



Proposed 5-Year (FY23/24-FY27/28) Capital Improvement Program

Board of Directors Meeting
May 10, 2023



TRANSFORMING WASTEWATER TO RESOURCES

Overview

5-year CIP Development Process

March 8, 2023

Board received a staff report on Major Factors Impacting 5-year CIP Development

May 10, 2023

Board reviews draft 5-year CIP and considers setting Public Hearing for June 14, 2023

June 14, 2023

Public Hearing and Board Consideration of Final 5-year CIP Adoption

Update Existing Project Scopes, Budgets, and Schedules

Solicit New Project Ideas to Address New Issues

Develop Scopes, Budgets, Schedules for Selected New Projects

Prioritize Existing and New Projects based on Key Criteria

Develop Funding Plan and Assess Rate Impacts

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)

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

STRATEGY NO. 3

- Key Objectives
- Ensure the 5-yr infrastructure r
 - Coordinate vari

STRATEGY NO. 4

- Key Objectives
- Ensure meanin unforeseen scc
 - Consider proje project alternat line" analyses,
 - Conduct projec and design stu operational, an
 - Integrate revis including initial
 - Ensure an effec
 - Formalize roles and key stakeh consistent with

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Annual Number of M

Goal 1 Infrastructure Investment

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

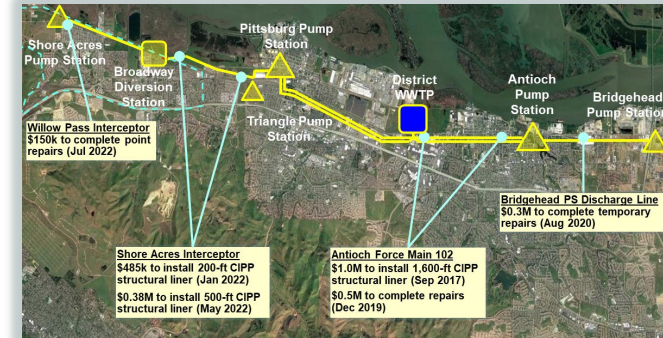
Proposed 5-year CIP

- Ensuring **effective prioritization** of capital investment to address critical **aging infrastructure, regulatory compliance** needs in wastewater collection, conveyance, and treatment, and recycled water systems

- Proposed 5-year CIP = **\$138.7M**
 - +\$2.8M from current CIP (\$135.9M)

- FY23/24 Budget Appropriation Need

Required FY23/24 CIP Budget Appropriation =	\$11.8M
Estimated FY23/24 Carryover Expenditures =	<u>\$4.6M</u>
Estimated FY23/24 CIP Expenditures =	\$16.4M



Major Drivers Impacting Proposed 5-yr CIP Development (Mar 2023 Update)



Secondary Process Improvements

- Project schedule has been delayed by approximately two years (completing master planning work)
- Original Project scope (**\$60M**) did not include nutrient removal (renew infrastructure, address service area growth)
- Algal blooms in SF Bay in summer 2022 may accelerate implementation of nutrient removal requirements

APS and Conveyance System Improvements

- Project schedule has been delayed by approximately two years (significant planning/pre-design efforts to determine best project approach)
- Significant cost increase (**\$18.5M**, +\$9.5M increase)

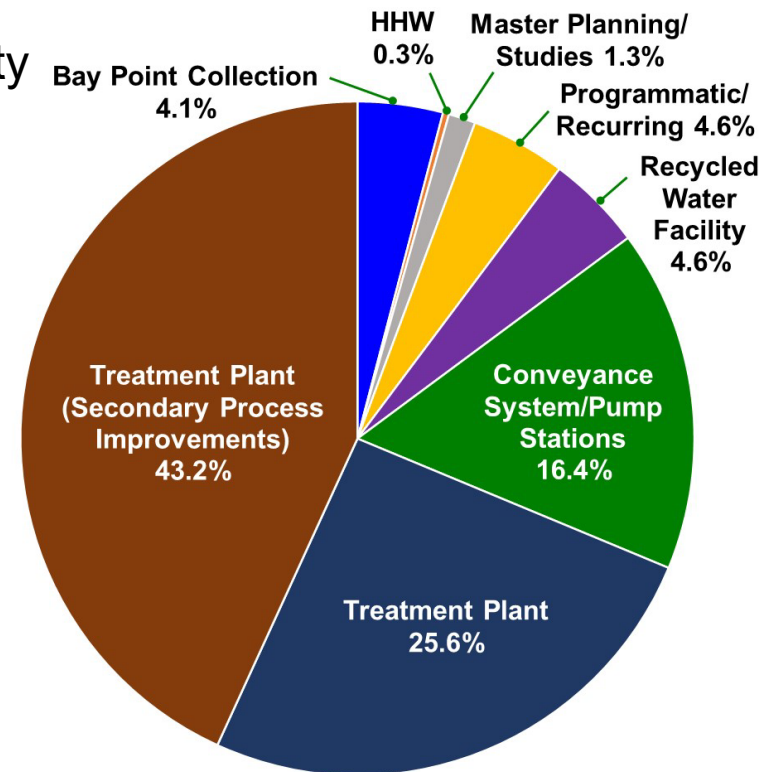
Cogeneration System Improvements

- Project schedule has been delayed by approximate one year (provided opportunity to access federal funding)
- Staff is pursuing accelerated design schedule to meet federal tax credit requirement under Inflation Reduction Act (in construction by December 31, 2024)
- **\$10M** construction cost w/assumed \$3M tax credit

