



San Francisco
Water Power Sewer

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DATE: August 14, 2026

TO: Commissioner Joshua Arce, President
Commissioner Stephen E. Leveroni, Vice President
Commissioner Avni Jamdar
Commissioner Kate H. Stacy
Commissioner Meghan Thurlow

FROM: Dennis J. Herrera, General Manager *DJH*

RE: Wastewater Enterprise Capital Improvement Programs
4th Quarter/ Fiscal Year 2025-2026

Enclosed please find the Wastewater Enterprise Capital Improvement Programs Quarterly Report for the 4th Quarter of Fiscal Year 2025-2026. The primary intent of this report is to provide the Commission, stakeholders, and the public a status summary of the Program for the period of April 1, 2026 to June 30, 2026.

Attachment

Daniel Lurie
Mayor

Joshua Arce
President

Stephen E. Leveroni
Vice President

Avni Jamdar
Commissioner

Kate H. Stacy
Commissioner

Meghan Thurlow
Commissioner

Dennis J. Herrera
General Manager

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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QUARTERLY REPORT

Wastewater Enterprise Programs April 2026 – June 2026

Published: August 14, 2026

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Wastewater Enterprise Capital Improvement Program Quarterly Report

Quarter 4, Fiscal Year 2025-2026, April 2026 – June 2026

About this report

The Wastewater Enterprise Capital Improvement Program (CIP) Quarterly Report provides a consistent, transparent, and accessible snapshot of progress on major wastewater capital projects during the reporting quarter. Its purpose is to inform the SFPUC Commission, Finance stakeholders, and the public on how the program is performing against approved scope, budget, and schedule; highlight notable accomplishments and near-term priorities; and summarize key delivery considerations being actively managed.

This report has been updated to improve clarity, consistency, accessibility, and efficiency of production. The revised format emphasizes information that meaningfully changes on a quarterly cadence and supports a repeatable publication process using standardized data sources.

To align with SFPUC's evolving Rolling CIP approach and while maintaining consistency with the Commission-approved 10-year Capital Plan, the quarterly report continues to present program-level performance using the adopted CIP baseline. The report narrative and highlights are oriented toward current delivery priorities and upcoming work, while ensuring that reported "Approved" totals remain directly traceable to the approved 10-year Capital Plan.

As part of SFPUC's normal two-year budgeting cycle, the Commission-adopted CIP baseline is refreshed to reflect the current program plan and reporting horizon. Using that updated baseline for quarterly reporting maintains clear alignment between the report and the adopted 10-year Capital Plan and reinforces a Rolling CIP focus on active delivery and upcoming work, while preserving a consistent record of program performance.

For reliability and consistency, the report uses standardized definitions for terms such as project phase, approved budget, forecast, and expenditures to date. Where the same value appears in multiple places, it is sourced from the same underlying dataset and inserted through a repeatable process to minimize manual reconciliation.

This report is designed to be accessible to a broad audience, including readers using assistive technologies. Accessibility considerations include structured headings, readable tables, meaningful link text, and alternative text for images. Graphics and photos are included only when they improve understanding and can be maintained accessibly on a quarterly basis.

The Executive Summary provides a snapshot and selected highlights. The body of the report provides supporting detail organized by quarterly accomplishments, program performance, and project-level status summaries.

This report includes the following sections:

- **Section 1** – Quarter in Review
- **Section 2** – Program Performance
- **Section 3** – Project Status Report
- Appendices

This Executive Summary provides a brief snapshot of Wastewater Enterprise capital program performance for the reporting quarter, including overall cost and schedule status, key accomplishments, and notable delivery considerations. Additional project details are provided in the following sections and in the Project Status Report.

How to read cost and schedule information

- Cost figures are typically shown in millions of dollars, and represent approved budgets, current forecasts, and actual expenditures to date for the reporting period.
- Schedule information focuses on project phase, key milestones, and forecast completion dates.
- Variance between approved, forecast, and actual values indicate where work is ahead of plan, on track, or requires additional management attention.

Data sources and timing

Unless otherwise noted, cost and schedule data are drawn from SFPUC's financial and project management systems as of the end of the reporting period. Because some figures are rounded and certain project statuses may change after the data "as-of" date, the report should be used as a snapshot in time.

Executive Summary

This Quarterly Report provides a summary update of the Wastewater Enterprise (WWE) Capital Programs that include capital as well as repair and replacement projects. The three WWE programs are: (1) the Sewer System Improvement Program (SSIP), (2) WWE Facilities and Infrastructure Program (F&I), and (3) the WWE Renewal and Replacement Program (R&R).

The SSIP is further divided into SSIP Phase 1 and Other SSIP because of program re-baselining and the evolution from a fixed program (SSIP Phase 1) to a “rolling” capital improvement program (Other SSIP). F&I projects are those capital projects outside of the original SSIP, because of type, location or timing of projects. The rolling Capital improvement Program (CIP) includes SSIP and F&I projects. R&R is an ongoing annual program that addresses deficiencies in the wastewater collection and treatment systems.

ES 1.1 Rolling 10-year CIP Cost and Schedule Snapshot

The following tables provide a summary of the cost and schedule snapshot for the rolling capital projects. For this Quarterly Report, the schedule and cost forecasts for projects in the rolling CIP were updated to match the proposed schedules and costs in the upcoming FY27-FY36 10-year Capital Plan that was presented to the San Francisco Public Utilities Commission in February 2026. The forecasts reflect updated cost assumptions, updated cost and schedule estimates, and refined scopes of work for multiple projects in the rolling CIP, and project level details can be found in Section 2 of this report.

As part of the mid-cycle budget update to the 10-Year Capital Plan for FY2025-26 to FY2034-35 that was adopted by the Commission on February 11, 2025, the Biosolids Digester Facilities Project’s budget increased from \$2,672.62M to \$2,837.14M. The SSIP Phase 1 Approved Budget has increased by \$164.52 million due to this change. In the tables below, the Current Approved Budget reflects the Commission approved FY2026 through FY2035 mid-cycle budget.

Table ES 1.1.1 Rolling 10-year CIP Program Snapshot

Program Snapshot	Value
Reporting Period	April 2026 – June 2026
Number of Approved Projects	127
Current Approved Budget	\$9,000.6M
Forecast Cost	\$9,195.1M
Expenditures	\$4,754.4M
Approved Completion Date	11/29/39
Forecast Completion Date	12/31/41

Please be advised that all negative values reported for cost and schedule variances reflect forecasted cost overruns or schedule delays.

Table ES 1.1.2 Rolling 10-year CIP Cost Performance Overview

Program	Expenditures to Date	Current Approved Budget	Forecast Cost	Cost Variance = Current Approved Budget - Forecast Costs	Variance Over Reporting Period
SSIP Phase 1	\$4,183.8M	\$4,871.9M	\$4,887.4M	-\$15.5M	\$3.6M
Other SSIP	\$324.1M	\$3,644.4M	\$3,782.3M	-\$137.9M	\$0.0M
F&I	\$246.6M	\$484.3M	\$525.4M	-\$41.1M	\$0.0M
Total	\$4,754.4M	\$9,000.6M	\$9,195.1M	-\$194.5M	\$3.6M

During the reporting period, the forecast cost for SSIP Phase 1 project was updated to match the proposed costs in the upcoming FY27-FY36 10-year Capital Plan. The \$3.6M variance reflects cost savings from closing out projects.

Table ES 1.1.3 Rolling 10-year CIP Schedule Summary

Program	Approved Start	Actual Start	Approved Completion	Forecast Completion	Schedule Variance (Months)
SSIP Phase 1	07/01/11	07/01/11	06/30/34	06/30/29	60.0
Other SSIP	03/03/18	03/03/18	11/29/39	12/31/41	-25.1
F&I	01/01/11	01/01/11	07/20/33	02/19/37	-43.1
Overall Programs	01/01/11	01/01/11	11/29/39	12/31/41	-25.1

ES 1.2 R&R Cost and Schedule Snapshot:

The following Tables provide a summary of the cost and schedule snapshot for the Renewal and Replacement (R&R) projects.

Table ES 1.2.1. R&R Program Snapshot

Program Snapshot	Value
Reporting Period	April 2026 – June 2026
Number of Approved Projects	185
Current Approved Budget	\$1,606.2M
Forecast Cost	\$1,606.2M
Expenditures	\$1,269.1M
Approved Completion Date	03/31/27
Forecast Completion Date	03/31/27

Table ES 1.2.2 R&R Cost Performance Overview

Program	Expenditures to Date	Current Approved Budget	Forecast Cost	Cost Variance = Current Approved Budget - Forecast Costs	Variance Over Reporting Period
R&R Collection Systems - Small Diameter	\$1,020.7M	\$1,230.0M	\$1,230.0M	\$0.0M	\$0.0M
R&R Collection Systems - Large Diameter	\$29.8M	\$98.4M	\$98.4M	\$0.0M	\$0.0M
R&R Treatment Facilities	\$218.3M	\$270.6M	\$270.6M	\$0.0M	\$0.0M
T/S Box Tier 2 (Field) Condition Assessment	\$0.3M	\$7.3M	\$7.3M	\$0.0M	\$0.0M
TOTAL:	\$1,269.1M	\$1,606.2M	\$1,606.2M	\$0.0M	\$0.0M

Table ES 1.2.3. R&R Schedule Summary

Program	Approved Start	Actual Start	Approved Completion	Forecast Completion	Schedule Variance (Months)
R&R Collection Systems - Small Diameter	07/01/10	07/01/10	03/31/27	03/31/27	0
R&R Collection Systems - Large Diameter	07/01/22	07/01/22	03/31/27	03/31/27	0
R&R Treatment Facilities	07/01/10	07/01/10	03/31/27	03/31/27	0
T/S Box Tier 2 (Field) Condition Assessment	12/09/24	12/09/24	03/31/27	03/31/27	0
Overall Programs	07/01/10	07/01/10	03/31/27	03/31/27	0

Key Highlights This Quarter:

1. There was no significant variance to schedule nor budget between this quarter and last quarter.
2. During this quarter, sixteen projects achieved major milestones, and details can be found in Table 1.1 in the next Section.

1. Quarter in Review

During the reporting period, the Wastewater Capital Program advanced work across planning, design, procurement, construction, and closeout activities. This section summarizes the accomplishments from the quarter, including key milestones achieved, significant contract actions, and select community and workforce highlights that reflect program delivery priorities. Detailed project status information and performance summaries are provided in the sections that follow.

1.1 Major Milestones Achieved

A list of major milestones achieved during this quarter is shown on Table 1.1 below.

Table 1.1 Project Milestones Achieved During Quarter

Project ID & Name	Milestones
10015807 – SE02 New Headworks (Grit) Replacement Project	Completed Scope III construction contract (WW-628).
10026810 – Yosemite Green Infrastructure	Advertised construction contract (WW-668).
10026822 - North Shore Wet Weather Pump Station Improvements and Disinfection	Completed project.
10029726 – Green Infrastructure Capital Planning (GI-01)	Completed project.
10033820 – Southeast Outfall Condition Assessment and Rehabilitation	Completed 95% design for Contract (C) Islais Creek 48-inch Bypass Life Extension (WW-801).
10034360 - Lower Alemany Area Stormwater Improvement Project	Re-advertised construction contract (WW-756R).
10037194 – Balboa High School Regional Runoff Reduction Project	Started planning phase.
10037733 - Solids Thickening (OSP 011) Process Upgrade	Advertised construction contract (WW-745).
10037734 - OSP Plant-wide Ventilation (HVAC) Upgrades	Advertised construction contract (WW-770).
10037735 - Admin Bldg (OSP 930) Health & Safety Improvements	Awarded construction contract (WW-766).
10038446 – Geary Underpass PS Safe Access Enhancements	Completed project.
10038469 – Pump Station Security Upgrades (Cesar Chavez, GFS, CHS, MMS)	Awarded construction contract (WW-780).
10039193 - Gaseous Oxygen System (OSP 011) Upgrades	Completed the final Conceptual Engineering Report.
10039811 – SEP Condition Improvement Projects - Part 1	Issued Notice to Proceed (NTP) for construction contract WW-789R.
10041084 – Geary BRT Sewer Improvements - Phase 2 (CON)	Advertise construction contract 2298I (Final paving for WW-743).
10042456 – Dechlorination Process (NPF 500) Evaluation & Interim Rehab	Completed the Conceptual Engineering Report.

1.2 Highlights of Conducted Outreach

- April: Conducted community outreach and began construction at two locations for the Combined Sewer Outfall Rehabilitation Projects, including at Laguna outfall near Fort Mason, Brannan Street and Sansome Street outfalls.
- April: Southeast Treatment Plant Project Teams met with The SF Market to share construction updates.
- April: Hosted Southeast Treatment Plan Construction Tours for ABC7, Bay Area Air Quality Management District's executive team and BAYWORK's "Workshop on Wheels."
- May: Southeast Treatment Plant Project teams met with the Market Zone Working Group to share construction updates.
- May: Hosted Southeast Plant tours for PG&E leadership, Stanford University graduate students, California Water Resources Control Board State Revolving Fund inspection, and Construction Industry Workforce Initiative group.
- May: Presented to the SF Port's Northern Advisory Committee about Sansome and Brannan Outfall improvements.
- May: Conducted community outreach and began construction at 6th Street, Evans Avenue and Mariposa Street outfalls, as part of the Combined Sewer Outfall Rehabilitation Project.
- May: Folsom Area Stormwater Improvement Project and workforce development presentation to John O'Connell High School.
- May: Presentation to the SF Port Fisherman's Wharf Advisory Committee (FWAC) and Northern Advisory Committee (NAC) for the Brannan Street and Sansome Street Outfalls Improvement Project.
- May: Tabling at Carnaval festival for Folsom Area Stormwater Improvement Project.
- June: Provided quarterly update for SF Port Southern Advisory Committee.

2. Program Performance

This section provides a high-level view of cost and schedule performance for the Wastewater Capital Program, using the Commission-adopted CIP baseline as the reference point. It summarizes approved budgets, current forecasts, and expenditures to date, along with key schedule indicators, to show how projects are progressing relative to planned delivery. Performance is presented in a way that supports quarterly oversight and highlights material changes and trends that inform near-term delivery focus.

As part of the mid-cycle budget update to the 10-Year Capital Plan for FY2025-26 to FY2034-35 that was adopted by the Commission on February 11, 2025, the Biosolids Digester Facilities Project's (BDFP's) budget increased from \$2,672.6M to \$2,837.1M. The SSIP Phase 1 Approved Budget increased by \$164.5M due to this change. In the tables below, the Current Approved Budget reflects the Commission approved FY2026 through FY2035 mid-cycle budget.

For this Quarterly Report, the schedule and cost forecasts for projects in the rolling CIP were updated to match the proposed schedules and costs in the upcoming FY27-FY36 10-year Capital Plan that was presented to the San Francisco Public Utilities Commission in February 2026. The forecasts reflect updated cost assumptions, updated cost and schedule estimates, and refined scopes of work for multiple projects in the rolling CIP, and project level details can be found below.

2.1 Rolling 10-year CIP Cost Performance Overview

Program	Expenditures to Date	Current Approved Budget	Forecast Cost	Cost Variance = Current Approved Budget - Forecast Costs	Variance Over Reporting Period
SSIP Phase 1	\$4,183.8M	\$4,871.9M	\$4,887.4M	-\$15.5M	\$3.6M
Other SSIP	\$324.1M	\$3,644.4M	\$3,782.3M	-\$137.9M	\$0.0M
F&I	\$246.6M	\$484.3M	\$525.4M	-\$41.1M	\$0.0M
Total	\$4,754.4M	\$9,000.6M	\$9,195.1M	-\$194.5M	\$3.6M

2.2 Rolling 10-year CIP Schedule Performance Overview

Program	Approved Start	Actual Start	Approved Completion	Forecast Completion	Schedule Variance (Months)
SSIP Phase 1	07/01/11	07/01/11	06/30/34	06/30/29	60.0
Other SSIP	03/03/18	03/03/18	11/29/39	12/31/41	-25.1
F&I	01/01/11	01/01/11	07/20/33	02/19/37	-43.1
Overall Programs	01/01/11	01/01/11	11/29/39	12/31/41	-25.1

2.3 Rolling 10-year CIP Projects by Phase

Project Phase	No. of Projects	Percent by No. of Projects	Total Project Value	Percent by Project Value
Not Initiated	9	7%	\$154.7M	2%
Planning	6	5%	\$1,691.5M	19%
Design & Bid and Award	17	13%	\$661.3M	7%
Construction	19	15%	\$4,676.7M	52%
Closeout	2	2%	\$12.4M	0%
Completed	66	52%	\$788.4M	9%
Multi-Phases	8	6%	\$1,015.7M	11%
Total	127	100%	\$9,000.6M	100%

2.4 R&R Cost Performance Overview

Program	Expenditures to Date	Current Approved Budget	Current Forecast Cost (Total)	Cost Variance = Current Approved Budget - Forecast Costs	Variance Over Reporting Period
R&R Collection Systems - Small Diameter	\$1,020.7M	\$1,230.0M	\$1,230.0M	\$0.0M	\$0.0M
R&R Collection Systems - Large Diameter	\$29.8M	\$98.4M	\$98.4M	\$0.0M	\$0.0M
R&R Treatment Facilities	\$218.3M	\$270.6M	\$270.6M	\$0.0M	\$0.0M
T/S Box Tier 2 (Field) Condition Assessment	\$0.3M	\$7.3M	\$7.3M	\$0.0M	\$0.0M
TOTAL:	\$1,269.1M	\$1,606.2M	\$1,606.2M	\$0.0M	\$0.0M

2.5 R&R Schedule Performance Overview

Program	Approved Start	Actual Start	Approved Completion	Forecast Completion	Schedule Variance (Months)
R&R Collection Systems - Small Diameter	07/01/10	07/01/10	03/31/27	03/31/27	0
R&R Collection Systems - Large Diameter	07/01/22	07/01/22	03/31/27	03/31/27	0
R&R Treatment Facilities	07/01/10	07/01/10	03/31/27	03/31/27	0
T/S Box Tier 2 (Field) Condition Assessment	12/09/24	12/09/24	03/31/27	03/31/27	0
Overall Programs	07/01/10	07/01/10	03/31/27	03/31/27	0

3. Project Status Report

10015796 - SEP Biosolids Digester Facilities Project

Approved Budget:	\$2,837.1M	Approved Completion Date:	05/11/29
Forecast Cost:	\$2,837.1M	Forecast Completion Date:	05/11/29
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$2,319.4M	Environmental Status:	Completed (EIR)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

The project has two construction contracts, namely WW-647R for main Biosolids Digester Facilities and DB-138 for Biogas Utilization Facility.

The project delivery method for the main Biosolids Digester Facilities is Construction Manager/General Contractor (CM/GC) and it consists of:

- (A) Scope I (Demolition and Utility Relocation) – Completed.
- (B) Scope II (New Biosolids Facilities – Remainder of the construction work) is underway.

The project delivery method for the Biogas Utilization Facility is Design-Build.

For the Biosolids Digester Facilities construction, the CM/GC continues with the mechanical, electrical, and plumbing work, and equipment installations in the solids pretreatment, solids dewatering and odor control facilities. Interior and exterior architectural finishes are also underway. Resources have increased to focus on the electrical and instrumentation, and control activities. Discussion and coordination for the functional testing and facility start-up and commissioning are still in progress. For the Biogas Utilization Facility, in which the digester gas will be converted into renewable natural gas for injection into an existing PG&E pipeline, the 100% design package was submitted. Installation of underground utilities and electrical conduits is completed. Construction is underway with rebar mat installation and concrete placement for slab on grade. A new electrical service agreement with PG&E to power the Biogas Facility is in progress.

Issues and Challenges:

A possible schedule delay is projected due to clarifications in electrical interconnections and conduit schedules. A time impact analysis from the CM/GC is under review.

10015807 - SEP New Headworks (Grit) Replacement

Approved Budget:	\$716.7M	Approved Completion Date:	08/31/27
Forecast Cost:	\$707.8M	Forecast Completion Date:	08/31/27
Cost Variance:	\$8.9M	Schedule Variance:	0 days
Expenditures to Date	\$677.9M	Environmental Status:	Completed (MND)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

The project delivery method for this project is Construction Manager/General Contractor (CM/GC). WW-628 CM/GC Construction consists of:

- (A) Scope I (Site Preparation) – Completed.
- (B) Scope II.A (BFS Improvements) – Completed.
- (C) Scope III (New Headworks Facility) – Final Completion has been granted for all systems.
- (D) Scope IV (SEP-012 Demolition) – Demolition of SEP-012 old all-weather headworks is completed.

Contract closeout activities continued.

Issues and Challenges:

As previously reported, the project team anticipates that total project costs will be below the approved budget. The variance in the budget is due to efficiency achieved in delivering project scope related to demolition of existing Headworks, SEP-012.

10015809 - WWE Facility-Wide Distributed Control System (DCS) Upgrade

Approved Budget:	\$73.0M	Approved Completion Date:	12/30/27
Forecast Cost:	\$99.0M	Forecast Completion Date:	06/30/29
Cost Variance:	-\$26.0M	Schedule Variance:	-548 days
Expenditures to Date	\$43.8M	Environmental Status:	Not Applicable
Current Phase:	Multi-Phases	Program	SSIP Phase 1

Progress and Status:

The project delivery method for this project is Progressive Design-Build with pre-design, design, manufacturing, and installation components. Process specific DCS field testing and commissioning work for the process facilities within the Biosolids Digester Facilities Project footprint at Southeast Water Pollution Treatment Plant (SEP) continued during this quarter. Design of the system-wide DCS network at SEP is completed. As part of the 10-Year CIP effort, the scope of work that was originally under three other DCS capital projects were consolidated under this project.

Issues and Challenges:

As previously reported, the variance in the project budget and schedule is the result of consolidating the scope of work that used to be covered under multiple DCS capital projects. This consolidation effort resulted in the early closeout and budget reduction under the three other capital projects.

10002284 - SEP Power Feed and Primary Switchgear Upgrades

Approved Budget:	\$95.9M	Approved Completion Date:	03/31/26
Forecast Cost:	\$95.9M	Forecast Completion Date:	02/09/27
Cost Variance:	\$0.0M	Schedule Variance:	-315 days
Expenditures to Date	\$88.2M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

PG&E has accepted the construction of the underground raceway, vault, and the restoration work associated with the system tie-in. Flooring work at mechanical room in switchgear building of SEP-032 was completed. Photovoltaic Security and Fire Alarm were installed and ready for inspection.

Issues and Challenges:

As previously reported, the schedule variance is due to additional design and site investigation efforts needed for installation of an electrical vault to house interrupter and connecting conductors in compliance with PG&E requirements.

10037353 - SEP 550 Booster PS Condition Inspection & Interim

Approved Budget:	\$31.3M	Approved Completion Date:	06/30/28
Forecast Cost:	\$31.3M	Forecast Completion Date:	12/29/28
Cost Variance:	\$0.0M	Schedule Variance:	-182 days
Expenditures to Date	\$8.2M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

Contractor removed the main lift pump and Motor No. 3 for refurbishment. The old Variable Frequency Drive No. 3 was removed and replaced with a new variable frequency drive. Contractor also performed cleaning and concrete repair within Wet Well No. 3, as well as application of epoxy coating.

Issues and Challenges:

As previously reported, the variance in the schedule reflects the additional construction duration needed to properly sequence the wet weather work.

10038373 - SEP Booster PS & BFS Security Enhancements

Approved Budget:	\$35.8M	Approved Completion Date:	03/01/28
Forecast Cost:	\$58.4M	Forecast Completion Date:	05/02/29
Cost Variance:	-\$22.6M	Schedule Variance:	-427 days
Expenditures to Date	\$2.0M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

The project delivery method for this project is Progressive Design-Build with pre-design and design components. The Request for Proposals (RFP) was advertised, and the pre-proposal conference and site inspection were completed. The RFP deadline is scheduled for next quarter. The project team continues to coordinate with Wastewater Enterprise, SFPUC Information Technology Services, SFPUC Security, and other stakeholders regarding security enhancements and the configuration of servers needed for video recording, management, and analytics.

Issues and Challenges:

As previously reported, this project incorporates scope from 10037777 OSP and 10037904 NPF security projects, resulting in an increased forecast schedule and cost, and reduction in the aforementioned projects.

10037330 - Primary Treatment (SEP 040/041) H&S Improvements

Approved Budget:	\$29.6M	Approved Completion Date:	03/31/28
Forecast Cost:	\$29.6M	Forecast Completion Date:	03/31/28
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$15.2M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

The contractor excavated a utility trench to install conduits leading to the SEP-060 west pump room pit. The existing concrete wall at SEP-060 was partially demolished to accommodate conduit penetrations. The contractor also began pulling power and low-voltage cables from the Motor Control Center (MCC) to the associated equipment. The manufacturer's representative conducted inspection and testing of the MCCs. At SEP-041 Sedimentation Bldg. No. 2, stainless steel guardrails and safety gates were installed. Excavation also began for the generator panel equipment pad.

Issues and Challenges:

None at this time.

10037331 - Maintenance Building (SEP 940) Interim Improvement

Approved Budget:	\$20.9M	Approved Completion Date:	02/04/28
Forecast Cost:	\$21.9M	Forecast Completion Date:	12/29/28
Cost Variance:	-\$1.01M	Schedule Variance:	-329 days
Expenditures to Date	\$4.3M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

The project team continued to review the contractor's Requests for Information (RFIs) and submittals. The contractor installed the temporary office trailer and embassy fencing as part of the site preparation activities. The contractor also completed the utility connections for the trailers. Installation of the electrical and security systems is ongoing.

Issues and Challenges:

As previously reported, the variance in the budget is due to an increase in the construction cost based upon bids received. The variance in the schedule is due to additional time needed as it relates to site preparation work to facilitate the temporary relocation of impacted Wastewater Enterprise staff during the office renovation.

