San Francisco
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Services of the San Francisco Public Utilities Commission

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DATE: September 3, 2024

TO: Commissioner Tim Paulson, President
Commissioner Anthony Rivera, Vice President
Commissioner Newsha K. Ajami
Commissioner Kate H. Stacy

FROM: Dennis J. Herrera, General Manager DJH

RE: Water Enterprise Capital Improvement Program
Quarterly Report (4th Quarter / FY 2023-2024)

Enclosed please find the Water Enterprise Capital Improvement Program (WECIP) Quarterly Report for the 4th Quarter (Q4) of Fiscal Year (FY) 2023-2024. The primary intent of the report is to provide the Commission, stakeholders, and the public with a status summary of the Water Enterprise Capital Improvement Program based on data for the period of April 1, 2024 to June 30, 2024.

Attachment

OUR MISSION: To provide our customers with high-quality, efficient and reliable water, power and sewer services in a manner that values environmental and community interests and sustains the resources entrusted to our care.

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San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

QUARTERLY REPORT

Water Enterprise Capital Improvement Program

Q4 FY 2023 | 2024

April 2024 — June 2024

Published: September 3, 2024

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EXECUTIVE SUMMARY

The primary intent of this quarterly report is to provide the Commission, stakeholders, and the public with a status summary of the projects within the Regional and Local Water Enterprise Capital Improvement Program (CIP) based on data for the period of April 1, 2024 to June 30, 2024.

This quarterly report incorporates approved scopes, schedules, and budgets for the Regional Water Enterprise CIP projects and the Local Water Enterprise CIP projects according to the 10-Year Water Enterprise Capital Plan for FY2023-24 to FY2032-33, presented to and adopted by this Commission on February 14, 2023.

The 2023 approved Regional Water Enterprise CIP (2023 Regional WECIP) has twenty-five (25) projects, all of which are in progress.

The 2023 approved Local Water Enterprise CIP (2023 Local WECIP) has thirteen (13) projects, all of which are in progress.

Program Current Status:

Overall steady progress continued on the ongoing Water Enterprise CIP projects. As of the end of the reporting period, the Regional Water Enterprise CIP includes 25 projects in various phases as follows: seventeen (17) projects in planning, design, and bid and award; seven (7) projects in construction; and one (1) project in closeout.

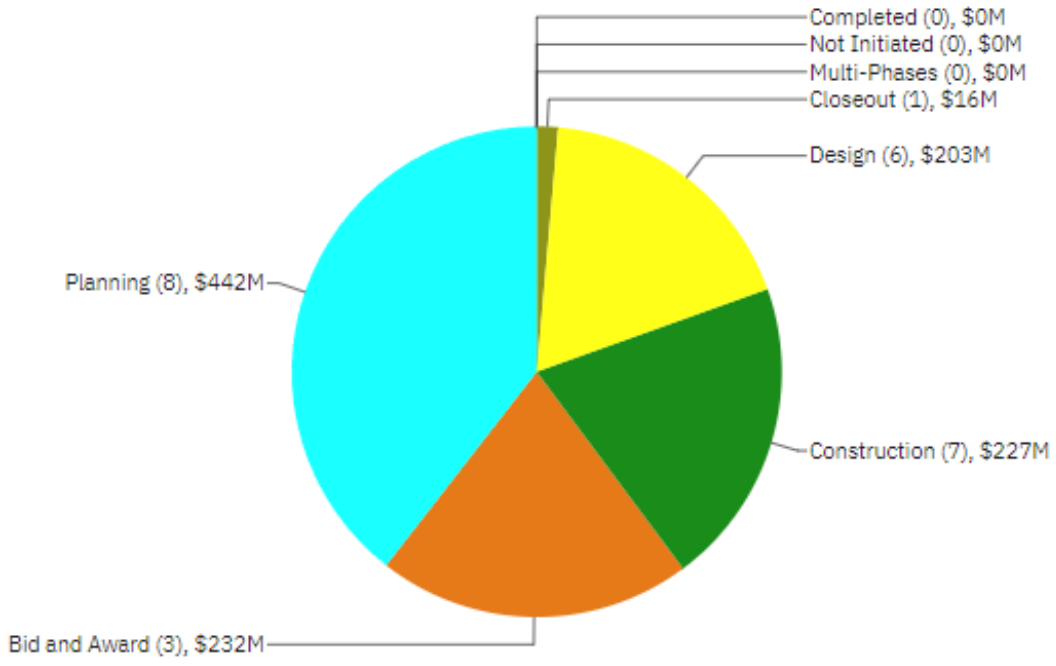

Figure A Total Current Approved Budget for Regional Projects Active in Each Phase

As of the end of the reporting period, the Local Water Enterprise CIP includes 13 projects in various phases as follows: four (4) projects in multiple phases, five (5) projects in planning, design, and bid and award, three (3) projects in construction, and one (1) project in closeout.

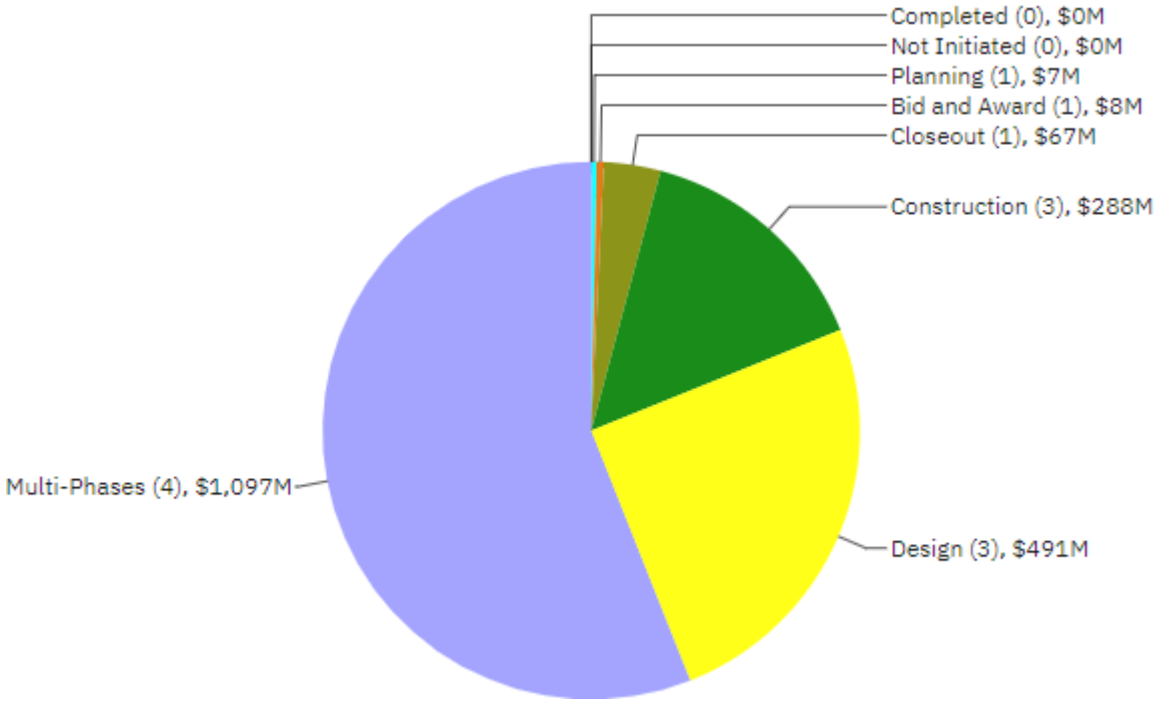

Figure B Total Current Approved Budget for Local Projects Active in Each Phase

The following Tables provide a high- level summary of the cost and schedule status for the Regional and Local programs.

Table A. Program Cost Summary

Programs	Expenditures To Date ($ Million) (A)	Current Approved Budget ($ Million) (B)	Q4/FY23-24 Forecast Costs ($ Million) (C)	Cost Variance ($ Million) (D = B - C)	Variance Over Reporting Period* ($ Million) (E)
Regional Program	$222.35	$1,120.58	$1,452.29	($331.70)	-
Local Program	$915.05	$1,958.28	$2,259.31	($301.03)	-
Programs Total	**$1,137.40**	**$3,078.87**	**$3,711.60**	**($632.73)**	**-**

** Negative number is reflecting cost increases since last quarter, and positive number is reflecting cost reduction since last quarter.*

The total Current Approved Budget (including Regional and Local Programs) and Current Forecast Cost at completion are $3,078.9 million and $3,711.6 million, respectively. The Current Approved Budget and Forecast Cost at completion for only the Regional Water Program (including construction contingency) are $1,120.6 million and $1,452.3 million, respectively. The Current Approved Budget and Forecasted Cost at completion for only the Local Water Program (including construction contingency) are $1,958.3 million and $2,259.3 million respectively.

Table B. Current Approved vs. Current Forecast Schedule Dates

Programs	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)
Water Regional	01/01/09	01/01/09 A*	06/29/35	12/31/35	6.1 (Late)
Water Local	03/03/03	03/03/03 A*	06/30/33	12/31/35	30.0 (Late)
Overall Water Enterprise CIP	**03/03/03**	**03/03/03 A***	**06/29/35**	**12/31/35**	**6.1** (Late)

** "A" represents the actual date*

The Regional program is forecasted to complete six months after the approved completion date and the Local program is forecasted to complete thirty months after the approved completion date.

Program Key Updates:

The key updates for the Regional Water Enterprise Capital Improvement Program include:

- The Sunol Valley Water Treatment Plant - Ozone project - Alameda County reviewed and approved the general plan conformity determination for the project. The construction contract was awarded. The team coordinated with the Contractor on early construction planning. The project team continued coordinating the application process with California State Water Resource Control Board for a $50M State Revolving Fund loan, including meeting additional environmental review requirements prior to construction groundbreaking. The project team is evaluating the schedules for completing the environmental review process and the Contractor's proposed work activities to identify any scheduling issues.
- For the HTWTP Filter Underdrain Replacement project – the project team continues to work with the contractor to resolve inefficient backwashing due to poor air distribution in the air scour piping. Orifice plates were installed in the air scour piping, but backwashing is still inefficient. The Contractor is evaluating upgrading the air scour blower motor as a warranty item to improve backwashing efficiency.
- For the Regional Groundwater Treatment Improvement project - Two firms submitted proposals

in response to the Request for Proposals (RFP) to procure a consultant to assist with project planning and long-term implementation strategy for regional groundwater treatment. The proposals were scored, oral interviews held, and the higher scoring consultant will be recommended to be awarded the contract in the next quarter.

- For the Sunol Valley Chloramination Facility project - Construction Notice to Proceed was delayed to July to meet the shutdown requirements in the contract. The project team held a pre- construction meeting with the contractor to discuss sequencing of the construction work and early procurement long lead-time materials. The contractor has started early submittals for the long lead-time equipment required during the shutdowns.
- For the Crystal Springs Pipeline No. 2 Reach 5 Lining Replacement project - The 65% Design was completed and distributed for review. Potholing work to confirm the pipeline alignment and utilities was completed. Outreach to property owners and local jurisdictions impacted by the project as well as CEQA review all continued.
- For the Corrosion Control project - Phase 2 includes 11 sites currently under construction, with rectifier installations completed at two of these sites, pending functionality testing and commissioning. Phase 3 encompasses 19 sites and is currently in the planning stage. The project team is finalizing the Conceptual Engineering Report, scheduled for issuance in July 2024.
- For San Antonio Pump Station MCC Upgrades project - The contractor received construction Notice to Proceed on April 15. Although construction is starting, the contractor has indicated that physical work on the site would not occur until Spring of 2025 due to the yearlong procurement of various materials required.
- For the Turner Dam and Reservoir Improvements project - The final draft Condition and Needs Assessment Report was completed, and the report continues to be finalized with stakeholders. The alternatives analyses and evaluation was initiated. The team is developing the alternatives and preparing a shortlist to evaluate as part of the Alternatives Analysis Report.
- For Pilarcitos Dam Improvements project - The project team continued to develop Conceptual Engineering Report (CER) for both permanent reservoir restriction and dam replacement alternatives. Some of the on-going work that has continued from the last quarter included refining the designs for the conceptual layouts, preparing preliminary construction cost estimates and construction schedules, performing studies to evaluate on-site power supply requirements, and field work related to surveying existing utilities in the vicinity of the project site.
- For San Andreas Dam Facility Improvements project - The first draft Alternatives Analysis Report (AAR) was completed and circulated to internal stakeholders for review. Scoring panels were selected to provide the scoring and ranking of the five alternatives evaluated. In the next quarter, the team will evaluate the scoring and ranking results.
- For Merced Manor Reservoir Facilities project – The project team submitted an updated engineering work plan and began initial work on alterative analysis. During the next report period the design team will be conducting site investigation and testing in order to prepare the alternative analysis.

- For the Southern Skyline Blvd Ridge Trail Extension project - The contractor completed site clearing, established staging areas, and continued tree removal south of State Route 92. In addition, the contractor commenced installation of the soldier pile retaining walls and grading of the parking lot.
- For the SA-1 Service Road/Ingoing Road project - State environmental permit was obtained in April. In May, Operations staff completed water drawdown in San Andreas reservoir from elevation 450 feet to 438 feet, which allowed the Contractor to commence work below the high-water level. The target schedule for Operations to refill the water in the reservoir is October 2024. For this reporting period, ongoing construction activities include installation of piles and tiebacks, and other earthwork.
- For the Sunol Long Term Improvements project - Watershed Center (Contract B): During the reporting period, exhibit equipment installation, berm excavation and utility removal, bluestone etching repair and decomposed granite walkway repair work started. The exhibit sign fabrication, furniture, fixtures and equipment fabrication, and punch-list work all continued. Soil samples from the berm excavation were collected and sent to the lab for analysis. An investigation of the berm wall waterproofing system started to determine the extent of the damage and replacement.
- For Millbrae Yard Laboratory and Shop Improvements project - The draft Conceptual Design Report was issued for review; meetings were held to present the report with Water Enterprise and Infrastructure staff. A single proposal was received for the combined Request for Qualifications (RFQ)/Request for Proposals (RFP) for engineering and specialized services. Engineer's estimate for construction was issued based on the draft conceptual report. Requests for additional information for qualifications would be issued to several proposers for the RFQ for Construction Manager/General Contractor (CM/GC) with core trades. The draft RFP for the CM/GC was issued for review.

The key updates for the Local Water Enterprise Capital Improvement Program include:

- For the Town of Sunol Pipeline project - The construction contract was advertised, and a pre-bid meeting and site visit was held with potential bidders. The bids are due in mid-July. Real Estate provided the offer package to the Sunol Glen School for the new easement through the school's property. Coordination with Caltrans continues on a monthly basis to negotiate the impacts within the Arroyo de la Laguna Creek. An interagency meeting was held with the State Regional Water Control Board to discuss environmental permitting applications between the agencies.
- For the Local Water Conveyance/Distribution System, FY23/24 actual installed mileage that is now in service was 4.5 miles. Approximately $62M in construction contracts were advertised during FY23/24 which will allow for increased forecasted mileage in FY24/25 and FY25/26.
- The Lead Component Service Program is on budget and on schedule to complete replacement of galvanized steel water service pipes and lead components by March 2026.
- For the College Hill Reservoir Outlet project - The contractor completed the following: installation of valve control vault access stairs; control vault electrical conduits; reservoir roof

plywood; and on-going reservoir roof membrane.

- For the New City Distribution Division (CDD) Headquarters project, construction documents are being completed and construction is anticipated to start in the next two quarters.

Quarterly Report

Water Enterprise Capital Improvement Program

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I. Regional Water Enterprise Capital Improvement Program

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1. CAPITAL IMPROVEMENT PROGRAM DESCRIPTION

The San Francisco Public Utilities Commission (SFPUC) Water Enterprise manages a complex water supply system stretching from the Sierra Nevada to San Francisco and featuring a series of reservoirs, tunnels, pipelines, and treatment systems. Two unique features of this system stand out: the drinking water provided is among the highest quality in the world, and water deliveries are made to most customers without the use of power, by gravity flow, while generating power at the same time.

The SFPUC is the third largest municipal utility in California, serving 2.7 million residential, commercial, and industrial customers in the Bay Area. Approximately one-third of the delivered water goes to retail customers in San Francisco, while wholesale deliveries to 26 suburban agencies in Alameda, Santa Clara, and San Mateo counties comprise the other two-thirds.

The Regional Water System consists of water storage and treatment facilities; water transmission infrastructure; buildings and structures for facilities and employees; communications systems; and watersheds and Rights-of- Way (ROW) lands in San Mateo, Santa Clara, and Alameda Counties as well as western San Joaquin County. The Regional Water System also includes numerous assets in San Francisco that are operated in conjunction with the regional system. The Regional Water Enterprise Capital Improvement Program (Regional Water CIP) is part of the SFPUC's 10-Year Capital Plan (10-Year CIP), a 10-year plan of proposed appropriations including planned projects to physically improve the assets within the Regional Water System. The 10-Year CIP is updated every two years (with minor modifications in the off years) and integrated with the SFPUC's Financial Plan and rate-setting.

Biannual updates to the Regional Water CIP also account for post-Water System Improvement Program (post-WSIP) conditions, including deferred projects not in WSIP and new projects needed to continue meeting level of service goals and to maintain facilities in a state of good repair.

There are six (6) groupings of projects in the Regional Water Enterprise CIP. The categories are:

- Water Treatment
- Water Transmission
- Water Supply and Storage
- Watershed and Lands Management
- Communications and Monitoring
- Buildings and Grounds

Changes to the approved baseline program, including any changes to continuing projects' scopes, schedules, and budgets, are proposed as part of the biannually updated 10- year CIP to be adopted by the SFPUC Commission and approved by San Francisco's Mayor and Board of Supervisors. The proposed revisions to the program become the new baseline for new and continuing projects' scopes, schedules, and budgets in the beginning of the new fiscal year following SFPUC Commission adoption.

2. CAPITAL IMPROVEMENT PROGRAM STATUS

This Quarterly Report presents the progress made on Regional Water projects between April 1, 2024 and June 30, 2024. This document serves as the fourth (4th) Quarterly Report in Fiscal Year 2023-2024 (FY24) published for the Water Enterprise Capital Improvement Program.

This quarterly report includes approved scopes, schedules, budgets for the Regional Water Enterprise CIP projects and the Local Water Enterprise CIP projects that were included in the Water Enterprise Capital Improvement Program according to the 10-Year Capital Plan for FY2023-24 to FY2032-33, presented to and adopted by the Commission on February 14, 2023, under Resolution No. 23-0037. The 10-Year Capital Plan for FY2023-24 to FY2032-33 serves as the new baseline for project scopes, schedules, and budgets starting as of the first quarter (Q1) of FY2023-24. The 2023 Approved Water Enterprise CIP is a subset of the Regional and Local Water Enterprise 10-Year CIP for FY2023-24 to FY2032-33 and includes individual projects over $5 million that were then currently active or intended to be active by July 1, 2023 at the time proposed to the Commission on February 14, 2023.

The 2023 Approved Regional Water Enterprise CIP (2023 Regional WECIP) has twenty-five (25) projects, all of which are in progress.

Figure 2.1 shows the total Current Approved Budget for the 25 Regional projects in each phase of the program as of June 30, 2024. The number of projects currently active in each phase is shown in parentheses.

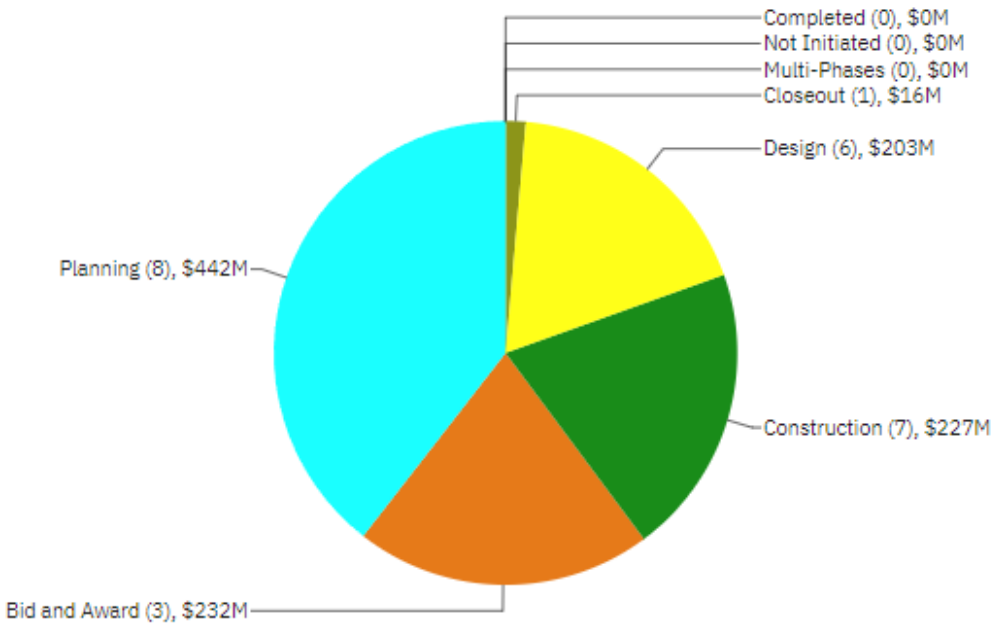

Figure 2.1 Total Current Approved Budget for Regional Projects Active in Each Phase

Figure 2.2 shows the number of Regional projects in the following stages as of June 30, 2024: Pre-construction, Construction, and Post-construction.

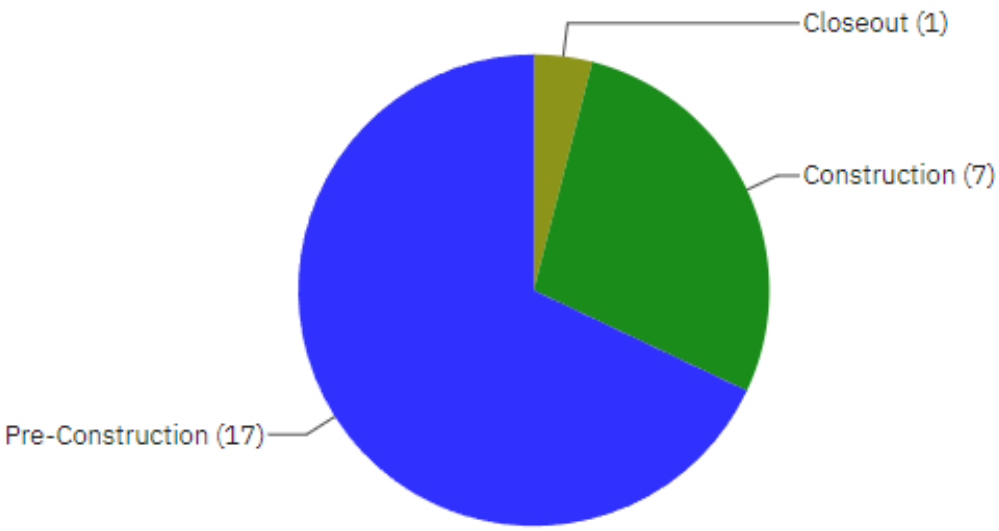

Figure 2.2 Number of Regional Projects in Pre-construction, Construction, and Post-construction

Figure 2.3 summarizes the environmental review status of the 25 Regional projects as of June 30, 2024.

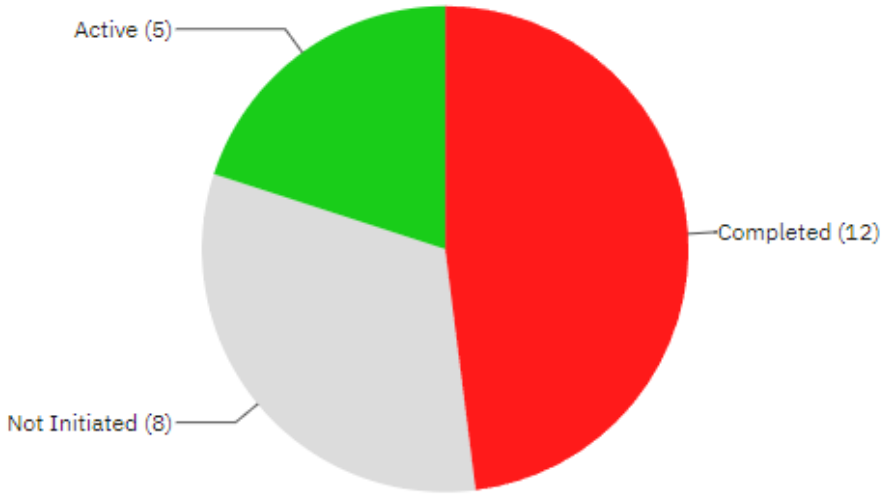

Figure 2.3 Regional Program Environmental Review

3. CAPITAL IMPROVEMENT PROGRAM COST SUMMARY

Table 3 provides an overall program-level cost summary of the Regional Water Program. It shows by categories of projects the Expenditures to Date, Current Approved Budgets, Q4/FY23-24 Forecast Costs, Cost Variance between the Current Approved Budgets and Forecast Costs, and Variance Over Reporting Period (difference between cost forecasts reported in Q3/FY23-24 and in Q4/FY23-24).

