

DATE:	November 20, 2024
TO:	Commissioner Kate H. Stacy, President Commissioner Joshua Arce, Vice President Commissioner Avni Jamdar Commissioner Steve Leveroni
FROM:	Dennis J. Herrera, General Manager
RE:	Wastewater Enterprise Capital Improvement Programs 1 <sup>st</sup> Quarter/ Fiscal Year 2024-2025

Enclosed please find the Wastewater Enterprise Capital Improvement Programs (CIP) Quarterly Report for the 1<sup>st</sup> Quarter of Fiscal Year (FY) 2024-2025. 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 July 1, 2024 to September 30, 2024.

This Quarterly Report adopts all the changes made to the Wastewater Enterprise Capital Improvement projects according to the 10-Year Capital Improvement Plan for FY2024-25 to FY2033-34 presented to and approved by the San Francisco Public Utilities Commission on February 13, 2024.

Attachment

London N. Breed Mayor

> Kate H. Stacy President

> Joshua Arce Vice President

Avni Jamdar Commissioner

Steve Leveroni 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 July 2024 – September 2024

Published: November 20, 2024

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#### EXECUTIVE SUMMARY

This Quarterly Report provides a summary update of the Wastewater (WWE) Capital Programs, including (1) the Sewer System Improvement Program (SSIP), comprised of SSIP Phase 1 and Other SSIP, (2) the WWE Facilities and Infrastructure Program (F&I), and (3) the WWE Renewal and Replacement Program. This Report provides a status summary of the WWE Capital Programs for the period of July 1, 2024 to September 30, 2024 to the Commission, the programs' stakeholders and the public.

This Quarterly Report includes schedule and cost forecasts of the FY2024-25 to FY2033-34 10-year Capital Improvement Plan (FY25-34 10-year CIP) that was presented to and approved by the San Francisco Public Utilities Commission on February 13, 2024. Changes to the approved program and project scopes, schedules, and budgets that were approved as part of this FY25-FY34 10-year CIP was effective at the start of FY2024-25 or on July 1, 2024.

The following table reflects the 2023 and 2024 Approved Budget and Schedule for all WWE CIP projects including the SSIP Phase 1, Other SSIP, and Facilities and Infrastructure Projects:

Programs	2023 Approved Schedule	2023 Approved Budget (\$ Million)	2024 Approved Schedule	2024 Approved Budget (\$ Million)	Budget Variance Between 2024 and 2023 (\$ Million)	Schedule Variance Between 2024 and 2023 (Months)
SSIP Phase 1	04/02/36	\$4,401.1	06/30/34	\$4,707.4	\$306.3	(21)
Other SSIP	06/30/37	\$1,786.5	11/29/39	\$3,644.4	\$1,857.9	29
Facilities and Infrastructure (F&I)	04/19/32	\$630.5	07/20/33	\$484.3	(\$146.2)	15
Total	06/30/37	\$6,818.1	11/29/39	\$8,836.1	\$2,018	29

Table A - Wastewater Enterprise CIP 2023 vs. 2022 Approved Budget and Schedule

In summary, according to the last approved CIP in 2024, the Approved Budget for the SSIP Phase 1 was increased by \$306.3M, and the approved schedule was reduced by 21 months. The number of projects for SSIP Phase 1 remains at 70. Also, the Approved Budget for the other SSIP projects was increased by \$1,857.9M, and the approved schedule was extended by 29 months. The number of projects for other SSIP is 51. The Approved Budget for F&I projects decreased by \$146.2M and the approved schedule is extended by 15 months. The number of projects in the F&I is 6.

#### Program Current Status:

During this quarter, steady progress continues with the Wastewater Capital Programs. For this reporting period, the overall SSIP is 41.1% complete, and SSIP Phase 1 and Other SSIP at 67.7% and 4.8% complete, respectively.

#### Q1-FY2024-2025 (07/01/24-09/30/24)

#### **WWE Quarterly Report**

For this reporting period, the SSIP Phase 1 remains at seventy (70) projects in various phases as follows: five (5) projects in planning or design, seven (7) projects in construction, one (1) project in multi-phase (projects with different phases), seven (7) projects in closeout, and fifty (50) projects completed. See Figure A below.

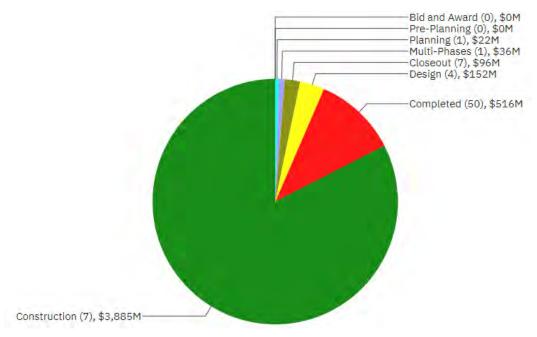
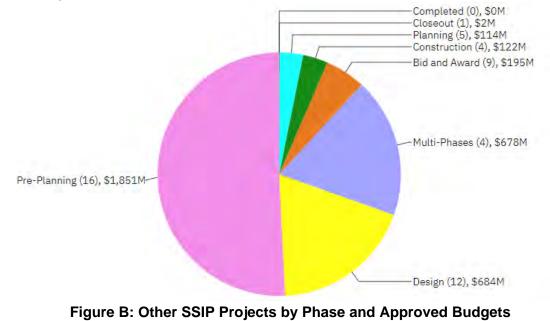


Figure A: SSIP Phase 1 Projects by Phase and Approved Budget

For this reporting period, the Other SSIP changed to fifty-one (51) projects in various phases as follows: sixteen (16) projects in pre-planning, twenty-six (26) projects in planning, bid and award, or design, four (4) projects in construction, four (4) projects in multi-phase, and one (1) project in closeout. See Figure B below.



For this reporting period, the F&I has six (6) projects in various phases as follows: one (1) project in pre-planning, two (2) projects in planning or design, and three (3) projects in construction. See Figure C below.

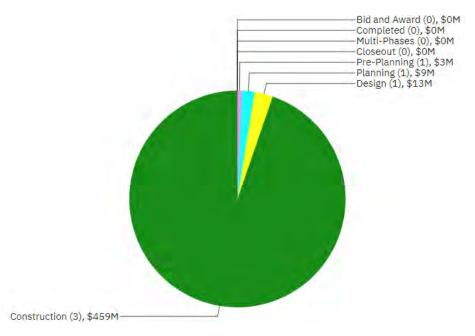


Figure C: Facilities and Infrastructure Projects by Phase and Approved Budgets

The following Tables provide a summary of the cost and schedule status for the SSIP Phase 1, Other SSIP, and F&I.

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Programs	(\$ Million) (\$ Mill (A) (B)		Forecast Costs this Quarter (\$ Million)	Cost Variance (\$ Million)	Variance Over Reporting Period* (\$ Million)
	(A)	(B)	(C)	(D=B-C)	(E)
SSIP Phase 1	\$3,270.3	\$4,707.4	\$4,707.4	-	-
Other SSIP	\$149.3	\$3,644.4	\$3,644.4	-	-
F&I	\$130.2	\$484.3	\$484.3	-	-
Programs Total	\$3,549.8	\$8,836.1	\$8,836.1	-	-

#### Table B: Program Level Cost Summary

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

Programs	2016 Approved Project Start	Current Approved Project Start	Actual Start	2016 Approved Completion	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)						
SSIP Phase 1	07/01/11	07/01/11	07/01/11 A*	10/30/26	06/30/34	06/30/34	-						
Other SSIP	N/A	03/03/18	03/03/18 A*	N/A	11/29/39	11/29/39	-						
F&I	01/01/11	01/01/11	01/01/11 A*	12/29/23	07/20/33	02/20/35	19.1 (Late)						
Overall Programs	01/01/11	01/01/11	01/01/11 A*	10/30/26	11/29/39	11/29/39	-						

#### Table C: Program Level Schedule Summary

\* "A" represents the actual date.

N/A = not applicable since these projects were not part of the 2016 Approved Baseline.

#### Program Key Updates:

Some projects decreased in overall percentage completion compared to the last quarter due to scope/budget/schedule that were approved according to the last 10-year CIP.

Key updates for the Sewer System Improvement Program include:

- 1. SEP Biosolids Digester Facilities Construction of the digester facilities continues. The digester covers have all been lifted into place. Installation of the digesters' exterior panels and coating of the digester interior are progressing. Mechanical, electrical, and plumbing installations are ongoing in the digester basement, solids pretreatment building, and supporting facilities and pipe galleries. The tank silos for the dewatered biosolids have been assembled and placed into the dewatering building. In addition, a separate Biogas Utilization Contract (Biogas Contract) was initiated to convert biogas produced from the new digesters into renewable natural gas for other beneficial use. Originally, the Biogas Contract was proposed to be implemented using a Public-Private Partnership (P3) delivery approach, but the P3 proved to be not financially viable for SFPUC. Last quarter, the project team expedited efforts and began developing a Design-Build RFQ/RFP for the Biogas Contract, and was advertised this quarter. The SEP Biosolids Digester Facilities project completion is at 53.5% compared to 53.4% last quarter.
- SEP New Headworks (Grit) Replacement Permanent power was provided by the Power Enterprise which allowed the new Headworks substations to be energized. Equipment pre-test checks and functions testing is on-going. Raw sewage was introduced for performance testing as well. For the influent Pumping, installation of influent pumps, dewatering pump, coarse screen, level sensor, hydraulic gate modifications also occurred. The overall project completion is at 87.0%, compared to 87.5% last quarter.
- 3. WWE Facility-wide Distributed Control System (DCS) Upgrade DCS training activities specific to the new Southeast Water Pollution Control Plant (SEP) Headworks facility's processes were initiated and are ongoing. DCS server cabinets and other related hardware were delivered onsite and were installed by the Biosolids project contractor at one of the

process facilities. Process control network and new DCS network design activities for the entire SEP progressed to 100% design during this reporting period. The overall project completion is at 43.7%, compared to 60.2% last quarter.

- 4. Westside Pump Station Reliability Improvements During this quarter, construction activities under WW-645R contract have progressed, with PG&E completing the installation of the power meter frame. The overall project completion is at 71.2%, compared to 89.4.% last quarter.
- 5. **OSP Condition Improvement Projects Part 2** This project includes seven subprojects, which are at the following phases: one in closeout, two in construction, one in design, two in planning and one to be initiated. The overall project completion is at 14.4%, compared to 18.7% last quarter.
- 6. North Shore Pump Station Wet Weather Improvements During this quarter, the contractor completed wiring, field testing, and cutovers of all four main station gates. Installation of motor control centers 2 & 4, and cutovers of all power loads were completed. The Contractor also completed structural foundation work for the installation of the remaining two new dry weather pumps. The overall project completion is at 79.1%, compared to 82.4% last quarter.
- Large Diameter Sewer Projects and Channel FM Intertie This project includes ten subprojects, which are at the following phases: four in construction, one in design, four in closeout, and one completed. During this quarter, one project obtained Notice-to-Proceed and one subproject accomplished Final Completion. The overall project completion is at 59.1%, compared to 57.5% last quarter.
- 8. Geary BRT Sewer Improvements Phase 2 This includes both projects 10033106 and 10041084 and reflects the pre-bid & award phases, and post-bid & award phases of the project, respectively. During this quarter, the project team worked on getting contract certification. The overall combined project completion is at 10.3%, compared to 11.2% last quarter. Both the project budget and schedule were increased.
- 9. **Sunnydale PS Safety Improvements** During this quarter, the construction contract was awarded. The overall project completion is at 14.2%, compared to 15.2% last quarter. Both the project budget and schedule were increased.
- 10. **CSD Structure Rehab & Upgrades Part 1** This project includes two contracts, one in design and the other contract has been advertised. The overall project completion is at 5.3%, compared to 5.2% last quarter.
- 11. Lower Alemany Area Stormwater Improvements The project team anticipated receiving environmental clearance in the upcoming quarter. Project team continues refining additional technical studies based on coordination with Caltrans. The overall project completion is at 9.6%, compared to 9.6% last quarter.
- 12. Folsom Area Stormwater Improvement This project is implemented through four construction contracts, WW-719A, WW-719B, WW-719C, and WW-719D. For Contract WW-719A, Initial Upstream Pipe, design was finalized. For Contract WW-719B, Alameda Tunnel Construction Contract the project team completed the Final US-101 Type Selection Report and Draft I-80 Type Selection Report for Caltrans. For Contract WW-719C, Harrison and Treat Sewer Box, the design activities for the 95% package are complete but need to be assembled and reviewed in the next quarter. For Contract WW-719D, Large Upstream Pipe, the project

team completed 65% design. The overall project completion is at 66.1%, compared to 63.7% last quarter.

Key updates for the WWE F&I Program include:

- 1. New Treasure Island Wastewater Treatment Plant Project This project is implemented using the Design-Build delivery method, and as such, both design and construction work are occurring at the same time. During this quarter, the Design-Builder placed concrete for the Administration and Maintenance building slab-on-grade and made the first pour for the walls of both buildings using shotcrete. The Design-Builder commenced excavating for the trash capture unit in the wetland area. The Design-Builder started in-slab conduits for the Mail Electrical Structure. The site-wide electrical distribution network work continued this quarter. The steel frame installation in the Membrane Bio Reactor process area was completed this quarter. The overall project completion is at 38.3%, compared to 34.9% last quarter.
- 2. Ocean Beach Climate Change Adaptation Project This project is being executed through five subprojects: (A) Army Corps of Engineers sand placement, which is complete; (B) Short-Term Improvements which is ongoing; and Long-Term Improvements which is ongoing, and includes (C) Intersection Reconfiguration, (D) Seawall and Coastal Access Amenities, and (E) Vegetation Planting. The project team currently estimates an 18-month delay to construction. The project is now anticipated to be executed in two separate contracts (C) Intersection, (D) Seawall, and (E) Planting so we've combined contracts (C) & (D) together. The overall project completion is at 17.4%, compared to 18.7% last quarter.
- 3. Southeast Bay Outfall Islais Creek Crossing Replacement During this reporting period, the project team completed the 42-inch pipe inspection report. The project team and permitting manager met with regulatory agencies this quarter to discuss the life extension of the bypass. The Conceptual Engineering Report was initiated for the bypass life extension scope of work. The overall project completion is at 94.1%, compared to 93.5% last quarter.
- 4. Interim Sidestream Nutrient Removal –The project work is being planned for implementation through the existing contracts from the Biosolids Digester Facilities project. The proposed construction cost and schedule provided by the Construction Manager General Contractor (CM/GC) is under review. The overall project completion is at 6.7%, compared to 4.6% last quarter.

In addition, the following are key updates on the R&R program:

- 1. **Collection Systems, R&R Program** During this quarter, approximately 1.06 miles of small and large diameter sewer main replacement work have been awarded.
- 2. **Treatment, R&R Program** During this quarter, eight equipment purchases, totaling over \$549.4K, were completed.

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I. Sewer System Improvement Program

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#### 1. PROGRAM DESCRIPTION

The responsibilities of the San Francisco Public Utilities Commission (SFPUC)'s Wastewater Enterprise (WWE) are to manage, operate, and maintain San Francisco's wastewater collection and treatment system. San Francisco's sewer system collects, conveys, and treats both dry and wet weather (urban stormwater) flows.

The Sewer System Improvement Program (SSIP) is a wastewater capital improvement program which includes multiple projects to improve the existing system. The SSIP is the culmination of wastewater system planning efforts, public meetings, and SFPUC Commission workshops, to develop proposed improvements to address the following challenges:

- 1. Aging infrastructure and the poor condition of existing facilities.
- 2. Seismic deficiencies and lack of structural integrity.
- 3. Limited operating flexibility and lack of redundancy.
- 4. Compliance with operational permits at all times.
- 5. Managing stormwater in San Francisco's eight urban watersheds.
- 6. Optimizing system performance and efficiency.
- 7. Protecting public health, the environment, and conservation goals to safeguard our natural and human environments, and
- 8. Compliance with the Commission's Environmental Justice and Community Benefits Policy.

The purpose of the SSIP is to upgrade the existing wastewater system to meet the challenges of today and the future. The implementation of the SSIP projects were originally phased over twenty (20) years to maintain ratepayer affordability and minimize impacts to our communities throughout the City.

In February 2011, the SFPUC Commission directed staff to proceed with the procurement of a program management consultant to assist City staff with the implementation of the SSIP. The AECOM-Parsons Joint Venture was selected, and the Program Management Consultant (PMC) team began work on September 6, 2011. The first major task for the PMC was to develop a recommended Program, collectively known as Program Validation. This effort was completed by the PMC and City staff recommending the scope, schedule, and budget of the SSIP treatment and collection system projects, as well as revisions to the SSIP Goals and Levels of Service (LOS). On August 28, 2012, after a series of three public SSIP workshops, the SFPUC Commission officially endorsed the proposed projects in the \$6.933 billion 20-year SSIP and the associated Goals and Level of Service and authorized staff to proceed with planning and development of projects within Phase 1 of the SSIP, representing \$2.7 billion.

Subsequently, in October 2015, the PMC was assigned to refine the program scope, budget, and schedule based on newly available information, various constraints, and challenges. The effort included project re-prioritization, scope refinement, budget re-alignment, and schedule re-alignment. The refinement was completed in January 2016 and presented to the SFPUC Commission on March 22, 2016. The refined program scope and budget for \$6.976 billion, along with the Goals and LOS for all three phases of the SSIP, was endorsed by the Commission along with the baseline for scope, schedule, and budget for Phase 1 projects totaling \$2.910 billion. The revised program is referred to as the "2016 SSIP Baseline".

The 2016 Endorsed Goals include:

- Provide a compliant, reliable, resilient, and flexible system that can respond to catastrophic events;
- Integrate green and grey infrastructure to manage stormwater and minimize flooding;
- Provide benefits to impacted communities;
- Modify the system to adapt to climate change;

- Achieve economic and environmental sustainability; and
- Maintain ratepayer affordability.

#### Wastewater System Overview:

The San Francisco wastewater collection and treatment system has been developed over the past two centuries. San Francisco's sewer system dates back to the 1800's when the first sewers were constructed which, at the time, discharged directly into the San Francisco Bay and the Pacific Ocean. Since then, WWE's Collection System is now a network of sewers, tunnels and large structures (called transport/storage structures) that collect, store, and provide primary-level treatment for both sanitary flows and stormwater runoff (or combined sewage), before conveying the combined sewage flows to the wastewater treatment facilities. The City's major treatment facilities were constructed over several years with previously completed capital improvement programs. The treatment facilities that continues to be in operations today were originally built as follows: North Point Facility, 1951; Southeast Plant, 1952; and Oceanside Plant, 1993. The Southeast Plant was enlarged and upgraded to secondary treatment in 1982, and again expanded to treat the current peak wet-weather flows in 1996.

Whenever possible, this wastewater system is designed to reduce operation and maintenance costs by taking advantage of the City's natural topography and maximize the benefits of gravity flow for the collection, transport, treatment, and discharge of wastewater and stormwater. Ninety-two percent of San Francisco is served by this combined sewer system that consists of approximately 24,800 manholes, 25,000 catch basins, 27 pump stations, and 1,000 miles of sewers ranging from 8-inch diameter pipes to 10-foot diameter tunnels to transport/storage structures, which are underground concrete structures up to 45 feet deep by 25 feet wide.

Flows are conveyed from the collection system through the transport/storage boxes, to two centralized all-weather treatment plants, located in the southeast and southwest sections of the City respectively, the Southeast Water Pollution Control Plant (SEP) and the Oceanside Water Pollution Control Plant (OSP). During wet weather, additional flows are conveyed to our wet-weather facility, located in the northeast section of the City, the North Point Wet-Weather Facility (NPF). During each dry weather day, more than 80 million gallons of wastewater is collected and transported to one of three treatment plants (Southeast, Oceanside, and North Point), where harmful pollutants like human waste, oil and other pesticides are removed before reaching the San Francisco Bay and Pacific Ocean. When it rains, our wastewater system collects and can treat up to 575 million gallons a day. On an annual basis, the system treats approximately 40 billion gallons of combined sewage.