10039505 - New Ops, Engineering and Maintenance Buildings

Approved Budget:	\$171.9M	Approved Completion Date:	08/31/28
Forecast Cost:	\$161.9M	Forecast Completion Date:	04/30/29
Cost Variance:	\$10.0M	Schedule Variance:	-242 days
Expenditures to Date	\$27.0M	Environmental Status:	Completed (EIR)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

The Contractor completed demolition of SEP-850 and trailers 850A and 850B. Site grading work is completed and foundation work for the new buildings is in progress. SEP-930 boiler work is in progress. Procurement is on-going.

Issues and Challenges:

As previously reported, the project schedule variance is due to additional design and site investigation efforts needed for the new electrical substations.

10039310 - Secondary Clarifiers (SEP230) Rehabilitation

Approved Budget:	\$52.0M	Approved Completion Date:	11/30/29
Forecast Cost:	\$59.0M	Forecast Completion Date:	01/28/30
Cost Variance:	-\$7.1M	Schedule Variance:	-59 days
Expenditures to Date	\$2.2M	Environmental Status:	Active (Cat Ex)
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

The project delivery method for this project is Fixed Budget Limit Design-Build, with pre-design and design components. The Request for Proposals (RFP) was advertised, and the pre-proposal conference / site inspection were completed. The RFP deadline is scheduled for next quarter. The project completed CEQA review, and additional environmental review to comply with NEPA is underway for potential WIFIA/SRF funding.

Issues and Challenges:

As previously reported, as a result of the bridging document review, the project timeline has been extended, and overall costs have increased. These adjustments stem from ongoing supplier negotiations, the sole source waiver approval process, continued design development, and resource availability.

10039811 - SEP Condition Improvement Projects - Part 1

Approved Budget:	\$16.0M	Approved Completion Date:	10/29/27
Forecast Cost:	\$18.9M	Forecast Completion Date:	03/30/29
Cost Variance:	-\$2.9M	Schedule Variance:	-518 days
Expenditures to Date	\$2.4M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

The construction contract (WW-789R) has received a Notice to Proceed. The project team is reviewing the contractor's Requests for Information and submittals. The project team also submitted a staging area request within SEP boundaries on behalf of the contractor.

Issues and Challenges:

As previously reported, the variance in the schedule is due to an increase in the design duration to facilitate additional coordination with other surrounding Southeast Water Pollution Treatment Plant (SEP) projects. The variance in the budget is related to the forecast construction cost based on the engineer's estimate. Furthermore, the project experienced a delay during the bid/award phase related to protests and subsequent rebidding of the contract. The schedule variance reflects the additional time needed for protest evaluation and rebid, and the budget variance is related to the increase to the construction budget based upon the low bid received.

10041824 - SEP Mainstream Nutrient Reduction

Approved Budget:	\$1,470.3M	Approved Completion Date:	11/29/39
Forecast Cost:	\$1,470.3M	Forecast Completion Date:	11/29/39
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$2.5M	Environmental Status:	Not Initiated (TBD)
Current Phase:	Planning	Program	Other SSIP

Progress and Status:

The project is being delivered with Progressive Design-Build (PDB) contracting process. Upon the Commission approval of the initial award for the progressive design-builder to provide pre-construction services, kick-off meeting was held with larger internal stakeholders from Wastewater Enterprise and Infrastructure. Project has started Alternative Analysis Report phase of the pre-construction services. This phase of report will consist of ten workshops over next fifteen months with Wastewater Enterprise to validate and achieve alignment on the target scope, technologies, schedule and budget. The first workshop was held to discuss filtering criteria as pass/fail performance measurements to determine which Process Technologies are favorable for consideration in formulating potential alternatives. Project Team has also begun discussions around piloting one or two process technologies in dry weather for 2027, and potentially later when the new digester facility is brought on-line. SFPUC's Owner Advisor facilitated the first session to establish project goals, partnering commitments, and issue resolution ladders to guide project work and support successful project outcome.

Issues and Challenges:

None at this time.

10029736 - Westside Pump Station Reliability Improvements

Approved Budget:	\$93.3M	Approved Completion Date:	06/30/26
Forecast Cost:	\$93.3M	Forecast Completion Date:	12/30/27
Cost Variance:	\$0.0M	Schedule Variance:	-548 days
Expenditures to Date	\$71.2M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

This project includes multiple construction contracts:

(A) WW-572R Westside Pump Station Discharge Pipe Manifold Upgrade: Previously completed.

(B) WW-645R Westside Pump Station Reliability Improvements: Construction activities continue.

During the reporting period, the Contractor selectively removed the existing wet-weather manifold and began rough-in of new, redundant 54-inch diameter forcemain installation.

Issues and Challenges:

As previously reported, the schedule variance is a result of delays with obtaining third-party (PG&E) power to the pump station facility, and the associated delay costs are under negotiation.

10029737 - OSP Digester Gas Utilization Upgrade

Approved Budget:	\$69.6M	Approved Completion Date:	06/02/25
Forecast Cost:	\$81.6M	Forecast Completion Date:	03/31/28
Cost Variance:	-\$12.0M	Schedule Variance:	-1,033 days
Expenditures to Date	\$68.8M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

WW-639 Oceanside Water Pollution Control Plant Digester Gas Utilization Upgrade contract construction phase activities continue. During this reporting period, at Building 800 the Contractor continued installing electrical connection of major equipment items, cogeneration engines and fire alarm systems.

Issues and Challenges:

As previously reported, an increase of construction and construction management / engineering support during construction phase budgets and an increased schedule duration are necessary to complete additional electrical infrastructure improvements to comply with PG&E requirements.

10037733 - Solids Thickening (OSP 011) Process Upgrade

Approved Budget:	\$20.2M	Approved Completion Date:	03/10/28
Forecast Cost:	\$20.2M	Forecast Completion Date:	10/03/29
Cost Variance:	\$0.0M	Schedule Variance:	-572 days
Expenditures to Date	\$2.4M	Environmental Status:	Not Applicable
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

During this reporting period, construction contract WW-745 was advertised.

Issues and Challenges:

As previously reported, the schedule variance reflects limited staffing resources. The construction duration was extended based on construction sequencing requirements to keep plant process operations going while selective equipment replacements take place.

10037734 - OSP Plant-wide Ventilation (HVAC) Upgrades

Approved Budget:	\$22.6M	Approved Completion Date:	07/16/27
Forecast Cost:	\$31.6M	Forecast Completion Date:	03/13/29
Cost Variance:	-\$9.0M	Schedule Variance:	-606 days
Expenditures to Date	\$1.3M	Environmental Status:	Not Applicable
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

During this reporting period, bids for construction contract WW-770 were received and are under review with the project team.

Issues and Challenges:

As previously reported, the budget increase was based on an updated cost estimate at 95% Design, which includes escalation. Construction duration was extended based on construction sequencing requirements to keep plant ventilation process operations going while selective ventilation equipment, ductwork and duct support replacements take place.

10036398 - OSP Condition Improvement Projects - Part 2

Approved Budget:	\$105.1M	Approved Completion Date:	06/28/30
Forecast Cost:	\$105.1M	Forecast Completion Date:	11/07/31
Cost Variance:	\$0.0M	Schedule Variance:	-497 days
Expenditures to Date	\$20.1M	Environmental Status:	Active (Various)
Current Phase:	Multi-Phases	Program	Other SSIP

Progress and Status:

This project includes multiple construction contracts:

- (A) OSP 620 Digestion H&S, Mech Improvements, OSP 800 Mech Improvements: The project team advanced the detailed design of these project elements.
- (B) OSP 011 Polymer & Ferric Chloride Replacement: The project detail design phase activities continue to 35% Design.
- (C) OSP 042 Primary Clarifiers Structural and Mechanical Improvements: The project detail design phase activities continue to 35% Design.
- (D) OSP 200 Aeration Tanks Structural and Mechanical Improvements: The project detail design phase activities continue to 35% Design.
- (E) WW-648 OSP Building 042 Primary Clarifier Improvements: Previously completed.
- (F) WW-669 OSP Building 011 Grit Classifier & Preliminary Influent Slide Gate System Improvements: Previously completed.
- (G) JOC 53R3-15 OSP UPS Assembly Replacements: Previously completed.

Issues and Challenges:

As previously reported, schedule change reflects limited staffing resources to lead the various subprojects.

10037735 - Admin Bldg (OSP 930) Health & Safety Improvements

Approved Budget:	\$9.6M	Approved Completion Date:	07/08/27
Forecast Cost:	\$9.6M	Forecast Completion Date:	04/18/29
Cost Variance:	\$0.0M	Schedule Variance:	-650 days
Expenditures to Date	\$1.0M	Environmental Status:	Not Applicable
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

During this reporting period, construction contract WW-766 was awarded.

Issues and Challenges:

As previously reported, the construction duration was extended based on sequencing requirements for the phased lab fume hood replacement, while maintaining reduced functions for lab staff.

10039193 - Gaseous Oxygen System (OSP 011) Upgrades

Approved Budget:	\$22.4M	Approved Completion Date:	05/08/29
Forecast Cost:	\$22.4M	Forecast Completion Date:	11/07/31
Cost Variance:	\$0.0M	Schedule Variance:	-913 days
Expenditures to Date	\$1.5M	Environmental Status:	Not Initiated (TBD)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

The project detail design phase activities continue to 35% Design.

Issues and Challenges:

As previously reported, the schedule variance reflects limited staffing resources. The project is now resourced for the completion of the design phase deliverables.

10039184 - Westside FM Reliability Project - PLANNING

Approved Budget:	\$1.1M	Approved Completion Date:	06/24/26
Forecast Cost:	\$1.1M	Forecast Completion Date:	03/10/28
Cost Variance:	\$0.0M	Schedule Variance:	-625 days
Expenditures to Date	\$0.3M	Environmental Status:	Not Applicable
Current Phase:	Planning	Program	Other SSIP

Progress and Status:

The planning phase activities continued, as the project team continues with the drafting of a combined Needs Assessment, Alternative Analysis and Conceptual Engineering Report.

Issues and Challenges:

As previously reported, the schedule variance reflects limited staffing resources. The project is now resourced for the completion of the planning phase deliverables.

10039183 – OSP Communications & Safety Monitoring Updates

Approved Budget:	\$27.4M	Approved Completion Date:	05/30/30
Forecast Cost:	\$27.4M	Forecast Completion Date:	12/09/32
Cost Variance:	\$0.0M	Schedule Variance:	-924 days
Expenditures to Date	\$0.1M	Environmental Status:	TBD
Current Phase:	Planning	Program	Other SSIP

Progress and Status:

The planning phase activities continued, as the project team continues with the drafting of a combined Needs Assessment, Alternative Analysis and Conceptual Engineering Report.

Issues and Challenges:

As previously reported, the schedule variance reflects limited staffing resources. The project is now resourced for the completion of the planning phase deliverables.

10039251 - Sedimentation (NPF 040/041) Tanks Condition Improvement

Approved Budget:	\$54.2M	Approved Completion Date:	08/30/30
Forecast Cost:	\$65.1M	Forecast Completion Date:	08/30/30
Cost Variance:	-\$10.9M	Schedule Variance:	0 days
Expenditures to Date	\$4.0M	Environmental Status:	Active (Cat Ex)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

The project team issued the 65% design package to internal stakeholders and third-party reviewers and held a review workshop to facilitate the comment process. A duct inspection JOC was also initiated to assess the condition of the ductwork associated with the ventilation system upgrade in the sedimentation tank areas.

Issues and Challenges:

As previously reported, the budget variance is due to the increase in the forecast construction estimate based upon the Conceptual Engineering Report.

10042456 - Dechlorination Process (NPF 500) Evaluation & Interim Rehab

Approved Budget:	\$5.6M	Approved Completion Date:	11/09/29
Forecast Cost:	\$9.3M	Forecast Completion Date:	11/03/30
Cost Variance:	-\$3.7M	Schedule Variance:	-359 days
Expenditures to Date	\$0.4M	Environmental Status:	Not Initiated (TBD)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

The project team issued the combined Needs Analysis, Alternative Analysis, and Conceptual Engineering Report for signature.

Issues and Challenges:

As previously reported, the budget and schedule variances are due to updated soft costs and resource schedule commitments.

10034718 - Large Diameter Sewer Projects and Channel FM Intertie

Approved Budget:	\$114.6M	Approved Completion Date:	12/07/26
Forecast Cost:	\$114.6M	Forecast Completion Date:	06/30/28
Cost Variance:	\$0.0M	Schedule Variance:	-571 days
Expenditures to Date	\$97.6M	Environmental Status:	Completed (Various)
Current Phase:	Multi-Phases	Program	Other SSIP

Progress and Status:

This project includes multiple construction contracts:

- (A) WW-723R Channel Force Main Intertie: Construction work is ongoing.
- (B) WW-712 New Montgomery, Jessie, Minna and Mission Street Brick Sewer Rehabilitation: Previously completed.
- (C1) WW-724 Panhandle and Inner Sunset Large Sewer Improvements: Previously completed.
- (C2) WW-754; West SOMA, Panhandle, and Inner Sunset Improvements: Construction work is ongoing.
- (D) WW-721 Tenderloin and Nob Hill Sewer Improvements: Previously completed/combined with WW-731.
- (E) WW-731 Chinatown and North Beach Sewer Improvements: Project closeout continued.
- (F) WW-736 Castro District Sewer Improvements: Project closeout continued.
- (G) SFPW Contract 1243I South Van Ness Ave Sewer Improvements (joined Paving Project): Final Completion has been delayed due to closeout of the overall construction contract.
- (H1) WW-738 East SOMA Sewer Improvements: Project closeout continued.
- (H2) SFPW Various Locations No. 62: Construction work is ongoing.
- (H3) SFPW 8th/Clay Street & Leavenworth Street: Construction work is ongoing.
- (H4) SFPW Various Location No. 67B: Construction work is ongoing.
- (H5) WW-748 As Needed Spot Sewer Replacement No. 45: Contract closeout continued.
- (H6) WW-730 Various Location Sewer Replacement No.18: Construction work is ongoing.
- (I) WW-753 Hayes Valley Sewer Improvements: Pre-construction is completed. Collection Systems R&R program funded the construction and contract closeout has been completed.
- (J) WW-754 West SOMA Sewer Improvements: Pre-construction is completed. Construction is ongoing and reported/funded through Collection Systems R&R program.

Issues and Challenges:

As previously reported, the schedule variance is due to extension of construction duration for construction contract WW-723R.

10002652 - Kansas and Marin Streets Sewer Improvements

Approved Budget:	\$6.7M	Approved Completion Date:	10/16/26
Forecast Cost:	\$6.7M	Forecast Completion Date:	10/24/28
Cost Variance:	\$0.0M	Schedule Variance:	-739 days
Expenditures to Date	\$5.0M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Design	Program	SSIP Phase 1

Progress and Status:

During this quarter, the project team finalized the combined Alternative Analysis Report (AAR) and Conceptual Engineering Report (CER) document and is routing for signature. The project team also continued to make progress on the design phase.

Issues and Challenges:

As previously reported, the schedule variance is due to a larger effort needed to establish, model, and approve the project hydraulic design criteria.

10041084 - Geary BRT Sewer Improvements - Phase 2 Construction

Approved Budget:	\$23.9M	Approved Completion Date:	02/28/28
Forecast Cost:	\$23.9M	Forecast Completion Date:	07/28/28
Cost Variance:	\$0.0M	Schedule Variance:	-151 days
Expenditures to Date	\$15.6M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

The environmental portion of the project was completed under Project 10033106, Geary BRT Sewer Improvements Phase 2 Pre-Construction. This project includes two construction contracts:

- (A) Sewer scope under WW-743, Geary Boulevard Sewer and Water Improvements Phase 2 (procured by SFPUC): During this quarter, the contractor completed all the water main replacement work in Segment B (between 12th Avenue and Stanyan Street) and completed the sewer main lining work in both Segment B and Segment A (between 12th Avenue and 32nd Avenue).
- (B) Street paving scope under Contract 2298I, Geary Boulevard Improvement Project – Surface Upgrades (procured by Public Works): The project team received a low bid and is preparing to award the contract.

Issues and Challenges:

As previously reported, the schedule variance reflects the delay associated with SFPW's roadway paving contract.

10002664 - Van Ness BRT Sewer Improvements

Approved Budget:	\$25.0M	Approved Completion Date:	12/31/24
Forecast Cost:	\$25.0M	Forecast Completion Date:	12/29/28
Cost Variance:	\$0.0M	Schedule Variance:	-1,459 days
Expenditures to Date	\$21.1M	Environmental Status:	Completed (EIR)
Current Phase:	Construction	Program	SSIP Phase 1

Progress and Status:

SFMTA is the project lead and contracting authority. Substantial Completion for the sewer work was issued by SFMTA in January 2021. On-going claim negotiations with subcontractors impact the issuance of the Final Completion for the overall project.

Issues and Challenges:

As previously reported, the schedule variance is due to extending the project completion for pending claim negotiations and closeout activities.

10002776 - Taraval Sewer Improvements

Approved Budget:	\$34.5M	Approved Completion Date:	07/31/25
Forecast Cost:	\$34.5M	Forecast Completion Date:	12/29/28
Cost Variance:	\$0.0M	Schedule Variance:	-1,247 days
Expenditures to Date	\$31.1M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Multi-Phases	Program	SSIP Phase 1

Progress and Status:

SFMTA is the project lead and construction contracts were issued by SFMTA or SFPW. This project includes multiple contracts:

- (A) SFMTA Contract No. 1306 SF Zoo to Sunset Blvd.: Project closeout continues.
- (B) SFMTA Contract No. 1308 Sunset Blvd to West Portal: Construction final completion has been delayed due to the review of closeout documents and cost-share discussion.
- (C) SFPW Contract 2652319th Ave. Sewer Cost Share (Ulloa): SF Public Works is finalizing the closeout documents.

Issues and Challenges:

As previously reported, the schedule variance is due to the delay in obtaining the final completion for construction contract (SFMTA contract No. 1308).

10037251 - Seacliff No. 1 PS & FM Upgrade

Approved Budget:	\$16.2M	Approved Completion Date:	03/31/27
Forecast Cost:	\$13.0M	Forecast Completion Date:	09/30/27
Cost Variance:	\$3.2M	Schedule Variance:	-183 days
Expenditures to Date	\$7.8M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

During this quarter, construction work continues, and underground infrastructure for electrical and communication was installed.

Issues and Challenges:

As previously reported, the budget variance reflects the savings from the awarded construction contract. The schedule variance is due to the extension of the construction duration.

10037246 - Seacliff No. 2 PS & FM Upgrade

Approved Budget:	\$22.1M	Approved Completion Date:	04/03/28
Forecast Cost:	\$24.1M	Forecast Completion Date:	04/06/29
Cost Variance:	-\$2.0M	Schedule Variance:	-368 days
Expenditures to Date	\$12.2M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

During this quarter, the Contractor installed and started the testing and commissioning of the interim pump system to bypass the station. In addition, the force main trench work was completed.

Issues and Challenges:

As previously reported, the budget variance reflects the low bid and awarded contract, which is higher than the Engineer's Estimate. Additional funding from closed projects was reallocated to fund the cost variance. The schedule variance is due to longer bid and award duration per loan requirements.

10037303 - Sunnydale PS Safety Improvements

Approved Budget:	\$16.7M	Approved Completion Date:	05/23/28
Forecast Cost:	\$16.7M	Forecast Completion Date:	07/01/30
Cost Variance:	\$0.0M	Schedule Variance:	-769 days
Expenditures to Date	\$4.5M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

During this quarter, the manifold piping was demolished in preparation of the replacement work.

Issues and Challenges:

As previously reported, the schedule variance reflects an extended advertisement period and increased construction duration to allow procurement of long-lead items.

10042116 - Sunnydale PS & FM Improvements - Phase A

Approved Budget:	\$6.7M	Approved Completion Date:	06/03/30
Forecast Cost:	\$10.7M	Forecast Completion Date:	12/31/30
Cost Variance:	-4.0M	Schedule Variance:	-211 days
Expenditures to Date	\$0.5M	Environmental Status:	Active (Cat Ex)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

During this quarter, the project team continues with the design effort to reach the 65% Design milestone.

Issues and Challenges:

As previously reported, the variance in the budget and schedule are based on the latest forecast in the Conceptual Engineering Report.

10038469 - Pump Station Security Upgrades (Cesar Chavez, GFS, CHS, MMS)

Approved Budget:	\$8.0M	Approved Completion Date:	09/13/27
Forecast Cost:	\$8.0M	Forecast Completion Date:	12/29/28
Cost Variance:	\$0.0M	Schedule Variance:	-473 days
Expenditures to Date	\$1.4M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

During this quarter, the bid protests were resolved, and the construction contract, WW-780, was awarded.

Issues and Challenges:

As previously reported, the schedule variance reflects additional time needed to onboard the specialty security design consultant, approval of the environmental clearance and finalization of the contract bid documents.

10041814 - Griffith DW FM Rehab

Approved Budget:	\$4.9M	Approved Completion Date:	10/03/28
Forecast Cost:	\$5.9M	Forecast Completion Date:	12/31/29
Cost Variance:	-\$1.0M	Schedule Variance:	-454 days
Expenditures to Date	\$0.5M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

During this quarter, the project team started preparing the bid documents for advertisement of construction contract WW-797.

Issues and Challenges:

As previously reported, the variance in the budget and schedule are based on the latest forecast in the Conceptual Engineering Report.

10037245 - Brannan Outfall 19 Discharge/Baffle Rehab & Sansome Outfall 15 Valve

Approved Budget:	\$11.9M	Approved Completion Date:	04/28/28
Forecast Cost:	\$14.4M	Forecast Completion Date:	04/28/28
Cost Variance:	-\$2.5M	Schedule Variance:	0 days
Expenditures to Date	\$3.6M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Multi-Phases	Program	Other SSIP

Progress and Status:

This project includes multiple construction contracts:

- (A) WW-793 Brannan Street Outfall Improvements: During this quarter, Contractor mobilized onsite and completed installation of the bulkhead.
- (B) WW-795 Sansome Street Outfall Improvements: During this quarter, Contractor mobilized onsite and completed installation of the bulkhead.

Issues and Challenges:

As previously reported, the budget variance is due to the separation of scope into two contracts and higher cost estimate for the associated electrical work at Sansome Street Outfall.

10038547 - CSD Structure Rehab & Upgrades - Part 1

Approved Budget:	\$39.7M	Approved Completion Date:	01/31/29
Forecast Cost:	\$24.0M	Forecast Completion Date:	06/28/30
Cost Variance:	\$15.7M	Schedule Variance:	-513 days
Expenditures to Date	\$4.2M	Environmental Status:	Active (Cat Ex)
Current Phase:	Multi-Phases	Program	Other SSIP

Progress and Status:

This project includes multiple construction contracts:

- (A/B) WW-757R Laguna, Howard and Mission Creek Combined Sewer Discharge Improvements: Contractor completed concrete spall and crack repair at Laguna and 6th St outfall. Contractor also completed carbon fiber reinforced plastic repair and installed rip rap at Laguna outfall.
- (C) WW-790 Evans Ave and Mariposa Outfalls Improvements: During this quarter, the project team started reviewing submittals prior to mobilization onsite.
- (D) Seacliff Outfall: During this quarter, the team continues to work on evaluating the different alternatives.

Issues and Challenges:

As previously reported, the variance in the budget and schedule are due to scope adjustments and actual bid received from construction contract A/B and contract C.

10026810 - Yosemite Green Infrastructure

Approved Budget:	\$27.5M	Approved Completion Date:	11/08/28
Forecast Cost:	\$32.1M	Forecast Completion Date:	03/22/29
Cost Variance:	-\$4.6M	Schedule Variance:	-134 days
Expenditures to Date	\$7.8M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Bid and Award	Program	SSIP Phase 1

Progress and Status:

During this quarter, SFPUC received seven bids and awarded the project construction contract (WW-668). Six of the seven bids were less than the engineer's estimate.

Issues and Challenges:

As previously reported, the variance in the schedule is due to the increased construction duration from additional environmental and schedule requirements from San Francisco Recreation & Parks. The variance in the budget reflects the latest forecast due to construction cost escalation and construction phase staffing requirements.

10034553 - Green Infrastructure Grant Program (GIGP)

Approved Budget:	\$61.3M	Approved Completion Date:	06/30/33
Forecast Cost:	\$61.3M	Forecast Completion Date:	06/30/33
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$13.8M	Environmental Status:	Not Applicable
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

SFPUC is required to submit quarterly reports summarizing all grant agreements from the prior quarter to the San Francisco Board of Supervisors, please refer to the website www.sfpuc.gov/gigrants for the latest update.

Issues and Challenges:

See www.sfpuc.gov/gigrants.

10042088 - Citywide Green Infrastructure Implementation (New)

Approved Budget:	\$100.4M	Approved Completion Date:	03/31/34
Forecast Cost:	\$191.8M	Forecast Completion Date:	12/31/41
Cost Variance:	-\$91.4M	Schedule Variance:	-2,832 days
Expenditures to Date	\$0.2M	Environmental Status:	Not Initiated (TBD)
Current Phase:	Planning	Program	Other SSIP

Progress and Status:

This project will be implemented with a series of sequential subprojects and contracts. As of this quarter, there are two identified projects:

- (A) Alemany and Cayuga Greening: The scope of work includes pedestrian safety and green infrastructure improvements at five locations. Work on Contract A conceptual engineering continued. A surveying team started survey work at four of the five project sites. Contract A is an interagency project with the San Francisco Municipal Transportation Agency in the Islais Creek Watershed.
- (B) Upper Yosemite Creek Daylighting – Post-Construction Pilot Project at Louis Sutter Playground: Subproject B has not started yet.

Issues and Challenges:

As previously reported, the project budget, schedule, and scope are revised to align with potential regulatory durations and requirements.

