



# Major Factors Impacting Capital Improvement Program Development

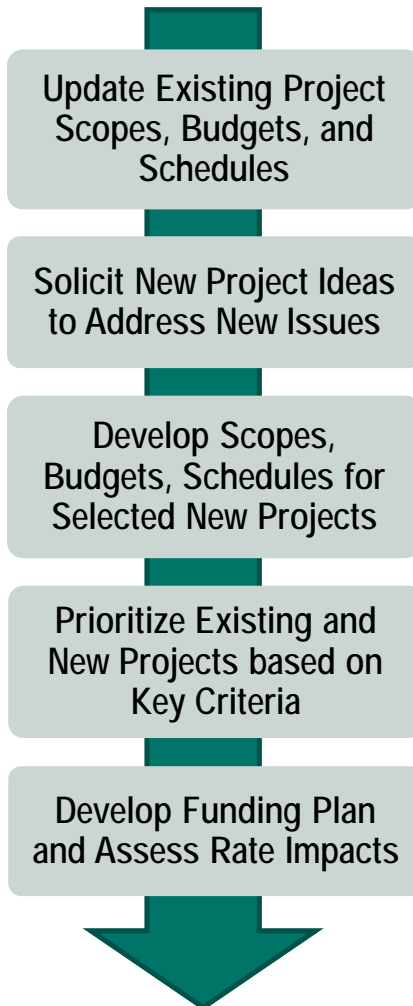
Board of Directors Meeting  
January 13, 2021



TRANSFORMING WASTEWATER TO RESOURCES

# Overview

## CIP Development Process



- Investing in existing wastewater infrastructure renewal
- Addressing new infrastructure needs
- Adapting to shifting project priorities and changes
- Integrating key asset management principles
- Driving organizational improvement
- Planning for the future

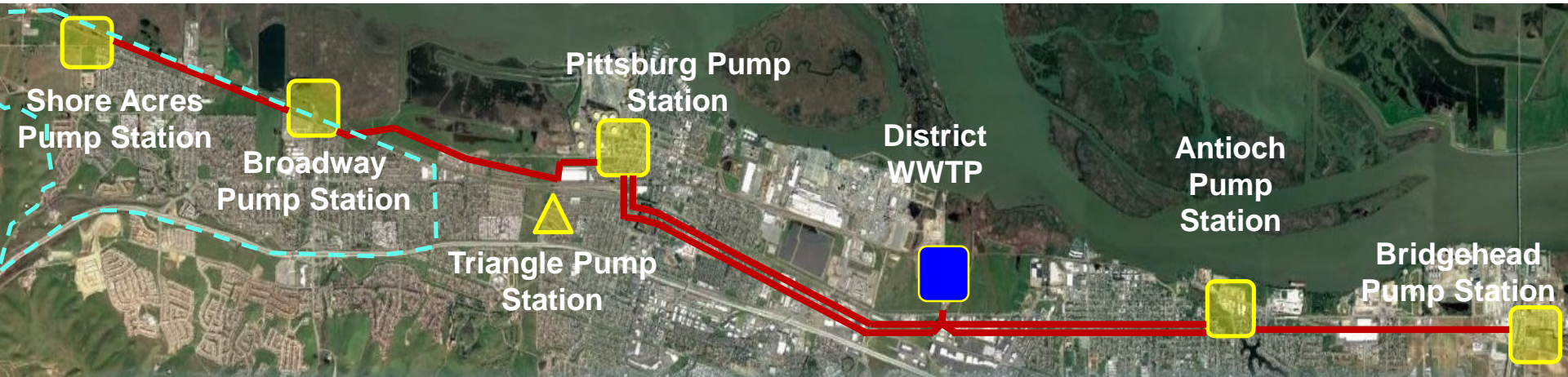
# Financial Sustainability

## Guiding Principles



- Critically review operating budget each year to identify budget adjustment needs and opportunities
- **Ensure effective prioritization of a capital improvement program (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 secondary capacity expansion and nutrient management treatment plant upgrades**
- Maintain SSCs below average relative to peer agencies

# Infrastructure Investment Wastewater Conveyance System



**Bay Point Sewer Repair Phase 5 = \$3.0M**

- Collection system reliability and compliance with 2013 River Watch Settlement Agreement