#### **Program Evolution:**

Due to the size of the SSIP, a phased approach was initially developed to simplify the implementation of projects. This was done to manage rate impacts, consider construction sequencing impacts and maintain existing operations and permit compliance. Each of the projects in the SSIP contributes to the wastewater system by meeting the Commission-endorsed Goals and LOS. The Program was originally baselined via the 2016 SSIP Baseline, which was endorsed by the SFPUC Commission to be implemented in three overlapping phases, Phase 1, 2 and 3. Subsequently, the SSIP Phase 1 Baseline Budget and Schedule were revised in 2018 and approved by the San Francisco Public Utilities Commission on April 24, 2018. Phase 1 projects focused on ensuring regulatory compliance, enhancing process reliability and redundancy, improving plant odor control, and replacing the antiquated biosolids and headworks facilities with state-of-the-art technology. As such, Phase 1 primarily focused on treatment plant improvements.

Since the Commission approval of the 2018 SSIP Baseline, considerable thought was put into how the program has evolved since its inception in 2010, and how it should move forward. A capital program spanning several decades, like the SSIP, must continually adapt to ever-evolving priorities and

changing market conditions to be sustainable. In previous SSIP baseline efforts, long-term forecasting was used to plan the three overlapping phases of investments to deliver the program while achieving financial affordability goals. However, lessons learned have taught us that the confidence and accuracy of these forecasts diminish over a long duration. Thus, on February 8, 2022, the Commission approved the 2022 SSIP Baseline, where a selection of high priority projects identified initially in Phases 2 and 3 were initiated. The SFPUC is transitioning away from the original intent of three SSIP phases to implementing capital improvement projects as part of a rolling Ten-Year Capital Plan. New projects will be initiated based on priority and timeline through the SFPUC's biennial budget process.

#### **SSIP** Revised Baseline:

As reflected in Table 1.1, the SSIP Phase 1 Baseline Budget and Schedule were revised in 2018, 2020, 2022, and 2023, and these revisions were approved by the San Francisco Public Utilities Commission (the Commission) on April 24, 2018, December 2020, February 2022, and February 2023 respectively. The 2023 Approved Budget for SSIP Phase 1 is \$4,401.1 million, which is about \$1.6 million lower than the 2022 Baseline Budget. The 2023 Approved Program Completion is April 2036, which is about 45 months later than the 2022 Baseline Program Completion.

As described in the Program Evolution above, other SSIP projects beyond Phase 1 (Other SSIP Projects) were initiated based on the rolling Ten-Year Capital Plan efforts. Table 1.2 reflects the Other SSIP Projects that were originally described in the 2018 Baseline approved by the Commission on December 11, 2018, before these Projects were approved for revision by the Commission on December 2020, February 2022, and February 2023. The 2023 Approved Budget for Other SSIP Projects was \$1,786.5 million, which was about \$215.6 million higher than the 2022 Baseline Budget. The 2023 Approved Projects' Completion is June 2037, which is about 48 months later than the 2022 Baseline Projects Completion. This Quarterly report also includes schedule and budget forecasts of the FY25-FY34 10-year Capital Improvement Plan that was presented to and approved by the San Francisco Public Utilities Commission on February 13, 2024. Changes to the approved program and project scopes, schedules, and budgets that were proposed as part of this FY25-FY34 10-year CIP was effective at the start of FY25, on July 1, 2024.

Refer to Appendix 1 for scope description of all projects in SSIP Phase 1 Program and Other SSIP Projects.

10					
Program Revision	Commission Approval	Budget (\$Million)	Schedule <sup>*</sup>		
2016 (Baseline)	March 22, 2016	\$2,910.4	10/30/26		
2018 (Revised)	April 24, 2018	\$2,978.7	05/01/25		
2020 (Revised)	December 22, 2020	\$3,655.3	08/31/27		
2022 (Revised)	February 8, 2022	\$4,402.7	06/30/32		
2023 (Revised)	February 14, 2023	\$4,401.1	04/02/36		
2024 (Latest Approved)	February 13, 2024	\$4,707.4	06/30/34		

#### Table 1.1 SSIP Phase I Program Revisions

\* Final Program Completion Date

Program Revision	Commission Approval	Budget (\$Million)	Schedule <sup>*</sup>			
2018 (Baseline)	December 11, 2018	\$430.5	06/30/28			
2020 (Revised)	December 22, 2020	\$1,197.3	12/26/29			
2022 (Revised)	February 8, 2022	\$1,570.9	06/30/33			
2023 (Revised)	February 14, 2023	\$1,786.5	06/30/37			
2024 (Latest Approved)	February 13, 2024	\$3,644.4	11/29/39			

#### Table 1.2 Other SSIP Projects

\* Final Program Completion Date

#### 2. PROGRAM STATUS

Figure 2.1 depicts the total Current Approved Budget for the SSIP Phase 1 projects in each phase of the program as of September 30, 2024. The number of projects in each phase is shown in parentheses.

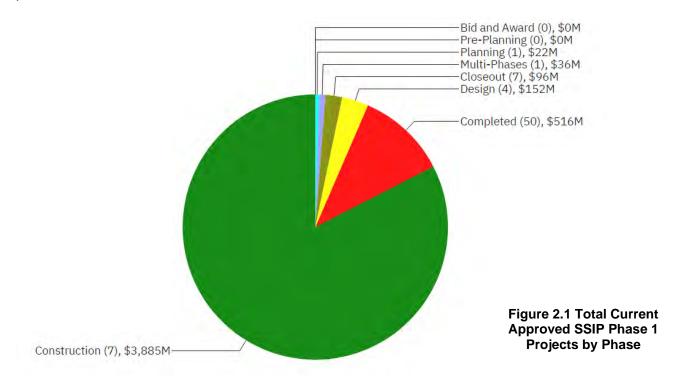


Figure 2.2 depicts the number of SSIP Phase 1 projects in the following stages of the program as of September 30, 2024: Pre-construction, Construction, and Post-construction (Completed or Closeout).

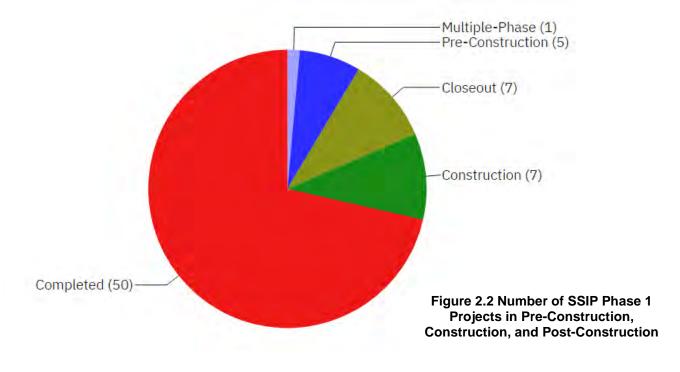


Figure 2.3 depicts the environmental review and permitting status of the SSIP Phase 1 projects as of September 30, 2024.

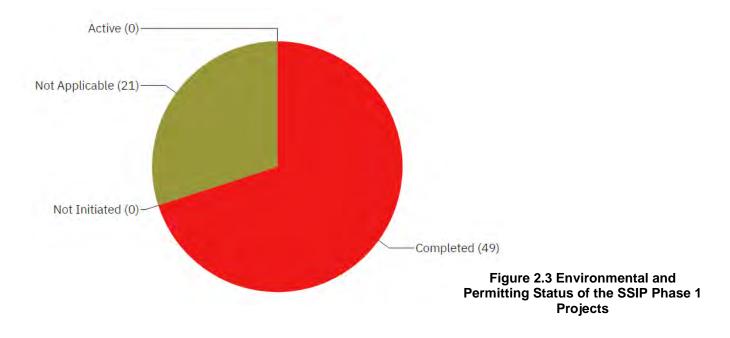


Figure 2.4 depicts the total Current Approved Budget for the Other SSIP projects remaining in each phase of the program as of September 30, 2024. The number of projects currently active in each phase is shown in parentheses.

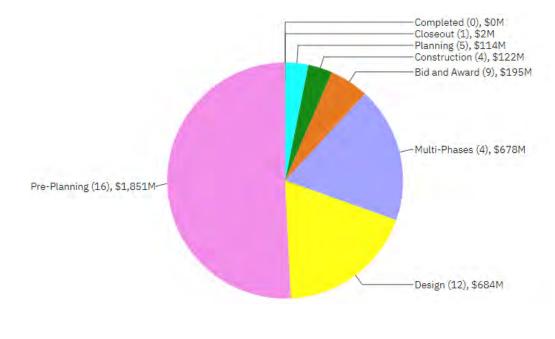


Figure 2.4 Total Current Approved Other SSIP Projects by Phase

#### Q1-FY2024-2025 (07/01/24 - 09/30/24)

Figure 2.5 depicts the number of Other SSIP projects in the following stages of the program as of September 30, 2024: Pre-construction, Construction, and Post-construction (Closeout or Completed).

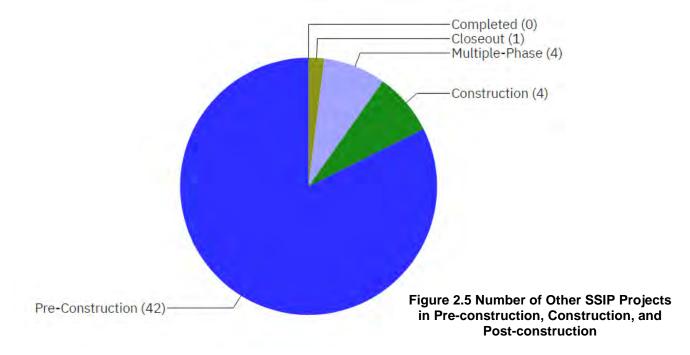


Figure 2.6 depicts the environmental review and permitting status of the Other SSIP projects as of September 30, 2024.

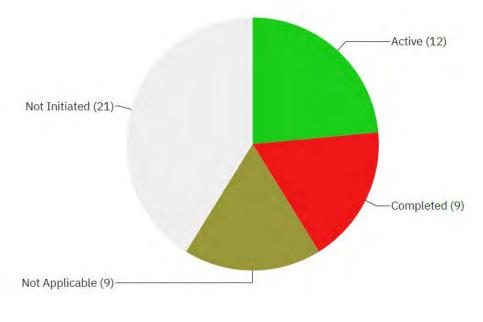


Figure 2.6 Environmental and Permitting Status of the Other SSIP Projects

#### KEY ACCOMPLISHMENTS

#### Programmatic

For this reporting period, the overall SSIP is 41.1% complete with 8 more projects added, and SSIP Phase 1 and Other SSIP at 67.7% and 4.8% complete, respectively.

#### In the News

During the quarter, there were various articles covering the future of the Great Highway, Treasure Island, completion of the L-Taraval Project, and continuing coverage of the EPA lawsuit:

July:

• https://www.kron4.com/news/bay-area/what-is-the-future-of-great-highway-in-sf/

#### August:

• <u>https://sfstandard.com/2024/08/15/youre-not-crazy-roads-and-sidewalks-are-under-construction-all-over-sf-right-now/</u>

#### September:

- <u>https://informedinfrastructure.com/96389/a-good-neighbor-treasure-island-looks-toward-the-horizon-once-again/</u>
- <u>https://www.sfgate.com/local/article/upper-great-highway-november-ballot-measure-19728180.php</u>
- <u>https://abc7news.com/post/san-francisco-prop-k-great-highway-partial-closure-proposition-tensions-rising/15322040/</u>
- https://www.sfchronicle.com/sf/article/south-market-soma-business-19786752.php
- <u>https://www.sfcityattorney.org/2024/09/26/san-francisco-files-final-brief-in-scotus-case-to-protect-utility-ratepayers-from-massive-bill-increases/</u>
- <u>https://www.sfexaminer.com/news/transit/l-taraval-muni-metro-service-resuming-after-5-year-hiatus/article\_8225ff0e-6fc1-11ef-9d36-9b10ea15f7ef.html</u>

#### **Highlights of Conducted Outreach**

July

- Presented Southeast Treatment Plant construction updates and progress in the design of the Biogas Utilization project element of the Biosolids Digester Facilities Project to the Southeast Community Center.
- Presented to the Geary Blvd Citizens Advisory Committee (CAC) on planning for the start of construction of the Geary BRT and Sewer Improvements Phase 2.

#### August

- Provided site tour of BDFP and Headworks construction to SFPUC Interns.
- Presented Southeast Treatment Plant construction updates and progress in the design of the Biogas Utilization Project element of the Biosolids Project, to the Bay Area Air Quality Management District's BVHP Interagency Quarterly Meeting.
- Presented to the SFPUC Wastewater CAC Subcommittee on the Biogas Utilization Project and the Geary BRT and Sewer Improvements Phase 2.
- Initiated outreach and stakeholder engagement on upcoming R & R sewer upgrade projects dispersed across San Francisco.

#### Q1-FY2024-2025 (07/01/24 - 09/30/24)

#### I. SSIP Quarterly Report

#### September

- Participated in the L-Taraval Ribbon Cutting ceremony and celebration.
- Participated in Back to School night and kicked off school-community-engagement for the A.P. Giannini Green Schoolyard project.
- Conducted targeted outreach for heavy night work construction on the Channel Force Main Intertie Project.
- Provided construction site tour of BDFP and Headworks to PG&E's International TechWomen's Emerging Leaders.
- Announced the Evans Avenue Restoration Project to Bayview residents and D10 Supervisor Shamann Walton.

#### 3. PROGRAM COST SUMMARY

Table 3 provides an overall program-level cost summary of Sewer System Improvement Program (SSIP) projects grouped by Facilities. It shows the Expenditures to Date, Current Approved Budget, Q1/FY24-25 Forecast Costs, Cost Variance between the Current Approved and Forecast Cost, and Variance Over Reporting Period. The Current Approved Budget and the Current Forecast Cost are both \$8,351.8 million.

Subprograms	Expenditure To Date (\$ Million) (A)	Current Approved Budget (\$ Million) (B)	Current Forecasted Cost (\$ Million) (C)	Cost Variance (\$ Million) (D = B - C)	Variance Over Reporting Period* (\$ Million) (E)
Treatment Facilities	\$2,665.1	\$6,202.1	\$6,202.1	\$0.0	\$0.0
Biosolids Digester Facilities Project	\$1,532.9	\$2,672.6	\$2,672.6	\$0.0	\$0.0
SSIP Phase 1	\$1,532.9	\$2,672.6	\$2,672.6	\$0.0	\$0.0
New Headworks (Grit) Replacement	\$629.2	\$716.7	\$716.7	\$0.0	\$0.0
SSIP Phase 1	\$629.2	\$716.7	\$716.7	\$0.0	\$0.0
Southeast Plant (SEP) Improvements	\$288.0	\$2,163.3	\$2,163.3	\$0.0	\$0.0
SSIP Phase 1	\$272.3	\$335.7	\$335.7 \$0.		\$0.0
Other SSIP	\$15.7	\$1,827.6	\$1,827.6 \$1,827.6		\$0.0
Oceanside Plant (OSP) Improvements	\$152.3	\$468.5	\$468.5	\$0.0	\$0.0
SSIP Phase 1	\$133.3	\$177.0	\$177.0	\$0.0	\$0.0
Other SSIP	\$19.0	\$291.5	\$291.5	\$0.0	\$0.0
North Point Facility (NPF) Improvements	\$62.7	\$180.9	\$180.9	\$0.0	\$0.0
SSIP Phase 1	\$58.4	\$69.5	\$69.5	\$0.0	\$0.0
Other SSIP	\$4.3	\$111.5	\$111.5	\$0.0	\$0.0
Collection System	\$317.7	\$611.5	\$611.5	\$0.0	\$0.0
Interceptors / Tunnels and Odor Control	\$94.1	\$174.3	\$174.3	\$0.0	\$0.0
SSIP Phase 1	\$33.7	\$35.7	\$35.7	\$0.0	\$0.0
Other SSIP	\$60.4	\$138.5	\$138.5	\$0.0	\$0.0
Interdepartmental Projects	\$71.6	\$82.2	\$82.2	\$0.0	\$0.0
SSIP Phase 1	\$71.6	\$82.2	\$82.2	\$0.0	\$0.0

#### Table 3. Program-Level Cost Summary of SSIP

\*Negative number reflects cost increases since last quarter, and positive number reflects cost reduction since last quarter.

#### Table 3. Program-Level Cost Summary of SSIP (continued)

Subprograms	Expenditure To Date (\$ Million) (A)	Current Approved Budget (\$ Million) (B)	Current Forecasted Cost (\$ Million) (C)	Cost Variance (\$ Million) (D = B - C)	Variance Over Reporting Period* (\$ Million) (E)
Pump Stations and Forcemain Improvements	\$90.6	\$233.0	\$233.0	\$0.0	\$0.0
SSIP Phase 1	\$81.0	\$81.8	\$81.8	\$0.0	\$0.0
Other SSIP	\$9.6	\$151.1	\$151.1	\$0.0	\$0.0
Combined Sewer Discharge (CSD) and Transport/Storage Structures	\$24.7	\$85.3	\$85.3	\$0.0	\$0.0
SSIP Phase 1	\$19.8	\$20.0	\$20.0	\$0.0	\$0.0
Other SSIP	\$5.0	\$65.3	\$65.3	\$0.0	\$0.0
Central Bayside System Improvement (CBSIP)	\$36.7	\$36.7	\$36.7	\$0.0	\$0.0
SSIP Phase 1	\$36.7	\$36.7	\$36.7	\$0.0	\$0.0
Stormwater Management	\$117.1	\$343.5	\$343.5	\$0.0	\$0.0
Early Implementation Projects	\$47.9	\$71.0	\$71.0	\$0.0	\$0.0
SSIP Phase 1	\$47.9	\$71.0	\$71.0	\$0.0	\$0.0
Watershed Stormwater Management	\$44.4	\$220.7	\$220.7	\$0.0	\$0.0
SSIP Phase 1	\$33.9	\$49.4	\$49.4	\$0.0	\$0.0
Other SSIP	\$10.6	\$171.3	\$171.3	\$0.0	\$0.0
Advanced Rainfall and Operation Decision System	\$7.2	\$7.3	\$7.3	\$0.0	\$0.0
SSIP Phase 1	\$7.2	\$7.3	\$7.3	\$0.0	\$0.0
Urban Watershed Assessment	\$17.4	\$17.4	\$17.4	\$0.0	\$0.0
SSIP Phase 1	\$17.4	\$17.4	\$17.4	\$0.0	\$0.0
Watershed Stormwater Management and Customer Service Billing System	\$0.1	\$27.2	\$27.2	\$0.0	\$0.0
Other SSIP	\$0.1	\$27.2	\$27.2	\$0.0	\$0.0
Flood Resilience Projects	\$59.6	\$766.0	\$766.0	\$0.0	\$0.0
Flood Resilience Projects	\$59.6	\$766.0	\$766.0	\$0.0	\$0.0
SSIP Phase 1	\$37.5	\$50.6	\$50.6	\$0.0	\$0.0
Other SSIP	\$22.1	\$715.4	\$715.4	\$0.0	\$0.0
Land Reuse	\$85.6	\$88.9	\$88.9	\$0.0	\$0.0
Land Reuse	\$85.6	\$88.9	\$88.9	\$0.0	\$0.0
SSIP Phase 1	\$85.6	\$88.9	\$88.9	\$0.0	\$0.0
Program Management	\$174.6	\$340.0	\$340.0	\$0.0	\$0.0
Phase 1 Program Management	\$174.6	\$340.0	\$340.0	\$0.0	\$0.0
SSIP Phase 1	\$172.0	\$195.0	\$195.0	\$0.0	\$0.0
Other SSIP	\$2.6	\$145.0	\$145.0	\$0.0	\$0.0

\*Negative number reflects cost increases since last quarter, and positive number reflects cost reduction since last quarter.

#### Table 3. Program-Level Cost Summary of SSIP (continued)

Subprograms	Expenditure To Date (\$ Million) (A)	Current Approved Budget (\$ Million) (B)	Current Forecasted Cost (\$ Million) (C)	Cost Variance (\$ Million) (D = B - C)	Variance Over Reporting Period* (\$ Million) (E)
Overall Program Total	\$3,419.6	\$8,351.8	\$8,351.8	\$0.0	\$0.0
SSIP Phase 1 Subtotal	\$3,270.3	\$4,707.4	\$4,707.4	\$0.0	\$0.0
Other SSIP Subtotal	\$149.3	\$3,644.4	\$3,644.4	\$0.0	\$0.0

\*Negative number reflects cost increases since last quarter, and positive number reflects cost reduction since last quarter.

