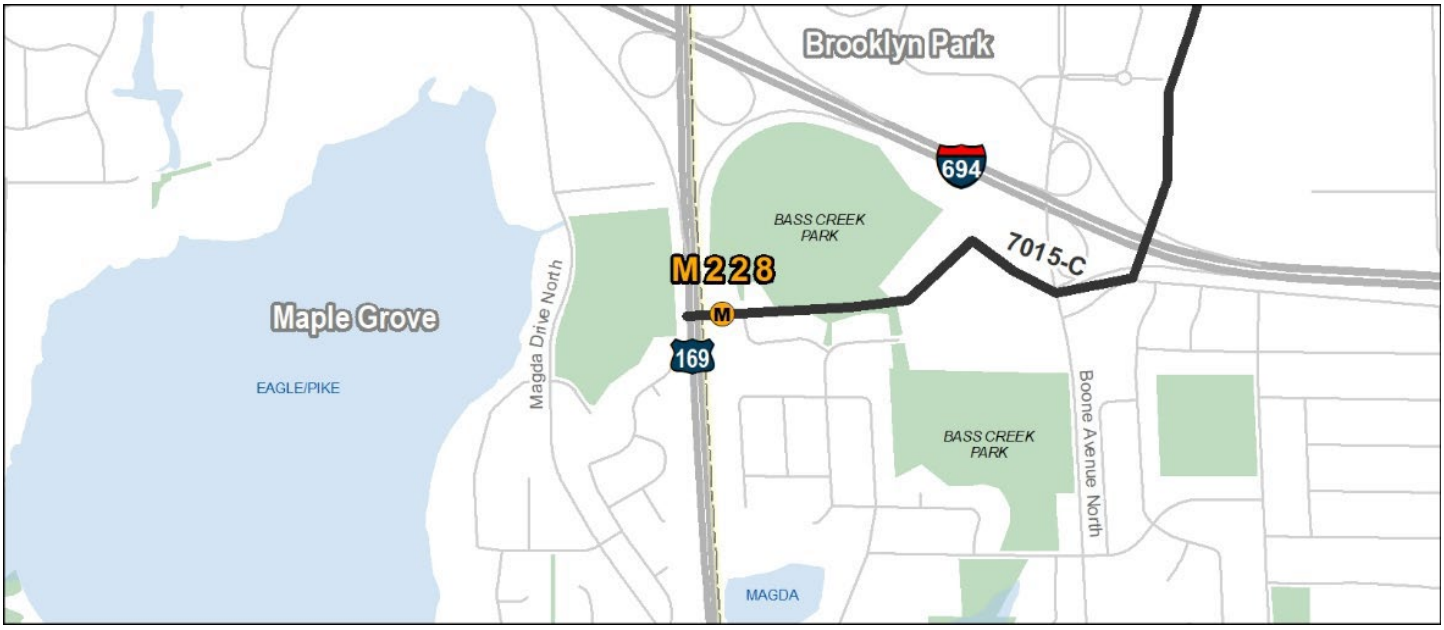
Financial analysis

2025 cash flow:	$200,000
Current ACP:	$274,000
2025 through 2030 cash flow: Total project cost:	$500,000

Replacement Meter Vault M228

Program family 8056 **Project #805636**

Project location: Council district #2, City of Brooklyn Park



Project #805636 location near Bass Creek Park in Brooklyn Park

Project type
Meter Improvements

Objectives
Asset Preservation

Scope
Replace existing Meter M228.

Project need
Replace and update meter due to corrosion and difficult access. The meter is important to ensure accuracy of cost distribution among communities.

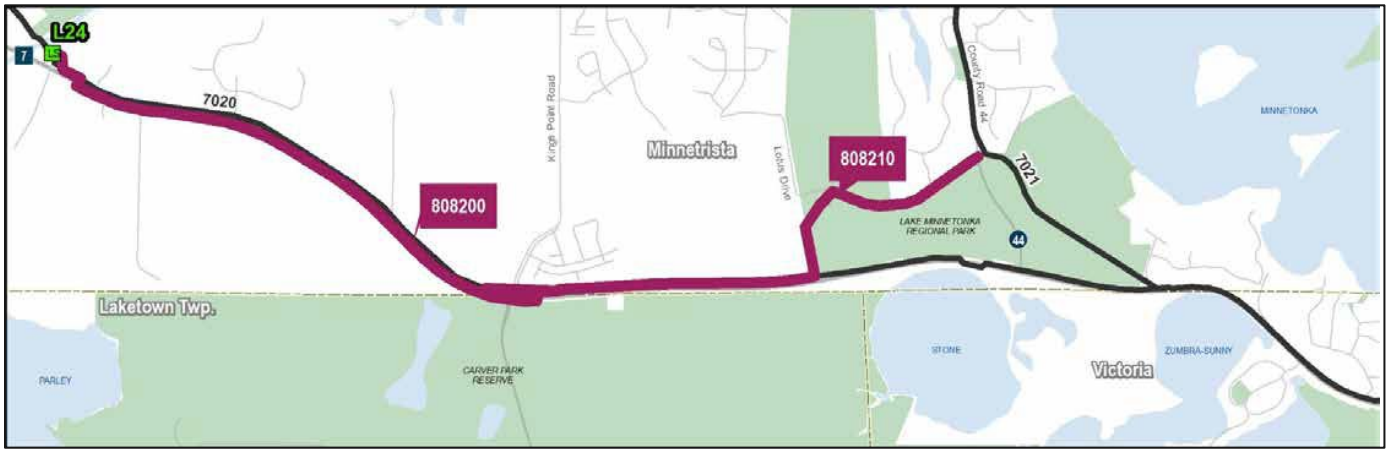
Project schedule:

Planning: 2019	Design: 2020 through 2025	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$7,126,000
2025 through 2030 cash flow:	$12,700,000
Total project cost:	$13,950,000

Program 8082 – St. Bonifacius Lift Station/Forcemain Improvements



Map of Program 8062 projects in the Minnetrista area

Description

This project consists of a new lift station and a new dual forcemain. Ultimately, the dual 14-inch forcemains will be installed from L24 to the gravity discharge location in Lake Minnetonka Regional Park. This forcemain will connect to the previously installed Lotus Drive piping, a 2,600-foot segment of the forcemain that was constructed as part of Lotus Drive with the City of Minnetrista. The forcemain construction will start at the west end of Lotus Drive and end on the east side of CR-44. The remaining 1,000 feet of the Waconia forcemain will be upgraded with this project as well, to align with work previously completed in Phases 1 and 2 of that project.

Purpose and justification

The lift station needs rehabilitation based on an assessment of its condition and a history of its performance. The St. Bonifacius forcemain is approximately forty years old and near the end of its design life. The single 12-inch diameter cast iron pipe is just over three miles long. The forcemain parallels Highway 7 and discharges to a gravity interceptor located in Lake Minnetonka Regional Park. The new dual forcemain will provide reliable conveyance of wastewater, as well as capacity to serve long-term growth.

Program location

The active projects within this program are in the following Council districts: 3 and 4

Active projects in program

Project Number	Project Title
808200	St. Bonifacius LS/FM Rehabilitation (Parent Project)

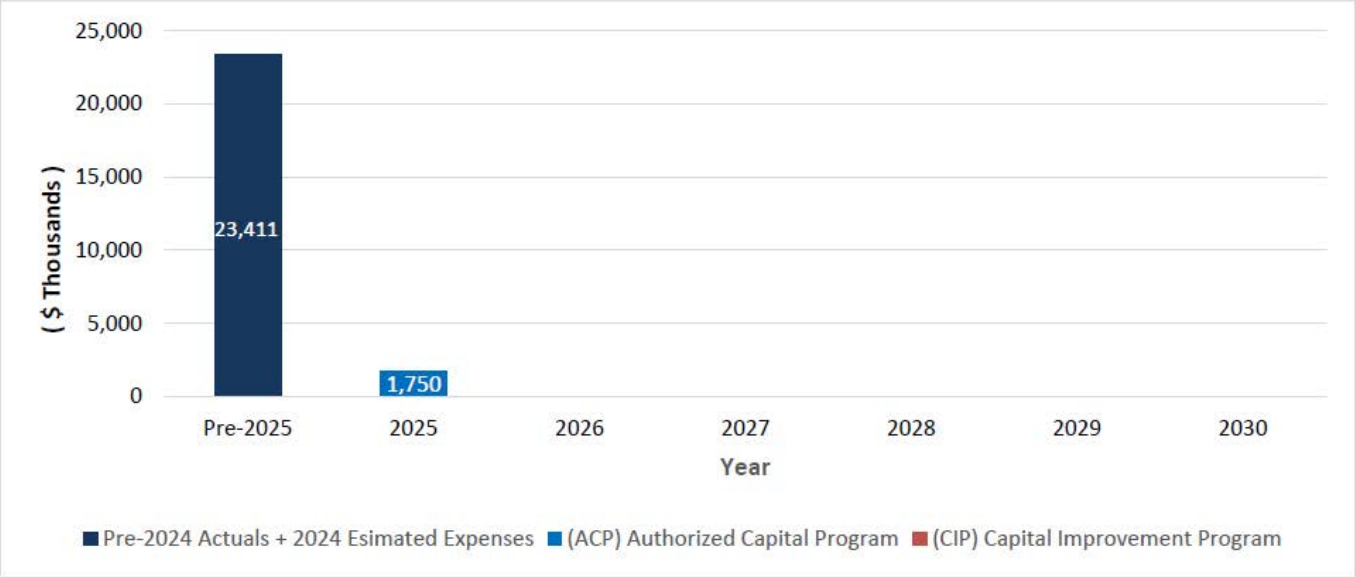
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $25,161,626
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Program 8086 – North Area Interceptor (NAI) Rehabilitation

Lining work being performed on the 4-NS-525 Interceptor in Coon Rapids

Description

The interceptor systems in Blaine, Brooklyn Park, Champlin, Circle Pines, Coon Rapids, Forest Lake, Fridley, Hugo, Lexington, Lino Lakes, Maple Grove, Mounds View, Spring Lake Park, and other north-area communities need rehabilitation and/or replacement. The project will rehabilitate existing interceptor facilities, including gravity sewers, forcemains, lift stations, and meter stations.

Purpose and justification

Inspections of the interceptors that serve the North Metro Area have revealed corrosion damage. The corrosion is extensive and has resulted in significant damage to the interior concrete surfaces of the interceptors and maintenance structures.

Program location

The active projects within this program are in the following Council districts: 1, 2, 8, 9, 10, 11, 12, and 13.

Active projects in program

Project Number	Project Title
808600	North Area Interceptor (NAI) Rehabilitation (Parent Project)
808602	CAB Interceptor Improvements
808603	Forest Lake Interceptor 7029 Rehabilitation
808604	Interceptor 7015-C Rehabilitation
808607	Fridley Liquid Waste Receiving Improvements
808609	4-NS-525 Rehabilitation Phase 2

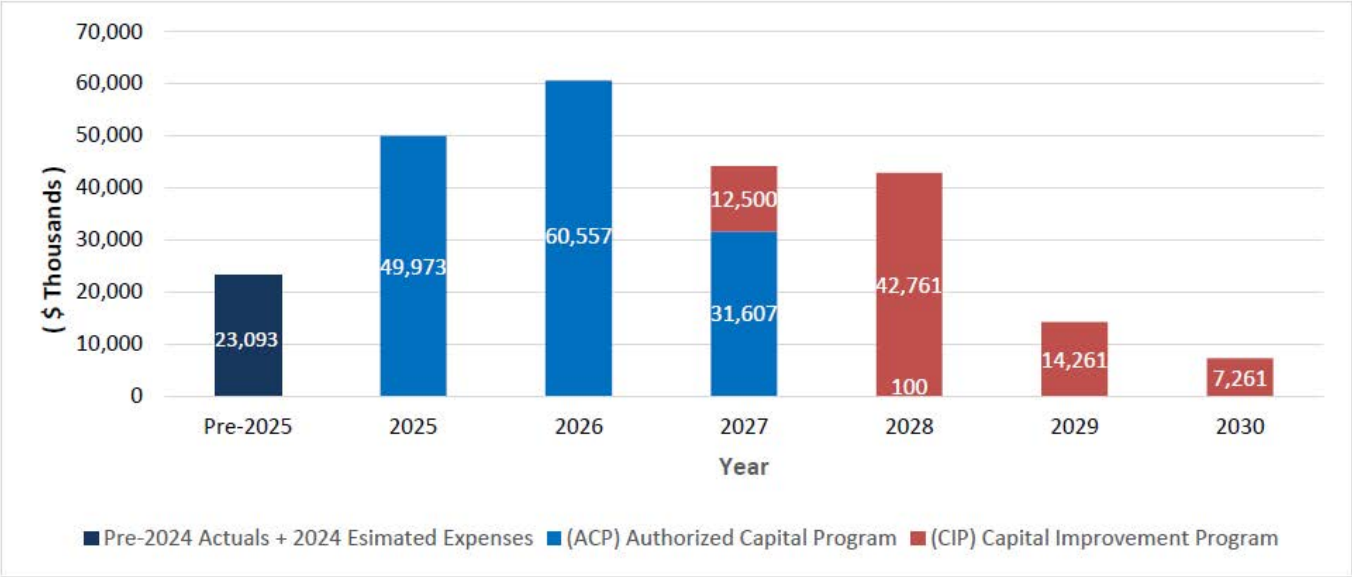
Project Number	Project Title
808611	1-RV-430 Rehabilitation
808612	4-NS-521 Rehabilitation
808613	Northeast Interceptor Hydraulic Modeling
808614	8151 and 7122 Siphon Rehabilitation
808616	Interceptor 1-CL-455 Rehabilitation
808617	9004-1 & 900415 Rehabilitation
808619	Rogers Plant to Plant Sewer
808622	Maple Grove Interceptor Replacement
808624	New Rogers Lift Station
808687	Lake Elmo West Connection
808688	L77 Lift Station Improvements
808689	Blaine Relief Interceptor

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $165,330,691
- Capital Improvement Plan (CIP): $ 76,783,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



CAB Interceptor Improvements

Program family 8086 **Project #808602**

Project location: Council district #2, City of Brooklyn Park

Map of project #808602 in Brooklyn Park between 108th Avenue North and 88th Avenue North

Project type
Interceptor Improvements

Objectives
Quality Improvements and System Expansion

Scope
Rehabilitate or replace 4.5 miles of severely corroded 54-inch and 66-inch reinforced concrete pipe (RCP).

Project need
Condition assessments of the CAB Interceptor have identified areas of deteriorated pipe in need of rehabilitation. Additionally, a system evaluation has identified areas of the CAB Interceptor in need of expansion to provide additional capacity to support regional growth.

Planning: 2025 through 2026	Design: 2026 through 2027	Construction: 2027 through 2029

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$897,000
2025 through 2030 cash flow:	$20,000,000
Total project cost:	$23,584,000

Forest Lake Interceptor 7029 Rehabilitation

Program family 8086 **Project #808603**

Project location: Council district #11, City of Forest Lake

Map of Project #808603 north of 180th Street North in Forest Lake

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Metropolitan Council Environmental Services (ES) owns and operates the Forest Lake Interceptor from Lift Station L01 to L78 in White Bear Lake. This project scope will include rehabilitation of about 11,000 feet of 36-inch reinforced concrete pipe (RCP) sewer interceptor from 202nd Street to 180th Street and the cleaning-only of about 7,000 ft of 36-inch sewer interceptor north of 202nd Street to Lift Station L01. The project scope also includes the rehabilitation of twenty maintenance holes and the replacement of six maintenance holes.

This project will include a dual barrel temporary conveyance system with temporary easements required for construction staging and access.

Project need
Interceptor 7029 was constructed in 1970 to convey flow from the City of Forest Lake. A condition assessment was completed in 2018 of the 36-inch RCP. The worst condition was between MH-99 and L02, where a 1,000-foot segment was identified as condition 4.5, and the remaining 7,000 feet as condition 4.