**Antioch Conveyance System/Pump Station Improvements = \$8.3M**

- Conveyance system reliability and infrastructure needs

**Pump Station Facilities Repair = \$14.1M**

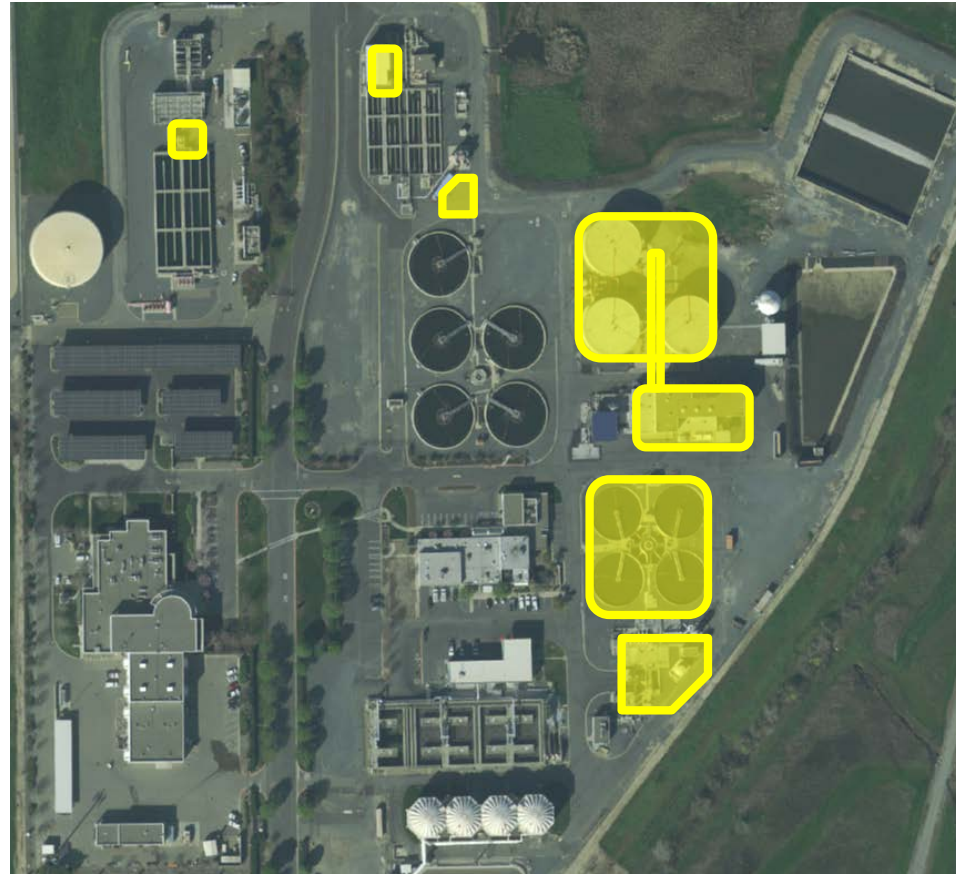
- Infrastructure needs and safety issues at six pump stations



