



5-Year (FY22/23-FY26/27) Capital Improvement Program

Board of Directors Meeting
June 22, 2022



TRANSFORMING WASTEWATER TO RESOURCES

5-Year Capital Improvement Program (CIP) Development Schedule



Board Meeting

March 30, 2022

- Board received a report regarding major factors impacting the development of the new 5-year CIP

April 20, 2022

- Board reviews proposed SSC adjustments, considers setting public hearing and approving distribution of Prop. 218 notices

May 11, 2022

- Board reviews key operating budget assumptions, draft 5-year CIP (FY22/23-FY26/27)

June 22, 2022

- **CIP Public Hearing, Board considers CIP approval**
- SSC Public Hearing, Board considers SSC approval and authorizing collection on tax roll
- Board considers approval of FY22/23 Budget appropriations

District Strategic Plan (Aug 2021)



Goal 1 Infrastructure Investment

Ensure the long-term effectiveness and reliability of critical District infrastructure through prioritized, cost-effective capital investment and maintenance

Key Highlights

- Ensure effective capital project delivery (**engagement**, lifecycle costs, **risk assessments**, **lessons learned**, defined roles and responsibilities)
- Conduct and integrate **infrastructure** condition assessment, master planning, and CIP prioritization
- Develop **strategic, risk-based** Asset Management Program

Goal 1 Infrastructure Investment (cont'd) DRAFT

Ensure the long-term effectiveness and reliability of critical infrastructure through prioritized, cost-effective capital investment and maintenance

STRATEGY NO. 3 Infrastructure Investment

Key Objectives

- Ensure the 5-yr infrastructure investment plan
- Coordinate with other strategies

STRATEGY NO. 4 Ensure Infrastructure Reliability

Key Objectives

- Ensure meaningful investment in infrastructure
- Consider project alternatives, including "vertical assets"
- Conduct project and design status reviews, including initial and final reviews
- Integrate reviews including initial and final reviews
- Ensure an effective project delivery process
- Formalize roles and key stakeholders consistent with the project delivery process

Number of Master Plans

Meet Completion Schedule

Actual Annual Capital Investment

Construction Change Orders

Construction Change Orders Completed

Annual Number of Major Projects

Goal 1 Infrastructure Investment DRAFT

Ensure the long-term effectiveness and reliability of critical infrastructure through prioritized, cost-effective capital investment and maintenance



STRATEGY NO. 1 Identify existing infrastructure vulnerabilities and long-term planning considerations (e.g., service area growth, regulatory requirements, new technologies) that drive future investment in new and existing infrastructure

Key Objectives

- Conduct periodic infrastructure condition assessment activities and document findings in the wastewater conveyance ("linear assets," including pump stations, gravity sewers, and force mains) and treatment ("vertical assets," including WWTP, RWF) systems, using multi-faceted evaluation methods
- Prepare comprehensive master plans for major infrastructure focus areas that include infrastructure condition assessments, prioritized capital investment needs, service area growth considerations, and opportunities to improve operating effectiveness and efficiency through new processes or technology

STRATEGY NO. 2 Meet operational needs, support reliability goals, and extend asset life through continued development and implementation of a formalized, risk-based Asset Management Program