#### 4. PROGRAM SCHEDULE SUMMARY

Figure 4 depicts the Current Approved Schedule completion date and the Current Forecast Schedule completion date for the SSIP.

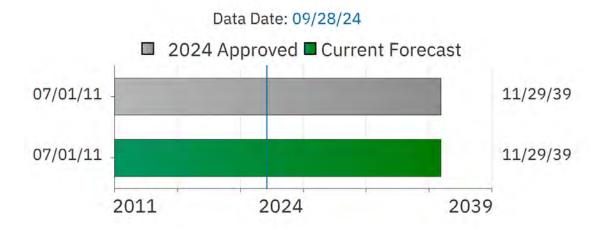


Figure 4 SSIP Schedule Summary

The latest approved program schedules for the SSIP Phase 1 and Other SSIP are based on the 2024 revision approved by the Commission on February 13, 2024. Table 4 depicts the current approved schedules and this quarter's forecast completion schedules for SSIP Phase 1 and Other SSIP Projects.

 Table 4. Current Approved vs. Current Forecast Schedule Dates

SUBPROGRAM	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)
SSIP Phase 1	07/01/11	07/01/11 A*	06/30/34	06/30/34	-
Other SSIP	03/03/18	03/03/18 A*	11/29/39	11/29/39	-
Overall SSIP	07/01/11	07/01/11 A*	11/29/39	11/29/39	-

\* "A" represents the actual date

#### 5. BUDGET AND SCHEDULE TREND SUMMARY

This Table 5 contains all approved SSIP projects that are active and in any of the planning, design, bid and award, or construction phases of the project. The table excludes all Program Management projects, as well as any projects that are either Not-Initiated, On-Hold, in Closeout or Completed.

During this Quarter (Q1 FY24-25), the following major milestones were achieved:

- 1. 10036398 OSP Condition Improvement Projects Part 2 Completed Conceptual Engineering Report for WW-746 OSP 620 Digestion H&S, Mech Improvements in July 2024
- 10037303 Sunnydale PS Safety Improvements Awarded construction contract in September 2024

- 3. 10037251 Seacliff No. 1 PS & FM Upgrade Awarded construction contract in August 2024
- 4. 10038547 Combined Sewer Discharge (CSD) Structure Rehab and Upgrades Part 1 Completed draft 65% design for Evans and Mariposa CSDs in September 2024
- 10026818 Folsom Area Stormwater Improvement Project Completed 95% Design for Tunnel WW-719 B in September 2024
- 6. 10026818 Folsom Area Stormwater Improvement Project Completed 95% Design for Box Sewer WW-719 C in September 2024

		Most F	Recent CIP	Projec	t Initiation		CER	35%	Design	95%	Design	Awarded	Construction <sup>1</sup>	Curre	nt Status
Project Name	Previous Program Group Title	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
		а	b	с	d	е	f	g	h	i	j	k	I	m	n
Rolling WWE Capital Projects Treatment Facilities															
Biosolids Digester Facilities Project															
10015796 SEP Biosolids Digester Facilities Project (BDFP) <sup>2</sup>	SSIP Phase 1	FY2025-34		12	/31/14	01/29/16		11/	/30/16		(Scope I) & 9 (Scope II)		(Scope I) & D (Scope II)	Q1 - FY2024-25	
Scope I - EOP 1A, 1C, 1B, 2B Scope II - Remainder of SOW		\$2,672.6	05/11/29	\$1,750.0	08/31/23	\$1,276.4	05/01/25	\$1,276.4	05/01/25	\$1,315.3	05/01/26	\$1,680.7	07/06/28	\$2,672.6	05/11/29
New Headworks (Grit) Replacement	•														
10015807 SEP New Headworks (Grit) Replacement <sup>2</sup>	SSIP Phase 1	FY2	2025-34	03	/01/13	01	/29/16	10/17/16	6 (Scope I), (Scope II) & 6 (Scope III)	09/26/17	7 (Scope I), (Scope II) & 3 (Scope III)	12/17/18	7 (Scope I), (Scope II) & 9 (Scope III)	Q1 - F	Y2024-25
Scope I - Site Preparation Scope II - Bruce Flynn Pump Station Scope III - New Headworks		\$716.7	08/31/27	\$183.0	03/31/20	\$359.0	12/29/23	\$359.0	12/29/23	\$718.0	09/30/24	\$718.8	09/30/24	\$716.7	08/31/27
Southeast Plant (SEP) Improvements															
10015809 WWE Facility-Wide Distributed Control System Upgrade <sup>3</sup>	SSIP Phase 1	FY2	2025-34	02/13/14		02/02/15		12/30/2025		6/30/2026		12/13/164		Q1 - FY2024-25	
		\$73.0	12/30/27	\$63.0	02/26/21	\$63.0	08/31/23	TBD	TBD	TBD	TBD	\$63.0	08/31/23	\$73.0	12/30/27
10002284 SEP Power Feed and Primary Switchgear Upgrades	SSIP Phase 1	FY2	2025-34	06	/23/14	04	/15/16	07/	/29/16	10/	/31/17	09	/08/20	Q1 - F	Y2024-25
		\$95.9	03/31/26	\$69.8	07/31/20	\$69.8	07/31/20	\$69.8	11/19/20	\$84.3	06/30/22	\$95.9	06/18/24	\$95.9	03/31/26
	0.1 0.015	FY2025-34		01/12/21		06/30/23		01/17/24		12/31/24		08/26/25		Q1 - FY2024-25	
10037353 SEP 550 Booster PS Condition Inspection & Interim	Other SSIP	\$31.3	06/30/28	\$9.9	06/30/26	\$20.3	01/21/28	\$31.3	06/30/28	TBD	TBD	TBD	TBD	\$31.3	06/30/28
10038373 SEP, Booster PS, & BFS Security Enhancements <sup>3</sup>	Other SSIP	FY2	2025-34	01/18/22		04/30/24		7/31/2025		10/3	1/2025	03/11/25		Q1 - FY2024-25	
	Other SSIP	\$35.8	03/01/28	\$35.8	12/10/26	\$35.8	03/01/28	TBD	TBD	TBD	TBD	TBD	TBD	\$35.8	03/01/28
		FY2	2025-34	01	/04/21	04	/15/22	08/	/31/22	09/	/01/23	09	/13/24	Q1 - F	Y2024-25
0037330 Primary Treatment (SEP 040/041) H&S Improvements	Other SSIP	\$29.6	03/31/28	\$27.4	09/30/26	\$27.4	09/30/26	\$27.4	09/30/26	\$29.6	03/31/28	\$29.6	3/31/2028	\$29.6	03/31/28
10037331 Maintenance Building (SEP 940) Interim Improvement	Other SSIP	FY2	2025-34	01	/12/21	03	/24/23	09/	/21/23	09/	/03/24	03	/11/25	Q1 - F	Y2024-25
	Other 33F	\$20.9	02/04/28	\$21.6	07/02/26	\$40.7	01/09/29	\$40.7	01/09/29	\$20.9	02/04/28	TBD	TBD	\$20.9	02/04/28
10039505 New Ops, Engineering and Maintenance Buildings	Other SSIP	FY2	2025-34	11	/01/22		N/A	٦	ГВD	٦	ГВD	03/	29/24 <sup>5</sup>	Q1 - F	Y2024-25
		\$171.9	08/31/28	\$68.2	09/30/26	N/A	N/A	TBD	TBD	TBD	TBD	TBD	TBD	\$171.9	08/31/28
0039310 Secondary Clarifiers (SEP 230) Rehabilitation <sup>6</sup>	Other SSIP	FY2	2025-34	10	/03/22	04	/30/24	Т	ГBD	٦	ГBD	06/01/25		Q1 - F	Y2024-25
		\$52.0	11/30/29	\$52.0	06/26/28	\$52.0	11/30/29	TBD	TBD	TBD	TBD	TBD	TBD	\$52.0	11/30/29
0039811 SEP Condition Improvement Projects - Part 1	Other SSIP	FY2	2025-34	04	/03/23	03	/19/24	08/	/16/24	03/	/31/25	10	/28/25	Q1 - F	Y2024-25
		\$16.0	10/29/27	\$22.5	08/15/28	\$16.0	10/29/27	\$16.0	10/29/27	TBD	TBD	TBD	TBD	\$16.0	10/29/27

#### Footnotes:

Froemotes:
1. This represents forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB scope.
2. The project delivery method for this project is Construction Manager/General Contractor (CM/GC).
3. The project delivery method for this project is Progressive Design-Build (DB).
4. This represents the award of the overall progressive design build contract DB-126 which includes Preconstruction & Construction phases. The project initiation forecast cost was based on funding availability.
5. This represents forecasted project cost and project completion date at the time of award of CM/GC contract during Pre-Construction.
6. The project delivery method for this project is Fixed Budget-Limit Design-Build.

		Most	lecent CIP	Projos	Initiation		CER	250/	Design	05%	Design	Autoralay	A Construction <sup>1</sup>		hown in million. nt Status
	Previous Program	Approved	Approved	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Project Name	Group Title	Budget	Completion	Cost	Completion	Cost	Completion	Cost	Completion	Cost	Completion	Cost	Completion	Cost	Completion
Oceanside Plant (OSP) Improvements		a	b	c	a	e	I	g	h	1		ĸ	•	m	n
		EVO	025-34	06	/13/13	02/04/16 08/02/16		002/46	08/18/17		02/09/21		Q1 - FY2024-25		
10029736 Westside Pump Station Reliability Improvements (OP02)	SSIP Phase 1	\$93.3	06/30/26	\$68.3	09/02/21					\$70.5 12/02/21			1		
		- ·	FY2025-34		09/02/21		12/02/21	\$70.5	12/02/21		01/17	\$87.8 12/31/24 08/28/18		\$93.3 06/30/26 Q1 - FY2024-25	
10029737 OSP Digester Gas Utilization Upgrade (OP03)	SSIP Phase 1	\$69.6			06/15/20	\$48.2	06/15/20	\$39.7	06/15/20	\$39.7	06/15/20	\$45.9	07/29/21	\$69.6 06/02/25	
			025-34	\$48.2	25/22		00/13/20		2/06/24		22/24		/23/25		Y2024-25
10037733 Solids Thickening (OSP 011) Process Upgrade (OSP - 2)	Other SSIP	\$20.2	03/10/28	\$20.2	03/26/27	\$20.2	03/10/28	\$20.2	03/10/28	TBD	TBD	TBD	TBD	\$20.2	03/10/28
			025-34		26/22		/26/24		6/07/24		31/25		/17/25		Y2024-25
10037734 OSP Plant-wide Ventilation (HVAC) Upgrades (OSP - 3)	Other SSIP	\$22.6	07/16/27	\$7.4	03/29/27	\$22.6	07/16/27	\$22.6	07/16/27	TBD	TBD	TBD	TBD	\$22.6	07/16/27
10036398 OSP Condition Improvement Projects - Part 2 (OSP - 4)		FY2025-34		03/03/18		(B)1 (C)0 (D)0 (E	07/18/24 10/31/25 01/30/26 06/30/25 E) N/A E) N/A G) N/A	(A) 06/10/25 (B) 11/10/25 (C) 04/13/26 (D) 01/02/26 (E) N/A (F) N/A (G) N/A		(B) 0 (C) 0 (D) 1 (E) (F)	2/15/25 8/24/26 3/24/27 2/31/26 ) N/A ) N/A ) N/A	(A) 10/19/26 (B) 06/15/27 (C) 10/12/27 (D) 11/23/27 (E) 02/08/22 (F) 09/13/22 (G) N/A		Q1 - FY2024-25	
<ul><li>(A) WW-746 OSP 620 Digestion H&amp;S, Mech Improvements</li><li>(B) OSP 011 Polymer &amp; Ferric Chloride Replacement</li></ul>															
(C) OSP 042 Primary Clarifiers Structural and Mechanical Improvements															
(D) OSP 200 Aeration Tanks Structural and Mechanical Improvements (E) W-648 OSP Building 042 Primary Clarifier Improvements (F) WW-669 OSP Building 011 Grit Classifier & Preliminary Influent Slide Gate System Improvement (G) JOC 53R-15 OSP UPS Assembly Replacements		\$105.1	06/28/30	\$105.1	07/06/29	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$105.1	06/28/30
		FY2025-34		02/01/22		10/31/23		03/04/24		10/02/24		04/17/25		Q1 - FY2024-25	
10037735 Admin Bldg (OSP 930) Health & Safety Improvements (OSP - 7)	Other SSIP	\$9.6	07/08/27	\$5.7	10/01/26	\$9.6	1/21/2027	\$9.6	7/8/2027	TBD	TBD	TBD	TBD	\$9.6	07/08/27
	Other SSIP	FY	23-32	08	/02/21	04	/30/24	11	/14/25	07/17/26		12/10/24		Q1 - FY2024-25	
10037777 OSP & WSPS Security Enhancements <sup>2</sup>		\$13.8	03/01/28	\$7.2	06/30/25	\$13.8	3/1/2028	TBD	TBD	TBD	TBD	TBD	TBD	\$13.8	03/01/28
10039193 Gaseous Oxygen System (OSP 011) Upgrades	Other SSIP	FY2	025-34	01	/03/23	06	6/30/25	01	/02/26	12/	31/26	11,	/23/27	Q1 - F	Y2024-25
(OSP - 11)		\$22.4	05/08/29	\$22.4	05/08/29	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$22.4	05/08/29
North Point Facility (NPF) Improvements															
10026822 North Shore Wet Weather Pump Station Improvements and		FY2	025-34	08	15/13	05	6/29/15	06	6/30/17	12/	07/18	01/	/26/21	Q1 - FY2024-25	
Disinfection	SSIP Phase 1	\$51.3	06/30/25	\$8.8	09/29/25	\$66.6	12/31/19	\$61.4	12/31/20	\$55.0	01/27/22	\$55.0	12/29/23	\$51.3	06/30/25
10037325 Admin Bldg (NPF 930) Evaluation & Interim H&S Improvements	0/1 00/10	FY2	025-34	03	01/22	12	/29/23	07	/05/24	05/	30/25	11/	/06/25	Q1 - F	Y2024-25
(NPF - 2)	Other SSIP	\$22.7	09/29/28	\$7.9	02/03/26	\$22.7	9/29/2028	\$22.7	09/29/28	TBD	TBD	TBD	TBD	\$22.7	09/29/28
	Other SSIP	FY2	025-34	01	18/22	04	/30/24	06	6/04/25	02/	02/26	03/	/11/25	Q1 - F	Y2024-25
10037904 NPF & NSS Security Enhancements <sup>2</sup>	Other SSIP	\$17.8	03/01/28	\$17.8	12/10/26	\$17.8	03/01/28	TBD	TBD	TBD	TBD	TBD	TBD	\$17.8	03/01/28
10028252 NPE DCS Upgrades (Construction) <sup>2</sup>	Other SSIP	FY2	025-34	11.	01/21		N/A		N/A	1	I/A		N/A	Q1 - F	Y2024-25
10038353 NPF DCS Upgrades (Construction) <sup>2</sup>	Other SSIP	\$11.0	12/30/27	\$11.0	09/02/27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$11.0	12/30/27
10039251 Sedimentation (NPF 040/041) Tanks Condition Improvements	Other SSIP	FY2	025-34	11	14/22	12	2/31/24	06	6/25/25	06/	25/26	05/	/03/27	Q1 - F	Y2024-25
		\$54.2	08/30/30	\$54.2	07/17/31	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$54.2	08/30/30

Footnote: 1. This represents forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB

2. The project delivery method for this project is Progressive Design-Build (DB).

		Mont	Recent CIP	Proise	Initiation		CER	350/	Design	05%	Design	Aworded	A Construction <sup>1</sup>		hown in million. nt Status
Project Name	Previous Program Group Title	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
Collection System		а	b	c	d	e	f	g	h	i	j	k	1	m	n
Interceptors/Tunnels and Odor Control															
10034718 Large Diameter Sewer Projects and Channel FM Intertie <sup>2</sup>	Other SSIP	FY2	2025-34	08/	01/19	(E) (C) (D) (E) (C) (F) (C) (G) (H) (C) (I) (I)	03/22/21 3) N/A 10/30/20 09/30/20 04/30/21 06/30/21 5) N/A 01/31/22 19/16/22 12/15/22	(B) 0 (C) 0 (D) 0 (E) 1 (F) 1 (G (H) 0 (I) 0	99/10/21 11/24/20 16/01/21 12/17/21 0/04/21 2/01/21 1) N/A 19/09/22 3/24/23 3/15/23	(B) 0 (C) 0 (D) 0 (E) 0 (F) 0 (G (H) 0 (H) 0 (I) 1	14/19/22 19/30/20 12/24/22 12/25/22 12/14/22 17/07/22 1) N/A 14/28/23 1/30/23 1/29/24	(B) (C (C) 1 (D (E) (C (F) (C (F) (C (H) (C (H) (C) (I) 0	12/13/22 15/11/21 12/13/22 1) N/A 18/23/22 15/09/23 3) N/A 14/09/24 15/28/24 13/11/25	Q1 - F	Y2024-25
(A) Channel FM Intertie (B) New Montgomery, Mission, Jassie, & Minna Streets (C) Panhandle & Inner Sunset (D) Tenderloin & Nob Hill (E) Chinatown & North Beach (F) Castro (G) South Van Ness Ave (H) East SOMA (I) Hayes Valley (J) West SOMA		\$114.6	12/07/26	\$47.0	12/07/26	\$114.6	12/07/26	\$114.6	12/07/26	\$114.6	12/07/26	TBD	TBD	\$114.6	12/07/26
10002652 Kansas and Marin Streets Sewer Improvements	SSIP Phase 1	FY2	2025-34	06/	10/13		/18 - DBB //23/24		21 - DBB /30/25	07/	/01/25	12	/09/25	Q1 - F	Y2024-25
10002002 Kansas and Marin Streets Sewer Improvements	Soir Phase 1	\$6.7	10/16/26	\$12.5	03/30/16	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$6.7	10/16/26
10041084 Geary BRT Sewer Improvements - Phase 2 Construction	Other SSIP		2025-34		04/24		N/A		N/A		N/A		/25/24		Y2024-25
		\$23.9	02/28/28	\$23.9	02/28/28	N/A	N/A	N/A	N/A	N/A	N/A	\$23.9	02/28/28	\$23.9	02/28/28
Interdepartmental Projects															
10002664 Van Ness BRT Sewer Improvements	SSIP Phase 1		2025-34		01/13		/20/14		N/A		/01/15		/15/16		Y2024-25
		\$25.0	12/31/24	\$12.3	01/16/18	\$14.0	03/30/17	N/A	N/A	\$14.0	04/19/17	\$15.0	06/04/20	\$25.0	12/31/24
10002776 Taraval Sewer Improvements	SSIP Phase 1		2025-34		14/16		/03/17		/01/17		/31/17	10/05/21	- Segment A - Segment B		Y2024-25
		\$34.5	07/31/25	\$20.4	10/19/20	\$20.4	10/19/20	N/A	10/19/20	\$20.4	10/19/20	\$34.5	07/31/25	\$34.5	07/31/25

Footnotes: 1. This represents forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB scope.