Project schedule:

Planning: 2023	Design: 2023 through 2025	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$800,000
Current ACP:	$2,705,000
2025 through 2030 cash flow: Total project cost:	$18,700,000 $18,938,000

Interceptor 7015-C Rehabilitation

Program family 8086 **Project #808604**

Project location: Council district #2, City of Brooklyn Park, Interceptor 7015-C

Map of Project #808604 east of Bass Creek Park in Brooklyn Park

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Site 3 of the North Area Improvements. This project includes rehabilitation and/or replacement of approximately 10 feet of interceptor that was not lined during the 2007 rehabilitation project and replacement of two structures. An extensive temporary conveyance system will be needed to repair this section.

Project need
Interceptor 7015-C in Brooklyn Park is a 36-inch reinforced concrete pipe (RCP) constructed in 1970 and lined in 2007. A five-to-ten-foot section of pipe was found unlined on the downstream end of Section 124009 near maintenance hole (MH) 45. Prior to lining, the condition of the pipe was 4.5.

Project schedule:

Planning: 2023	Design: 2023 through 2024	Construction: 2024 through 2025

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$717,700
2025 through 2030 cash flow:	$2,100,000
Total project cost:	$2,231,000

Fridley Liquid Waste Receiving Improvements

Program family 8086 **Project #808607**

Project location: Council district #2, City of Fridley, 8296 Hickory Street NE

Fridley Liquid Waste Receiving Facility

Project type
Interceptor Improvements

Objectives
Asset Preservation, Quality Improvements, and System Expansion

Scope
The loadout bay discharge pipe elevation needs to be lowered to allow customers to hook up more efficiently, provide larger rock traps, and allow replacement or recalibration of existing flow meters. Access improvements are necessary to allow large tanker trucks into the bay. The maintenance structure that is used to dump during outages needs to be upgraded to include a grit chamber.

Project need
There are several deficiencies and issues with the receiving, process, and treatment at the Fridley Liquid Waste Receiving Facility. Several upgrades are necessary for this to be successfully used as a regional liquid waste receiving and maintenance facility.

Project schedule:

Planning: 2022 through 2023	Design: 2023 through 2024	Construction: 2024 through 2025

Financial analysis

2025 cash flow:	$75,000
Current ACP:	$1,500,000
2025 through 2030 cash flow:	$9,775,000
Total project cost:	$9,970,000

4-NS-525 Rehabilitation Phase 2

Program family 8086 **Project #808609**

Project location: Council district #9, City of Coon Rapids

Map pf Project #808609 in City of Coon Rapids.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
The scope of work on this project will include rehabilitation of 7,800 linear feet of 48-inch reinforced concrete pipe (RCP) and 28 structures.

Project need
Condition assessments revealed poor condition pipe and maintenance structures.

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

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$2,000,000
2025 through 2030 cash flow:	$1,050,000
Total project cost:	$1,356,000

1-RV-430 Rehabilitation

Program family 8086 **Project #808611**

Project location: Council district #10, City of Roseville, Dale Street North and Highway 36

Map of project #608611 location near Highway 36 in Roseville.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
1-RV-430 in Roseville will be rehabilitated using cured-in-place pipe (CIPP) lining. Structures along the corridor are also planned to be rehabilitated as needed.

Project need
The section of 1-RV-430 that is planned to be rehabilitated has been identified to be condition-4 pipe during CCTV inspections. Because of this it is critical that the pipe is rehabilitated to avoid potential failure.

Planning: 2024 through 2025	Design: 2025 through 2026	Construction: 2026 through 2027

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$1,160,500
2025 through 2030 cash flow:	$10,900,000
Total project cost:	$11,038,000

4-NS-521 Rehabilitation

Program family 8086 **Project #808612**

Project location: Council district #2, City of Fridley

Map of project #808612 location near Interstate 694 in Fridley.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Two sections of 4-NS-521 in Fridley will be rehabilitated using cured-in-place pipe (CIPP) lining. Structures along the corridor are also planned to be rehabilitated as needed.

Project need
The two sections of 4-NS-521 that are planned to be rehabilitated have been identified as condition-4 pipe during CCTV inspections. Because of this it is critical that the pipe is rehabilitated to avoid potential failure.

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

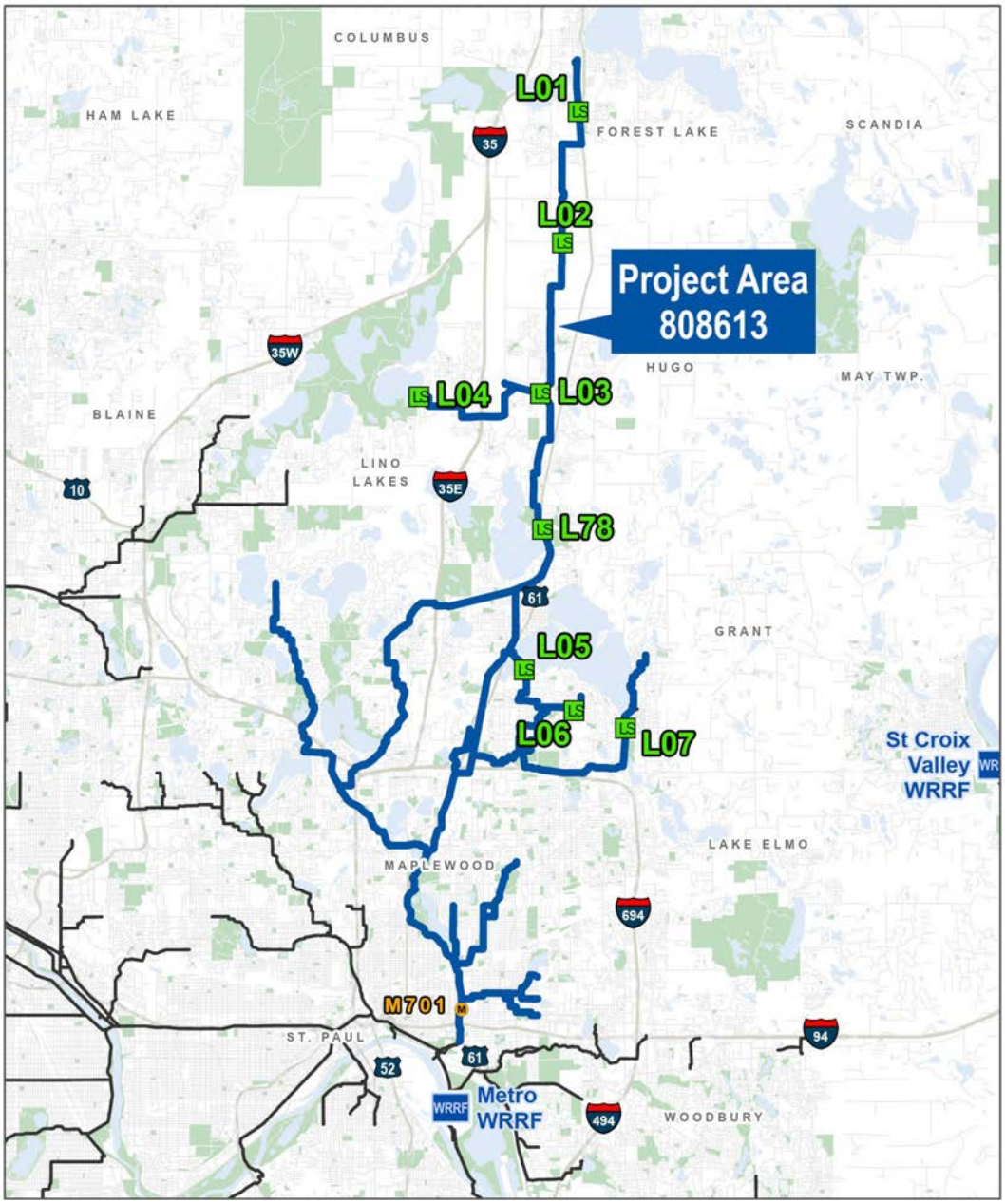
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$4,374,000
2025 through 2030 cash flow:	$34,000,000
Total project cost:	$34,471,000

Northeast Interceptor Hydraulic Modeling

Program family 8086 **Project #808613**

Project location: Council district #10, 11, and 13, Cities in the vicinity of the Northeast Interceptor Area



Map of the Northeast Interceptor study area

Project type
Interceptor Hydraulic Model - Study

Objectives
Asset Preservation

Scope
This project is to build and calibrate a hydraulic model of the Northeast Interceptor from M-701 in Saint Paul to Forest Lake. The model will be calibrated for dry weather flow and wet weather flow, run future flow scenarios, and summarize findings and recommendations for 20-year and ultimate planning horizons.

Northeast Interceptor Hydraulic Modeling (continued)
Project #808613

Project need
This effort will help meet the overall project goals and outcomes to:

- Better understand capacity constraints, if any, and assess options to improve operations to mitigate those constraints.
- Develop informed decisions for investing, operating, and maintaining the conveyance system.
- Identify and assess areas with high rates of I/I and highest risk of sanitary sewer overflow.
- Develop strategies to reduce I/I contribution to wastewater flows to recover system capacity, maximize conveyance, and utilize storage in the existing ES system.
- Develop feasible alternatives for multiple future scenarios – including evaluation of cost-effectiveness – for capital projects for any of the goals above.



Planning: 2024 through 2026	Design: TBD	Construction: N/A

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$865,000
2025 through 2030 cash flow:	$800,000
Total project cost:	$870,000

8151 and 7122 Siphon Rehabilitation

Program family 8086 **Project #808614**

Project location: Council district #3, City of Maplewood

Project #808614 – Site 1 in Maplewood in Keller Park on Interceptor 8151 and Site 2 in Maplewood along Highway 61 and Beam Ave North.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Site 1 – 8151 - Due to the deterioration of the concrete in the pipe and structures, the project will include rehabilitation of the two 24-inch and one 42-inch DIP pipes using a CIPP liner. The headhouse and tail house structure will include rehabilitation of the deteriorated concrete surface and installing protective coating system. New gates/valves will also be designed to better separate the flows between the siphon pipes and to allow better hydraulic performance.

Site 2 – 7122 – Project will include extension of the air jumper structures to maintain flow in the system and for proper access for cleaning and inspection. The flow control system for isolating pipe will also be added for adequate cleaning and televising.

Project need
Both the 8151 and 7122 sites are aging and require repair due to past pipe failures. 8151 condition assessment indicates that the head house and tail house structures are also in poor condition and should be rehabilitated to address age-related deterioration, improve access, and facilitate easier cleaning and future inspections. 7122 Air Jumper structures lack proper flow control to divert flow from one pipe to another and for isolating pipe for cleaning and inspection. Also, the hydraulics of the flow coming in are not proper and improvements to the structure would be needed to achieve proper self-cleaning velocities.

Planning: 2022 through 2023	Design: 2024 through 2025	Construction: 2025 through 2027

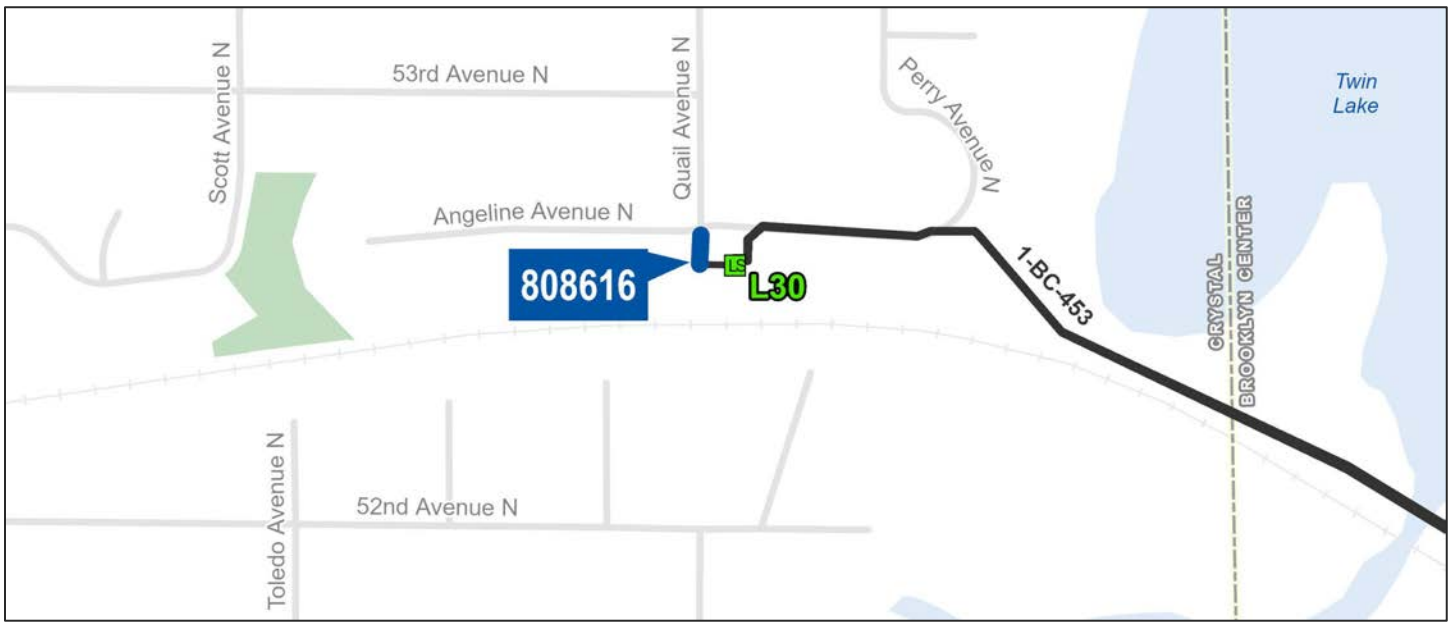
Financial analysis

2025 cash flow:	$200,000
Current ACP:	$575,000
2025 through 2030 cash flow:	$8,000,000
Total project cost:	$8,210,000

Interceptor 1-CL-455 Rehabilitation

Program family 8086 **Project #808616**

Project location: Council district #8, City of Crystal, Interceptor 1-CL-455



Map of Project #808616 near Angeline Avenue North and Quail Avenue North in Crystal

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitate a section of pipe between Shaft 1 and MH-100 by abandoning the existing pipe and installing a new pipe in the new location. Two maintenance hole structures will also be rehabilitated, and one structure will be added.

Project need
Condition assessment of pipe shows the pipe in this section as poor condition and a sag in the pipe. There is severe grease build-up from the city pipe coming in, and a need for frequent cleaning.