10039608 - Buchanan Street Mall

Approved Budget:	\$9.6M	Approved Completion Date:	12/28/26
Forecast Cost:	\$9.0M	Forecast Completion Date:	06/30/27
Cost Variance:	\$0.7M	Schedule Variance:	-184 days
Expenditures to Date	\$5.6M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

San Francisco Recreation & Parks is the contracting authority for this project with San Francisco Public Works support. Most of the sewer work was completed in prior quarters. Park construction work progressed following the completion of subsurface utility work in several of the park blocks. The green infrastructure work commenced with the installation of rain garden drainage structures. The contractor also started grading work to prepare for installation of pervious concrete paving. Scheduling PG&E support services has required more time than planned.

Issues and Challenges:

As previously reported, due to bid and award phase delays, the construction completion date has been extended. The forecasted budget is decreased to reflect the actual bid received.

10037195 - Regional School/Park: Giannini Middle School

Approved Budget:	\$11.8M	Approved Completion Date:	06/30/29
Forecast Cost:	\$13.3M	Forecast Completion Date:	06/30/29
Cost Variance:	-\$1.6M	Schedule Variance:	0 days
Expenditures to Date	\$0.9M	Environmental Status:	Not Initiated (Cat Ex)
Current Phase:	Design	Program	Other SSIP

Progress and Status:

In this quarter, work on the design phase continued. The consultant submitted and the project team reviewed the draft design criteria report. During the prior quarter, the project team learned that the 100% design documents must be approved by the Division of the State Architect before contract advertisement. The project team is evaluating the potential schedule impact from the permit requirement.

Issues and Challenges:

As previously reported, the budget variance reflects the latest estimate from the draft CER.

10034360 - Lower Alemany Area Stormwater Improvement Project

Approved Budget:	\$299.6M	Approved Completion Date:	11/01/28
Forecast Cost:	\$364.1M	Forecast Completion Date:	10/30/31
Cost Variance:	-\$64.5M	Schedule Variance:	-1,093 days
Expenditures to Date	\$25.3M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Bid and Award	Program	Other SSIP

Progress and Status:

Contract WW-756R was re-advertised this quarter and a pre-bid meeting was held.

Issues and Challenges:

The current forecasts in cost and schedule do not reflect potential impacts from the no bid situation. As previously reported, the schedule variance reflects the additional time needed to coordinate with external entities and additional environmental studies for California Environmental Quality Act (CEQA) approval. The variance in cost reflects the latest engineer's estimate and is based on the progression of complex design elements.

10026818 - Folsom Area Stormwater Improvement Project

Approved Budget:	\$38.4M	Approved Completion Date:	12/31/24
Forecast Cost:	\$39.9M	Forecast Completion Date:	09/30/26
Cost Variance:	-\$1.5M	Schedule Variance:	-638 days
Expenditures to Date	\$34.3M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Design	Program	SSIP Phase 1

Progress and Status:

The Folsom Area Stormwater Improvement are funded by projects 10026818 and 10038471. Project 10026818 covers the planning, design, environmental review, and right-of-way phases and project 10038471 covers the construction, construction management and closeout phases. Furthermore, this project includes multiple construction contracts, and the planning and environmental phases have been completed for all four contracts.

- (A) WW-719A Initial Upstream Pipe: Design for this contract was previously completed.
- (B) WW-719B Alameda Tunnel: During this quarter, the project team submitted 100% design documents to Caltrans for review and received comments.
- (C) WW-719C Harrison and Treat Sewer Box: this contract is in bid & award phase, see project 10038471 for updates.
- (D) WW-719D Large Upstream Pipe: During this quarter, the project is preparing the 100% design. The project team continues to pursue temporary easements for securing construction staging and permanent sewer easements, which are needed to implement contracts WW-719B and WW-719C.

Issues and Challenges:

As previously reported, the current forecasts in cost and schedule do not reflect potential impacts from the single bid received for contract WW-719C described above. The forecasted project schedule variance is driven by delays on the WW-719B design phase due to a longer Caltrans review process, and to perform additional studies to obtain National Environmental Policy Act (NEPA) clearance by Caltrans. The forecasted cost variances are driven by increased design costs on the WW-719B contract due to Caltrans comments, and the WW-719C contract due to unforeseen challenges requiring design adjustments.

10038471 - Folsom Area Stormwater Imp. Project Phase 2

Approved Budget:	\$391.2M	Approved Completion Date:	02/16/29
Forecast Cost:	\$402.5M	Forecast Completion Date:	12/06/30
Cost Variance:	-\$11.3M	Schedule Variance:	-658 days
Expenditures to Date	\$13.7M	Environmental Status:	Completed (Cat Ex)
Current Phase:	Multi-Phases	Program	Other SSIP

Progress and Status:

The project is being implemented through four contracts, and this project funds the bid & award, construction, construction management and closeout phases of these contracts. The planning, environmental, right-of-way, and design phases are funded under a separate project, 10026818 - Folsom Area Stormwater Improvement. The four contracts include:

- (A) WW-719A Initial Upstream Pipe: Construction has been completed, and the contract is nearing Final Completion.
- (B) WW-719B Alameda Tunnel Construction Contract: In design phase, see project 10026818 above.
- (C) WW-719C Harrison and Treat Sewer Box: In bid & award phase and is currently preparing to readvertise.
- (D) WW-719D Large Upstream Pipe: In design phase, see project 10026818 above.

Issues and Challenges:

As previously reported, the current forecasts in cost and schedule do not reflect potential impacts from the single bid received for contract WW-719C (as explained in Project 10026818). The forecasted project schedule variance is driven by delays in completing the WW-719B design and the longer duration of construction for the WW-719C contract from what was previously anticipated. The forecasted project cost variance is driven by the latest engineer's estimates for WW-719B and WW-719C along with additional anticipated costs for access mitigations during construction, such as off-street parking.

10039682 - Flood Resiliency Planning

Approved Budget:	\$9.6M	Approved Completion Date:	06/29/29
Forecast Cost:	\$9.6M	Forecast Completion Date:	06/28/30
Cost Variance:	\$0.0M	Schedule Variance:	-364 days
Expenditures to Date	\$2.5M	Environmental Status:	Not Applicable
Current Phase:	Planning	Program	Other SSIP

Progress and Status:

During the reporting period, the project team performed hydrologic and hydraulic modeling and geographic information systems work necessary to update the flood risk assessment. The project team developed presentations and memos to document the flood risk assessment process.

Issues and Challenges:

As previously reported, the forecasted schedule variance is needed to align the SFPUC's flood resilience planning efforts with the duration of the San Francisco Port's Waterfront Resilience Program.

10040621 - Floodwater Management Grant Assistance Program (Grant)

Approved Budget:	\$15.0M	Approved Completion Date:	12/27/34
Forecast Cost:	\$15.0M	Forecast Completion Date:	12/27/34
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$1.3M	Environmental Status:	Not Applicable
Current Phase:	Construction	Program	Other SSIP

Progress and Status:

During the reporting period, the Floodwater Grant Program received thirteen (13) grant interest forms, conducted nine (9) site visits, received three (3) grant applications and awarded one (1) grant totaling \$17,525. Two locations closed out grant contracts during the reporting period.

Issues and Challenges:

None at this time.

10037194 - Balboa High School Regional Runoff Reduction Project

Approved Budget:	\$15.4M	Approved Completion Date:	06/30/31
Forecast Cost:	\$15.4M	Forecast Completion Date:	08/27/31
Cost Variance:	\$0.0M	Schedule Variance:	-58 days
Expenditures to Date:	\$0.0M	Environmental Status:	Not Initiated (TBD)
Current Phase:	Planning	Program:	Other SSIP

Progress and Status:

The project will be implemented in two phases under different construction contracts: Phase 1 includes the work on the Denman Middle School campus and Phase 2 includes the work on the Balboa High School campus. During this quarter, Phase 1 planning work started with the development of a project implementation strategy to use San Francisco Unified School District design and construction contracts. Phase 2 Balboa High School campus planning and design has not started yet.

Issues and Challenges:

None at this time.

10033820 - Southeast Outfall Condition Assessment and Rehabilitation

Approved Budget:	\$9.2M	Approved Completion Date:	03/31/27
Forecast Cost:	\$21.8M	Forecast Completion Date:	05/31/28
Cost Variance:	-\$12.6M	Schedule Variance:	-427 days
Expenditures to Date	\$5.0M	Environmental Status:	Active (Various)
Current Phase:	Design	Program	F&I

Progress and Status:

The project includes multiple contracts:

- (A) Settlement Monitoring and 54-inch Pipe Repair (JOC-95-07): completed.
- (B) Diffuser Repair (WW-802): 95% design completed. Received comments from regulatory agencies regarding in-water environmental permit applications.
- (C) Islais Creek 48-inch Bypass Life Extension (WW-801): 95% design completed and under review. Staff continued coordination with the Port of San Francisco and San Francisco Public Works regarding construction staging for both contracts (B) and (C).

Issues and Challenges:

As previously reported, the variances in budget and schedule are due to the higher construction cost estimates to repair the underwater diffuser, and additional scope of work from Islais Creek 48-inch bypass life extension.

10015546 - New Treasure Island Wastewater Treatment Plant

Approved Budget:	\$222.2M	Approved Completion Date:	08/26/26
Forecast Cost:	\$222.2M	Forecast Completion Date:	12/31/28
Cost Variance:	\$0.0M	Schedule Variance:	-858 days
Expenditures to Date	\$190.7M	Environmental Status:	Completed (EIR)
Current Phase:	Construction	Program	F&I

Progress and Status:

The project is moving into final commissioning with most major structures complete. Occupied buildings are nearly finished, and water is being introduced for plumbing testing—a key milestone. Process areas (influent pumping structure, headworks, UV, recycled water, solids, odor control) are progressing through commissioning and software testing, with no issues blocking startup. Site work continues, including wetlands flooding approval, roadway paving, and upcoming landscaping. The final tie-in to the existing plant is scheduled for completion.

Issues and Challenges:

As previously reported, the variance in schedule is due to a delay in limited availability of potable water and the pending tie-in with the existing treatment plant.

10015554 - Ocean Beach Climate Change Adaptation Project

Approved Budget:	\$209.6M	Approved Completion Date:	07/20/33
Forecast Cost:	\$252.9M	Forecast Completion Date:	02/19/37
Cost Variance:	-\$43.3M	Schedule Variance:	-1,310 days
Expenditures to Date	\$35.6M	Environmental Status:	Active (Various)
Current Phase:	Multi-Phases	Program	F&I

Progress and Status:

This project includes multiple construction contracts:

- (A) Army Corps of Engineers: Construction completed 2021-2022. Closeout activities have been completed.
- (B) The short-term improvements project represents multi-year, as-needed protection of the bluff that overlays the Lake Merced Tunnel and is helping to deliver pre-project dune habitat mitigation. Two acres of dune habitat mitigation are complete.
- (C/D/E) Long Term Improvements: The California Coastal Commission unanimously approved the permit application at the November 2024 hearing. The permit required design changes are in progress and are expected to delay the start of construction and increase the project budget. In addition to this delay, the construction schedule is forecasted to extend an additional 24-months to allow for coordination of the Westside Force Main (FM) Reliability project to ensure construction of the two projects happen at the same time. Due to these delays, the project team is currently working to advance access and circulation improvements to SF Zoo Parking Lot and associated intersection at Sloat Boulevard.

Issues and Challenges:

As previously reported, the variance in the budget and schedule is due to the on-going and extensive coordination efforts among multiple stakeholders, technical complexities, additional analysis and design efforts needed to address challenging negotiations between affected stakeholders, and significant delays associated with mandated project design changes from the California Coastal Commission that require extensive re-design and a California Environmental Quality Act (CEQA) amendment. In addition, the construction schedule is extended in coordination with the Westside FM Reliability Project to ensure construction of the two projects occurs at the same time.

15722-SD - R&R Collection Systems - Small Diameter

Approved Budget:	\$1,230.0M	Approved Completion Date:	03/31/27
Forecast Cost:	\$1,230.0M	Forecast Completion Date:	03/31/27
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$1,020.7M	Environmental Status:	Completed
Current Phase:	Multi-Phases	Program	R&R

Progress and Status:

The summary below shows the total number of R&R Collection Systems-Small Diameter projects in each phase of the program as of this quarter, and the three-hundred sixty-nine (369) projects are distributed as follows:

Planning: 1
Design: 38
Bid & Award: 12
Construction: 24
Closeout: 31
Completed: 263

During this quarter, seven new projects were initiated, three projects were advertised, five projects were awarded/awaiting Notice to Proceed (NTP), three projects received NTP, and three projects completed construction.

Issues and Challenges:

None at this time.

15722-LD - R&R Collection Systems - Large Diameter

Approved Budget:	\$98.4M	Approved Completion Date:	03/31/27
Forecast Cost:	\$98.4M	Forecast Completion Date:	03/31/27
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$29.8M	Environmental Status:	Completed
Current Phase:	Multi-Phases	Program	R&R

Progress and Status:

The summary below shows the total number of R&R Collection Systems-Large Diameter projects in each phase of the program as of this quarter, and the twenty-five (25) projects are distributed as follows:

Planning: 0
Design: 15
Bid & Award: 2
Construction: 5
Closeout: 1
Completed: 2

During this quarter, two new projects initiated, two projects were advertised, three projects started construction and one project completed construction.

Issues and Challenges:

None at this time.

15724 - R&R Treatment Facilities

Approved Budget:	\$270.6M	Approved Completion Date:	03/31/27
Forecast Cost:	\$270.6M	Forecast Completion Date:	03/31/27
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$218.3M	Environmental Status:	Active
Current Phase:	Multi-Phases	Program	R&R

Progress and Status:

The summary below shows the total number of R&R Treatment Facilities projects in each phase of the program as of this quarter, and the one hundred twenty-one (121) projects are distributed as below:

Planning: 4
Design: 2
Bid & Award: 2
Construction: 12
Closeout: 35
Completed: 66

Equipment Purchase FY26 to Date: Thirty-seven (37) equipment purchases completed totaling \$3,427,145.50.

Issues and Challenges:

None at this time.

15722-TS - T/S Box Tier 2 (Field) Condition Assessment

Approved Budget:	\$7.3M	Approved Completion Date:	03/31/27
Forecast Cost:	\$7.3M	Forecast Completion Date:	03/31/27
Cost Variance:	\$0.0M	Schedule Variance:	0 days
Expenditures to Date	\$0.3M	Environmental Status:	Not Initiated
Current Phase:	Planning	Program	R&R

Progress and Status:

Condition assessments will be performed under the planning phase in this project. The summary below shows the total number of T/S Box Tier 2 (Field) Condition Assessment projects in each phase of the program as of this quarter.

Planning: 1

Issues and Challenges:

None at this time.

Appendices Wastewater Enterprise Capital Improvement Program Quarterly Report

Quarter 4, Fiscal Year 2025-2026, April 2026 - June 2026

A. PROJECT DESCRIPTION

B. APPROVED PROJECT BUDGET AND SCHEDULE

C. LIST OF ACRONYMS

A. Project Description

10015796 SEP Biosolids Digester Facilities Project

This project will provide a new digester and solids handling facility, replacing the existing aged and failing facility at the Southeast Plant (SEP). The new facility will include updated/modern treatment processes, producing Class A (EPA 40 CFR 503) biosolids. Biosolids treatment processes will include solids thickening, screening, pre-Thermal Hydrolysis Pretreatment (THP) dewatering, THP, digestion, post-THP dewatering, gas handling, biogas utilization, odor control, and associated operations and maintenance facilities. The facility will promote the beneficial reuse of resources for sustainability and other environmental benefits.

10015807 SEP New Headworks (Grit) Replacement

The new 250 MGD headworks consists of major components / facilities as follows: New Influent Junction Structure and Influent Monitoring; New Primary Influent Distribution Structure; New Bar Screens, Washer-Compactors and Screenings Handling Facility; New Grit Basins, Grit Washers and Grit Handling Facility; A new Odor Control Facility, consisting of a two-stage system with bio scrubbers followed by carbon adsorption; Two new primary substations; Electrical, Instrumentation and Control Rooms/Building; Demolition of both existing Headworks Facilities (SEP-011 and SEP-012); Rehabilitation of the existing Southeast Lift Station; Upgrades to the Bruce Flynn Pump Station.

10015809 WWE Facility-Wide Distributed Control System (DCS) Upgrade

The purpose of this project is to replace WWE's aging Distributed Control System (DCS) with a new, standardized, reliable, secure, and redundant control system. This project helps meet the WWE's Treatment Facilities Operational Reliability Level of Service Goal of: "all facilities should be able to operate to treat, store, or convey wastewater without interruption in accordance with good management practices and state and federal regulatory compliance". This project will enable the SFPUC to operate the City's sewer system more efficiently by utilizing high tech control system interfaces and eliminating product obsolescence challenges. The project will also provide control systems design and implementation for two major SSIP projects: (1) the Biosolids Digester Facilities Project ("BDFP"); and (2) the SEP New Headworks [Grit] Facility Project ("Headworks"). The Project consists of performing: 1. Programming (Planning & Predesign) and DCS Design on all WWE facilities such as SEP, NPF, OSP, and various ancillary pump stations. 2. Manufacturing, Construction (installation, field test, and commissioning), and the start of Support and Upgrade phase at SEP, CHS, BFS, & BPS. However, the manufacturing and construction for all other WWE facilities (i.e., OSP, NPF, and other pump stations) are scoped under other SSIP DCS projects. The overall rollout and completion of the DCS Support & Upgrade period is also scoped under a separate SSIP DCS project. (Note, that there are currently four SSIP DCS projects delivered through one Progressive Design-Build Contract No DB-126).

10015810 SEP Seismic Reliability and Condition Assessment Improvements

This project has been completed. As part of the condition assessment effort, numerous seismic, conditional, and operational issues associated with the existing facilities will require remedial attention before other program projects are completed. This project provided immediate improvements to various existing facilities at Southeast Plant (SEP), which were identified as part of the condition assessment effort and were not included as part of another near-term Sewer System Improvement Program (SSIP) Phase 1 project. This project included items for rehabilitation, such as concrete spalling repair and seismic retrofit of priority process buildings. Seismic retrofit and structural repairs to the Sedimentation Building and channel structures (SEP 530 Contact Channel, SEP 540 Effluent Control Structure, 6' reinforced concrete pipe from SEP 540 to Booster Pump Station, Conduits C/D/E, SEP 525 Box Channel, and 9' reinforced concrete pipe to Junction Structure #5) were completed.

10002284 SEP Power Feed and Primary Switchgear Upgrades

The purpose of the SEP Power Feed and Primary Switchgear Upgrades project is to reliably provide continued operation, maintenance, and regulatory compliance, and to maintain assets in a state of good repair, which will help meet the level of service (LOS) goal of operational reliability without interruption in accordance with good management practices and state and federal regulatory compliance. The objective of the project is to increase reliability, redundancy, and capacity of the electrical system at SEP by upgrading the existing power feed by PG&E and obtaining a new power feed by SFPUC's Power Enterprise Bay Corridor and Transmission Distribution (BCTD) project. The scope of this project is to install a new primary switching station and related electrical infrastructures at SEP including the following major components: 1. Construction of a two-story building (SEP Building 032) supported on piles and over the existing primary power switch station to house the new primary switchgear. 2. Installation of new primary switchgear sized to provide adequate power for all existing electrical loads and future demands and peak loads. 3. Installation of two utility power metering cabinets outside Building 032 for connection to the new SFPUC power feed and existing PG&E power feed. 4. Replacement of existing substation transformers at various locations. 5. Installation of new underground electrical infrastructures, and new power monitoring and control system for additional reliability and efficiency. 6. Installation of a utility power metering cabinet and electrical gear for incoming redundant power feed at Bruce Flynn Pump Station. 7. Retrofit of existing electrical equipment for incoming redundant power feed at Islais Creek Booster Station. This project's budget does not include construction phase for upgrading the existing power feed from PG&E Hunter's Point switchyard to accommodate the projected SSIP power requirements.

10037353 SEP 550 Booster PS Condition Inspection & Interim

The purpose of this project is to perform mechanical, structural, and electrical rehabilitation to help meet the Operational Reliability Level of Service Goals (State of Good Repair) by providing improvements at the Islais Creek Booster Station. The scope of work consists of: (1) Concrete Repair and rehabilitation within the Influent Channel and Wet Wells 1-4; (2) Replace 4 existing variable frequency drives; (3) Seal water backup system installation; (4) Bubbler

compressor system installation; (5) Electrical upgrades: (a) Installation of (4) relays and (4) 1200A breakers related to the variable frequency drives; (b) Installation of power quality meter monitoring device at the switchgear; (c) Installation of 3000KVA transformer and reliable backup source; (6) HVAC Equipment Replacement; (7) Four Booster Pumps Refurbishment: (a) Vibration testing for comparative results with existing vibrations; (b) Testing and replacement of pump monitoring/protective devices; (c) Recoating; (d) New line bearings & seals (e) Recondition or replace shaft; (f) Impeller repair or replacement and rebalancing; (8) Discharge Pipe Manifold Repairs; (9) Replacement of 4 existing dewatering pumps and 1 Water Heater (10) Electrical/I&C: (a) Power and control cabling to support new pump installations; (b) Investigate installation of flowmeter(s) at the pump discharge; (11) Miscellaneous mechanical and electrical work.

10038373 SEP Booster PS & BFS Security Enhancements

The project involves upgrading card readers and door contacts at all perimeter doors and ensuring proper operation; Replacing and furnishing gates and gate operators including structural support, electrical power and controls; Adding protective cages around outdoor chemical and electrical equipment as needed; Replacing/repairing the existing perimeter fence and fence support as needed; Furnishing, installing, and configuring servers for video recording, management and analytics; Configuring security fiber optic connectivity and adding video camera units and local recording; Establishing prune landscaping, adding new security signage, and upgrading to dusk- activated LED lighting; Providing interior intrusion detection of critical assets; Adding interior presence sensing connected to an intrusion detection panel and alarming to security; Upgrading UPS backup power to serve security components; Adding new security signage with "No Trespassing", applicable penal code and emergency contact information; and, Installing new paging system; Installing new fiber optics communication backbone.

10037330 Primary Treatment (SEP 040/041) H&S Improvements

The project scope of work consists of the following to address Operational Reliability and Health, Safety & Security LOS goals: 1. Improvements to the existing ventilation system. 2. Repair of concrete cracks/deficiencies and rebar exposure. 3. Replacement of two (2) deteriorating dilution fans. 4. Interior/exterior lighting upgrades. 5. Replacement of selective guardrails that are corroded. 6. Consolidation of electrical motor control center equipment. 7. Switchboard replacement. 8. Installation of induction mixers. 9. Miscellaneous piping relocation. 10. Removal of abandoned assets. 11. Miscellaneous instrumentation and control improvements.

10037331 Maintenance Building (SEP 940) Interim Improvement

The project scope of work consists of: 1. First floor renovations to accommodate offices and restrooms, as well as addition of wellness center. 2. Second floor renovations to accommodate offices, conference rooms and lactation room. 3. New built-up roof system, skylights and fall protection at roof ladder, roof hatch, skylights and roof edges. 4. Modernize freight elevator to passenger elevator. 5. Install all new signage. 6. Upgrade existing exterior gate. 7. Carbon-fiber-reinforced polymers (CFRP) wrapping around select window and door

openings. 8. Mechanical Upgrades (HVAC/Plumbing/Fire Protection). 9. Provide all new 480V and 208V panels and transformers to accommodate the renovated areas. 10. Meet California Energy Code Title 24 Standards.

10039505 New Ops, Engineering and Maintenance Buildings

New Operations, Engineering and Maintenance Buildings (SEP 603 and SEP 914) The project will replace SEP 850 and the adjacent parking lot at Jerrold and Phelps, an area just under one acre, with two new buildings, SEP 603 and SEP 914. Building SEP 603 is a single story, 9,800 square foot, Mechanical Maintenance building for crews 402, 403, and 404. Building SEP 914 is a two-story, 28,250 square foot building, consisting of shops for Painters, Carpenters and Plumber on the ground floor, shower and locker facilities on the second floor, and the engineering division on the third floor. The scope includes demolition of SEP 850, trailers and parking lot, and relocation of utilities from SEP 850 that serve SEP 930 and SEP 940. Removal of SEP 850 requires relocation of the building occupants and its facilities to an interim location. Interim office space and shower facilities are required to support the larger work of developing the Campus.

10039310 Secondary Clarifiers (SEP230) Rehabilitation

The purpose of the Secondary Clarifiers Rehabilitation project is to address rehabilitation works for the secondary clarifiers at SEP, which will help meet the Operational Reliability (State of Good Repair) Level of Service (LOS) goal. The scope of work for the project at SEP 230 for the remaining eight clarifiers include performing inspections of confined spaces considering operational constraints; rehabilitating concrete, repairing and coating, including patching and coating for basin areas; replacing collector mechanisms, sludge collectors, and drives; Inspecting mixed liquor dewatering gates and replacing as needed; Replace the air low pressure piping head in mixed liquor channel; Replacing area lighting with watertight fixtures (LED lighting has corroded) and buried electrical wiring/conduit; Coordinating with plant-wide door contract and security contract on updates associated with SEP 230; Increasing pedestrian safety adjoining vehicular access areas (includes repaving, regrading, and striping).

10039811 SEP Condition Improvement Projects - Part 1

The purpose of the SEP Condition Improvement Projects – Part 1 is to replace sodium bisulfite tanks (SEP 515) and relocate new system in the vicinity of the effluent disinfection location (SEP 521/522), which will help to meet the following Level of Service: 1. Full compliance with state and federal regulatory requirements applicable to the treatment and disposal of sewage and stormwater. 2. Critical functions are built with redundant infrastructure, and 3. Dry-weather primary treatment with disinfection must be online within 72 hours of a major earthquake. The scope of work involves the following: 1. 3 x 15,000 gallons storage tanks. 2. Chemical injection systems. 3. Chemical Fill station. 4. Utility relocations. 5. Foundation consisting of torque-down piles. 6. Electrical, controls, and mechanical piping to support the reliable operation of disinfection needs. 7. Demolition of SEP 515 tank farm and day tank and all ancillary system associated with the existing system. In the FY24-33 CIP,

only sufficient funds were requested to begin planning and design. The request in FY25-34 CIP is to request funds for the construction phase.