The total Current Approved Budget (including Regional and Local Programs) and Current Forecast Cost at completion are $3,078.9 million, and $3,711.6 million, respectively. The Current Approved Budget and Forecast Cost at completion for only the Regional Water Program (including construction contingency) are $1,120.6 million and $1,452.3 million, respectively.

The overall 2023 Regional WECIP negative Cost Variance of $331.70M in Table 3 can be attributed to the following projects and their variances provided below; all of these variances were reported last quarter and included as revised budget requests submitted to and approved by the Commission on February 13, 2024 as part of the FY2024/25 to FY2033/34 10-Year CIP. The reasons for the project variances are reported in Section 7:

- 10033123 SVWTP Ozone forecast cost increased by $38.16M.
- 10015064 SVWTP Short Term Improvements forecast cost increased by $12.77M.
- 10037628 SVWTP Polymer Feed Facility forecast cost decreased by $14.97M.
- 10038328 SVWTP Long Term Improvements forecast cost increased by $6.03M.
- 10037277 Sunol Valley Chloramination Facility forecast cost increased by $4.23M.
- 10015076 San Antonio Pump Station MCC Upgrades forecast cost increased by $3.12M.
- 10034578 CSPL2 Reach 5 Lining Replacement forecast cost increased by $17.69M.
- 10036840 BDPL 1-4 Lining Repair forecast cost increased by $11.41M.
- 10035029 As-Needed Pipeline Repairs forecast cost increased by $8.76M.
- 10036998 Turner Dam and Reservoir Improvements forecast cost increased by $2.50M.
- 10015091 Pilarcitos Dam Improvements forecast cost increased by $34.34M.
- 10015113 Southern Skyline Blvd Ridge Trail Extension forecast cost increased by $11.02M.
- 10030771 SA-1 Service Road/Ingoing Road forecast cost increased by $2.85M.
- 10015128 Millbrae Yard Laboratory and Shop Improvements forecast cost increased by $190.20M.
- 10034825 Millbrae Security Upgrades forecast cost increased by $3.58M.

Table 3 Program Cost Summary

Programs	Expenditures To Date ($ Million) (A)	Current Approved Budget ($ Million) (B)	Q4/FY23-24 Forecast Costs ($ Million) (C)	Cost Variance ($ Million) (D = B - C)	Variance Over Reporting Period* ($ Million) (E)
Regional Water Program	**$222.35**	**$1,120.58**	**$1,452.29**	**($331.70)**	**-**
Water Treatment	$45.20	$388.65	$434.88	($46.23)	-
Water Transmission	$27.17	$228.78	$269.76	($40.98)	-
Water Supply & Storage	$15.09	$81.86	$118.71	($36.84)	-
Watershed & Lands Management	$17.93	$54.56	$68.43	($13.87)	-
Buildings and Grounds	$116.97	$366.73	$560.51	($193.78)	-
Local Water Program	**$915.05**	**$1,958.28**	**$2,259.31**	**($301.03)**	**-**
PROGRAMS TOTAL	**$1,137.40**	**$3,078.87**	**$3,711.60**	**($632.73)**	**-**

** Negative number is reflecting cost increases since last quarter; and positive number is reflecting cost reduction since last quarter.*

Please refer to the section of II.3 of this report for more details about the reported cost variance for the Local Water Program

4. CAPITAL IMPROVEMENT PROGRAM SCHEDULE SUMMARY

Figure 4 compares the 2023 Approved Schedule completion date and the Current Forecast Schedule completion date for the Regional Water CIP. As shown in Table 4, the Current Approved and Current Forecast Schedule completion for the overall Water Enterprise CIP (including Regional and Local Programs) are June 2035 and December 2035 respectively. The Current Approved and Current Forecast Schedule completion for the Regional Water CIP alone are also June 2035 and December 2035 respectively.

Figure 4. Regional Program Schedule Summary

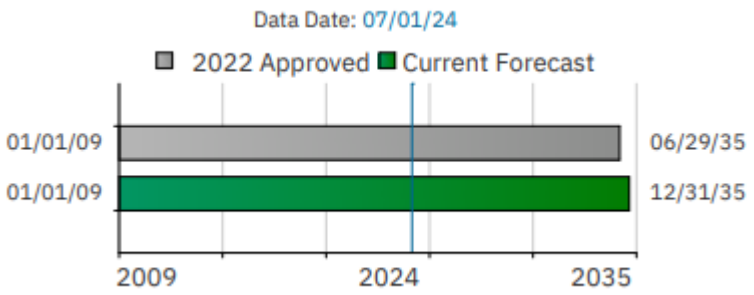

Table 4. Current Approved vs. Current Forecast Schedule Dates

Programs	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)
Water Regional	01/01/09	01/01/09 A*	06/29/35	12/31/35	6.1 (Late)
Water Local	03/03/03	03/03/03 A*	06/30/33	12/31/35	30.0 (Late)
Overall Water Enterprise CIP	**03/03/03**	**03/03/03 A***	**06/29/35**	**12/31/35**	6.1 (Late)

** "A" represents the actual date*

Please refer to the section of II.4 of this report for more details about the reported schedule variance for the Local Water Program.

5. BUDGET AND SCHEDULE TREND SUMMARY

Table 5, titled Budget and Schedule Trend Summary contains all approved Regional Water projects that are active and in any of the planning, design, bid and award, or construction phases of the project. The table excludes any projects that are either not-initiated, on-hold, in closeout, or completed.

During the reporting period, the following Regional projects achieved major project milestones:

- SVWTP Ozone project construction contract was awarded.
- San Antonio Pump Station MCC Upgrades project moved from Bid and Award phase to Construction phase.
- 65% Design was completed for CSPL2 Reach 5 Lining Replacement project.
- Construction Notice-to-Proceed was issued for San Antonio Pump Station MCC Upgrades project.
- Sneath Lane Gate/North San Andreas project moved from Planning phase to Design phase.

Table 5. Budget and Schedule Trend Summary

All Costs are shown in million.

	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
Project Name	a	b	c	d	e	f	g	h	i	j	k	l	m	n
WECIP - Regional														
Water Treatment														
10033123 SVWTP Ozone	FY24-33		06/27/17		01/18/22		05/10/22		02/28/23		05/14/24		Q4-FY23-24	
	$214.0	11/21/28	$115	09/09/24	$192.8	06/30/28	$192.8	06/30/28	$192.8	06/30/28	$252.1	06/04/29	$252.1	06/04/29
10015064 SVWTP Short Term Improvements	FY24-33		03/03/14		07/29/22		03/24/23		09/29/23		11/12/24		Q4-FY23-24	
	$65.9	12/29/27	$7.1	10/01/18	$60.0	05/17/27	$60.0	05/17/27	$65.9	12/29/27	TBD	TBD	$78.6	07/03/29
10037349 HTWTP Filter Underdrain Replacement	FY24-33		11/2/2020		6/29/2021		10/22/2021		1/21/2022		9/2/2022		Q4-FY23-24	
	$14.4	06/28/24	$14.4	06/28/24	$14.4	06/28/24	$14.4	06/28/24	$14.4	06/28/24	$14.4	06/28/24	$14.4	12/31/24
10037350 Regional Groundwater Treatment Improvement	FY24-33		08/13/20		09/30/27		06/07/28		06/28/29		04/23/30		Q4-FY23-24	
	$38.6	12/31/33	$38.6	12/27/29	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$38.6	12/31/33
10038328 SVWTP Long Term Improvements	FY24-33		11/01/21		12/29/28		05/01/29		01/03/30		05/05/31		Q4-FY23-24	
	$29.6	08/10/29	$10.5	05/17/27	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$35.6	12/31/34
10037277 Sunol Valley Chloramination Facility	FY24-33		01/02/19		12/31/19		N/A		10/03/23		02/13/24		Q4-FY23-24	
	$10.6	12/31/25	$4.5	12/01/24	$4.5	12/01/24	N/A	N/A	$10.6	12/31/25	$14.8	02/28/27	$14.8	02/28/27
Water Transmission														
10034578 CSPL2 Reach 5 Lining Replacement	FY24-33		02/25/19		01/31/23		09/29/23		07/17/24		12/24/24		Q4-FY23-24	
	$23.7	11/30/27	$12.8	11/30/22	$23.7	11/30/27	$23.7	11/30/27	TBD	TBD	TBD	TBD	$41.4	11/30/27

Footnote:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC construction work).

Table 5. Budget and Schedule Trend Summary (continued)

All Costs are shown in million.

	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
Project Name	a	b	c	d	e	f	g	h	i	j	k	l	m	n
10035029 As-Needed Pipeline Repairs	FY24-33		10/22/16		06/30/21		03/29/24		12/02/24		05/13/25		Q4-FY23-24	
	$7.7	08/25/28	$6.8	08/25/28	$6.8	08/25/28	$16.5	12/31/29	TBD	TBD	TBD	TBD	$16.5	12/31/29
10036839 BDPL4 PCCP Repair	FY24-33		05/01/20		04/30/25		07/31/26[4]		10/13/26		07/13/27		Q4-FY23-24	
	$54.7	12/31/26	$54.7	11/22/23	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$54.7	12/31/29
10036840 BDPL 1-4 Lining Repair	FY24-33		09/12/16		06/30/21		03/29/24		12/02/24		05/13/25		Q4-FY23-24	
	$10.8	08/25/28	$9.3	08/25/28	$9.30	08/25/28	$22.2	12/31/29	TBD	TBD	TBD	TBD	$22.2	12/31/29
10015071 Corrosion Control	FY24-33		01/01/16		07/01/12 (Phase I) 01/04/17 (Phase II) 08/02/24 (Phase III)		12/31/13 (Phase I) 12/31/18 (Phase II)[5] 06/30/25 (Phase III)		07/30/15 (Phase I) 11/30/21 (Phase II) 06/30/25 (Phase III)		12/30/18 (Phase I) 03/06/23 (Phase II) 08/25/25 (Phase III)		Q4-FY23-24	
Phase I Phase II Phase III	$36.5	06/30/28	$24.9	12/29/34	$24.9	12/29/34	$24.9	12/29/34	$36.5	01/31/28	$36.5	06/30/28	$36.5	02/28/29
10015076 San Antonio Pump Station MCC Upgrades	FY24-33		05/12/16		NA[2]		01/28/22[3]		08/30/22		12/12/23		Q4-FY23-24	
	$12.5	06/30/26	$7.2	01/27/23	NA	NA	$12.5	03/19/25	$12.5	03/19/25	$15.6	03/17/28	$15.6	03/18/28
10015081 CSPL2 Reaches 2 and 3 Rehabilitation	FY24-33		09/12/16		01/31/23		09/30/24		01/22/25		08/11/26		Q4-FY23-24	
	$82.8	11/30/27	$55.9	10/10/23	$82.8	11/30/27	TBD	TBD	TBD	TBD	TBD	TBD	$82.8	06/29/29
Water Supply & Storage														
10036998 Turner Dam and Reservoir Improvements	FY24-33		10/01/20		06/30/27		06/29/28		12/31/30		10/21/31		Q4-FY23-24	
	$7.5	06/29/35	$7.5	06/29/35	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$10.0	06/29/35

Footnotes:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC construction work).
2. For San Antonio Pump Station MCC, CER was not needed.
3. For San Antonio Pump Station MCC 35% Design was replaced with 65%.
4. For BDPL4 PCCP 35% design was replaced with 50%.
5. For Corrosion Control 35% design was replaced with 95%.

Table 5. Budget and Schedule Trend Summary (continued)

All Costs are shown in million.

Project Name	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
	a	b	c	d	e	f	g	h	i	j	k	l	m	n
10015091 Pilarcitos Dam Improvements	FY24-33		04/07/14		03/28/25		01/15/27		10/31/29		01/07/31		Q4-FY23-24	
	$30.1	06/29/29	$25.7	09/05/25	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$64.4	12/31/35
10015092 San Andreas Dam Facility Improvements	FY24-33		12/11/13		6/30/26		11/30/26		4/6/27		4/29/31		Q4-FY23-24	
	$32.2	12/30/33	$26.8	04/20/27	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$32.2	12/30/33
10015232 Merced Manor Reservoir Facilities Repairs	FY24-33		7/3/23		7/31/25		12/31/25		10/30/26		5/4/27		Q4-FY23-24	
	$12.1	06/30/31	$12.1	06/30/31	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$12.1	06/30/31
Watershed & Lands Management														
10015108 Sneath Lane Gate/North San Andreas	FY24-33		02/01/21		03/24/22		TDB		TBD		TBD		Q4-FY23-24	
	$12.4	08/02/27	$6.7	01/27/28	$6.7	08/02/27	TBD	TBD	TBD	TBD	TBD	TBD	$12.4	11/30/35
10015113 Southern Skyline Blvd Ridge Trail Extension	FY24-33		10/31/12		03/09/15		09/10/15[2]		01/05/18		09/26/23		Q4-FY23-24	
	$27.0	06/30/25	$18.7	02/25/19	$18.7	02/25/19	$18.7	02/25/19	$19.3	07/22/21	$38.0	3/30/2026	$38.0	03/30/26
10030771 SA-1 Service Road/Ingoing Road	FY24-33		06/30/16		01/06/22		03/01/23[2]		03/31/23		01/23/24		Q4-FY23-24	
	$15.2	03/03/27	$9.6	12/31/26	$15.8	12/31/26	$15.8	12/31/26	$15.8	12/31/26	$18.1	03/03/27	$18.1	03/03/27

Footnotes:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC construction work).
2. This represents a project milestone of 50% Design.

Table 5. Budget and Schedule Trend Summary (continued)

All Costs are shown in million.

	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
Project Name	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Buildings and Grounds														
10034526 Millbrae Warehouse Settlement & Admin. Bldg. HVAC	FY24-33		01/03/17		12/29/17 (Scope I) 01/02/18 (Scope II)		12/29/18(Scope I) 08/12/22 (Scope II)		08/03/20(Scope I) 03/29/23 (Scope II)		03/09/21 (Scope I) N/A[2]		Q4-FY23-24	
Scope I														
Scope II	$7.1	06/02/25	$5.5	11/30/23	$5.5	11/30/23	$7.1	06/02/25	$5.5	11/30/23	$5.5	11/30/23	$7.1	04/30/26
10015124 Sunol Long Term Improvements	FY24-33		01/01/09		04/27/12		05/28/13 (Scope I) 08/07/14 (Scope II)		03/30/15 (Scope I) 10/02/15 (Scope II)		11/08/16 (Scope I) 12/10/19 (Scope II)		Q4-FY23-24	
Scope I														
Scope II	$114.5	12/31/25	$91.7	09/01/21	$91.7	09/01/21	$91.7	09/01/21	$91.7	09/01/21	$91.7	09/01/21	$114.5	12/31/25
10015128 Millbrae Yard Laboratory and Shop Improvements	FY24-33		11/02/15		07/31/24		01/31/25		01/30/26 Phase 1 11/30/27 Phase 2 11/30/29 Phase 3		12/10/24[3]		Q4-FY23-24	
Phase 1	$237.5	09/13/30	$24.5	05/03/23	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$427.7	10/29/32
Phase 2														
Phase 3														
	FY24-33		09/01/19		10/01/20		03/01/21		11/30/21		08/27/24		Q4-FY23-24	
10034825 Millbrae Security Upgrades	$7.6	08/30/24	$3.9	12/31/23	$3.90	12/31/23	$3.9	12/31/23	$3.9	12/31/23	TBD	TBD	$11.1	09/30/26

Footnotes:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC pre-construction work).
2. To be constructed via a JOC contract.
3. This date represents the CM/GC contract award date during Pre-Construction.

6. PROJECT PERFORMANCE SUMMARY*

All costs are shown in $1,000s

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
Water Treatment											
10033123 SVWTP Ozone (CUW27202)	BA	$213,972	$213,972	$252,136	$18,197	($38,164)	(18%)	11/21/28	11/21/28	06/04/29	(195)
10015064 SVWTP Short Term Improvements	DS	$65,871	$65,871	$78,645	$11,162	($12,774)	(19%)	12/29/27	12/29/27	07/03/29	(552)
10037349 HTWTP Filter Underdrain Replacement	CN	$14,404	$14,404	$14,404	$11,870	$0	0%	06/28/24	06/28/24	12/31/24	(186)
10037350 Regional Groundwater Treatment Improvement	PL	$38,605	$38,605	$38,605	$2,227	$0	0%	12/31/33	12/31/33	12/31/33	0
10038328 SVWTP Long Term Improvements	PL	$29,587	$29,587	$35,616	$143	($6,029)	(20%)	08/10/29	08/10/29	12/31/34	(1,969)

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

(+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY24-33.

(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10037277 Sunol Valley Chloramination Facility	BA	$10,586	$10,586	$14,821	$1,016	($4,235)	(40%)	12/31/25	12/31/25	02/28/27	(424)
Water Transmission											
10034578 CSPL2 Reach 5 Lining Replacement	DS	$23,696	$23,696	$41,388	$4,090	($17,691)	(75%)	11/30/27	11/30/27	11/30/27	0
10035029 As-Needed Pipeline Repairs	DS	$7,723	$7,723	$16,487	$1,171	($8,764)	(113%)	08/25/28	08/25/28	12/31/29	(493)
10036839 BDPL4 PCCP Repair	PL	$54,751	$54,751	$54,751	$2,235	$0	0%	12/31/26	12/31/26	12/31/29	(1,096)
10036840 BDPL 1-4 Lining Repair	DS	$10,764	$10,764	$22,172	$1,214	($11,408)	(106%)	08/25/28	08/25/28	12/31/29	(493)
10015071 Corrosion Control	CN	$36,536	$36,536	$36,536	$12,042	$0	0%	06/30/28	06/30/28	02/28/29	(243)
10015076 San Antonio Pump Station MCC Upgrades	CN	$12,500	$12,500	$15,617	$2,772	($3,117)	(25%)	06/30/26	06/30/26	03/18/28	(627)

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**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

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Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10015081 CSPL2 Reaches 2 and 3 Rehabilitation	DS	$82,813	$82,813	$82,813	$3,640	$0	0%	11/30/27	11/30/27	06/29/29	(577)
Water Supply & Storage											
10036998 Turner Dam and Reservoir Improvements	PL	$7,500	$7,500	$10,000	$3,817	($2,500)	(33%)	06/29/35	06/29/35	06/29/35	0
10015091 Pilarcitos Dam Improvements	PL	$30,087	$30,087	$64,432	$5,346	($34,345)	(114%)	06/29/29	06/29/29	12/31/35	(2,376)
10015092 San Andreas Dam Facility Improvements	PL	$32,195	$32,195	$32,195	$5,917	$0	0%	12/30/33	12/30/33	12/30/33	0
10015232 Merced Manor Reservoir Facilities Repairs	PL	$12,082	$12,082	$12,082	$12	$0	0%	06/30/31	06/30/31	06/30/31	0
Watershed & Lands Management											

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

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(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10015108 Sneath Lane Gate/North San Andreas	DS	$12,393	$12,393	$12,393	$841	$0	0%	08/02/27	08/02/27	11/30/35	(3,042)
10015113 Southern Skyline Blvd Ridge Trail Extension	CN	$26,956	$26,956	$37,977	$10,694	($11,020)	(41%)	06/30/25	06/30/25	03/30/26	(273)
10030771 SA-1 Service Road/Ingoing Road	CN	$15,210	$15,210	$18,056	$6,395	($2,846)	(19%)	03/03/27	03/03/27	03/03/27	0
Buildings and Grounds											
10034526 Millbrae Warehouse Settlement & Admin. Bldg. HVAC	CN	$7,149	$7,149	$7,149	$2,535	$0	0%	06/02/25	06/02/25	04/30/26	(332)
10015124 Sunol Long Term Improvements	CN	$114,494	$114,494	$114,494	$103,609	$0	0%	12/31/25	12/31/25	12/31/25	0

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

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(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10015128 Millbrae Yard Laboratory and Shop Improvements	PL	$237,533	$237,533	$427,737	$9,273	($190,203)	(80%)	09/13/30	09/13/30	10/29/32	(777)
10034825 Millbrae Security Upgrades	BA	$7,553	$7,553	$11,130	$1,549	($3,577)	(47%)	08/30/24	08/30/24	09/30/26	(761)

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

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(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

7. PROJECT STATUS REPORT

10033123 - SVWTP Ozone (CUW27202)

Project Description: In recent years, SFPUC's Sunol Valley Water Treatment Plant (SVWTP) has experienced more frequent taste and odor (T&O) events from seasonal algal blooms than had occurred historically. This project's objective is to install ozone treatment facilities as a long-term solution to control T&O events encountered in the raw water supply from both the San Antonio and Calaveras Reservoir sources. This project will improve the reliability to meet water quality goals especially during warm months and during Hetch Hetchy shutdowns.

Program: Water Treatment	**Project Status:** Bid and Award	**Environmental Status:** Completed (EIR)

Project Cost:

Approved	$ 213.97 M
Forecast	$ 252.14 M
Actual	$ 18.20 M

Project Schedule:

Approved 06/27/17	11/21/28
Forecast 06/27/17	06/04/29

Project Percent Complete: 11.0%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	07/13/23 A	09/29/23 A	08/30/24	01/29/29

Progress and Status:

During the reporting period, Alameda County reviewed and approved the general plan conformity determination for the project. The review process delayed the bid and award phase by 15 days as approval was required prior to contract award. The construction contract was awarded in May. The team coordinated with the Contractor on early construction planning. The project team continued coordinating the application process with California State Water Resource Control Board for a $50M State Revolving Fund Loan, including performing additional environmental review as part of the loan requirement prior to any construction groundbreaking activity. The project team is evaluating the schedules for completing the environmental review process and the Contractor's proposed work activity to identify any issues.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast budget and schedule is due to the higher construction cost submitted as part of the approved bid, and planned increase in the construction duration to allow for better start-up coordination.

Existing Sewer Pump Station

10015064 - SVWTP Short Term Improvements

Project Description: The primary objective of the SVWTP Short Term Improvements project is to improve regional delivery reliability by addressing various conditions and deficiencies of the Sunol Valley Water Treatment Plant (SVWTP). Upgrades were identified through condition assessments and operations staff observations, review of level of service, subsequent feasibility studies, and alternative analyses.

Program: Water Treatment	**Project Status:** Design	**Environmental Status:** Completed (EIR)

Project Cost:

Approved	$ 65.87 M
Forecast	$ 78.64 M
Actual	$ 11.16 M

Project Schedule:

Approved 03/03/14	12/29/27
Forecast 03/03/14	07/03/29

Project Percent Complete: 19.6%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	07/13/23 A	08/23/24	03/04/25	01/03/29

Progress and Status:

During the reporting period, the 100% Design was issued for review to stakeholders. Stakeholder comments are being addressed prior to issuing the contract for bid advertisement. The Division 00 and 01 specifications are being further developed and updated by the project team to allow for emergency return to service of the plant and to account for potential future Hetch Hetchy system shutdowns that could affect the project duration.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the addition of the Utility Water/Fire Protection System pump station scope. The pump station design was developed under SVWTP Ozone project, while the construction work will be under the SVWTP Short Term Improvements project. The pump station design scope was identified late in the SVWTP Ozone project's design phase and is lagging behind the Short Term Improvements design. The advertisement date for the SVWTP Short Term Improvements construction contract will consequently be delayed allowing incorporation of the pump station scope into the bid package.

Corrosion on Existing Sludge Collection Auger

10037349 - HTWTP Filter Underdrain Replacement

Project Description: Over twenty projects have been identified to improve the performance and reliability of the Harry Tracy Water Treatment Plant (HTWTP). However, underdrains in two filters in a bank of six have failed since 2019 and replacement of the underdrains is being prioritized to restore the plant's treatment capacity and reliability. The remaining projects will be deferred to future CIP Planning.

Program: Water Treatment	Project Status: Construction	Environmental Status: Completed

Project Cost:

Approved	$ 14.40 M
Forecast	$ 14.40 M
Actual	$ 11.87 M

Project Schedule:

Approved 11/02/20	06/28/24
Forecast 11/02/20	12/31/24

Project Percent Complete: 98.0%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	10/29/21 A	04/21/22 A	10/03/22 A	09/30/24

Progress and Status:

Substantial Completion was achieved late 2023, and the filters were returned to Operations. During testing and commissioning, it was discovered that backwashing of the filter media was not efficient due to poor air distribution in the air scour piping. Orifice plates were installed in the air scour piping, but backwashing is still inefficient. The Contractor is evaluating upgrading the air scour blower motor as a warranty item to improve backwashing efficiency.

Issues and Challenges:

As previously reported, the budget forecast has been updated to reflect the FY25-34 CIP; however, the project schedule has been extended due to the extended final completion date, which is pending on the work needed to improve the backwashing efficiency.

