

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).

Planning work is documented in the Metro Plant 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, did not qualify for PFA funding. (The project to renew the existing three incinerators is relocated to Program 8103 Metro WRRF Restoration and Improvements.)

Purpose and justification

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 Solids Auxiliary Systems
806230	Metro WRRF Fourth Incinerator

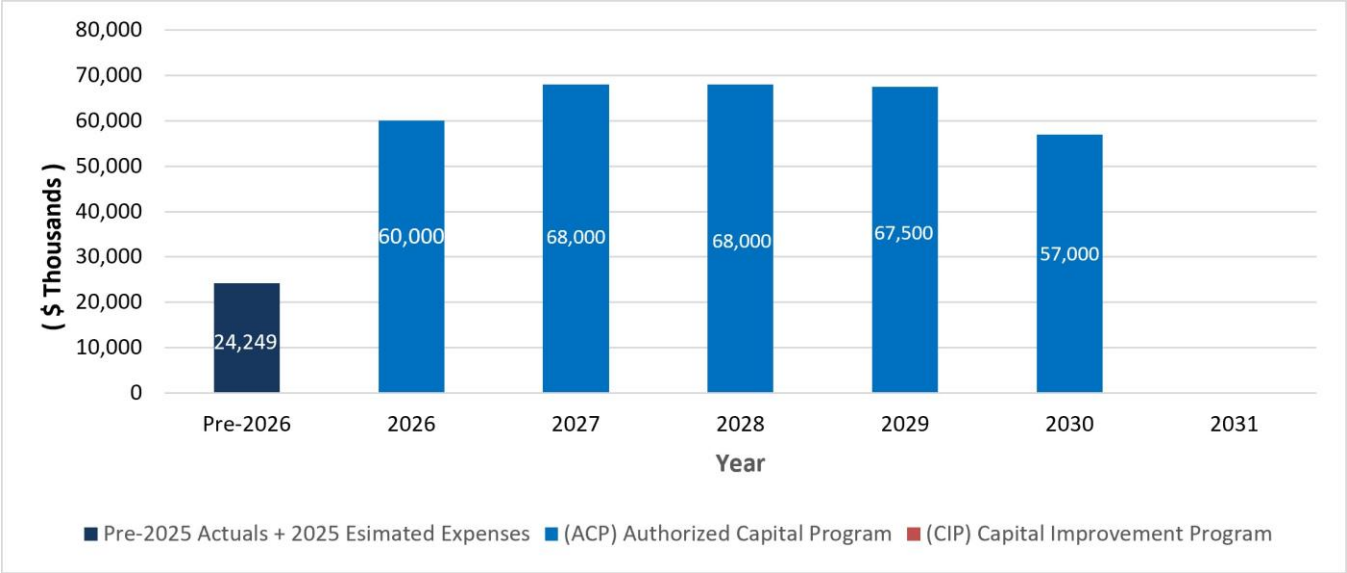
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Environmental Services 2026 through 2031 Capital Program

- Authorized Capital Program (ACP): \$344,748,946
- Capital Improvement Plan (CIP): \$0

Estimated program cash flow from 2026 through 2031

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



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



Existing Primary Heat Exchanger to be Rehabilitated



Existing Auxiliary Condenser to be Replaced

Project type
Facility

Objectives
Asset Preservation and Quality Improvements

Scope
This project includes rehabilitating primary heat exchangers, replacing auxiliary condensers, adding an additional effluent water pump, demolishing fuel oil tanks, installing oxygen meters, and installing effluent water softening.

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



Planning: 2011 through 2019



Design: 2025 through 2027



Construction: 2027 through 2029

Financial analysis

2026 cash flow:	\$2,000,000
Current ACP:	\$3,530,000
2026 through 2031 cash flow:	\$32,000,000
Total project cost:	\$32,432,000

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



3D Rendering of 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:
2011 through 2019



Preliminary Design:
2020 through 2024



Design-Build Construction:
2025 through 2028

Financial analysis

2026 cash flow:	\$57,000,000
Current ACP:	\$285,000,000
2026 through 2031 cash flow:	\$285,000,000
Total project cost:	\$307,529,000