10029736 Westside Pump Station Reliability Improvements

The project includes construction of a new electrical building and associated electrical gear, new wet-weather variable frequency drive pump controllers. The existing pump station facility improvements consists of replacement of existing bar screens, and addition of screening washing and compaction systems, a wet-well chamber interconnecting channel, site landscape, security and site civil improvements to the existing site and installation of a redundant discharge force main. Other improvements include a new power feeder and replacing existing odor control units with dilution ventilation fans and ducting at the facility.

10029737 OSP Digester Gas Utilization Upgrade

In this project, the gas storage vessel and digester gas conditioning equipment will be replaced. The existing cogeneration Internal- Combustion units (IC engines) and controls will also be replaced. Other improvements include providing an ancillary exhaust gas conditioning and heat exchanger systems to comply with regulatory air board requirements. Improved reliability and redundancy of hot water and electrical energy production systems, as well as ventilation upgrades will maximize process efficiency within the energy recovery building. The electrical gear at Sub-Station No. 5 will be replaced to provide parallel electrical gear and power system reliability.

10037733 Solids Thickening (OSP 011) Process Upgrade

Depending on the status of the R&R project (CWWRNRTFA8) to replace the GBT with RDT, an alternatives evaluation should be performed to confirm the selected thickening technology. As a basis, this project assumes replacement of the two remaining GBTs and installation of two new RDTs that can thicken a combination of primary sludge, waste activated sludge, and secondary scum. The scope of the project also includes the replacement of corroded pipe, room fixtures, demolition of the existing units and ventilation improvements, such as: Demolishing the two existing GBTs; Installing two new RDTs and associated controls; Replacing the three existing wash water booster pumps, piping, and appurtenances; Installing hot water lines, redundant primary scum skimmer, ventilation system, two fixed hydrogen sulfide sensors in the Gravity Belt Thickener Room, new ultrasonic pulsar level sensor in the TPAS tank and improving the mixing system in the tank; Redesign the drains on existing and new drum screens; Replace the three thickened sludge pumps, corroded pipes, window frames, doors, floor gates, and tiles; Upgrade electrical components and DCS control of the new system; Address residual thickening area odor issues that were not addressed by the OSP Ventilation (HVAC) Upgrades Project.

10037734 OSP Plant-wide Ventilation (HVAC) Upgrades

A wide range of HVAC-related improvements were identified as part of the OSP Condition Assessment Repairs Project. It was determined that a plant-wide air handling performance evaluation be conducted to determine if the ventilation systems are meeting requirements and

to better identify needed HVAC improvements. OSP 011: (1) Replace inadequate duct supports in OSP 011 hallway areas; (2) Duct supports within exhaust fan room at OS70EF1-1 thru -3 and OS70EF1-5 and -6 needs to be refastened/replaced; (3) Coordination of HVAC evaluation, design and construction under the OSP Solids Thickening Process Upgrades project. OSP 530: (1) Assess ventilation issues if keeping the temporary chemical station from the Recycle Water Project. OSP 620: (1) Replace all HVAC equipment. Based on results of the plant-wide air handling performance evaluation, make provisions for increasing air ventilation rates in order to declassify area from Class 1 Division 1 to Class 1 Division 2; (2) Replace FRP ducts in digester basement serving fans 70EF19-1, 2; (3) Replace HVAC equipment at OSP 042, OSP 230, and OSP 930.

10036398 OSP Condition Improvement Projects - Part 2

A condition assessment of the Oceanside Water Pollution Control Plant (OSP) was completed in 2013 (OSP 2013 Condition Assessment Report). This evaluation included visual inspection of equipment systems and structures and review of existing seismic evaluations. The results included recommendations for seismic, structural, and equipment improvements. The condition assessment findings and recommendations were reviewed, and input from staff was incorporated into the report. The OSP 2013 CAR also provided prioritization and recommended time frames for improvements based on remaining asset life and risk evaluation. Risks were analyzed based on condition ratings developed during inspections and operational criticality ratings previously developed by OEM staff. The NAR was completed in August 2015 and tabulated the facility equipment deficiencies and seismic improvement needs. The AAR was completed in February 2017 and included an evaluation of viable alternatives to group repair/replacement work for certain assets at OSP (identified for the 0-5-year time frame), into various contract packages. The CER, completed in October 2018, prioritized improvements for the implementation phase and concluded the planning phase as part of SSIP Phase 1. The scoped improvements and priority of this project are detailed in the CER. The improvements identified, include (1) Health and Safety of personnel and visitors; (2) Priority based on the timing of equipment repairs needed; (3) Risk ranking & seismic performance criteria of primary treatment facilities; (4) Project efficiencies, such as grouping seismic upgrades and structural condition repairs together; (5) Reducing impacts to operations by grouping all improvements to a process building. Condition Assessment Repairs will be implemented in stages, with the first stage addressing the most critical needs. The project will target project management, detail design, environmental, bid/award, construction, and construction management of critical needs and high-priority projects. These include improvements to health and safety, the primary clarifier, selective building seismic retrofits, gravity belt thickener, equipment replacement, and associated process improvements.

10037735 Admin Bldg (OSP 930) Health & Safety Improvements

A wide range of health and safety-related improvements were identified as part of the Oceanside Plant (OSP) Condition Assessment Repairs Project. Specific work includes repairing concrete deficiencies, water infiltration, and drainage issues within OSP 930 per conceptual engineering report (CER) "Concrete Surface Condition Assessment and Repair

TM"; Replace the three (3) OSP 930 building sump pumps, nine (9) Laboratory Fume Hoods, and laboratory and freight elevators.

10037777 OSP & WSPS Security Enhancements

The project involves upgrading card readers and door contacts at all perimeter doors and ensuring proper operation; Replacing and furnishing gate and gate operator including structural support, electrical power, and controls; Adding protective cages around outdoor chemical and electrical equipment, as needed; Replacing/repairing the existing perimeter fence and fence support as needed; Furnishing, installing and configuring servers for video recording, management, and analytics; Configuring security fiber optic connectivity and adding video camera units and local recording; Establishing prune landscaping, adding new security signage, and upgrading lighting to dusk-activated LED lighting; Providing interior intrusion detection of critical assets; Adding interior presence sensing connected to an intrusion detection panel and alarming security; Upgrading UPS backup power to serve security components; and, Adding new security signage with "No Trespassing", applicable penal code and emergency contact information.

10039193 Gaseous Oxygen System (OSP 011) Upgrades

The appropriate technology and alternative would be explored in the project's planning phase, but as a basis for this project, replacement of the PSA units with vacuum pressure swing adsorption (VPSA) units is assumed. VPSA reduces the desorption pressure compared to PSA, which allows for a higher percentage of available oxygen to be recovered and less air to be processed. This project includes the replacement/upgrade of the existing gaseous oxygen (GOX) system at OSP as detailed below: 1. Demolish/remove the three (3) existing 10 ton per day PSAs. 2. Install two (2) new 10 ton per day VPSAs. 3. Replace the GOX line connecting the VPSAs to the OSP 200 Aeration Basins.

10026822 North Shore Wet Weather Pump Station Improvements and Disinfection

The purpose of this project is to fulfill the LOS of operational reliability. This project consists of the following improvements: 1. Replacement of four dry weather pumps. 2. Replacement and extension of discharge piping, select portions of 36" headers, and associated mechanical equipment including but not limited to knife gate valves and check valves. 3. Upgrade of the existing dewatering system. 4. Ferrous chloride systems upgrades including redundant tank installation, metering pump replacement, chemical piping replacement, emergency eyewashes/showers and water heater. 5. Selective mechanical/electrical/control system improvements at the facility.

10037325 Admin Building (NPF 930) Evaluation & Interim H&S Improvements

The purpose of this project is to address WWE's Health, Safety & Security LOS goals. The project scope of work consists of the following: NPF 930 Improvements: 1. Repair deteriorated concrete spalling, concrete cracking, exposed reinforcement, and/or delamination of steel reinforcement to the path of travel areas. 2. Repair and/or modify non-conforming guardrail posts' anchorage at building basement (below grade) levels 3. Install one (1) new mechanical

dewatering pump unit 4. 5. 4. Replace three (3) Supply Fans 5. Replace two (2) Exhaust Fans 6. Provide "EXIT" lights/signs with minimum 90-minute battery backup 7. Provide emergency path of egress lighting for minimum 1 foot candle level 8. Replace emergency path of egress light with minimum 90-minute battery backup 9. Replace damaged/broken glass blocks and glazing in-kind at windows 10. Conduct Water testing to determine the source of water intrusion 11. Upgrade electrical service Prefabricated Modular Trailers: 1. Provide WWE personnel lab/office space to accommodate (a) "Dry" modular trailers for WWE Managers, Supervisors, and Operations Staff offices; (b) "Wet" modular trailers for lab technicians with supporting workstations and ancillary provisions (fume hoods, deionized water system, eye wash/hazmat shower, locker rooms, server room, etc.).

10037904 NPF & NSS Security Enhancements

The project involves upgrading card readers and door contacts at all perimeter doors and ensuring proper operation; Replacing and furnishing gate and gate operator including structural support, electrical power, and controls; Adding protective cages around outdoor equipment as needed; Repairing/replacing perimeter fence and fence support as needed; Furnishing, installing, and configuring servers for video recording, management and analytics; Configuring security fiber optic connectivity and adding video camera units and local recording; Establishing prune landscaping, adding new security signage, and upgrading to dusk- activated LED lighting; Providing interior intrusion detection of critical assets; Adding interior presence sensing connected to intrusion detection panel and alarming to security; Upgrading UPS backup power to serve security components; and, Adding new security signage with "No Trespassing", applicable penal code and emergency contact information.

10038353 NPF DCS Upgrades (Construction)

The purpose of this project is to replace the aging control system infrastructure at NPF and NSS, as the existing DCS equipment are obsolete. This project helps meet the WWE's Treatment Facilities Operational Reliability Level of Service Goal of: "all facilities should be able to operate to treat, store, or convey wastewater without interruption in accordance with good management practices and state and federal regulatory compliance". The needed upgrades include replacement of all existing DCS hardware and software as specified by the Facility-Wide DCS Upgrades progressive design-build contract, replacement of aging control panels, annunciator panels, disconnect switches, bare grounding wiring and control devices. The design of the new DCS in the Northpoint facilities is scoped to be performed under SSIP project "10015809 – SEP Facility-Wide Distributed Control System (DCS) Upgrade" while the "Construction" portion of the work is scoped under this project. DCS construction consists of coordination with other ongoing projects on-site, manufacturing DCS hardware and software, delivery and installation on site, field testing, commissioning, and initiation of the support and upgrade period. At a minimum, the DCS supplier / design builder is expected to provide the following equipment at Northpoint: 1. Process control module panels. 2. Remote I/O (RIO) panels. 3. Server equipment and racks. 4. Main fiber distribution rack panels. 5. Marshalling panels or "B" panels. 6. Fiber optic patch panels and terminal panels. 7. Network switches and routers.

10039251 Sedimentation (NPF 040/041) Tanks Condition Improvement

The purpose of this project is to address WWE's operational reliability and Health, Safety & Security LOS goals. The scope of work consists of the following: NPF 040 & NPF 041 Sedimentation Buildings No. 1 & 2 Improvements: (1) Concrete structural rehabilitation (patch and coat basin concrete and perform all crack and concrete repairs); (2) Evaluate Heating Ventilation and Air Conditioning system and ventilation; (3) Install a new heating system for locker rooms; (4) Replace building hot water system; (5) Roof replacement; (6) Address National Fire Protection Association 820 area classification issues (locker room, control room & basement may have classification issues as they are not physically separate from the process tank area); (7) Rehabilitate locker rooms. Evaluate moving personnel-occupied areas which are not physically separated from process areas; (8) Repair/replace deteriorated piping, equipment supports and other corroded metallic components; (9) Some stairs and guardrails are not fully compliant; (10) Provide a no flow cut-off for sludge pumps to protect pumps from running dry; (11) Replace building sump pumps as needed in NPF 041; (12) Replace two air compressors in NPF 041; (13) Upgrade NPF 041 server room to better isolate process area and prevent foul air and water from entering; (14) Remove all abandoned in place equipment. NPF 043 Grease & Scum Removal Building Improvements: (1) Concrete structural rehabilitation (repair all deteriorated concrete surfaces including cracks and spalling, patch and coat concrete areas exposed to wet conditions); (2) Building repairs, including replacement of roof; (3) Repair general piping and corroded metal items that show signs of deterioration. NPF 060 Sludge Control Building (NPF 061, NPF 062, NPF 063, NPF 064) Improvements: (1) Concrete structural rehabilitation; (2) Building repairs, including replacement of roof; (3) Repair general piping and corroded metal items that show signs of deterioration; (4) HVAC/ventilation upgrades; (5) Replace one dewatering pump; (6) Replace sump pumps as needed; (7) Evaluate elevator; (8) Replace MCC; (9) Remove abandoned in-place equipment.

10034718 Large Diameter Sewer Projects and Channel FM Intertie

The purpose of project is to rehabilitate/replace approximately 35,000-feet of large-diameter sewers that are over 100 years old in various parts of San Francisco, which helps meet the Wastewater Enterprise Levels of Services (LOS) goals. In addition, a 66-inch diameter pressurized pipe (or the Channel Force Main) was identified to be in need of rehabilitation or replacement; however, since the force main is almost always in service to meet regulations, a major sewer bypass is needed in order to perform a thorough inspection. This project will construct a bypass, or the Channel Force Main Tee, that will connect the existing force main to a nearby sewer transport/storage structure. When complete, approximately one-third of the existing force main can be taken out of service for rehabilitation and/or repair during the dry-weather seasons. In addition, this bypass will provide long-term operational flexibility to Wastewater Enterprise since flows from the Channel Force Main can be diverted away from the headworks area of Southeast Treatment Plant during dry weather seasons. When complete, this project will fund multiple construction contracts to rehabilitate and/or repair approximately 35,000-feet of large diameter sewers, and a bypass will be installed that would

allow future condition assessment and/or rehabilitation of one-third of the Channel Force Main.

10002652 Kansas and Marin Streets Sewer Improvements

The Kansas and Marin Streets Sewer Improvements Project will increase the wet weather flow conveyance for a minor drainage basin within the Islais Creek Watershed Basin to meet the Level of Service (LOS) storm. The original project consisted of a 900 linear foot, 8-foot inside diameter tunnel connecting two existing sewer boxes through the Public Works Corporation Yard at Cesar Chavez Avenue. The original project also included relocation assistance associated with temporary displacements of existing lease-holders who occupy SFPUC's property above the C-Box Transport Storage Structure (Lot 031), as this space was needed for construction staging. Due to various challenges with implementing the original scope of work, the project team re-evaluated various potential alternatives. Based on the re-evaluation and additional hydraulic modeling work, a more cost-effective solution that involves a weir modification to the existing system was determined to provide significant improvements to the conveyance capacity. The scope of this project is now the implementation of this weir modification. After this project is completed, staff will observe the system performance and determine if additional work is needed and if a separate project would be recommended for initiation in the future.

10041084 Geary BRT Sewer Improvements - Phase 2 Construction

The purpose of this project is to replace and rehabilitate aging combined sewer system facilities and to help meet the Wastewater Enterprise Level of Service goals of controlling and managing flows from a storm of a three-hour duration that delivers 1.3 inches of rain. The project scope includes the installation of 4,800 linear feet of sewer pipe mains, installing 2,300 linear feet of Cure-In-Place Liner within existing sewer mains, and the replacement of sewer laterals within the corridor. Funding for this project is separated into two-line items in the program. Costs for Bid & Award, construction, construction management, and closeout phases are funded under this project. Planning, environmental and design phases are part of a separate SSIP project (10033106), which is completed.

10033106 Geary BRT Sewer Improvements - Phase 2 Pre-Construction

This project has been completed. The purpose of this project is to replace and rehabilitate aging combined sewer system facilities and help meet the Wastewater Enterprise Level of Service goals of controlling and managing flows from a storm of a three-hour duration that delivers 1.3 inches of rain. The project scope includes the installation of 4,800 linear feet of sewer pipe mains, installing 2,300 linear feet of Cure-In-Place Liner within existing sewer mains, and the replacement of sewer laterals within the corridor. Funding for this project is separated into two line items in the program. Costs for Bid & award, construction, construction management, and closeout phases are funded under this project. Planning, environmental and design phases are part of a separate SSIP project (10033106), which is already in progress.

10002664 Van Ness BRT Sewer Improvements

The purpose of the project is to replace and relocate existing sewer utilities within Van Ness Avenue, between Lombard Street and Mission Street, from the center of the street to outside of the BRT right-of-way. This helps meet the Wastewater Enterprise Level of Services (LOS) goal by providing full compliance with State and Federal regulatory requirements applicable to the collection of sewage and storm water. The scope of the project includes constructing approximately 20,000 linear feet (LF) of 12-inch to 54-inch diameter Vitrified Clay Pipe (VCP), Reinforced Concrete Pipe (RCP) or High-Density Polyethylene (HDPE (in steel casing) sewer mains and associated manholes, catch basins and culverts; and retrofitting and connecting existing sewer laterals and catch basins to the new sewer mains. Closed-circuit television (CCTV) technology will be used to inspect the newly constructed sewer mains, sewer laterals and culverts. Abandoned sewers (approximately 1,800 LF) will be plugged-and-filled. Sewer construction was completed in early 2021.

10002667 Better Market Street Sewer Improvements

This project has been completed. The purpose of the project is to replace / rehabilitate aging sewer infrastructure beneath Market Street, especially the brick sewers that are over 100 years old, which help meet Wastewater Enterprise (WWE) Level-of-Service (LOS) by providing full compliance with State and Federal regulatory requirements applicable to the treatment and disposal of sewage and storm water. The requesting funding is for project cost of SFPW's Phase 1A Contract, from 5th Street to 8th Street, and for design budget of the entire Market Street corridor. After 95% design for the Phase 1A Contract was completed, SFPW/SFMTA decided to proceed on this contract without any of SFPUC's sewer scope of work. Under this project, project staff implemented sewer rehabilitation work using existing as-needed sewer contracts and before the Phase 1A Contract broke ground. Formerly, SFPUC's utility scope was proposed to be deferred until future Better Market St contracts; however, SFPW and SFMTA has since suspended the planning work related to future phases of work. This project will be deemed completed upon financial closeout and a new project may be proposed if coordination between SFPUC and SFMTA/SFPW resumes in the future.

10002776 Taraval Sewer Improvements

The purpose of this project is to relocate existing sewer facilities from the center of the street to outside of the SFMTA Muni track pathway to allow for ease of maintenance and repair/replacement. This project helps meet the Wastewater Enterprise Level of Service Goals by providing compliance with State and Federal regulatory requirements applicable to the treatment and disposal of sewage and stormwater. The scope of work includes replacing and relocating existing sewer facilities so they will no longer be under SFMTA's tracks, overhead wires and trolley poles to allow for ease of future maintenance and repair/replacement without impacting SFMTA's future operations. The detailed scope includes replacing approximately 19,000 linear feet (LF) of 12-inch to 36-inch diameter sewers along Taraval Street, between 15th Avenue and 46th Avenue, and along Ulloa Street, between Forest Side Avenue and 15th Avenue with a twin sewer system. Most of the sewers to be replaced are close to 100 years old. The construction work is split into two contracts, Segment A and B, and both contracts are

led by SFMTA. Construction of Segment A, from the San Francisco Zoo to Sunset Blvd. was completed in 2021. Construction of Segment B, from Sunset Blvd. to West Portal, began in December 2021.

10026828 Mariposa Dry-Weather Pump Station & Force Main Improvements

The project scope consists of demolishing the existing pump station building, underground structure, wet well, electrical system, and associated assets to make room for a new pump station. The existing dry weather force main downstream of the pump station was also replaced to accommodate the increased flows. A memorandum of understanding (MOU) was established with the Port of San Francisco (SF Port) since both the pump station and force main are located within SF Port's jurisdiction. The project helps meet the SSIP Levels of Service (LOS) by providing full compliance with State and Federal regulatory requirements applicable to the treatment and disposal of sewage and stormwater, and Wastewater Enterprise (WWE) goal of providing a compliant, reliable, resilient, and flexible system that can respond to catastrophic events. This is an asset replacement project, where existing operation and maintenance staff will have a new pump station and force main to operate when the project is completed. The operation and maintenance of the new pump station is expected to be similar or less than the previous station due to the upgrades and improvements of the entire station.

10037251 Seacliff No. 1 PS & FM Upgrade

The purpose of the project is to replace Seacliff No.1 Pump Station and force main due to its age, condition, and opportunity for water quality benefits through upsizing the station's capacity, which helps meet the Wastewater Enterprise Operational Reliability Level-of Service (LOS) Goals (State of Good Repair), Operational Reliability LOS Goal (Performance Requirement & Water Quality) and Health, Safety & Security LOS. This would include: 1. Relocation and replacement of pump station; 2. Replacement of 8-inch force main (930 LF) and gravity sewer; 3. Installation of flow monitoring devices for post-storm evaluation; 4. Installation of floatable controls at the overflow structure to CSD 005; 5. Connection from new pump station to CSD 005; 6. Consider installing a redundant pump for 'n+1' redundancy during wet weather and consider provisions for wet well isolation for maintenance and inspection, if feasible; 7. Demolishing existing pump station. As the current site is partially on Federal/GGNRA property, locating a suitable site requires additional coordination with the Real Estate Division.

10037246 Seacliff No. 2 PS & FM Upgrade

The purpose of this project is to rehabilitate Seacliff 2 Pump Station and Force Main and improve its operational performance and reduce CSD activations. This project helps meet the SSIP Level-of-Service (LOS) Wastewater Enterprise (WWE) goal of providing a compliant, reliable, resilient, and flexible system that can respond to catastrophic events and meet operational reliability (State of Good Repair). The pump station has undergone a number of small R&R projects over the years, capital improvements are now needed to provide a more comprehensive improvements to renew the life of the pump station and force main. The proposed scope consists of the following: 1. Increase the dry weather capacity to handle a

peak flow rate of 3.0 MGD; 2. Obtain CEQA approval for the project and apply for necessary permits to construct the improvements; 3. Rehabilitate and Upgrade existing Pump Station including: (a). Perform seismic retrofit of the existing pump station building and associated mechanical and electrical equipment, piping, and fittings; (b). Address fire, emergency and health and safety requirements; (c). Repair damaged concrete and exposed rebars and repair deterioration of the existing wet wells; (d). Replace the three submersible pumps in kind (47 horsepower pumps); (e). Replace other mechanical and process equipment, including existing crane, bubbler system, piping, valves, inlet gate and operator, water system components, and washdown pump; (f). Provide protective coating to all exposed metal piping, fittings, and valves; (g). Replace all electrical equipment, including a stationary back-up generator; and (h). Upgrade fiber optic connection, address PS security needs, including providing perimeter camera, access key box at gate, egress compliant gate hardware and level lockset or panic hardware exit device and solid panel surrounding lock; 4. Replace existing eight-inch force main with 16-inch force main in a new alignment; 5. Utility Coordination; and 6. Conduct public outreach to the community. Overall, this project will have a positive operational impact to the wastewater system. When complete, the useful life of the pump station and force main will be extended.

10037303 Sunnydale PS Safety Improvements

Scope of this project aims to address the following health, safety, and security issues at Sunnydale PS; 1. Address safety risks from groundwater intrusion, including; 2. Repair structural deficiencies observed including repair of cracks and leaks including closing of the HVAC penetration; 3. Upgrade and repair equipment and appurtenances inside manifold room that are severely corroded. (Including: piping, PRVs, lighting, instruments, equipment); 4. Address water leakage in manifold room and Motor Control Center (MCC); 5. Address water intrusion from conduits package connected to PG&E transformer; 6. Repair watertight submarine door; 7. Replace switchgear, MCC, and re-reroute buried conduits from switchgear to MCC; 8. Replace HVAC equipment that are corroded due to water intrusion; 9. Address Security Concerns, including; 10. Install new security signage and upgrade lighting to dusk-activated LED lighting; 11. Upgrade card readers and door contacts at all perimeter doors; 12. Add interior presence sensing, connected to an intrusion detection panel and alarming to security; 13. Furnish, install, and configure video recording servers, management server and analytic servers including uninterruptable power supplies (UPS); 14. Install video camera units and local recording; 15. Waterproofing between the manifold room and fan room; and 16. Demolition of the Odor Control Unit.

10038469 Pump Station Security Upgrades (Cesar Chavez, GFS,CHS, MMS)

A summary of the scope is below (details can be found in "SFPUC WWE Security Evaluation Matrix [September 2017]"): 1. Cesar Chavez Pump Station: Upgrade card readers and door contacts; Add interior presence sensing; connected to an intrusion detection panel and alarm security; Replacing perimeter fence; Add protective cage around outdoor chemical/electrical equipment; Install video recording servers, management server, and analytic servers including UPS; Configure security fiber optic connectivity back to SEP; Upgrade lighting; add new security signage; 2. Griffith Pump Station: Add bullet-resistant glass at perimeter windows;

Upgrade card readers and door contact; Add interior presence sensing, connected to an intrusion detection panel and alarm security; Install two new gates, replace gate and gate operator at one location, including structural support and electrical power and controls; Replace perimeter fence; Add protective cage around outdoor chemical/electrical equipment; Install recording servers, management server, and analytic servers UPS; Upgrade lighting; Add new security signage; Add video camera units and local recording; 3. Channel Pump Station: Repair card reader operation at swing gate; Repair any door contacts requiring upgrades; Upgrade card readers Add interior presence sensing, connected to an intrusion detection panel and alarming to security; Replace gate and gate operator at one location including structural support and electrical power and controls; Replace perimeter fence; Install video recording servers, management server, and analytic servers including UPS; Install wireless mesh network; Configure security fiber optic connectivity back to SEP; Upgrade lighting; Add new security signage; Add video camera units and local recording; and 4. Merlin Morris Pump Station: Add new security signage; Upgrade lighting; Convert roof and perimeter fencing to be non-porous to protect staff from freeway debris and safety and security risks posed by the public.