Inefficient Filter Media Backwashing

10037350 - Regional Groundwater Treatment Improvement

Project Description: The purpose of this project is to improve the performance of the Regional Groundwater Wells and treatment systems in the South Westside Basin for reliable use during dry years. In normal and wet years, the SFPUC will supply treated surface water to Daly City, San Bruno, and Cal Water to be used in place of their typical groundwater supply, thereby increasing the volume of groundwater in storage that can be pumped as supplemental water in dry years. This project will address emerging well water quality issues that require treatment, will provide additional reliability for treatment systems at the wells, and will evaluate the potential for a consolidated treatment facility (through Alternatives Analysis only). If a centralized treatment alternative is selected, the estimated project cost could potentially be $250 million, which includes construction of approximately 14 miles of 8" to 24" diameter pipeline, a pump station, storage tanks, treatment facilities, and other ancillary facilities. This project will build auxiliary water treatment facilities as well as other enhancements to increase the reliability and efficiency for maintenance and operation of the well stations.

Program: Water Treatment	**Project Status:** Planning	**Environmental Status:** Not Initiated (TBD)

Project Cost:

Approved	$ 38.61 M
Forecast	$ 38.61 M
Actual	$ 2.23 M

Project Schedule:

Approved 08/13/20	12/31/33
Forecast 08/13/20	12/31/33

Project Percent Complete: 6.2%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	08/21/29	11/30/29	06/03/30	06/02/33

Progress and Status:

Two firms submitted proposals in response to the Request for Proposals (RFP) to procure a consultant to assist with project planning and long-term implementation strategy for regional groundwater treatment. The proposals were scored, oral interviews held, and the higher scoring consultant will be recommended to be awarded the contract in the next quarter.

Issues and Challenges:

None at this time.

Typical Groundwater Station Piping

10038328 - SVWTP Long Term Improvements

Project Description: The primary objective of the SVWTP Long Term Improvements project is to improve regional delivery reliability by addressing various conditions and deficiencies of the Sunol Valley Water Treatment Plant (SVWTP). Upgrades were identified through condition assessments and operations staff observations, review of level of service, subsequent feasibility studies, and alternative analyses.

Program: Water Treatment	**Project Status:** Planning	**Environmental Status:** Not Initiated (TBD)

Project Cost:

Approved	$ 29.59 M
Forecast	$ 35.62 M
Actual	$ 0.14 M

Project Schedule:

Approved 11/01/21	08/10/29
Forecast 11/01/21	12/31/34

Project Percent Complete: 1.6%

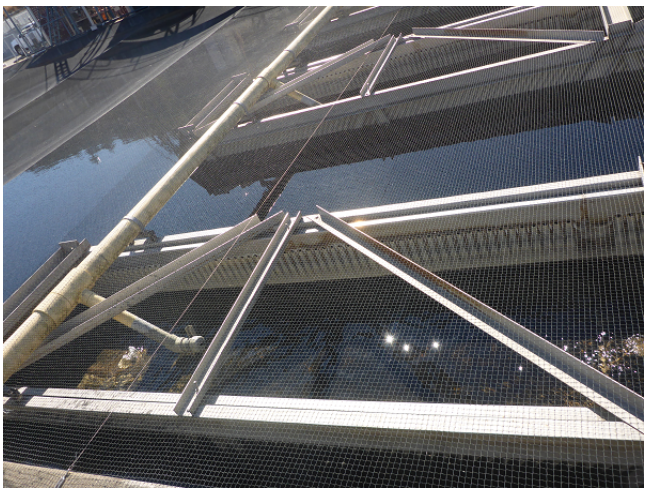
Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	06/29/29	11/22/30	07/01/31	06/30/34

Progress and Status:

During the quarter, the Request for Proposal (RFP) for professional services support was finalized and submitted for final review and processing before advertising.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to changes in the 10-Year CIP to defer construction funding to FY30-31, the addition of master planning scope, soft cost adjustments, and construction escalation costs related to the deferment of construction funding.



Bird Netting On Sedimentation Basin

10037277 - Sunol Valley Chloramination Facility

Project Description: The Sunol Valley Chloramination Facility (SVCF) is a chemical feed facility that provides chloramine disinfection, pH control, and fluoride addition for the unfiltered Hetch Hetchy (HH) water supply. In addition, the chemical systems for removing chlorine and adjust ing the pH of waters entering into Alameda Siphons 1, 2, and 3. The primary objective of the project is to increase reliability at the Fluoridation (HFA) Facility, Sunol Valley Chloramination Facility (SVCF), and Dechlorination Facility by addressing various deficiencies of the chemical feed systems, controls, main programmable logic controller (PLC), and various related equipment, which will lower the current maintenance costs of the existing equipment.

Program: Water Treatment	**Project Status:** Bid and Award	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 10.59 M
Forecast	$ 14.82 M
Actual	$ 1.02 M

Project Schedule:

Approved 01/02/19	12/31/25
Forecast 01/02/19	02/28/27

Project Percent Complete: 11.9%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	12/31/20 A	11/03/23 A	07/29/24	05/19/26

Progress and Status:

Construction Notice to Proceed is being delayed to July to coordinate with the timing of the shutdowns identified in the Contract. The project team held a pre-construction meeting with the contractor to discuss sequencing of the construction work and procurement of long lead-time materials. The Contractor has started submittals early for the long lead-time equipment required during the shutdowns. The team continues to provide review and support on pre-construction activities.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to additional time needed to procure materials during construction and the forecast cost will be increased due to the bids coming in over the engineer's estimate. The scope variance is due to the addition of the programmable logic controller which was previously included in a different project, as well as additional safety and code requirements to commission the Dechlorination Facility. In addition, a new carrier water source is being included to streamline the operation effort required for return to service operations before and after Hetch Hetchy system shutdowns.

RIO Panel to be Upgraded

10034578 - CSPL2 Reach 5 Lining Replacement

Project Description: Crystal Springs Pipeline No. 2 (CSPL2) runs from Crystal Springs Pump Station to University Mound Reservoir. It delivers potable and emergency water supply to San Francisco and to several cities along the Peninsula. Reach 5 of CSPL2, 60" in diameter, spanning from Millbrae Yard through the cities of Millbrae, San Bruno and South San Francisco to Baden Pump Station, is over 80 years old and has extensive lining failures. This project will replace approximately 3.8 miles of coal tar lining with cement mortar lining, upgrade over 30 appurtenances to meet current standards, and improve access for maintenance by upgrading existing and installing new access manway structures. In addition, seven large diameter valves will be installed to improve future shutdown flexibility and to provide safe pipeline entry for future maintenance.

Program: Water Transmission	**Project Status:** Design	**Environmental Status:** Active (EIR)

Project Cost:

Approved	$ 23.70 M
Forecast	$ 41.39 M
Actual	$ 4.09 M

Project Schedule:

Approved 02/25/19	11/30/27
Forecast 02/25/19	11/30/27

Project Percent Complete: 18.0%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	08/30/24	09/20/24	05/01/25	05/31/27

Progress and Status:

The 65% Design was completed and distributed for review. Potholing work to confirm the pipeline alignment and utilities was completed. Outreach to property owners and local jurisdictions impacted by the project as well as California Environmental Quality Act (CEQA) review all continued.

Issues and Challenges:

As previously reported, the budget forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget is due to refinement of the cost estimate as the project is progressing. The prior budget was based on a preliminary cost estimate from the Alternatives Analysis phase, while the current CIP budget is based on a cost estimate prepared at 35% design. The current cost estimate includes the additional costs to remove coal tar to the highest level of cleanliness, costs due to the refinement of scope for appurtenance upgrades, and costs for temporary line stops and permanent valves ranging in size from 42-inches to 60-inches in diameter to achieve safe pipeline entry for construction and future operational needs.

Exploratory Potholing Work

10035029 - As-Needed Pipeline Repairs

Project Description: Water Supply and Treatment Division's (WSTD) maintenance and inspection program inspects the regional pipeline system on an ongoing basis. However, when repairs are identified to be needed following inspections and when emergency repairs are needed, a contractor is not readily available to perform the repairs. This project will increase system reliability by reducing the duration and number of outages since a pre-qualified, as-needed contractor will be available to complete repairs immediately following inspections or in emergencies. This project will repair/replace regional pipeline segments that will be inspected over the next five years, in addition to any emergency repairs that may be needed. The initial construction contract will be 3 years and combined with Project 10036840, BDPL1-4 Lining Repair to provide a sufficient guaranteed scope. Subsequent construction contract(s) will be issued to parallel WSTD's inspection program

Program: Water Transmission	**Project Status:** Design	**Environmental Status:** Active (Cat Ex)

Project Cost:

Approved	$ 7.72 M
Forecast	$ 16.49 M
Actual	$ 1.17 M

Project Schedule:

Approved 10/22/16	08/25/28
Forecast 10/22/16	12/31/29

Project Percent Complete: 16.2%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	11/27/24	01/31/25	09/02/25	06/30/29

Progress and Status:

Comments to the 35% Design are being incorporated into the 65% Design. In addition, the draft 100% Design for a contract to pre-purchase, including fabricating, storing, delivering, and installing valves for safe pipeline entry was completed this quarter and will be advertised next quarter. This valve contract will also procure valves for safe pipeline entry for the BDPL1-4 Lining Repair Project.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the additional scope of installing new valves to provide safe entry for construction and future operational needs.

Typical Valve Lot

10036839 - BDPL4 PCCP Repair

Project Description: Historically, when pre-stressed concrete cylinder pipe (PCCP) fails due to breaks in the spirally wound wire, the high-pressure failure can have catastrophic consequences. Some segments of the Regional Water System are constructed of PCCP. From recent inspections of Bay Division Pipeline No. 4 (BDPL4) Segment D, constructed of PCCP, a large number of wire breaks and circumferential cracks were found in the last 1.25 miles of pipeline that parallels Edgewood Road in Redwood City. In addition, several leaks have surfaced at circumferential cracks and where the pipeline transitions from PCCP to steel. Segments where wire breaks are concentrated will need to be repaired/replaced to prevent catastrophic failure and circumferential cracks and leaks will also be repaired. The first phase of this project will be to repair segments where there are high concentrations of wire breaks, wide circumferential cracks and active leaks. This first phase will include planning, design and construction of repairs. The second phase of the project will be to address the remaining 1.25 miles of pipeline, which includes planning, design and partial encumbrance of a construction contract. The project budget will be reevaluated following completion of the Alternatives Analysis for the second phase. The first construction contract will increase system reliability by rehabilitating approximately 650 feet of 84-inch diameter BDPL4 PCCP in Redwood City.

Program: Water Transmission	**Project Status:** Planning	**Environmental Status:** Not Initiated (Cat Ex)

Project Cost:

Approved	$ 54.75 M
Forecast	$ 54.75 M
Actual	$ 2.24 M

Project Schedule:

Approved 05/01/20	12/31/26
Forecast 05/01/20	12/31/29

Project Percent Complete: 6.8%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	02/26/27	03/01/27	11/01/27	10/31/28
	B	TBD	TBD	TBD	TBD

Progress and Status:

This project is being delivered in two phases. Phase 1 will repair six segments, approximately 650 feet of Bay Division Pipeline No. 4 Pre-Stressed Concrete Cylinder Pipe (BDPL4 PCCP) identified to be at risk for failure due to a high number of wire breaks, wide circumferential cracks, and active leaks. The Key Milestone dates above reflects the Phase 1 schedule. Phase 2 will evaluate and address the wire breaks and circumferential cracks in the remaining 1.3 miles of BDPL4 PCCP. Phase 1: An Alternatives Analysis Report was completed comparing various repair alternatives such as replacing with welded steel pipe sections and repairing with Carbon Fiber Reinforced Polymer (CFRP). Welded steel pipe replacement was the highest scoring alternative and will be recommended to move forward to the Conceptual Engineering Phase. Phase 2: Finalizing the Needs Assessment Report (NAR) was placed on hold until the Phase 1 repair alternative is selected. When the NAR is finalized, this phase 2 project will be placed on hold with planning scheduled to resume in 2026 in order to focus on Phase 1.

Typical PCCP Joint

Issues and Challenges:

As previously reported, the schedule forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project schedule is due to the need for additional time to evaluate Phase 1 repair alternatives to ensure that the selected alternative meets the Phase 1 goals and considers the scope of the future Phase 2 project. Phase 2 planning will begin in 2026 and be completed in 2029.

10036840 - BDPL 1-4 Lining Repair

Project Description: Water Supply and Treatment Division's (WSTD) ongoing pipeline inspection program has identified segments of the BDPL 1-4 and other regional pipelines that require lining repairs. In addition, this project will retain an as-needed contractor to repair linings identified to be deficient by WSTD over the next 5-years. This project will repair the lining in segments of the BDPL 1-4 and other regional pipelines over the next 5 years. The initial construction contract for this project will be 3 years and combined with Project 10035029, As-Needed Pipeline Repair to provide a sufficient guaranteed scope.

Program: Water Transmission	**Project Status:** Design	**Environmental Status:** Active (Cat Ex)

Project Cost:

Approved	$ 10.76 M
Forecast	$ 22.17 M
Actual	$ 1.21 M

Project Schedule:

Approved 09/12/16	08/25/28
Forecast 09/12/16	12/31/29

Project Percent Complete: 12.4%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	11/27/24	01/31/25	09/02/25	06/30/29

Progress and Status:

Comments to the 35% Design are being incorporated into the 65% Design. In addition, the draft 100% design for a contract to pre-purchase, including fabricating, storing, delivering, and installing valves for safe pipeline entry was completed this quarter and will be advertised next quarter. This valve contract will also procure valves for safe pipeline entry for the As-Needed Pipeline Repair Project.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the additional scope of installing new valves to provide safe entry for construction and future operational needs.

Typical Valve Vault

10015071 - Corrosion Control

Project Description: This project will implement the corrosion protection and control program as recommended in the Corrosion Control Master Plan completed in August 2010. Sites identified with the worst levels of corrosion were bundled up in the master plan in three phases. Each phase will take several years to implementation. The scope for all phases will be similar, but the number of sites will vary at each phase. Phase 1 construction work for ten sites was completed and accepted on August 27, 2019. Phase 2 has eleven sites and is currently in construction phase. Phase 3 has 19 sites and is currently in planning phase.

Program: Water Transmission	**Project Status:** Construction	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 36.54 M
Forecast	$ 36.54 M
Actual	$ 12.04 M

Project Schedule:

Approved 01/01/16	06/30/28
Forecast 01/01/16	02/28/29

Project Percent Complete: 40.0%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	N/A	N/A	11/09/16 A	12/31/18 A
	B	01/31/22 A	05/27/22 A	03/13/23 A	03/06/25
	C	06/30/26	07/09/25	03/03/26	08/31/28

Progress and Status:

The Phase 2 contract includes 11 sites that are currently under construction. Rectifier installations have been completed at two of these sites, and they are pending for functionality testing and commissioning. The Phase 3 contract will include 19 sites and is currently in the planning stage. The project team is finalizing the Conceptual Engineering Report for issuance, in July 2024.

Issues and Challenges:

As previously reported, the schedule forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project schedule is due to the 3 sites that were deferred from Phase 2 and added to Phase 3. With the addition of these sites in Phase 3, additional time for design, construction, as well as securing required permits will be needed for all 20 sites.

Trenching Sidewalk for Electrical Service Connection to Utility Power at Newark

10015076 - San Antonio Pump Station MCC Upgrades

Project Description: The San Antonio Pump Station (SAPS) is one of the key facilities in the Sunol Valley; it was constructed in 1965 and modified in 1990. The existing motor control centers (MCC) MCC-A, MCC-B, and MCC-C have been in service since the 1960's and they are approaching the end of their useful life. In order to maintain reliable operation at SAPS, the existing MCCs are being replaced and facility walls are being seismically retrofitted. In order to accommodate the retrofit work, the communications system is being relocated to an adjacent room and the HVAC will be replaced in affected rooms. In addition, a new propane generator will replace the existing diesel generator to serve as reliable backup power to the facility.

Program: Water Transmission	**Project Status:** Construction	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 12.50 M
Forecast	$ 15.62 M
Actual	$ 2.77 M

Project Schedule:

Approved 05/12/16	06/30/26
Forecast 05/12/16	03/18/28

Project Percent Complete: 29.5%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	01/03/23 A	06/29/23 A	04/15/24 A	05/14/27

Progress and Status:

The Contractor received construction Notice to Proceed on April 15. The project team has started evaluating construction related submittals and various requests for information. A preconstruction meeting was held in June with the contractor and stakeholders to kick off the construction phase. Although construction is starting, the contractor has indicated that physical work on the site would not occur until Spring of 2025 due to the yearlong procurement of various required materials.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to higher engineering estimate at 100% design and longer construction durations which increased the escalation cost.

Main Control Panel to be Removed

10015081 - CSPL2 Reaches 2 and 3 Rehabilitation

Project Description: Crystal Springs Pipeline No. 2 (CSPL2) spans from Crystal Springs Pump Station to University Mound Reservoir. It delivers potable and emergency water supply to San Francisco and several cities along the Peninsula. Reaches 2 and 3, 60" in diameter, spanning from Crystal Springs Pump Station through the cities/towns of Hillsborough, Burlingame, and San Mateo and unincorporated parts of San Mateo County to the Burlingame Valve Lot, are over 80 years old and have extensive lining failures. In addition, a segment located on steep terrain, adjacent to a creek bank, is difficult to access for maintenance and repairs. This project will relocate approximately 1.5 miles of CSPL2 into Crystal Springs Road by removing the out of service 44" diameter CSPL1, remove the coal tar lining and reline approximately 2.2 miles of CSPL2 with cement mortar lining, upgrade approximately 15 appurtenances to meet current standards, upgrade existing and install new access manway structures, and install four large diameter valves to improve future shutdown flexibility and to provide safe pipeline entry for future maintenance.

Program: Water Transmission	**Project Status:** Design	**Environmental Status:** Active (MND)

Project Cost:

Approved	$ 82.81 M
Forecast	$ 82.81 M
Actual	$ 3.64 M

Project Schedule:

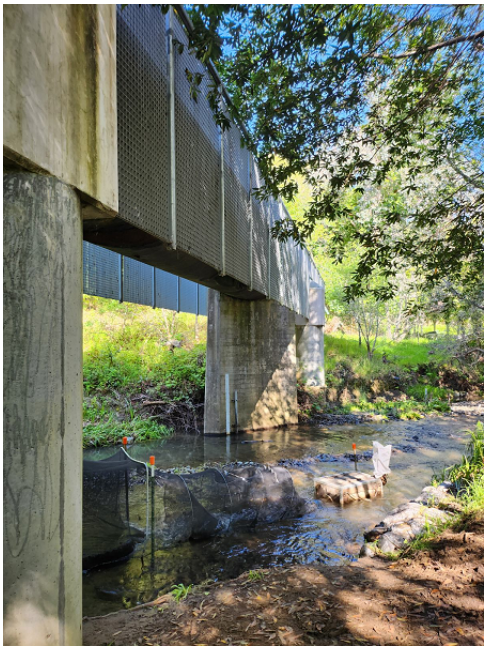
Approved 09/12/16	11/30/27
Forecast 09/12/16	06/29/29

Project Percent Complete: 6.0%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	02/27/25	05/22/26	01/01/27	12/31/28

Progress and Status:
The 35% Design is continuing, which includes survey, structural and geotechnical engineering work. Other activities in this quarter include initiating California Environmental Quality Act (CEQA) review and performing biological surveys. The utility potholing plan was finalized and applications for encroachment permits were submitted. Outreach to public agencies and private property owners continued.

Issues and Challenges:
As previously reported, the schedule forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project schedule is due to anticipated delays in completing CEQA review and right-of-way acquisition. Furthermore, additional time was needed for a consultant to review the Conceptual Engineering Report and to perform a data gap analysis.



CSPL2 at Creek Crossing

10036998 - Turner Dam and Reservoir Improvements

Project Description: Turner Dam is a 195-foot-high earth embankment dam that was completed in 1965 and impounds San Antonio Reservoir in the East Bay. The dam is regulated by the California Division of Safety of Dams (DSOD). This project is to investigate the seismic stability and hydraulic performance of the Turner Dam and San Antonio Reservoir facilities and to perform necessary upgrades identified during the Planning Phase.

(The project percent complete noted below is referring to the planning phase completion since this project is only budgeted for the planning phase.)

Program: Water Supply & Storage	**Project Status:** Planning	**Environmental Status:** Not Initiated (EIR)

Project Cost:

Approved	$ 7.50 M
Forecast	$ 10.00 M
Actual	$ 3.82 M

Project Schedule:

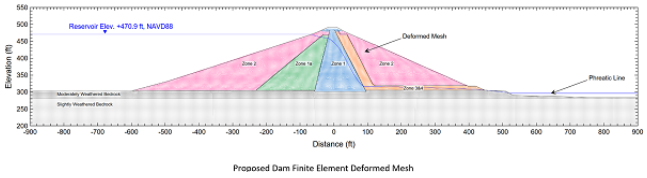
Approved 10/01/20	06/29/35
Forecast 10/01/20	06/29/35

Project Percent Complete: 32.3%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	06/30/31	07/01/31	01/02/32	12/29/34

Progress and Status:
The final draft Condition and Needs Assessment Report was completed, and the report continues to be finalized with stakeholders. The alternatives analyses and evaluation was initiated. The team is developing the alternatives and preparing a shortlist to evaluate as part of the Alternatives Analysis Report.

Issues and Challenges:
As previously reported, the budget forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast budget is due to additional budget that is estimated to be needed to complete the planning phase and initiate the design phase.



Turner Dam Finite Element Deformed Mesh

10015091 - Pilarcitos Dam Improvements

Project Description: The Pilarcitos Dam is an earthen embankment dam that was built in 1866 and raised in 1874; it is the SFPUC's oldest dam regulated by the California Division of Safety of Dams (DSOD). This project will investigate the seismic stability and hydraulic performance of the Pilarcitos Dam and Reservoir facilities, including the dam and forebay outlet structure, spillway,outlet tunnel and outlet pipeline, and will perform necessary upgrades identified during the Planning Phase.

Program: Water Supply & Storage	**Project Status:** Planning	**Environmental Status:** Not Initiated (EIR)

Project Cost:

Approved	$ 30.09 M
Forecast	$ 64.43 M
Actual	$ 5.35 M

Project Schedule:

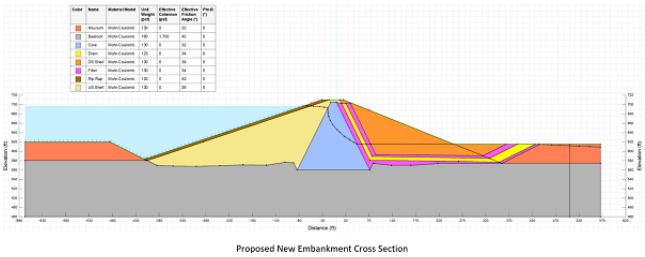
Approved 04/07/14	06/29/29
Forecast 04/07/14	12/31/35

Project Percent Complete: 28.2%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	07/31/30	08/08/30	04/01/31	12/31/34

Progress and Status:

During the reporting period, the project team continued to develop Conceptual Engineering Report for both the permanent reservoir restriction (Alternative 5) and dam replacement (Alternative 1) alternatives. Some of the on-going work continued from the last quarter included refining the designs for the conceptual layouts, preparing preliminary construction cost estimates and construction schedules, performing studies to evaluate on-site power supply requirements, and field work related to surveying existing utilities in the vicinity of the project site.



Pilarcitos Proposed New Embankment Cross Section

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the newly identified scope of work for the permanent reservoir restriction alternative (Alternative 5).

10015092 - San Andreas Dam Facility Improvements

Project Description: The San Andreas dam is a 105-foot-high earthen embankment dam that was built in 1870; it impounds San Andreas Reservoir that is the raw water source for the Harry Tracy Water Treatment Plant, and it is regulated by the California Division of Safety of Dams (DSOD). This project will investigate the seismic stability and hydraulic performance of the San Andreas Dam and Reservoir facilities, including the dam, spillway, emergency outlet, and ancillary facilities, and perform necessary upgrades identified during the Planning Phase.

Program: Water Supply & Storage	**Project Status:** Planning	**Environmental Status:** Not Initiated (EIR)

Project Cost:

Approved	$ 32.20 M
Forecast	$ 32.20 M
Actual	$ 5.92 M

Project Schedule:

Approved 12/11/13	12/30/33
Forecast 12/11/13	12/30/33

Project Percent Complete: 20.7%

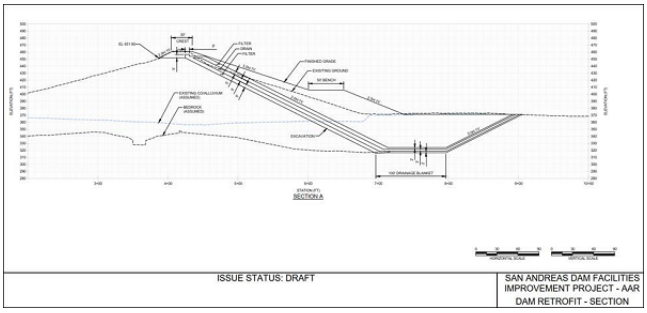
Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	12/31/30	01/02/31	09/02/31	06/30/33

Progress and Status:

The first draft Alternatives Analysis Report was completed and circulated to internal stakeholders for review. Scoring panels were selected to provide the scoring and ranking of the five alternatives evaluated. In the next quarter, the team will evaluate the scoring and ranking results.