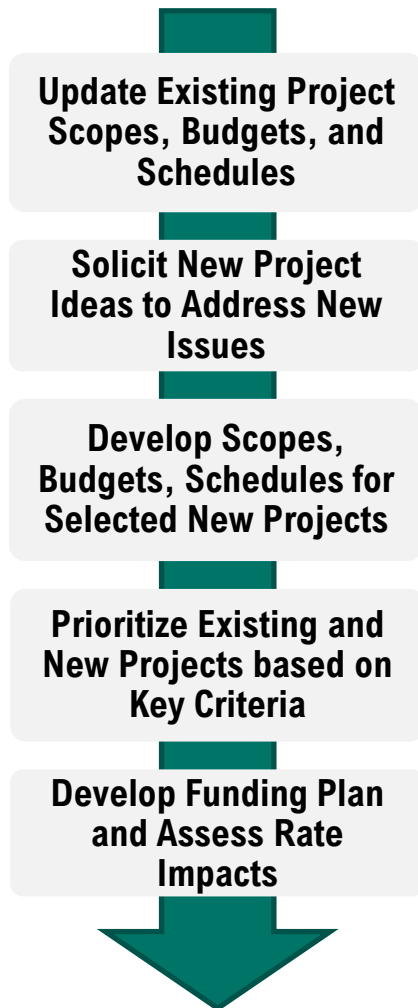
Key Objectives

- Expand utilization of computerized maintenance management systems (CMMS) and formalized workflow changes to support reliability-based asset maintenance activities and data-driven decision making
- Utilize an action-based, strategic approach with clear goals, objectives, roles, and responsibilities to support successful Asset Management Program implementation



Overview

5-Year CIP Development Process



Financial Sustainability Guiding Principles

- Critically review operating budget each year to identify budget adjustment needs and opportunities
- **Ensure effective prioritization** of a CIP that addresses critical infrastructure needs
- Utilize a 5-year rate model to identify SSC revenue needed to meet cost projections without sharp rate increases
- **Maximize cash funding** of CIP (vs. debt financing) to ensure lowest overall costs for District customers
- Meet District policy to maintain minimum reserve balance
- Factor growth into SSC calculation each year to ensure equitable cost allocation across customers
- **Reserve future debt capacity** for long-term nutrient management treatment plant upgrades
- Maintain SSCs below average relative to peer agencies

5-Year CIP Overview

- Proposed 5-year CIP (FY22/23-FY26/27) = \$135.9M
 - ① Supporting Strategic Plan implementation
 - ② Investing in existing wastewater infrastructure renewal
 - ③ Addressing new infrastructure needs
 - ④ Adapting to shifting project priorities and changes
 - ⑤ Integrating key asset management principles
 - ⑥ Driving organizational improvement
 - ⑦ Planning for the future

- Current 5-year CIP (FY21/22-FY25/26) = \$127.0M
 - Proposed 5-year CIP = +\$8.9M increase

- FY22/23 CIP Budget Request
 - Required FY22/23 CIP budget appropriation = \$10.8M
 - Estimated carryover budget for FY22/23 = \$6.0M
 - Estimated FY22/23 CIP expenditures = \$16.8M

5-Year CIP Overview (cont'd)

Focus Areas	Key Actions
② Investment in Existing Wastewater Infrastructure Renewal	✓ 78% of the total CIP total is allocated to rehabilitation and/or replacement of critical wastewater infrastructure
③ Addressing New Infrastructure Needs	✓ CIP includes seven new, prioritized projects totaling \$3.0M ✓ \$1.5M for Recycled Water Facility and WWTP interconnection to support regulatory compliance objectives during potential WWTP process upset events ✓ \$0.4M for overhaul of existing cogeneration engine to support resource recovery via on-site power generation (meets ~60% of WWTP needs)
⑦ Planning for the Future	✓ CIP includes five master plans totaling \$1.8M to identify strategic considerations and guide prioritized infrastructure investment in recycled water, process control, electrical, and biosolids focus areas

Major Infrastructure Investment Drivers Impacting CIP Development



Wastewater Collection System

- Most of Bay Point system is in “fair to good” condition
- Address infrastructure needs via Bay Point Sewer Repair Phase 5 Project (**\$3.0M**) for ongoing compliance with 2013 River Watch Settlement Agreement