10038446 Geary Underpass PS Safe Access Enhancements

This project aims to improve access in and around the Geary Underpass Pump Station, in accordance with the Health, Safety, and Security LOS goal. This project will utilize a Job Order Contracting (JOC) delivery method and includes the following: 1. Improve lighting and accessibility improvements on both levels of the pump station; 2. Various Health and Safety Improvements: (a). Provide handrails and toe boards at entry steps; (b). Install fall arrest system at all ladders and sump entry; and (c). Install swing gates with automatic closing; 3. Replace exhaust fans and control switches; 4. Remove water storage tank and replace booster pump for washdown, reinstate water service; and 5. Install davit crane to lift pumps from the below grade level wet well sump to entrance of pump station. A positive operating impact is anticipated since the project will address safety, access issues, and health and safety concerns at the station.

10037245 Brannan Outfall 19 Discharge/Baffle Rehab & Sansome Outfall 15 Valve

The purpose of the project is to rehabilitate the Brannan and Sansome CSDs, which helps meet the Operational Reliability Level of Services (LOS) goals (State of Good Repair). The components of the project at Brannan CSD involve the following: 1. Replace the butterfly valve and hydraulic actuator; 2. Replace the two sensors and corroded metal stilling wells; 3. Replace the flap gate with an inline check valve; 4. Replace HPU, control cabinet, hydraulic lines and appurtenances; 5. Install baffle for floatables control; 6. Conduct concrete patching and repair works and repair exposed rebar; and 7. Replace the access ladder. The components of the project at Sansome CSD involve the following: 1. Replace two hydraulic actuators and two butterfly gates; 2. Replace hydraulic lines; 3. Replace gaskets around gate frames; 4. Allowance for replacement of bubbler system; and 5. Verify setpoints of gate and elevation of outfall.

10037244 Baker Baffle Improvements & Backflow Valve Repair

The purpose of the project is to rehabilitate Baker CSD, which helps meet the Operational Reliability LOS goals (State of Good Repair). Major components of the project at the Baker CSD include the following: 1. Install a baffle on the east overflow weir; 2. Repair or replace western array of valves to stop leaking; 3. Repair eastern array of valves to prevent leaking; 4. Repair or replace deteriorated metal plumbing pipes; and 5. Repair minor defects including missing aggregate and infiltration in connecting sewer.

10038468 Systemwide CSD & T/S Monitoring Equipment Assessment

The purpose of this project is to provide a system-wide assessment of all current sensors, which would identify the importance of each monitoring location based on requirements stemming from WWE operations, permit compliance, and other needs. This is in support of WWE's Collections System level of service goal which states that the system should be able to reliably provide continued operation, maintenance, and regulatory compliance and that monitoring equipment should be capable of reliably generating data that can be used to determine the start and end time of discharges from CSD outfalls. The project involves performing an assessment of all of WWE's collection system monitoring equipment for dry and wet-weather operations, reporting and other related functions. The project scope will perform a desktop-based gap analysis to document, at a minimum, the location, condition, and reliability of the existing monitoring devices and compare that against WWE's long-term vision. The assessment will provide recommendations for replacement, relocation or consolidation of sensors, calibration needs, technology upgrades related to power and communications, new installations, additional access, or other recommendations. The assessment will also include a long-term maintenance plan for all sensors. There are approximately 150-200 existing monitoring devices installed throughout the City of San Francisco.

10038547 CSD Structure Rehab & Upgrades - Part 1

The purpose of the project is to rehabilitate CSD structures in response to structural deterioration, which helps meet the Operational Reliability Level of Services (LOS) GOALS (State of Good Repair and Performance Requirements). Detailed condition inspection and/or assessment would reveal the actual improvements required. In general, the scope of this project is structural rehabilitation of the following CSD structures: 1. CSD 001 Lake Merced; 2. CSD 011 Laguna; 3. CSD 018 Howard; 4. CSD 022 3rd Street; 5. CSD 023 Fourth St N.; 6. CSD 027 Sixth St S.; 7. CSD 028 4th Street S.; 8. CSD 029 Mariposa; and 9. CSD 037 Evans.

10026810 Yosemite Green Infrastructure

The purpose of this project is to manage stormwater runoff from a 106-acre area of McLaren Park, which helps meet the Wastewater Level of Service Goals of minimizing flooding by addressing the 5-year, 3-hour storm. The scope of this project is to daylight Upper Yosemite Creek within McLaren Park, including the following major components: (1) Stormwater diversion structure at Yosemite Marsh and McNab Lake; (2) Earthen creek channel with periodic drop structures (approx. 1,700 LF); (3) Retaining wall (4'high), sidewalk, curb, gutter, and curb ramps along Wayland Street; (4) Pedestrian bridge at the corner of Wayland and

Oxford Streets; (5) Storm drainpipe for one residential block of Wayland Street (approx. 400 LF); (6) Three inline bioretention basins adjacent to the soccer field; (7) Soccer field with subsurface storage tanks, drainage improvements, subsurface irrigation system, quick couplers; (8) Yosemite Station improvements, including paving, pedestrian bridge, seating, planting, and educational signage; (9) Tree removal; (10) Restoration of landscaped areas, irrigation, and road surfaces.

10026816 Wawona Area Stormwater Improvements

The purpose of this project is to minimize flooding and helps meet the Wastewater Enterprise Level of Service Goal of managing flows from a statistically derived storm lasting three hours, with a total of 1.3 inches of rainfall and defined peak rainfall intensity (5-year 3-hour storm, LOS storm) in the neighborhood surrounding the intersection of 15th Avenue and Wawona Street. The overall project scope is to divert part of the combined sewer flows from the intersection of Wawona St. and Vicente St. into a new auxiliary sewer on Vicente St., extended to from Wawona St. to 34th Ave. The flow then would enter the existing sewer system that has additional sewer capacity.

10029726 Green Infrastructure Capital Planning (GI-01)

This project supports the development of green infrastructure capital project concepts through watershed planning, working with other city departments, stakeholder engagement, and project evaluation. Scope of work includes: 1. GI Capital Project Evaluation: tasks will evaluate, refine and validate schedule, scope and budget of upcoming GI capital projects. This project will complete an annual AAR documenting the evaluated alternatives for ready GI capital projects and the recommended GI Capital Project(s) selected for the upcoming fiscal year. Individual project funding will be pulled from Citywide Green Infrastructure Implementation Project. 2. Watershed Planning: a. Green Infrastructure Program Development - work related to the development of new programs and incentives as the SFPUC's green infrastructure portfolio grows. This work will pilot new approaches by establishing technical criteria, administrative needs, and funding levels to establish long term program budgets and frameworks. b. Outreach and engagement with priority landowners on the various applicable PUC GI stormwater programs and policies; providing as needed technical support and evaluation of opportunities to promote partnership frameworks. c. GI Scaling - Development of methods to scale up green infrastructure implementation. Responding to immediate regulatory requests, evaluation of project and program opportunities at a watershed scale, new legislative, contracting, and program delivery approaches, and new funding and financing opportunities. d. GI Monitoring – performance monitoring of new technologies and established projects to develop a refined understanding of green infrastructure performance over time.

10034553 Green Infrastructure Grant Program (GIGP)

The Green Infrastructure (GI) Grant Program funds green infrastructure projects on public and private properties throughout San Francisco. By providing grants to owners of large, impervious parcels the SFPUC will encourage further green infrastructure projects that manage stormwater and improve the City's collection system performance during wet

weather. The grants will cover costs of design and construction of approved stormwater management features, such as rain gardens, permeable pavement, cisterns, and vegetated roofs. Grantees will be eligible to receive \$1,035,000 per acre of impervious surface managed, up to \$2.5 million per project.

10039608 Buchanan Street Mall

The scope of this project is to install green infrastructure and sewer improvements including the following major components: 1. Infiltration galleries at Buchanan Mall at Turk Street (665 sf) and Buchanan Mall at Larch Street (230 sf). 2. Bioretention planters, drainage structures, irrigation, plants, planting media required to collect stormwater from the right of way at Buchanan Mall and Fulton Street (607 sf), McAllister Street (498 sf), Golden Gate Ave (641 sf), Turk Street (sf TBD), Larch Street (sf TBD). 3. Sewer lining work between McAllister Street and Larch Street (approx. 793 lf). 4. Three manholes and one manhole riser. 5. Sewer lateral replacement (26 sewer laterals). 6. Traffic control work.

10029730 Operational Decision System - Phase 2

This project integrates available data in the collection system (levels, flows, pump status, etc.) with rainfall prediction data from National Oceanic and Atmospheric Administration (NOAA). The real-time data will be coupled with Wastewater Enterprise's (WWE) collection system hydraulic model to forecast the likely impact of approaching storms and generate specific operational recommendations for managing flows. Phase 2 builds upon Phase 1 (CWWSIPFCRP02) for a citywide installation. This project's deliverable, the Operational Decision System, is considered no longer viable due to WWE's organizational and procedural changes.

10037195 Regional School/Park: Giannini Middle School

AP Giannini Middle School is located above the Westside Groundwater Basin. The project site is 12 acres of mostly impervious roofs and pavement, including over 4.5 acres of play yard. There is an opportunity to remove impervious paving to promote infiltration while greening the schoolyard. The scope of this project includes the following major green infrastructure best management practices (BMP) components: 1. Impervious surface removal at the play yard and replacement with grass and landscaping. 2. Upgrades to 4.5 acres of the play yard. 3. Permeable paving at the upper play yard. 4. Parking lot and roof runoff management with bioretention planters adjacent to the parking lots. 5. Infiltration galleries west of the school building to manage roof runoff. 6. Replacement of recreational courts and fields. 7. Access improvements between play areas including paving, retaining walls and handrails. 8. Replacement of site furnishing at passive recreation areas.

10034360 Lower Alemany Area Stormwater Improvement Project

The purpose of this proposed project is to minimize flooding and to help meet the Wastewater Enterprise Levels of Service LOS goals of managing flows from a statistically derived storm lasting 3 hours, with a total of 1.3 inches of rainfall and defined peak rainfall intensity (5-year 3-hour storm, LOS storm). The proposed project includes constructing a 10-foot diameter

underground pipe, from Stoneybrook Avenue to Industrial Street, via Alemany Boulevard, Gaven Street, and Boutwell Street to convey stormwater away from the Lower Alemany area. The proposed project includes all phases of work, including planning, environmental review, right-of-way, design, procurement, construction and closeout.

10026818 Folsom Area Stormwater Improvement Project

The Folsom Area Stormwater Improvement Project (FASIP) will provide stormwater conveyance improvements to the neighborhood surrounding 17th and Folsom Street. The project is being developed based on the alternative chosen in the NAR/AAR report and further defined in the CER. Major components of the project consist of a tunnel to convey stormwater flows from the neighborhood surrounding 17th and Folsom to the Channel Consolidated Transport/Storage Box, and upsizing the existing combined sewer pipes and structures upstream of the tunnel. This is Phase 1 of the project, which covers the planning through the design phases of the project. Bid and Award through Construction and Closeout will be covered by a separate project, Folsom Area Stormwater Improvement Project Phase 2 (FR-1). Currently, the project will be delivered using four separate construction contracts, as follows: (1) Contract WW-719A: Upstream Small Diameter Sewer Pipe Improvements. (2) Contract WW-719B: Alameda Wet Weather Tunnel (3) Contract WW-719C: Harrison and Treat Sewer Box Improvements (4) Contract WW-719D: Upstream Large Diameter Sewer Pipe Improvements.

10038471 Folsom Area Stormwater Imp. Project - Phase 2

The Folsom Area Stormwater Improvement Project (FASIP) is intended to provide stormwater conveyance improvements to the neighborhood surrounding 17th and Folsom Street. The proposed project was developed based on the alternative chosen in the NAR/AAR report and further refined in the CER and during the initial design process. Major components of the project consist of a tunnel to convey stormwater flows from the neighborhood surrounding 17th and Folsom to the Channel Consolidated Transport/Storage Box and upsizing of existing combined sewer pipes and boxes upstream of the proposed new tunnel. This is Phase 2 of the overall FASIP and Phase 1 is a separate SSIP project that covers the project from planning through the design phase. This project covers bid and award, construction and closeout phases of the project. Overall, the project scope will be constructed through four separate contracts: (1) Contract WW-719A, Upstream Small Diameter Sewer Pipe Improvements; (2) Contract WW-719B, Alameda Wet Weather Tunnel; (3) Contract WW-719C, Harrison and Treat Box Improvements; and (4) Contract WW-719D, Upstream Large Diameter Sewer Pipe Improvements.

10039682 Flood Resiliency Planning

This project develops existing and potential new flood resilience programs, plans and partnerships, and evaluates the feasibility of flood resilience projects. Specific tasks include: 1. Evaluation, recommendation and prioritization of flood resilience projects for the Wastewater 10-year Capital Improvement Plan. 2. Development and implementation of the Flood Resilient Building Code. 3. Development of city-wide flood resilience policy to inform future capital projects and plans. 4. Development of a city-wide flood resilience plan. 5. Support for work on

the Waterfront Resilience Plan and ongoing program partnership. 6. Development of the Islais Creek area plan. 7. Mapping and modeling work associated with the items above.

10026821 Northpoint Outfall Refurbishment

This project has been completed. North Point Facility (NPF), North Shore Pump Station and associated outfalls improvements includes the following: 1. North Shore Wet Weather Pump Station Improvement and Disinfection: installation of pumps and pumping system to provide redundancy for the 150 MGD wet weather station, as well as fully redundant influent channels with two redundant coarse bar screens. A 66" force main connection will also be installed. 2. NPF Outfall System Rehabilitation: Includes rehabilitation and sediment removal of four outfalls and their structural support systems to address issues with the liner, inadequate air relief, and issues with manhole covers. 3. NPF Clarifier Improvements: Includes refurbishment of the existing clarifiers or sedimentation basins, including seismic retrofit and rehabilitation of sedimentation basins, improvements to hydraulic gates and actuators, and improvements to the primary clarification process to allow more efficient operation. 4. Distributed Control System (DCS)/Telemetry System Upgrade: Includes upgrades to the communications, sensors, and control devices at NPF, as well as in the Treatment/Storage (T/S) structures, pump stations, and outfalls to provide real-time system-wide monitoring and control. 5. Maintenance Facilities Relocation: Involves relocating all the maintenance functions from existing buildings 800, 870, 871, and 925 to a new maintenance facility. 6. Other North Point Facility Reliability and Redundancy Upgrades: Includes the W2/W3 & Transport Odor Control Project to bring W2 or W3 from Southeast Plant (SEP) to NPF, and the Clarifier Tipping Buckets Project to install tipping buckets at the head of each clarifier for easier flushing. Security upgrades will also be completed. 7. Redundant Wet Weather Fine Screens: Provides redundancy for wet weather fine screens by installing an additional 75 MGD fine screen. Jackson and Marina T/S Odor Control: Includes pulling air from the Jackson and Marina T/S structures and treating it at the new odor control facility. 8. Dry Weather Grit Removal: Involves construction of a new 34 MGD grit facility.

10042456 Dechlorination Process (NPF 500) Evaluation & Interim Rehab

The interim rehabilitation components of the project at NPF 500 include but are not limited to: Repair deteriorated concrete surfaces; Leakage into the lower level pump room needs to be addressed; Repair or replacement of Palmer-Bowlus flume (effective flow monitoring is needed and currently not available); Assess the dewatering system pumps and piping; dewatering pumps and suction lines to be inspected and repaired/replaced; Repair general piping, metal items corrosion; Upgrade/replace the HVAC systems; Evaluate if new sampling system is needed. If required, replace sample pumps and ISCO samplers, or provide a sampling system; Assess functional need for replacement of chlorine residual analyzers (currently not in use); Assess disinfection (hypo contact) and dechlorination (bisulfite contact) functional needs; Evaluate condition of two seal water pumps. In addition, a process evaluation of the facility is recommended, which will involve evaluation of the long-term plan for the facility. This will determine whether the Roundhouse should be upgraded or eliminated and replaced by another type of disinfection & dechlorination system.

10002102 Central Bayside System Improvement Project (CBSIP)

This project was stopped at 35% design. The Central Bayside System Improvements Project (CBSIP) was originally scoped to provide collection system enhancement to the Channel & Islais Creek urban watersheds, including providing redundancy to the existing 66-inch Channel Force Main, infrastructure improvements to sewers/pump stations, and stormwater management through elements of both green and grey infrastructure. Major components of the project consisted of a tunnel to transport, via gravity, dry and wet-weather flows from the Channel and North Shore watersheds to the Southeast Water Pollution Control Plant (SEP), a large all-weather pump station to lift the flows into the SEP, improvements to Channel Pump Station, and green/gray infrastructure improvements within the tributary watersheds. The project was stopped at the 35% design phase from the original scope of work. The project team then completed a Draft Alternative Analysis Report to evaluate the options for constructing a redundant force main as an alternative to CBSIP. Upon completion of the Draft AAR, this project was deemed complete. Future projects maybe initiated to address the needs that were originally identified to be addressed with this project.

10033745 Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation

Project Completed. The project purpose is to rehabilitate and/or replace large-diameter sewers after the scope of work is defined through the condition assessment efforts from the Collection System Condition Assessment Project (Project CWWSSIPCSSR02). Based on the condition assessment efforts, approximately 1-mile of large diameter sewers over 100-years old and located on Mission Street, between 16th and Cesar Chavez Streets, were confirmed to be in need of rehabilitation. This project will include the design, environmental review, right-of-way, bid and award, construction, project management, and construction management support to complete the rehabilitation work. In addition, the planning efforts for two additional projects was funded through this project. At the end of the planning effort, the two projects will be completed through a separate wastewater capital project, the Large Diameter Sewer Rehabilitation and Condition Assessment. When this project is completed, approximately 4,350 feet of large-diameter sewers will be rehabilitated, with useful life extended by at least 50-years.

10002554 Richmond Transport Modeling

The project has been completed. Historically, geysering and blown manholes have been observed in the Richmond Transport/Storage Tunnel and upstream sewer system during large storms. Various hydraulic models were performed using InfoWorks and some physical improvements to the system have been made over the last 15 years. The hydraulic modeling performed could not account for air pockets or potential hydraulic bores in the system; therefore, WWE and DPW/Hydraulics agreed that consultant support was needed to provide numeric modeling that can stimulate the known situation and provide recommendations for capital improvements to address the system issues. This project included the review of two separate models: the InfoWorks Integrated Catchment Model of the San Francisco collection system, and a Transient Analysis Program model of the Richmond Transport/Storage Tunnel and associated sewers and amenities. Recommendations for improving the system and

addressing the identified issues were developed in a technical memorandum. Since the completion of the Technical Memo (TM), a new project was initiated to evaluate and determine which recommendations from the TM will be implemented through construction.

10002641 Collection System Condition Assessment

This project has been completed. There are over 80-miles of major sewers that have been in service for over 100-years. Using Collection System Asset Management Program (CSAMP) data, major sewers were prioritized by expanding the existing consequence of failure scores. Using this method, staff identified approximately 13-miles (out of the 80-miles) of major sewers that were considered to be the most critical with an average age of 127-years. The project completed the condition assessment of approximately 10-miles of these critical large-diameter sewers. The project included condition assessment of large-diameter sewers at various locations throughout San Francisco and conducting the Needs Assessment effort for the Planning Phase. Upon completion of the condition assessment, the means and methods of rehabilitation or replacement will be determined and SSIP sewer improvement projects initiated.

10002689 Drumm and Jackson Streets Sewer System Improvement

This project has been completed. Under this project, 800 linear-feet of the Drumm Street Box Sewer (between Commercial and Jackson Streets) and 200 linear-feet of the Jackson Street Box Sewer (between Drumm Street and the Embarcadero) was rehabilitated. Increasing the reliability of these major assets helps meet the NPDES permit requirement to maximize use of the collection system for storage and to maximize flows to the wastewater treatment plant. Associated work for rehabilitation included performing necessary cleaning for trenchless rehabilitation, bypassing sewer flow by damming and piping through the existing box sewer and performing surface restoration. Coordination with WWE was conducted to ensure worker safety and prevent wet-weather impacts. CEQA approval and public outreach for the project were completed. The project included planning, environmental approval, design, and construction phases.

10002760 Cargo Way Sewer Box Odor Reduction

This project has been completed. This project will construct a new force main (flush line) that conveys secondary effluent from the existing Booster Pump Station to the existing 7-foot diameter sewer located on Cargo Way, near Mendell Street. The new force main will introduce approximately 1.5 million-gallon-per day (MGD) of flow back into the sewer system to minimize solids from settling to the bottom of the sewer; thereby, reducing odors from forming and escaping from the sewers into the atmosphere. In addition, mechanical, electrical, and instrumental controls will be installed inside the Booster Pump Station that would allow operation staff to turn on and off (or throttle) flows into this flush line.

10002767 Rutland Sewer Improvements

Project Completed. Under this project, the hydraulic capacity of the sewers in the project area increased to meet the SSIP Level of Service storm. The project consisted of multiple

improvements along Rutland Street (from Visitacion Avenue to Sunnydale Avenue) including replacing the existing sewer with a larger reinforced concrete pipe, constructing a wet weather diversion structure, and conveying water passing over a weir inside this underground structure during a large storm event through new piping and discharging into a deep wet weather tunnel (Sunnydale Sewer Tunnel). To minimize construction impacts to the community, this sewer work was constructed with the Visitacion Valley Green Nodes Project.

10029734 Land Reuse of 1801 Jerrold Avenue

This project includes the acquisition of this site for SFPUC both near-term and long-term use. This 1.54-acre site is currently under the jurisdiction of the Department of Public Works. It was formerly used as an asphalt plant that has not been operational for many years. Acquisition of the site by the SFPUC would be beneficial because there are very few empty or underutilized sites around the SEP; and, after completion of any necessary planning and environmental review, this site can serve a variety of functions to support the SEP's short and long term efforts.

10015803 SSIP Program Management

This project includes the following components necessary for successful implementation of the Sewer System Improvement Program (SSIP) Program Management: condition assessment (facility inspections), technical support and evaluations, water quality studies, progression of project definition and prioritization, public outreach and education, analysis of the impacts of climate change, development of green infrastructure standards and training programs, Triple Bottom Line evaluations, site logistics coordination, sustainability evaluation, and general program management tasks (program controls, change control, constructability, QA/QC, risk management, document management and evaluation study of alternate delivery systems). This project includes support by an integrated team comprised of SFPUC staff and the Program Management Consultants (PMC) under a professional services contract.

10029732 SSIP Program Management

This project includes the following components necessary for successful implementation of the Sewer System Improvement Program (SSIP) Program Management: condition assessment (facility inspections), technical support and evaluations, water quality studies, progression of project definition and prioritization, public outreach and education, analysis of the impacts of climate change, development of green infrastructure standards and training programs, Triple Bottom Line evaluations, site logistics coordination, sustainability evaluation, and general program management tasks (program controls, change control, constructability, QA/QC, risk management, document management and evaluation study of alternate delivery systems). This project includes support by an integrated team comprised of SFPUC staff and the Program Management Consultants (PMC) under a professional services contract.

10040591 SSIP Program Management - PM02

This project includes the following components necessary for successful implementation of the Sewer System Improvement Program (SSIP) Program Management: condition

assessment (facility inspections), technical support and evaluations, water quality studies, progression of project definition and prioritization, public outreach and education, analysis of the impacts of climate change, development of green infrastructure standards and training programs, Triple Bottom Line evaluations, site logistics coordination, sustainability evaluation and general program management tasks (program controls, change control, constructability, QA/QC, risk management, document management and evaluation study of alternate delivery systems).

10041814 Griffith DW FM Rehab

This project involves condition assessment and rehabilitation of the Griffith dry weather force main. It is recommended that a complete CCTV inspection is performed as the 2017 inspection was only partially performed due to standing water in the pipeline. Although rehabilitation is a potential option and should be explored in Planning & Design, the project cost assumes an in-kind replacement of the entire length (640 LF) of existing dry weather force main.

10042116 Sunnydale PS & FM Improvements - Phase A

This project addresses the longer-term improvements to meet the Operational Reliability LOS goal (state of good repair) and should be coordinated with the preceding Sunnydale PS Safety Improvements project (PS-3). The scope of this project includes: 1. Renew protective coatings on the discharge piping, fittings, and valves excluding Manifold Room piping; 2. Thickness test on critical piping in manifold room to determine remaining useful life for discharge piping; 3. Replace dewatering pumps and piping; 4. Replace lift pumps; 5. Evaluate remaining life for existing VFDs and compatibility with future pump replacement; 6. In conjunction with pump replacement, evaluate ways to mitigate grit issues (i.e., pump type, slurry pump with agitator); 7. Evaluate the need for flushing system, and then determine if assets should be replaced; 8. Pumps are expected to reach the end of their useful lives around 2030 and will need replacement to maintain system reliability and 9. Perform detailed evaluation on the condition of the existing force main.

10002417 Hudson Ave Pump Station and Outfall Improvements

Project Completed. This project involved working with other City departments as necessary to request two affected property owners to install sewer laterals from their properties to the sewer main on Innes Avenue. The project also involved working with other City departments to determine the feasibility and possibility of implementing a loan program or other financial assistance to the property owners for their construction of the lateral connection to the sewer main. After the affected properties have sewer lateral connections to the sewer main in place on Innes Avenue, the Hudson Avenue Pump Station and the 1-block of 8-inch easement sewer will be deactivated by plugging and capping the pipe with light weight concrete. Coordination with SFPW will be required on sidewalk encroachment issues related to one of the affected properties. External outreach will also be needed to implement the solution, in coordination with SFPUC Communications. The project assumes that the property owners will hire and pay for their own contractor to install necessary pumps or laterals to make a connection to the sewer on Innes Avenue.