Project schedule:

Planning: 2023	Design: 2024 through 2025	Construction: 2025 through 2026

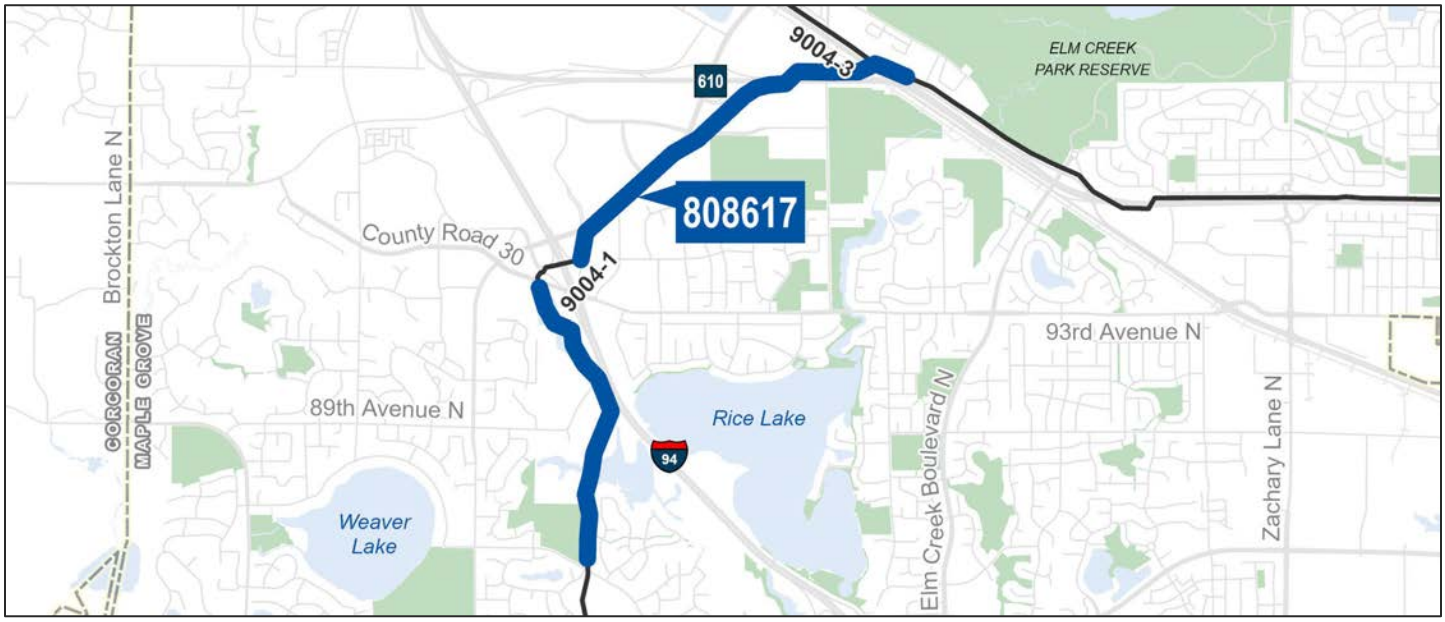
Financial analysis

2025 cash flow:	$200,000
Current ACP:	$2,100,000
2025 through 2030 cash flow:	$1,499,000
Total project cost:	$2,108,000

9004-1 & 900415 Rehabilitation

Program family 8086 **Project #808617**

Project location: Council district #1, City of Maple Grove



Map of Project #808617 along Maple Grove Parkway North in Maple Grove

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitate 410 feet of severely corroded 48-inch reinforced concrete pipe (RCP).

Project need
Condition assessment of the interceptor has identified it as being severely corroded. Rehabilitation of the interceptor is needed to prevent further deterioration and potential failure.

Project schedule:

Planning: 2023	Design: 2023 through 2024	Construction: 2024 through 2025

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$0
2025 through 2030 cash flow:	$2,500,000
Total project cost:	$2,500,000

Rogers Plant to Plant Sewer

Program family 8086 **Project #808619**

Project location: Council district #1, City of Rogers

Map of project #808624 location near Interstate 94 and Highway 101 in Rogers

Project type
Interceptor Improvements

Objectives
System Expansion

Scope
The scope of the project is to build a new sanitary sewer to convey flow from the lift station at the existing Rogers Wastewater Treatment Facility (WWTF) site to the Crow River Water Resource Recovery Facility (WRRF). The new sewer must be completed by 2029, as the Crow River WRRF will be ready by 2030.

Project need
Environmental Services purchased the existing Rogers WWTF in 2016. The site was purchased because the plant cannot be expanded as needed to meet future expected capacity and anticipated changes in regulatory requirements.

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

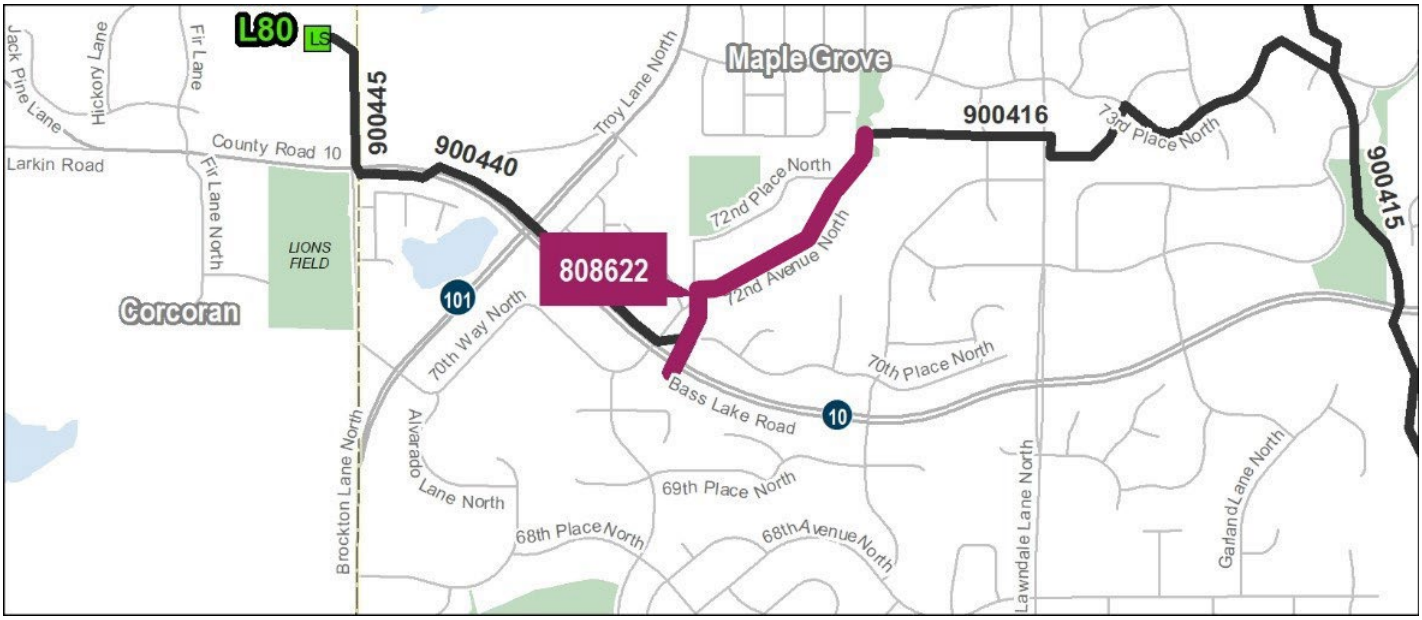
Financial analysis

2025 cash flow:	$600,000
Current ACP:	$2,539,000
2025 through 2030 cash flow:	$10,200,000
Total project cost:	$10,200,000

Maple Grove Interceptor Replacement

Program family 8086 **Project #808622**

Project location: Council district #1, City of Maple Grove



Map of Project #808622 location east of Highway 101 and north of Highway 10 in Maple Grove

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Areas of Interceptor 900416 have been identified with varies degrees of deflection. The interceptor will be evaluated to determine which sections require rehabilitation or replacement.

Project need
To maintain the integrity of the system and to prevent potential damage to the environment due to pipe failure, sections of the interceptor must be repaired or replaced.

Project schedule:

Planning: 2019 through 2021	Design: 2021 through 2022	Construction: 2023 through 2026

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$900,000
2025 through 2030 cash flow:	$13,350,000
Total project cost:	$14,005,000

New Rogers Lift Station

Program family 8086 **Project #808624**

Project location: Council district #1, City of Rogers, to be located at the existing Rogers Wastewater Treatment Facility, 22200 South Diamond Lake Road, Rogers, MN 55374

Map of project #808624 location near Interstate 94 and Highway 101 in Rogers

Project type
New Lift Station

Objectives
System Expansion

Scope
The scope of the project is to build a 1.5 MGD submersible lift station to convey flow from the lift station to the new gravity trunk sewer, which ultimately flows to the Crow River Water Resource Recovery Facility (WRRF). The new lift station must be completed by 2029, as the Crow River WRRF will be ready by 2030.

Project need
Environmental Services purchased the existing Rogers Wastewater Treatment Facility in 2016. The site was purchased because the plant cannot be expanded as needed to meet future expected capacity and anticipated changes in regulatory requirements.

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

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$2,300,000
2025 through 2030 cash flow:	$10,050,000
Total project cost:	$10,050,000

Lake Elmo West Connection

Program family 8086 **Project #808687**

Project location: Council Districts #12 and 13; Cities of Lake Elmo, Oakdale, and Woodbury

Project #808687 location along Hudson Road between I-694 and I-94

Project type
Interceptor Improvements

Objectives
System Expansion

Scope
Provide regional sewer service to southwestern Lake Elmo through a gravity interceptor extension from 1-WO-500. Includes the upgrade of an existing interceptor sewer crossing Interstate 94 to accommodate current and future growth in the service area.

Project need
This project will provide interceptor facilities to convey wastewater from southwestern Lake Elmo and eastern Oakdale to the Metro WRRF in Saint Paul. The project is needed to support growth in this eastern portion of the metropolitan area.

Planning: 2020	Design: 2021 through 2023	Construction: 2024 through 2026

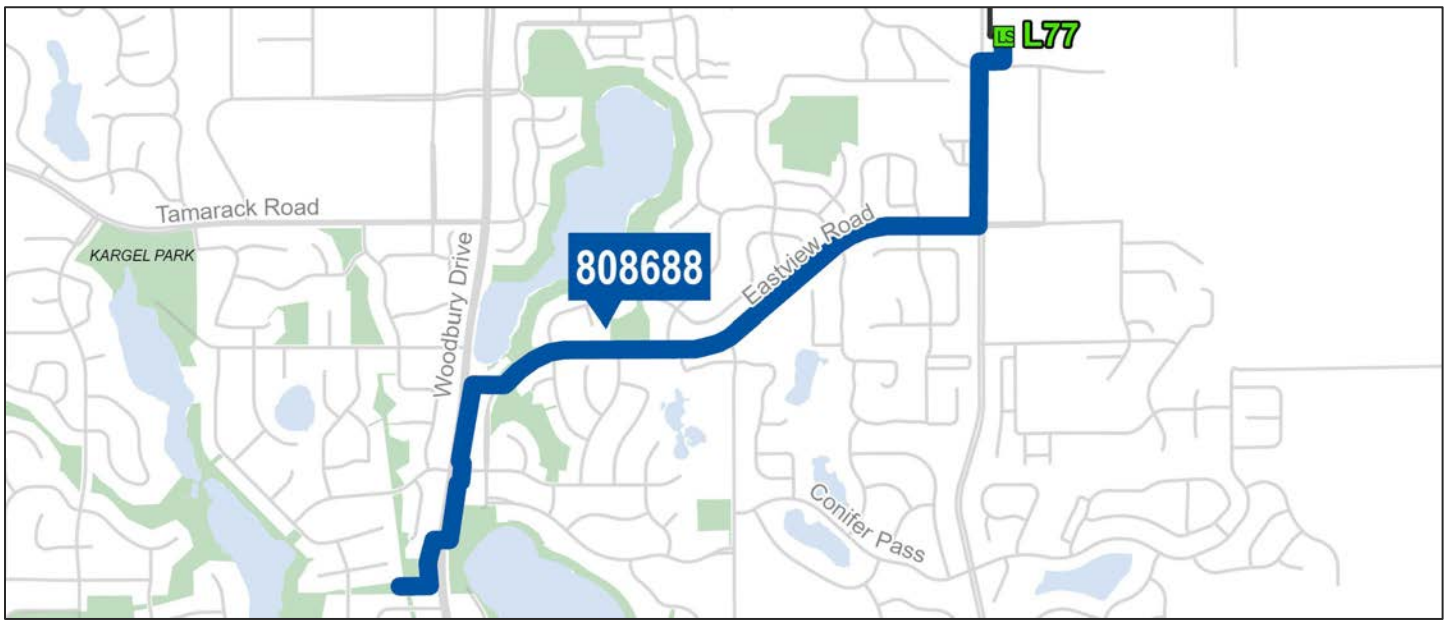
Financial analysis

2025 cash flow:	$8,000,000
Current ACP:	$35,527,000
2025 through 2030 cash flow: Total project cost:	$27,500,000 $35,527,000

L77 Lift Station Improvements

Program family 8086 **Project #808688**

Project location: Council Districts #11 and 12, City of Woodbury



Project #808688 location along Eastview Road in Woodbury.

Project type
Lift Station and Interceptor Improvements

Objectives
System Expansion and Quality Improvements

Scope
Expand L77 lift station and connect to larger forcemain. Work includes the addition of an emergency generator for the lift station.

Project need
Growth in northeastern Woodbury and southeastern Lake Elmo necessitates an expansion of pumping capacity at the L77 lift station. The forcemain was constructed earlier by the City of Woodbury during road improvements to serve flows from the L77 lift station, and an agreement entered into with the city for purchase of the infrastructure for regional use.

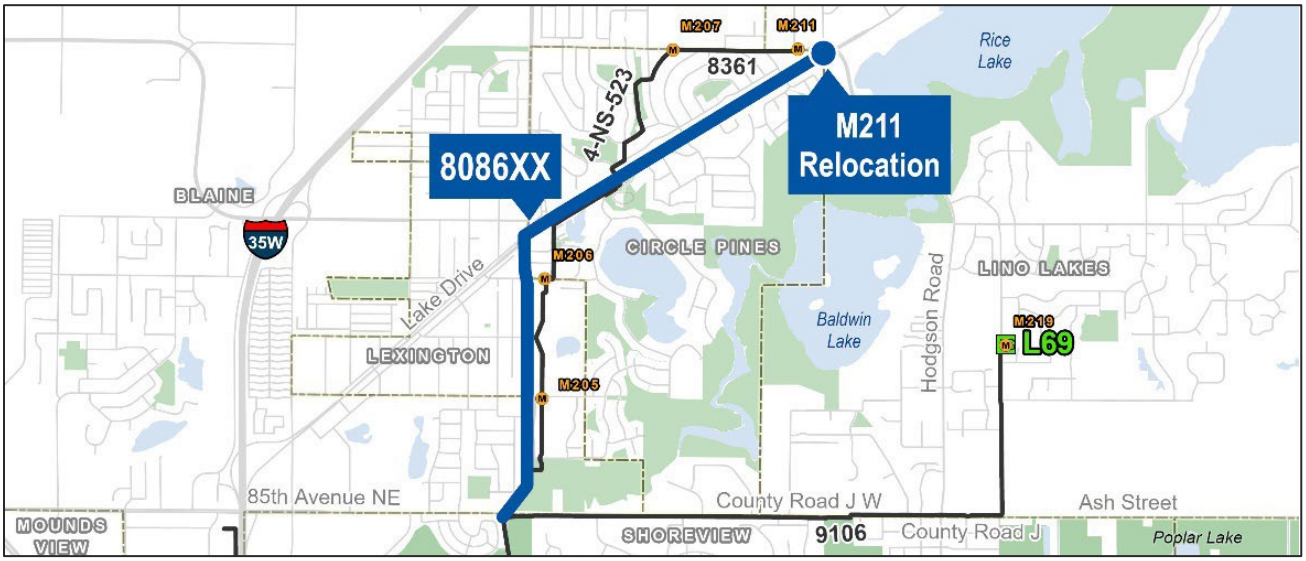
Planning: 2020 through 2021	Design: 2022 through 2023	Construction: 2024 through 2026

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$5,200,000
2025 through 2030 cash flow:	$9,300,000
Total project cost:	$5,322,000

Blaine Relief Interceptor
Program family 8086 **Project #808689**

Project location: Council district #10, City of Circle Pines, Lexington Avenue and Lake Drive



Map of Project #8086xx, Blaine Relief Interceptor project and M211 Relocation along Lake Drive in Circle Pines

Project type
Interceptor Improvements

Objectives
System Expansion

Scope
Construction of a new 14,000+ feet, 36-inch (approximate) interceptor in Circle Pines along Lexington Avenue between County Road J, north to Lake Drive then east, along Lake Drive to approximately the Lino Lakes corporate border. Project would include the relocation of M-211 to allow for the measurement of flow from the western portion of Lino Lakes.