2. The Project Initiation Forecast Cost was based on funding availability.

		Most	Recent CIP	Projec	t Initiation		CER	35%	Design	95%	Design	Awarded	Construction <sup>1</sup>		shown in million Int Status
Project Name	Previous Program Group Title	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
		а	b	c	d	е	f	g	h	i	j	k	1	m	n
Pump Stations and Force Main Improvements															
10037251 Seacliff No. 1 PS & FM Upgrade	Other SSIP	FY	2025-34	12	2/07/20	01	/31/23	02	/14/23	08	/04/23	08/	/27/24	Q1 - F	Y2024-25
	ould obli	\$16.2	03/31/27	\$13.1	12/26/29	\$16.2	03/31/27	\$16.2	03/31/27	\$16.2	03/31/27	\$16.2	3/31/2027	\$16.2	03/31/27
10037246 Seacliff No. 2 PS & FM Upgrade	Other SSIP	FY	2025-34	12	/14/20	09	/30/22	01	/17/23	10	/20/23	01/	/28/25	Q1 - F	Y2024-25
10037246 Seacin No. 2 PS & FM Opgrade	Other SSIP	\$22.1	04/03/28	\$16.8	12/21/29	\$19.3	01/31/28	\$20.8	04/03/28	\$22.1	4/3/2028	TBD	TBD	\$22.1	04/03/28
10037303 Sunnydale PS Safety Improvements	Other SSIP	FY	2025-34	12	/14/20	09	/26/22	02	/13/23	02	/08/24	09/	/24/24	Q1 - F	Y2024-25
	Other Ooli	\$16.7	05/23/28	\$5.0	05/29/26	\$15.5	05/29/26	\$15.5	12/31/26	\$16.7	05/23/28	\$16.7	05/23/28	\$16.7	05/23/28
10038469 Pump Station Security Upgrades (Cesar Chavez, GFS, CHS,	Other SSIP	FY	2025-34	06	6/01/22	05	/11/23	10/	04/24 <sup>2</sup>	04	/03/25	11/	/25/25	Q1 - F	Y2024-25
MMS)		\$8.0	09/13/27	\$9.1	05/03/27	\$9.1	06/30/27	TBD	TBD	TBD	TBD	TBD	TBD	\$8.0	09/13/27
10038446 Geary Underpass PS Safe Access Enhancements	Other SSIP	FY	2025-34	01	/10/22	07	/21/22	12	/29/22	12	/22/23	I	N/A	Q1 - F	Y2024-25
		\$1.3	05/29/26	\$1.9	05/29/26	\$1.9	05/29/26	\$1.9	05/29/26	\$1.3	05/29/26	N/A	N/A	\$1.3	05/29/26
CSDs and Transport/Storage Structures															
10037245 Brannan Outfall 19 Discharge/Baffle Rehab & Sansome Outfall 15		FY	2025-34	12	2/07/20	05	/30/23	09	/15/23	04	/18/25	12/	/09/25	Q1 - F	Y2024-25
Valve	Other SSIP	\$11.9	04/28/28	\$6.9	08/18/25	\$7.9	10/30/26	\$7.9	10/30/26	TBD	TBD	TBD	TBD	\$11.9	04/28/28
10038468 Systemwide CSD & T/S Monitoring Equipment Assessment	Other SSIP	FY	2025-34	01	/18/22	02	/28/25	06	/02/25	12	/09/25	10/	/22/26	Q1 - F	Y2024-25
Toosofoo Systemwide CSD & 1/3 Monitoring Equipment Assessment	Other 33F	\$11.2	03/17/28	\$9.3	02/01/27	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$11.2	03/17/28
10038547 CSD Structure Rehab & Upgrades - Part 1	Other SSIP	FY	2025-34	01	/03/22		9/22; 01/31/23 03/08/24	· · · /	04/10/23 07/12/24	· · · /	01/02/24 04/02/25	· · /	11/12/24 2/09/25	Q1 - F	Y2024-25
(A/B) Laguna Howard Streets and Mission Creek CSDs (C) Mariposa, Evans & Lake Merced		\$39.7	01/31/29	\$39.7	01/31/29	\$39.7	01/31/29	\$39.7	1/31/2029	TBD	TBD	TBD	TBD	\$39.7	01/31/29

Footnote: 1. This represents forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB

Construction of the second seco

		Most F	Recent CIP	Projec	t Initiation		CER	35%	Design	95%	Design	Awarded	A Construction <sup>1</sup>	All Costs are shown in millio Current Status	
Project Name	Previous Program Group Title	Approved Budget a	Approved Completion b	Forecast Cost	Forecast Completion d	Forecast Cost	Forecast Completion f	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost k	Forecast Completion	Forecast Cost	Forecast Completion
Stormwater Management		a	d	C	a	e	T	g	n	1	]]	ĸ	1	m	n
Early Implementation Projects															
10026810 Yosemite Green Infrastructure	SSIP Phase 1	FY2	2025-34	12	/03/12	01	/11/21		N/A	05/	31/24	08	/18/25	Q1 - F`	Y2024-25
	SSIF Flidse I	\$27.5	11/08/28	\$13.5	08/30/19	\$17.1	06/30/26	N/A	N/A	\$27.5	11/8/2028	TBD	TBD	\$27.5	11/08/28
Watershed Stormwater Management															
10029726 Green Infrastructure Capital Planning (GI-01)	SSIP Phase 1	FY2	2025-34	07.	/11/16		N/A		N/A	1	N/A	1	N/A	Q1 - F	Y2024-25
	SOIF Flidse I	\$21.0	06/30/34	\$9.0	07/12/19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$21.0	06/30/34
10034553 Green Infrastructure Grant Program (GIGP)	Other SSIP	FY2	2025-34	07.	/01/18		N/A		N/A	1	N/A	(3) 01/28/20 (5) 04/28/20 (7) 10/22/20 (9) 11/10/20 (11) 03/ 06/01/23; (14) 12/ 04/08/24;	9; (2) 10/09/19; ; (4) 05/12/20; ; (6) 01/13/20; ; (8) 10/22/20; ; (10) 03/31/22; '31/22; (12) (13) 03/01/24; '20/23; (15) (16) 05/13/24; )5/13/24.	Q1 - F'	Y2024-25
		\$61.3	06/30/33	\$25.0	06/30/28	N/A	N/A	N/A	N/A	N/A	N/A	\$61.3	06/30/29	\$61.3	06/30/33
10039608 Buchanan Street Mall	SSIP Phase 1	FY2	2025-34	10	/03/22	10	/03/22	11	/03/22	12/	04/23		TBD	Q1 - F	Y2024-25
		\$9.6	12/28/26	\$9.3	12/28/26	\$9.3	12/28/26	\$9.3	12/28/26	\$9.6	12/28/26	TBD	TBD	\$9.6	12/28/26
Watershed Stormwater Management and Customer Service Bill	ing System				10 1 10 1		10.0.10.5		10.0.10.0						
10037195 Regional School/Park: Giannini Middle School	SSIP Phase 1	FY2 \$11.8	2025-34 06/30/29	\$11.8	/04/24 06/29/29	TBD	/30/25 TBD	01 TBD	/30/26 TBD	TBD	30/26 TBD	TBD	/22/26 TBD	Q1 - F \$11.8	Y2024-25 06/30/29
Flood Resilience Projects		φ11.0	00/00/20	¢11.0	00/20/20		100	100	100	100	100	100	100	¢11.0	00/00/20
		FY2	2025-34	01.	/02/19	02	/10/23	05	;/03/23	02/	13/24	08	/22/25	Q1 - F	Y2024-25
10034360 Lower Alemany Area Stormwater Improvement Project	Other SSIP	\$299.6	11/01/28	\$286.5	03/13/28	\$299.6	11/1/2028	\$299.6	11/1/2028	\$299.6	11/1/2028	TBD	TBD	\$299.6	11/01/28
10026818 Folsom Area Stormwater Improvement Project	SSIP Phase 1	FY2	2025-34	07.	/01/16	03	/16/18	(E (C)	03/31/20 8) N/A 11/24/21 0) N/A	(B) 0 (C) 1	9/06/22 9/20/24 1/15/24 1/20/24		N/A	Q1 - F'	Y2024-25
Initial Upstream WW-719A (A) Tunnel WW-719B (B) Box Sewer WW-719C (C) Large Pipe WW-719D (D)		\$38.4	12/31/24	\$36.3	11/01/19	\$38.4	12/31/24	\$38.4	12/31/24	TBD	TBD	N/A	N/A	\$38.4	12/31/24
10038471 Folsom Area Stormwater Imp. Project Phase 2	Other SSIP	FY2	2025-34	10.	/17/22		N/A		N/A	1	N/A	(B) (C) (C) (B) (B) (B) (B) (C) (C) (B) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	08/04/23 08/04/25 05/30/25 06/16/25	Q1 - F`	Y2024-25
Initial Upstream WW-719A (A) Tunnel WW-719B (B) Box Sever WW-719C (C) Large Pipe WW-719D (D)		\$391.2	02/16/29	\$282.0	06/30/27	N/A	N/A	N/A	N/A	N/A	N/A	TBD	TBD	\$391.2	02/16/29
10039682 Flood Resiliency Planning	Other SSIP	FY2	2025-34	10.	/03/22		N/A		N/A	١	N/A		N/A	Q1 - F	Y2024-25
···· ··· · · · · · · · · · · · · · · ·		\$9.6	06/29/29	\$9.6	06/30/26	TBD	TBD	N/A	N/A	N/A	N/A	N/A	N/A	\$9.6	06/29/29
10040621 Floodwater Management Grant Assistance Program (Grant)	Other SSIP	FY2	2025-34	10	/16/23		N/A		N/A	1	N/A	(2) ( (3) (	0/16/23 )4/04/24 )4/03/24 )4/26/24	Q1 - F'	Y2024-25
	1	\$15.0	12/27/34	\$15.0	03/31/33	TBD	TBD	N/A	N/A	N/A	N/A	\$15.0	12/27/34	\$15.0	12/27/34

Footnote: 1. This represents forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB

scope.

#### Q1-FY2024-2025 (07/01/24 - 09/30/24)

#### 6. PROJECT PERFORMANCE SUMMARY\*

All costs are shown in \$1,000s

Project Name	Previous Program Group Title	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
Treatment Facilities												
Biosolids Digester Facilities	s Project											
10015796 SEP Biosolids Digester Facilities Project	SSIP Phase 1	CN	\$2,672,616	\$2,672,616	\$2,672,616	\$1,532,852	\$0	0%	05/11/29	05/11/29	05/11/29	0
New Headworks (Grit) Repla	acement											
10015807 SEP New Headworks (Grit) Replacement	SSIP Phase 1	CN	\$716,679	\$716,679	\$716,679	\$629,216	\$0	0%	08/31/27	08/31/27	08/31/27	0
Southeast Plant (SEP) Impr	ovements											
10015809 WWE Facility-Wide Distributed Control System (DCS) Upgrade	SSIP Phase 1	DS	\$73,004	\$73,004	\$73,004	\$32,020	\$0	0%	12/30/27	12/30/27	12/30/27	0
10002284 SEP Power Feed and Primary Switchgear Upgrades	SSIP Phase 1	CN	\$95,875	\$95,875	\$95,875	\$73,593	\$0	0%	03/31/26	03/31/26	03/31/26	0
10037353 SEP 550 Booster PS Condition Inspection & Interim	Other SSIP	DS	\$31,259	\$31,259	\$31,259	\$1,825	\$0	0%	06/30/28	06/30/28	06/30/28	0
10038373 SEP Booster PS & BFS Security Enhancements	Other SSIP	BA	\$35,759	\$35,759	\$35,759	\$1,255	\$0	0%	03/01/28	03/01/28	03/01/28	0
10037330 Primary Treatment (SEP 040/041) H&S Improvements	Other SSIP	CN	\$29,602	\$29,602	\$29,602	\$3,304	\$0	0%	03/31/28	03/31/28	03/31/28	0
10037331 Maintenance Building (SEP 940) Interim Improvement	Other SSIP	DS	\$20,897	\$20,897	\$20,897	\$2,292	\$0	0%	02/04/28	02/04/28	02/04/28	0
10039505 New Ops, Engineering and Maintenance Buildings	Other SSIP	DS	\$171,879	\$171,879	\$171,879	\$4,860	\$0	0%	08/31/28	08/31/28	08/31/28	0
10039310 Secondary Clarifiers (SEP230) Rehabilitation	Other SSIP	BA	\$51,952	\$51,952	\$51,952	\$1,167	\$0	0%	11/30/29	11/30/29	11/30/29	0
10039811 SEP Condition Improvement Projects - Part 1	Other SSIP	DS	\$16,009	\$16,009	\$16,009	\$970	\$0	0%	10/29/27	10/29/27	10/29/27	0

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

PL Planning DS Design		d	Phase Status Lege	** Ph
		DS Design	L Planning	PL
BA Bid & Award CN Construction MP Multi-Phase	MP Multi-Phase	CN Construction	A Bid & Award	BA

#### Footnotes:

- (+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

#### Q1-FY2024-2025 (07/01/24 - 09/30/24)

Project Name	Previous Program Group Title	Active Phase (a)	CIP Approved Budget (b)	Current Approved Budget (c)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d)	% Cost Changes (g=f/c)	CIP Completion Date (h)	Approved Completion Date (i)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j)
Oceanside Plant (OSP) Imp	rovomonto	(**)	(+)	(++)			(+++)	(+++)	(+)	(++)		(+++)
	1											
10029736 Westside Pump Station Reliability Improvements	SSIP Phase 1	CN	\$93,300	\$93,300	\$93,300	\$58,312	\$0	0%	06/30/26	06/30/26	06/30/26	0
10029737 OSP Digester Gas Utilization Upgrade	SSIP Phase 1	CN	\$69,577	\$69,577	\$69,577	\$60,898	\$0	0%	06/02/25	06/02/25	06/02/25	0
10037733 Solids Thickening (OSP 011) Process Upgrade	Other SSIP	DS	\$20,222	\$20,222	\$20,222	\$917	\$0	0%	03/10/28	03/10/28	03/10/28	0
10037734 OSP Plant-wide Ventilation (HVAC) Upgrades	Other SSIP	DS	\$22,577	\$22,577	\$22,577	\$650	\$0	0%	07/16/27	07/16/27	07/16/27	0
10036398 OSP Condition Improvement Projects - Part 2	Other SSIP	MP	\$105,100	\$105,100	\$105,100	\$15,404	\$0	0%	06/28/30	06/28/30	06/28/30	0
10037735 Admin Bldg (OSP 930) Health & Safety Improvements	Other SSIP	DS	\$9,650	\$9,650	\$9,650	\$633	\$0	0%	07/08/27	07/08/27	07/08/27	0
10037777 OSP & WSPS Security Enhancements	Other SSIP	BA	\$13,776	\$13,776	\$13,776	\$901	\$0	0%	03/01/28	03/01/28	03/01/28	0
10039193 Gaseous Oxygen System (OSP 011) Upgrades	Other SSIP	PL	\$22,351	\$22,351	\$22,351	\$493	\$0	0%	05/08/29	05/08/29	05/08/29	0
North Point Facility (NPF) In	nprovements											
10026822 North Shore Wet Weather Pump Station Improvements and Disinfection	SSIP Phase 1	CN	\$51,296	\$51,296	\$51,296	\$40,202	\$0	0%	06/30/25	06/30/25	06/30/25	0
10037325 Admin Building (NPF 930) Evaluation & Interim H&S Improvements	Other SSIP	DS	\$22,691	\$22,691	\$22,691	\$1,322	\$0	0%	09/29/28	09/29/28	09/29/28	0
10037904 NPF & NSS Security Enhancements	Other SSIP	BA	\$17,849	\$17,849	\$17,849	\$822	\$0	0%	03/01/28	03/01/28	03/01/28	0
10038353 NPF DCS Upgrades (Construction)	Other SSIP	CN	\$11,073	\$11,073	\$11,073	\$1,359	\$0	0%	12/30/27	12/30/27	12/30/27	0

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

PL Planning DS Design	** Phase Status Lege	end	
BA Rid & Award CN Construction MP Multi Phase	PL Planning	DS Design	
	BA Bid & Award	CN Construction	MP Multi-Phase

#### Footnotes:

- (+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

#### Q1-FY2024-2025 (07/01/24 - 09/30/24)

Project Name	Previous Program Group Title	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
10039251 Sedimentation (NPF 040/041) Tanks Condition Improvement	Other SSIP	PL	\$54,249	\$54,249	\$54,249	\$818	\$0	0%	08/30/30	08/30/30	08/30/30	0
Collection System												
Interceptors / Tunnels and	Odor Control											
10034718 Large Diameter Sewer Projects and Channel FM Intertie	Other SSIP	MP	\$114,592	\$114,592	\$114,592	\$60,209	\$0	0%	12/07/26	12/07/26	12/07/26	0
10002652 Kansas and Marin Streets Sewer Improvements	SSIP Phase 1	DS	\$6,700	\$6,700	\$6,700	\$4,684	\$0	0%	10/16/26	10/16/26	10/16/26	0
10041084 Geary BRT Sewer Improvements - Phase 2 Construction	Other SSIP	BA	\$23,935	\$23,935	\$23,935	\$204	\$0	0%	02/28/28	02/28/28	02/28/28	0
Interdepartmental Projects												
10002664 Van Ness BRT Sewer Improvements	SSIP Phase 1	CN	\$25,000	\$25,000	\$25,000	\$21,066	\$0	0%	12/31/24	12/31/24	12/31/24	0
10002776 Taraval Sewer Improvements	SSIP Phase 1	MP	\$34,500	\$34,500	\$34,500	\$28,533	\$0	0%	07/31/25	07/31/25	07/31/25	0
Pump Stations and Forcem	ain Improveme	ents										
10037251 Seacliff No. 1 PS & FM Upgrade	Other SSIP	BA	\$16,180	\$16,180	\$16,180	\$2,620	\$0	0%	03/31/27	03/31/27	03/31/27	0
10037246 Seacliff No. 2 PS & FM Upgrade	Other SSIP	DS	\$22,136	\$22,136	\$22,136	\$3,793	\$0	0%	04/03/28	04/03/28	04/03/28	0
10037303 Sunnydale PS Safety Improvements	Other SSIP	BA	\$16,666	\$16,666	\$16,666	\$2,244	\$0	0%	05/23/28	05/23/28	05/23/28	0
10038469 Pump Station Security Upgrades (Cesar Chavez, GFS,CHS, MMS)	Other SSIP	DS	\$7,985	\$7,985	\$7,985	\$635	\$0	0%	09/13/27	09/13/27	09/13/27	0
10038446 Geary Underpass PS Safe Access Enhancements	Other SSIP	BA	\$1,280	\$1,280	\$1,280	\$286	\$0	0%	05/29/26	05/29/26	05/29/26	0

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

** Phase Status Legen	d	
PL Planning	DS Design	
BA Bid & Award	CN Construction	MP Multi-Phase

#### Footnotes:

- (+) CIP Approved Budget and Project Completion Date: The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

## I. SSIP Quarterly Report

## Q1-FY2024-2025 (07/01/24 - 09/30/24)

Project Name	Previous Program Group Title	Active Phase (a) (**)	CIP Approved Budget (b) (+)	Current Approved Budget (c) (++)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d) (+++)	% Cost Changes (g=f/c) (+++)	CIP Completion Date (h) (+)	Approved Completion Date (i) (++)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j) (+++)
Combined Sewer Discharge	e (CSD) and Tra	ansport/S	torage Struct	ures								
10037245 Brannan Outfall 19 Discharge/Baffle Rehab & Sansome Outfall 15 Valve	Other SSIP	DS	\$11,944	\$11,944	\$11,944	\$1,014	\$0	0%	04/28/28	04/28/28	04/28/28	0
10038468 Systemwide CSD & T/S Monitoring Equipment Assessment	Other SSIP	PL	\$11,185	\$11,185	\$11,185	\$747	\$0	0%	03/17/28	03/17/28	03/17/28	0
10038547 CSD Structure Rehab & Upgrades - Part 1	Other SSIP	MP	\$39,653	\$39,653	\$39,653	\$2,009	\$0	0%	01/31/29	01/31/29	01/31/29	0
Stormwater Management												
Early Implementation Proje	cts											
10026810 Yosemite Green Infrastructure	SSIP Phase 1	DS	\$27,539	\$27,539	\$27,539	\$6,717	\$0	0%	11/08/28	11/08/28	11/08/28	0
Watershed Stormwater Man	agement											
10029726 Watershed Stormwater Management (Planning Only)	SSIP Phase 1	PL	\$21,000	\$21,000	\$21,000	\$7,766	\$0	0%	06/30/34	06/30/34	06/30/34	0
10034553 Green Infrastructure Grant Program (GIGP)	Other SSIP	CN	\$61,318	\$61,318	\$61,318	\$9,652	\$0	0%	06/30/33	06/30/33	06/30/33	0
10039608 Buchanan Street Mall	Other SSIP	BA	\$9,632	\$9,632	\$9,632	\$918	\$0	0%	12/28/26	12/28/26	12/28/26	0
Watershed Stormwater Man	agement and	Customer	Service Billin	ng System								
10037195 Regional School/Park: Giannini Middle School	Other SSIP	PL	\$11,764	\$11,764	\$11,764	\$123	\$0	0%	06/30/29	06/30/29	06/30/29	0
Flood Resilience Projects												
Flood Resilience Projects	Flood Resilience Projects											
10034360 Lower Alemany Area Stormwater Improvement Project	Other SSIP	DS	\$299,555	\$299,555	\$299,555	\$15,280	\$0	0%	11/01/28	11/01/28	11/01/28	0
10026818 Folsom Area Stormwater improvement Project	SSIP Phase 1	DS	\$38,411	\$38,411	\$38,411	\$25,346	\$0	0%	12/31/24	12/31/24	12/31/24	0