10002419 Force Main Rehab at Embarcadero and Jackson Streets

This project has been complete. The purpose of the project is to provide redundancy for critical facilities which helps meet the Wastewater Level of Service goal of providing a compliant, reliable, and flexible system that can respond to catastrophic events. This project consists of rehabilitating the remaining 240-feet of NSFM, which is most susceptible to failure, by installing a 28-inch outside diameter HDPE pipe into the existing 36-inch diameter steel force main. In addition, the project will include construction of a new valve vault and associated mechanical and electrical equipment, refurbishment of mechanical and electrical equipment inside an existing valve vault, and installation of a new electrical pedestal and control units aboveground. Together, the mechanical and electrical equipment will allow Wastewater Enterprise Operations operational redundancy to direct combined sewage flows to either the NSFM or to the NSCFM.

10026829 Cesar Chavez Pump Station

Project Completed. Under this project, stormwater and groundwater that collects under the Cesar Chavez freeway underpass within a bounded area will be conveyed to SEP. As this is not an all-weather pump station, WWE determined that this project is a lower priority than other all-weather pump stations. The remaining needs of the project may be added to the WWE R&R program list for consideration. After the NAR and the Draft AAR were completed, it was determined that this project is less critical than other dry-weather or all-weather pump station improvements. Therefore, this project completed the Draft AAR.

10002465 Marin Street Sewer Replacement

This project has been completed. The project will upsize the 24-inch diameter sewer (located between the intersection of 3rd Street and Marin Street and the Marin Street Outfall Structure) and associated sewers to handle the additional dry-weather flows projected from the tributary area. The wet-weather conveyance associated with this sewer system will also be evaluated but any identified scope for addressing wet-weather conveyance issues is not included in this project. Hydraulic studies of the watershed area will be performed to determine the hydraulic adequacy of the pipelines in the area based on expected flows from approved developments, as well as to confirm the necessary pipe size. The existing 24-inch diameter sewer in the vicinity of Marin Street, between Indiana Street and Marin Street CSD (located under southbound Highway 280) will also be upsized. The existing 24-inch diameter sewer on Marin Street, between 3rd street and Indiana Streets, will be replaced with a larger diameter sewer.

10002485 Griffith Pump Station Improvements

This project has been completed. The aging mechanical and electrical systems at Griffith Pump Station is refurbished and its expected service life is extended. The facility is modernized, which reduces energy use and future maintenance requirements. The scope of the project included replacing the dry weather pumps and rebuilding the wet weather pump, installing new sump pumps to maintain the existing capacity of 11.5 MGD and 120 MGD, new bar screens, two new bridge cranes in the manifold room and main pump area, and a new tamper-proof roof access ladder. The bar rack room crane is replaced with a new monorail

system. Structural modifications were performed in support of mechanical systems installations. The project involved construction of two canopy systems to protect outdoor equipment, including chemical tanks, metering pumps, ultraviolet light, and associated deteriorating elements.

10002670 Geary BRT Sewer Improvements - Phase 1

The purpose of this project is to relocate and/or replace sewer assets along the Geary Corridor from Van Ness Avenue to Stanyan Street, coordinate with SFMTA's Geary Bus Rapid Transit Project, and help meet the Wastewater Level of Service goal of providing benefits to impacted communities when implementing interdepartmental projects. The scope of the project included improving approximately 2.5 miles of aging sewers (6-inch to 18-inch diameter circular sewers and 3-foot by 5-foot egg-shaped brick sewers) along the Geary corridor and sewers located in associated cross streets.

10002672 Central Subway Sewer Improvements

Project Completed. This project is related to the SFMTA Central Subway Phase 2 of the Third Street Long Range Transportation Plan Project that will extend rail service from Fourth and King Streets to a northern terminal at Stockton and Jackson Streets. The purpose of this project is to include sewer improvements to avoid conflicts with the proposed light rail scope and to minimize future repair and replacement impacts. The sewer improvement project includes reconstructing existing 78-inch sewer (Fourth Street between Brannan Street and King Street) and relocating/ replacing existing 30-inch force main (Fourth Street between Bryant Street and King Street) and 48- inch gravity sewer (Fourth Street between Bryant Street and Brannan Street).

10002687 Mission Bay Loop Sewer Improvements

The purpose of this project is to relocate and replace existing sewer assets before SFMTA's installation of light rail assets; this helps meet the Wastewater Enterprise Level of Service Goal of providing benefits to impacted communities when implementing interdepartmental projects. The scope of work includes relocating and replacing existing gravity sewers and Mariposa pump station force mains and adding access sewer manholes on Illinois Street (between 18th and 19th Streets) so SFPUC could maintain the sewer services after SFMTA installs new light rail tracks on the same locations. The sewer work is cost-shared between SFPUC and SFMTA, and the construction work executed through a contract led by SFMTA.

10002695 Masonic Avenue Sewer Improvements

Project Completed. SFPW's Masonic Avenue Complete Streets Project is located on Masonic Avenue between Geary Boulevard and Fell Street. The project includes sidewalk and streetscape improvements; median and bicycle lane additions on Masonic Avenue; construction of a small park on the southwest corner of Geary Boulevard and Masonic Avenue; and incorporation of public art elements along this corridor. In conjunction with the SFPW Masonic Avenue Complete Streets Project, the Masonic Avenue Sewer Replacement Project includes rehabilitating/ realigning existing sewers as well as constructing new sewer

mains, manholes, side sewers and catch basins. The sewer scope includes approximately 4,700 linear feet of sewers ranging from 12-inch to 24-inch in diameter.

10002138 North Shore to Channel F M Drainage Improvement

Project Completed. North Shore Force Main (NSFM) provides critical conveyance of combined sewage and stormwater flows as well as redundancy, which did not exist before this project. Approximately 2,750 LF of the 8,000 LF of this force main is located in The Embarcadero Roadway and was constructed of either steel pipe or ductile iron pipe (both are susceptible to corrosion). After emergency repairs in 2008, a project was initiated under the Wastewater Capital Improvement Program to construct a redundant force main (North Shore to Channel Force Main [NSCFM]), so the 2,750 LF of the existing NSFM may be taken out of service for complete repairs.

10041324 CHFM Inspection and Rehabilitation - Southern Portion

The 66-inch diameter Channel Force Main (CHFM) conveys flows from Channel Pump Station (CHS) to the Southeast Water Pollution Control Plant (SEP). Limited evaluations performed on the CHFM have shown sections that are vulnerable to damage from major earthquake and long-term soil settlement. This force main cannot be taken out of service for a significant amount of time for maintenance, as it is always in service and limited shutdown time. This project allows for the internal inspection of approximately 2,600 LF of the southern portion of the force main to SEP, which is assumed to be performed by a multi-sensor remote operated vehicle (ROV). It is assumed that the ROV will be able to collect will include video camera, sonar, and lidar data capture equipment. Once the condition of the facility is evaluated, the design and construction for the required level of rehabilitation will be performed. The assumed rehabilitation budget assumed cured-in-place lining (CIPL) for the southern portion of the CHFM. The project has a positive impact on operations and helps ensure a critical conveyance facility is brought to a good state of repair and helps meet the Operational Reliability LOS.

PS-10 Tennessee PS & FM Improvements

The scope of this project aims to address the following operational reliability areas, which should be confirmed through assessments as part of project planning. Buildings, underground structures, wet wells, and surrounding site: Inspect wet well and patch and coat concrete/basin areas exposed to wet conditions to extend life and repair defects; Repair exposed rebar; Repair or replace access ladder. Electrical equipment, power service, generator system, level monitoring system: Remove and update schematic diagrams if Pac Bell connection is no longer used; Evaluate the adequacy of the weatherproof enclosure; Evaluate PLC replacement as part of ongoing effort to replace PLCs system-wide (replace pedestal as part of the electrical upgrade); Bubbler system is currently in good condition, but it will require replacement during the service life of the building. Process equipment: Purchase and install new pumps; Replace 4-inch check valves and associated discharge piping; Add two discharge isolation valves; Perform thickness test on critical piping to determine remaining useful life; Guide rails and chains are currently in good condition but will require replacement

during the service life of the building. HVAC: Confirm existing equipment; replace/install equipment as appropriate to meet safety and code regulations.

PS-13 Davidson PS & FM Improvements

As part of project planning, the feasibility of transferring ownership of this pump station would be assessed and evaluated before investing in condition improvements, which, would then inform the alternatives for the proposed project. Currently, the costs of ownership transfer is not included in this project. The rest of this project description and assumed scope, schedule and budget are based on the assumption that ownership will not be transferred. The scope of condition improvements aims to address the following operational reliability areas, which should be confirmed through assessments as part of project planning: Buildings, underground structures, wet wells, and surrounding site: Consider options for providing camera and verify area lighting; Consider using corrugated metal panels for increased durability; Provide clear paved path with 5'x5' min landing to control cage gate and steps with handrail and landing to transformer; Provide graded paved walks < 5% slope from street to gate and to transformer; Perform inspection of wet well confined space. Recommended improvements include patch and coat concrete/basin areas exposed to wet conditions to extend life and repair defects; Electrical equipment, power service, generator system, level monitoring system: All electrical equipment components will need replacement to maintain system reliability; Controls and communication equipment to SEP need to be evaluated; Add control and more monitoring to SCADA/DCS; Process equipment; Replace all submerged equipment, dewatering pump, deteriorated parts of pump lifting rails/system; Perform thickness test on critical piping to determine remaining useful life; Replace wet weather pump; Evaluate upgrading control panel for Selby valve on gate or integration with pump station control panel and upgrade as needed; Force Main: Replace the existing force main as pipe is shallow and evaluate new discharge point (closer to Davidson box would be better).

PS-15A Channel PS Improvements - Phase A

The scope of this project includes: 1. Provide cable for ladder to roof and ladder after inlet gates for fall protection; 2. Evaluate and upgrade PLC as part of the ongoing effort to replace PLCs system-wide or migrate to DCS; 3. Replace main pump and main pump flywheel assembly (note that VFDs No. 3 & No. 6 will be replaced in an R&R Project); 4. Evaluate and repair/replace motors as needed. Overhaul motors on pumps 4 & 5; 5. Replace bar screen inlet gates and hydraulic actuators (note that the bar screens will be replaced via an R&R Project); 6. Evaluate and provide screen/trash compactor. Replace conveyors and compacting dumpsters for screening; 7. Evaluate suction piping for lift pumps (#4 pump will be replaced via RnR Project); and 8. Replace pump #1.

10002299 Richmond Transport/Storage Tunnel Rehabilitation

The Richmond Transport Modeling Project developed and recommended options for handling reported system issues including geysering through vent holes and dislodged manhole covers in various areas as well as odor issues. The purpose of this project is to execute the recommendations of the Modeling Project. The scope of this project includes the evaluation of rehabilitation methods for the Richmond / Transport Storage Tunnel to confirm the previous

findings and recommendations included in the physical modeling performed by PMC and presented in October 2013 to resolve identified historical surge issues.

10002300 Baker/Laguna/Pierce CSD & Outfall

Project has been deferred.

10002303 Beach and Sansome Street CSD Rehabilitation

The purpose of the project is to rehabilitate Beach and Sansome Street CSDs, which helps meet the Operational Reliability Level of Services (LOS) goals (State of Good Repair). Scope of work for these CSDs are based on historical performance and Wastewater Enterprise (WWE) Operations video inspection records and include several items at both Beach Street and Sansome Street CSDs. Under this project, cleaning and specific condition assessment of the CSDs were completed to further scope rehabilitation at the Beach Street CSD. Inspection of baffles and weirs was performed, and necessary repairs or replacements was made accordingly. A corroded metal ceiling was also repaired. Similar improvements were carried out for the Sansome Street CSD. Concrete cracks and spalling, exposed rebar, and I-beam were repaired along with the replacement of butterfly valve seals.

10002344 CSD Backflow Prevention and Monitoring

The purpose of the project is to install backflow preventers at various CSDs, which helps meet the Operational Reliability Level of Services (LOS) goals (State of Good Repair). The scope includes planning, design and installation of backflow preventers at selected CSD outfalls. Backflow preventers were installed at CSDs in a phased and monitored approach, with the following priority CSD (by CSD identifier) outfalls considered based on locations with the potential for highest backflow into the system for the same tide: 17 Jackson Street, 10 Pierce Street, 29 Mariposa Street, 13 Beach Street, 15 Sansome Street, 24 Fifth Street, 25 Sixth Street, 26 Division Street, 18 Howard Street, 31A Islais Creek North, 32 Marin Street, 33 Selby Street, and 41 Yosemite.

10002378 5th, North 6th and Division Street CSD Rehabilitation

The purpose of the project is to rehabilitate 5th, North 6th and Division Street CSDs, which helps meet the Operational Reliability Level of Services (LOS) goals (State of Good Repair). Scopes of work for these CSDs are based on historical performance and WWE Operations video inspection records and include cleaning and specific condition assessment of the asset. Work includes preliminary seismic evaluation, providing necessary ventilation, and repair of concrete cracks, spalling and exposed rebar. The project also included work to provide safe access, replace the flap gate at 5th St. CSD and North 6th St. CSD, refurbish the flap gate at Division CSD, and repaired the baffle at Division CSD.

10042843 Pine Lake Easement Sewer Relocation - Phase A

To mitigate the risk posed by the existing situation of the Pine Lake easement sewer, this project analyzes the existing conditions in detail, identifies and evaluates alternatives. WWE Collection System Division has already conducted: 1. Surface inspections of the slope; 2. A

survey of mains relative to property and easement boundaries; 3. Camera inspections of the mains; 4. A localized repair and main realignment; and 5. A high-level conceptual study of potential solutions. The project alternatives can include options such as drainage modifications within private parcels which would require close coordination with City Attorney's Office, Communications, DBI and the homeowners directly. This project covers only the planning activities, including preparation of the Needs Assessment Report (NAR), Alternatives Analysis Report, and Conceptual Engineering Report (CER). Subsequent work will be performed under the Pine Lake Easement Sewer Relocation – Phase B (Design and Construction) project.

CWWLID02 Islais Creek Green Infrastructure

This project will incorporate green stormwater management into an urban design to meet the neighborhood's needs and the stormwater performance goals for the Islais Creek watershed (i.e. manage the first 0.75 inch of rainfall for a 5-year, 3-hour storm event within the drainage management area). The project will also provide secondary benefits by creating new plazas that can serve as neighborhood gathering spaces, greening of the neighborhood by adding more vegetated areas within the right-of-way (ROW), and adding curb bulb-outs to enhance pedestrian and bicyclist safety. Additional work includes construction of bioretention and pervious concrete plazas, construction of permeable pavement parking strips, and developing parking spaces and traffic lane configurations based on recommendations from SFMTA & SF Planning.

10026813 Islais Creek Green Infrastructure (SPLIT)

This project has been completed. This project incorporated green stormwater management into an urban design to meet the neighborhood's needs and the stormwater performance goals for the Islais Creek watershed (i.e. manage the first 0.75 inch of rainfall for a 5-year, 3-hour storm event within the drainage management area). The project also provided secondary benefits by creating new plazas that can serve as neighborhood gathering spaces, greening of the neighborhood by adding more vegetated areas within the right-of-way (ROW), and adding curb bulb-outs to enhance pedestrian and bicyclist safety. Additional work included construction of 12 bioretention planters and a subsurface infiltration gallery. This project is also referred to as the "Mission and Valencia Streets Green Gateway".

CWWLID01 Cesar Chavez Green Infrastructure

The purpose of this streetscape and sewer improvement project, which focused on the segment between Guerrero Street and Hampshire Street, was to improve the safety, aesthetics, and infrastructure and transit efficiency of the corridor. This project also turned Cesar Chavez into a sustainable "green street" by increasing the number of street trees, implementing Low Impact Development (LID) practices, and installing stormwater planters to add green landscaping pockets and provide for stormwater management. The project widened the existing median to allow for many more street trees and landscaping; provided left turn pockets for turning vehicles; widened the sidewalk at the corners; and upgraded the street lighting along the corridor to LED to provide brighter, whiter light and reduce energy consumption. Permeable paving and bioretention were also integrated into the street design.

This strategy fuses infrastructure with urban design, allowing the streetscape to become part of the solution to drainage problems. This project has been completed.

10026805 Sunset Green Infrastructure

This project has been completed. The Sunset Boulevard Greenway project constructed a series of tiered bioretention rain gardens in the western stretch of landscaped parcels along 10 to 16 blocks stretching from Golden Gate Park to Lake Merced. The rain gardens manage stormwater runoff on the west side of Sunset Boulevard from the street, paths, and a portion of the landscaped parcel area. The project also incorporated a "Learning Lab" to supplement elementary school curriculum. This project is also referred to as "Sunset Boulevard Greenway."

10026806 North Shore Green Infrastructure

This project has been completed. This project routed stormwater to flow-through bioretention planters with surfaces set lower than the surrounding grade. During large storm events, ponded water at the surface of the planters reaches a maximum depth of 6 inches before it crests an overflow weir, either to a lower planter tier or to a concrete valley gutter running the length of the alley. To protect the adjacent building foundations, an impermeable waterproof liner was placed along the bottom and sides of the planters. New street surfacing and furnishings provide improved community space for local residents and visitors. This project is also referred to as "Chinatown Green Alley".

10026807 Lake Merced Green Infrastructure

This project has been completed. The project starts at the Ashton Avenue intersection and extends along eight blocks to the Lee Avenue intersection. Corner bulb-outs containing bioretention planters were installed on the downstream end of six of the blocks. On the remaining two blocks, roadside bioretention planters adjacent to the curb manage stormwater in lieu of corner bulb-out planters, which were infeasible due to driveway conflicts. The bioretention planters were sized to manage stormwater runoff from the sidewalk and use the minimal area needed in order to minimize the associated parking loss from the new bulb-outs. Permeable pavement installed within the existing parking lanes on both sides of Holloway Avenue manages runoff from the roadway. This project is also referred to as the "Holloway Green Street".

10026808 Sunnydale Green Infrastructure

This project has been completed. This project included two green nodes in Sunnydale watershed; a mini plaza on Sunnydale Ave. and a rain garden at the eastern end of McLaren Park. These green nodes were designed to maximize the removal of street stormwater runoff from the combined sewer system. At the Sunnydale Avenue Mini-Plaza, bulb-outs containing bioretention planters were installed to remove stormwater while also providing traffic calming and pedestrian safety. At the Leland Avenue Rain Garden, terraced bioretention facilities were created to capture, store, and infiltrate runoff from the impervious roadway and an adjacent vegetated sloped area. Approximately one block of local sewer work on Rutland Street was

included into the construction contract to minimize construction impact; however, the project cost of that sewer improvement is accounted for separately. This project is also referred to as the "Visitacion Valley Green Nodes".

10026809 Richmond Green Infrastructure

This project has been completed. Specific work completed at El Camino Del Mar includes providing new pedestrian crosswalks, terraced rain gardens, subsurface infiltration galleries, soil stabilization techniques in selected locations, sewer main upsizing between Lands End Trailhead and manhole east of 32nd Avenue, and Americans with Disabilities Act compliant crosswalks. Specific work completed at Beach Terrace includes permeable pavement, rain garden bulb outs at the eastern & western ends of the permeable pavement, a flow-through rain garden, traditional (infiltrative) rain garden bulb-outs, improved catch basins, and a traditional rain garden. This project is also referred to as the "Baker Beach Green Street".

10026812 Channel Green Infrastructure

This project has been completed. This project is also referred to as the "Wiggle Neighborhood Green Corridor". The purpose of the Wiggle Neighborhood Green Corridor project is to implement low impact stormwater management along the Wiggle bike route between Duboce Street and Fell Street to reduce flooding and provide additional stormwater management benefits to the SSIP. Key features of this project include installation of bulb-outs on selected street corners, bioretention planters, and permeable pavement.

10042088 Citywide Green Infrastructure Implementation (New)

Citywide Green Infrastructure Project Implementation funds the conceptual engineering, design, and construction of "implementation ready" green infrastructure (GI) projects within all eight (8) urban watersheds. This project, in conjunction with GI-01, Green Infrastructure Planning, will deliver 65 acres of drainage management area (DMA) managing 35 million gallons of stormwater each year, once complete. Although GI CIP has several candidate projects that will be planned before the start of the FY24/25 WWE CIP, SFPUC anticipates that the candidate project list will change over time to leverage new partnership projects. The \$100M budget for this project is based upon an average project cost per acre managed of \$1.5M over the 10-year period and GI performance objective of 65 acres. This average project cost is based off prior completed project costs, assuming efficiencies in project delivery and increases due to escalation. For accurate project accounting and controls, green infrastructure projects funded by Green Infrastructure Project Implementation will be listed and managed as separate capital projects in the CIP. The number of projects funded by this line item will vary each year based on partnership opportunities and project readiness. This project holds the total budget for Green Infrastructure Capital Projects, and funds the following project activities: 1. Project Management 2. Conceptual Design 3. Detailed Design 4. Project-based stakeholder outreach 5. Construction Management 6. Construction costs – both direct and indirect costs for construction of BMPs, such as paving or landscape restoration, replacement in-kind, and educational signage. 7. Plant Establishment.

10037194 Balboa High School Regional Runoff Reduction Project

The regional stormwater project is centered around Balboa High School in the Balboa Park Neighborhood. In addition to the stormwater performance metrics, the considerations that led to this project being selected as the preferred regional Green Infrastructure (GI) site in Cayuga include: Ideal location relative to surrounding flood risks; Positive synergy with providing a solution to historical flooding in the basement of the high school; Quantity and location of impervious area relative to irrigated open space; Supports level-of-service (LOS) by providing benefits to a disadvantaged community; Synergy with Balboa Park Area Plan by the San Francisco Planning Department. This Project involves regional stormwater collection from San Miguel Child Development Center, Civic Center Secondary School, James Denman Middle School, as well as the Balboa High School campus itself.

10015816 Urban Watershed Assessment and Planning Initiation

This project has been completed. Many of the SSIP's proposed projects are focused on improvements to surface drainage and collection system management in San Francisco. The SSIP Urban Watershed Assessment Task evaluated and recommended alternatives that balance the use of grey (for example, pipelines) versus green infrastructure (for example, low impact design) for improvements to watershed surface drainage and collection system management. The SSIP utilized an integrated watershed management approach to investigate the health of the City's watershed and identify potential opportunities for stormwater capture, conveyance, detention and possible reuse to address issues of flooding as well as combined sewage conveyance and storage. Project implementation required the hydrologic and hydraulic analysis of each of the eight drainage basins and included: identification of various solutions to each basin's unique set of flooding challenges; evaluation of the social, economic and environmental values of alternatives that meet the level of service with a triple bottom line tool and the optimization and prioritization of projects for each basin. The work addressed life cycle costs and detailed operation and maintenance requirements.

10015817 Urban Watershed Assessment and Planning

The UWA is the comprehensive watershed-based planning process developed to diagnose challenges and design solutions for the surface drainage and collection/conveyance portion of the City's sewer system. The UWA emphasizes holistic urban watershed-scale planning and the development of multiple-function solutions to sewer system challenges. These solutions are evaluated using a comprehensive Triple Bottom Line (TBL) tool that employs societal and environmental benefits and costs with the goal of delivering more holistic investment decisions. Project implementation will require the hydrologic and hydraulic analysis of each of the eight drainage basins and will include identification of various solutions to each basin's unique set of flooding and other challenges; evaluation of the social, economic and environmental values of alternatives using the TBL tool; optimization and prioritization of projects for each basin; and life cycle costs with detailed operation and maintenance requirements.

10015818 Fulton St Sewer

Many of the SSIP's proposed projects are focused on improvements to surface drainage and collection system management in San Francisco. The SSIP Urban Watershed Assessment Task will evaluate and recommend alternatives that balance the use of grey (pipelines) versus green infrastructure (low impact design) for solutions to watershed surface drainage and collection system management improvements. The SSIP will utilize an integrated watershed management approach to investigate the health of the City's watershed and identify potential opportunities for stormwater capture, conveyance, detention and possible reuse to address issues of flooding as well as combined sewage conveyance and storage. Project implementation will require the hydrologic and hydraulic analysis of each of the eight drainage basins and will include: identification of various solutions to each basin's unique set of flooding challenges; evaluation of the social, economic and environmental values of alternatives that meet the level of service with a triple bottom line tool and the optimization and prioritization of projects for each basin. The work will address life cycle costs and detailed maintenance requirements.

10015819 Lake Merced Drainage

Many of the SSIP's proposed projects are focused on improvements to surface drainage and collection system management in San Francisco. The SSIP Urban Watershed Assessment Task will evaluate and recommend alternatives that balance the use of grey (pipelines) versus green infrastructure (low impact design) for solutions to watershed surface drainage and collection system management improvements. The SSIP will utilize an integrated watershed management approach to investigate the health of the City's watershed and identify potential opportunities for stormwater capture, conveyance, detention and possible reuse to address issues of flooding as well as combined sewage conveyance and storage. Project implementation will require the hydrologic and hydraulic analysis of each of the eight drainage basins and will include: identification of various solutions to each basin's unique set of flooding challenges; evaluation of the social, economic and environmental values of alternatives that meet the level of service with a triple bottom line tool and the optimization and prioritization of projects for each basin. The work will address life cycle costs and detailed maintenance requirements.

10015820 Major Trunk Sewers

Many of the SSIP's proposed projects are focused on improvements to surface drainage and collection system management in San Francisco. The SSIP Urban Watershed Assessment Task will evaluate and recommend alternatives that balance the use of grey (pipelines) versus green infrastructure (low impact design) for solutions to watershed surface drainage and collection system management improvements. The SSIP will utilize an integrated watershed management approach to investigate the health of the City's watershed and identify potential opportunities for stormwater capture, conveyance, detention and possible reuse to address issues of flooding as well as combined sewage conveyance and storage. Project implementation will require the hydrologic and hydraulic analysis of each of the eight drainage basins and will include: identification of various solutions to each basin's unique set of flooding

challenges; evaluation of the social, economic and environmental values of alternatives that meet the level of service with a triple bottom line tool and the optimization and prioritization of projects for each basin. The work will address life cycle costs and detailed maintenance requirements.