# Infrastructure Investment Wastewater Treatment Plant (WWTP)

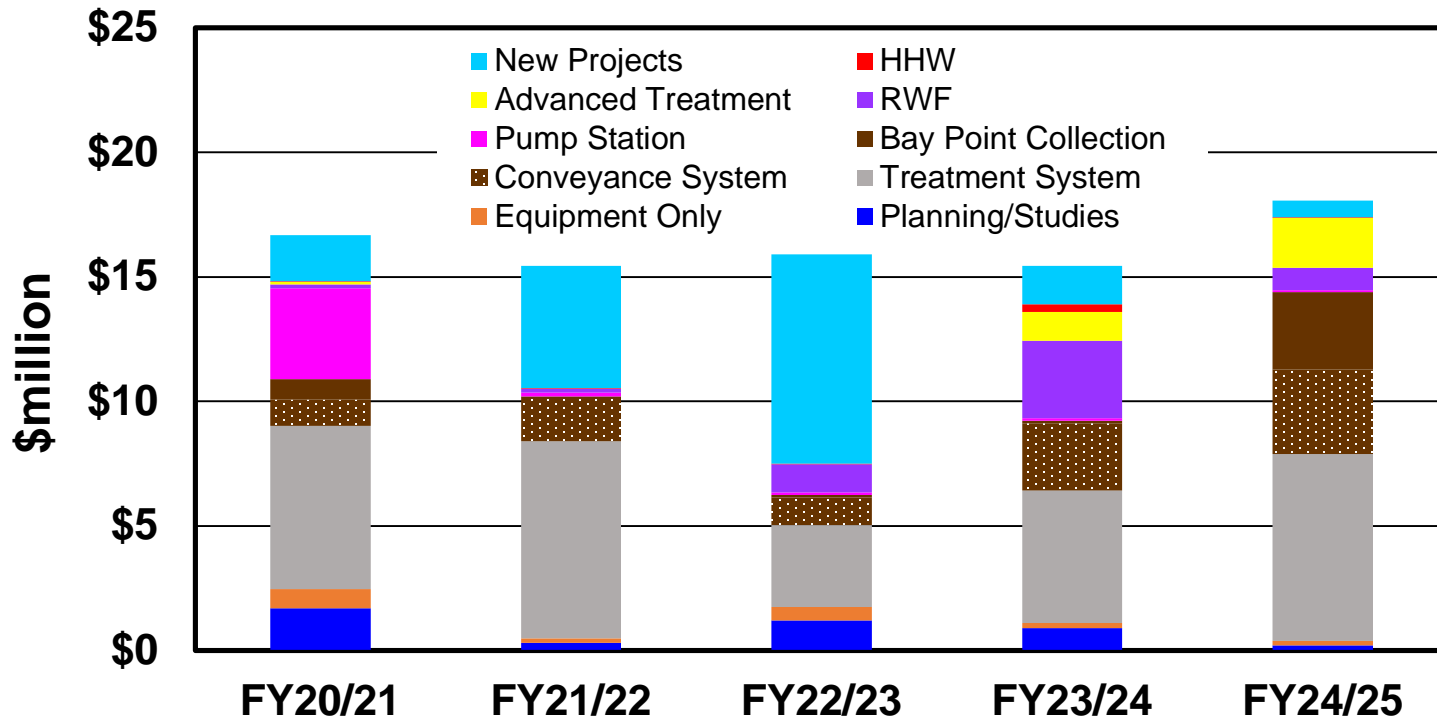
## Rebuilding Major WWTP Infrastructure

- Headworks Improvements (\$12.0M) to improve influent screening and grit removal
- Primary Clarifier Improvements (\$4.2M) to replace critical scum and sludge collection pumps
- Electrical Switchgear Replacement (\$11.2M) to ensure reliability of power distribution system
- Digester and Cogeneration Engine Improvements (\$5.8M) to address infrastructure needs
- Sodium Bisulfite Tank Replacement (\$0.8M) to ensure dechlorination process reliability



# Current 5-year CIP Highlights

- Total planned 5-year CIP = \$81.3 million
  - 70% allocated to WW Capital Asset Replacement Fund to support rehabilitation of critical wastewater infrastructure
- FY20/21 CIP Budget Appropriation = \$16.7M
  - Planned FY20/21 Expenditures = \$28.7M (\$12.0M in carryover)



# Major Drivers Impacting Development of Upcoming 5-yr CIP



## Headworks Improvements

Early project completion required additional \$3.0M in appropriations in FY20/21 (reduces need in FY21/22)  
[**Board Approved:** December 2020]

## Bridgehead Pipeline Replacement

- Unplanned \$1.5M in FY20/21 for temporary line  
[**Board Approved:** September 2020]
- Unplanned \$1.5-3.0M in FY21/22 for permanent line

## Antioch Conveyance Improvements

- Current CIP = \$3.0M (FY21/22) + \$5.0M (FY22/23)
- Staff expects to defer project due to conflicts with Bridgehead Pipeline Replacement

# Major Drivers Impacting Development of Upcoming 5-yr CIP



## Resource Recovery Facility Master Plan

- Condition assessment findings identified \$12.0-15.0M in new WWTP infrastructure renewal projects
- Staff to integrate and prioritize with existing CIP

## Secondary Process Upgrade/Expansion

- Estimated \$60-70M required to address infrastructure/growth needs – not included in current CIP [Presented to Board: November 2020]
- Requires significant debt issuance to offset SSC impacts

## Electrical Switchgear Replacement

- Significant increase in total cost from \$7.8M to \$11.2M; higher planning/design costs to mitigate potential risks, increased PG&E review/approval/infrastructure costs
- Recent construction bid is \$0.6M higher than estimated; outside engineering, construction services
- Staff to request \$6.4M in new CIP (current = \$3.0M)



# Board Actions for Consideration



## 1) Take Actions Related to Switchgear Replacement Project

- b. **Approve** Project and Design; **Waive** Minor Irregularities in Bid Documents; **Award** and **Authorize** General Manager to Execute Construction Services Contract, in an Amount Not to Exceed \$6,647,104.17, Cupertino Electric, Inc.; **Authorize** General Manager or His Designee to Approve Contract Change Orders in an Amount Not to Exceed 7.5% of Contract Amount; and **Take Related Actions**, Treatment Plant Electrical Switchgear Replacement, Project No. 17120
- c. **Authorize** General Manager to Execute Consulting Services Contract in an Amount Not to Exceed \$613,541, Engineering Services, Lee & RO, Inc.; and **Authorize** General Manager to Execute Consulting Services Contract in an Amount Not to Exceed \$901,618, Construction Management Services, Psomas, Treatment Plant Electrical Switchgear Replacement, Project No. 17120

# Next Steps

- Initiate development of FY21/22-FY25/26 CIP ✓
- Staff submittal of new project requests ✓
- Develop fund plan and assess SSC impacts Feb 2021
- Review draft CIP with Finance Committee Apr 2021
- Present proposed CIP to Board and establish Public Hearing date May 2021
- Conduct Public Hearing and consider CIP adoption Jun 2021