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

** Phase Status Lege	nd	
PL Planning	DS Design	
BA Bid & Award	CN Construction	MP Multi-Phase

#### Footnotes:

- (+) CIP Approved Budget and Project Completion Date: The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

## I. SSIP Quarterly Report

Project Name	Previous Program Group Title	Active Phase (a)	CIP Approved Budget (b)	Current Approved Budget (c)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d)	% Cost Changes (g=f/c)	CIP Completion Date (h)	Approved Completion Date (i)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j)
		(**)	(+)	(++)			(+++)	(+++)	(+)	(++)		(+++)
10038471 Folsom Area Stormwater Imp. Project Phase 2	Other SSIP	MP	\$391,226	\$391,226	\$391,226	\$5,541	\$0	0%	02/16/29	02/16/29	02/16/29	0
10039682 Flood Resiliency Planning	Other SSIP	PL	\$9,600	\$9,600	\$9,600	\$1,077	\$0	0%	06/29/29	06/29/29	06/29/29	0
10040621 Floodwater Management Grant Assistance Program (Grant)	Other SSIP	CN	\$15,000	\$15,000	\$15,000	\$169	\$0	0%	12/27/34	12/27/34	12/27/34	0

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

** Phase Status Leger	nd	
PL Planning	DS Design	
BA Bid & Award	CN Construction	MP Multi-Phase

#### Footnotes:

- (+) CIP Approved Budget and Project Completion Date: The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

# 7. PROJECT STATUS REPORT

## 10015796 - SEP Biosolids Digester Facilities Project

**Project Description:** 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.

<b>Program:</b> Biosolids Digester Facilities Project			Project Status: Construction				Environmental Status: Completed (EIR)			
Project Cost: Approved Forecast Actual			\$	2672.62 M 2672.62 M 1532.85 M	Project Sche Approved 07/0 Forecast 07/0 Project Para	01/11 01/11	nplete: 53.5%		05/11/29 05/11/29	
Key Milestones		Environme Approva		Bid Adv	ertisement		struction NTP		uction Final mpletion	
Current Forecast	А	10/12/18	A	1	N/A	(	)8/26/19 A	06	/25/21 A	
				N/A 07/01/20 A		07	07/11/28			

#### **Progress and Status:**

The project delivery method for this project is Construction Manager/General Contractor (CM/GC). WW-647R CM/GC Construction contract consists of: (A) Scope I, and (B) Scope II. Scope I (Demolition and Utility Relocation) - Complete. Scope II (New Biosolids Facilities - Remainder of the construction work) - To date, with all the work bid out and awarded, construction of all of the major biosolids facilities continues at a significant pace. Installation of the digesters' exterior panels and coating of the digester interior are progressing. Mechanical. electrical, and plumbing installations are ongoing in the digester basement, solids pretreatment building, dewatering facility and supporting facilities and pipe galleries. The tank silos for the dewatered biosolids have been assembled and placed into the dewatering building. In addition to Scope I and Scope II, a separate Biogas Utilization Project is underway to ensure the beneficial use of the biogas generated from the new digesters. The digester biogas will be converted into renewable natural gas for injection into an existing PG&E pipeline. The Biogas Project was to be delivered under a Public-Private Partnership (P3) delivery approach. However, in Q4FY24, it was decided to change the delivery approach away from a P3 due to a lack of financial viability. Instead, the Biogas Utilization Project will be delivered through a City-led Design-Build approach. A new Design-Build Request for Qualification/Request for Proposal (Contract No. DB-138) for the Biogas Project was advertised, and only one proposal was received.

#### **Issues and Challenges:**

Without funding support from the private P3 entity, the Biogas Project will now need to rely on San Francisco Public Utilities Commission-provided Capital Improvement Program funding for the Design-Build approach. The increase to the Biosolids Digester Facilities Project budget is being determined.



Welding on one of four Biosolids Storage Silos, which will be set in the Biosolids Dewatering Building.

## 10015807 - SEP New Headworks (Grit) Replacement

**Project Description:** 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-Compacters 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.

Program: New Hea Replacement	Headworks (Grit) Project Status: Construction				Environmental Status: Completed (MND)				
Project Cost: Approved Forecast Actual			Project Schedule:\$ 716.68 M\$ 716.68 M\$ 629.22 MProject Percent Complete: 87.0%					08/31/27 08/31/27	
Key Milestones		Environme Approva		Bid Adv	ertisement	Cons	truction NTP	Construction Final Completion	
	А	05/31/17	A	1	N/A	1	1/15/17 A	05/01/20 A	
Current Forecast	В	05/31/17	A	1	N/A	1	2/17/18 A	11/14/20 A	
Current Forecast	С	05/31/17	A	1	N/A	0	7/22/19 A	05/30/25	
	D	05/31/17	А	01/	02/26	(	06/04/26 02/26/27		

#### **Progress and Status:**

The project delivery method for this project is Construction Manager/General Contractor (CM/GC). WW-628 CM/GC Construction which consists of: (A) Scope I; (B) Scope II.A; and (C) Scope III (D) Demolition Contract – not yet awarded. Scope I (Site Preparation) and Scope II.A (BFS Improvements) – Complete. Scope III (Main Headworks) – Permanent power was provided by the Power Enterprise this quarter which allowed the new Headworks substations to be energized. Equipment pretest checks and functions testing is on-going. Raw sewage was introduced for performance testing as well. For the Influent Pumping, installation of influent pumps, dewatering pump, coarse screen, level sensors, and modifications to the hydraulic gate occurred this quarter.

#### **Issues and Challenges:**



Southeast Pumping Station Construction and Various Forcemains

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

**Project Description:** The purpose of this project is to replace WWE's aging Distributed Control System (DCS) with a new, standardized, and reliable control system. 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 consists of performing DCS preconstruction activities at all WWE facilities (i.e. SEP, NPF, OSP, and various ancillary pump stations), and construction activities (i.e. manufacturing, installation, and field testing/commissioning) of the new DCS specifically at SEP. The project also provides control systems design for the two major SSIP Southeast Treatment Plant projects: (1) the Biosolids Digester Facilities Project ("BDFP"); and (2) the SEP New Headworks [Grit] Facility Project ("Headworks").

Program: Southeast Plant (SEP)         Project Status           Improvements         Project Status			Design Environmental			Status: Not Applicable	
Project Cost:			Project Sch	edule:			
Approved Forecast Actual		\$ 73.00 M \$ 73.00 M \$ 32.02 M	M Forecast 02/13/14 12				
Key Milestones	Environme Approva		Bid Advertisement Construction NTP Constructio Complet				
Current Forecast	N/A	1	N/A 12/31/18 A 06/30/27				

### **Progress and Status:**

Note regarding the above table: It was determined that upgrades to the Distributed Control System (DCS) primarily involve computer hardware and software which do not fall within the definition of a "project" under the California Environmental Quality Act because there would be no physical change in the environment. The project delivery method for this project is Progressive Design-Build with pre-design and design components. Construction Notice-to-Proceed represents the start of fabrication/manufacturing.

DCS training activities specific to the new Southeast Water Pollution Control Plant (SEP) Headworks facility's processes were initiated and are ongoing. DCS server cabinets and other related hardware were delivered onsite and were installed by the Biosolids project contractor at one of the process facilities. Process control network and new DCS network (DCS work segment 1 of 8 under the WWE DCS progressive design-build contract) design activities for the entire SEP progressed to 100% design during this reporting period.

# 

New Distributed Control System (DCS) cabinet delivery at a Southeast Water Pollution Control Plant (SEP) process building.

### **Issues and Challenges:**

# **10002284 - SEP Power Feed and Primary Switchgear Upgrades**

**Project Description:** The objective of the project is to increase reliability, redundancy, and capacity of the electrical system at Southeast Plant (SEP) and two nearby facilities by upgrading the existing power feed by PG&E and obtaining a new power feed by SFPUC's Power Enterprise. The project will construct a new primary switching station and related electrical infrastructures at SEP. In addition, aging substations will be replaced, and new monitoring and protection system will be installed for additional reliability and efficiency.

<b>Program:</b> Southeast P Improvements	lant (SEP)	Project Status:	bject Status: Construction Environmental Status: Comp Ex)				
Project Cost:			Project Sch	edule:			
Approved \$95.88 M Forecast \$95.88 M			Example 20/20/44 00/20/44				
Actual		\$ 73.59 N	Project Perc	ent Complete: 77.5%			
Key Milestones	Environme Approva		lvertisement	Construction NTP	Construction Final Completion		
Current Forecast	02/22/18	A 02	2/20/20 A	10/05/20 A	02/17/25		

#### **Progress and Status:**

This quarter, the primary switchgear building received the San Francisco Public Utilities Commission power via the Bay Corridor and Transmission Distribution project. Hence, the substation cutover work resumed and subsequently the four substations were energized. The contractor installed the instrumentation & control monitoring cabinet at the Bruce Flynn Pump Station, and also the fibers for the fire alarm system connection at the master control station in the administration building.

## Issues and Challenges:

None at this time.



Energization of Substation in Progress

# 10037353 - SEP 550 Booster PS Condition Inspection & Interim

**Project Description:** 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.

Program: Southeast Plant (SEP) Improvements Project Status			Environmental Status: Active (C				
Project Cost:			Project Sche	edule:			
Approved Forecast Actual		\$ 31.26 M \$ 31.26 M \$ 1.82 M	M Forecast 01/12/21				06/30/28 06/30/28
Key Milestones	Environme Approva		ertisement	Const	truction NTP	Constructio Comple	
Current Forecast	03/31/25	05/	05/01/25 12/01/25 12/31/27				

#### **Progress and Status:**

The 65% design review comments were finalized and incorporated into the draft 95% set. Coordination regarding permitting and environmental clearance is ongoing. The project team also held a coordination meeting with Municipal Transportation Agency regarding requirements for potential street and paring space closure.

## **Issues and Challenges:**



Interior CCTV Camera Inspection of the Discharge Manifold

# 10038373 - SEP Booster PS & BFS Security Enhancements

**Project Description:** 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.

Program: Southeast Pla Improvements	Project Status: B	id and Award	Environment	Environmental Status: Active (Cat Ex)		
Project Cost: Approved Forecast Actual		\$ 35.76 M \$ 35.76 M \$ 1.25 M	Project Schu Approved 01/ Forecast 01/ Project Perc	18/22	03/01/28 03/01/28	
Key Milestones	Environme Approva		ertisement	Construction NTP	Construction Final Completion	
Current Forecast	08/28/25	10/	31/24	12/31/25	08/31/27	

#### **Progress and Status:**

The project delivery method for this project is Progressive Design-Build with predesign/design components. The bid advertisement date has been pushed out to next quarter, however, there is no impact to the overall project schedule. The project team continues to coordinate with Wastewater Enterprise, San Francisco Public Utilities Commission (SFPUC) Information Technology Services, SFPUC Security, and other stakeholders regarding security enhancements, as well as the configuration of security fiber optic connectivity and servers needed for video recording, management, and analytics.



Existing Cameras on a Building at SEP

#### **Issues and Challenges:**

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

**Project Description:** 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.

Program: Southeast P Improvements	lant (SEP)	Project	Status: C	atus: Construction Environmental Status: Complete Ex)				
Project Cost:				Project Sche	edule:			
Approved Forecast Actual			\$ 29.60 M \$ 29.60 M \$ 3.30 M	60 M Forecast 01/04/21				03/31/28 03/31/28
Key Milestones	Environme Approva		Bid Adv	ertisement	Cons	struction NTP	Constructi Comple	
Current Forecast	07/12/23	A	03/0	)5/24 A	0	9/16/24 A	04/13/	27

#### **Progress and Status:**

The contractor received notice-to-proceed in this quarter and began mobilization. The project team continued to review submittals and requests for information.

#### **Issues and Challenges:**

None at this time.



Existing SEP-041 Wet-Weather Primary Sedimentation Building.

# 10037331 - Maintenance Building (SEP 940) Interim Improvement

**Project Description:** 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.

Program: Southeast Pl Improvements	Project Status: Design			Environmental Status: Active (Cat Ex)			
Project Cost: Approved Forecast Actual		\$ 20.90 M \$ 20.90 M \$ 2.29 M	90 M Forecast 01/12/21				
Key Milestones	Environmenta Approval	al Bid Adv	ertisement	Const	truction NTP	Construction Final Completion	
Current Forecast	10/31/24	11/	18/24	0	6/02/25	08/03/27	

#### **Progress and Status:**

The 95% design was issued this quarter and a stakeholder review meeting was held to facilitate review comments. The project team also engaged 3rd party reviewers for independent technical review, cost estimating, and review of the Department of Building Inspection courtesy plan check. Coordination related to California Environmental Quality Act clearance and with furniture vendors is ongoing.

## **Issues and Challenges:**

None at this time.



Interior of Bldg. SEP 940

02/29/28

## 10039505 - New Ops, Engineering and Maintenance Buildings

**Project Description:** 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.

Program: Southeast Pl Improvements	ant (SEP)	Project Status: Design			Environmental Status: Active (EIR)		
Project Cost: Approved Forecast Actual		\$ 171.88 M \$ 171.88 M \$ 4.86 M		01/22 01/22	plete: 3.1%	08/31/28 08/31/28	
Key Milestones	Environme Approva		vertisement	Cons	struction NTP	Construction Final Completion	

N/A

#### **Progress and Status:**

**Current Forecast** 

During this quarter, the project team prepared the Draft Environmental Impact Report document for review and comments. Environmental review is underway. The project team submitted the Site Permit review package to the Department of Building Inspection.

02/28/25



05/12/25

# **Issues and Challenges:**

None at this time.

Perspective View - South Elevation in SEP 914

# 10039310 - Secondary Clarifiers (SEP230) Rehabilitation

**Project Description:** 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).

<b>Program:</b> Southeast P Improvements	ant (SEP)	Project Status: B	Envir (TBD)	Environmental Status: Not Initiated (TBD)			
Project Cost:			Project Sch	edule:			
Approved Forecast		\$ 51.95 M \$ 51.95 M	Approved 10/ Forecast 10/			11/30/29 11/30/29	
Actual		\$ 1.17 M	Project Perc	ent Complete: 4	4.2%		
Key Milestones	Environme Approva		al Bid Advertisement Construction NTP Construction Complete Comple				
Current Forecast	10/31/25						

#### **Progress and Status:**

The project delivery method for this project is Fixed Budget Design-Build with pre-design and design components. Bid advertisement documents for project delivery continue to be developed. The bid advertisement date has been pushed out pending additional review of the bid advertisement documents.

## **Issues and Challenges:**



One of the Secondary Clarifiers To be Rehabilitated

## 10039811 - SEP Condition Improvement Projects - Part 1

**Project Description:** 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. Dryweather 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.

Program: Southeast Pla Improvements	ant (SEP)	Project Status: Design			Environmental Status: Not Initiated		
Project Cost:			Project Sch	edule:			
Approved\$ 16.01 MForecast\$ 16.01 MActual\$ 0.97 M			M Forecast 04/03/23 10/29/27				
Key Milestones	Environmen Approval		ertisement	Cons	struction NTP		ction Final pletion
Current Forecast	05/30/25	07/	02/25	(	02/02/26	04/	30/27

#### **Progress and Status:**

The 35% design and Design Criteria Report were issued this quarter and a stakeholder review meeting was held to facilitate comments. The Design Criteria Report is being updated accordingly and the final report will be issued in Q2 of FY24/25. The project team continued coordination with Wastewater Enterprise and Construction Management Bureau staff.

## **Issues and Challenges:**



Existing Sodium Bisulfite Tanks

## 10029736 - Westside Pump Station Reliability Improvements

**Project Description:** 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.

Program: Oceanside Plant (OSP) Improvements			Project	oject Status: Construction			Environmental Status: Completed (Cat Ex)		
Project Cost:Approved\$ 93.30 MForecast\$ 93.30 MActual\$ 58.31 M				\$ 93.30 M	M Forecast 06/13/13				06/30/26 06/30/26
Key Milestones		Environme Approva		Bid Adv	ertisement	Cons	truction NTP	Constructio Comple	
Current Forecast	А	06/13/13	A	05/0	06/14 A	A 10/15/14 A		03/27/17 A	
			09/0	/08/20 A 04/19/21 A 12/16/25			25		

## **Progress and Status:**

This project includes multiple construction contracts: (A) WW-572R Westside Pump Station Discharge Pipe Manifold Upgrade, contract closeout has been completed. Environmental approval for this contract was achieved in Project CWWRNRTF47 as presented in the table above. (B) WW-645R Westside Pump Station Reliability Improvements contract, construction phase activities continue.

#### **Issues and Challenges:**



New Electrical Building with Fog Lilies mural by artist Jet Martinez.

# 10029737 - OSP Digester Gas Utilization Upgrade

**Project Description:** 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.

Program: Oceanside P Improvements	lant (OSP)	Project Status: C	onstruction	Environmen Ex)	Environmental Status: Completed (Cat Ex)		
Project Cost: Approved Forecast Actual		\$ 69.58 M \$ 69.58 M \$ 60.90 M	Forecast 10/01/13 06/02/2				
Key Milestones	Environmen Approval		ertisement	Construction NTP	Construction Final Completion		
Current Forecast	06/14/17 A	04/2	25/18 A	11/26/18 A	12/31/24		

#### **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 continues mechanical piping and electrical connection of major equipment items, cogeneration engines, heat exchangers and loop pumps, electrical substation No. 5 transformer, and motor control centers. During the reporting period, PG&E provided a Wholesale Distribution Tariff 3 work performance agreement. The project team has expedited the processing of the engineering advance fees. The additional PG&E electrical infrastructure scope may result in potential construction delays.

#### **Issues and Challenges:**



Cogeneration engine exhaust system installation and testing.

# 10037733 - Solids Thickening (OSP 011) Process Upgrade

**Project Description:** 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.

Program: Oceanside P Improvements	Project Status: Design			Environmental Status: Not Applicable			
Project Cost: Approved Forecast Actual	\$ 20.22 M \$ 20.22 M \$ 0.92 M	22 M Forecast 01/25/22 03/10/					
Key Milestones	Environmer Approva		ertisement	Construc	tion NTP	Constructio Comple	
Current Forecast	N/A	02/	04/25	10/29	9/25	07/01/	27

#### **Progress and Status:**

During this reporting period, the project team distributed the 65% design phase deliverables. The project team completed the Operations Engineering Maintenance staff presentation and solicited comments. The 65% design comments have been received and the project team is incorporating them into the 95% design phase deliverables.

## **Issues and Challenges:**



Existing Gravity Belt Thickener identified for equipment replacement.

# 10037734 - OSP Plant-wide Ventilation (HVAC) Upgrades

**Project Description:** 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.

Program: Oceanside P Improvements	Project Status: Design			Environmental Status: Not Applicable			
Project Cost:			Project Sch	edule:			
Approved\$ 22.58 MForecast\$ 22.58 MActual\$ 0.65 M			8 M Forecast 01/26/22 07/16/2				I
Key Milestones	Environme Approva		ertisement	Constr	uction NTP	Construction Fina Completion	I
Current Forecast	6/04/25 01/05/26 01/15/27						

#### **Progress and Status:**

During this reporting period, the project team distributed the 65% design phase deliverables.

## **Issues and Challenges:**



Existing Contaminated Air Fiber Reinforce Plastic (FRP) Ductwork Identified for Replacement with New FRP Ductwork With Drains at Low Points.

## 10036398 - OSP Condition Improvement Projects - Part 2

**Project Description:** 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 scoped improvements and priority are 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.