Wastewater Conveyance System

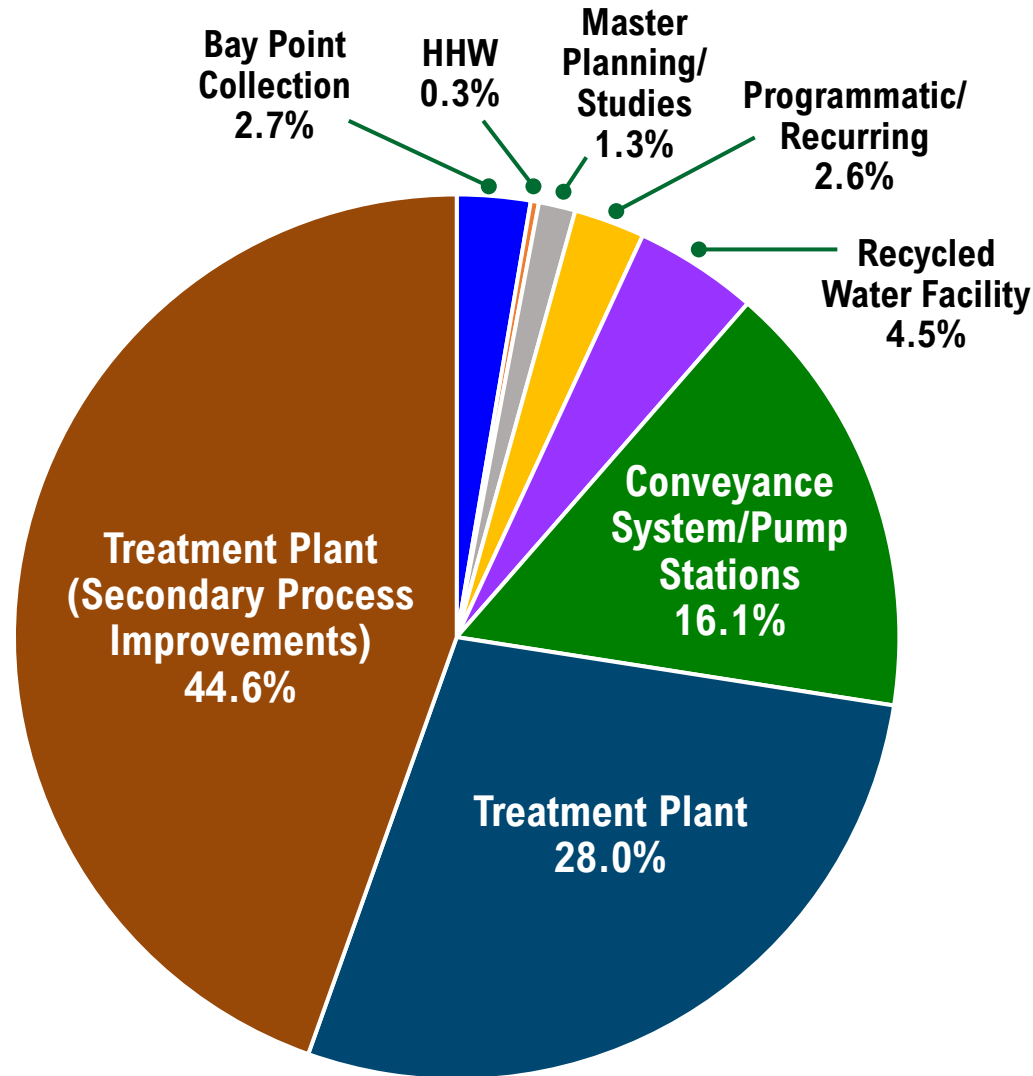
- Intensifying focus on **gravity sewer rehabilitation**
- Significant cost increase for Antioch PS and Conveyance System Improvements (**\$18.5M**, +\$9.5M increase)
- Manhole, Gravity Interceptor, Easement Roadway Improvements (**\$1.5M**)—includes **condition assessment**
- Bridgehead Pipeline Replacement (**\$3.5M**)

Wastewater Treatment Plant

- Complete Switchgear Replacement Project (**\$6.0M**)
- Initiate Digester Gas Handling and Cogeneration Engine Improvements (**\$7.0M**)
- Address significant regulatory compliance vulnerability via Secondary Process Improvements (**\$60M**)