Issues and Challenges:

None at this time.



San Andreas Dam Retrofit Alternative Cross Section

10015232 - Merced Manor Reservoir Facilities Repairs

Project Description: Merced Manor Reservoir - Concrete Spalling Repair project. The roof structure of the Merced Manor Reservoir was inspected and evaluated by SFPUC structural engineers in 1995. It was determined that seismic strengthening and repair of the roof structure is needed. This project is to implement the recommendations from the seismic evaluation and inspection of the roof structure of Merced Manor Reservoir. Scope of the project will include performing a structural evaluation of the existing roof structure per current seismic code, developing design for seismic strengthening and repair, and construction.

Program: Water Supply & Storage	**Project Status:** Planning	**Environmental Status:** Not Initiated (TBD)

Project Cost:

Approved	$ 12.08 M
Forecast	$ 12.08 M
Actual	$ 0.01 M

Project Schedule:

Approved 07/03/23	06/30/31
Forecast 07/03/23	06/30/31

Project Percent Complete: 1.2%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	12/31/26	01/04/27	07/01/27	12/30/30

Progress and Status:

During the reporting period, staff submitted an updated engineering work plan and began initial work on alterative analysis.

Issues and Challenges:

None at this time.

Interior of Merced Manor Reservoir During Construction in 1936.

10015108 - Sneath Lane Gate/North San Andreas

Project Description: The 2001 Peninsula Watershed Management Plan identified the need for a new trail connection between San Mateo County's Crystal Springs Regional Trail (North San Andreas) to Golden Gate National Recreation Area's (GGNRA) Sweeney Ridge property at the Sneath Lane Gate. The trail is a critical connection among existing regional trails at the north end of the Peninsula watershed, that will serve hikers, bikers and equestrians.

Program: Watershed & Lands Management	**Project Status:** Design	**Environmental Status:** Active (MND)

Project Cost:

Approved	$ 12.39 M
Forecast	$ 12.39 M
Actual	$ 0.84 M

Project Schedule:

Approved 02/01/21	08/02/27
Forecast 02/01/21	11/30/35

Project Percent Complete: 7.2%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	04/10/25	TBD	TBD	TBD

Progress and Status:

During this reporting period, the environmental consultant submitted the Final Biological Resources Assessment and Draft 2 of the Cultural Resources and Archaeological Survey Report. The completion of the Mitigated Negative Declaration is extended by 3-months due to longer than scheduled review time for the technical memos that are the basis of the environmental document. However, it did not cause any delays in overall project completion since last quarterly report.

Issues and Challenges:

As previously reported, the schedule forecast has been updated to reflect the FY25-34 CIP. The variance between the forecast project schedule is due to Water Enterprise budgetary constraints, thus, project construction funding has been deferred. Environmental and design phase work will be performed with the existing budget appropriations.

View South from Proposed Trail Alignment

10015113 - Southern Skyline Blvd Ridge Trail Extension

Project Description: The Bay Area Ridge Trail project was started in 1987 by the Bay Area Ridge Trail Council to create an approximately 550-mile long continuous trail for hikers, mountain bicyclists, and equestrians along the ridgelines overlooking San Francisco Bay. The objective of the project is to provide access to the Peninsula watershed, to enhance educational opportunities, and to ensure watershed protection. South of Highway 92, this proposed extension project would construct a 6-mile-long trail on the Peninsula Watershed in San Mateo County between Highway 92 and the Golden Gate National Recreation Area's (GGNRA) Phleger Estate. The project consists of a 6 foot wide, all-weather surface trails; retaining structures to stabilize cut and/or fill slopes; drainage facilities; a 15,000-square-foot parking lot accommodating up to 14 cars; two pre-fabricated restrooms along the trail; site security features; and landscape restoration. North of Highway 92, the project includes construction of a trail segment adjacent to the Fifield Cahill Trail that is compliant with the Americans with Disabilities Act, a 16,000-square foot parking lot, and one pre-fabricated restroom.

Program: Watershed & Lands Management	**Project Status:** Construction	**Environmental Status:** Completed (EIR)

Project Cost:

Approved	$ 26.96 M
Forecast	$ 37.98 M
Actual	$ 10.69 M

Project Schedule:

Approved 10/31/12	06/30/25
Forecast 10/31/12	03/30/26

Project Percent Complete: 29.8%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	05/11/21 A	06/09/23 A	01/08/24 A	08/29/25

Progress and Status:
This quarter, the contractor completed site clearing, established staging areas, and continued tree removal south of State Route 92. In addition, the contractor commenced installation of the soldier pile retaining walls and grading of the parking lot.

Issues and Challenges:
As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the additional time required to secure National Environmental Policy Act approval for the Federal Highway Administration grant and revise the bid documents to reflect the biological opinion, hence increasing construction and project management costs.

View From Staging Area 6

10030771 - SA-1 Service Road/Ingoing Road

Project Description: The SFPUC has identified landslide and erosion damage that have destabilized service roads (East Shore Service Road and West Shore Service Road) and adjacent areas in three locations on San Francisco Peninsula Watershed lands situated along the San Andreas Reservoir in San Mateo County. The project is to evaluate and repair the damage, and to implement long term solutions for SFPUC staff and contractors to continue to use the roads to access, operate, and maintain SFPUC facilities and watershed lands. Construction for these locations can be done through phases to accommodate budget cash flow.

Program: Watershed & Lands Management	**Project Status:** Construction	**Environmental Status:** Completed (EIR)

Project Cost:

Approved	$ 15.21 M
Forecast	$ 18.06 M
Actual	$ 6.39 M

Project Schedule:

Approved 06/30/16	03/03/27
Forecast 06/30/16	03/03/27

Project Percent Complete: 44.0%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	01/04/24 A	07/27/23 A	03/04/24 A	03/03/26

Progress and Status:
State environmental permit (CDFW) was obtained in April 2024. In May 2024, Operations completed water drawdown in San Andreas reservoir from elevation 450 feet to 438 feet, which allowed the Contractor to commence work below the high water level. The target schedule for Operations to refill the water in the reservoir is October 2024. For this reporting period, ongoing construction activities include installation of piles and tiebacks, and other earthwork.

Issues and Challenges:
As previously reported, the budget forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget is due to the additional cost to accommodate reservoir operational restrictions and to accommodate deeper soldier pile walls for structural integrity.

Rebar Cages for Cast in Drilled Hole Piles

10034526 - Millbrae Warehouse Settlement & Admin. Bldg. HVAC

Project Description: This project will construct improvements for two buildings located at the Millbrae Yard facility, the Millbrae Warehouse and the Administration Building. The Millbrae Warehouse Settlement project will provide a long-term repair for the displacement (settlement) of the slab between the loading dock and the offices. The slab settlement resulted from expansive clay layers located seven feet below the top of the existing concrete slab. For the Millbrae Administration Building HVAC Upgrades, this project will provide long-term reliable and economical improvements to heating and cooling systems.

Program: Buildings and Grounds	**Project Status:** Construction	**Environmental Status:** Completed (Various)

Project Cost:

Approved	$ 7.15 M
Forecast	$ 7.15 M
Actual	$ 2.54 M

Project Schedule:

Approved 01/03/17	06/02/25
Forecast 01/03/17	04/30/26

Project Percent Complete: 36.5%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	08/31/20 A	09/01/20 A	06/16/21 A	11/24/21 A
	B	01/12/22 A	01/05/24 A	02/09/24 A	12/31/24

Progress and Status:

Contract A) Warehouse Settlement: Completed. (Contract B) Administration Building HVAC Upgrades (JOC): Installation of variable frequency drives has started.

Issues and Challenges:

As previously reported, the schedule forecasts has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project schedule is due to additional time needed to complete the JOC scope of work and to retain a new JOC Contractor.

Existing Fans inside the Millbrae Yard Administration Building

10015124 - Sunol Long Term Improvements

Project Description: The project includes redevelopment of the existing Sunol Yard and construction of a Watershed Center near the Sunol Water Temple. Most of the existing structures at the Sunol Yard date back to 1930 and were converted from the original purpose, residence and barn, to office and shop spaces. The structures contain lead-based paint, asbestos, bats, and bat guano, and did not meet current building, health, or safety codes. The project will demolish six existing dilapidated structures at the Sunol Yard and construct a LEED Gold administration building, shops, fuel station, backup generator system, truck wash station, paving and site restoration. The project will also construct a one-story LEED Gold facility that will include an interpretive display exhibit area, a freshwater stream profile aquarium, history display alcoves, a watershed discovery lab classroom, a community multi-purpose room, restrooms, patios, and administrative offices; a 2.5-acre discovery trail area with native plant landscaping, irrigation, meandering trails, seating areas and water and landscape features; site restoration; and access stairs and ramps to the picnic area.

Program: Buildings and Grounds	**Project Status:** Construction	**Environmental Status:** Completed (MND)

Project Cost:

Approved	$ 114.49 M
Forecast	$ 114.49 M
Actual	$ 103.61 M

Project Schedule:

Approved 01/01/09	12/31/25
Forecast 01/01/09	12/31/25

Project Percent Complete: 98.5%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	12/02/15 A	03/01/16 A	01/17/17 A	09/15/20 A
	B		08/30/19 A	03/09/20 A	12/31/25

Progress and Status:
Sunol Yard (Contract A): Completed. Watershed Center (Contract B): During the reporting period, exhibit equipment installation began, berm excavation and utility removal was initiated, and bluestone etching repair and decomposed granite walkway repair work started. The exhibit sign fabrication, furniture, fixtures and equipment fabrication, and punch-list work all continued. Soil samples from the berm excavation were collected and sent to the lab for analysis. An investigation of the berm wall waterproofing system started to determine the extent of the damage and potential need for replacement and further waterproofing.

Issues and Challenges:
None at this time.

Installation of Exhibits

10015128 - Millbrae Yard Laboratory and Shop Improvements

Project Description: SFPUC has determined that the existing Millbrae Administration Building must remain operational following a major earthquake, and therefore needs to be retrofitted or replaced to meet essential facility requirements. SFPUC also wants to expand the existing Millbrae Administration Building to merge and house the Water Enterprise staff and equipment from the Rollins Road Facility. This project is necessary to provide Water Enterprise personnel a long term and sustainable campus, and allow the consolidation of work groups for increased staff efficiency. This project will also alleviate shortage of program space, increase efficiency of operations, improve employee working environment with improved heating, ventilation, and air conditioning, improve employee health and safety, and enhance site and building security. A recent planning study has identified several alternatives to meet the project goals. The selected alternative for the Millbrae Yard campus improvements will be implemented in three phases. Phase 1 includes a new laboratory office and new south shop building to alleviate Water Enterprise undersized and outdated workspaces and desire to relocate mission-critical functions to code-compliant structures. This project will provide additional space in the laboratory building by constructing two additional floors on top of it to accommodate the relocation of all personnel from Rollins Road Facility. Phase 2 includes demolition of the existing Administration Building and construction of a new consolidated Administration Building adjacent to the new laboratory building to accommodate other Water Enterprise staff. Phase 3 includes new covered storage for materials and equipment. Only the scope of work for Phase 1 will be implemented under this project to meet near-term needs, minimize disruptions to operations, and allow gradual buildout of the master plan to stay within the 10-year CIP budget.

Program: Buildings and Grounds	**Project Status:** Planning	**Environmental Status:** Not Initiated (MND)

Project Cost:

Approved	$ 237.53 M
Forecast	$ 427.74 M
Actual	$ 9.27 M

Project Schedule:

Approved 11/02/15	09/13/30
Forecast 11/02/15	10/29/32

Project Percent Complete: 4.8%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	12/04/25	08/15/24 *	05/01/26	10/31/31

** This date represents the advertisement of the RFP for the CM/GC contract.*

Progress and Status:

During this quarter, for the engineering services that will be provided through SFPW, a single proposal was received by SFPW for the combined Request for Qualifications (RFQ) and Request for Proposal (RFP); the proposal is being reviewed. The draft Conceptual Design Report was issued for review; meetings were held to present the report with Water Enterprise and Infrastructure staff. Engineer's estimate for construction was issued based on the draft conceptual report. Requests for additional information for qualifications will be issued to several proposers for the RFQ for Construction Manager/General Contractor (CM/GC) with core trades and the draft RFP for the CM/GC was issued for review.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the cost increase and schedule extension required to increase the scope to incorporate all three phases of the project into one extended construction contract.

Rendering of Main Entrance to the New Proposed Combined Laboratory-Office Building

10034825 - Millbrae Security Upgrades

Project Description: Millbrae Yard is currently vulnerable to unauthorized intrusion, trespassing, theft, vandalism and physical damage. Site concerns include lack of adequate fencing around the perimeter of the site, lack of electronic security measures to monitor and control access into the Administration Building during normal business hours and after hours, lack of video surveillance to monitor the secure areas within the fenced perimeter, and lack of a physical barrier separating access to the shops/yard areas from visitor parking. This project would address the security concerns and would enhance the overall physical and electronic security components of the Millbrae Yard.

Program: Buildings and Grounds	**Project Status:** Bid and Award	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 7.55 M
Forecast	$ 11.13 M
Actual	$ 1.55 M

Project Schedule:

Approved 09/01/19	08/30/24
Forecast 09/01/19	09/30/26

Project Percent Complete: 21.6%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	08/31/22 A	03/11/24 A	03/01/25	08/30/26

Progress and Status:
Three (3) bids were received and opened in May 2024 but were rejected because they did not meet the set requirements for bid documentation. The project was re-advertised at the end of May with a short advertising period, and four (4) bids were received in late June. The project team is currently reviewing post-bid submittals and safety pre-qualification of bidders. Construction Notice to Proceed is now forecasted to be March 2025.

Issues and Challenges:
As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The budget and schedule variances are due to additional scope, associated design changes and updated engineering estimates based on 100% design.

Millbrae Headquarters Building Security to be Upgraded

8. ON-GOING CONSTRUCTION*

Construction Contract	Schedule			Budget		Variance (Approved - Forecast)		Percent Complete
	NTP Date	Approved Construction Final Completion	Current Forecasted Construction Final Completion**	Approved Contract Cost	Current Forecasted Cost**	Schedule (Cal Days)	Cost	
Water Treatment								
10037349 - HTWTP Filter Underdrain Replacement - (WD-2887)	10/03/22	12/29/23	09/30/24	$9,264,300	$9,264,300	(276)	$0	98.0%
Water Transmission								
10015071 - Corrosion Control - (WD-2845)	03/13/23	03/06/25	03/06/25	$3,601,885	$3,601,885	0	$0	59.7%
10015076 - San Antonio Pump Station MCC Upgrades (WD-2862)	04/15/24	05/14/27	05/14/27	$9,756,254	$9,756,254	0	$0	0.0%
Watershed & Lands Management								
10015113 - Southern Skyline Blvd Ridge Trail Extension (WD-2840)	01/08/24	08/29/25	08/29/25	$27,367,170	$27,367,170	0	$0	11.8%
10030771 - SA-1 Service Road/Ingoing Road (WD-2902)	03/04/24	03/03/26	03/03/26	$10,491,406	$10,491,406	0	$0	38.8%
Buildings and Grounds								
10015124 - Sunol Long Term Improvements - Watershed Center - (WD-2794B)	03/09/20	11/28/24	12/31/25	$31,857,387	$35,170,258	(398)	($3,312,871)	96.0%

	Approved Contract Cost	Current Forecast Cost	Variance	
			Cost	Percent
Program Total for On-Going Construction	**$92,338,402**	**$95,651,273**	**($3,312,871)**	**(3.6%)**

Note: * This table reflects Active Construction Contracts with an original contract amount greater than $1M.

** The Forecasted Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends.

9. PROJECTS IN CLOSEOUT

Project Title	Current Approved Construction Phase Completion	Actual Construction Phase Completion	Current Approved Construction Phase Budget	Construction Phase Expenditures To Date
Water Treatment				
10037628 - SVWTP Polymer Feed Facility	08/31/26		$9,752,412	$0
TOTAL			**$9,752,412**	**$0**

10. COMPLETED PROJECTS

There are no completed projects.

II. Local Water Enterprise Capital Improvement Program

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1. CAPITAL IMPROVEMENT PROGRAM DESCRIPTION

The San Francisco Public Utilities Commission (SFPUC) Water Enterprise manages a complex water supply system stretching from the Sierra to San Francisco and featuring a series of reservoirs, tunnels, pipelines, and treatment systems. Two unique features of this system stand out: the drinking water provided is among the highest quality in the world, and water deliveries are made to most customers without the use of power, by gravity flow, while generating power at the same time.

The SFPUC is the third largest municipal utility in California, serving 2.7 million residential, commercial, and industrial customers in the Bay Area. Approximately one-third of the delivered water goes to retail customers in San Francisco, while wholesale deliveries to 26 suburban agencies in Alameda, Santa Clara, and San Mateo counties comprise the other two-thirds.

The Local Water System is located primarily within the City and County of San Francisco and consists of water storage and treatment facilities; water transmission and distribution infrastructure; buildings and structures for facilities and employees; communications systems; and various lands in the City and County of San Francisco. In addition, the Local Water System includes several other small retail systems in Alameda, Santa Clara and San Mateo Counties where the SFPUC directly retails water to various customers. Groundwater in San Francisco is under the jurisdiction of the SFPUC; the Westside Basin is the only viable aquifer for municipal use. Additionally, the Local Water System includes the Emergency Firefighting Water System (EFWS) used for fire suppression in San Francisco and developer-funded assets that have been conveyed to the SFPUC.

The Local Water Enterprise Capital Improvement Program (Local Water CIP) is a 10-year proposed appropriations plan of scheduled projects to physically improve the system assets and maintain level of service goals. This Local Water CIP is updated every two years (with minor modifications in the off years) and integrated with the SFPUC's 10-year Financial Plan and rate-setting.

There are seven (7) groupings of projects in the Local Water CIP in addition to a separate set of programmatic projects used for feasibility planning, for future capital projects, and for implementation of permit compliance activities. The categories are:

- Local Water Supply
- Local Water Conveyance/Distribution
- Local Reservoirs and Tanks Improvements
- Pump Station Improvements
- Automated Water Meter Reading
- Buildings and Grounds Improvements
- Emergency Firefighting Water System

Changes to the approved baseline program, including any changes to continuing projects' scopes, schedules, and budgets, are proposed as part of the biannually updated 10- year CIP to be adopted by the SFPUC Commission and approved by San Francisco's Mayor and Board of Supervisors. The proposed revisions to the program become the new baseline for new and continuing projects' scopes, schedules, and budgets in the beginning of the new fiscal year following SFPUC Commission adoption.

2. CAPITAL IMPROVEMENT PROGRAM STATUS

This Quarterly Report presents the progress made on Local Water projects between April 1, 2024 and June 30, 2024. This document serves as the fourth (4th) Quarterly Report in Fiscal Year 2023-2024 (FY24) published for the Water Enterprise Capital Improvement Program.

This quarterly report includes approved scopes, schedules, budgets for the Regional Water Enterprise CIP projects and the Local Water Enterprise CIP projects that were included in the Water Enterprise Capital Improvement Program according to the 10-Year Capital Plan for FY2023-24 to FY2032-33, presented to and adopted by the Commission on February 14, 2023, under Resolution No. 23-0037. The 10-Year Capital Plan for FY2023-24 to FY2032-33 serves as the new baseline for project scopes, schedules, and budgets starting as of the first quarter (Q1) of FY2023-24. The 2023 Approved Water Enterprise CIP is a subset of the Regional and Local Water Enterprise 10-Year CIP for FY2023-24 to FY2032-33 and includes individual projects over $5 million that were then currently active or intended to be active by July 1, 2023 at the time proposed to the Commission on February 14, 2023.

The 2023 Approved Local Water Enterprise CIP (2023 Local WECIP) has thirteen (13) projects. No Local project is in “Not Initiated“ status.

Figure 2.1 shows the total Current Approved Budget for the Local projects in each phase of the program as of June 30, 2024. The number of projects currently active in each phase is shown in parentheses.

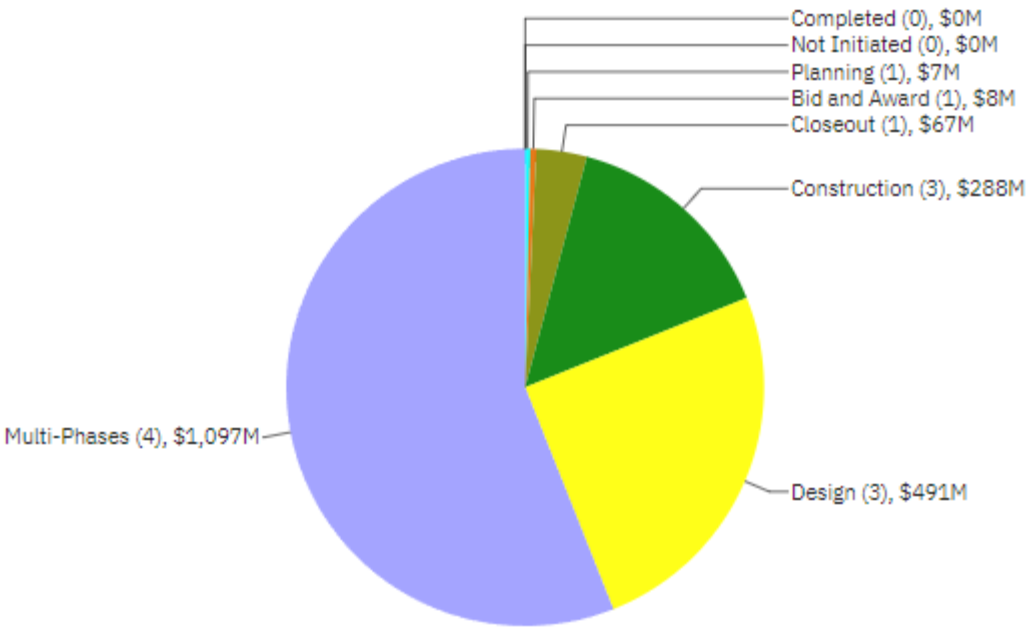


Figure 2.1 Total Current Approved Budget for Local Projects Active in Each Phase

Figure 2.2 shows the number of Local projects in the following phases as of June 30, 2024: Pre-construction, Construction, and Post-construction.

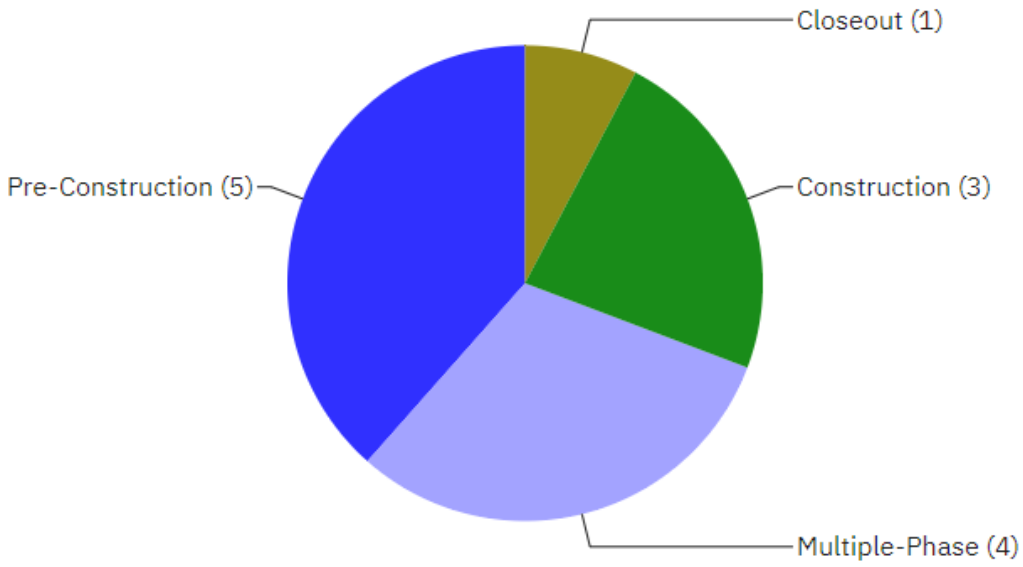


Figure 2.2 Number of Local Projects in Pre-construction, Construction, and Post-construction

Figure 2.3 summarizes the environmental review status of the Local projects as of June 30, 2024.