Project need
The project need was first identified in 2005 to accommodate projected growth in western Lino Lakes. Existing capacity within interceptor 4-NS-523 was insufficient to accommodate the expected increase in flow generated by the growth. An engineering report completed in 2006 recommended the above-referenced project out of four identified alternatives. In response to the economic downturn in 2007-08, Lino Lakes revised its growth forecasts to no longer reflect the need for additional capacity. The project was then placed on hold. The city, in its 2018 Comprehensive Sewer Plan, added growth within its western area that once again reflects the need for additional wastewater conveyance capacity. The Council committed to having additional capacity available for the city by the end of 2030.

Project schedule:

Planning: 2023	Design: 2024 through 2027	Construction: 2028 through 2030

Financial analysis

2025 cash flow:	$10,000
Current ACP:	$1,405,000
2025 through 2030 cash flow:	$26,460,000
Total project cost:	$26,460,000

Program 8088 – Saint Paul Interceptor System Rehabilitation

Left: Cured-in-Place (CIP) pipe liner being installed through a maintenance hole. Right: Large-diameter interceptor sewer pipe segments ready for installation.

Description

The interceptors located in Saint Paul, Maplewood, Roseville, New Brighton, Shoreview, and Vadnais Heights need rehabilitation and/or replacement due to age and deterioration. The project will rehabilitate existing interceptor facilities to ensure reliable service.

Purpose and justification

The Saint Paul Interceptor System Rehabilitation Program was developed to address areas of severe corrosion in the interceptor sewer system in Saint Paul and surrounding suburbs. Internal corrosion of concrete sewer pipes and structures creates structural weakness that creates a risk for collapse and potential loss of service or wastewater spills. Projects have been identified to rehabilitate the existing sewers using trenchless means, such as cured-in-place pipe or slip lining, where possible.

Program location

The active projects within this program are in the following Council districts: 10, 13, and 14

Active projects in program

Project Number	Project Title
808800	Saint Paul Interceptor System (SPIS) Rehabilitation (Parent Project)
808811	Riverview Siphon 1-SP-230 Improvements
808812	1-SP-216 Rehabilitation
808861	Grass Lake Interceptor Rehabilitation
808863	Snail Lake Rehabilitation Project
808864	West Side Sandstone Tunnel Rehabilitation
808882	1-MS-100 Rehabilitation Feasibility Study
808884	Saint Paul Interceptor System Study

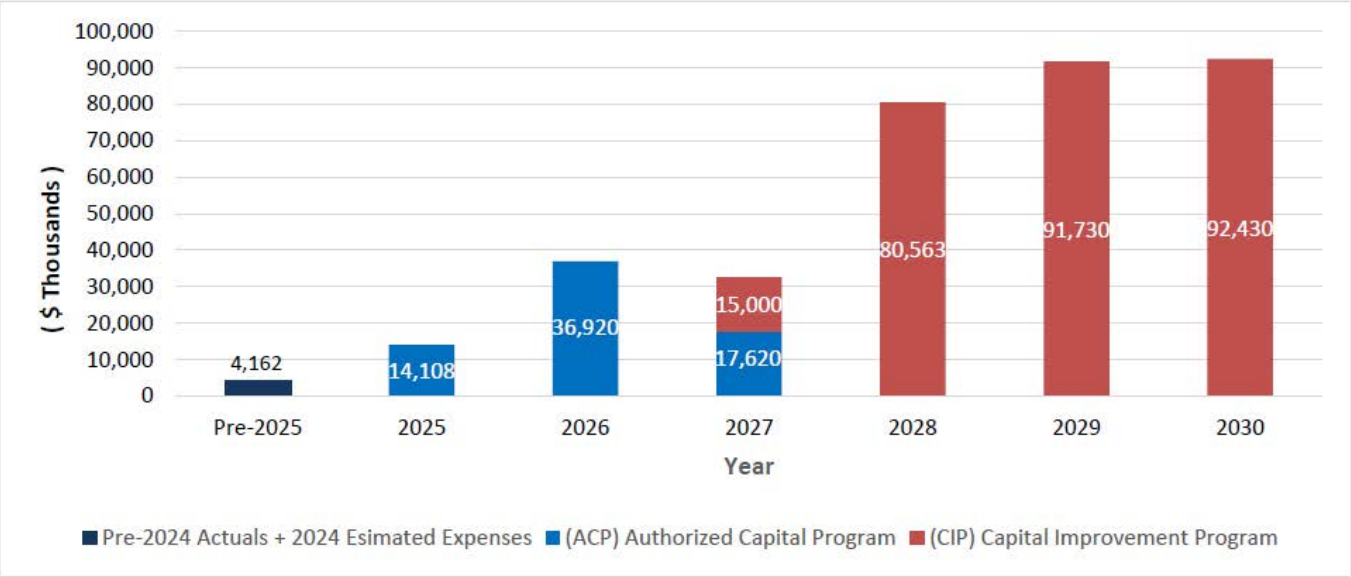
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $72,810,570
- Capital Improvement Plan (CIP): $279,723,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Riverview Siphon 1-SP-230 Improvements

Program family 8088 **Project #808811**

Project location: Council District #13, City of Saint Paul

Map of Project #808811 along Wabasha Street in Saint Paul

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Improvements to the headhouse and tailhouse as well as the construction of a fourth pipe across the river.

Project need
Flow monitoring and a system evaluation have determined that the three pipes under the Mississippi River are limited in capacity during peak flows. There is also limited ability to inspect the three pipes, which places the facility under greater risk.

Planning: 2025 through 2026	Design: 2026 through 2028	Construction: 2028 through 2030

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$800,000
2025 through 2030 cash flow:	$17,900,000
Total project cost:	$33,900,000

1-SP-216 Rehabilitation

Program family 8088 **Project #808812**

Project location: Council district #13, City of Saint Paul

Map of project #808812 just east of Phalen Regional Park in Saint Paul. The project runs along Kennard Street from Larpenteur Avenue East to Hoyt Avenue East. The other section runs east to west along Hoyt Avenue East from White Bear Avenue North to Kennard Street

Project type
Interceptor Rehabilitation

Objectives
Asset Preservation

Scope
The project will line from M010 on Larpenteur Avenue East to MH-3 on Hoyt Avenue East. While there are three areas of condition 4 pipe, the most economical way to line this interceptor is with the least amount of set-up. At the intersection of Hoyt Avenue East, 1-SP-214 intersects with 1-SP-216. Two segments of this pipe are 72-inch reinforced concrete pipe with a 36-inch reinforced concrete pipe in between. These segments will either be replaced or slip-lined depending on design constraints.

Project need
1-SP-216 is a 42-inch reinforced concrete pipe that is showing signs of deterioration such as ribbing and cracks in the pipe. There are three areas of deteriorated pipe totaling approximately 750 feet of pipe. Two 72-inch sections of pipe along 1-SP-214 are oversized, increasing the risk for sedimentation build up.

Planning: 2025	Design: 2025 through 2026	Construction: 2026 through 2027

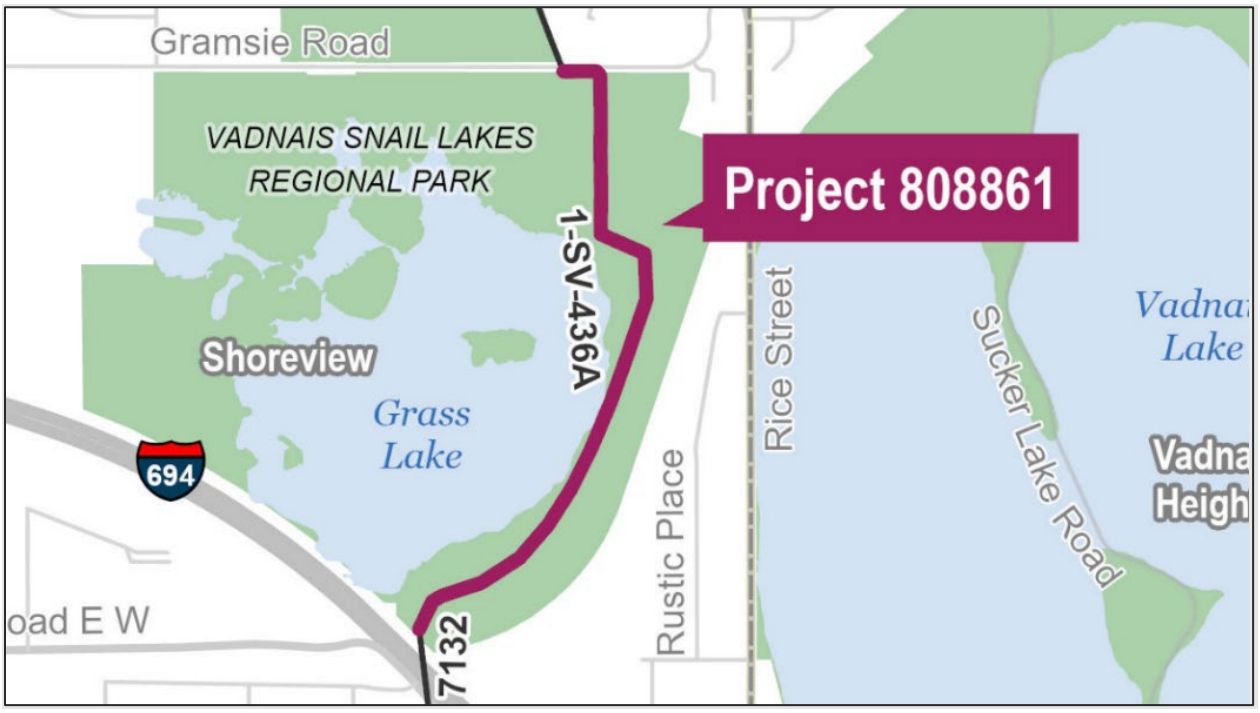
Financial analysis

2025 cash flow:	$50,000
Current ACP:	$1,133,000
2025 through 2030 cash flow:	$9,500,000
Total project cost:	$9,500,000

Grass Lake Interceptor Rehabilitation

Program family 8088 **Project # 808861**

Project location: Council district #10, City of Shoreview



Map of Project #808861 location along the east side of Grass Lake in Shoreview

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Realign MH-1 to MH-15 to improve access and reduce inflow and infiltration (I/I) along Grass Lake.

Project need
To relocate the interceptor to provide year-round access, prevent flooded structures, and prevent I/I as lake levels continue to rise.

Planning: 2019	Design: 2020 through 2025	Construction: 2026 through 2028

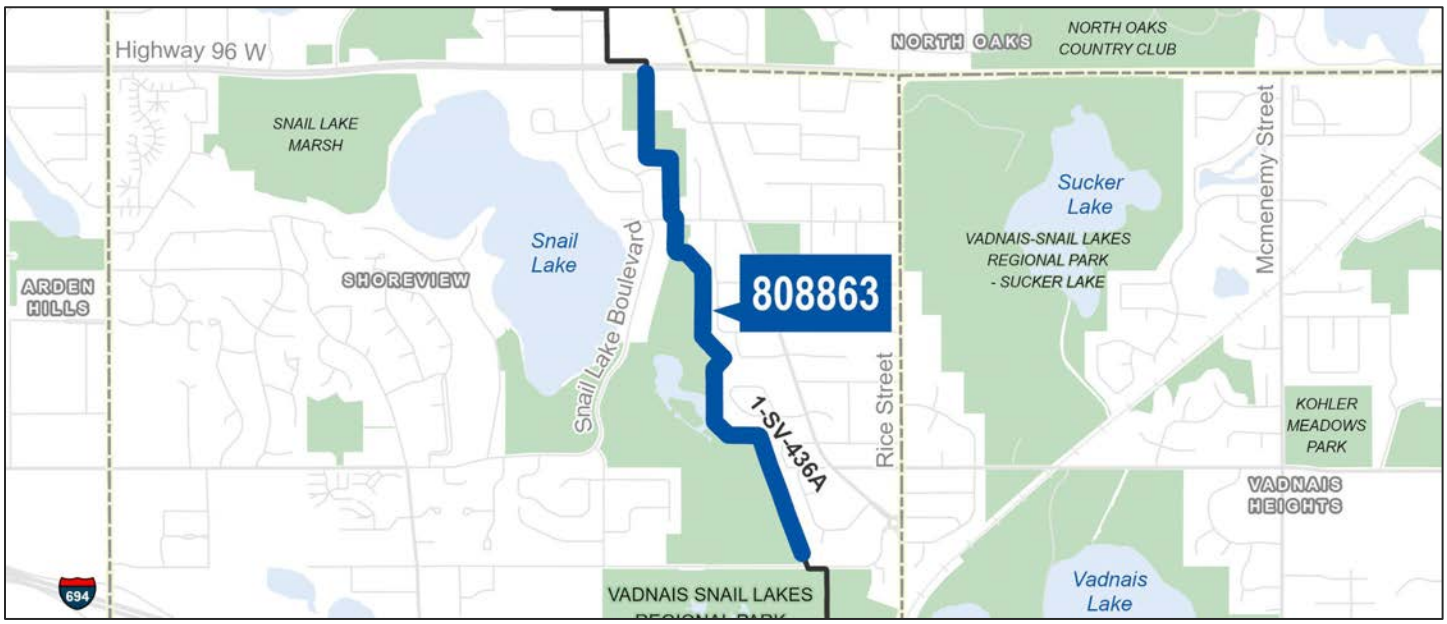
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$23,411,000
2025 through 2030 cash flow:	$21,000,000
Total project cost:	$22,534,000

Snail Lake Rehabilitation Project

Program family 8088 **Project #808863**

Project location: Council district #10, City of Shoreview, between Highway 96W and Gramsie Road



Map of project #808863 location near Snail Lake in Shoreview.

Project type
Interceptor Improvements

Objectives
Asset Preservation, Quality Improvements

Scope
Rehabilitation of 26 maintenance hole structures on Interceptor 1-SV-436A.

Project need
Condition assessments identified damaged maintenance hole structures that required repairs to reduce system inflow and infiltration (I/I).

Planning: 2024	Design: 2024 through 2025	Construction: 2025

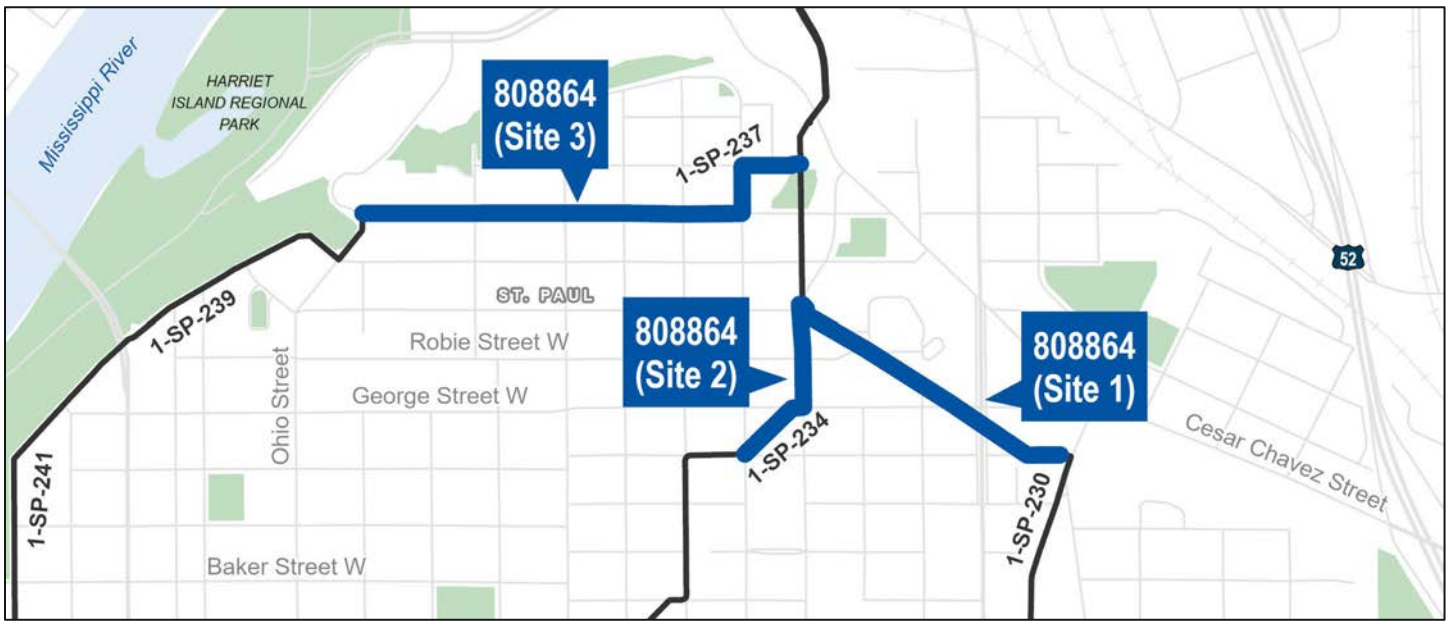
Financial analysis

2025 cash flow:	$1,200,000
Current ACP:	$2,030,000
2025 through 2030 cash flow: Total project cost:	$1,550,000 $1,697,000

West Side Sandstone Tunnel Rehabilitation

Program family 8088 **Project #808864**

Project location: Council district #13, City of Saint Paul



Map of project #808864 locations near City of Saint Paul's West Side.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
This project consists of rehabilitating interceptor sandstone tunnels and maintenance structures.