<b>Program:</b> Oceansic Improvements	<b>Program:</b> Oceanside Plant (OSP) Improvements			Project Status: Multi-Phases			Environmental Status: Active (Various)		
Project Cost:					Project Schedule:				
Approved Forecast Actual	\$ 105.10 M         Approved 03/03/18           \$ 105.10 M         Forecast 03/03/18           \$ 105.10 M         Forecast 03/03/18           \$ 15.40 M         Project Percent Complete: 14.4%						06/28/30 06/28/30		
Key Milestones Environme Approv						Cons	struction NTP	Constructio Comple	
	А	12/31/25	5	07/	07/26		02/01/27	02/01/2	29
	В	12/31/25	5	03/	04/27		10/01/27	10/02/2	29
	С	12/31/25	5	06/	29/27		02/01/28	12/27/2	29
Current Forecast	D	06/25/26	5	08/	05/27		03/07/28	12/01/2	28
	Е	10/19/20	A	09/2	22/21 A	C	05/16/22 A	11/30/2	24
	F	03/03/18	А	06/2	22/22 A	1	2/19/22 A	09/03/2	25
	G	12/14/21	A	٦	N/A	C	05/12/22 A	10/31/2	3 A

#### **Progress and Status:**

This project includes multiple construction contracts: (A) OSP 620 Digestion H&S, Mech Improvements, OSP 800 Mech Improvements: During the reporting period, the project team advanced the detailed design of these project elements. (B) OSP 011 Polymer & Ferric Chloride Replacement: Subproject Planning Phase was initiated this quarter. (C) OSP 042 Primary Clarifiers Structural and Mechanical Improvements: Subproject not initiated. (D) OSP 200 Aeration Tanks Structural and Mechanical Improvements: Subproject Planning Phase was initiated during this quarter. (E) WW-648 OSP Building 042 Primary Clarifier Improvements: Construction activities continue, the Contractor continues spray nozzles, mechanical and electrical equipment rough-ins in Clarifier Tank No. 2 and perform functional, performance and commission testing on equipment installed within Clarifier No. 1. The contract Substantial Completion is delayed due to additional mechanical modifications and unforeseen additional mechanical equipment repairs within the primary clarifier tanks. (F) WW-669 OSP Building 011 Grit Classifier & Preliminary Influent Slide Gate System Improvements: The Contractor installation of the new slide gates, butterfly valves and hydro gritter assembly is ongoing. (G) JOC 53R3-15 OSP UPS Assembly Replacements: Installation of the four (4) Uninterruptable Power Supply systems has been completed.



Contract (F) WW-669, the Contractor is preparing the area to install the replacement preliminary influent slide gate valve assembly.

**Issues and Challenges:** None at this time.

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

**Project Description:** 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.

Program: Oceanside Plant (OSP) ImprovementsProject Status			Design Environmental Status: Not App				
Project Cost:			Project Sch	edule:			
Approved Forecast Actual	Approved 02/01/22         07/08/27           Forecast 02/01/22         07/08/27           Project Percent Complete: 7.1%						
Key Milestones	Environme Approva		ertisement	Cons	struction NTP	Constructio Comple	
Current Forecast	N/A	01/	/03/25		08/04/25	01/07/2	27

#### **Progress and Status:**

During this reporting period, the project team distributed the 65% design phase deliverables.

## **Issues and Challenges:**

None at this time.



Existing fume hood #3 identified for replacement.

# 10037777 - OSP & WSPS Security Enhancements

**Project Description:** 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.

Program: Oceanside P Improvements	Project Status: Bid and Award			Environmental Status: Active (Cat Ex)				
Project Cost:				Project Sch	edule:			
Approved \$13.78 M Forecast \$13.78 M Actual \$0.90 M				B M Forecast 08/02/21 03/01/26				
Key Milestones	Environme Approva		Bid Adv	ertisement	Cons	struction NTP	Constructio Complet	
Current Forecast	08/28/25	5	10/	31/24		12/30/25	08/31/2	27

#### **Progress and Status:**

The project delivery method for this project is Progressive Design-Build with pre-design/design components. The bid advertisement date has been pushed out to next quarter but it's not impacting the overall project schedule. Coordination continued with Wastewater Enterprise, San Francisco Public Utilities Commission (SFPUC) Information Technology Services, SFPUC Security, and other stakeholders regarding security enhancements, as well as configuration of servers needed for video recording, management, and analytics.

#### **Issues and Challenges:**



Existing East Vehicle Entrance at OSP

# 10039193 - Gaseous Oxygen System (OSP 011) Upgrades

**Project Description:** 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 VPSA, 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.

Program: Oceanside P Improvements	Project Status: Planning			Environmental Status: Not Initiated (TBD)			
Project Cost: Approved Forecast Actual	\$ 22.35 M \$ 22.35 M \$ 0.49 M	M Forecast 01/03/23 05/08/2					
Key Milestones	Environme Approva		ertisement	Const	ruction NTP	Constructio Comple	
Current Forecast	06/25/26	08/	04/27	03	3/07/28	12/01/2	28

## **Progress and Status:**

During this reporting period, the project team performed field condition assessment investigations and related planning phase activities. The project team is continuing to assemble the project Needs Assessment Report and Alternatives Analysis Report.

#### **Issues and Challenges:**



Existing pressure swing absorption compressor assembly equipment identified for replacement.

## 10026822 - North Shore Wet Weather Pump Station Improvements and Disinfection

**Project Description:** 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.

Program: North Point F Improvements	Facility (NPF)	Project Status: C	onstruction	Environmenta Ex)	Environmental Status: Completed (Cat Ex)			
Project Cost:			Project Sch	edule:				
Approved Forecast Actual		\$ 51.30 M \$ 51.30 M \$ 40.20 M	M Forecast 08/15/13					
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion			
Current Forecast	10/13/17	A 10/0	10/08/20 A 04/19/21 A 12/31/24					

#### **Progress and Status:**

The contractor completed wiring, field testing, and cutovers of all four main station gates. Installation of motor control centers 2 & 4, and cutovers of all power loads were completed. The contactor also completed structural foundation work for installation of the remaining two new dry weather pumps.

#### **Issues and Challenges:**

None at this time.



Main Gates Panel Startup and Testing

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

**Project Description:** 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 supported by new concrete pad on existing Level 3 slab. 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.).

<b>Program:</b> North Point Facility (NPF) Improvements		Project Status: D	Project Status: Design			Environmental Status: Active (Cat Ex)		
Project Cost: Approved Forecast Actual	\$ 22.69 M \$ 22.69 M \$ 1.32 M	69 M Forecast 03/01/22 09/29/28						
Key Milestones	Environme Approva		Bid Advertisement Co		truction NTP	Construction Complet		
Current Forecast	06/30/25	07/30/25		0	3/02/26	03/28/2	8	

#### **Progress and Status:**

The 35% design and design criteria report were issued this quarter and a stakeholder review meeting was held to facilitate comments. The design criteria report is being updated accordingly. The project team began coordination with Wastewater Enterprise and Power Enterprise regarding electrical load capacity increase. Project team also continues to coordinate with environmental group regarding California Environmental Quality Act clearance.

#### **Issues and Challenges:**

None at this time.



NPF 930 Admin Building. Electrical Equipment Site Visit.

## 10037904 - NPF & NSS Security Enhancements

**Project Description:** 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.

<b>Program:</b> North Point Facility (NPF) Improvements		Project Status: B	Project Status: Bid and Award			Environmental Status: Active (Cat Ex)		
Project Cost:			Project Sch	edule:				
Approved\$ 17.85 MForecast\$ 17.85 MActual\$ 0.82 M			5 M Forecast 01/18/22 03/01/28					
Key Milestones	Environme Approva		al Bid Advertisement Cons		truction NTP	Construction Fin Completion	nal	
Current Forecast	08/28/25	5 10/	/31/24		12/31/25	08/31/27		

#### **Progress and Status:**

The project delivery method for this project is Progressive Design-Build with pre-design and design components. The bid advertisement date has been pushed out to next quarter but it's not impacting the overall project schedule. 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:**



Temporary Chain Link Fence at North Point Facility

## 10038353 - NPF DCS Upgrades (Construction)

**Project Description:** The purpose of this project is to replace the aging distributed control system (DCS) infrastructure at Northpoint Wet Weather Treatment Facility (NPF) and Northshore Pump Station (NSS), as the existing DCS equipment are obsolete. The needed upgrades include replacement of all existing DCS hardware and software, as specified by the system-wide DCS replacement progressive design-build contract. The design of the new DCS in the Northpoint facilities is scoped to be performed under SSIP project "10015809: WWE Facility-Wide Distributed Control System (DCS) Upgrades" 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.

Program: North Point Facility (NPF) Improvements		Project Status: C	roject Status: Construction		Environmental Status: Not Applicable		
Project Cost: Approved Forecast Actual	\$ 11.07 M \$ 11.07 M \$ 1.36 M	M Forecast 11/01/21 12/30/27					
Key Milestones	Environme Approva		al Bid Advertisement Co		uction NTP	Constructi Comple	
Current Forecast	N/A	N/A		11/	01/21 A	06/30/	27

#### **Progress and Status:**

Note regarding the above table: It was determined that upgrades to the Distributed Control System (DCS) primarily involve computer hardware and software which do not fall within the definition of a "project" under California Environmental Quality Act because there would be no physical change in the environment. The project delivery method for this project is Progressive Design-Build with pre-design and design components. Construction Notice-to-Proceed represents the start of fabrication/manufacturing. Design activities for the remaining new DCS conversion effort at NPF Wet Weather Treatment Facility under SSIP Project "10015809 WWE Facility-wide DCS Upgrade" are still ongoing. Field testing and commissioning under the WW-685R North Shore Pump Station (NSS) contract and coordination between the NSS and the DCS project teams are also ongoing during this reporting period.



## **Issues and Challenges:**

North Shore Pump Station DCS Hardware Operational Readiness Test

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

Project Description: 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; (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; (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; (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.

<b>Program:</b> North Point Facility (NPF) Improvements		Project Status: P	Project Status: Planning		Environmental Status: Not Initiated (TBD)		
Project Cost: Approved Forecast Actual	\$ 54.25 M \$ 54.25 M \$ 0.82 M	.25 M Forecast 11/14/22 08/30/30					
Key Milestones	Environme Approva		rertisement	Construction NT	P Construction Completion		
Current Forecast	12/31/26	6 02/	02/27	09/01/27	03/01/30		

## **Progress and Status:**

The project team continued the development of the Alternatives Analysis/Conceptual Engineering Report combined deliverable. The project team held several meetings with Wastewater Enterprise regarding Heating, Ventilation, and Air Conditioning improvement alternatives. A computational fluid dynamics model which depicts existing and proposed air flow improvements was shared with the stakeholders. The project team also met with the accessibility coordinator regarding required site improvements.

## **Issues and Challenges:**



NPF 041 Main Sedimentation Tank Area

## 10034718 - Large Diameter Sewer Projects and Channel FM Intertie

**Project Description:** 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.

Program: Intercepte Odor Control	ors / T	unnels and	Projec	Project Status: Multi-Phases			Environmental Status: Completed (Various)		
Project Cost:					Project Sch	edule:			
Approved Forecast				\$ 114.59 M Approved 08/01/19 \$ 114.59 M Forecast 08/01/19			12/07/26 12/07/26		
			ent Corr	Complete: 59.1%					
Key Milestones Environmer Approval				al Bid Advertisement C		Cons	struction NTP	Constructi Comple	
	А	05/09/22	А	06/2	06/28/22 A		6/26/23 A	06/08/	26
	В	08/06/20	А	01/1	9/21 A	C	08/30/21 A	03/23/2	23 A
	С	08/11/21	А	09/2	09/23/22 A		3/13/23 A	08/08/2	24 A
	D	03/23/21	А	06/1	06/17/22 A		09/02/22 A 09/0		22 A
Current Forecast	Е	03/08/22	А	06/1	17/22 A		2/05/22 A	01/18/2	24 A
Current Forecast	F	06/29/22	А	01/3	31/23 A	C	8/28/23 A	02/04/	25
	G	06/22/21	А	1	N/A	C	3/14/22 A	10/15/	24
	Н	02/01/23	А	01/0	3/24 A	C	8/12/24 A	10/10/	25
	Ι	12/05/23	А	03/0	4/24 A		N/A	N/A	
	J	02/12/24	А	11/	/01/24		N/A	N/A	

#### Progress and Status:

For a complete list of contracts and subprojects, see Table 5 Trend Summary. Subproject (A): Construction (CN) work is ongoing. Subproject (B): The project is in closeout. Subproject (C): Contract WW-724 is in closeout. Contract documents for WW-754 are being prepared. Subproject (D): Completed as the remaining scope of work was added to Subprojects B & E for contracting convenience. Subproject (E): The project is in closeout. Subproject (F): CN work is ongoing. Subproject (G): Substantial Completion has been established. Subproject (H): Notice-to-Proceed (NTP) for contract WW-738 has been issued. Subproject (I): NTP for contract WW-753 has been issued. CN phase will be funded through the Collection Systems R&R Program. Subproject (J): Contract documents are being prepared. The design duration has been extended due to additional scope and resource constraints with no impact to the overall project completion. CN phase will be funded through the Collection Systems R&R Program



Contract A: Installation of New Air Release Valves

## Issues and Challenges:

## 10002652 - Kansas and Marin Streets Sewer Improvements

**Project Description:** 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.

<b>Program:</b> Interceptors / Tunnels and Odor Control		Project Status: D	Project Status: Design		Environmental Status: Completed (Cat Ex)		
Project Cost:         Approved       \$ 6.70 M         Forecast       \$ 6.70 M         Actual       \$ 4.68 M			.70 M Forecast 06/10/13 10/16/26				
Key Milestones	Environme Approva		ertisement	Construction NTP	Construction Final Completion		
Current Forecast	07/23/19	A 08	08/04/25		07/24/26		

#### **Progress and Status:**

During this quarter, the project team completed the hydraulic modeling for the revised Alternatives Analysis Report.

#### **Issues and Challenges:**



Existing Weir Structure where Marin Street Sewer Crosses over the Islais Creek Transport Storage Box

## 10041084 - Geary BRT Sewer Improvements - Phase 2 Construction

**Project Description:** 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.

<b>Program:</b> Interceptors / Odor Control	: Interceptors / Tunnels and rol Project Status:			Environmenta Ex)	Il Status: Completed (Cat
Project Cost:			Project Sch	edule:	
Approved Forecast		\$ 23.93 M \$ 23.93 M	Approved 03/0 Forecast 03/0		02/28/28 02/28/28
Actual		\$ 0.20 M	Project Perc	ent Complete: 0.8%	
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion
Current Forecast	N/A	03/2	28/24 A	10/28/24	09/29/27

#### **Progress and Status:**

The environmental portion of the project was completed under project 10033106 Geary BRT Sewer Improvements Phase 2 PreCon. During this quarter, the project team executed the construction contract with Cratus Inc. and prepared for construction Notice-to-Proceed. Contract execution was delayed but does not impact the overall project completion. The project team finalized all cost shares, transferred construction support funding, and initiated the construction management phase.

## **Issues and Challenges:**



PG&E Pothole Investigation at 6th and Geary

## 10002664 - Van Ness BRT Sewer Improvements

**Project Description:** 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.

Program: Interdepartm	Project	Project Status: Construction			Environmental Status: Completed (EIR)			
Forecast \$25.00 M			\$ 25.00 M \$ 25.00 M \$ 21.07 M	M Forecast 10/01/13				12/31/24 12/31/24
Key Milestones	Environme Approva		Bid Advertisement		Constru	ction NTP	Construction Final Completion	
Current Forecast	N/A		N/A		01/1	6/18 A	11	/27/24

#### **Progress and Status:**

Substantial Completion for the sewer work was issued by SFMTA in January 2021. Claim negotiations with subcontractors continued and remain outstanding. Final completion is pending due to the claim negotiations.

#### Issues and Challenges:

None at this time.



Sewer Completion along Van Ness Avenue

## 10002776 - Taraval Sewer Improvements

**Project Description:** 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.

Program: Interdepa	Program: Interdepartmental Projects Project Statu			Multi-Phases Environmental Status: Completed Ex)			
Project Cost:				Project S	chedule:		
Approved Forecast Actual			\$ 34.50 \$ 34.50 \$ 28.53	M Forecast		ete: 87.5%	07/31/25 07/31/25
Key Milestones		Environme Approva		dvertisemen	t Constr	uction NTP	Construction Final Completion
	А	04/17/17	A 1	0/02/18 A	07/	01/19 A	07/02/21 A
Current Forecast	В	04/17/17	A C	1/21/21 A	/21/21 A 12/01/21 A		12/06/24
	С	N/A		N/A	10/	19/20 A	12/31/24

#### **Progress and Status:**

SFMTA is the project lead and contracting authority. This project includes the following contracts: (A) SF Zoo to Sunset Blvd/SFMTA Contract No 1306; (B) Sunset Blvd to West Portal/SFMTA Contract No 1308; and (C) 19th Ave Sewer Cost Share (Ulloa) PW 26523. Contract A: Project closeout continues. Contract B: Substantial Completion for the entire contract was obtained this quarter. Contract C: Substantial Completion for the entire contract as work is still on-going with no impact to the overall project completion.

## **Issues and Challenges:**



Segment B: Installing Catch Basin Sand Trap and Grouting Joints NE 35th Ave

# 10037251 - Seacliff No. 1 PS & FM Upgrade

**Project Description:** 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.

<b>Program:</b> Pump Station Forcemain Improvement	Project Status: B	id and Award	Environmenta Ex)	Environmental Status: Completed (Cat Ex)		
Project Cost:			Project Sch	edule:		
Approved Forecast Actual		\$ 16.18 M \$ 16.18 M \$ 2.62 M	Approved 12/0 Forecast 12/0 Project Perc		03/31/27 03/31/27	
Key Milestones	Environmen Approval		ertisement	Construction NTP	Construction Final Completion	
Current Forecast	06/13/23 A	A 04/1	5/24 A	12/02/24	06/03/26	

#### **Progress and Status:**

During this quarter, the project was awarded.

#### **Issues and Challenges:**



Seacliff Pump Station No.1

# 10037246 - Seacliff No. 2 PS & FM Upgrade

**Project Description:** The purpose of this project is to rehabilitate Seacliff 2 Pump Station and Force Main and improve its operational performance and reduce CSD activations. 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 various mechanical and electrical equipment replacement, seismic retrofit, health & safety and security improvements, and replacement of the force main. 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.

Program: Pump Stations and Forcemain ImprovementsProject State			: Design Environmental Status: Completed Ex)				
Project Cost: Approved Forecast		\$ 22.14 M \$ 22.14 M \$ 3.79 M	4 M Forecast 12/14/20 04/03/28				
Key Milestones	Environme Approva	ntal Bid Adv	rertisement	Construction NTP	Construction Final Completion		
Current Forecast	11/29/23	A 10/	11/24	04/28/25	04/16/27		

## **Progress and Status:**

During this quarter, the design team continues to work on the bid package due to resource constraints and advertisement is delayed with no impact to the overall project completion.

## **Issues and Challenges:**



Potholing Investigation for Force Main

# 10037303 - Sunnydale PS Safety Improvements

**Project Description:** 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 doo; 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.

<b>Program:</b> Pump Station Forcemain Improvement		Project Status: B	oject Status: Bid and Award Environmental Status			
Project Cost:			Project Sch	edule:		
Approved Forecast Actual		\$ 16.67 M \$ 16.67 M \$ 2.24 M	M Forecast 12/14/20 05/2			
Key Milestones	Environmen Approval		ertisement	Construction NTP	Construction Final Completion	
Current Forecast	01/08/24 A	A 06/2	06/27/24 A		11/24/27	

#### **Progress and Status:**

Contract has been awarded this quarter.

#### **Issues and Challenges:**



HVAC Ducting Corrosion Due to Water Intrusion

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

Project Description: 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.

<b>Program:</b> Pump Stations and Forcemain Improvements		Project Status:	E	Environmental Status: Active (Cat Ex)			
Project Cost:         Approved       \$ 7         Forecast       \$ 7         Actual       \$ 0			Project Schedule:         09/13/27           Approved 06/01/22         09/13/27           Forecast 06/01/22         09/13/27           Project Percent Complete: 8.7%         09/13/27				
Key Milestones	Environmer Approva		Bid Advertisement		uction NTP	Construction Final Completion	
Current Forecast	06/02/25	07	07/02/25		04/26	02/26/27	

#### **Progress and Status:**

During this quarter, the project team is progressing towards the 95% Design deliverables.