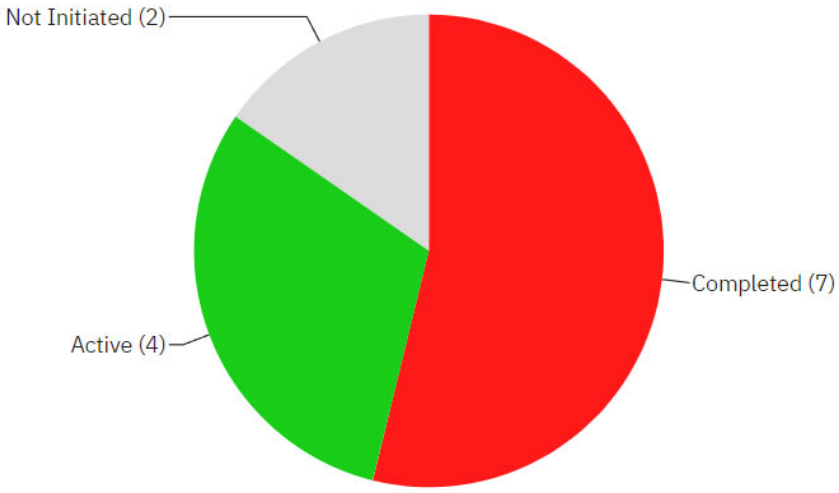
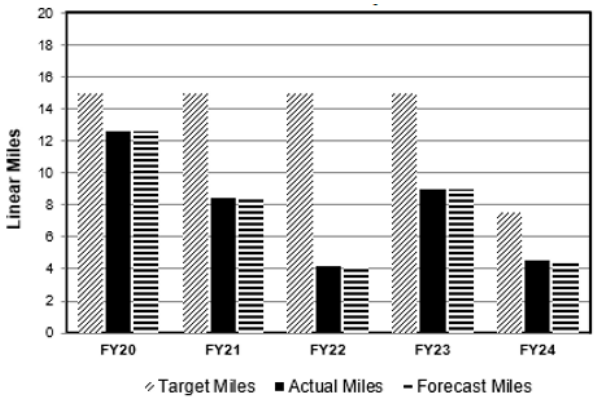


Figure 2.3 Local Program Environmental Status

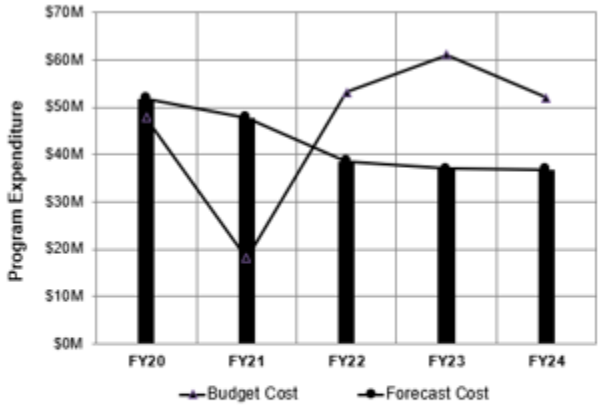
The Local Water Conveyance/Distribution System Program has an annual goal to replace or improve a target of 15 miles of water mains in San Francisco. Figure 2.4 shows the planned and actual miles of pipeline projects that have reached substantial completion since FY20. The actual mileage for FY24 is 4.5 miles which matches the FY forecast and is reduced from the target of 15 miles due to a reduction in program budget for FY24.



	FY20	FY21	FY22	FY23	FY24
Target Miles	15.0	15.0	15.0	15.0	15.0
Actual Miles	12.6	8.4	4.2	9.0	4.5
Forecast Miles					4.5

Figure 2.4 Water Conveyance/Distribution System Program - Linear Miles by Fiscal

Water main replacement projects with construction underway in the 4th quarter of FY24 includes the City streets of Diamond Street, Laidley Street, Hampshire Street, Gold Mine Drive, Joost Street, Precita Avenue, and Webster Street. Water work under Construction Contract WD-2765 on Jersey Street is anticipated to start in Q1 FY25. During this reporting period, Construction Contract WD-2844 which includes water work on Parnassus Avenue from Stanyan Street to 6th Avenue was advertised with SFPUC Commission, and the award is anticipated for Q1 FY25, Construction Contract WD-2708 which includes water sewer work on Geary Boulevard from 32nd Avenue to Stanyan Street was awarded.



	FY20	FY21	FY22	FY23	FY24
Budget	$47.7M	$18M	$53M	$61M	$51.9M
Actual Expenditure	$51.7M	$47.8M	$38.5M	$36.9M	$36.8M
Forecast Expenditure					$36.8M

Figure 2.5 Water Conveyance/Distribution System Program - Expenditure by Fiscal Year

Figure 2.5 shows the annual total program expenditure by fiscal year for the pipeline replacement program. The budget for FY24 is $51.9M and the actual expenditures are $36.8M.

3. CAPITAL IMPROVEMENT PROGRAM COST SUMMARY

Table 3 provides an overall program-level cost summary of the Local Water Program. It shows by categories of projects the Expenditures to Date, Current Approved Budgets, Q4/FY23-24 Forecast Costs, Cost Variance between the Current Approved Budgets and Forecast Costs, and Variance Over Reporting Period (difference between cost forecasts reported in Q3/FY23-24 and in Q4/FY23-24).

The total Current Approved Budget (including Regional and Local Programs) and Current Forecast Cost at completion are $3,078.9 million and $3,711.6 million, respectively. The Current Approved Budget and Forecast Cost at completion for only the Local Water Program (including construction contingency) are $1,958.3 million and $2,259.3 million respectively.

The overall 2023 Local WECIP negative Cost Variance of $301.0M in Table 3 is the same as reported in the last quarter and can be attributed to the following projects and their variances provided below; all of these variances were reported last quarter and included as revised budget requests that was submitted to and approved by the Commission on February 13, 2024 as part of the FY2024/25 to FY33/34 10-Year CIP. The reasons for the project variances are reported in Section 7:

- 10015239 Lake Merced Water Level Restoration forecast cost increased by $8.93M.
- 10015242 San Francisco Westside Recycled Water forecast cost increased by $17.03M.
- 19063 Local Water Conveyance/Distribution System forecast cost increased by $244.51M.
- 10033818 Town of Sunol Pipeline forecast cost increased by $4.25M.
- 10037794 Reservoir Roof and Tank Coatings forecast cost increased by $23.80M.
- 10015231 Harding Park PS forecast cost increased by $2.50M.

Please refer to the section of I.3 of this report for more details about the reported cost variance for the Regional Water Program.

Table 3. Program Cost Summary

Programs	Expenditures To Date ($ Million) (A)	Current Approved Budget ($ Million) (B)	Q4/FY23-24 Forecast Costs ($ Million) (C)	Cost Variance ($ Million) (D = B - C)	Variance Over Reporting Period* ($ Million) (E)
Local Program	**$915.05**	**$1,958.28**	**$2,259.31**	**($301.03)**	**-**
Water Transmission	$539.17	$1,013.69	$1,262.46	($248.77)	-
Local Water Supply	$271.97	$322.88	$348.85	($25.96)	-
Local Tanks/Reservoir Improvements	$21.78	$38.78	$62.58	($23.80)	-
Pump Stations	$1.04	$6.72	$9.22	($2.50)	-
Buildings and Grounds	$17.24	$393.60	$393.60	-	-
Emergency Firefighting Water System	$63.83	$182.61	$182.61	-	-
Regional Program	**$222.35**	**$1,120.58**	**$1,452.29**	**($331.70)**	-
PROGRAMS TOTAL	**$1,137.40**	**$3,078.87**	**$3,711.60**	**($632.73)**	-

** Negative number is reflecting cost increases since last quarter, and positive number is reflecting cost reduction since last quarter*

4. CAPITAL IMPROVEMENT PROGRAM SCHEDULE SUMMARY

Figure 4 compares the 2023 Approved Schedule and the Current Forecast Schedule for the Local Water CIP. As shown in Table 4, the Current Approved and Forecast Schedule completion for the overall Water Enterprise CIP (including Regional and Local Programs) are June 2035 and December 2035 respectively. The Current Approved and Forecast Schedule completion for the Local CIP alone are June 2033 and December 2035 respectively.

Figure 4. Local Program Schedule Summary

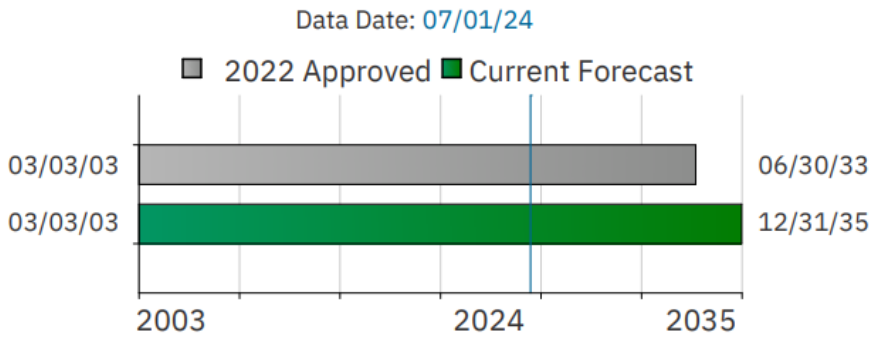


Table 4. Current Approved vs. Current Forecast Schedule Dates

Programs	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)
Water Regional	01/01/09	01/01/09 A*	06/29/35	12/31/35	6.1 (Late)
Water Local	03/03/03	03/03/03 A*	06/30/33	12/31/35	30.0 (Late)
Overall Water Enterprise CIP	**03/03/03**	**03/03/03 A***	**06/29/35**	**12/31/35**	**6.1 (Late)**

** "A" represents the actual date*

5. BUDGET AND SCHEDULE TREND SUMMARY

Table 5 contains all approved Local Water projects that are active and in any of the planning, design, bid and award, or construction phases of the project. The table excludes any projects that are either not-initiated, on-hold, in closeout, or completed.

During the reporting period, the following Local WECIP projects achieved major project milestones:

- Two contracts under the Potable Emergency Firefighting Water System project moved from Planning phase to Design phase.
- The construction contract for the Town of Sunol project was advertised. The project moved from Design phase to Bid and Award phase.
- The construction contract WD-2708 under the 19063 – Local Water Conveyance/Distribution System project was awarded.

Table 5. Budget and Schedule Trend Summary

All Costs are shown in million.

Project Name	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
	a	b	c	d	e	f	g	h	i	j	k	l	m	n
WECIP - Local														
Water Transmission														
10033816 Potable Emergency Firefighting Water System[2]	FY24-33		08/12/19		4/28/2023		11/14/2023		7/25/2025		9/8/2026		Q4-FY23-24	
	$55.0	06/30/29	$44.8	06/30/28	$55.0	06/30/29	$55.0	06/30/29	TBD	TBD	TBD	TBD	$55.0	06/30/29
10033818 Town of Sunol Pipeline	FY24-33		06/17/19		11/01/21		10/14/22[3]		07/14/23		09/05/24		Q4-FY23-24	
	$8.0	05/30/25	$5.0	04/03/23	$5.0	04/03/23	$8.0	05/30/25	$8.0	05/30/25	TBD	TBD	$12.3	06/30/26
19063 Local Water Conveyance / Distribution System[4]	FY24-33		N/A		Various		Various		Various		Various		Q4-FY23-24	
	$901.5	06/30/33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$1,146.0	06/30/35
10036916 Lead Component Service Program	FY24-33		09/13/21		N/A		N/A		05/06/22		01/24/23		Q4-FY23-24	
	$49.2	12/13/27	$49.2	12/13/27	N/A	N/A	N/A	N/A	$49.2	12/13/27	$49.2	12/13/27	$49.2	12/30/27
Local Water Supply														
10015239 Lake Merced Water Level Restoration	FY24-33		06/16/03		04/30/10		11/27/13		08/24/18		05/02/25		Q4-FY23-24	
	$42.7	07/22/27	$32.7	01/31/19	$32.7	01/31/19	$32.7	01/31/19	$32.7	01/31/19	TBD	TBD	$51.6	11/02/28
10015242 San Francisco Westside Recycled Water	FY24-33		03/03/03		05/15/09		12/08/14		06/29/16		10/16/17		Q4-FY23-24	
	$213.3	05/20/26	$201.3	04/18/08	$149.6	09/25/13	$186.2	12/18/19	$186.2	12/18/19	$186.2	12/18/19	$230.4	12/31/26

Footnotes:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC construction work).
2. Potable Emergency Firefighting Water System: This project will fund construction phase of PEFWS pipelines in the next several years.
3. Town of Sunol first Design milestone is 65%.
4. Local Water Conveyance/Distribution System: This is a Renew and Replacement Program where the corresponding CIP budget and forecast completion date are updated every 2 years during the CIP budget update cycle.

Table 5. Budget and Schedule Trend Summary (continued)

All Costs are shown in million.

Project Name	Most Recent CIP Approved Budget		Project Initiation		CER		35% Design		95% Design		Awarded Construction[1]		Current Status	
	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
	a	b	c	d	e	f	g	h	i	j	k	l	m	n
Local Tank/Reservoir Improvements														
10015223 College Hill Reservoir Outlet[2]	FY24-33		01/24/13		10/14/16		12/15/16		02/15/19		06/08/21		Q4-FY23-24	
	$25.8	04/24/24	$16.3	09/28/21	$16.3	09/28/21	$16.3	09/28/21	$16.3	09/28/21	$19.3	01/29/24	$25.8	01/13/25
10037794 Reservoir Roof and Tank Coatings	FY24-33		07/01/21		N/A (Subproject A) N/A (Subproject B) N/A (Subproject C) TBD (Subproject D)		01/30/23 (Subproject A) 12/07/24 (Subproject B) 11/15/24 (Subproject C) TBD (Subproject D)		08/14/24 (Subproject A) 04/11/25 (Subproject B) 03/20/25 (Subproject C) TBD (Subproject D)		1/14/25 (Subproject A) 11/25/25 (Subproject B) 12/23/25 (Subproject C) TBD (Subproject D)		Q4-FY23-24	
	$13.0	06/15/27	$13.0	06/15/27	TBD	TBD	$13.0	6/15/2027	TBD	TBD	TBD	TBD	$36.8	12/31/35
Pump Stations														
10015231 Harding Park PS	FY24-33		05/12/21		07/31/24		09/24/24		04/16/25		04/14/26		Q4-FY23-24	
	$6.7	11/30/26	$6.5	04/03/26	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	$9.2	11/01/29
Buildings and Grounds														
10037249 New CDD Headquarters	FY24-33		02/01/20		08/31/21		12/30/21		03/28/25		06/28/22[5]		Q4-FY23-24	
	$393.6	05/31/29	$350.2	06/28/28	$393.6	06/28/28	$393.6	06/28/28	TBD	TBD	$393.6	06/28/28	$393.6	05/31/29
Emergency Firefighting Water System														
EFWS Pipelines[3]	FY24-33		04/04/11		Various		Various		Various		Various		Q4-FY23-24	
	$158.1	12/29/28	$31.6	09/29/17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$158.1	12/29/28
EFWS Pump Stations[4]	FY24-33		04/04/11		Various		Various		Various		Various		Q4-FY23-24	
	$24.5	12/29/28	$17.5	09/26/16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	$24.5	12/29/28

Footnotes:

1. These columns represent forecast project cost and project completion date at the time of award of construction contract (or Award for CM/GC pre-construction work).
2. College Hill Reservoir Outlet: Planning through 65% Design was achieved under a different program in Local Water Conveyance/Distribution System.
3. EFWS Pipelines: Include multiple projects.
4. EFWS Pump Stations: Include multiple projects.
5. This represents Forecasted project cost and project completion date at the time of award of CM/GC contract during Pre-Construction.

6. PROJECT PERFORMANCE SUMMARY*

All costs are shown in $1,000s

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
Water Transmission											
10033816 Potable Emergency Firefighting Water System	DS	$55,000	$55,000	$55,000	$997	$0	0%	06/30/29	06/30/29	06/30/29	0
10033818 Town of Sunol Pipeline	BA	$8,013	$8,013	$12,267	$4,298	($4,254)	(53%)	05/30/25	05/30/25	06/30/26	(396)
19063 Local Water Conveyance/ Distribution System	MP	$901,496	$901,496	$1,146,010	$518,104	($244,515)	(27%)	06/30/33	06/30/33	06/30/35	(730)
10036916 Lead Component Service Program	CN	$49,181	$49,181	$49,181	$15,776	$0	0%	12/13/27	12/13/27	12/30/27	(17)
Local Water Supply											

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

(+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY24-33.

(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10015239 Lake Merced Water Level Restoration	DS	$42,668	$42,668	$51,597	$5,028	($8,929)	(21%)	07/22/27	07/22/27	11/02/28	(469)
10015242 San Francisco Westside Recycled Water	CN	$213,316	$213,316	$230,351	$201,596	($17,035)	(8%)	05/20/26	05/20/26	12/31/26	(225)
Local Tanks/Reservoir Improvements											
10015223 College Hill Reservoir Outlet	CN	$25,783	$25,783	$25,783	$21,602	$0	0%	04/24/24	04/24/24	01/13/25	(264)
10037794 Reservoir Roof and Tank Coatings	MP	$13,000	$13,000	$36,799	$183	($23,799)	(183%)	06/15/27	06/15/27	12/31/35	(3,121)
Pump Stations											
10015231 Harding Park PS	PL	$6,717	$6,717	$9,215	$1,044	($2,498)	(37%)	11/30/26	11/30/26	11/01/29	(1,067)
Buildings and Grounds											

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

(+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY24-33.

(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

Project Name	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10037249 New CDD Headquarters	DS	$393,601	$393,601	$393,601	$17,244	$0	0%	05/31/29	05/31/29	05/31/29	0
Emergency Firefighting Water System											
EFWS PL - EFWS Pipelines	MP	$158,108	$158,108	$158,108	$45,409	$0	0%	12/29/28	12/29/28	12/29/28	0
EFWS PS - EFWS Pump Station	MP	$24,500	$24,500	$24,500	$18,421	$0	0%	12/29/28	12/29/28	12/29/28	0

* Does not include projects in closeout, completed, not initiated,on hold, deleted projects, and projects combined with other projects.

**** Phase Status Legend**

PL Planning DS Design

BA Bid & Award CN Construction MP Multiple-Phase

Footnotes:

(+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY24-33.

(++) **Current Approved Budget and Schedule:** The budget and schedule approved as part of 10-year CIP for FY24-33, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.

(+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

7. PROJECT STATUS REPORT

10033816 - Potable Emergency Firefighting Water System

Project Description: This project provides funding for the design and construction of about 2 to 3 miles of large diameter earthquake resistant pipeline to improve the fire water and potable supply reliability in the western area of San Francisco, particularly in the Sunset and Richmond Districts. This project is part of a larger effort to construct approximately 14 miles of the Potable Emergency Firefighting Water System (PEFWS), which also includes two planned pump stations. Current funding will fund the aforementioned 2 to 3 miles of pipeline and design work for a Lake Merced Pump Station. The pipeline will be designed as a potable AWSS pipeline, meaning it will convey low pressure potable water with connections to the distribution system during normal operations but can be isolated with motorized valves and operate under high pressure for firefighting after a major seismic event or emergency conditions by activating associated pumps. Funding is provided through FY 28-29. Additional funding will be provided by existing Earthquake Safety & Emergency Response (ESER) general obligation bond funds, with additional funding possibly approved in the March 2020 ESER referendum. $10M in funding was utilized for the Stern Grove Emergency Restoration Contract and is requested to be included back in FY 23-24 funding. The total Local Water funding commitment to this project is $55M with $12M carryover from FY 18-19 and FY19-20 budgets.

Program: Water Transmission	**Project Status:** Design	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 55.00 M
Forecast	$ 55.00 M
Actual	$ 1.00 M

Project Schedule:

Approved 08/12/19	06/30/29
Forecast 08/12/19	06/30/29

Project Percent Complete: 2.6%

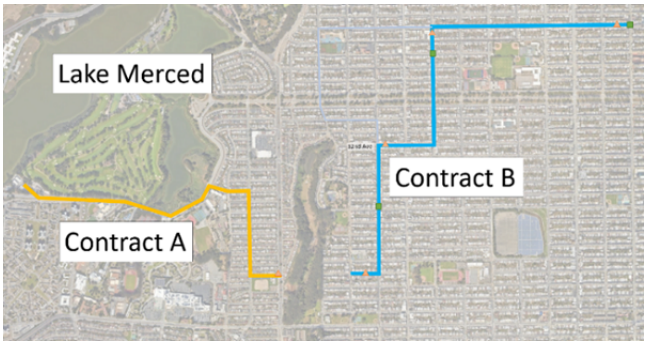
Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	08/12/19 A	TBD	TBD	01/31/29
	B		TBD	TBD	TBD

Progress and Status:

The Potable EFWS Pipeline project will install new Potable Emergency Firefighting Water System (PEFWS) pipelines in the western neighborhoods of the city. Contracts A and B will install new PEFWS pipelines from Lake Merced Pump Station to Sloat Blvd/19th Ave, and from 23rd Ave/Vicente to 42nd Ave/Lawton St, respectively. Contract A is progressing to the 65% Design milestone. Contract B started Design in February 2024 and is progressing toward the 35% Design milestone.

Issues and Challenges:

None at this time.



PEFWS Contract A & B Conceptual Alignment

10033818 - Town of Sunol Pipeline

Project Description: Since 2000 the SFPUC has replaced the majority of the Town of Sunol pipeline system through the Town of Sunol Fire Suppression project, except for two segments. This project will complete the replacement of the last two segments of the system, by replacing sections of the pipeline that crosses the Arroyo de Laguna Creek (Creek Crossing) and under Highway 680.The upstream section of pipeline that feeds the Town of Sunol is exposed under the creek and in danger of failing under Highway 680. Pipeline failure at either location has significant consequences, since all fire and potable water in the Town of Sunol is dependent on the rehabilitation of this 12-inch diameter line. This project will reduce maintenance from pipe breaks and have less main flushing which may lower impact on operating expenses.

Program: Water Transmission	**Project Status:** Bid and Award	**Environmental Status:** Completed (MND)

Project Cost:

Approved	$ 8.01 M
Forecast	$ 12.27 M
Actual	$ 4.30 M

Project Schedule:

Approved 06/17/19	05/30/25
Forecast 06/17/19	06/30/26

Project Percent Complete: 57.9%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	10/25/23 A	05/16/24 A	01/02/25	01/30/26

Progress and Status:

During this reporting period, the construction contract was advertised and a pre-bid meeting and site visit was held with potential bidders. The bids are due in mid-July. Real Estate provided the offer package to the Sunol Glen School for the new easement. Coordination with Caltrans continues on a monthly basis to negotiate the impacts within the Arroyo de la Laguna Creek. An interagency meeting was held with the State Regional Water Control Board to discuss environmental permitting applications between the agencies.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to additional coordination effort with Caltrans and environmental permitting. Although the coordination will likely not take a full year, the project is constrained by performing work during the summer months since a portion of the work crosses the Sunol Glen School, which requires construction to be performed during summer break. There is also new requirement from permitting agencies that the existing Town of Sunol Pipeline needs to be removed from the creek, which lead to higher escalation costs.

Sunol Glen School Shade Structure to be Removed for Construction

19063 - Local Water Conveyance/Distribution System

Project Description: This long-term program funds management of linear assets in San Francisco's potable water distribution system between transmission or storage and final customer service connection. The Linear Asset Management Program replaces and renews feeder and distribution mains for the 1,230 miles of pipe in San Francisco's drinking water distribution system. The FY23-24 approved budget will include the following: 1) replacement of distribution pipelines at $5.8M per mile; 2) replacement of 1 mile with seismically reliable pipelines at $8.6M per mile; and 3) Pipe relining at $4.3M per mile.

Program: Water Transmission	**Project Status:** Multi-Phases	**Environmental Status:** Active (Various)

Project Cost:

Approved	$ 901.50 M
Forecast	$ 1146.01 M
Actual	$ 518.10 M

Project Schedule:

Approved 07/01/10	06/30/33
Forecast 07/01/10	06/30/35

Project Percent Complete: 58.6%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	Various	Various	Various	Various

Progress and Status:

This programmatic project includes multiple active and upcoming construction contracts (refer to Section 8 for the active construction status). At the end of FY23/24, 4.5 miles of pipe were installed and placed in service. Projects under construction during Q4 FY23/24 included the City streets of Diamond Street, Laidley Street, Hampshire Street, Gold Mine Drive, Joost Street, Precita Avenue, and Webster Street. Water work under Construction Contract WD-2765 on Jersey Street is anticipated to start in Q1 FY25. During this reporting period, Construction Contract WD-2844 which includes water work on Parnassus Ave from Stanyan St To 6th Ave was advertised for construction, and the award is anticipated for Q1 FY25. Construction Contract WD-2708 which includes water sewer work Geary Boulevard from 32nd Avenue to Stanyan Street was awarded.

Installation of Cathodic Protection for 16-inch Steel Casing on 36th Avenue crossing Taraval Street for the L-Taraval Improvement Project

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the extended project schedule and providing additional funding for increased focus on the main replacement program due to an increase in main breaks through the city.

10036916 - Lead Component Service Program

Project Description: In 2016, the California Legislature enacted SB-1398 “Public Water Systems: Lead User Service Lines” which compelled water agencies to replace Lead User Service Lines (LUSL) and service lines with unknown material by July 1, 2030. This program was established to replace approximately 1,300 galvanized service lines throughout the City by 2026. The Contractor provides excavation, permitting, restoration, and work related the service line replacements while SFPUC plumbers will be replacing the 1,300 services.