Project need
Condition assessments completed by confined space entries in these tunnels revealed varied erosion in shoulders and crowns of unlined sandstone tunnels, fractures and missing bricks in brick lined portions, and failed connections.

Planning: 2024 through 2025	Design: 2025	Construction: 2026

Financial analysis

2025 cash flow:	$150,000
Current ACP:	$3,300,000
2025 through 2030 cash flow:	$0,000,000
Total project cost:	$3,350,000

1-MS-100 Rehabilitation Feasibility Study

Program family 8088 **Project #808882**

Project location: Council districts #13 and 14; City of Saint Paul

1-MN-100 project extent

Project type
Interceptor Rehabilitation

Objectives
Asset Preservation

Scope
Evaluation of the 1-MS-100 interceptor and rehabilitation of identified interceptor sections. System evaluation includes a review of temporary conveyance options and resiliency improvements.

Project need
1-MS-100 is a deep tunnel interceptor sewer collecting flows from parts of Saint Paul, Minneapolis, and over 40 communities upstream of Minneapolis. Previous inspections and evaluations have identified segments of 1-MS-100 that are experiencing concrete corrosion, large-scale infiltration points, possible exposed reinforcing steel, and void space above the concrete pipe. The condition of 1-MS-100 combined with its criticality to daily operations make rehabilitation of 1-MS-100 a high priority.

Planning: 2025	Design: N/A	Construction: N/A

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$5,111,000
2025 through 2030 cash flow: Total project cost:	$35,500,000 $206,000,000

Saint Paul Interceptor System Study

Program family 8088 **Project # 808884**

Project location: Council district #13 and 14, City of Saint Paul

Photo of a LaserFlow flow monitor inside ES interceptor pipe

Project type
Study

Objectives
Asset Preservation

Scope
Provide a long-term study (approximately 5 years) of the regional wastewater system in the City of Saint Paul. The consultant will install and maintain temporary flow meters across the city for two years and use that data to build a hydraulic model of the ES system. Other tasks include identification of areas with high inflow and infiltration (I/I), potential for sewer overflow, and limited hydraulic capacity. Project will also replace the M700 series planning meters which are reaching the end of their useful life.

Project need
To assist in developing a quantitative understanding of flow conditions, define existing and future system limitations, and outline improvements that may be necessary for long-term reliability of the regional system.

Planning: 2023 through 2027	Design: N/A	Construction: N/A

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$1,980,000
2025 through 2030 cash flow:	$2,000,000
Total project cost:	$3,300,000

Program 8090 – Interceptor Rehabilitation Program

Vactor truck used to clean debris from interceptors

Description

This program includes miscellaneous projects to rehabilitate failing facilities, address inflow and infiltration (I/I) sources, and address general needs of the interceptor system not programmed into a region- or facility-specific program. This program also includes additional condition assessment work to complement the internal inspections work completed by Operations, odor control improvements, city coordination for street improvement projects, and office space planning and design to accommodate all staff assigned to the Regional Maintenance Facility.

Purpose and justification

Periodic condition assessments for interceptor facilities have revealed facilities requiring immediate projects. In addition, system-wide administrative and management work is needed to efficiently operate the interceptor system.

Program location

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

Active projects in program

Project Number	Project Title
809099	Funds for Future Interceptor Rehabilitation Projects (Parent Project)
809089	Special Interceptor Inspections
809095	Regional Maintenance Facility (RMF) Expansion
819011	Interceptor Chemical Odor Control
819016	Large Diameter Interceptor Cleaning – Phase 2
819019	Regional Vactor Waste Facility Improvements

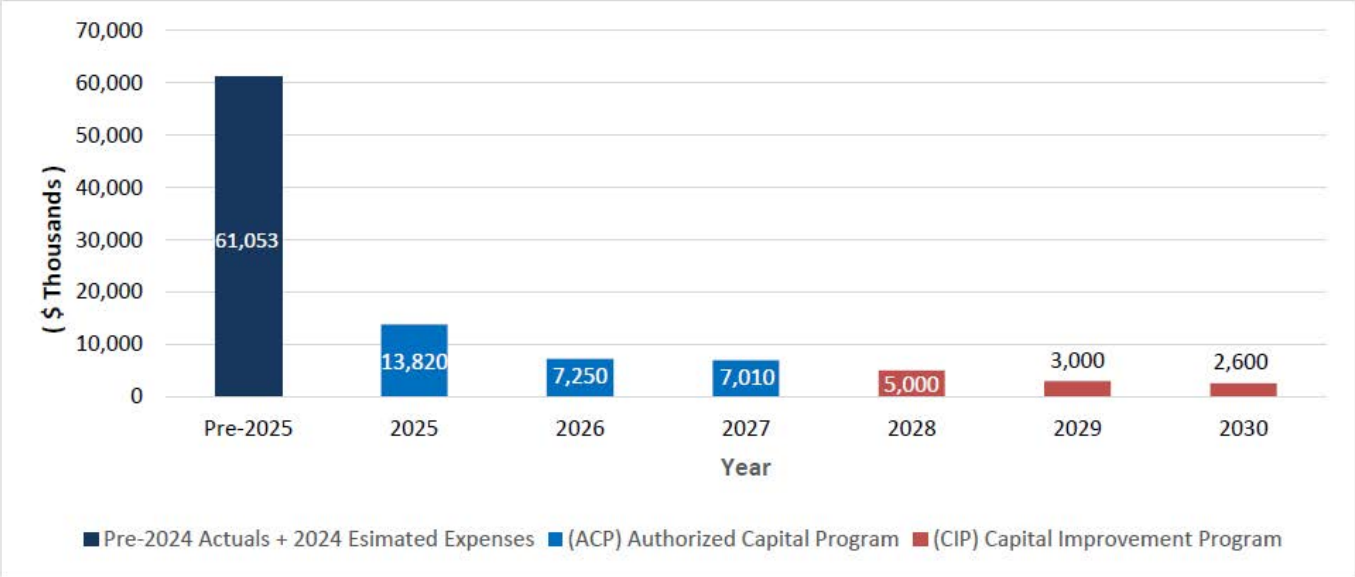
Project Number	Project Title
819022	Interceptor Rehabilitation Project 6-MO-650
819025	TH-13 – MnDOT Coordination

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $89,133,662
- Capital Improvement Plan (CIP): $10,600,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Special Interceptor Inspections

Program family 8090 **Project #809089**

Project location: Project location varies across seven-county Twin Cities Metro Area

UTV equipped with tracks and CCTB equipment

Project type
Condition Assessment

Objectives
Asset Preservation

Scope
Work is identified each year during the planning for the sewer televising work that is to be completed. Work that cannot be handled in-house is contracted out. Less than 20% of the work in the last two years has been contracted.

Project need
Environmental Services maintains critical infrastructure throughout the greater metropolitan area, and not all of it is accessible by using the standard equipment that Interceptor Operations owns. Specialized equipment, permits, and coordination with the communities are needed to complete the work.

Planning: Ongoing	Design: N/A	Construction: N/A

Financial analysis

2025 cash flow:	$75,000
Current ACP:	$1,500,000
2025 through 2030 cash flow: Total project cost:	$32,000,000
	$32,000,000

Regional Maintenance Facility (RMF) Expansion

Program family 8090 **Project #809095**

Project location: Council district #15, City of Eagan, 3565 Kennebec Drive

Regional Maintenance Facility (RMF)

Project type
Building Improvements

Objectives
Quality Improvements

Scope
This project includes remodeling RMF to address the inadequate women's locker room and bathrooms and expansion to include the Air Quality lab and accommodate current staffing along with planned growth. The building improvements will address ADA deficiencies. Finally, a large meeting room is being planned that could share space with other amenities for consistent use and serve as an emergency operations center.

Project need
RMF was constructed in 1986, with improvements made in 2012 for expansion to accommodate additional staff. Currently, several work areas require improvements, including Dispatch, Computer Room, and women's facilities and improvements to comply with the ADA. Furthermore, ES is no longer going to be leasing space at Metro 94 for the Air Quality department, and RMF has been identified as a preferred location.

Planning: 2019	Design: 2019 through 2022	Construction: 2022 through 2024

Financial analysis

2025 cash flow:	$1,800,000
Current ACP:	$27,662,000
2025 through 2030 cash flow:	$2,006,000
Total project cost:	$27,662,000

Interceptor Chemical Odor Control

Program family 8090 **Project #819011**

Project location: Multiple lift stations and meter stations throughout the seven-county Twin Cities Metro Area

L24 Chemical Odor Control Tank and Pumping System

Project type
Odor Control Improvements

Objectives
Asset Preservation

Scope
Work will be performed under a design-build-operate contract, where Environmental Services will own all equipment (except for hydrogen sulfide monitoring equipment) and a vendor will operate, maintain, monitor, report, and supply chemicals. This includes installing chemical delivery equipment and new HDPE tanks at most sites. The work includes operation of the systems for approximately 7 years with up to two 5-year extensions.

Project need
Environmental Services currently has 16 operational chemical dosing odor control sites, including meters and lift stations. These sites are critical to reducing odor releases impacting communities and reducing corrosion within the interceptor system.

Planning: 2019 through 2020	Design: 2020 through 2022	Construction: 2022 through 2023

Financial analysis

2025 cash flow:	$911,000
Current ACP:	$8,186,100
2025 through 2030 cash flow:	$1,491,000
Total project cost:	$8,675,000

Large Diameter Interceptor Cleaning – Phase 2

Program family 8090 **Project #819016**

Project location: Council districts #6, 7, 8, 13, and 14, Cities of Minneapolis and Saint Paul, Neighborhoods of St. Anthony West, Prospect Park, Downtown, Marcy Holmes, North Loop, Summit Hill

Contractor's cleaning equipment layout

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Clean seven separate segments of Interceptors 1-MN-300, 1-MN-310, 1-MN-320, 1-SP-250, and 1-MS-100. These are deeper or larger tunnels that cannot otherwise feasibly be completed by Council Operations staff.

Project need
Interceptors need to be cleaned to restore original design capacity and minimize the potential for service interruptions.

Planning: 2020 through 2021	Design: 2020 through 2021	Construction: 2021 through 2026

Financial analysis

2025 cash flow:	$3,500,000
Current ACP:	$13,010,000
2025 through 2030 cash flow:	$10,700,000
Total project cost:	$14,667,000

Regional Vactor Waste Facility Improvements

Program family 8090 **Project #819019**

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

Vactor truck discharging into a waste receiving facility

Project type
Study

Objectives
Asset Preservation

Scope
Study the need for regional vactor waste facilities. Implementation of improvements, if any, would be completed under a separate project.

Project need
Metro Plant is the only regional vactor waste receiving facility in operation. Consequently, no regional vactor waste disposal facility is available when river flooding closes access to the plant. Additionally, lack of a disposal facility can interrupt customers' cleaning operations and potentially result in illicit dumping into the regional conveyance system.

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

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$200,000
2025 through 2030 cash flow:	$200,000
Total project cost:	$300,000

Interceptor Rehabilitation 6-MO-650

Program family 8090 **Project #819022**

Project location: Council district #3, City of Mound, Interceptor 6-MO-650

Map of Project #819022 Site 1 along Shoreline Drive in Mound

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitation of 2,600 feet of 8-inch and 10-inch forcemain. Rehabilitation of about 500 feet of 24-inch reinforced concrete pipe (RCP) pipe at Auditors Road and Shoreline Drive.

Project need
Routine condition assessments have identified interceptors at this site as pipes in poor condition. 6-MO-650 has experienced recent breaks in the forcemain due to its age. There is sag in the gravity section of the pipe. Hennepin County is planning a road reconstruction project on Shoreline Drive. This project needs to be completed before the road reconstruction.

Planning: 2022	Design: 2023	Construction: 2023 through 2025

Financial analysis

2025 cash flow:	$1,700,000
Current ACP:	$7,580,000
2025 through 2030 cash flow:	$1,700,000
Total project cost:	$7,580,000

TH-13 – MnDOT Coordination

Program family 8090 **Project #819025**

Project location: Council district #16, City of Savage

Map of Project #819025 along Highway 13 in Savage

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
This project realigns the existing forcemain route to move it from under MnDOT's proposed entrance ramps and frontage roads.

Project need
MnDOT's TH-13 project includes constructing an overpass with entrance and exit ramps to improve traffic safety at the intersections of Highway 13 and Dakota Ave and Highway 13 and Yosemite Ave. The existing forcemains need to be relocated to ensure continued maintenance without disrupting the proposed highway improvements. The work will be completed as a part of a MnDOT construction contract.

Planning: 2021	Design: 2021 through 2022	Construction: 2022 through 2023

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$4,200,000
2025 through 2030 cash flow: Total project cost:	$500,000 $4,200,000

Program 8092 – Minneapolis Interceptor System Improvements

Photo collage including 4th Street tunnel repairs and the inside of a tunnel constructed in the 1930s.

Description

This program includes facility planning and new projects to address aging infrastructure within or contributary to the City of Minneapolis. Potential projects include:

- Interceptor 1-MN-303 Pipe-in-Pipe Rehabilitation
- Interceptor 1-MN-320 Improvements

Purpose and justification

Interceptors in Minneapolis were constructed as early as 1891 and included tunnels constructed in the 1930s to intercept the old, combined sewers. Additional planning work is required to both identify projects needed to address capacity and to repair existing facilities. These projects will be prioritized into the future CIP.