## Issues and Challenges:



Security Issues at Cesar Chavez Pump Station

# 10038446 - Geary Underpass PS Safe Access Enhancements

**Project Description:** This project aims to improve access in and around the Geary Underpass Pump Station. This project will improve lighting and accessibility on both levels of the pump station, provide various health and safety improvements such as handrails, falls arrest system and swing gates, improve ventilation and maintenance ability, and lastly install a davit crane arm for lifting pumps from the below grade level wet well sump to the entrance of the station. A positive operating impact is anticipated since the project will address safety, access issues, and health and safety concerns at the station.

<b>Program:</b> Pump Stations and Forcemain Improvements		Project Status: Bid and Award			Environmental Status: Not Applicable		
Project Cost:	Project Schedule:						
Approved\$ 1.28 MForecast\$ 1.28 MActual\$ 0.29 M			Forecast 01/10/22 05/29/26				
Key Milestones	Environme Approva		Bid Advertisement		truction NTP	Construction Final Completion	
Current Forecast	N/A		N/A		10/09/24	09/09/25	

#### **Progress and Status:**

During this quarter, the project team reviewed the Health & Safety Plan. The Notice-to-Proceed for the Job Order Contract is delayed with no impact to the overall project completion.

## **Issues and Challenges:**



Wet Well of Pump Station

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

**Project Description:** 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.

Program: Combined Sewer Discharge CSD) and Transport/Storage StructuresPro			roject Status: Design			Environmental Status: Active (Cat Ex)		
Project Cost:				Project Sch	edule:			
Approved Forecast Actual			\$ 11.94 M \$ 11.94 M \$ 1.01 M	Approved 12/0 Forecast 12/0 Project Perc	07/20	plete: 8.7%		04/28/28 04/28/28
Key Milestones	Environme Approva		Bid Advertisement		Cons	struction NTP	Constructio Comple	
Current Forecast	07/30/25	5	07/31/25			04/06/26 06/2		27

#### **Progress and Status:**

The project team received concurrence for the added scope recommendation for Sansome Street CSD. Design has resumed and is progressing towards the 65% design milestone.

# **Issues and Challenges:**



Brannan CSD Existing Damaged Butterfly Discharge Valve

# 10038468 - Systemwide CSD & T/S Monitoring Equipment Assessment

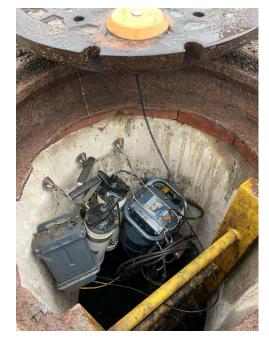
**Project Description:** The purpose of this project is to provide a system-wide assessment of collections system monitoring equipment for dry and wet-weather operations, reporting, and other related functions. This is in support of WWE's Collections System level of service goal which states that the 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 outfalls. 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.

<b>Program:</b> Combined S (CSD) and Transport/Sto		Project Status: P	lanning	Environmen (TBD)	tal Status: Not Initiated	
Project Cost:			Project Sch	edule:		
Approved \$11.19 M Forecast \$11.19 M Actual \$0.75 M			M Forecast 01/18/22 03/17/28			
Key Milestones	Environme	ntal Bid Adv	risement	Construction NTP	Construction Final	
	Approva	1			Completion	
Current Forecast	10/31/25	04/	01/26	12/01/26	09/17/27	

#### **Progress and Status:**

The project team continued to work on the second draft of the Needs Assessment Report upon receipt of review comments last quarter. Coordination and logistics planning to conduct multiple field surveys and onsite assessments at various San Francisco sewer outfalls and transport / storage boxes were completed.

# **Issues and Challenges:**



Existing Field Instrumentation Equipment Installed In a Sewer Manhole

# 10038547 - CSD Structure Rehab & Upgrades - Part 1

**Project Description:** 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.

<b>Program:</b> Combined Sewer Discharge (CSD) and Transport/Storage Structures		Project Status: Multi-Phases				Environmental Status: Active (Cat Ex)		
Project Cost:					Project Sch	edule:		
Approved Forecast	ed			\$ 39.65 M \$ 39.65 M			01/31/29 01/31/29	
Actual				\$ 2.01 M	Project Percent Complete: 5.3%			
Key Milestones		Environme Approva		Bid Adv	ertisement	Cons	struction NTP	Construction Final Completion
Current Forecast	A/B	03/13/24	A	07/1	2/24 A		03/24/25	06/04/27
Current Torecast	С	05/30/25	5	07/	/31/25		02/27/26	10/14/27

# **Progress and Status:**

This project includes the following Combined Sewer Discharge (CSD) contracts: (A/B) Laguna, Howard and Mission Bay; and (C) Mariposa and Evans. For Contract A/B: The construction contract was advertised this quarter. For Contract C: the 65% design was completed this guarter.

# **Issues and Challenges:**



Damaged Rip-Rap Under and Around Laguna CSD

# 10026810 - Yosemite Green Infrastructure

**Project Description:** 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.

Program: Early Implementation Projects Project Status: E			Design Environmental Status: Completed (Cat Ex)			
Project Cost:			Project Sch	edule:		
Approved Forecast Actual		\$ 27.54 M \$ 27.54 M \$ 6.72 M	Approved 12/0 Forecast 12/0 Project Perc		11/08/28 11/08/28	
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion	
Current Forecast	08/15/17	A 01,	/31/25	08/19/25	05/08/28	

#### **Progress and Status:**

During this reporting period, the design team negotiated a Streambed Alteration Agreement with California Department of Fish & Wildlife for the improvements within Yosemite Marsh and McNab Lake. The project team performed quality control on the 95% design deliverables, and initiated contract preparation activities. The project team is working towards bid advertisement. Although the bid advertisement date has changed, there is no overall impact to the project schedule.

#### **Issues and Challenges:**

None at this time.



Green Infrastructure Interpretive Sign

# 10029726 - Green Infrastructure Capital Planning (GI-01)

**Project Description:** 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.

Program: Watershed S Management	tormwater	Project Status: P	lanning	Environmental Status: Not Applic			ot Applicable
Project Cost: Approved Forecast Actual	Approved \$21.00 M Forecast \$21.00 M			Forecast 07/11/16 06/30/34			
Key Milestones	Environmen Approval		Bid Advertisement		struction NTP	Construction Final Completion	
Current Forecast	N/A	N/A		N/A	N/A		

#### **Progress and Status:**

During the reporting period, the project team continued to evaluate opportunities for green infrastructure capital projects. The team completed the draft Alternatives Analysis Report and finalized alternative recommendations, incorporating geotechnical investigation results at three potential project locations. The team coordinated with San Francisco Public Works and continued community outreach for the proposed permeable Cumberland Street project, including synthesizing feedback from the community survey and presenting results to the community via email and during an in-person event. The team continued coordination on project opportunities for Brotherhood Way with San Francisco County Transportation Authority and Embarcadero with San Francisco Municipal Transportation Agency. During the reporting period, the stormwater billing project continued work on capturing unmetered parcels.



Setting up for a Community Event on Cumberland Street.

Issues and Challenges:

# 10034553 - Green Infrastructure Grant Program (GIGP)

**Project Description:** 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 \$930,000 per acre of impervious surface managed, up to \$2 million per project.

Program: Watershed S Management	tormwater P	Project Status: Construction Environmental Status: Not App					
Project Cost: Approved Forecast Actual		\$ 61.32 M \$ 61.32 M \$ 9.65 M	\$ 61.32 M Forecast 07/01/18				
Key Milestones	Environment Approval	al Bid Adv	ertisement	Construction NTP	Construction Final Completion		
Current Forecast	N/A	N	N/A		N/A		

## **Progress and Status:**

During the reporting period, San Francisco Public Utilities Commission announced the awards for the Spring 2024 application cycle. Of the two applications received, one project was awarded (Jefferson Elementary School) and one project opted to withdraw their application to revise the project plans and application with the intent to resubmit in a future application cycle (Panorama Elementary School). During the reporting period, one project completed design (Buchanan Street Mall), two projects began community engagement and design (Mariners Village and Jefferson Elementary School), three projects (St Monica, St Thomas the Apostle, and Everett Middle School) continued construction, and eight projects (Project Artaud, Buena Vista Horace Mann K-8, Visitacion Valley Middle School, Visitacion Valley Elementary School, Thurgood Marshall High School, El Dorado Elementary School, Church of the Visitacion, and St. Thomas More School) continued design and community engagement.



Construction of Rain Garden at St Monica Church and School

#### **Issues and Challenges:**

# 10039608 - Buchanan Street Mall

**Project Description:** 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.

<b>Program:</b> Watershed St Management	ormwater	Project Status:	Environmental Status: Completed Ex)			
Project Cost:			Project Sch	edule:		
Approved Forecast Actual		\$ 9.63 M \$ 9.63 M \$ 0.92 M	Forecast 10/	03/22	12/28/26 12/28/26	
Actual		\$ 0.92 W	Project Perc	ent Complete: 10.1%		
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion	
Current Forecast	01/17/23	A 08	/01/24 A	01/01/25	06/30/26	

# **Progress and Status:**

The project was advertised for bid by San Francisco Public Works.

#### **Issues and Challenges:**



Illustrative plan showing rain gardens at ends of Buchanan St. Mall

# 10037195 - Regional School/Park: Giannini Middle School

**Project Description:** 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.

<b>Program:</b> Watershed St Management and Custon Billing System		Project Status:	Planning	Environmental Status: Not Initiat (Cat Ex)			
Project Cost: Approved Forecast Actual		\$ 11.76 M \$ 11.76 M \$ 0.12 M	76 M Forecast 04/04/24 06				
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion		
Current Forecast	10/30/26	<b>i</b> 11	/02/26	07/01/27	12/31/28		

## **Progress and Status:**

During the reporting period, the project team conducted two engagement events to solicit input from the school community regarding the schoolyard programming.

## **Issues and Challenges:**



Aerial of existing AP Giannini MS campus

# 10034360 - Lower Alemany Area Stormwater Improvement Project

**Project Description:** 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.

Program: Flood Resilience Projects Project Status:			Status: D	Design Environmental Status: Active			e (Cat Ex)	
Project Cost:Approved\$ 299.56 MForecast\$ 299.56 MActual\$ 15.28 M		Forecast 01/02/19 11/01/28						
Key Milestones	Environme Approva		Bid Advertisement Cor		Cons	struction NTP	Constructie Comple	
Current Forecast	12/30/24	1	01/	02/25	/25 08/25/25		05/10/28	

## **Progress and Status:**

The project team anticipates receiving environmental clearance in the upcoming quarter. Project team continues refining additional technical studies based on coordination with Caltrans.

## Issues and Challenges:



Flooding at the I-280/Hwy 101 Interchange at Lower Alemany Area, During the Rainfall of January 2023

# 10026818 - Folsom Area Stormwater improvement Project

**Project Description:** 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.

Program: Flood Resilie	rogram: Flood Resilience Projects Project Status:			Design Environmental Status: Completed (Cat Ex)			
Project Cost:			Project Sche				
Forecast \$ 38.4		\$ 38.41 M \$ 38.41 M \$ 25.35 M	Forecast 07/01/16				
Key Milestones	Environme Approva		ertisement	Construction NTP	Construction Final Completion		
Current Forecast	04/11/23 A	A	N/A	N/A	N/A		

#### **Progress and Status:**

The project is being implemented through (4) contracts: WW-719A Initial Upstream Pipe: The design for this contract was previously completed. WW-719B Alameda Tunnel Construction Contract: During this quarter, the project team completed the Final US-101 Type Selection Report and Draft I-80 Type Selection Report for Caltrans. WW-719C Harrison and Treat Sewer Box: During this quarter, the project team completed the 95% design for this contract and continued outreach related to access during construction. WW-719D Large Upstream Pipe: During this quarter, the project team completed the 65% design. The Folsom project requires extensive staging on private property and permanent improvements through private property in order to be implemented



The Proposed Tunnel Boring Machine (TBM) Retrieval Shaft at Berry Street

## **Issues and Challenges:**

# 10038471 - Folsom Area Stormwater Imp. Project Phase 2

**Project Description:** 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.

Program: Flood Re	Program: Flood Resilience Projects Project Status			atus: M	ulti-Phases	E E>		I Status: Com	pleted (Cat
Project Cost:         Approved       \$ 391.23         Forecast       \$ 391.23         Actual       \$ 5.54					M Forecast 10/17/22 02/16/29				
Key Milestones		Environme Approva		id Adv	ertisement	Constr	uction NTP	Constructi Comple	
	А	N/A		11/1	7/22 A	08/	07/23 A	11/15/	24
Current Forecast	В	N/A		11/	26/24	08	/05/25	04/10/28	
	С	N/A		11/		05	05/31/25		28
	D	N/A		12/	24/24	06	/17/25	12/21/26	

#### **Progress and Status:**

The project is being implemented through four contracts: WW-719A Initial Upstream Pipe, WW-719B Alameda Tunnel Construction Contract, WW-719C Harrison and Treat Sewer Box, and WW-719D Large Upstream Pipe. The Planning and Environmental phase was completed for all four contracts, and design is ongoing under a separate project, 10026818 - Folsom Area Stormwater Improvement. During this quarter, the project team continued fieldwork on Contract WW-719A, completing most of the work on the final two sites of the contract.

## **Issues and Challenges:**



Investigation of 3ft x 5ft Brick Sewer on Folsom Street as Part of Contract WW-719A

# 10039682 - Flood Resiliency Planning

**Project Description:** 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 Wasterfront Resilience Plan and ongoing program partnership. 6. Development of the Islais Creek area plan. 7. Mapping and modeling work associated with the items above.

Program: Flood Resilience Projects Project Status			Planning Environmental Status: Not App			pplicable	
Project Cost: Approved Forecast Actual		\$ 9.60 M \$ 9.60 M \$ 1.08 M	Forecast 10/	03/22 03/22	olete: 10.1%		06/29/29 06/29/29
Key Milestones	Environme Approva		Bid Advertisement Con		ruction NTP	Constructio Comple	
Current Forecast	N/A		N/A		N/A	N/A	

## **Progress and Status:**

The project team prepared to publish the 100-year flood elevation risk map on the San Francisco Public Utilities Commission website. The project team developed an outreach plan to engage with industry professionals related to the proposed flood resilient building code update. Work on the flood resilience policy continued as the project team planned case study research related to flood resilience policies in three comparable cities.

## **Issues and Challenges:**



Flood Resilient Building Code - Outreach Materials

# 10040621 - Floodwater Management Grant Assistance Program (Grant)

**Project Description:** 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.

Program: Flood Resilie	Program: Flood Resilience Projects Project Sta					Environmenta	ntal Status: Not Applicable		
Project Cost: Approved \$7 Forecast \$7 Actual \$				Project Schr Approved 10/ Forecast 10/ Project Perc	16/23 16/23	nplete: 1.1%		12/27/34 12/27/34	
Key Milestones	Environme Approva		Bid Adv	ertisement	Cons	struction NTP		ction Final pletion	
Current Forecast N/A				N/A		N/A	I/A		

#### **Progress and Status:**

During the reporting period, the Floodwater Grant Program received two (2) grant interest forms, conducted two (2) site visits, and received one (1) grant application. The Floodwater Grant Guidebook has been completed and is in the final review phase. In addition, a coffee chat for the grant program was held in the Folsom neighborhood and door to door outreach in both the Folsom and Marina neighborhoods were conducted.

## **Issues and Challenges:**



Work in Progress for 37 Chenery Street Floodwater Grant Project.

# 8. On-Going Construction\*

Construction		Schedule		Bud	dget		ance   - Forecast)	Percent
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete
Biosolids Digester Facilities Project	t							
10015796 - SEP Biosolids Digester Facilities Project - (WW-647R/Scope II - Remainder of Scope II (Issued POs for 59 Packages))	07/01/20	07/11/28	07/11/28	\$1,127,086,283	\$1,131,195,120	0	(\$4,108,837)	71.6%
New Headworks (Grit) Replacemen	t							
10015807 - SEP New Headworks (Grit) Replacement - (WW-628/Scope III - New Headworks (issued POs for 66 Packages))	07/22/19	02/29/24	05/30/25	\$377,479,471	\$380,565,387	(456)	(\$3,085,916)	89.4%
Southeast Plant (SEP) Improvement	its							
10002284 - SEP Power Feed and Primary Switchgear Upgrades - (WW-662R)	10/05/20	08/21/24	02/17/25	\$33,458,735	\$34,257,770	(180)	(\$799,035)	76.0%
10037330 - 01-PUC SEWPCP 040/041/043 IMPR (WW-742)	09/16/24	04/13/27	04/13/27	\$18,700,490	\$18,700,490	0	\$0	0.0%
Oceanside Plant (OSP) Improveme	nts							
10029736 - Westside Pump Station Reliability Improvements - (WW-645R)	04/19/21	02/02/24	12/16/25	\$49,475,479	\$49,475,479	(683)	\$0	63.8%
10029737 - Oceanside Water Pollution Control Plant Digester Gas Utilization Upgrades - (WW-639)	11/26/18	03/17/22	12/31/24	\$54,049,275	\$54,049,275	(1,020)	\$0	92.2%

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

\*\* The Forecast Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends. \*\*\* Contracts performed under SFMTA/SFPW.

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

Construction		Schedule		Buc	lget		ance - Forecast)	Percent
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete
10036398 - OSP Condition Improvement Projects - Part 2 - (Contract E, WW-648)	05/16/22	08/12/24	11/30/24	\$6,668,542	\$6,668,542	(110)	\$0	86.0%
10036398 - OSP Condition Improvement Projects - Part 2 - (Contract F, WW-669)	12/19/22	09/03/25	09/03/25	\$9,354,255	\$9,354,255	0	\$0	45.0%
North Point Facility (NPF) Improver	nents							
10026822 - North Shore Pump Station Wet Weather Improvements - (WW-685R)	04/19/21	12/31/24	12/31/24	\$26,427,848	\$27,073,726	0	(\$645,878)	90.9%
Interceptors / Tunnels and Odor Co	ontrol							
10034718 - Large Diameter Sewer Projects and Channel FM Intertie - (Contract A, WW-723R)	06/26/23	06/08/26	06/08/26	\$15,796,272	\$15,796,272	0	\$0	38.0%
10034718 - Large Diameter Sewer Projects and Channel FM Intertie - (Contract F, WW-736)	08/28/23	02/04/25	02/04/25	\$6,972,320	\$6,972,320	0	\$0	91.0%
10034718 - Large Diameter Sewer Projects and Channel FM Intertie - (Contract G, SFPW 1243I)	03/14/22	10/15/24	10/15/24	\$2,129,950	\$2,129,950	0	\$0	95.0%
10034718 - Large Diameter Sewer Projects and Channel FM Intertie - (Contract H, WW-738)	08/12/24	10/10/25	10/10/25	\$10,802,000	\$10,802,000	0	\$0	0.1%
Interdepartmental Projects								
10002664 - Van Ness BRT Sewer Improvements - (No. 1289) ***	01/16/18	11/27/24	11/27/24	\$17,649,795	\$17,649,795	0	\$0	99.7%

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

\*\* The Forecast Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends. \*\*\* Contracts performed under SFMTA/SFPW.

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

Construction		Schedule		Buc	lget	Var (Approvec	Percent	
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete
10002776 - Taraval Sewer Improvements - (Contract B, SFMTA 1308R) ***	12/01/21	09/30/24	12/06/24	\$17,000,000	\$17,000,000	(67)	\$0	93.2%
Flood Resilience Projects								
10038471 - Folsom Area Stormwater Improvements - SOMA and Mission Districts Sewer Replacement (WW-719A)	08/07/23	11/15/24	11/15/24	\$7,844,051	\$7,844,051	0	\$0	60.3%

	Approved Contract Cost \$1,780,894,768	Current	Varia	ance
	Contract Cost	Forecast Cost	Cost	Percent
Program Total for On- Going Construction	\$1,780,894,768	\$1,789,534,434	(\$8,639,666)	(0.5%)

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

\*\* The Forecast Cost includes all approved, pending, and potential change orders; and Forecast Final Completion includes all approved, pending, and potential change orders, and trends. \*\*\* Contracts performed under SFMTA/SFPW.