Program: Water Transmission	**Project Status:** Construction	**Environmental Status:** Active

Project Cost:

Approved	$ 49.18 M
Forecast	$ 49.18 M
Actual	$ 15.78 M

Project Schedule:

Approved 09/13/21	12/13/27
Forecast 09/13/21	12/30/27

Project Percent Complete: 40.8%

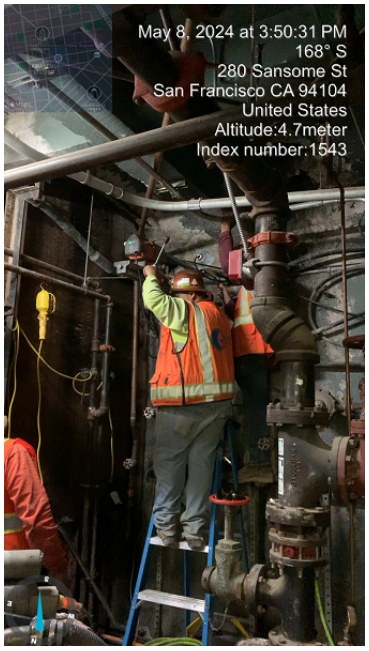
Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	Various	09/27/22 A	03/27/23 A	03/15/26

Progress and Status:

Eight-hundred and thirty-one galvanized steel services have been replaced with copper piping as of the end of June. Contract WD-2889 is 15 months into the 3-year contract duration and is on track to complete all remaining services under budget by the March 2026 substantial completion date. Project team continues to work with Grants and Loans and Engineering Management Bureau to pursue a State Revolving Fund loan to help finance replacement work. Water Quality continues to work on service line inventory of the water system.

Issues and Challenges:

None at this time.



Contractor Supports Replacement of Service Line in Basement

10015239 - Lake Merced Water Level Restoration

Project Description: The project consists of the following subprojects. (1) The City of Daly City is proposing and working in coordination with the SFPUC to implement the Vista Grande Drainage Basin Improvements project to address storm related flooding in the Vista Grande Watershed Drainage Basin while providing the benefit of restoring connection to the natural watershed of Lake Merced, (2) The SFPUC is evaluating diversion of highly treated recycled water from the new Westside Recycled Water facility into Lake Merced to increase and stabilize lake levels.

Program: Local Water Supply	**Project Status:** Design	**Environmental Status:** Active (Various)

Project Cost:

Approved	$ 42.67 M
Forecast	$ 51.60 M
Actual	$ 5.03 M

Project Schedule:

Approved 06/16/03	07/22/27
Forecast 06/16/03	11/02/28

Project Percent Complete: 13.6%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	07/31/18 A	09/26/24	05/05/25	06/01/28
	B	12/31/24	03/03/26	10/31/26	09/29/27

Progress and Status:

The project includes two subprojects: Subproject 1 (A) Vista Grande Drainage Basin Improvement managed by Daly City; and Subproject 2 (B) Lake Merced Recycled Water Diversion - Phase 3. 1) Vista Grande Drainage Basin Improvement Project (Contract A): Daly City in coordination with SFPUC received modified permit conditions from California Coastal Commission (CCC) and received permit approval in June 2024. SFPUC and Daly City are currently working on planning for implementation of advance mitigation as required by the CCC Permit. SFPUC staff completed and shared a final Draft Funding Memorandum of Agreement with Daly City. 2) Lake Merced Recycled Water Diversion (Contract B): The delay in this phase continues due to a lack of staffing and significant delays for the Westside Recycled Water Project that would impact availability of recycled water.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to abatement of past improper charges from Water System Improvement Program groundwater projects, additional construction contribution to Daly City authorized by SFPUC and increases due to escalation associated with project delays. The forecasted completion date is delayed as a result of Daly City's challenges with attaining funding and delays with permit approval.

View Looking West Towards the Lake Merced Boathouse

10015242 - San Francisco Westside Recycled Water

Project Description: This project includes all facilities to produce and deliver about 2 mgd of recycled water for irrigation use in the western end of San Francisco. The project includes a new recycled water treatment facility consisting of membrane filtration, reverse osmosis, and ultraviolet light disinfection; a 1.1 million gallon storage reservoir; distribution pumping facilities; and 5 to 6 miles of new pipelines.

Program: Local Water Supply	**Project Status:** Construction	**Environmental Status:** Completed (EIR)

Project Cost:

Approved	$ 213.32 M
Forecast	$ 230.35 M
Actual	$ 201.60 M

Project Schedule:

Approved 03/03/03	05/20/26
Forecast 03/03/03	12/31/26

Project Percent Complete: 96.9%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	09/03/15 A	12/29/16 A	10/18/17 A	12/18/25
	B		12/19/18 A	07/01/19 A	08/31/24
	C		07/15/16 A	02/21/17 A	08/19/18 A
	D		02/25/20 A	01/25/21 A	11/08/23 A

Progress and Status

This project includes multiple construction contracts. (A) Recycled Water Treatment Facility; (B) Pump Station and Reservoir; (C) Pipeline; (D) Irrigation System Retrofit. Contract A: The majority of construction work at the treatment facility is complete. The Construction Management team issued the construction punchlist to the Contractor. The Project Team has started working on Job Order Contract documents to complete selected scope items that were previously to be constructed via change order to Contract A including the procurement and installation of replacement equipment. Contract B: The Contractor continued addressing administrative punch-list and contract closeout items. The installation of the PG&E transformer has been scheduled for July, after which the pump station will have permanent power. Contract C: is complete. Contract D: is complete and was approved for closeout by the Commission in June. Cross-connection testing of the Golden Gate Park and Lincoln Park systems was completed, and the final report was issued this quarter.

Westside Recycled Water Project - Treatment Facility at Oceanside Plant

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The scope, schedule and budget have changed primarily due to premature equipment failures at the Recycled Water Treatment Facility. The variable frequency drives (VFDs) for the reverse osmosis pumps and secondary effluent pumps failed due to environmental conditions and must be replaced; the associated heating, ventilation, and air conditioning systems must also be modified to lessen moisture in the building which led to the equipment failure. The lead time for the VFD equipment is forecasted to be at least eighteen months. In addition, the treatment facility will require an increase in the power capacity allocated to the Oceanside Plant through PG&E, which will incur an additional project cost. If this increased power is not available once the commissioning process is re- started, a large generator will need to be rented to complete the project. The schedule forecast is increased by only several months because the schedule had been previously extended to accommodate the timeline for securing a new primary power service for the Recycled Water Pump Station in Golden Gate Park as required at that time by PG&E. Since the last CIP, PG&E agreed to provide secondary service to the facility.

10015223 - College Hill Reservoir Outlet

Project Description: This project provides funding for the design and construction of the College Hill Reservoir Outlet Structure and Pipeline Upgrade Project to address seismic, water quality, electrical, structural, and other deficiencies. This project includes installation of a new control valve vault; replacement of reservoir inlet and outlet piping; replacement of reservoir transmission pipelines up to Cortland Avenue; reservoir roof replacement; and miscellaneous piping, security, site access, electrical, instrumentation, and water quality improvements.

Program: Local Tanks/Reservoir Improvements	**Project Status:** Construction	**Environmental Status:** Completed (Cat Ex)

Project Cost:

Approved	$ 25.78 M
Forecast	$ 25.78 M
Actual	$ 21.60 M

Project Schedule:

Approved 01/24/13	04/24/24
Forecast 01/24/13	01/13/25

Project Percent Complete: 74.5%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	11/20/19 A	02/24/21 A	09/27/21 A	09/30/24

Progress and Status:
During the quarter, the contractor completed the following: installation of valve control vault access stairs: control vault electrical conduits; reservoir roof plywood; and on-going reservoir roof membrane.

Issues and Challenges:
As previously reported, the schedule forecast has been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project schedule is due the bypass that will be installed prior to the start of construction to allow for the reservoir to be taken out of service during the entire 24-month construction duration. In addition, there are on-going delays associated with manufacturing defects of marine grade plywood being installed for the reservoir roof substructure failure and PG&E requiring a new service application and associated design due to a previous dispute related to rate tariff. SFPUC has requested that the Contractor proceed with fabrication of remaining electrical equipment including adding a portable generator auxiliary power feed to the main panel to allow for temporary power connection for startup, testing, and contractor closeout, due to an unknown service date from PG&E. These on-going delays are currently being evaluated by the project team and might impact forecast schedule in the future.

Reservoir Roof Plywood Installation at 50 Percent Completion

10037794 - Reservoir Roof and Tank Coatings

Project Description: The City Distribution Division (CDD) tanks and reservoirs that were upgraded during the Water System Improvement Project (WSIP) are currently, or in the very near future, in need of replacement of their exterior coatings and/or roofing. The useful service life of most of these coatings is approximately ten years and many have begun to deteriorate in the last few years due to the harsh marine environment to which they are exposed. This project will provide the R&R funding necessary to maintain these coating and extend the useful service life of these critical assets.

Program: Local Tanks/Reservoir Improvements	**Project Status:** Multi-Phases	**Environmental Status:** Not Initiated (TBD)

Project Cost:

Approved	$ 13.00 M
Forecast	$ 36.80 M
Actual	$ 0.18 M

Project Schedule:

Approved 07/01/21	06/15/27
Forecast 07/01/21	12/31/35

Project Percent Complete: 2.1%

Key Milestones		Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	A	N/A	08/15/24	01/14/25	09/17/25
	B	TBD	04/14/25	12/01/25	08/05/26
	C	TBD	03/21/25	12/24/25	09/25/26

Progress and Status:

There are three active subprojects (Subproject A: University Mound Reservoir North Basin Roof Coating, Subproject B: Sutro Reservoir Roof Coating, and Subproject C: La Grande Tank Coating). In the future Subproject D for the Local Tank Coatings is planned to be initiated. During the reporting period, same as last quarter, the project team continued with preparing the contract for University Mound North Basin roof coating work for advertisement and is preparing a task order for condition assessment at La Grande Tank.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the added scope to provide future tank and roof coating replacement for all the remaining Local Water tanks and reservoirs. Additional budget was added as a placeholder for this future work. Needs and condition assessments will be performed in the next several years to fully outline the scope, with a more refined cost estimate and schedule based on the priorities.

Premature Coating Failure and Corrosion at La Grande Tank

10015231 - Harding Park PS

Project Description: This project funds long term improvements to the Harding Park Pump Station to increase reliability and correct conditions that have led to the premature corrosion and failure of critical components. The current design places the pumping facility on top of the recycled water reservoir leading to high humidity levels within the facility. This project will seal the reservoir from the pump room, improve the HVAC system for humidity control, and relocate critical electrical panel and components out of the pump room. The project will also modify the current electrical feed to allow for the safe maintenance of the water pump electrical components while leaving the buildings lighting and auxiliary loads powered.

Program: Pump Stations	**Project Status:** Planning	**Environmental Status:** Not Initiated (TBD)

Project Cost:

Approved	$ 6.72 M
Forecast	$ 9.22 M
Actual	$ 1.04 M

Project Schedule:

Approved 05/12/21	11/30/26
Forecast 05/12/21	11/01/29

Project Percent Complete: 17.6%

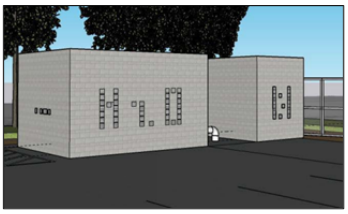
Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	01/31/25	09/02/25	05/05/26	10/20/28

Progress and Status:

The Draft Conceptual Engineering Report (CER), including updated geotechnical and structural recommendations was issued and presented to the Technical Steering Committee in April 2024. The CER California Environmental Quality Act Checklist was also completed to initiate the environmental review process. Work plans for design were prepared and submitted by SFPUC Engineering Management Bureau, the SF Department of Public Works and the consultant team, the architectural design of the new proposed building was also presented to and approved by the SF Arts Commission Civic Design Review committee.

Issues and Challenges:

As previously reported, the budget and schedule forecasts have been updated to reflect the FY25-34 CIP. The variance between the approved and forecast project budget and schedule is due to the proposed changes to the project scope which includes a new separate building for the electrical system relocation, additional security upgrades, and reservoir access hatch reconfiguration; in addition to the procurement of long-lead equipment like the new electrical variable frequency drives.



New Rendering of Electrical Building

10037249 - New CDD Headquarters

Project Description: The City Distribution Division (CDD) Headquarters, currently located at 1990 Newcomb Avenue, San Francisco, was constructed in 1962. The majority of CDD's staff are located at Newcomb (approx. 260 people). Existing facilities include administrative offices, warehouse, shops, materials and equipment storage and vehicle fleet. CDD oversees the retail water distribution system with the City and County of San Francisco, responsible for the physical infrastructure of San Francisco's potable, auxiliary water system, groundwater, and recycled water systems. CDD's responsibilities include 24/7 emergency response to water main breaks and two-alarm or larger fires in addition to day-to-day operations and maintenance of over 1,250 miles of water main, 12 reservoirs, 9 pump stations, 7 hydro-pneumatic stations, 6 tanks, the water meter program serving over 176,000 customers, and maintaining CDD's physical plant, equipment and vehicles and over 1,100 acres of grounds throughout the City.

Program: Buildings and Grounds	**Project Status:** Design	**Environmental Status:** Active (MND)

Project Cost:

Approved	$ 393.60 M
Forecast	$ 393.60 M
Actual	$ 17.24 M

Project Schedule:

Approved 02/01/20	05/31/29
Forecast 02/01/20	05/31/29

Project Percent Complete: 5.3%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	08/30/24	06/18/21 A	10/01/24	11/30/28

Progress and Status:

Construction Documents, the final phase of design, is underway. The Preliminary Mitigated Negative Declaration was posted in June. The review period will expire in July 2024. Certification of the Final Mitigated Negative Declaration (FMND) is critical path for issuing the Notice to Proceed with construction. Pending certification of the FMND, the project is on schedule to start construction in Fall 2024. In addition, the project team continues to work with PG&E to secure temporary power for construction.

Issues and Challenges:

There were delays in issuing the FMND which may delay issuance of the Notice to Proceed with construction, however, this delay will not impact the overall project forecast completion date.

Rendering of New Administrative Office Building

EFWS PL - EFWS Pipelines

Project Description: These projects include construction of various pipelines using ESER bond funds.

Program: Emergency Firefighting Water System	**Project Status:** Multi-Phases	**Environmental Status:** Completed (Various)

Project Cost:

Approved	$ 158.11 M
Forecast	$ 158.11 M
Actual	$ 45.41 M

Project Schedule:

Approved 04/04/11	12/29/28
Forecast 04/04/11	12/29/28

Project Percent Complete: 26.9%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	Various	Various	Various	Various

Progress and Status:

Clarendon Supply EFWS Pipeline – Construction reached substantial completion January 2024. The project team continues to address closeout items with expected Final Completion by Fall 2024. Fireboat Manifold – Planning is progressing for new pipelines and fireboat manifolds near Fort Mason, Pier 2 and Pier 33.5 for fire suppression. Fort Mason Fireboat Manifold draft Alternative Analysis Report has been distributed for stakeholder review in June 2024. Potable Emergency Firefighting Water System (PEFWS) project – Contract A and B will install new PEFW pipelines from Lake Merced Pump Station to Sloat Blvd/19th Ave, and from 23rd Ave/Vicente to 42nd Ave/Lawton St, respectively. Contract A is progressing to the 65% Design milestone. Contract B started Design in February 2024 and is progressing toward the 35% Design milestone.

Issues and Challenges:

None at this time.

Enclosure Installation for Clarendon Supply Facility at Dellbrook and Clarendon

EFWS PS - EFWS Pump Station

Project Description: These projects include construction of various pump stations using ESER bond funds.

Program: Emergency Firefighting Water System	**Project Status:** Multi-Phases	**Environmental Status:** Completed (Various)

Project Cost:

Approved	$ 24.50 M
Forecast	$ 24.50 M
Actual	$ 18.42 M

Project Schedule:

Approved 04/04/11	12/29/28
Forecast 04/04/11	12/29/28

Project Percent Complete: 76.8%

Key Milestones	Environmental Approval	Bid Advertisement	Construction NTP	Construction Final Completion
Current Forecast	Various	Various	Various	Various

Progress and Status:

Pump Station No.2 – Continued project close out activities. The team is adding electrical systems for short circuit protection through a Job Order Contract (JOC) with construction anticipated to be completed by the end of March 2025. JOC was awarded to US Electric. Potable Emergency Firefighting Water System (PEFWS) Pump Station – The team continued planning for Central, Sunset and Lake Merced Pump Stations.

AWSS Pump Station No. 2 Improvements

Issues and Challenges:

None at this time.

8. ON-GOING CONSTRUCTION*

Construction Contract	Schedule			Budget		Variance (Approved - Forecast)		Percent Complete
	NTP Date	Approved Construction Final Completion	Current Forecasted Construction Final Completion**	Approved Contract Cost	Current Forecasted Cost**	Schedule (Cal Days)	Cost	
Water Transmission								
19063 - Diamond Street (27th to Diamond Heights) - (WD-2843)	07/25/22	06/07/24	06/07/24	$8,802,037	$8,977,900	0	($175,863)	88.0%
19063 - Laidley Street from Harper to Castro Streets - (WD-2847)	03/06/23	11/23/24	08/03/24	$6,267,019	$6,267,019	112	$0	98.0%
19063 - Gold Mine Drive from Topaz Way to Diamond Heights Boulevard	01/02/24	08/31/25	08/31/25	$7,750,985	$7,750,985	0	$0	4.0%
19063 - Joost Avenue	01/22/24	02/04/26	02/04/26	$5,845,500	$5,894,609	0	($49,109)	17.0%
19063 - Hampshire	06/13/23	05/10/26	08/06/26	$18,353,105	$18,353,105	(88)	$0	19.0%
19063 - Webster Street	06/07/24	03/20/25	03/20/25	$1,468,961	$1,468,961	0	$0	2.0%
19063 - COLERIDGE ST/ PRECITA/COSO	06/10/24	06/24/26	06/24/26	$8,633,150	$8,633,150	0	$0	2.0%
10036916 - Lead Component Service Program (WD-2889)	03/27/23	03/15/26	03/15/26	$26,663,850	$26,663,850	0	$0	28.0%
Local Water Supply								
10015242 - Westside Recycled Water Treatment Facility - (WD-2776)	10/18/17	07/29/22	12/18/25	$95,011,386	$95,011,386	(1,238)	$0	98.1%
10015242 - SFWRW Pump Station and Reservoir - (WD-2797)	07/01/19	06/30/22	08/31/24	$17,909,582	$17,909,582	(793)	$0	99.9%
10015242 - Westside Recycled Irrigation Retrofits and Improvements - (WD-2852R)	01/25/21	07/29/22	11/08/23	$2,783,525	$2,783,525	(467)	$0	100.0%
Local Tanks/Reservoir Improvements								
10015223 - College Hill/Prospect/Santa Maria - (WD-2717)	09/27/21	09/30/24	09/30/24	$19,948,546	$21,129,091	0	($1,180,545)	78.9%

Note: * This table reflects Active Construction Contracts with an original contract amount greater than $1M.

** The Forecasted Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends.

Construction Contract	Schedule			Budget		Variance (Approved - Forecast)		Percent Complete
	NTP Date	Approved Construction Final Completion	Current Forecasted Construction Final Completion**	Approved Contract Cost	Current Forecasted Cost**	Schedule (Cal Days)	Cost	
Emergency Firefighting Water System								
10029724/10029695 - Clarendon Supply - (WD-2861)	02/01/21	07/29/22	07/31/23	$2,954,292	$2,974,292	(367)	($20,000)	75.0%

	Approved Contract Cost	Current Forecast Cost	Variance	
			Cost	Percent
Program Total for On-Going Construction	**$222,391,938**	**$223,817,456**	**($1,425,518)**	**(0.6%)**

Note: * This table reflects Active Construction Contracts with an original contract amount greater than $1M.

** The Forecasted Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends.

9. PROJECTS IN CLOSEOUT

Project Title	Current Approved Construction Phase Completion	Actual Construction Phase Completion	Current Approved Construction Phase Budget	Construction Phase Expenditures To Date
Local Water Supply				
10015240 - San Francisco Groundwater Supply	02/23/23	02/23/23	$40,494,110	$40,494,110
TOTAL			**$40,494,110**	**$40,494,110**

10. COMPLETED PROJECTS

There are no completed projects.

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APPENDICES

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APPENDIX A. PROJECT DESCRIPTION

WATER REGIONAL

Water Treatment

10033123 SVWTP Ozone (CUW27202)

In recent years, SFPUC's Sunol Valley Water Treatment Plant (SVWTP) has experienced more frequent taste and odor (T&O) events from seasonal algal blooms than had occurred historically. This project's objective is to install ozone treatment facilities as a long-term solution to control T&O events encountered in the raw water supply from both the San Antonio and Calaveras Reservoir sources. This project will improve the reliability to meet water quality goals especially during warm months and during Hetch Hetchy shutdowns. The scope of this project is to install a raw water ozonation system at SVWTP including the following major components: • 10-inch through 66-inch diameter piping, elbows and valves • Concrete valve vaults • Ozone Generator Building (approx. 10,000 sq. ft. concrete structure) • Electrical Building (approx. 1250 sq. ft. concrete structure) • Loop Cooling Water Systems (approx. 375 sq. ft. concrete pad, skid system, pumps, valves, piping) • Cryogenic Oxygen Tank Systems (approx. 2300 sq. ft. foundation, liquid oxygen system equipment, stainless steel piping, valves, fittings and controls) • Liquid Oxygen Vaporizer Systems (equipment, piping, valves, fittings and controls) • Ozone Generators (generators, piping, valves, fittings and controls) • Ozone Injector Systems (approx. 3200 sq. ft. concrete structure, stainless steel injector units and piping, quenching chemical injection system, 66-inch diameter piping and manifold, valves, pumps and controls) • Ozone Contact Basin (approx. 12,000 sq. ft. concrete structure) • Ozone Destruct Systems (equipment, piping, valves, fittings and controls) • Pre-chloramination Facilities for Bromate Control • Instrumentation & Controls • Shop Space • Solar Panels; Standby Power Systems; High Voltage & Low Voltage Electrical Eq. & Distribution Systems • Minor Calaveras Substation Upgrades to support the Ozone facility power needs • Underground Utilities; Site Improvements

10015064 SVWTP Short Term Improvements

The primary objective of the SVWTP Short Term Improvements project is to improve regional delivery reliability by addressing various conditions and deficiencies of the Sunol Valley Water Treatment Plant (SVWTP). Upgrades were identified through condition assessments and operations staff observations, review of level of service, subsequent feasibility studies, and alternative analyses. The construction scope of work will include the following: • Structural and HVAC improvements at the Administration Building. • Water Quality Lab remodel at the Administration Building including cabinet, countertop, sink, plumbing and flooring replacement and mold remediation work. • Repair concrete spalling in the sedimentation basins. • Upgrade wash water tank and access system and install valve actuator. • Upgrade sludge system piping, valves, and monitoring system. • Upgrade chemical piping system. • Remediate leakage at expansion joint around settled water pipes from sedimentation basin. • Replace flocculator variable frequency drives (VFDs) for the flocculation basins. • Replace leaking wash water drain valves. • Replace corroded air scour piping and chlorine contact tank piping. • Install new flowmeters for the wash water backwash system and chlorine contact tank. • Install new fixed washdown system at sedimentation basin. • Install new lighting and plant intercom and paging systems. • Install new server room fire suppression system. • Install plate settler washdown piping system.

10037628 SVWTP Polymer Feed Facility

At the Sunol Valley Water Treatment Plant (SVWTP), the new flocculation/sedimentation basin built in 2013 as well as the other 4 existing basins that are each rated at a capacity of 40 million gallons per day (mgd) were not able to achieve their capacity under all operating and water quality scenarios. A basin optimization plan was prepared to address the performance; it recommended adding a flocculant aid

polymer system. The project will build a polymer feed facility that will serve all five sedimentation basins to optimize plant water production. The funding for the project is provided under WECIP and WSIP. The WSIP funding for this project, $2.19M, is included with other Sunol Valley closeout projects and was completed in the Planning phase and a portion of the Design phase. The remaining funding for the project is provided under Water Enterprise 10-year CIP, $19,046,104. The scope of this project includes installation of a new polymer feed facility for SVWTP Basins 1 through 5. The flocculant aid polymer system will consist of the following: • Polymer Feed Building with polymer totes and tote storage area. • Polymer blending units. • Batch tanks. • Tank and tote mixers. • Batch tanks polymer transfer pump. • Polymer feed pumps. • Piping and valving. • Site improvements.