10029728 Advanced Rainfall Prediction - Part 1

This project includes planning, design, and environmental review for three new radar equipment stations to collect additional data. Although the installation of all three radar equipment stations is not proposed at this time, there is a regional project with other Bay Area agencies moving forward under a grant from the State. Needed coordination and site activities are accounted for in the project. Once all equipment stations are installed and running, the data will be provided in real-time to a new Advanced Quantitative Precipitation Information (AQPI) system, which would perform rainfall prediction modeling for short-term and long term precipitation forecasts, and deliver the resulting forecast to SFPUC automatically in real-time. The AQPI system is expected to be delivered to SFPUC as a turnkey system, providing SFPUC operations staff with important tools to help inform their decisions.

10029729 Operational Decision System - Phase 1

Project Completed. SFPUC desires a more consistent and transparent basis for making decisions that make best use of available data in an automated way. This project integrates available data in the collection system (levels, flows, pump status, etc.) with rainfall prediction data (from National Oceanic and Atmospheric Administration, or in the future improved through the Advanced Rainfall Prediction project). The real-time data will be coupled with WWE's collection system hydraulic model to project the likely impact of approaching storms and generate specific operational recommendations for managing flows.

10026811 17th and Folsom Wet Weather Storage

This project has been completed. The neighborhood surrounding 17th Street, 18th Street and Folsom Street has been experiencing flooding with over a foot of water on the streets, sidewalks and into their houses during rain events, resulting in property damages to the residents. The 17th and Folsom Wet Weather Storage project was originally intended to provide interim flood mitigation to the neighborhood while SSIP is working on identifying long-term solutions through capital improvement projects. The proposed interim flood mitigation alternatives consisted of a storage basin, pump station, and collection facilities to be built underneath the proposed future 17th & Folsom Park. However, the project was cancelled and defunded except for residual funds for ongoing response activities as directed by SFPUC management, including certain outreach activities related to flooding.

10026814 Flood Resilience Analysis (Planning Phase Only)

This project has been completed. The Flood Resilience Analysis Project will focus on developing a framework for identifying multiple storm scenarios; quantifying risks and cost implications associated with mitigating flooding across the various storm scenarios; and defining the extent and scope of the City's responsibility, based on consequences of extreme

storms. To minimize flood risks citywide and meet SFPUC objectives, this project will also develop programs and policies beyond what the collection system can manage, and make recommendations on prioritization of structural, non-structural, and operational measures.

10026815 Flood Resilience - Early Projects (Planning Phase Only)

This project has been completed. The City of San Francisco has experienced multiple significant storms in the last decade, which have led to flooding in various parts of the City. While Flood Resilience Analysis is being conducted by SFPUC, early infrastructure projects are being planned at three critical areas (Cayuga, Wawona, and Folsom neighborhoods) subjected to high flood risk. This project focuses on planning and developing stormwater detention and conveyance concepts specific to each of the aforementioned critical neighborhoods.

10026817 Cayuga Ave Stormwater Detention Project

This project has been completed. The neighborhood surrounding the northeastern end of Cayuga Avenue has been susceptible to recurring flooding associated with moderate to heavy storms. Due to its low land topography, the area can experience up to a few feet of water on the streets and sidewalks during rain events. This project improved the stormwater detention by re-grading the I-280 embankment at the foot of Cayuga to create a low lying detention field. This project provided surface detention of flows during flooding and included an overflow relief connection into the College Hill Tunnel as well and a retaining wall to support the roadway.

10026819 17th and Folsom Permanent Barriers

This project has been completed. SFPUC has purchased off-the-shelf plastic temporary flood barriers for 2015 and 2016 wet seasons. At locations where temporary plastic flood barriers were installed and proven effective in mitigating floods, SFPUC installed more durable custom aluminum or steel barriers before a permanent solution (Folsom Area Stormwater Improvement Project) can be implemented. The aluminum or steel barriers were installed during wet seasons and removed during dry seasons. The sidewalk was graded and outfitted with recessed and covered receptacles for mounting flood barrier poles. Interlocking aluminum logs were installed between the poles. The flood barrier system was custom built based on site-specific pole intervals, barrier height, and other characteristics.

10026820 Hydraulic and Drainage Sewer Improvements

This project includes awarding "As-Needed Construction Contracts" to implement small and non-specialty sewer improvement projects at critical flood prone neighborhoods. Examples of non-specialty, small infrastructure construction include improvement of drainage features, upsizing/expansion of sewer pipes, and surface grading modifications. Three preliminary projects (areas) were identified: Joost/Foerster Sewer Expansion, Urbano/Victoria Drainage Project, and Wawona Interim Drainage Project. Additional projects will be added as the needs arise.

10040621 Floodwater Management Grant Assistance Program (Grant)

The primary goal of the Grant Program is to encourage the implementation of site-specific floodproofing measures by providing grants to property owners to implement projects that improve flood resilience of their property. While the existing Grant Program has made multiple improvements to expand project types, increase funding caps, reduce financial burden, and improve the reimbursement structure, this project includes the development and implementation of further enhancements and expansion of the program. The Grant Program project scope includes: 1. Grant funds to be disbursed to property owners for the design and construction cost of approved floodproofing projects to improve flood resilience of property. 2. Program development and administration support. 3. Program technical support to perform project eligibility and feasibility assessments. 4. Support for outreach to property owners.

10029733 Land Reuse of 1800 Jerrold Avenue

This project includes the acquisition of this site for possible near-term and long-term SFPUC use. This 6.04-acre site on Jerrold Avenue between Quint and Rankin, is adjacent to the Southeast Plant and is currently occupied by another city department, Fleet Management under the Office of Contract Administration. The site is used as a central shop for vehicle repairs. Acquisition of the site by the SFPUC would be beneficial because there are very few empty or underutilized sites around the SEP; and, after completion of any necessary planning and environmental review, this site can serve a variety of functions to support the SEP's short and long-term efforts.

10026824 SEP Oxygen Generation Plant

The Oxygen Generation Plant (SE01) involved installation of two packaged vacuum pressure swing absorption (V/PSA) oxygen generation systems to provide gaseous oxygen (GOX) supply.

10015808 SEP Existing Digester Roof Repairs

This project has been completed. As part of the SSIP, a new biosolids handling facility was built to replace the existing system. The existing digesters and associated facilities must continue to handle all biosolids generated by primary and secondary treatment operations at SEP until all planning, design, construction, and commissioning activities for new facilities are complete. This project maintains existing digestion facilities in operation with sufficient capacity and reliability to produce Class B biosolids until new facilities are available for service. The project consisted of repairs to the existing floating roof and associated appurtenances (Digester 8), and replacement of the existing floating roofs and associated appurtenances (Digesters 4, 6, 7 and Cake Bins 3 & 4).

10026825 SEP Primary and Secondary Clarifier Upgrades

This project has been completed. This project upgraded the mechanical, structural and electrical components at the primary and secondary sedimentation tanks (clarifiers) at SEP to address operational reliability and compliance with regulatory requirements for liquid treatment. The major upgrades at the primary sedimentation tanks included replacing key

mechanical and electrical equipment and addressing structural repairs such as concrete repairs and coating seven tanks and influent channel. Covers for the primary sedimentation tanks and ventilation system were also installed. Similarly, major upgrades for the secondary clarifiers included replacing key equipment and retrofitting existing secondary clarifiers (8 of 16 included in this project). Structural repairs were addressed including concrete crack repairs and coating.

10002192 SEP 521/522 and Disinfection Upgrades (SEP Building Replacement)

This project has been completed. This project included upgrades to the Post-Chlorination Building as well as construction of a new building to house electrical and hydraulic controls, and replacement of valves and actuators in the Chlorine Contact Channel and stop logs at the Effluent Control Structure. The new building for electrical and hydraulic controls were constructed to meet the Sewer System Improvement Program (SSIP) seismic reliability goals. In addition, this project will upgrade and relocate the non-potable (W3) pump system by replacing four existing W3 pumps and motors with six new higher flow capacity pumps.

10002220 SEP Primary Sludge Handling Improvements

The project was considered complete at the end of the design phase. The project's scope of work included a new building to house primary sludge screens; grit removal equipment; grit washing and clarification equipment; ancillary equipment including pumps; a new Gravity Belt Thickener (GBT); rehabilitation of the existing two GBT units; replacement of existing odor control equipment; and upgrades to existing exhaust fans. However, after design was completed, it was determined that this project is less critical than other long-term treatment improvements. Therefore, this project completed the closeout of design. Rehabilitation of critical components was deferred to the WWE R&R program for consideration.

10026826 SEP Existing Digester Gas Handling Improvements

This project has been completed. As part of the Sewer System Improvement Program (SSIP), a new biosolids handling facility will be built to replace the existing system. However, the existing digesters and associated facilities must continue to handle all biosolids generated by primary and secondary treatment operations at Southeast Plant (SEP) until all planning, design, construction, and commissioning activities for new facilities are completed. The project consists of process upgrades addressing deficiencies related to digester gas compressors, heat exchangers and controllers, combined primary activated sludge (CPAS) tank, boiler and boiler stacks, waste flare and cogeneration cooling water system, and B100 biofuel tank (EPA permit compliance). Building systems and odor control unit (OCU) upgrades such as replacing roof drains, OCUs and upgrading ventilation and OCUs, roof replacement, and air compressor (BAAQMD Permit Application) will also be completed.

10015553 Biofuel Alternative Energy

The Biofuel/Alternative Energy Program will determine if it is feasible and cost-effective for the SFPUC to generate bioenergy (e.g., Biofuel or cogenerated power) as a byproduct of processing the fats, oils, and grease (FOG) and/or food waste collected throughout the city.

Feasibility will be determined through pilot studies and analysis that will evaluate whether adoption of Biofuel energy programs into the SFPUC's wastewater infrastructure (collection systems and/or treatment processes) would reliably and cost effectively enhance performance and sustainability.

10015811 SEP Oxygen Generation Plant 01

This project has been completed. The existing liquid oxygen (LOX) facility at Southeast Plant (SEP) does not meet current safety codes and needs replacement. The LOX system is a mandatory redundant system to the on-site oxygen generation to ensure full compliance with the NPDES permit. This project includes the demolition of the LOX facility (three horizontal LOX storage tanks, four vaporization systems, and ancillary equipment); demolition of SEP 270 Oxygen Generation Building; installation of structural piles; construction of concrete slabs and utility trench; and installation of a new packaged LOX system consisting of four vertical LOX storage tanks, vaporizers and an unloading station.

10041824 SEP Mainstream Nutrient Reduction

The purpose of this project is to reduce the amount of nutrients, specifically total inorganic nitrogen, discharged from SEP into San Francisco Bay. Based on a preliminary conceptual evaluation, the proposed project assumes maximization of the use of existing infrastructure in an effort to reduce costs. The proposed project assumes a scope of work that includes: the retrofit of the existing high purity oxygen activated sludge system to produce densified activated sludge; the construction of a new biological nutrient removal (BNR) system; modification of existing aeration basins (Facility 200); replacing the pure oxygen system; and other major components, such as a new blower building, distribution channels and pipe connections for the primary effluent, secondary liquid stream (mixed liquor) and return solids, and supporting appurtenances and utilities. The proposed project includes planning, environmental review, design, construction contract procurement, construction and closeout phases of the project.

10029738 Westside Pump Station Redundant Force Main Improvements

Flow from the Westside Pump Station (WSS) is transported through an existing force main with no reliable redundancy. The purpose of this project is to ensure operational flexibility and reliability of critical force main infrastructure functions. This is accomplished by providing a redundant force main pipeline and supporting valving sized to maximum treatment plant capacity. This project includes planning, design, environmental review and construction of a redundant new force main from the WSS to the OSP. Major components of this project include installation of 6,400 linear feet of new force main on Sloat Blvd and Highway 35, as well as street pavement demolition and restoration, traffic control, and relocation of impacted utilities. During the planning phase of this project, staff determined that this project may be deferred with accepted risks to SSIP Phase 2.

10039184 Westside FM Reliability Project - PLANNING

For the redundant force main, the proposed alignment from AAR is Alternative 1, which is approximately 2,765 total linear feet and requires a short overall pipeline length. This alignment mainly runs west from the connection point then south and parallel: either west of the existing force main within the paved outer northbound lane in the Great Highway or east of the existing force main within the east shoulder of the Great Highway, then turns east to connect to the headworks at OSP 011. This project will advance the existing AAR through CER, and in the process, also consider risk mitigation strategies with continuing operation of the existing Westside Force Main. Details of the CER will form the basis for Project OSP-1B: Westside Force Main Reliability Project – Design and Construction.

10029735 OSP Fine Screen and Grit Removal Enhancements

This project has been completed. The purpose of this project is to maximize solids/grit removal efficiencies at the plant headworks thereby reducing grit throughout the wastewater treatment facility processes; minimize potential grit impacts to biosolids processes and reduce O&M costs associated with grit wear on treatment process equipment. The project includes planning, design and environmental review of the following major components: controls improvements of the three existing 1/4-inch fine screens; evaluation/upgrade of the three existing Pista-type grit removal units with higher efficiency new fine grit removal units such as the hydraulically-induced vortex-type (Headcell) or other high-efficiency technologies that remove fine grit, and structural modifications to the influent channels / headworks structure to suite new grit removal units. The construction phase of this project is proposed in SSIP Phase 2. However, the SSIP re-prioritization in 2016 has resulted in the deferral of remaining efforts in planning, design and environmental review to Phase 2.

10029739 OSP Condition Assessment Repairs

This project has been completed. The Ocean Side Plant (OSP) Condition Assessment Repairs project will include major improvements to the plant, aimed to address the reliability of existing assets that have deteriorated over the years. This project includes planning, design, and environmental review of improvements to address the age, deterioration and reliability of existing assets at OSP that are not specifically included in the other Sewer System Improvement Program (SSIP) projects. This project includes rehabilitation of building structures, rehabilitation or replacement of mechanical and electrical equipment, and seismic retrofit of process tanks and buildings. Improvements focus on maintaining operational reliability and extending the service life of buildings that are required to remain in operation for 30 years or more.

10029740 OSP Odor Control Optimization

This project has been completed. Although the odor control facilities at OSP have been effective at collecting and treating odors generated in various locations throughout the facility, the efficacy evaluation of the process identified inherent inefficiencies that can result in opportunities for significant O&M cost reduction. Currently, the air from the entire building is exchanged and scrubbed for odor. In order to significantly reduce the volume of air treated for

odor, the primary clarifiers may be covered and only air from the primary clarifier basins would be scrubbed. The main components of this project include planning, design, environmental review and construction/upgrades of new covers for the five primary clarifiers and duct work to connect the head space in each clarifier basin to the odor control system. Current plans involve the completion of an odor control study as part of the Alternative Analysis Report (AAR) planning phase. Depending on the results of the alternative analysis, the project might forego covering the primary clarifiers and/or implement other optimization measures in its place.

10039185 OSP Odor Control Upgrades

Specific work includes Primary Odor Control System Improvements: Covering influent and effluent channels in OSP 042. The primary clarifiers would remain open and uncovered; Refurbishment of the existing Odor Control Units (OCUs) serving OSP 042; Installation of heating coils to pre-heat the foul air extracted from below the covered channels, OSP 042 building space, and the aeration basin channels prior to treatment through the OCUs; Other miscellaneous improvements include new variable frequency drives (VFDs) at the supply fans, new odor control fans with VFDs, duct repairs at odor control fans, replacement of fan differential pressure switches and automated ventilation modulation. Secondary Odor Control System Improvements: Sealing the inlet weir channel openings and effluent channel openings with aluminum checker plate hatch covers. The secondary clarifiers would remain open and uncovered; The air from the channel head spaces would be extracted and treated by two existing OCUs. The room air will contain very low odor/moisture concentrations and be transferred to OSP 530 as makeup air and then exhausted outdoors without treatment. A heating coil will be installed to pre-heat the foul air prior to the OCUs; Other miscellaneous improvements include new VFDs at supply fans, a new odor control fan, new space exhaust fans with VGDs, rebalancing existing odor control fans, blank-off plates at existing ductwork, replacement of motor control center (MCC) exhaust fan along with associated ductwork and disconnect switch, replacement of fan differential pressure switches and automated ventilation modulation. Replacement of High Head Loss Fittings: Replacement of two rectangular elbows in a Z-type configuration which supplies HVAC air to the second floor Gravity Belt Thickening Area in OSP 011 with two smooth radius elbows with a splitter vane.

10039183 OSP Communication & Safety Monitoring Upgrades

Fixed Gas Monitoring Systems: Fixed gas monitoring is to be added within the following OSP process areas. The systems should follow the standards and specifications included in Project WW-559R - SEP Fixed Gas Monitor Upgrades, and will include DCS connections, horns, beacon lights and other notifications. OSP 011: 1. Install two (2) fixed hydrogen sulfide sensors in the Influent Channel Room (OSP 011-107). 2. Install two (2) fixed ammonia sensors in the Screw Press Room (OSP 011-207). OSP 042: 1. Install four (4) fixed hydrogen sulfide monitors in the Primary Clarifier Building. OSP 230: 1. Install Two (2) fixed hydrogen sulfide sensors in the Secondary Clarifier Building. OSP 620: 1. Relocate fixed gas monitoring system notification locations which are currently considered to be located to close to potential gas sources. Public Address System / Emergency Evacuation Notification System: 1. Replace the existing Public Address System at OSP which is old and in disrepair. 2. Replace the

existing Emergency Evacuation Notification System at OSP which is old and in disrepair. Fire Alarm System: 1. Replace the existing Fire Alarm System at OSP and WSS which are old and in disrepair. Improvements to the WSPS and OSP radio communication.

OSP-8 OSP DCS Upgrade (Construction)

This project will replace the aging control system infrastructure at Oceanside and other satellite wastewater facilities like Westside Pump Station (WSS) as the existing DCS equipment are obsolete. The upgrades include converting all existing DCS, Wonderware HMI, and programmable logic controllers (PLCs) to Emerson-based systems as initiated and specified under SSIP Phase 1 project CWWSSIPSE07 SEP Facility-Wide Distributed Control System Upgrades Project. The DCS supplier will provide manufacturing and installation services. In addition to the needed DCS upgrades to the specified Emerson-based systems, a wide range of DCS-related improvements were identified as part of the OSP Condition Assessment Repairs Project. These are listed below but should be further evaluated during planning and design by the Contractor. OSP 011 Building: Replace panels, 25 standard disconnect switches, and 20 Class 1/Division 1 disconnect switches in the Bar Screen Room; OSP 042 Primary Clarifiers: Replace 21 disconnect switches and all bare copper grounding wire; OSP 200 Aeration Tanks: Replace panels; OSP 230 Secondary Clarifiers: Replace control panel and refurbish the annunciator panel; OSP 620 Digestion Operations: Replace control panel and Day Tank Bubbler Panel for code compliance. Please note that these control panels may not require replacement if ventilation improvements are made which result in an electrical reclassification of the OSP 620 area; Recycled Water Facility: Interface with the PLC.

OSP-12A Grit Removal (OSP 011) Upgrades - PLANNING

This project is a continuation of the efforts previously completed through the OSP Fine Screen and Grit Removal Enhancements Project through a Conceptual Engineering Report (CER) and would include an analysis to confirm/validate the design alternative previously selected and provide a recommendation for implementation through a separate project. This proposed project would provide an updated analysis that would also consider recent sedimentation assessment and cleaning programs.

10033820 Southeast Outfall Condition Assessment and Rehabilitation

The purpose of the SEO project at SEP is to reliably provide continued operation, maintenance and regulatory compliance, and to maintain assets in a state of good repair, which will help meet the level of service (LOS) goal of operational reliability to convey final plant effluent without interruption in accordance with good management practices and state and federal regulatory compliance. The project provides a site-specific inspection plan to define the scope for condition assessment with consideration of the LOS goal and operational constraints of the outfall system. The goal of the project is to determine the pipeline condition of the onshore force main and offshore outfall components of the SEO system. The project will thoroughly and completely evaluate the condition and remaining life expectancy of the SEO system and implement the interim rehabilitation solutions to extend the useful life. Alternatives are being evaluated and will be implemented to extend the existing outfall pipe by 15 years by

repairing following components: 1. Diffusers rehabilitation. 2. Sliplining 30-40 ft of outfall pipe / joint rehabilitation. 3. Settlement monitors.

10015546 New Treasure Island Wastewater Treatment Plant

The objective of this project is to provide tertiary treatment and wetlands to achieve an average dry weather flow capacity of at least 1.3 million gallons per day (MGD) and peak wet weather flow of 3.9 MGD, which will help to meet the following Level of Service: (1) Full compliance with state and federal regulatory requirements applicable to the treatment and disposal of sewage and stormwater; (2) Critical functions are built with redundant infrastructure; (3) Limit odors to within the treatment facility's fence lines; (4) Accommodate Sea level rise within the service life of asset; (5) Produce recycled water for non-potable water demands. The following is the list of assets that are anticipated to be designed and constructed: (1) Influent Pumping structure consisting of solids handling submersible centrifugal pumps; (2) Fine screening consisting of internally fed drum screens with 2 mm perforations; (3) Screening conveyor/compactor attached to each screen independently; (4) Membrane bioreactor (MBR) tanks; (5) Diffused aeration system consisting of turbo type blowers with fine bubbles type diffusers; (6) Membrane tank system consisting of basins with cassettes; (7) Ultraviolet (UV) system providing disinfection to MBR filtrate; (8) Solids handling facility consisting of waste activated sludge (WAS) holding tanks, aeration blowers, thickener feed pumps, rotary drum thickeners, sludge transfer/truck loading pumps. The thickened WAS will be transferred to trucks to be transported to in-land treatment plants for further processing; (9) Odor control system consisting of bio trickling filter followed by carbon adsorber; (10) Chemical storage and feed system for caustic for alkalinity addition, micro C for carbon addition, citric and sodium hypochlorite for membranes and polymer for sludge processing; (11) Wetland consisting of 2 cells for gravity discharge into the San Francisco Bay; (12) Perimeter security fencing and gates and monitoring; (13) Distributed Control System (DCS) to integrate and optimize performance of all processes. The TIWRRF DCS will consider the capability to control three major pump stations but will not be putting any infrastructure at the pump stations; (14) Miscellaneous electrical equipment such as motor control centers, variable frequency drives, and transformers. The power to the TIWRRF will be provided by SFPUC Power Enterprise; (15) Backup generators to run the entire plant for 8 hours. The following scopes have been deferred and are not part of this project: (1) Grit separation units have been deferred as the Island has a separate sewer system consisting of only domestic sewage; (2) Flow equalization basin is deferred and not needed for many years in future until the island is fully developed; (3) One set of membrane cassettes have been deferred as it will not be needed for many years in future until the island is fully developed.

10015554 Ocean Beach Climate Change Adaptation Project

The Project was initially envisioned through the 2012 Ocean Beach Master Plan. The Ocean Beach Master Plan lays out a comprehensive vision for addressing a wide range of complex challenges along Ocean Beach, including past emergency declarations by the City to protect both SFPUC and non-SFPUC assets, and presents a series of recommendations for a more resilient and sustainable future. The project, which is being led by the SFPUC, will facilitate the removal of the stabilization measures and development of a comprehensive shoreline

management and infrastructure protection plan in partnership with relevant stakeholders and regulatory agencies to provide a long-term solution to climate induced erosion issues along Ocean Beach. Project elements include a low-profile seawall, dedicated SFPUC Access Road, coastal trail, public restroom, public parking lot, beach access stairs, ADA beach access, habitat mitigation, and associated amenities. The project is being done with 3 phases – Short-term Improvements, Army Corps of Engineers Sand Placement, and Long-term Improvements.

10015557 Islais Creek Outfall Crossing

The project scope of work consists of performing bathymetric, sonar, and diver inspections on the existing Islais Creek crossings. Survey equipment will be mounted to a boat and no ground disturbance is anticipated.

10041337 ITS Capital Projects (WWE)

A significant part of the SFPUC's Information Technology (IT) infrastructure was implemented when headquarters moved to 525 Golden Gate Avenue in 2012. Much of the infrastructure implemented in 2012, which includes networking, telephony, conference room A/V equipment, etc., has surpassed its useful life. As a result, the likelihood of failure, not to mention cybersecurity risk, increases with the aging infrastructure. The purpose of this request is to fund the replacement, upgrade, and improvement of critical IT components/systems to mitigate these risks and provide higher levels of efficiency, reliability, and security. The Capital Plan request is comprised of the following projects, each focused on a specific area of IT infrastructure: 1. Network Infrastructure Upgrade 2. Server Infrastructure Upgrade 3. SCADA Infrastructure Upgrade 4. Phone Migration 5. 525GG Conference Room Refresh 6. Cybersecurity Improvements 7. SFPUC.GOV Migration 8. Maximo Upgrade 9. Application Enhancements

10040511 Interim Sidestream Nutrient Removal

The purpose of this project is to ultimately reduce the amount of nutrients, specifically total inorganic nitrogen in the treated effluent from the Southeast Wastewater Treatment Plant (SEP) being discharged into the San Francisco Bay. This project represents a near term action to reduce nutrients in the effluent by reducing the ammonia load that is recycled back into the treatment plant as a sidestream. A separate, long-term project is being included for full scale nitrogen reduction at the SEP. This sidestream project will provide biological treatment processes and supporting appurtenances to decrease the nitrogen levels in the centrate wastestream generated from the existing centrifuge dewatering facility (Facility 840). This interim facility will also be able to accommodate a portion of the filtrate from the new dewatering facility (Facility 615) under construction in the Biosolids Digester Facilities Project, once it is in service. Major project components include de-ammonification reactors in the existing abandoned Dissolved Air Thickeners (DAF) tanks located at the southside of SEP (south of Jerrold Avenue) and the installation of a filtrate pipeline from Facility 615 to the de-ammonification reactors. The target is to have this interim side stream treatment facility in operation by early 2026.