Program location

The active projects within this program are in the following Council districts: 5, 6, 7, and 8

Active projects in program

Project Number	Project Title
809200	Minneapolis Interceptor Rehabilitation Phase 2 (Parent Project) – Facility Planning
809203	1-MN-310 Siphon Rehabilitation
809204	1-MN-341 Improvements – Phase 3
809205	Interceptor 1-MN-320 Improvements
809207	1-MN-346 Rehabilitation – Phase 2
809210	Minneapolis Sandstone Tunnel Evaluation
809211	1-MN-303 Pipe-in-Pipe Rehabilitation
809213	1-MN-310 Rehab between 23rd and 33rd Avenue North
809214	1-MN-310 Rehabilitation – Phase 1

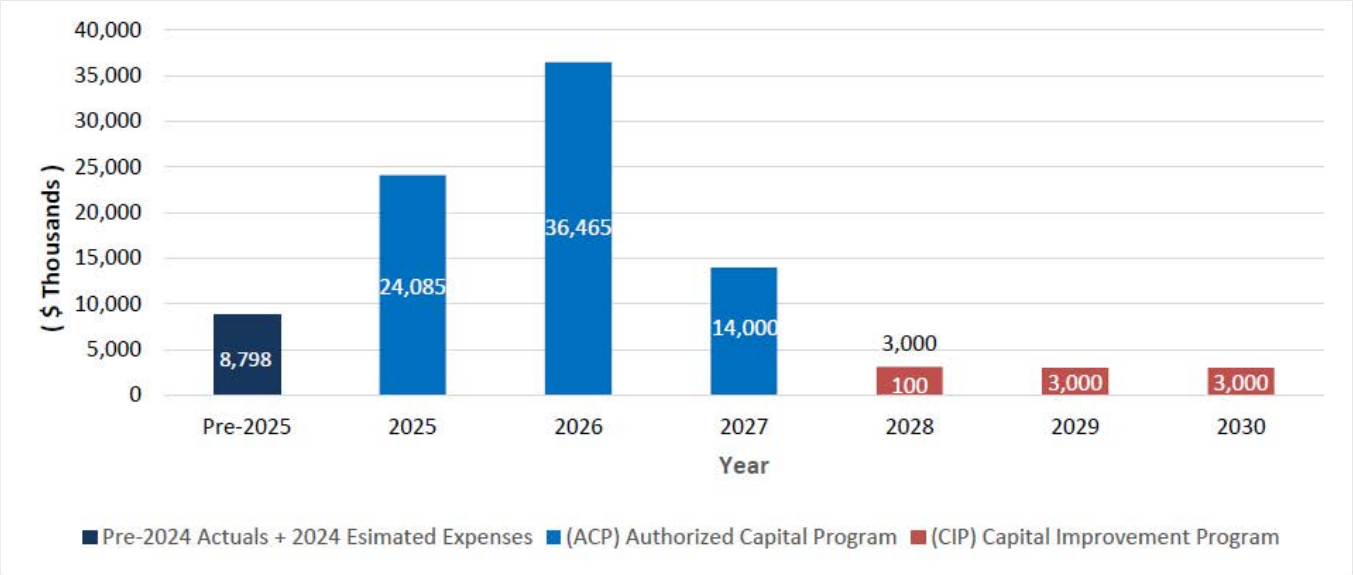
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $83,448,151
- Capital Improvement Plan (CIP): $9,000,000

Estimated program cash flow from 2025 through 2030

Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



1-MN-310 Siphon Rehabilitation

Program family 8092 **Project #809203**

Project location: Council district #7, City of Minneapolis

Map of project #809203 location near the Star Tribune building in Minneapolis.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitation of two 36-inch pipes that convey flow under the Bassets Creek tunnel, including rehabilitation of the siphon headhouse and tailhouse.

Project need
Condition assessments have identified the siphon on 1-MN-310, which conveys flow beneath the Bassets Creek tunnel in Minneapolis, as in poor condition and in need of rehabilitation.

Planning: 2024	Design: 2024 through 2025	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$500,000
Current ACP:	$4,009,000
2025 through 2030 cash flow:	$3,861,000
Total project cost:	$4,000,000

1-MN-341 Improvements – Phase 3

Program family 8092 **Project #809204**

Project location: Council district #6, City of Minneapolis, Crossing of Lyndale Ave at 36th Street West

Map of Project #809204 location at the intersection of Lyndale Ave and 36th St W in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitation of 1,500 feet of 60-inch and 90-inch concrete pipe and replacement of maintenance hole structures.

Project need
Condition assessment rated portions of Interceptor 1-MN-341 in poor condition. The project is needed to minimize the potential for pipe failure and the release of wastewater to the environment.

Planning: 2024	Design: 2024 through 2025	Construction: 2025 through 2026

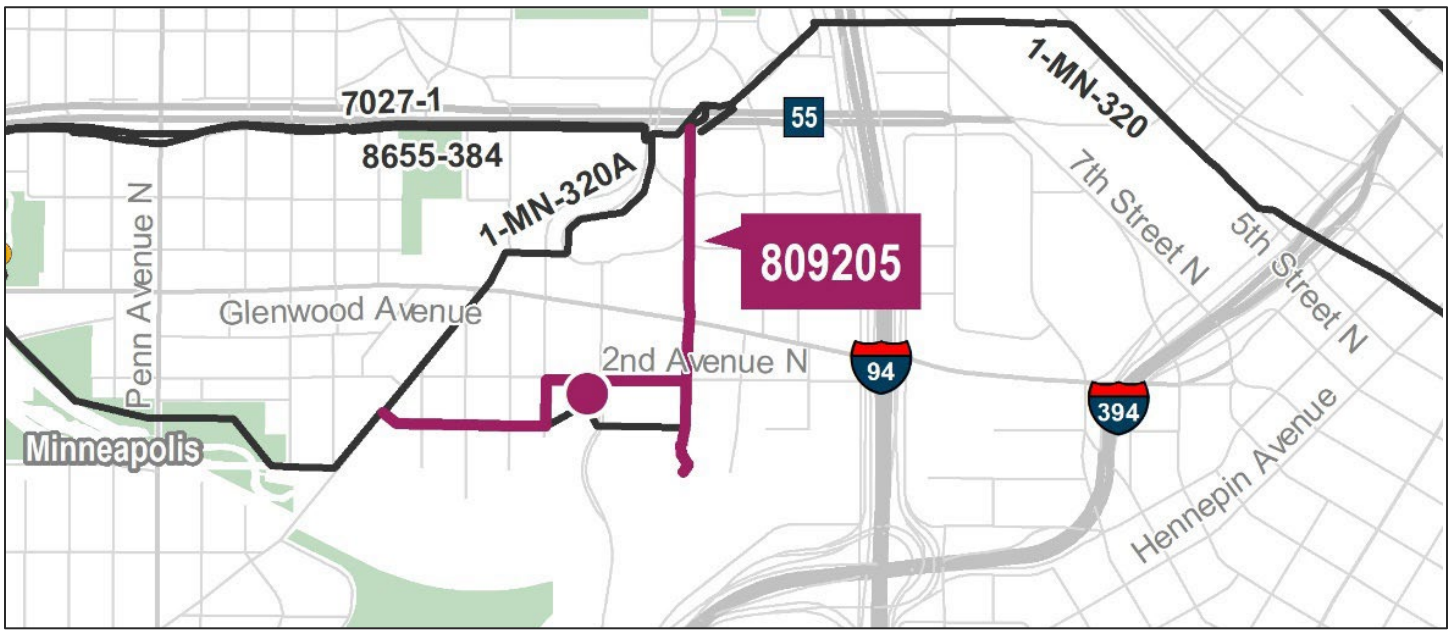
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$1,360,000
2025 through 2030 cash flow: Total project cost:	$16,300,000 $16,500,000

Interceptor 1-MN-320 Improvements

Program family 8092 **Project #809205**

Project location: Council district #7, City of Minneapolis



Map of Project #809205 location south of Highway 55 and west of I-94 in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
A Draft Facility Plan recommends the construction of a lift station that serves flows coming into the Currie Avenue portion of 1-MN-320 and a realignment of the portion of 1-MN-320 along Dupont Avenue.

Project need
This interceptor, originally constructed in 1888, is in poor condition. In addition, the poor grade and likely settlement of the old interceptor causes solids accumulation in the pipe and results in odors.

Planning: 2021	Design: 2022 through 2026	Construction: 2026 through 2028

Financial analysis

2025 cash flow:	$280,000
Current ACP:	$16,315,000
2025 through 2030 cash flow:	$15,900,000
Total project cost:	$20,000,000

1-MN-346 Rehabilitation – Phase 2

Program family 8092 **Project #809207**

Project location: Council district #6, Cities of Minneapolis and Richfield

Map of Project #809207 along 53rd Street East in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation and System Expansion

Scope
A study is underway to determine whether a new interceptor pipe should replace the existing 1-MN-346 interceptor or divert flow through a parallel pipe to increase capacity and reduce maintenance.

Project need
Hydraulic modeling conducted by Environmental Services in partnership with the City of Edina indicates future capacity issues. A sag between 54th and 56th Streets along 1-MN-346 has been problematic for maintenance with grease buildup and limits the capacity of the pipe.

Planning: 2023	Design: 2024	Construction: 2025 through 2026

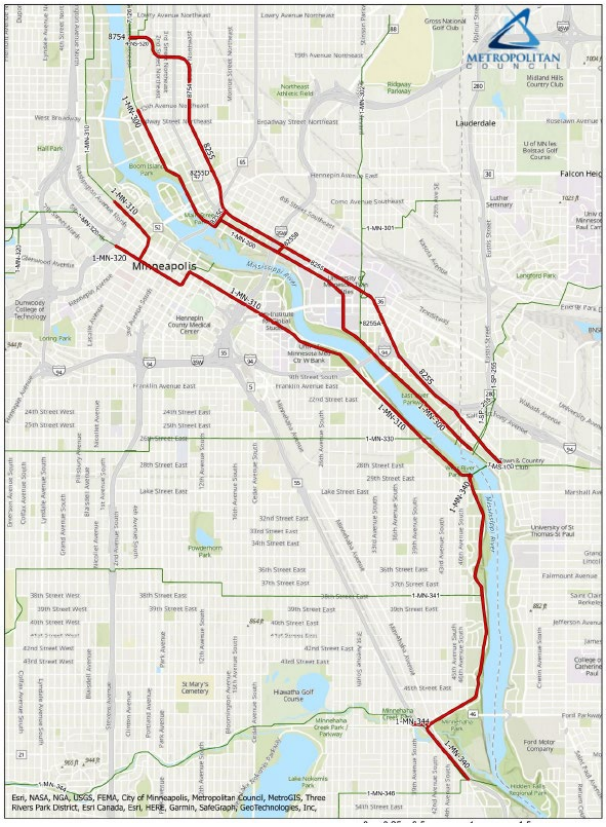
Financial analysis

2025 cash flow:	$500,000
Current ACP:	$2,400,000
2025 through 2030 cash flow:	$22,100,000
Total project cost:	$9,325,000

Minneapolis Sandstone Tunnel Evaluation

Program family 8092 **Project #809210**

Project location: Council districts #6 and 7, City of Minneapolis, generally paralleling the Mississippi River



Map of Project #809210 location along the Mississippi River in Minneapolis

Project type
Condition Assessment

Objectives
Asset Preservation

Scope
Complete cave inspections on 1-MN-310 and 1-MN-340 and prepare inspection plans.

Project need
There is a risk of sandstone eroding over time from over the top of constructed tunnels through natural ground behavior. Condition assessments are needed to minimize the potential for pipe failure.

Planning: 2022 through 2023	Design: 2023	Construction: 2025 through 2026

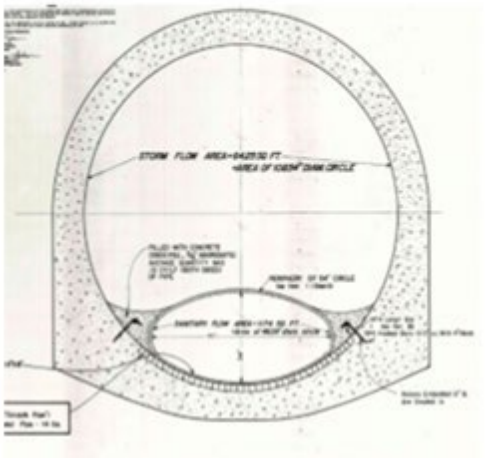
Financial analysis

2025 cash flow:	$100,000
Current ACP:	$6,500,000
2025 through 2030 cash flow:	$15,100,000
Total project cost:	$18,500,000

1-MN-303 Pipe-in-Pipe Rehabilitation

Program family 8092 **Project #809211**

Project location: Council district #7, City of Minneapolis, Columbia Park and Marshall Terrace neighborhoods



Left: Profile drawing of interceptor pipe. Right: Photo of damage to piping.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Repair pipe-in-pipe (PIP) using removal and replacement and/or cured-in-place-pipe (CIPP).

Project need
Interceptor 1-MN-303 was built in the early 1920s as a 102-inch reinforced concrete combined sanitary/storm sewer. The segment of 1-MN-303 on 31st Avenue NE between Randolph Street NE and Columbia Golf Course was converted to a PIP separated sewer in 1965 using inlaid deformed corrugated metal pipe (CMP). A walking inspection conducted in January 2022 identified severe damage and corrosion that is allowing significant inflow of stormwater into the sanitary sewer.

Planning: 2020 through 2021	Design: 2021 through 2022	Construction: 2022 through 2023

Financial analysis

2025 cash flow:	$120,000
Current ACP:	$15,000,000
2025 through 2030 cash flow:	$14,620,000
Total project cost:	$15,000,000

1-MN-310 Rehabilitation Between 23rd and 33rd Avenue North

Program family 8092 **Project #809213**

Project location: Council district #7, City of Minneapolis

Map of Project #809213 location south of Lowry Avenue and east of I-94 in Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Line 5,000 feet of 1-MN-310 from 34th Avenue North to 22nd Avenue North and rehabilitate 20 maintenance holes.

Project need
Interceptor 1-MN-310 is adjacent to the proposed Upper Harbor Terminal Project in Minneapolis. Recent CCTV inspection has identified condition 4 deterioration between 34th and 22nd Avenues North. The project schedule will be coordinated to limit impacts on future development in the area.

Planning: 2020	Design: 2020 through 2023	Construction: 2023 through 2025

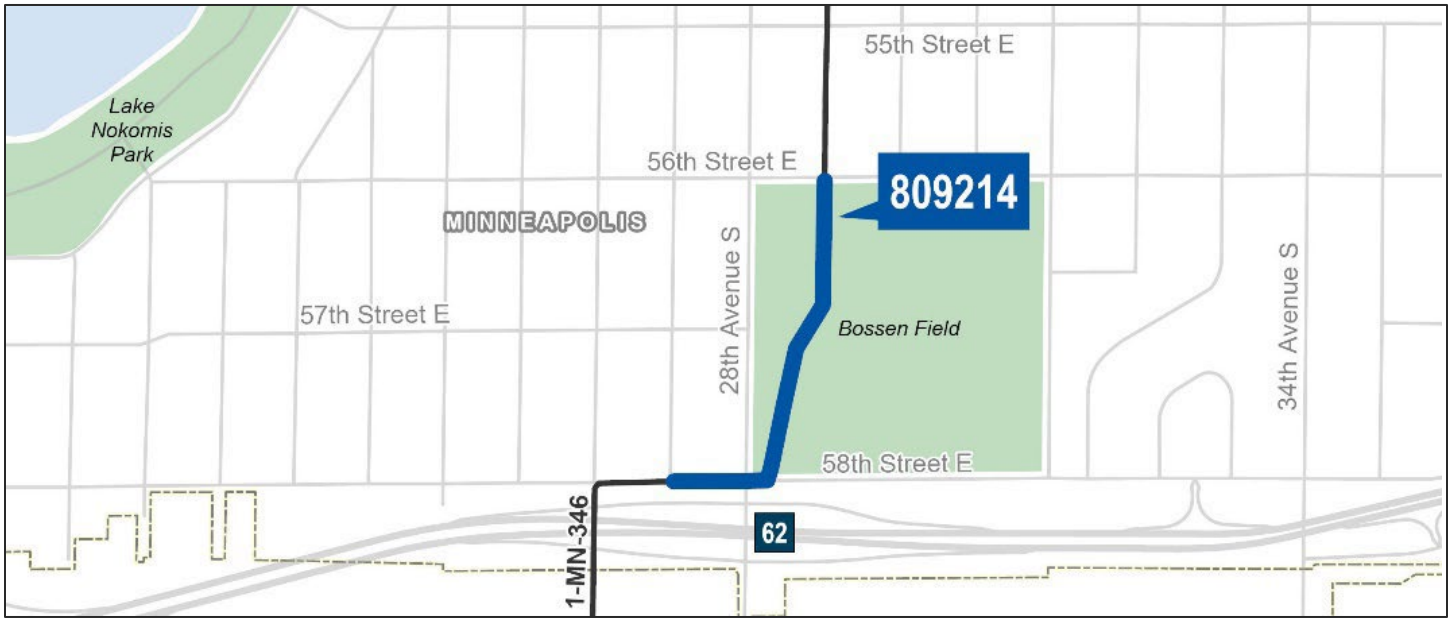
Financial analysis

2025 cash flow:	$150,000
Current ACP:	$15,330,000
2025 through 2030 cash flow:	$13,750,000
Total project cost:	$14,025,000

1-MN-346 Rehabilitation – Phase 1

Program family 8092 **Project #809214**

Project location: Council district #6, Cities of Minneapolis and Richfield, north side of the airport to the north side of Bossen Field



Map of Project #809214 location north of Highway 62 in Richfield and Minneapolis

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitate the existing condition 5 pipe between Bossen Field and 53rd Street East or replace it.