10037349 HTWTP Filter Underdrain Replacement

Over twenty projects have been identified to improve the performance and reliability of the Harry Tracy Water Treatment Plant (HTWTP). However, underdrains in two filters in a bank of six have failed since 2019 and replacement of the underdrains is being prioritized to restore the plant's treatment capacity and reliability. The remaining projects will be deferred to future CIP Planning. The scope of work includes the following: • Remove and dispose existing filter media and provide new filter media, • Procure and install new stainless steel filter underdrains for 6 filters, • Modify air distribution piping beneath filter underdrains, • Clean and recoat main air distribution piping, • Demolition work, and • Concrete work

10037350 Regional Groundwater Treatment Improvement

The purpose of this project is to improve the performance of the Regional Groundwater Wells and treatment systems in the South Westside Basin for reliable use during dry years. In normal and wet years, the SFPUC will supply treated surface water to Daly City, San Bruno, and Cal Water to be used in place of their typical groundwater supply, thereby increasing the volume of groundwater in storage that can be pumped as supplemental water in dry years. This project will address emerging well water quality issues that require treatment, will provide additional reliability for treatment systems at the wells, and will evaluate the potential for a consolidated treatment facility (through Alternatives Analysis only). If a centralized treatment alternative is selected, the estimated project cost could potentially be $250 million, which includes construction of approximately 14 miles of 8" to 24" diameter pipeline, a pump station, storage tanks, treatment facilities, and other ancillary facilities. This project will build auxiliary water treatment facilities as well as other enhancements to increase the reliability and efficiency for maintenance and operation of the well stations. While an evaluation for providing centralized treatment is included in the project, the current budget only includes design and construction of facilities at individual well sites, including the following: • Install ammonia analyzer (1 site) • Construct manganese enclosure (2 sites) • Construct building, filtration and ammonia analyzer (1 site) • Upsize pedestal & tank for 2-week storage for sodium hydroxide (5 sites) • Upsize pedestal & tank for 2-week storage for liquid ammonium sulfate (7 sites) • Upsize pedestal and tank for 2-week storage for sodium hypochlorite (1 site) • Install detention (contact) tank to address high levels of ammonia w/o enclosure (1 site) • Upsize pedestal, tank and overall chemical system for change in chemical concentration from 50% to 25% concentration (5 sites) • Install chlorine detention (contact) tank to address high levels of ammonia • Install venturi meter or mag meter with dismantling joint inside concrete vault (6 sites) • Remove bucket elevator for sodium fluoride (7 sites) • Study to compare liquid vs powder fluoride • Study reverse flow (lockout study for minimum shutdown time) • Reimburse Cal Water for supporting the project design & construction for SSF Main well

10038328 SVWTP Long Term Improvements

The primary objective of the SVWTP Long Term Improvements project is to improve regional delivery reliability by addressing various conditions and deficiencies of the Sunol Valley Water Treatment Plant (SVWTP). Upgrades were identified through condition assessments and operations staff observations,

review of level of service, subsequent feasibility studies, and alternative analyses. The construction scope of work will include the following: • Emergency Eyewash station installation at chlorine contact tank. • Repair bird netting deficiencies at Flocculation/Sedimentation Basins and filters. • Install new bird netting for fluoride storage and chemical delivery dock; • Replace Main Switchboards 1 and 2, remove ATS-1, ATS-2 and ATS-3 and incorporate functionality into new switchgear. • Add redundant 2MW standby generator with active particulate air filters. • Replace all GE Power Circuit Breakers (not all are ARC flash rated). • Repair concrete pad and coating at Caustic Tank farm. • Cat-C polymer feed system re-configuration. • Install wash water pumps soft starter system. • Install air monitors for aqua ammonia tanks. • Roadway and site improvements.

10037277 Sunol Valley Chloramination Facility

The Sunol Valley Chloramination Facility (SVCF) is a chemical feed facility that provides chloramine disinfection, pH control, and fluoride addition for the unfiltered Hetch Hetchy (HH) water supply. In addition, the chemical systems for removing chlorine and adjust ing the pH of waters entering into Alameda Siphons 1, 2, and 3. The primary objective of the project is to increase reliability at the Fluoridation (HFA) Facility, Sunol Valley Chloramination Facility (SVCF), and Dechlorination Facility by addressing various deficiencies of the chemical feed systems, controls, main programmable logic controller (PLC), and various related equipment, which will lower the current maintenance costs of the existing equipment.

Water Transmission

10034578 CSPL2 Reach 5 Lining Replacement

Crystal Springs Pipeline No. 2 (CSPL2) runs from Crystal Springs Pump Station to University Mound Reservoir. It delivers potable and emergency water supply to San Francisco and to several cities along the Peninsula. Reach 5 of CSPL2, 60" in diameter, from Millbrae Yard to Baden Pump Station (approximately 3.8 miles) in the cities of South San Francisco and San Bruno is over 80 years old and has extensive lining failures. This project would replace approximately 3.8 miles of coal tar lining with cement mortar lining (CML), upgrade 34 appurtenances to meet current standards, and improve access and shutdown flexibility for maintenance by installing 5 manway structures and one 60" diameter valve on CSPL2 and one 48" diameter valve on San Andreas Pipeline No. 1 (SAPL1) near Baden Pump Station. In addition, a recent corrosion investigation found a segment of the CSPL2 to be severely corroded across from the Baden Pump Station due to a gas pipeline crossing and will need to be replaced. Since the Sunset Supply Pipeline, San Andreas Pipeline No. 2, and San Andreas Pipeline No. 3, run parallel to the CSPL2 and are crossed by the gas pipeline, a corrosion investigation will be performed to determine if corrosion has occurred on these pipelines and if any repairs are needed. The scope of work includes the following: • Complete removal of coal tar lining • Installation of cement mortar lining • Installation of manway structures • Procurement and installation of isolation valves • Upgrade of appurtenances such as blow-offs, air release valves, etc. to meet current standards • Replacement of pipeline segments • Traffic control • Pavement restoration work

10035029 As-Needed Pipeline Repairs

Water Supply and Treatment Division's (WSTD) maintenance and inspection program inspects the regional pipeline system on an ongoing basis. However, when repairs are identified to be needed following inspections and when emergency repairs are needed, a contractor is not readily available to perform the repairs. This project will increase system reliability by reducing the duration and number of outages since a pre-qualified, as-needed contractor will be available to complete repairs immediately following inspections or in emergencies. This project will repair/replace regional pipeline segments that will be inspected over the next five years, in addition to any emergency repairs that may be needed. The initial construction contract will be 3 years and combined with Project 10036840, BDPL1-4 Lining Repair to provide a

sufficient guaranteed scope. Subsequent construction contract(s) will be issued to parallel WSTD's inspection program. The scope of work for the initial construction contract is as follows: • Pipeline replacement by open trench • Pipeline repair work • Protecting sensitive (wetland and creek) areas • Protecting utilities and infrastructure • Traffic control • Site/vegetation restoration • Paving restoration • Dewatering and providing temporary safe entry measures to pipelines such as line stops, roll out spool pieces, blind flanging, welding bulkheads, etc.

10036839 BDPL4 PCCP Repair

Historically, when pre-stressed concrete cylinder pipe (PCCP) fails due to breaks in the spirally wound wire, the high-pressure failure can have catastrophic consequences. Some segments of the Regional Water System are constructed of PCCP. From recent inspections of Bay Division Pipeline No. 4 (BDPL4) Segment D, constructed of PCCP, a large number of wire breaks and circumferential cracks were found in the last 1.25 miles of pipeline that parallels Edgewood Road in Redwood City. In addition, several leaks have surfaced at circumferential cracks and where the pipeline transitions from PCCP to steel. Segments where wire breaks are concentrated will need to be repaired/replaced to prevent catastrophic failure and circumferential cracks and leaks will also be repaired. The first phase of this project will be to repair segments where there are high concentrations of wire breaks, wide circumferential cracks and active leaks. This first phase will include planning, design and construction of repairs. The second phase of the project will be to address the remaining 1.25 miles of pipeline, which includes planning, design and partial encumbrance of a construction contract. The project budget will be reevaluated following completion of the Alternatives Analysis for the second phase. The first construction contract will increase system reliability by rehabilitating approximately 650 feet of 84-inch diameter BDPL4 PCCP in Redwood City and includes the following work: • Excavation, shoring, backfilling, and compaction • Demolition of PCCP • Replacement of approximately 530 feet of pipeline by open trench • Slip lining approximately 120 feet of pipeline • Protecting sensitive (wetland and creek) areas and utilities/infrastructure • Traffic control • Site/vegetation and paving restoration

10036840 BDPL 1-4 Lining Repair

Water Supply and Treatment Division's (WSTD) ongoing pipeline inspection program has identified segments of the BDPL 1-4 and other regional pipelines that require lining repairs. In addition, this project will retain an as-needed contractor to repair linings identified to be deficient by WSTD over the next 5-years. This project will repair the lining in segments of the BDPL 1-4 and other regional pipelines over the next 5 years. The initial construction contract for this project will be 3 years and combined with Project 10035029, As-Needed Pipeline Repair to provide a sufficient guaranteed scope. Subsequent construction contract(s) will be issued to parallel WSTD's inspection program. The scope of work entails the following: • Cement mortar lining (CML) repair including removal, handling and disposal of existing coal tar lining • Dielectric lining repair • Dewatering and providing temporary safe entry measures, such as line stops, blind flanging, roll out spool pieces, welding bulkheads, etc.

10015071 Corrosion Control

This project will implement the corrosion protection and control program as recommended in the Corrosion Control Master Plan completed in August 2010. Sites identified with the worst levels of corrosion were bundled up in the master plan in three phases. Each phase will take several years to implementation. The scope for all phases will be similar, but the number of sites will vary at each phase. Phase 1 construction work for ten sites was completed and accepted on August 27, 2019. Phase 2 has eleven sites and is currently in the design phase. Phase 3 is anticipated to include up to twenty sites depending on the funding. This project description is for all three phases. Scope of work includes the following: • Furnish and install cathodic protection (CP) systems. • Install rectifiers and anodes at a depth of approximately 300

feet • Install testing station for pipelines. • Install specialized galvanic and impressed current CP systems • Install remote monitoring units. • Install isolation protection systems. • Install transformers/switchgears under Phase 3 only

10015076 San Antonio Pump Station MCC Upgrades

The San Antonio Pump Station (SAPS) is one of the key facilities in the Sunol Valley and was constructed in 1965 and modified in 1990. The existing motor control centers (MCC) MCC-A, MCC-B, and MCC-C have been in service since the 1960's and they are approaching the end of their useful life. In order to maintain reliable operation at SAPS, the existing MCCs are being replaced and facility walls are being seismically retrofitted. In order to accommodate the retrofit work, the communications system is being relocated to an adjacent room and the HVAC will be replaced in affected rooms. In addition, a new propane generator will replace the existing diesel generator to serve as reliable backup power to the facility. The scope of work or construction will include the following: Replace existing diesel generator with new 150KW propane generator; Install new fire suppression system; Replace existing lighting system and install new exit lighting; Replace existing HVAC system; Architectural design to accommodate clean agent fire suppression; Seismic Retrofit of East Wing walls and foundation; Install temporary MCCs; Demolish and replace existing MCC; Demolish the existing Main Control Panel (MCP) and PSCP Panel; Replace existing underground power and control conductors; Install new City Furnished RTU and replace PLC components; and replace existing communication system for Control and SCADA room.

10015081 CSPL2 Reaches 2 and 3 Rehabilitation

Crystal Springs Pipeline No. 2 (CSPL2) spans from Crystal Springs Pump Station to University Mound Reservoir. It delivers potable water supply to San Francisco and several cities along the Peninsula, Reaches 2 and 3 of CSPL2 in the Town of Hillsborough, unincorporated areas of San Mateo County, the City of San Mateo, and the City of Burlingame are over 80 years old and have deteriorated, with Reach 2 located on eroding slopes with difficult access and Reach 3 containing extensive lining failures. This project will relocate approximately 1.5 miles of 60-inch diameter CSPL2 (portion of Reaches 2 and 3 that traverses through steep terrain with a narrow access road) into Crystal Springs Road by removing the abandoned-in-place 48-inch diameter CSPL1, reline approximately 2.2 miles of CSPL2 (remaining portion of Reach 3) with cement mortar lining, and upgrade appurtenances to meet current standards. The scope of work includes the following: • Removal of approximately 2.2 miles coal tar lining • Installation of approximately 2.2 miles of cement mortar lining • Relocation of 1.5 miles of CSPL2 to CSPL1 alignment and removal of CSPL1 • Pipeline installation work by open trench • Upgrade of appurtenances such as blow-offs, air release valves, etc. to meet current standards • Traffic control • Pavement restoration work • Installation of valves and line stops for safe pipeline entry

Water Supply & Storage

10015232 Merced Manor Reservoir Facilities Repairs

Merced Manor Reservoir - Concrete Spalling Repair project. The roof structure of the Merced Manor Reservoir was inspected and evaluated by SFPUC structural engineers in 1995. It was determined that seismic strengthening and repair of the roof structure is needed. This project is to implement the recommendations from the seismic evaluation and inspection of the roof structure of Merced Manor Reservoir. Scope of the project will include performing a structural evaluation of the existing roof structure per current seismic code, developing design for seismic strengthening and repair, and construction.

10036998 Turner Dam and Reservoir Improvements

Turner Dam is a 195-foot-high earth embankment dam that was completed in 1965 and impounds San

Antonio Reservoir in the East Bay. The dam is regulated by the California Division of Safety of Dams (DSOD). This project is to investigate the seismic stability and hydraulic performance of the Turner Dam and San Antonio Reservoir facilities and to perform necessary upgrades identified during the Planning Phase. The scope of work will be confirmed once Condition and Needs Assessments, and Alternative Analysis of the dam, outlet structures, and spillway are complete. Depending on the findings from the Planning Phase, the scope of work for construction may include improvements to the following facilities: • Embankment dam • Outlet tunnel and pipeline • Concrete spillway • Other ancillary facilities

10015091 Pilarcitos Dam Improvements

The Pilarcitos Dam is an earthen embankment dam that was built in 1866 and raised in 1874; it is the SFPUC's oldest dam regulated by the California Division of Safety of Dams (DSOD). This project will investigate the seismic stability and hydraulic performance of the Pilarcitos Dam and Reservoir facilities and perform necessary upgrades identified during the Planning Phase. The scope of work will be confirmed following the completion of the Condition and Needs Assessments, and Alternative Analysis for the dam and forebay outlet structure, spillway, outlet tunnel, and outlet pipeline. Depending on the findings from the Planning Phase, the scope of work for construction may include the following improvements: • Embankment dam • Outlet structure • Outlet tunnel and pipeline • Spillway • Other ancillary facilities

10015092 San Andreas Dam Facility Improvements

The San Andreas dam is a 105 foot high earthen embankment dam that was built in 1870; it impounds San Andreas Reservoir that is the raw water source for the Harry Tracy Water Treatment Plant, and it is regulated by the California Division of Safety of Dams (DSOD). This project will investigate the seismic stability and hydraulic performance of the San Andreas Dam and Reservoir facilities and perform necessary upgrades identified during the Planning Phase. The objectives are to perform Condition and Needs Assessments and Alternatives Analyses of the dam, spillway, emergency outlet, and ancillary facilities; to develop retrofit options if required; and to implement the selected alternatives.

Watershed & Lands Management

10015108 Sneath Lane Gate/North San Andreas

The 2001 Peninsula Watershed Management Plan identified the need for a new trail connection between San Mateo County's Crystal Springs Regional Trail (North San Andreas) to Golden Gate National Recreation Area's (GGNRA) Sweeney Ridge property at the Sneath Lane Gate. The trail is a critical connection among existing regional trails at the north end of the Peninsula watershed, that will serve hikers, bikers and equestrians. The project includes construction of a multi-modal, 6 foot wide trail that would be approximately 1.25 miles long. The project would include a new trailhead south of GGNRA's parking lot located at the end of Sneath Lane in Pacifica. The scope of the project will include the following related construction: Trees removal; Wildlife friendly security fencing; Grading and drainage work; Paving of one trailhead parking areas with educational signage; Protecting sensitive habitat; Site/vegetation restoration.

10015113 Southern Skyline Blvd Ridge Trail Extension

The Bay Area Ridge Trail project was started in 1987 by the Bay Area Ridge Trail Council to create an approximately 550-mile long continuous trail for hikers, mountain bicyclists, and equestrians along the ridgelines overlooking San Francisco Bay. The objective of the project is to provide access to the Peninsula watershed, to enhance educational opportunities, and to ensure watershed protection. South of Highway 92, this proposed extension project would construct a 6-mile-long trail on the Peninsula Watershed in San Mateo County between Highway 92 and the Golden Gate National Recreation Area's (GGNRA) Phleger Estate. The project consists of a 6 foot wide, all-weather surface trails; retaining structures to stabilize cut

and/or fill slopes; drainage facilities; a 15,000-square-foot parking lot accommodating up to 14 cars; two pre-fabricated restrooms along the trail; site security features; and landscape restoration. North of Highway 92, the project includes construction of a trail segment adjacent to the Fifield Cahill Trail that is compliant with the Americans with Disabilities Act, a 16,000-square foot parking lot, and one pre-fabricated restroom. In addition, the project includes the following related construction: • Removal of 160 trees • 9.3 miles of wildlife friendly security fencing • Grading and drainage work • 2000 LF soldier pile retaining walls • Paving of two trailheads parking areas with educational signage • Protecting sensitive habitat • Traffic control • Site/vegetation restoration

10030771 SA-1 Service Road/Ingoing Road

The SFPUC has identified landslide and erosion damage that have destabilized service roads (East Shore Service Road and West Shore Service Road) and adjacent areas in three locations on San Francisco Peninsula Watershed lands situated along the San Andreas Reservoir in San Mateo County. The project is to evaluate and repair the damage, and to implement long term solutions for SFPUC staff and contractors to continue to use the roads to access, operate, and maintain SFPUC facilities and watershed lands. The project is currently in 35% Design Phase. Recommendations for the long-term repairs of the roads are being designed. Construction constraints have been identified, which include dewatering the San Andreas Reservoir to 441 feet, and avoiding construction activities in the months of January to March due to Hetch Hetchy shutdown. The scope of work are: • Construct shoreline riprap north of the San Andreas Service Road (approximately 770 feet); • Construct pile wall (approximately 550 feet) and shoreline riprap (approximately 550 feet) at the In-going Road (San Andreas Dam Gate); and • Install debris boom and associated anchorage system.

Buildings and Grounds

10034526 Millbrae Warehouse Settlement & Admin. Bldg. HVAC

This project will cover the cost of construction repairs for 2 buildings, the Millbrae Warehouse and the Administration Building, which are both located in the Millbrae Yard facility. For the Millbrae Warehouse Settlement project, work consisted of a long term fix for the displacement (settlement) of the slab between the loading dock and the offices. The slab settlement resulted from expansive clay layers located at 7-feet below the top of the existing concrete slab. For the Millbrae Administration Building (Building) HVAC Upgrades project, a long-term reliable and economical solution to heating and cooling demands will be provided. The construction of the Millbrae Warehouse Settlement repairs and the Administration Building HVAC upgrades will be performed under two different contracts. Construction for the Millbrae Warehouse loading dock repair was completed, and the Commission approved acceptance of work on April 12, 2022, while the Millbrae Administration Building HVAC Upgrades will be constructed in Fall 2024.

10015124 Sunol Long Term Improvements

The project includes redevelopment of the existing Sunol Yard and construction of a Watershed Center near the Sunol Water Temple. Most of the existing structures at the Sunol Yard date back to 1930 and were converted from the original purpose, residence and barn, to office and shop spaces. The structures contain lead-based paint, asbestos, bats, and bat guano, and did not meet current building, health, or safety codes. The project will demolish six existing dilapidated structures at the Sunol Yard and construct a LEED Gold administration building, shops, fuel station, backup generator system, truck wash station, paving and site restoration. Owner requested scope was added to the project including backup generator to power the facility, 100 space parking lot, History terrace exhibit, picnic area restoration and fixtures, composing toilets, convert temporary construction areas to permanent areas for WSTD and NRD use and revisions to the interior exhibits. The additional scope increased the project budget to $104,914,000. The scope of

Center (Phase B) will consist of the following: • Construction of a one-story LEED Gold facility that will include an interpretive display exhibit area, a freshwater stream profile aquarium, history display alcoves, a watershed discovery lab classroom, a community multi-purpose room, restrooms, an entry plaza, a reception area, patios, and administrative offices; • Construction of a 2.5-acre discovery trail area with native plant landscaping, irrigation, meandering trails, seating areas and water and landscape features; • Site restoration of the Temple area forecourt; • Construction of new stairs and ramps to the picnic area; • Installation of underground utilities; and • Site restoration and paving.

10015128 Millbrae Yard Laboratory and Shop Improvements

SFPUC has determined that the existing Millbrae Administration Building must remain operational following a major earthquake, and therefore needs to be retrofitted or replaced to meet essential facility requirements. SFPUC also wants to expand the existing Millbrae Administration Building to merge and house the Water Enterprise staff and equipment from the Rollins Road Facility. This project is necessary to provide Water Enterprise personnel a long term and sustainable campus, and allow the consolidation of work groups for increased staff efficiency. This project will also alleviate shortage of program space, increase efficiency of operations, improve employee working environment with improved heating, ventilation, and air conditioning, improve employee health and safety, and enhance site and building security. A recent planning study has identified several alternatives to meet the project goals. The selected alternative for the Millbrae Yard campus improvements will be implemented in three phases. Phase 1 includes a new laboratory office and new south shop building to alleviate Water Enterprise undersized and outdated workspaces and desire to relocate mission-critical functions to code-compliant structures. This project will provide additional space in the laboratory building by constructing two additional floors on top of it to accommodate the relocation of all personnel from Rollins Road Facility. Phase 2 includes demolition of the existing Administration Building and construction of a new consolidated Administration Building adjacent to the new laboratory building to accommodate other Water Enterprise staff. Phase 3 includes new covered storage for materials and equipment. Only the scope of work for Phase 1 will be implemented under this project to meet near-term needs, minimize disruptions to operations, and allow gradual buildout of the master plan to stay within the 10-year CIP budget. The Phase 1 scope includes construction of 68,095 square foot 3-story laboratory building and 12,800 square foot shop building, renovation of an existing 7,440 square foot warehouse, and site improvements such as driveways, hardscape, landscape, and parking (approximately 400 spaces).

10034825 Millbrae Security Upgrades

Millbrae Yard is currently vulnerable to unauthorized intrusion, trespassing, theft, vandalism and physical damage. Site concerns include lack of adequate fencing around the perimeter of the site, lack of electronic security measures to monitor and control access into the Administration Building during normal business hours and after hours, lack of video surveillance to monitor the secure areas within the fenced perimeter, and lack of a physical barrier separating access to the shops/yard areas from visitor parking. This project would address the security concerns and would enhance the overall physical and electronic security components of the Millbrae Yard.

APPENDIX A. PROJECT DESCRIPTION

WATER LOCAL

Water Transmission

10033816 Potable Emergency Firefighting Water System

This project provides funding for the design and construction of about 2 to 3 miles of large diameter earthquake resistant pipeline to improve the fire water and potable supply reliability in the western area of San Francisco, particularly in the Sunset and Richmond Districts. This project is part of a larger effort to construct approximately 14 miles of the Potable Emergency Firefighting Water System (PEFWS), which also includes two planned pump stations. Current funding will fund the aforementioned 2 to 3 miles of pipeline and design work for a Lake Merced Pump Station. The pipeline will be designed as a potable AWSS pipeline, meaning it will convey low pressure potable water with connections to the distribution system during normal operations but can be isolated with motorized valves and operate under high pressure for firefighting after a major seismic event or emergency conditions by activating associated pumps. Funding is provided through FY 28-29. Additional funding will be provided by existing Earthquake Safety & Emergency Response (ESER) general obligation bond funds, with additional funding possibly approved in the March 2020 ESER referendum. $10M in funding was utilized for the Stern Grove Emergency Restoration Contract and is requested to be included back in FY 23-24 funding. The total Local Water funding commitment to this project is $55M with $12M carryover from FY 18-19 and FY19-20 budgets.