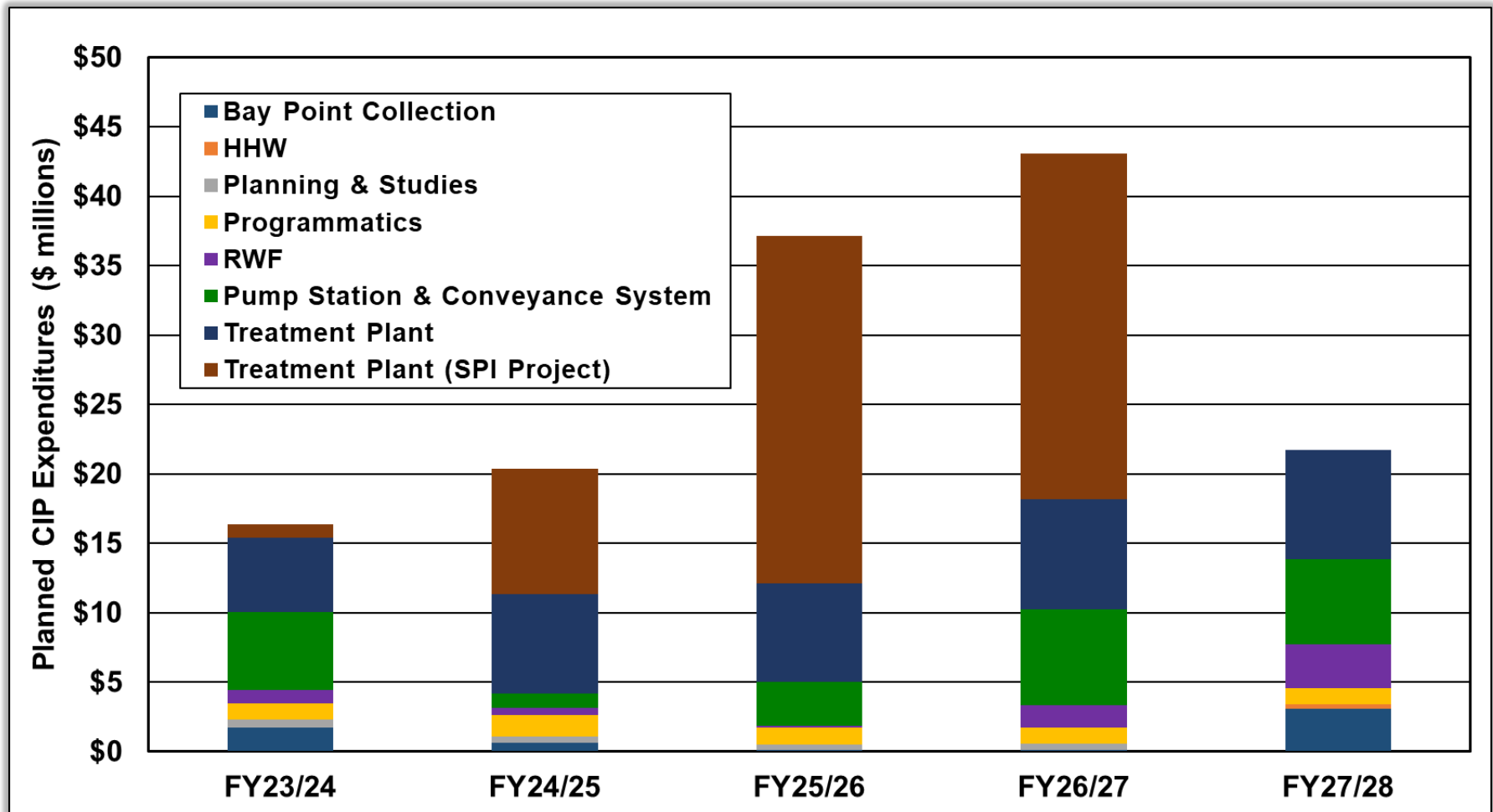
Ensuring Infrastructure Renewal Planned Expenditures by Major Area



- **Addressing Aging Infrastructure Needs**
 - ~78% of CIP supports rehabilitation and/or replacement of existing critical wastewater infrastructure
- **Prioritizing New Capital Investment Needs**
 - Ten new projects (\$6.0M)
 - **\$3.6M** in FY23/24 including Manhole, Gravity Interceptor, and Easement Improvements Phase 2 (\$2.0M) and Conveyance System Assessment (\$0.7M)
- **Ensuring Integrity of BP Collection**
 - Near- and long-term efforts to repair prioritized segments (\$5.7M)
- **Planning for the Future**
 - CIP includes \$1.8M for five master planning efforts to guide future investments



Significant Capital Projects on Horizon Planned Expenditures by Fiscal Year



Recommended Board Actions

- Review and provide comments on proposed 5-year (FY23/24-FY27/28) CIP
 - Reviewed with Finance Committee on April 26, 2023
- Set Public Hearing for June 10, 2023, at 5:30 pm to consider approval of the final 5-year CIP