10038793 Customer Service System

This project will transform the Customer Service experience at the SFPUC. It will modernize our technology and enable us to optimize business processes to align with current and future Customer Service needs and bring increased operational effectiveness. The project has 3 main components - a) Migrating to a modern, flexible cloud-based contact center solution, b) Migrating from our legacy "My Account" platform to a new digital self-service and customer engagement platform, and c) Migrating from our on-premises legacy Customer Information System (CIS) CC&B (Oracle "Customer Care & Billing") to Oracle's replacement CIS solution - Oracle CCS ("Customer Cloud Service"). These are all significant changes across our Customer Service and IT infrastructure.

TBD-08 SEP South Jerrold Avenue Campus (Planning and Environmental Review)

This proposed project includes preparation of the Environmental Impact Report (EIR) for the SEP Campus Plan – South Campus, in conformance with the provisions of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Public Resources Code Section 15000 et seq., "CEQA Guidelines"), and Chapter 31 of the San Francisco Administrative Code. CEQA requires the preparation of an EIR when a project could have significant unavoidable impacts on the physical environment. The physical boundary of the South Campus is Jerrold Avenue and Oakdale Avenue, and Phelps Street and the Caltrains line.

15722-SD R&R Collection Systems - Small Diameter

The purpose of the Wastewater Enterprise (WWE) Renewal and Replacement Program (R&R) Collection System Small Diameter Sewer project is to maintain the existing functionality of the sewage collection system and address planned and emergency projects for repair and replacement of structurally inadequate sewers. This project consists of the following sub-projects: small diameter (less than and equal to 36-inch) sewer improvements, small diameter (less than and equal to 36-inch) sewer condition assessment, spot sewer replacement. By utilizing an asset management approach, which factors in: physical condition, age, location, risk, public safety, paving schedule and other factors, aging and failed portions of the collection system are identified and replaced.

15722-LD R&R Collection Systems - Large Diameter

The purpose of the Wastewater Enterprise (WWE) Renewal and Replacement Program (R&R) Collection System Large Diameter Sewer project is to maintain the existing functionality of the sewage collection system and address planned and emergency projects for repair and replacement of structurally inadequate sewers. This project consists of the following sub-projects: large diameter (greater than 36-inch) sewer cleaning and condition assessment, and large diameter (greater than 36-inch) sewer improvements. By utilizing an asset management approach, which factors in: physical condition, age, location, risk, public safety, paving schedule and other factors, aging and failed portions of the collection system are identified and replaced.

15724 R&R Treatment Facilities

The purpose of the Wastewater Enterprise (WWE) Repair and Replacement (R&R) Program Treatment Plant Improvement projects is to maintain the capacity and reliable performance of the wastewater treatment facilities owned/operated by the Wastewater Enterprise. This is a continuing annual program to extend the useful life of the WWE treatment assets. Treatment Facility Wastewater Enterprise Assets include: Transport Boxes, Discharge Structures, Pump Stations, Force Mains, Tunnels and Treatment Plants. The R&R Treatment Facilities projects are prioritized based upon regulatory compliance, condition assessments, Operation staff recommendations and Level Of Service goals. Planned WWE R&R Program Treatment Plant Improvement projects will address aging infrastructure at the wastewater enterprise treatment facility assets. Planned WWE R&R Program Treatment Plant Improvement projects are prioritized based on risk to permit compliance, safety and urgency. The failure of any major component of the wastewater treatment facilities could be catastrophic, compromising the SFPUC's ability to handle and treat wastewater, which could result in severe public health, safety, regulatory, and environmental impacts.

15722-TS T/S Box Tier 2 (Field) Condition Assessment

The Tier 2 condition assessments in this project are intended to follow the previously performed Tier 1 condition assessments. The specific assets to be inspected, as well as their priorities, will be identified based on the Tier 1 information and other considerations. Tasks that would be performed as part of the inspection include information collection and review, field inspection including selection of inspection technique, logistical planning, and coordination; Execution of field inspection work; Review and analysis of inspection results, assessment of condition, development of recommendations and preparation of condition assessment reports. Due to the wide range in the sizes of the boxes, physical configuration and operational conditions, variability in approach is anticipated for each specific asset. Upon selection and prioritization of the T/S boxes to be inspected, asset-specific methodologies and budgets will be developed. Based on the size of the boxes, a limited number, if any, may be inspected using robotic multi-sensor equipment due to technological limitations such as lighting and video quality. Person entry may be required. Logistical components such as access, safety and flow bypass may be identified during the planning phase. If existing access points are not suitable to support inspection (person entry or robotic), improvements to or creation of access points may be required. Based on an assumed cost of \$1,000,000 per mile, the budget for this project may address inspection of up to 10 miles of T/S boxes.

Appendix B. Approved Project Budget and Schedule

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10015796 SEP Biosolids Digester Facilities Project	07/01/11	05/11/29	\$2,837,135,945
10015807 SEP New Headworks (Grit) Replacement	03/01/13	08/31/27	\$716,679,300
10026824 SEP Oxygen Generation Plant	08/23/12	06/10/16	\$11,135,740
10015808 SEP Existing Digester Roof Repairs	04/01/13	03/03/16	\$15,438,647
10026825 SEP Primary and Secondary Clarifier Upgrades	07/01/13	01/21/19	\$32,583,576
10002192 SEP 521/522 and Disinfection Upgrades (SEP Building Replacement)	06/03/13	06/30/21	\$44,978,369
10002220 SEP Primary Sludge Handling Improvements	06/03/13	02/10/16	\$2,064,253
10015809 WWE Facility-Wide Distributed Control System (DCS) Upgrade	02/13/14	12/30/27	\$73,003,759
10015810 SEP Seismic Reliability and Condition Assessment Improvements	06/03/13	03/31/23	\$34,205,381
10026826 SEP Existing Digester Gas Handling Improvements	06/16/14	02/28/20	\$15,878,502
10015553 Biofuel Alternative Energy	07/01/11	03/31/16	\$1,857,887
10002284 SEP Power Feed and Primary Switchgear Upgrades	06/23/14	03/31/26	\$95,875,000
10015811 SEP Oxygen Generation Plant 01	04/01/16	11/21/19	\$8,697,217
10037331 Maintenance Building (SEP 940) Interim Improvement	01/12/21	02/04/28	\$20,896,986
10037330 Primary Treatment (SEP 040/041) H&S Improvements	01/04/21	03/31/28	\$29,602,075
10037353 SEP 550 Booster PS Condition Inspection & Interim	01/12/21	06/30/28	\$31,258,655
10038373 SEP Booster PS & BFS Security Enhancements	01/18/22	03/01/28	\$35,759,000

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10039310 Secondary Clarifiers (SEP230) Rehabilitation	10/03/22	11/30/29	\$51,952,231
10039505 New Ops, Engineering and Maintenance Buildings	11/01/22	08/31/28	\$171,879,356
10041824 SEP Mainstream Nutrient Reduction	10/01/24	11/29/39	\$1,470,264,149
10039811 SEP Condition Improvement Projects - Part 1	04/03/23	10/29/27	\$16,009,333
10029736 Westside Pump Station Reliability Improvements	06/13/13	06/30/26	\$93,299,544
10029738 Westside Pump Station Redundant Force Main Improvements	01/02/14	01/29/16	\$726,974
10039184 Westside FM Reliability Project - PLANNING	01/02/25	06/24/26	\$1,091,800
10029735 OSP Fine Screen and Grit Removal Enhancements	07/01/13	11/20/15	\$510,275
10029737 OSP Digester Gas Utilization Upgrade	10/01/13	06/02/25	\$69,577,253
10029739 OSP Condition Assessment Repairs	07/31/14	01/29/21	\$11,630,774
10029740 OSP Odor Control Optimization	07/31/14	02/05/20	\$1,207,197
10037733 Solids Thickening (OSP 011) Process Upgrade	01/25/22	03/10/28	\$20,222,162
10037734 OSP Plant-wide Ventilation (HVAC) Upgrades	01/26/22	07/16/27	\$22,577,498
10036398 OSP Condition Improvement Projects - Part 2	03/03/18	06/28/30	\$105,100,000
10039185 OSP Odor Control Upgrades	01/02/26	05/07/31	\$23,256,546
10039183 OSP Communication & Safety Monitoring Upgrades	11/19/24	05/30/30	\$27,449,748
10037735 Admin Bldg (OSP 930) Health & Safety Improvements	02/01/22	07/08/27	\$9,649,916
OSP-8 OSP DCS Upgrade (Construction)	01/15/25	06/14/30	\$44,942,038
10037777 OSP & WSPS Security Enhancements	08/02/21	03/01/28	\$13,776,331

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10039193 Gaseous Oxygen System (OSP 011) Upgrades	01/03/23	05/08/29	\$22,350,810
OSP-12A Grit Removal (OSP 011) Upgrades - PLANNING	01/03/23	06/28/24	\$1,103,582
10026821 Northpoint Outfall Refurbishment	05/22/13	10/31/18	\$18,183,639
10026822 North Shore Wet Weather Pump Station Improvements and Disinfection	08/15/13	06/30/25	\$51,296,000
10037325 Admin Building (NPF 930) Evaluation & Interim H&S Improvements	03/01/22	09/29/28	\$22,691,088
10037904 NPF & NSS Security Enhancements	01/18/22	03/01/28	\$17,848,746
10038353 NPF DCS Upgrades (Construction)	11/01/21	12/30/27	\$11,072,530
10039251 Sedimentation (NPF 040/041) Tanks Condition Improvement	11/14/22	08/30/30	\$54,248,649
10042456 Dechlorination Process (NPF 500) Evaluation & Interim Rehab	07/01/24	11/09/29	\$5,603,878
10002102 Central Bayside System Improvement Project (CBSIP)	07/02/12	06/30/23	\$36,700,000
10033745 Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation	07/02/18	11/30/22	\$7,567,585
10002554 Richmond Transport Modeling	03/25/13	06/30/14	\$86,883
10002641 Collection System Condition Assessment	05/09/13	03/31/21	\$4,909,939
10002652 Kansas and Marin Streets Sewer Improvements	06/10/13	10/16/26	\$6,700,000
10002689 Drumm and Jackson Streets Sewer System Improvement	05/26/15	12/31/20	\$6,470,881
10002760 Cargo Way Sewer Box Odor Reduction	04/13/15	06/30/23	\$8,530,655
10002767 Rutland Sewer Improvements	10/30/17	09/21/18	\$1,465,319
10041084 Geary BRT Sewer Improvements - Phase 2 Construction	03/04/24	02/28/28	\$23,934,934
10034718 Large Diameter Sewer Projects and Channel FM Intertie	08/01/19	12/07/26	\$114,592,400

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10033106 Geary BRT Sewer Improvements - Phase 2 Pre-Construction	03/15/18	04/08/24	\$2,346,000
10002664 Van Ness BRT Sewer Improvements	10/01/13	12/31/24	\$25,000,000
10002667 Better Market Street Sewer Improvements	01/06/14	06/28/24	\$2,221,742
10002670 Geary BRT Sewer Improvements - Phase 1	01/06/14	05/10/24	\$11,324,500
10002672 Central Subway Sewer Improvements	01/06/14	06/28/19	\$3,108,430
10002687 Mission Bay Loop Sewer Improvements	05/02/14	06/28/24	\$718,200
10002695 Masonic Avenue Sewer Improvements	10/27/14	06/28/19	\$2,995,772
10002776 Taraval Sewer Improvements	03/14/16	07/31/25	\$34,500,000
10037246 Seacliff No. 2 PS & FM Upgrade	12/14/20	04/03/28	\$22,135,949
10037251 Seacliff No. 1 PS & FM Upgrade	12/07/20	03/31/27	\$16,180,175
10037303 Sunnydale PS Safety Improvements	12/14/20	05/23/28	\$16,665,861
10038446 Geary Underpass PS Safe Access Enhancements	01/10/22	05/29/26	\$1,280,000
10038469 Pump Station Security Upgrades (Cesar Chavez, GFS, CHS, MMS)	06/01/22	09/13/27	\$7,984,872
10041814 Griffith DW FM Rehab	10/01/24	10/03/28	\$4,914,864
10042116 Sunnydale PS & FM Improvements - Phase A	10/01/24	06/03/30	\$6,695,178
10002417 Hudson Ave Pump Station and Outfall Improvements	03/31/14	10/31/17	\$281,639
10002419 Force Main Rehab at Embarcadero and Jackson Streets	07/07/14	12/29/23	\$11,009,047
10026828 Mariposa Dry-Weather Pump Station & Force Main Improvements	07/01/14	06/28/24	\$31,932,460
10026829 Cesar Chavez Pump Station	09/08/14	05/26/16	\$178,360

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10002465 Marin Street Sewer Replacement	07/01/15	01/23/20	\$5,968,190
10002485 Griffith Pump Station Improvements	03/14/16	12/30/22	\$15,139,976
10002138 North Shore to Channel F M Drainage Improvement	05/29/12	06/06/17	\$17,300,000
10041324 CHFM Inspection and Rehabilitation - Southern Portion	04/01/24	09/30/30	\$51,004,753
PS-10 Tennessee PS & FM Improvements	10/01/25	04/04/30	\$2,562,809
PS-13 Davidson PS & FM Improvements	10/01/25	11/25/30	\$2,490,473
PS-15A Channel PS Improvements - Phase A	10/01/25	10/03/30	\$19,233,548
10037244 Baker Baffle Improvements & Backflow Valve Repair	12/07/20	10/10/24	\$1,511,400
10037245 Brannan Outfall 19 Discharge/Baffle Rehab & Sansome Outfall 15 Valve	12/07/20	04/28/28	\$11,943,987
10038468 Systemwide CSD & T/S Monitoring Equipment Assessment	01/18/22	03/17/28	\$11,185,045
10038547 CSD Structure Rehab & Upgrades - Part 1	01/03/22	01/31/29	\$39,653,100
10002299 Richmond Transport/Storage Tunnel Rehabilitation	06/01/15	12/31/20	\$589,972
10002300 Baker/Laguna/Pierce CSD & Outfall	06/29/15	11/20/15	\$8,536
10002303 Beach and Sansome Street CSD Rehabilitation	03/14/16	06/28/24	\$5,600,000
10002344 CSD Backflow Prevention and Monitoring	07/25/16	06/28/24	\$8,700,000
10002378 5th, North 6th and Division Street CSD Rehabilitation	07/01/16	06/28/24	\$5,135,000
10042843 Pine Lake Easement Sewer Relocation - Phase A	10/01/25	09/30/27	\$1,000,000
CWWLID02 Islais Creek Green Infrastructure	09/04/12	04/24/18	\$2,425,008
10026813 Islais Creek Green Infrastructure (SPLIT)	02/08/16	04/24/18	\$3,068,371

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
CWWLID01 Cesar Chavez Green Infrastructure	04/01/13	06/28/13	\$1,395,847
10026805 Sunset Green Infrastructure	12/03/12	10/31/22	\$8,458,091
10026806 North Shore Green Infrastructure	12/03/12	12/31/18	\$1,721,677
10026807 Lake Merced Green Infrastructure	12/03/12	04/24/18	\$6,286,478
10026808 Sunnydale Green Infrastructure	12/03/12	09/30/19	\$5,079,286
10026809 Richmond Green Infrastructure	12/03/12	09/30/22	\$12,713,052
10026810 Yosemite Green Infrastructure	12/03/12	11/08/28	\$27,538,582
10026812 Channel Green Infrastructure	02/21/14	08/31/18	\$2,263,671
10029726 Green Infrastructure Capital Planning (GI-01)	07/11/16	06/30/34	\$21,000,000
10026816 Wawona Area Stormwater Improvements	07/01/16	12/02/24	\$28,382,249
10039608 Buchanan Street Mall	10/03/22	12/28/26	\$9,632,282
10034553 Green Infrastructure Grant Program (GIGP)	07/01/18	06/30/33	\$61,317,958
10042088 Citywide Green Infrastructure Implementation (New)	10/01/24	03/31/34	\$100,359,171
10037194 Balboa High School Regional Runoff Reduction Project	10/05/26	06/30/31	\$15,393,019
10037195 Regional School/Park: Giannini Middle School	04/04/24	06/30/29	\$11,763,673
10015816 Urban Watershed Assessment and Planning Initiation	07/01/11	06/28/13	\$3,102,671
10015817 Urban Watershed Assessment and Planning	10/07/11	06/30/17	\$14,260,841
10015818 Fulton St Sewer	07/01/11	10/31/12	\$3,222
10015819 Lake Merced Drainage	07/01/11	10/31/12	\$21,376

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10015820 Major Trunk Sewers	07/01/11	10/31/12	\$21,112
10029728 Advanced Rainfall Prediction - Part 1	04/01/13	06/29/18	\$1,491,236
10029729 Operational Decision System - Phase 1	08/01/13	09/30/16	\$944,709
10029730 Operational Decision System - Phase 2	02/01/17	07/31/24	\$4,833,185
10026811 17th and Folsom Wet Weather Storage	04/01/13	05/06/16	\$898,623
10026814 Flood Resilience Analysis (Planning Phase Only)	06/30/15	02/28/17	\$2,176,246
10026815 Flood Resilience - Early Projects (Planning Phase Only)	10/26/15	12/30/16	\$4,037,057
10026817 Cayuga Ave Stormwater Detention Project	07/01/16	03/29/19	\$453,576
10026818 Folsom Area Stormwater Improvement Project	07/01/16	12/31/24	\$38,410,859
10026819 17th and Folsom Permanent Barriers	05/20/16	03/29/19	\$175,540
10026820 Hydraulic and Drainage Sewer Improvements	07/01/16	06/30/23	\$4,427,530
10034360 Lower Alemany Area Stormwater Improvement Project	01/02/19	11/01/28	\$299,555,015
10039682 Flood Resiliency Planning	10/03/22	06/29/29	\$9,600,000
10040621 Floodwater Management Grant Assistance Program (Grant)	10/16/23	12/27/34	\$15,000,000
10038471 Folsom Area Stormwater Imp. Project - Phase 2	10/17/22	02/16/29	\$391,225,795
10029733 Land Reuse of 1800 Jerrold Avenue	09/17/13	12/31/19	\$84,354,150
10029734 Land Reuse of 1801 Jerrold Avenue	09/30/13	12/24/21	\$4,506,756
10015803 SSIP Program Management	09/01/11	12/01/15	\$5,413,000
10029732 SSIP Program Management	09/01/11	05/01/29	\$189,587,000

Project Name & ID	Approved Start Date	Approved Completion Date	Approved Budget
10040591 SSIP Program Management - PM02	07/03/23	06/30/37	\$145,000,000
10015546 New Treasure Island Wastewater Treatment Plant	01/01/11	08/26/26	\$222,170,400
10015557 Islais Creek Outfall Crossing	09/26/16	06/30/25	\$13,000,000
10015554 Ocean Beach Climate Change Adaptation Project	07/23/12	07/20/33	\$209,588,805
10038793 Customer Service System	07/03/23	06/30/27	\$8,108,715
10040511 Interim Sidestream Nutrient Removal	09/01/23	06/30/26	\$18,000,000
10033820 Southeast Outfall Condition Assessment and Rehabilitation	07/01/19	03/31/27	\$9,192,004
TBD-08 SEP South Jerrold Avenue Campus (Planning and Environmental Review)	01/02/26	12/30/28	\$3,000,000
10041337 ITS Capital Projects (WWE)	07/01/24	06/30/30	\$1,205,575
15724 R&R Treatment Facilities	07/01/10	03/31/27	\$270,552,535
15722-SD R&R Collection Systems - Small Diameter	07/01/10	03/31/27	\$1,230,005,915
15722-LD R&R Collection Systems - Large Diameter	07/01/22	03/31/27	\$98,398,809
15722-TS T/S Box Tier 2 (Field) Condition Assessment	12/09/24	03/31/27	\$7,278,365

Appendix C. List of Acronyms

AAR	Alternative Analysis Report	CSD	Combined Sewer Discharge
ADA	Americans with Disabilities Act	DAF	Dissolved Air Flotation
AGM	Assistant General Manager	DB	Design-Build
BAAQMD	Bay Area Air Quality Management District	DBI	Department of Building Inspection
BCTD	Bay Corridor and Transmission Distribution	DCS	Distributed Control System
BDFP	Biosolids Digester Facilities Project	DMA	Drainage Management Area
BFS	Bruce Flynn Pump Station	EIR	Environmental Impact Report
BMP	Best Management Practices	EPA	Environmental Protection Agency
BNR	Biological Nutrient Removal	F&I	Facilities and Infrastructure
BPS	Booster Pump Station	FASIP	Folsom Area Stormwater Improvement Project
BRT	Bus Rapid Transit	FAT	Factory Acceptance Testing
Caltrans	California Department of Transportation	FM	Force Main
CBSIP	Central Bayside System Improvement Project	FRP	Fiberglass Reinforced Plastic
CCS	Customer Cloud Service	FY	Fiscal Year
CCTV	Closed-Circuit Television	GBT	Gravity Belt Thickener
CEQA	California Environmental Quality Act	GFS	Griffith Street Pump Station
CER	Conceptual Engineering Report	GGNRA	Golden Gate National Recreation Area
CFR	Code Federal Regulation	GI	Green Infrastructure
CFRP	Carbon-fiber-reinforced polymers	GIGP	Green Infrastructure Grant Program
CHFM	Channel Force Main	GOX	Gaseous Oxygen
CHS	Channel (Street) Pump Station	HDPE	High Density Polyethylene
CIP	Capital Improvement Program; Cast-Iron Pipe	HPU	Hydraulic Power Unit
CIPL	Cured-in-Place Lining	HVAC	Heating, Ventilation, and Air Conditioning
CIS	Customer Information System	I&C	Instrumentation and Controls
CM/GC	Construction Manager/General Contractor	IT	Information Technology
CN	Construction	JOC	Job Order Contract
CSAMP	Collection System Asset Management Program	LAASIP	Lower Alemany Area Stormwater Improvement Project
		LED	Light-Emitting Diode
		LID	Low Impact Development

LF	Linear Feet	RDT	Rotary Drum Thickener
LOS	Levels of Service	RCP	Reinforced Concrete Pipe
LOX	Liquid Oxygen	RIO	Remote I/O
MBR	Membrane bioreactor	RFP	Request for Proposal
MCC	Motor Control Center	RFQ	Request for Qualifications
MCOPI	Manufacturer Certificates of Proper Installation	ROV	Remote Operated Vehicle
MGD	Million Gallons per Day	ROW	Right-of-Way
MMS	Merlin Morris Pump Station	SCADA	Supervisory control and data acquisition
MND	Mitigated Negative Declaration	SEO	Southeast Outfall
MOU	Memorandum of Understanding	SEP	Southeast Water Pollution Treatment Plant
N/A	Not Applicable	SEWPCP	Southeast Water Pollution Control Plant
NAR	Needs Assessment Report	SF	San Francisco
NEPA	National Environmental Policy Act	SFPORT	Port of San Francisco
NPDES	National Pollutant Discharge Elimination System	SFPUC	San Francisco Public Utilities Commission
NPF	Northpoint (Wet-Weather) Facility	SFMTA	San Francisco Municipal Transportation Agency (also shown as MTA)
NSCFM	North Shore to Channel Force Main	SFPW	San Francisco Public Works (formerly SFDPW)
NSFM	North Shore Force Main	SOMA	South of Market
NSS	North Shore Pump Station (also shown as NSPS)	SOW	Scope of Work
NTP	Notice to Proceed	SRF	State Revolving Fund
O&M	Operations and Maintenance	SSIP	Sewer System Improvement Program
OCU	Odor Control Units	TBD	To Be Determined
OSP	Oceanside Water Pollution Control Plant	TIDA	Treasure Island Development Authority
PDB	Progressive Design-Build	TBL	Triple Bottom Line
PG&E	Pacific Gas & Electric	THP	Thermal Hydrolysis Process
PLC	Programmable Logic Controllers	TIWRRF	Treasure Island Water Resource Recovery
PM	Program Management; Project Manager	TM	Technical Memorandum
PMC	Program Management Consultant	TPAS	Thickened Primary Activated Sludge
PS	Pump Station; Primary Sludge	UPS	Uninterruptable Power Supply
PSA	Pressure Swing Absorption		
PUC	Public Utilities Commission		
QA/QC	Quality Assurance/Quality Control		
R&R	Renewal and Replacement (also Shown as RnR)		

UV	Ultraviolet
UWA	Urban Watershed Assessment
VCP	Vitrified Clay Pipe
VFD	Variable Frequency Drives
VP SA	Vacuum Pressure Swing Adsorption
WAS	Waste Activated Sludge
WIFIA	Water Infrastructure Finance and Innovation Act
WSPS	West Side Pump Station (also shown as WSS)
WSS	Westside Pump Station (also shown as WSPS)
WWE	Wastewater Enterprise

DEFINITIONS

Baseline (CIP Baseline / Approved Baseline): A formally approved reference point for a project's scope, schedule and budget that is used to measure and control performance throughout the life of the project.

Baseline Scope/ Approved Scope: The scope and list of deliverables included in the baseline and it is approved by the SFPUC Commissioner (as outlined on the Project datasheets submitted within the 10-Year CIP).

Baseline Schedule/ Approved schedule: The approved timeline (start and finish dates) as developed in the project baseline.

Baseline Cost/ Approved Budget: The approved budget or cost to complete a project as developed in the project baseline.

Beneficial Reuse: The use of a facility, system, or portion of a project for its intended purpose before full project completion, when it is safe and functional. It allows the owner to gain operational value while remaining work continues.

Commissioning: A systematic process for verifying and documenting that the systems, equipment, or infrastructure are installed, tested and performing according to design intent, operational requirement, and the owner standards.

Escalation: The increase in construction cost over time due to factors such as inflation, labor and material increase, and market conditions.

Punch List: A list of incomplete, defective, and nonconforming items identified near the end of a construction project that must be corrected or completed before final completion of construction contract, acceptance, and closeout.

Start-up / Startup: The initial phase of placing equipment or systems into operation, including testing, calibration, adjustments, and operator training, to ensure systems function properly prior to full commissioning and acceptance.