10033818 Town of Sunol Pipeline

Since 2000 the SFPUC has replaced the majority of the Town of Sunol pipeline system through the Town of Sunol Fire Suppression project, except for two segments. This project will complete the replacement of the last two segments of the system, by replacing sections of the pipeline that crosses the Arroyo de Laguna Creek (Creek Crossing) and under Highway 680. The upstream section of pipeline that feeds both the potable line and fire suppression line to the Town of Sunol is exposed under the creek and in danger of failing under Highway 680. Pipeline failure at either location has significant consequences, since all fire and potable water in the Town of Sunol is dependent on the rehabilitation of this 12" line. This project will reduce maintenance from pipe breaks and have less main flushing which may lower impact on operating expenses. This project is broken up into two portions and the scope of work will include the following: Creek Crossing: Replace approximately 550 feet of 12" diameter pipeline crossing Arroyo de Laguna Creek with 12" diameter Ductile Iron Pipe (DIP) class 53 - Open cut trench across the creek - New tie in points with gate valves - Creek restoration and tree removal in pipeline alignment and removal of existing Town of Sunol pipeline within the creek from bank to bank. Highway 680 Crossing: MOU agreement with Alameda County Transportation Commission (ACTC) to replace existing 12" diameter Town of Sunol pipelines under Highway 680 for $1.3M

19063 Local Water Conveyance/Distribution System

This long-term program funds management of linear assets in the potable water distribution system between transmission or storage and final customer service connection. Main Replacement Program: replaces and renews feeder and distribution mains for the 1,230 miles of pipe distribution system. Improvements include replacement, rehabilitation, relining, and cathodic protection of all pipe size categories to extend or renew pipeline useful life. Coordination with construction projects by other City agencies, especially SFPUC Sewer and DPW Paving, is emphasized to optimize efficiencies and minimize customer disruptions. In FY21-22, a new Joint Transit Project was created to provide separate funding for the main replacement project along major transit corridor including L-Taraval, Geary, and N-Judah, where street improvement projects by other agencies (CalTrans, SFMTA, SFCTA, DPW) and are more expensive to

implement due to their complexity, traffic and transit impacts, and multi-agency coordination. Phase A construction of the L Taraval Project is completed and Phase B construction is currently underway with a completion in FY24-25. Geary BRT Phase 2 (32nd Ave to Stanyan Street) is anticipated to start construction in FY24-25. The Joint Transit Project will provide separate project funding at a cost of $8.6M per mile. Additionally, In FY21-22 a new Better Market Street Project was created to provide separate funding for the water main replacement along the Market Street Corridor. Due to the concerns over construction impacts and overall project costs, design and initial funding for 0.5 miles is provided for FY23-24 and FY24-25 only. The budget will include the following: 1) replacement of distribution pipelines at $5.8M per mile; 2) replacement of 1 mile with seismically reliable pipelines at $8.6M per mile; and 3) Pipe relining at $4.3M per mile. The funding for FY23-24 and FY24-25 will provide funding for design and construction of 5.9 to 6.3 miles per year. The overall main replacement program will include design and construction funding for FY23-24 and FY24-25 of 7.5 to 9 miles per year when including the Joint Transit, Better Market Street Projects, and Potable Emergency Firefighting Water System.

10036916 Lead Component Service Program

In September 2016, the California State Legislature passed Senate Bill 1398 (SB 1398) requiring all public water systems to compile an inventory of known lead user service lines in use in its distribution system and identify areas that may have lead user service lines. In addition, SB 1398 requires public water systems to provide a timeline to the board for the replacement of user service lines whose content cannot be determined. This new CIP program funds the management of and replacement of a.) Unknown user service lines, and b.) Galvanized service lines with possible lead whips or appurtenances over a 10-year period: a.) Unknown user service lines: There are 10,912 unknown user service lines. CDD has field investigated 900 unknown user service lines distributed throughout the City and based upon a recommended statistical analysis, approximately 4% (36) of the 900 have been identified as galvanized. The new CIP program will continue the discovery of the remaining 10,012 service lines through consultant services over a 2-year period at a cost of approximately $1 million/year. In addition, the program estimates that approximately 15% (1,640) of the unknown service lines will need to be renewed; however, this figure may change depending on the results of the discovery process: $2.0M over 2 years to determine the service line material for unknown services, $24.6M over 10 years to renew approximately (15%) 1,640 services potentially found to have a galvanized service. Although only 4% of unknown services have currently been found to be galvanized, this new CIP program is projecting that conservatively 15% of unknown services will be renewed. b.) Galvanized service lines: There are 4,524 galvanized services with a potential lead whip or appurtenances. Currently, CDD has field inspected 200 galvanized services and 20% are galvanized with the remaining 80% consisting of another material. Based on this, the new CIP program will fund the continuation of field investigations as well as the service renewal of 30% (1,360) galvanized services over a 10-year period; $1.0M over 2 years to confirm the service line material for galvanized services; $20.4M over 10 years to renew 1,360 galvanized services. Although only 20% of galvanized services have been found to be galvanized, this new CIP program is projecting that conservatively 30% of the services will be found to actually be galvanized.

Local Water Supply

10015239 Lake Merced Water Level Restoration

The project consists of the following subprojects. (1) The City of Daly City is proposing and working in coordination with the SFPUC to implement the Vista Grande Drainage Basin Improvements project to address storm related flooding in the Vista Grande Watershed Drainage Basin while providing the benefit of restoring connection to the natural watershed of Lake Merced, (2) The SFPUC is evaluating diversion of highly treated recycled water from the new Westside Recycled Water facility into Lake Merced to increase

ad stabilize lake levels.

10015240 San Francisco Groundwater Supply

This project consists of two phases, which combined will provide an annual average of 4 mgd of groundwater to San Francisco's municipal water supply, and improvements at the existing San Francisco Zoo Well No. 5. Phase 1 is divided in two separate contracts, which are Contracts A & B. Contract A work for building four new groundwater well stations in the western part of San Francisco is currently in the final construction phase. Contract B work for installing buried piping to connect three of these well stations to the Sunset Reservoir was completed and accepted on December 21, 2015. Groundwater from the fourth well station was piped to the nearby Lake Merced Pump Station, where it was distributed to both the Sunset Reservoir and Sutro Reservoir. Phase 2 has Contract C work for installing buried piping and converting two existing irrigation well facilities in Golden Gate Park to groundwater supply wells is currently in the final construction phase, and would be implemented after completion of the CUW30201, San Francisco Westside Recycled Water Project. Improvements at the existing San Francisco Zoo Well No. 5 were completed and accepted on February 15, 2007.

10015242 San Francisco Westside Recycled Water

This project includes all facilities to produce and deliver about 2 mgd of recycled water for irrigation use in the western end of San Francisco. The project includes a new recycled water treatment facility consisting of membrane filtration, reverse osmosis, and ultraviolet light disinfection; a 1.1 million gallon storage reservoir; distribution pumping facilities; and 5 to 6 miles of new pipelines.

Local Tanks/Reservoir Improvements

10015223 College Hill Reservoir Outlet

This project provides funding for the design and construction of the College Hill Reservoir Outlet Structure and Pipeline Upgrade Project to address seismic, water quality, electrical, structural, and other deficiencies. This project includes installation of a new control valve vault; replacement of reservoir inlet and outlet piping; replacement of reservoir transmission pipelines up to Cortland Avenue; reservoir roof replacement; and miscellaneous piping, security, site access, electrical, instrumentation, and water quality improvements. This project is currently in construction through FY23-24. An addiitional $6.5M is added in FY23-24 for replacement of roof substructure including all wood joists and plywood sheating which were inspected during construction and found to be in need of replacement.

10037794 Reservoir Roof and Tank Coatings

The City Distribution Division (CDD) tanks and reservoirs that were upgraded during the Water System Improvement Project (WSIP) are currently, or in the very near future, in need of replacement of their exterior coatings and/or roofing. The useful service life of most of these coatings is approximately ten years and many have begun to deteriorate in the last few years due to the harsh marine environment to which they are exposed. This project will provide the R&R funding necessary to maintain these coating and extend the useful service life of these critical assets.

Pump Stations

10015231 Harding Park PS

This project funds long term improvements to the Harding Park Pump Station to increase reliability and correct conditions that have led to the premature corrosion and failure of critical components. The current design places the pumping facility on top of the recycled water reservoir leading to high humidity levels within the facility. This project will seal the reservoir from the pump room, improve the HVAC system for

humidity control, and relocate critical electrical panel and components out of the pump room. The project will also modify the current electrical feed to allow for the safe maintenance of the water pump electrical components while leaving the buildings lighting and auxiliary loads powered. In addition, the proprietary WaterTronics control panel is proposed to be replaced by a more standard PLC that can be modified by SFPUC if needed.

Buildings and Grounds

10037249 New CDD Headquarters

The City Distribution Division (CDD) Headquarters, currently located at 1990 Newcomb Avenue, San Francisco, was constructed in 1962. The majority of CDD's staff are located at Newcomb (approx. 260 people). Existing facilities include administrative offices, warehouse, shops, materials and equipment storage and vehicle fleet. CDD oversees the retail water distribution system with the City and County of San Francisco, responsible for the physical infrastructure of San Francisco's potable, auxiliary water system, groundwater, and recycled water systems. CDD's responsibilities include 24/7 emergency response to water main breaks and two-alarm or larger fires in addition to day-to-day operations and maintenance of over 1,250 miles of water main, 12 reservoirs, 9 pump stations, 7 hydro-pneumatic stations, 6 tanks, the water meter program serving over 176,000 customers, and maintaining CDD's physical plant, equipment and vehicles and over 1,100 acres of grounds throughout the City.

Emergency Firefighting Water System

EFWS PL - EFWS Pipelines

The Emergency Firefighting Water System(EFWS) includes several methods of delivering water to suppress fires during emergency situations. EFWS is vital for protecting against the loss of life, homes, and businesses from fire following an earthquake and non-earthquake multiple-alarm fires. One EFWS component is a high-pressure fire-suppression water system, formerly known as Auxiliary Water Supply System (AWSS), which was originally built in the decade following the catastrophic 1906 San Francisco earthquake. It consists of a resilient 135-mile high-pressure pipeline network, a high elevation reservoir, two large capacity tanks, two high-pressure seawater pumping stations, and manifolds that allow fireboats to inject Bay water into the City’s pipelines. The Potable Emergency Firefighting Water System (PEFWS) will bring a seismically resilient high□pressure firefighting water system to the western neighborhoods of San Francisco, while also creating a seismically resilient pipeline that supplies drinking water to the west side during non□fire situations. The proposed overall project will install over 14 miles of seismically resilient pipelines in multiple phases as funding is provided. The system will be capable of providing water to the SFFD firefighters at the high pressure needed to combat large fires after a seismic event. The proposed pipelines will be fed by pump stations delivering 30,000 gallons per minute with services to the Richmond and Sunset Districts. Fireboat manifolds allow fire boats to pump seawater from the bay into the EFWS. Existing fireboat manifolds at Fort Mason and Pier 33 ½ are located on piers of unknown condition and are likely susceptible to seismically induced failures. Rehabilitation of manifolds and connector pipelines is required at Fort Mason and Pier 33 ½ to provide adequate access for firefighters.

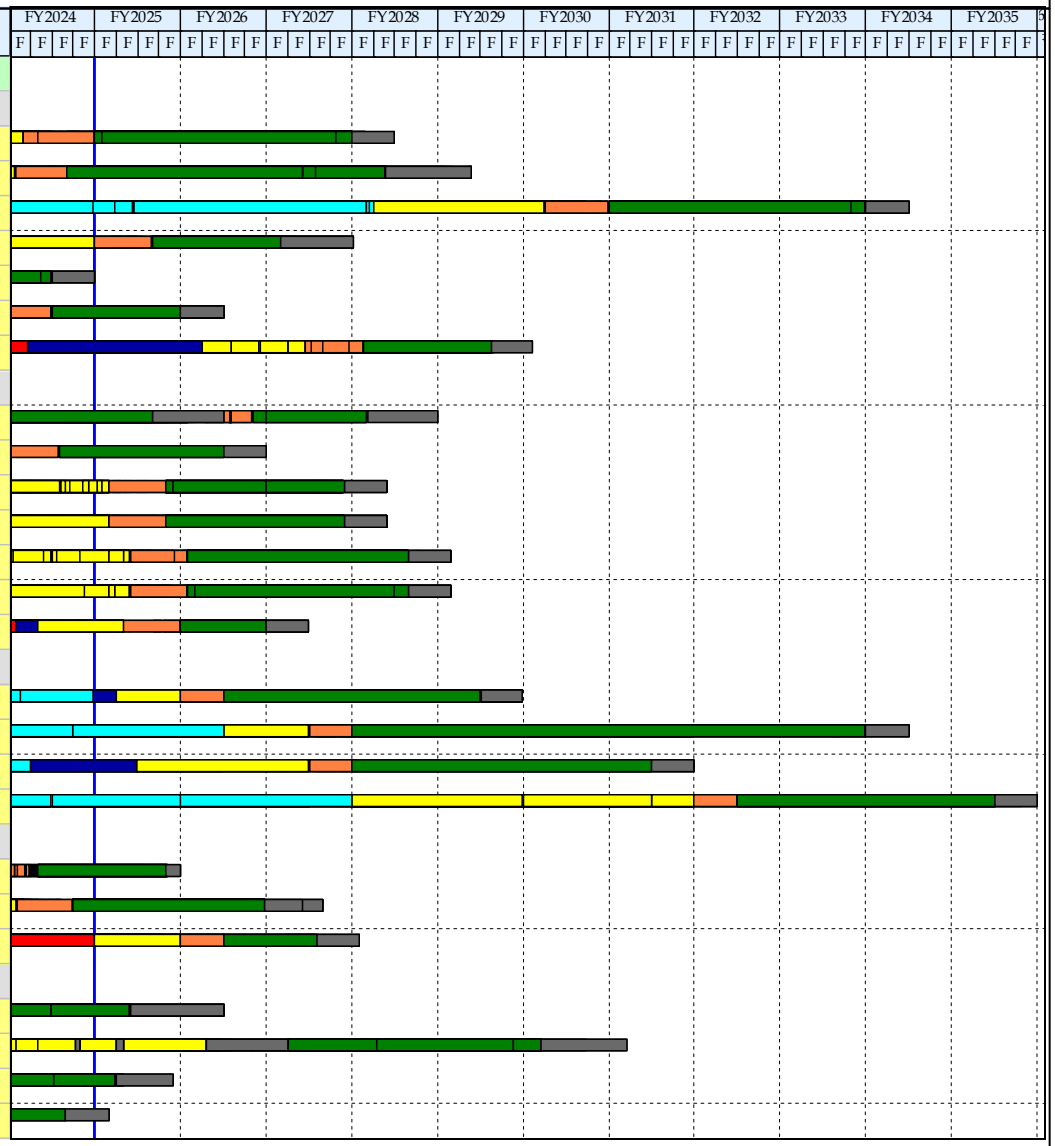
EFWS PS - EFWS Pump Station

The Emergency Firefighting Water System (EFWS) includes several methods of delivering water to suppress fires during emergency situations. EFWS is vital for protecting against the loss of life, homes, and businesses from fire following an earthquake and non-earthquake multiple-alarm fires. One EFWS component is a high-pressure fire-suppression water system, formerly known as Auxiliary Water Supply System (AWSS), which was originally built in the decade following the catastrophic 1906 San Francisco earthquake. It consists of a resilient 135-mile high-pressure pipeline network, a high elevation reservoir,

two large capacity tanks, two high-pressure seawater pumping stations, and manifolds that allow fireboats to inject Bay water into the City's pipelines. The Potable Emergency Firefighting Water System (PEFWS) will bring a seismically resilient high□pressure firefighting water system to the western neighborhoods of San Francisco, while also creating a seismically resilient pipeline that can supply drinking water to the west side during non□fire situations. The proposed overall project will install over 14 miles of seismically resilient pipelines in multiple phases as funding is provided. The system will be capable of providing water to the SFFD firefighters at the high pressure needed to combat large fires after a seismic event. The proposed pipelines will be fed by pump stations delivering 30,000 gallons per minute with services to the Richmond and Sunset Districts.

Appendix B. Water Enterprise Approved Project-Level Schedules Regional Programs

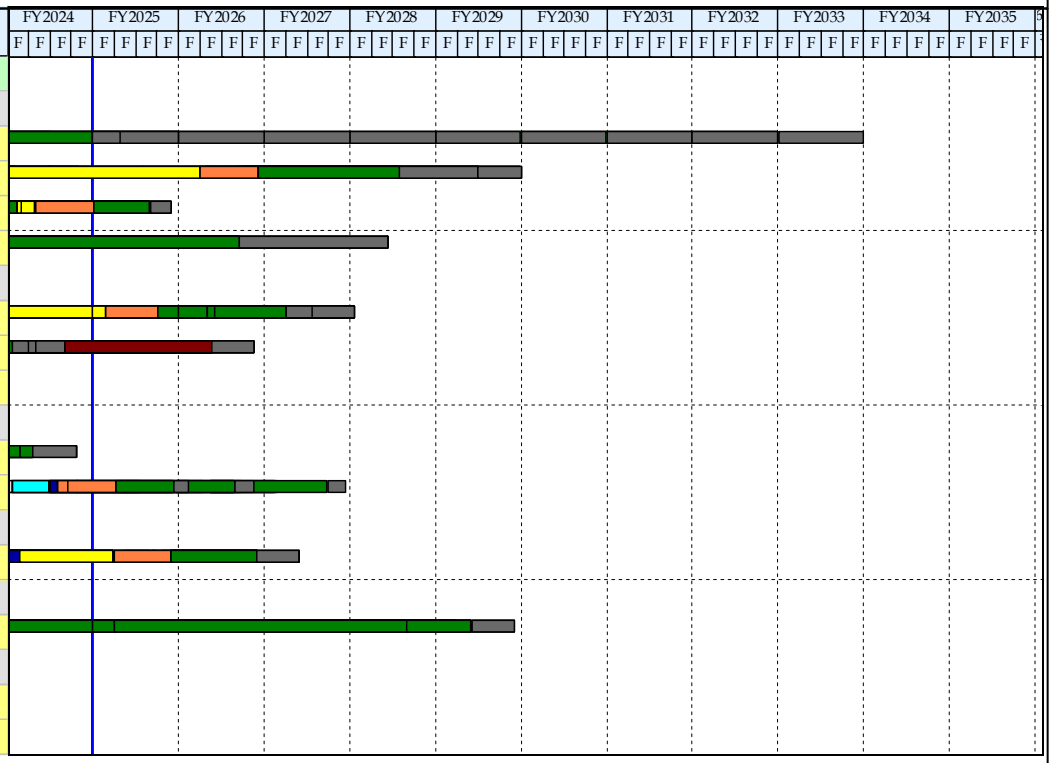
Project Name	Start	Finish
Water Regional Improvement Projects	01-Jan-09	29-Jun-35
Water Treatment	03-Mar-14	31-Dec-33
CUW272020402 SVWTP Short Term Improvements	03-Mar-14	29-Dec-27
10033123 SVWTP Ozone (CUW27202)	27-Jun-17	21-Nov-28
10037350 Regional Groundwater Treatment Improvement	13-Aug-20	31-Dec-33
10037628 SVWTP Polymer Feed Facility	01-Jul-21	09-Jul-27
10037349 HTWTP Filter Underdrain Replacement	02-Nov-20	28-Jun-24
10037277 Sunol Valley Chloramination Facility	02-Jan-19	31-Dec-25
10038328 SVWTP Long Term Improvements	01-Nov-21	10-Aug-29
Water Transmission	01-Jan-16	25-Aug-28
CUW27301 Corrosion Control	01-Jan-16	30-Jun-28
CUW2730404 San Antonio Pump Station MCC Upgrades	12-May-16	30-Jun-26
CUW2730505 CSPL2 Reaches 2 and 3 Rehabilitation	12-Sep-16	30-Nov-27
10034578 CSPL2 Reach 5 Lining Replacement	25-Feb-19	30-Nov-27
10035029 As-Needed Pipeline Repairs	22-Oct-16	25-Aug-28
10036840 BDPL 1-4 Lining Repair	12-Sep-16	25-Aug-28
10036839 BDPL4 PCCP Repair	01-May-20	31-Dec-26
Water Supply & Storage	11-Dec-13	29-Jun-35
CUW2740102 Pilarcitos Dam Improvements	07-Apr-14	29-Jun-29
CUW2740103 San Andreas Dam Facility Improvements	11-Dec-13	30-Dec-33
10015232 Merced Manor Reservoir Facilities Repairs	03-Jul-23	30-Jun-31
10036998 Turner Dam and Reservoir Improvements	01-Oct-20	29-Jun-35
Watershed and Lands Management	31-Oct-12	02-Aug-27
CUW2751801 Southern Skyline Blvd Ridge Trail Extension	31-Oct-12	30-Jun-25
CUW2752201 SA-1 Service Road/Ingoing Road	30-Jun-16	03-Mar-27
10015108 Sneath Lane Gate/North San Andreas	01-Feb-21	02-Aug-27
Buildings and Grounds	01-Jan-09	13-Sep-30
CUW27701 Sunol Long Term Improvements	01-Jan-09	31-Dec-25
CUW2770304 Millbrae Yard Laboratory and Shop Improvements	02-Nov-15	13-Sep-30
10034526 Millbrae Warehouse Settlement & Admin. Bldg. HVAC	03-Jan-17	02-Jun-25
10034825 Millbrae Security Upgrades	01-Sep-19	30-Aug-24



Project Management
Planning
Environmental
Design
Right-of-Way
Bid & Award
Construction Mgmt
Construction
Closeout

Appendix B. Water Enterprise Approved Project-Level Schedules Local Programs

Project Name	Start	Finish
Water Local Improvement Projects	03-Mar-03	30-Jun-33
Local Water Conveyance / Distribution System	01-Jul-10	30-Jun-33
CUW28000 Local Water Conveyance/Distribution System	01-Jul-10	30-Jun-33
10033816 Potable Emergency Firefighting Water System	12-Aug-19	30-Jun-29
10033818 Town of Sunol Pipeline	17-Jun-19	30-May-25
10036916 Lead Component Service Program	13-Sep-21	13-Dec-27
Local Water Supply	03-Mar-03	22-Jul-27
CUW30101 Lake Merced Water Level Restoration	16-Jun-03	22-Jul-27
CUW30201 San Francisco Westside Recycled Water	03-Mar-03	20-May-26
CUW30102 San Francisco Groundwater Supply	16-Jun-03	30-Jun-23
Local Tanks/Reservoir Improvements	24-Jan-13	15-Jun-27
CUW28301 College Hill Reservoir Outlet	24-Jan-13	24-Apr-24
10037794 Reservoir Roof and Tank Coatings	01-Jul-21	15-Jun-27
Pump Stations	12-May-21	30-Nov-26
10015231 Harding Park PS	12-May-21	30-Nov-26
Buildings and Grounds	01-Feb-20	31-May-29
10037249 New CDD Headquarters	01-Feb-20	31-May-29
Emergency Firefighting Water System (EFWS)	04-Apr-11	29-Dec-28
EFWS-PL EFWS PL - EFWS Pipelines	04-Apr-11	29-Dec-28
EFWS-PS EFWS PS - EFWS Pump Station	04-Apr-11	29-Dec-28



Project Management
Planning
Environmental
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Right-of-Way
Bid & Award
Construction Mgmt
Construction
Closeout

APPENDIX C. LIST OF ACRONYMS

AAR	Alternative Analysis Report
ACTC	Alameda County Transportation Commission
AWSS	Auxiliary Water Supply System
BA	Bid & Award
BDPL	Bay Division Pipeline
BDPL 1-4	Bay Division Pipeline Numbers 1-4
CalTrans	California Department of Transportation
CatEx	Categorical Exemption
CCC	California Coastal Commission
CDD	California Distribution Division
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CER	Conceptual Engineering Report
CFRP	Carbon Fiber Reinforced Polymer
CIP	Capital Improvement Program
CM/GC	Construction Manager/General Contractor
CML	Cement Mortar Lining
CN	Construction
CP	Cathodic Protection
CSPL1-2	Crystal Springs Pipeline Number 1-2
DIP	Ductile Iron Pipe
DPW	Department of Public Works
DS	Design
DSOD	Division of Safety of Dams (State of California)
EFWSPL	Emergency Firefighting Water System Pipeline
EFWS	Emergency Firefighting Water System
EIR	Environmental Impact Report
ESER	Earthquake Safety and Emergency Response
FHWA	Federal Highway Administration
FMC	Fort Mason Center
FY	Fiscal Year
GE	General Electric
GGNRA	Golden Gate National Recreation Area
HFA	Hydrofluoroalkane
HH	Hetch Hetchy
HTWTP	Harry Tracy Water Treatment Plant
HVAC	Heating, Ventilation, and Air Conditioning
JOC	Job Order Contract
LEED	Leadership in Energy and Environmental Design
LUSL	Lead User Service Lines
MCC	Motor Control Centers
MCP	Main Control Panel
MGD	Million Gallons per Day
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MP	Multiple Phase
NAR	Needs Assessment Report
NEPA	National Environmental Policy Act
NPS	National Park Service
NRD	National Resources Division
NTP	Notice to Proceed
PCCP	Pre-Stressed Concrete Cylinder Pipe
PEFWS	Potable Emergency Firefighting Water System
PG&E	Pacific Gas and Energy Company
PL	Planning
PLC	Programmable Logic Controller
PS	Pump Station
PUC	Public Utilities Commission
RFP	Request For Proposal
RFQ	Request For Qualifications
ROW	Right-Of-Way
SAPL1	San Andreas Pipeline 1
SAPS	San Antonio Pump Station
SCADA	Supervisory Control and Data Acquisition
SF	San Francisco
SFCTA	San Francisco County Transportation Agency

SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFPUC	San Francisco Public Utilities Commission
SVCF	Sunol Valley Chloramination Facility
SVWTP	Sunol Valley Water Treatment Plant
T&O	Taste and Odor
TBD	To Be Determined
TWR	Treated Water Reservoir
VFD	Variable Frequency Drives
WECIP	Water Enterprise Capital Improvement Program
WSIP	Water System Improvement Program
WSTD	Water Supply and Treatment Division

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