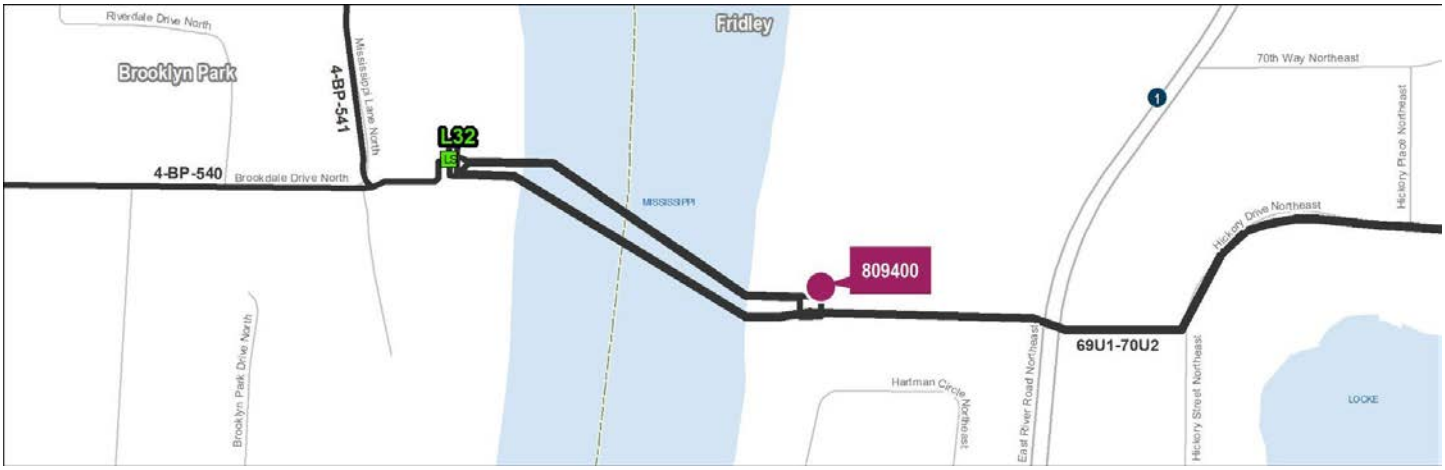
Project need
Methane gases are likely entering Interceptor 1-MN-346 through surrounding fill materials. High methane concentrations have been found at structures along Bossen Field park and upstream to Meter M-130. The interceptor was identified as being in poor condition in previous assessment. Lining the interceptor will preserve the pipe and minimize gases from entering the sewer, potentially causing hazardous conditions.

Planning: 2022	Design: 2023	Construction: 2024 through 2025

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$5,516,000
2025 through 2030 cash flow: Total project cost:	$4,810,000
	$5,000,000

Program 8094 – Brooklyn Park L32 Replacement



Map of project 809400 on either side of the Mississippi River in Brooklyn Park and Fridley

Description

This program provides the construction of a new lift station L32A on the east side of the Mississippi River on Council property. The program will determine which facilities will remain on the west side of the river at the existing L32 site.

Purpose and justification

Condition assessments have documented structural, mechanical, and electrical deficiencies which have led to system failures, such as backups and odor issues. Additionally, the existing lift station does not have capacity to serve the current and future needs of the area.

Program location

The active projects within this program are in the following Council district: 2

Active projects in program

Project Number	Project Title
809400	Design of New Lift Station L32A (Parent Project)

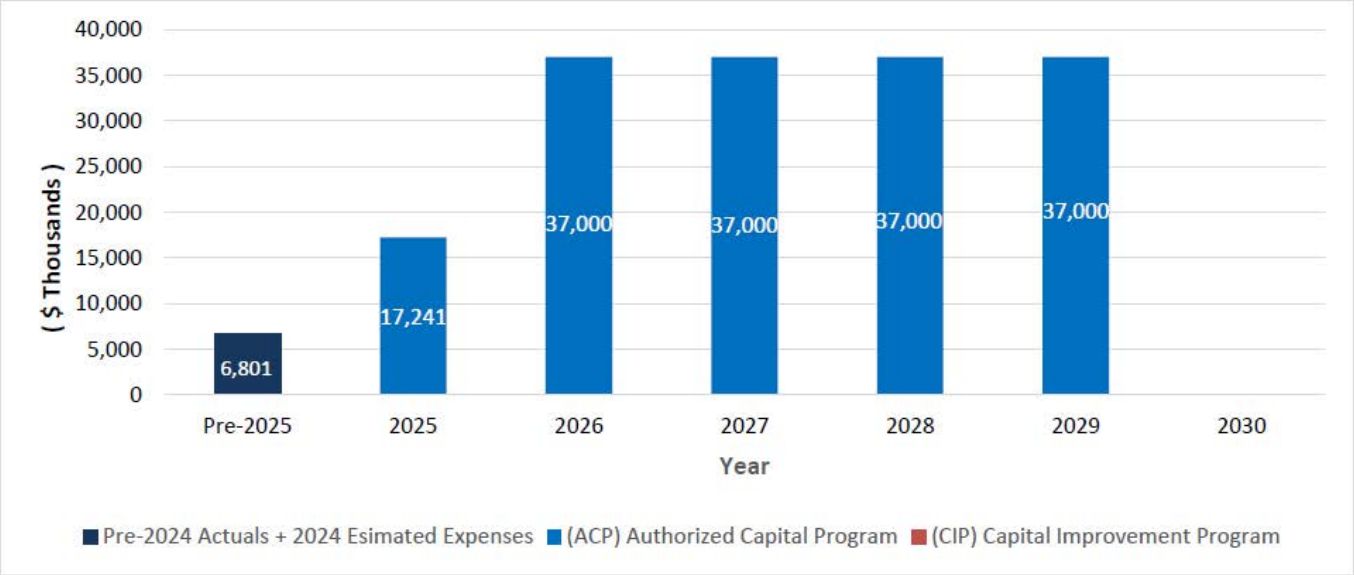
(Continued on next page)

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $172,042,700
- Capital Improvement Plan (CIP): $0

Estimated program cash flow from 2025 through 2030

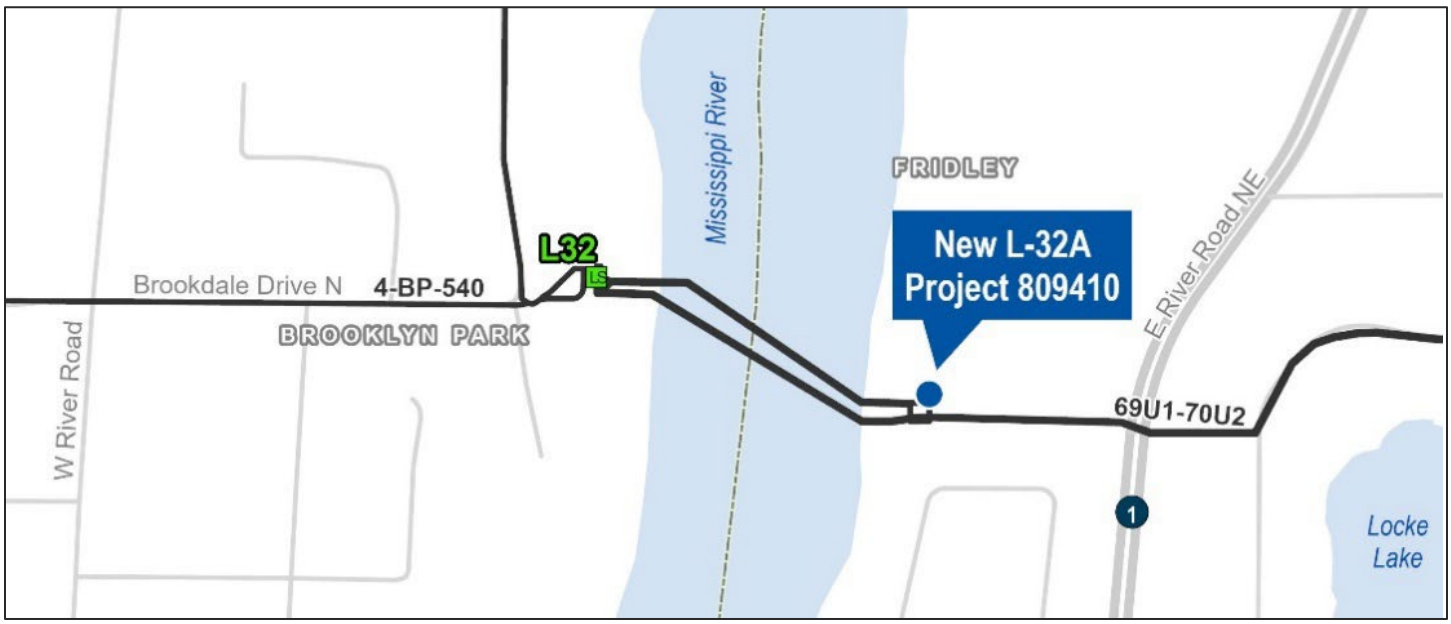
Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Design of New Lift Station L32A

Program family 8094 **Project #809400**

Project location: Council district #2, Cities of Brooklyn Park and Fridley, Lift Station L32 Site



Map of project #809400 location on either side of the Mississippi River in Brooklyn Park and Fridley

Project type
Lift Station Improvements

Objectives
System Expansion

Scope
Project includes design of a new lift station L32A on the east side of Mississippi River in Fridley. The work will also include rehabilitation of the two old forcemain pipes under the river, conversion of the existing forcemain pipes into siphon pipes, and demolition of the existing lift station L32 in Brooklyn Park.

Project need
Condition assessments have documented structural, mechanical, and electrical deficiencies which have led to system failures, such as backups and odor issues. Additionally, the existing lift station does not have capacity to serve the current and future needs of the area.

Planning: 2019 through 2021	Design: 2022 through 2025	Construction: 2025 through 2028

Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$170,700,000
2025 through 2030 cash flow:	$220,000,000
Total project cost:	$226,000,000

Program 8095 – South Area Interceptor Improvements

The construction of a new outfall structure for the Bloomington siphon in Eagan

Description

The interceptor systems in Apple Valley, Eagan, Farmington, Lakeville, Savage, and other south area communities need rehabilitation and/or replacement as well as expansion to serve growth. This program will rehabilitate existing interceptor facilities, including gravity sewers, and forcemains, and will analyze system needs to accommodate growth.

Purpose and justification

The program provides for improvements to the interceptor system that serves the south area. This includes work that will rehabilitate deteriorated interceptors in this area.

Program location

The active projects within this program are in the following Council districts: 4, 15, and 16

Active projects in program

Project Number	Project Title
809500	South Area Improvements (Parent Project)
809510	Shakopee Interceptor Odor Improvements

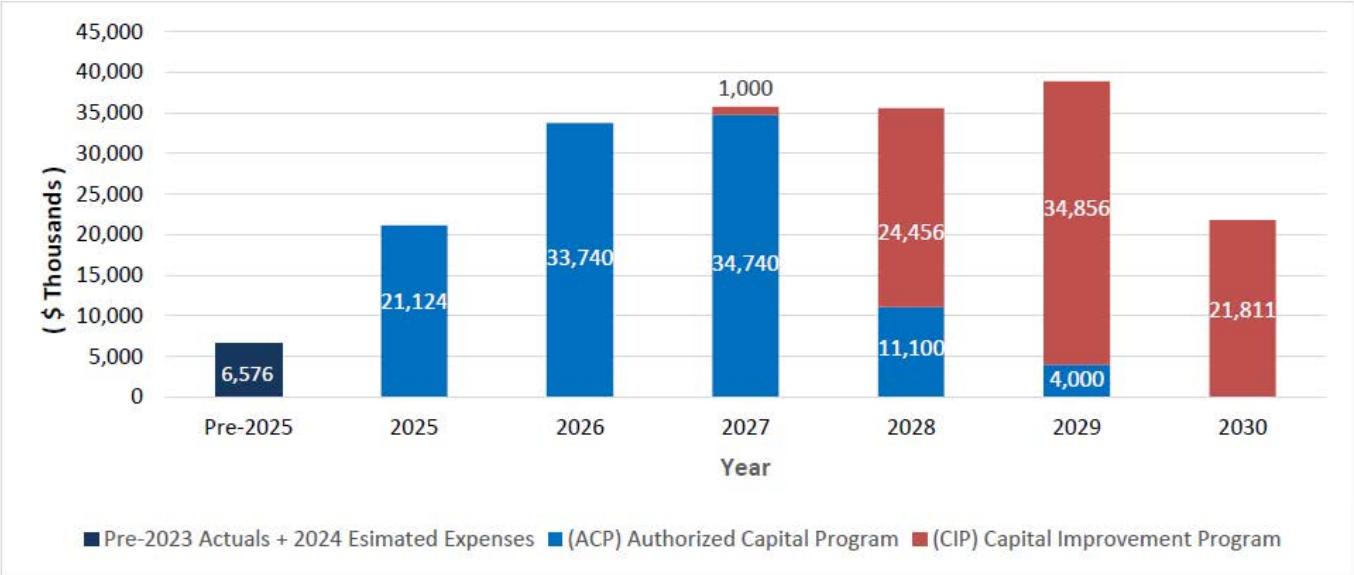
Project Number	Project Title
809512	1-MH-401 Rehabilitation
809513	7031-9003 Siphon Outlet Improvements
809515	Woodbury 1-WO-500 Improvements
809516	Burnsville Interceptor 3-BV-39
809518	MnDOT Robert Street Reconstruction 1-SP-230/M-058
809519	Interceptor 3-BV-35 Rehabilitation Site 1
809521	Burnsville 3-BV-35 Site 2 Rehabilitation
809523	Interceptor 7111A & Siphon 7102-2 Rehabilitation

Environmental Services 2025 through 2030 Capital Program

- Authorized Capital Program (ACP): $111,208,922
- Capital Improvement Plan (CIP): $82,123,000

Estimated program cash flow from 2025 through 2030

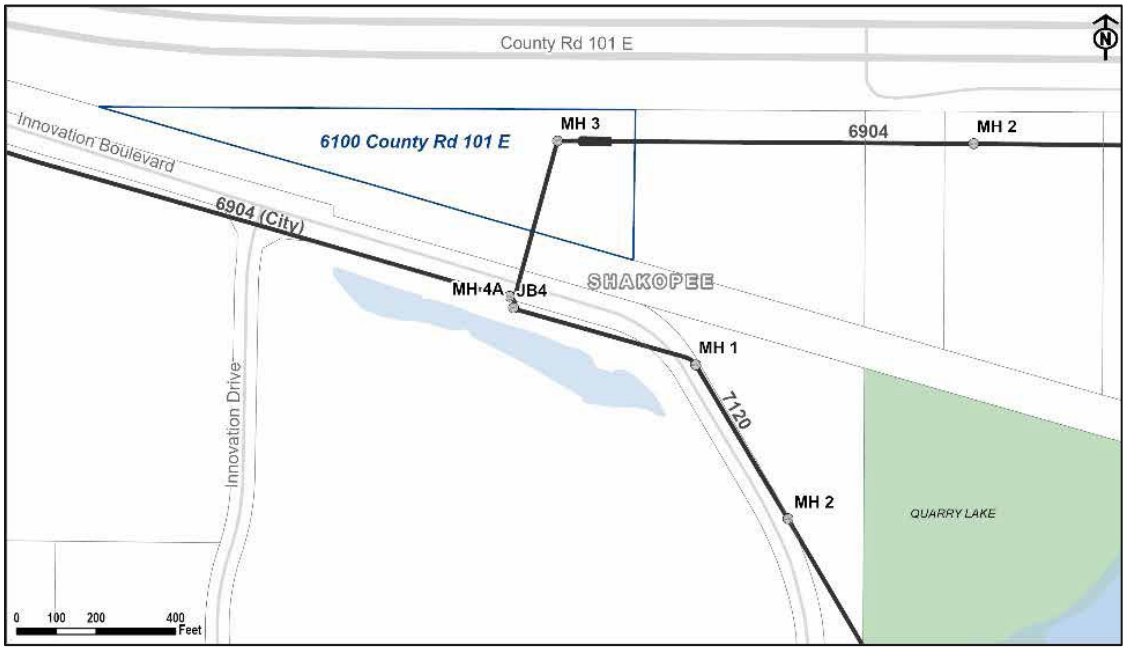
Note: the ACP is the total amount of all past and present authorizations including pre-2025 expenses.