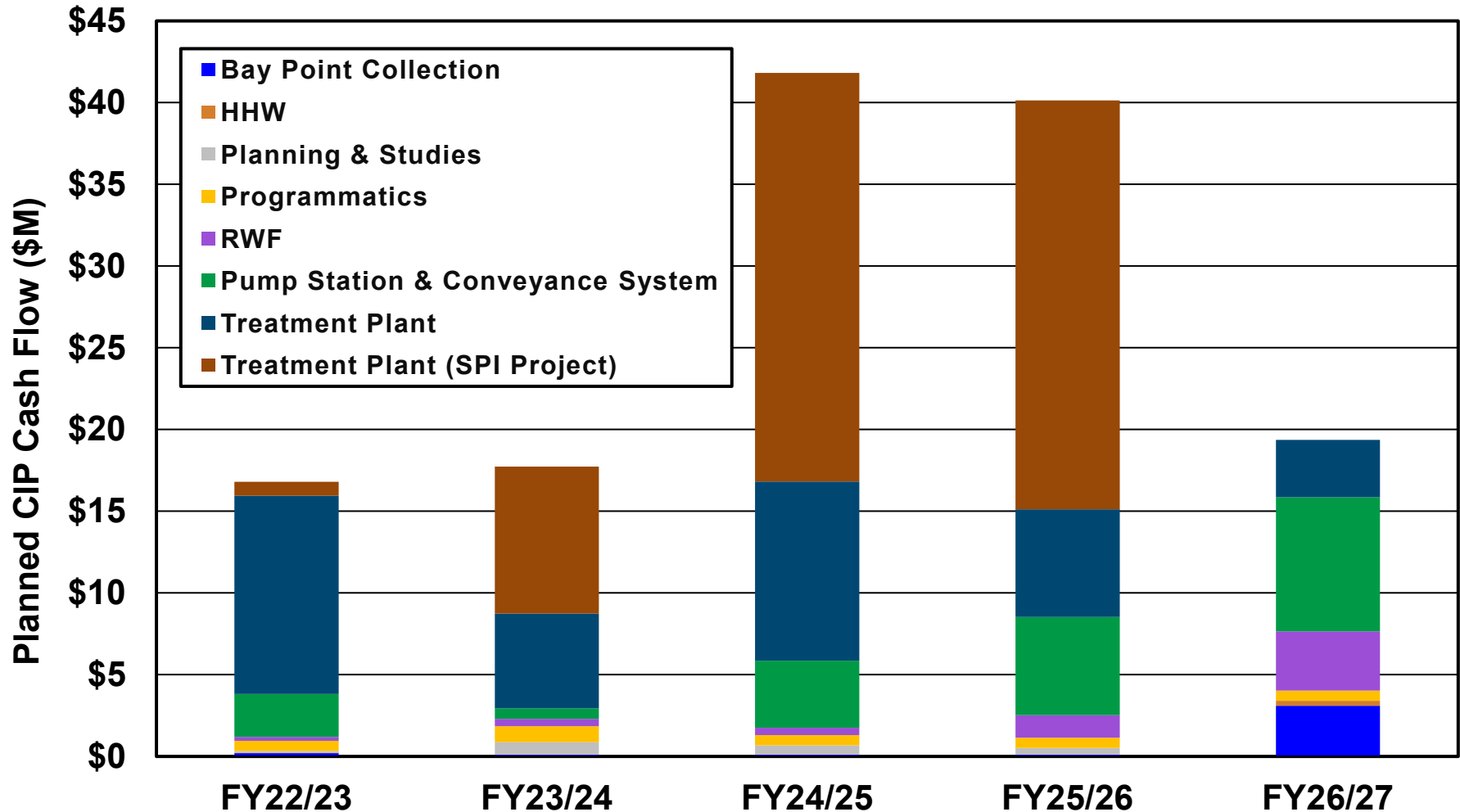
5-year CIP Overview

Planned Expenditures by Major Area



5-year CIP Overview

Planned Expenditures by FY



Recommended Actions

- Conduct a Public Hearing on FY22/23-FY26/27 CIP
- After receiving public comments, consider:
 - Approving FY22/23-FY26/27 CIP, and
 - Authorizing General Manager to file a California Environmental Quality Act (CEQA) Notice of Exemption