Shakopee Interceptor Odor Improvements

Program family 8095 **Project #809510**

Project location: Council district #4, City of Shakopee, 9206 and 7120; pipe that runs along Highway 169



Map of project #809510 north of Innovation Boulevard and south of County Road 101 East in Shakopee.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Project work will include construction of ventilation and odor treatment facilities.

Project need
Very high hydrogen sulfide generation in interceptors 7120, 9206, and 6904 has led to corrosion and odors. A siphon located along interceptor 6904 creates an air dam, forcing sewer air to escape to the surface and impacting surrounding properties with odor. Hydrogen sulfide concentration within the interceptors at this location is at dangerous levels creating a safety issue for inspections and cleaning work.

Planning: 2020 through 2023	Design: 2023 through 2024	Construction: 2024 through 2026

Financial analysis

2025 cash flow:	$400,000
Current ACP:	$1,561,000
2025 through 2030 cash flow:	$8,900,000
Total project cost:	$9,500,000

1-MH-401 Rehabilitation

Program family 8095 **Project #809512**

Project location: Council District #14, Cities of Saint Paul, Mendota Heights, and Lilydale.

Map of Project #809512 near I-35E and Crosby Farm Regional Park

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Facility rehabilitation will occur in multiple phases including cured-in-place pipe (CIPP) lining of the siphon segments in the “stray current zone”, inspection and repair of other siphon segments downstream of the headhouse and under the Mississippi River as needed, and improving the head and tail houses. Installation of a new siphon is also being evaluated.

Project need
The 1-MH-401 facility consists of three 4,400-foot siphons, 12-, 16-, and 20 inches in diameter; a head house with control valves; a tail house with mag meters; and 1,200 feet of 30-inch x 72-inch gravity sewer downstream of the tailhouse that discharges into Interceptor 1-SP-250. The 12-inch siphon experienced a catastrophic failure in 2023 in an area potentially prone to corrosion from stray currents. It was repaired under Emergency Declaration in 2024 using a “Bullet Liner”. Shortly after the 12-inch siphon was repaired, the 20-inch siphon stopped taking flow, and sinkholes developed in the same area when the 20-inch siphon was dewatered for inspection. The facility is currently operating with only the 12-inch and 16-inch siphons serviceable and the condition of the 16-inch siphon suspect. A rehabilitation project is required to restore reliability and capacity to the entire system and avoid wastewater releases to the environment.

Planning: 2023 through 2025	Design: 2025 through 2026	Construction: 2027 through 2029

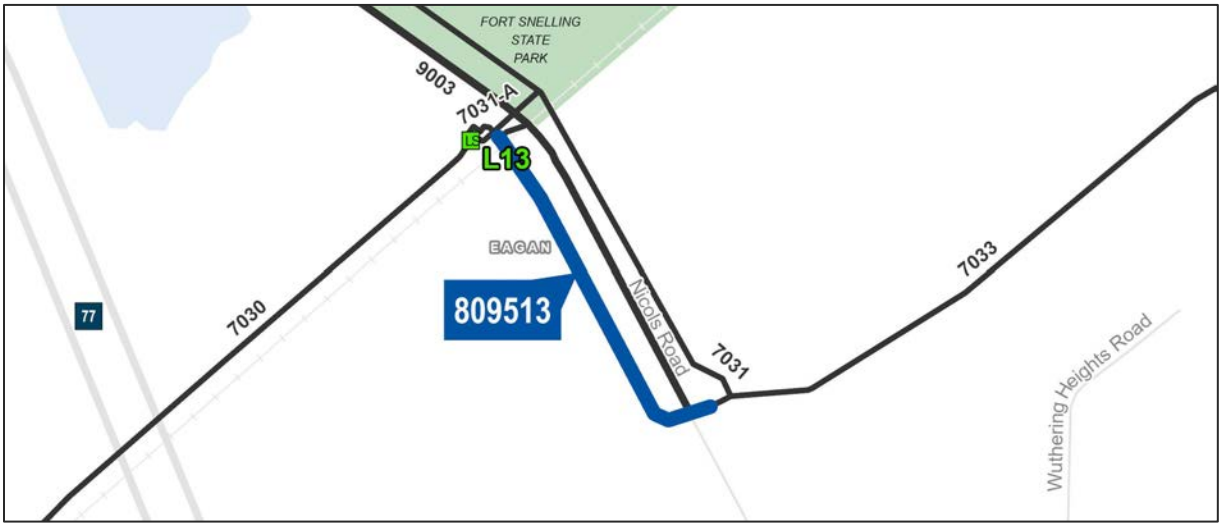
Financial analysis

2025 cash flow:	$1,000,000
Current ACP:	$15,755,000
2025 through 2030 cash flow:	$34,500,000
Total project cost:	$49,624,000

7031-9003 Siphon Outlet Improvements

Program family 8095 **Project #809513**

Project location: Council district #15, City of Eagan, Between L13 (located at 3725 Nicols Road) and the Bloomington Siphon Outlets (at 3740 Nicols Road).



Map of project 809513 location on Nicols Road in Eagan.

Project type
Forcemain and Siphon Improvements

Objectives
Asset Preservation

Scope
Phase I of the construction was completed under Project 819026: clear trees, relocate utilities, and install temporary conveyance. Phase II of the construction is being completed under Project 809513 over two winter construction seasons, and includes rebuilding the south junction structure, maintenance holes, slip-lining pipe, replacement of forcemain, and inspection of the siphons crossing the Minnesota River.

Project need
During inspection of the 7031/9003 Siphon Outlet Structures, Project 819010, severe corrosion was identified in the South Junction Structure and Maintenance hole 1. The 7030 forcemain between L13 and the Siphon Outlet Structure was constructed of 30-inch pre-stressed circular concrete pipe (PCCP) in 1972. PCCP Pipe of this installation year has a high rate of failure in corrosive environments. The pipe runs along the west side of Nicols Road through the Nicols Calcareous Fen, a unique type of wetland that supports many threatened or endangered plant species.

Planning: 2022 through 2023	Design: 2023 through 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$4,534,000
Current ACP:	$7,100,000
2025 through 2030 cash flow:	$2,345,000
Total project cost:	$7,100,000

Woodbury 1-WO-500 Improvements

Program family 8095 **Project #809515**

Project location: Council district 13, Cities of Woodbury and Oakdale

Map of the project 809515 location in Woodbury, Maplewood and St. Paul.

Project type
Study

Objectives
Asset Preservation and System Expansion

Scope
Metropolitan Council Environmental Services (ES) owns and operates 1-WO-500 in the cities of Woodbury, Maplewood, and Saint Paul. The interceptor potentially has capacity Issues from the crossing of I-94 at the Oakdale border to Ruth Street North in Saint Paul. The primary objective of this project is to improve system reliability by increasing the capacity of the interceptor. The planning phase will include hydraulic modeling and a desktop and field evaluation of the existing facility conditions.

Project need
The loss of service capacity in 1-WO-500 could cause environmental impacts from a spill or restrain future development.

Planning: 2025	Design: 2026	Construction: TBD

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$2,108,000
2025 through 2030 cash flow:	$11,000,000
Total project cost:	$11,000,000

Burnsville Interceptor 3-BV-39

Program family 8095 **Project #809516**

Project location: Council district #16, City of Burnsville

Map of Project #809520 Site 1 location from Frontage Road South across I-35W to near Cliff Road East in Burnsville

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Rehabilitation of 8,560 feet of interceptor pipe and 30 maintenance structures.

Project need
Routine gravity interceptor CCTV inspections have identified four interceptor sites in the South Interceptor Service Area that have failed pipes or pipes that will likely fail in the next 5 years. The facilities are in need of rehabilitation.

Planning: 2023	Design: 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$300,000
Current ACP:	$0
2025 through 2030 cash flow:	$14,700,000
Total project cost:	$15,000,000

MnDOT Robert Street Reconstruction 1-SP-230/M-058

Program family 8095 **Project #809518**

Project location: Council district #13 and 15, Cities of Saint Paul and West St. Paul

Map of project #809518 – location in Saint Paul's West Side

Project type
Interceptor and Meter Improvements

Objectives
Asset Preservation and Quality Improvements

Scope
The scope of work on this project will include rehabilitation of 2,500 linear feet of 42-inch brick pipe, 11 maintenance structures, and meter vault and flume improvements.

Project need
MnDOT's Robert Street Reconstruction project between Annapolis Street East and Kellogg Boulevard overlaps a portion of interceptor 1-SP-230 and M-058. Condition assessments show fair to poor condition assets in the vicinity. This project will extend the useful life of interceptor facilities in the MnDOT right-of-way beyond the construction 20-year no-dig moratorium.

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

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$700,000
2025 through 2030 cash flow:	$3,400,000
Total project cost:	$3,400,000

Interceptor 3-BV-35 Rehabilitation Site 1

Program family 8095 **Project #809519**

Project location: Council district #16, City of Burnsville

Map of Project #809520 Site 2 south of the eastern portion of Black Dog Lake and Site 3 along Cliff Road.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Sites 2 and 3 of the South Area Improvements. This project includes rehabilitation of 2,740 feet of interceptor pipe and associated maintenance structures as needed.

Project need
Interceptor 3-BV-35 was constructed in 1964. CCTV inspection showed two segments to be conditions 4 and 5 and in need of rehabilitation or replacement. The upstream segment from MH-172 to MH-170 includes approximately 800 feet of 18-inch reinforced concrete pipe (RCP). The downstream segment between MH-85 and the 7030 discharge includes 1,200 feet of 12-inch vitreous clay pipe (VCP) and 740 feet of 18-inch VCP.

Planning: 2023	Design: 2024	Construction: 2025 through 2026

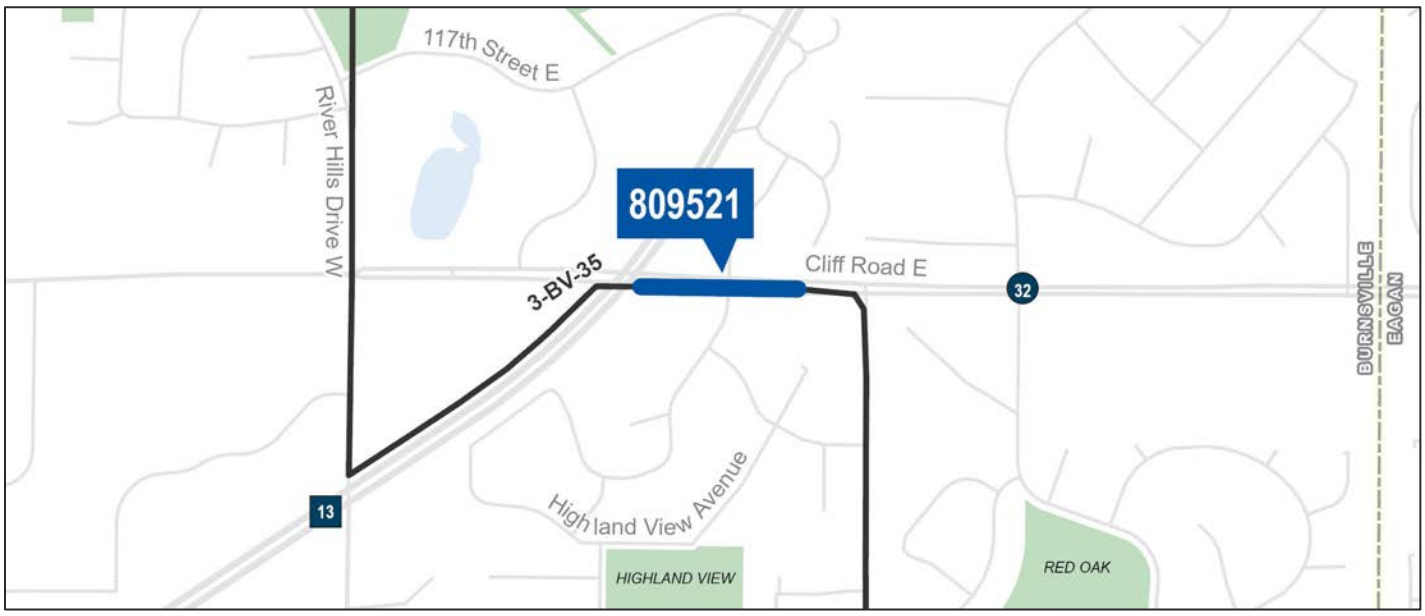
Financial analysis

2025 cash flow:	$50,000
Current ACP:	$1,216,000
2025 through 2030 cash flow:	$2,400,000
Total project cost:	$2,400,000

Burnsville 3-BV-35 Site 2 Rehabilitation

Program family 8095 **Project #809521**

Project location: Council district #16, City of Burnsville.



Map of project #809521 located along Cliff Road near Highway 13 in Burnsville

Project type
Interceptor Rehabilitation

Objectives
Asset Preservation

Scope
3-BV-35 Site 2 includes the approximately 800-foot segment from maintenance hole (MH)-170 to MH-1 along Cliff Road. MH-1 is a drop MH with one 8-inch City of Burnsville connection from the south. MH-2 is a drop MH with one 9-inch City of Burnsville connection from the north.

Site 2 construction will include a single temporary conveyance pipe routed on the south side of Cliff Road and underneath Highway 13. Site 2 construction will include traffic control around the construction area and restoration of disturbed areas.

Project need
Approximately 800 linear feet of 18-inch reinforced concrete pipe (RCP) pipe was installed in 1964 and was rated 4 (poor) during the 2022 condition assessment.

Planning: 2023	Design: 2024 through 2025	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$100,000
Current ACP:	$1,950,000
2025 through 2030 cash flow:	$2,100,000
Total project cost:	$2,100,000

Interceptor 7111A & Siphon 7102-2 Rehabilitation

Program family 8095 **Project #809523**

Project location: Council district #15, City of Inver Grove Heights, 7102-2 and 7111A

Map of Project #809520 Site 4 south of Heritage Village Park in Inver Grove Heights.

Project type
Interceptor Improvements

Objectives
Asset Preservation

Scope
Site 4 of the South Area Improvements. This project includes rehabilitation of 555 feet of interceptor pipe and associated maintenance structures.

Project need
CCTV inspection showed the segment between the 7102-2 Turning Chamber and 7111A discharge to 7111-1 and 2 at maintenance hole (MH) 212 to be conditions 4 and 5. The turning structure is in very poor to failing condition, as is the tail of the siphon pipes. Other structures associated with these pipes are in poor condition and will need replacement.

Planning: 2023	Design: 2024	Construction: 2025 through 2026

Financial analysis

2025 cash flow:	$200,000
Current ACP:	$1,121,000
2025 through 2030 cash flow:	$8,100,000
Total project cost:	$8,103,000

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