# 9. PROJECTS IN CLOSEOUT

Project Title	Current Approved Construction Phase Completion	Actual Construction Phase Completion	Current Approved Construction Phase Budget	Construction Phase Expenditures To Date
Sewer System Improvement Program Phase 1				
10002303 - Beach and Sansome Street CSD Rehabilitation	06/30/22	06/30/22	\$3,880,127	\$3,880,127
10002344 - CSD Backflow Prevention and Monitoring	04/12/22	04/12/22	\$4,637,300	\$4,637,300
10002378 - 5th, North 6th and Division Street CSD Rehabilitation	01/23/21	01/23/21	\$3,621,092	\$3,621,092
10002670 - Geary BRT Sewer Improvements Phase 1	06/30/22	06/30/22	\$7,798,461	\$7,798,461
10002687 - Mission Bay Loop Sewer Improvements	12/01/20	12/01/20	\$261,347	\$261,347
10026816 - Wawona Area Stormwater Improvements	03/15/24	03/15/24	\$21,017,320	\$19,059,670
10026828 - Mariposa Dry-Weather Pump Station & Force Main Improvements	05/12/23	05/12/23	\$19,271,293	\$19,359,844
10037244 - Baker Baffle Improvements & Backflow Valve Repair	12/05/23	12/05/23	\$507,257	\$507,257
TOTAL			\$60,994,197	\$59,125,098

# **10. COMPLETED PROJECTS**

Project Title	2016 Baseline Project Completion	2023 Approved Project Completion	Current Approved Project Completion	Actual Project Completion	2016 Baseline Project Budget	2023 Approved Project Budget	Current Approved Project Budget	Project Expenditures To Date
Early Implementation Projects								
10015558/10026813 - Islais Creek Green Infrastructure	10/30/26	04/24/18	04/24/18	04/24/18	\$4,929,908	\$5,493,379	\$5,493,379	\$3,800,476
10031477 - Cesar Chavez Green Infrastructure	06/28/13	06/28/13	06/28/13	06/28/13	\$1,374,143	\$1,395,847	\$1,395,847	\$1,395,847
10026805 - Sunset Green Infrastructure		10/31/22	10/31/22	10/31/22	\$10,745,679	\$8,458,091	\$8,458,091	\$8,273,863
10026806 - North Shore Green Infrastructure	03/31/20	12/31/18	12/31/18	12/31/18	\$2,493,272	\$1,721,677	\$1,721,677	\$1,721,677
10026807 - Lake Merced Green Infrastructure	07/31/20	04/24/18	04/24/18	04/24/18	\$7,316,074	\$6,286,478	\$6,286,478	\$6,286,478
10026808 - Sunnydale Green Infrastructure	11/30/20	09/30/19	09/30/19	09/30/19	\$4,950,001	\$5,079,286	\$5,079,286	\$5,079,286
10026809 - Richmond Green Infrastructure		09/30/22	09/30/22	10/28/22	\$10,118,934	\$12,713,052	\$12,713,052	\$12,463,216
10026812 - Channel Green Infrastructure	09/17/20	08/31/18	08/31/18	08/31/18	\$4,569,648	\$2,263,671	\$2,263,671	\$2,170,254
Southeast Plant (SEP) Improver	ments							
10026824 - SEP Oxygen Generation Plant	06/10/16	06/10/16	06/10/16	06/10/16	\$11,781,151	\$11,135,740	\$11,135,740	\$11,135,740
10015808 - SEP Existing Digester Roof Repairs	07/29/16	03/03/16	03/03/16	03/03/16	\$16,625,297	\$15,438,647	\$15,438,647	\$15,438,647
10026825 - SEP Primary and Secondary Clarifier Upgrades	08/31/18	01/21/19	01/21/19	01/21/19	\$36,016,280	\$32,583,576	\$32,583,576	\$32,583,576
10002192 - SEP 521/522 and Disinfection Upgrades (SEP Building Replacement)	01/18/19	06/30/21	06/30/21	06/30/21	\$41,613,516	\$44,978,369	\$44,978,369	\$44,978,369
10015810 - SEP Seismic Reliability and Condition Assessment Improvements		03/31/23	03/31/23	03/31/23	\$53,152,197	\$34,205,381	\$34,205,381	\$34,091,036
10026826 - SEP Existing Digester Gas Handling Improvements	03/05/19	02/28/20	02/28/20	02/28/20	\$22,143,317	\$15,878,502	\$15,878,502	\$15,878,502
10015811 - SEP Oxygen Generation Plant 01	12/31/18	11/21/19	11/21/19	11/21/19	\$9,030,106	\$8,697,217	\$8,697,217	\$8,697,217
10015553 - Biofuel Alternative Energy	03/31/16	03/31/16	03/31/16	03/31/16	\$1,855,143	\$1,857,887	\$1,857,887	\$1,857,887
Oceanside Plant (OSP) Improve	ments							
10029739 - OSP Condition Assessment Repairs	06/28/21	01/29/21	01/29/21	01/29/21	\$15,843,037	\$11,630,774	\$11,630,774	\$11,630,774
10029740 - OSP Odor Control Optimization	04/15/22	02/05/20	02/05/20	02/05/20	\$5,129,029	\$1,207,197	\$1,207,197	\$1,207,197
North Point Facility (NPF) Impro	ovements							
10026821 - Northpoint Outfall Refurbishment	08/27/18	10/31/18	10/31/18	10/31/18	\$17,775,621	\$18,183,639	\$18,183,639	\$18,183,639
Central Bayside System Improv	ement (CBSIP)							
10002102 - Central Bayside System Improvement Project (CBSIP)		06/30/23	06/30/23	06/30/23	\$64,000,000	\$36,700,000	\$36,700,000	\$36,666,256
Interceptors / Tunnels and Odo	r Control							
10033745 - Mission Street, 16th to Cesar Chavez Streets, Brick Sewer Rehabilitation		11/30/22	11/30/22	11/30/22		\$7,567,585	\$7,567,585	\$7,555,348
10002554 - Richmond Transport Modeling	06/30/14	06/30/14	06/30/14	06/30/14	\$86,883	\$86,883	\$86,883	\$86,883
10002641 - Collection System Condition Assessment	04/09/20	03/31/21	03/31/21	03/31/21	\$10,912,000	\$4,909,939	\$4,909,939	\$4,909,939

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

Project Title	2016 Baseline Project Completion	2023 Approved Project Completion	Current Approved Project Completion	Actual Project Completion	2016 Baseline Project Budget	2023 Approved Project Budget	Current Approved Project Budget	Project Expenditures To Date
10002689 - Drumm and Jackson Streets Sewer System Improvement	12/14/18	12/31/20	12/31/20	12/31/20	\$11,126,000	\$6,470,881	\$6,470,881	\$6,470,881
10002760 - Cargo Way Sewer Box Odor Reduction		06/30/23	06/30/23	06/30/23	\$6,442,000	\$8,530,655	\$8,530,655	\$8,498,820
10002767 - Rutland Sewer Improvements	04/26/18	09/21/18	09/21/18	09/21/18	\$1,500,000	\$1,465,319	\$1,465,324	\$1,465,324
Interdepartmental Projects								
10033106 - Geary BRT Sewer Improvements Phase 2 Pre- Construction		04/08/24	04/08/24	04/08/24		\$2,346,000	\$2,346,000	\$2,028,532
10002667 - Better Market Street Sewer Improvements		06/28/24	06/28/24	06/28/24	\$32,405,000	\$2,221,742	\$2,221,742	\$2,149,162
10002672 - Central Subway Sewer Improvements	02/28/17	06/28/19	06/28/19	06/28/19	\$3,956,000	\$3,108,430	\$3,108,430	\$3,108,430
10002695 - Masonic Avenue Sewer Improvements	05/07/18	06/28/19	06/28/19	06/28/19	\$3,921,000	\$2,995,772	\$2,995,772	\$2,995,772
Pump Stations and Forcemain I	mprovements							
10002138 - North Shore to Channel F M Drainage Improvement	06/06/17	06/06/17	06/06/17	06/06/17	\$29,800,000	\$17,300,000	\$17,300,000	\$17,300,000
10002417 - Hudson Ave Pump Station and Outfall Improvements	02/28/18	10/31/17	10/31/17	10/31/17	\$594,000	\$281,639	\$281,639	\$281,639
10002419 - Force Main Rehab at Embarcadero and Jackson Streets		12/29/23	12/29/23	12/29/23	\$5,845,000	\$11,009,047	\$11,009,047	\$10,798,824
10026829 - Cesar Chavez Pump Station	05/26/16	05/26/16	05/26/16	05/26/16	\$185,000	\$178,360	\$178,360	\$178,360
10002465 - Marin Street Sewer Replacement	08/03/18	01/23/20	01/23/20	01/23/20	\$3,926,000	\$5,968,190	\$5,968,190	\$5,968,190
10002485 - Griffith Pump Station Improvements		12/30/22	12/30/22	12/30/22	\$7,029,000	\$15,139,976	\$15,139,976	\$15,139,976
Combined Sewer Discharge (CS	SD) and Transpo	ort/Storage Stru	ctures					
10002299 - Richmond Transport/Storage Tunnel Rehabilitation	05/13/19	12/31/20	12/31/20	12/31/20	\$4,873,000	\$589,972	\$589,972	\$589,972
Urban Watershed Assessment								
10015816 - Urban Watershed Assessment and Planning Initiation	06/28/13	06/28/13	06/28/13	06/28/13	\$3,102,671	\$3,102,671	\$3,102,671	\$3,102,671
10015817 - Urban Watershed Assessment and Planning	04/04/17	06/30/17	06/30/17	06/30/17	\$14,260,844	\$14,260,841	\$14,260,841	\$14,260,841
Advanced Rainfall and Operatio	on Decision Sys	tem						
10029728 - Advanced Rainfall Prediction - Part 1	06/29/18	06/29/18	06/29/18	06/29/18	\$3,254,000	\$1,491,236	\$1,491,236	\$1,488,628
10029729 - Operational Decision System Phase 1	09/30/16	09/30/16	09/30/16	09/30/16	\$1,000,921	\$944,709	\$944,709	\$944,709
10029730 - Operational Decision System Phase 2		07/31/24	07/31/24	07/31/24	\$7,798,138	\$4,833,185	\$4,833,185	\$4,789,630
Flood Resilience Projects								
10026811 - 17th and Folsom Wet Weather Storage	03/31/16	05/06/16	05/06/16	05/06/16	\$1,012,352	\$898,623	\$898,623	\$898,623
10026814 - Flood Resilience Analysis (Planning Phase Only)	05/31/17	02/28/17	02/28/17	02/28/17	\$2,505,999	\$2,176,246	\$2,176,246	\$2,176,246
10026815 - Flood Resilience - Early Projects (Planning Phase Only)	12/30/16	12/30/16	12/30/16	12/30/16	\$5,708,749	\$4,037,057	\$4,037,057	\$4,037,057

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

Project Title	2016 Baseline Project Completion	2023 Approved Project Completion	Current Approved Project Completion	Actual Project Completion	2016 Baseline Project Budget	2023 Approved Project Budget	Current Approved Project Budget	Project Expenditures To Date
10026817 - Cayuga Ave Stormwater Detention Project	01/07/20	03/29/19	03/29/19	03/29/19	\$8,253,000	\$453,576	\$453,569	\$453,569
10026819 - 17th and Folsom Permanent Barriers	04/02/18	03/29/19	03/29/19	03/29/19	\$2,656,000	\$175,540	\$175,540	\$175,540
10026820 - Hydraulic and Drainage Sewer Improvements		06/30/23	06/30/23	06/30/23		\$4,427,530	\$4,427,530	\$4,427,530
Land Reuse								
10029733 - Land Reuse of 1800 Jerrold Avenue	02/01/19	12/31/19	12/31/19	12/31/19	\$90,000,000	\$84,354,150	\$84,805,355	\$84,805,355
10029734 - Land Reuse of 1801 Jerrold Avenue	12/04/17	12/24/21	12/24/21	12/24/21	\$8,244,010	\$4,506,756	\$4,055,551	\$812,753
Phase 1 Program Management								
10015803 - SSIP Program Management		12/01/15	12/01/15	12/01/15		\$5,413,000	\$5,413,000	\$5,193,906
TOTAL					\$611,859,920	\$497,153,920	\$497,153,918	\$490,633,048

**II. Facilities and Infrastructure Program** 

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# **1. PROGRAM DESCRIPTION**

The Wastewater Facilities and Infrastructure Program will encompass those capital improvements that fall outside of the Sewer System Improvement and Renewal and Replacement Programs. These capital projects are intended to provide necessary upgrades to aging facilities to maintain their intended functions.

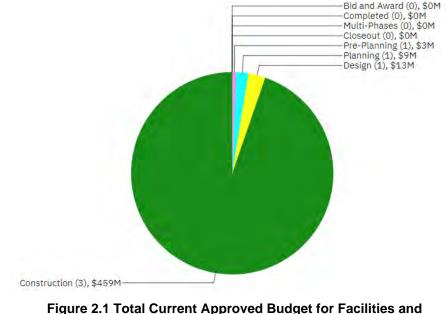
The Wastewater Facilities and Infrastructure Program will address the following challenges:

- Uphold the SFPUC Wastewater Enterprise Levels of Service (LOS);
- Protect the structural integrity of critical City infrastructure;
- Streamline core operational functions and processes;
- Employ energy efficiency components, stormwater management enhancements, seismic upgrades, spatial improvements, safety and security improvements, and other essential improvements to modernize existing facilities to current standards;
- Provide benefits to surrounding communities.

# 2. PROGRAM STATUS

This Quarterly Report presents the progress made on the Facilities and Infrastructure program between July 1, 2024 and September 30, 2024. The approved budget and schedule were developed by the project teams using the latest available information and was approved by Wastewater Enterprise Management.

Figure 2.1 depicts the total Current Approved Budget for the Facilities and Infrastructure program projects remaining in each phase of the program as of September 30, 2024. The number of projects currently active in each phase is shown in parentheses.



Infrastructure Program Projects Active in Each Phase

# **II. WWE F&I Quarterly Report**

Figure 2.2 depicts the number of Facilities and Infrastructure Program projects in the following stages of the program as of September 30, 2024: Pre-construction, Construction, and Post-construction.

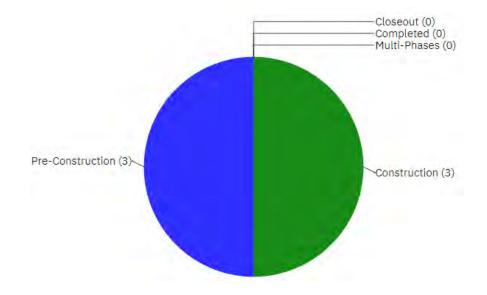


Figure 2.2 Number of Facilities and Infrastructure Program Projects in Pre-Construction, Construction, and Post-Construction

Figure 2.3 depicts the environmental review and permitting status of the Facilities and Infrastructure Program projects as of September 30, 2024.

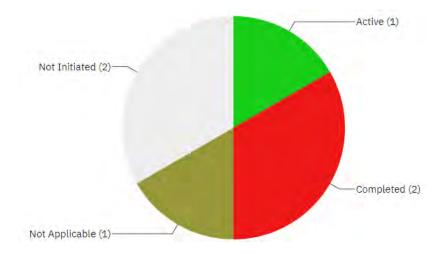


Figure 2.3 Program Environmental and Permitting Status of the Facilities and Infrastructure Program Projects

# 3. PROGRAM COST SUMMARY

Table 3 provides an overall program-level cost summary of the Facilities and Infrastructure Program. It shows the Expenditures to Date, Current Approved Budget, Q1/FY24-25 Forecast Costs, Cost Variance between the Current Approved and Forecast Cost, and Variance Over Reporting Period. The Current Approved Budget and the Current Forecast Cost (based on the proposed project list) at completion are both \$484.3M.

# Table 3. Program Level Cost Summary

Program	Expenditure To Date (\$ Million) (A)	Current Approved Budget (\$ Million) (B)	Current Forecast Cost (\$ Million) (C)	Cost Variance (\$ Million) (D = B - C)	Variance Over Reporting Period* (\$ Million) (E)
Facilities and Infrastructure Program	\$130.2	\$484.3	\$484.3	-	-

\* Negative number reflects cost increases since last quarter, and positive number reflects cost reduction since last quarter.

# 4. PROGRAM SCHEDULE SUMMARY

Figure 4 and Table 4 compare the Current Approved Schedule completion date and the Current Forecast Schedule completion date for the Facilities and Infrastructure Program. The Program schedule is under development, the overall time frame is 20-30 years.



Figure 4. Program Schedule Summary

# Table 4. Current Approved vs. Current Forecasted Schedule Dates

SUBPROGRAM	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecast Completion	Schedule Variance (Months)
Facilities and Infrastructure Program	01/01/11	01/01/11	07/20/33	02/20/35	19.1(Late)

# II. WWE F&I Quarterly Report

# 5. BUDGET AND SCHEDULE TREND SUMMARY

Table 5 contains all approved Facilities and Infrastructure projects that are active and in any of the planning, design, bid and award, or construction phases of the project. The table excludes all Program Management accounts, as well as any projects that are either Not-Initiated, On-Hold, in Closeout or Completed.

During this Quarter (Q1 FY24-25), the following major milestone was achieved:

1. 10033820 - Southeast Outfall Condition Assessment and Rehabilitation – submitted the draft Needs Assessment, Alternatives Analysis, and Conceptual Engineering Report in August 2024.

## Table 5. Budget and Schedule Trend Summary

													All Costs are s	hown in million.
		ecent CIP ed Budget	Project	Initiation	c	ER	35%	Design	95%	Design	Awarded 0	Construction <sup>1</sup>	Curren	t Status
Project Name	Approved Budget	Approved Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion	Forecast Cost	Forecast Completion
	а	b	C	d	е	f	g	h	i	j	k	I	m	n
WWE - Facilities and Infrastructure (F&I)														
10033820 Southeast Outfall Condition Assessment &	FY2	025-34	07/	01/19	09/	30/24	11/	01/24	04/	30/25	01/	16/26	Q1 - F)	(2024-25
Rehabilitation	\$9.2	03/31/27	\$33.8	01/31/28	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	\$9.2	03/31/27
10015546 New Treasure Island Wastewater	FY2	025-34	06/	18/18	04/	02/19	05/	22/23	09/2	29/23 <sup>2</sup>	10/2	24/22 <sup>3</sup>	Q1 - F)	/2024-25
Treatment Plant	\$222.2	08/26/26	\$67.4	11/01/22	\$67.4	01/29/24	\$222.2	8/26/2026	N/A	N/A	\$222.2	08/26/26	\$222.2	08/26/26
10015554 Ocean Beach Climate Change Adaptation Project	FY2	FY2025-34		07/23/12		(A) N/A (B) N/A (C) 09/30/19		) N/A ) N/A 9/30/20	(B) (C) 0 (D) 0	) N/A ) N/A 5/31/23 5/31/23 5/31/23	(A) N/A (B) 12/8/2015 (C) 02/09/27 (D) 02/09/27 (E) 02/27/29		Q1 - FY2024-25	
<ul> <li>(A) ACOE Beach Nourishment</li> <li>(B) Ocean Beach Short-Term Improvements</li> <li>(C) Ocean Beach Long-Term Improvements -</li> <li>(D) Ocean Beach Long-Term Improvements - Seawall</li> <li>(E) Ocean Beach Long-Term Improvements - Planting</li> </ul>	\$209.6	07/20/33	\$126.7	01/30/26	\$169.9	07/01/27	\$169.9	07/01/27	\$183.4	04/19/32	TBD	TBD	\$209.6	02/20/35
10015557 Southeast Bay Outfall Islais Creek Crossing	FY2	025-34	09/	26/16	1	N/A	1	N/A	1	N/A	1	N/A	Q1 - F)	/2024-25
Replacement	\$13.0	06/30/25	\$15.0	02/07/22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$13.0	06/30/25
40040544 Interim Cideotroom Nutriant Damaria	FY2	025-34	09/	01/23	06/	03/24	٦	BD	TBD		N/A <sup>4</sup>		Q1 - FY2024-25	
10040511 Interim Sidestream Nutrient Removal	\$18.0	06/30/26	\$15.0	06/30/26	\$18.0	6/30/2026	TBD	TBD	TBD	TBD	N/A	N/A	\$18.0	06/30/26

#### Footnotes:

This represents Forecast project cost and project completion date at the time of award of construction contract, award of CM/GC scope, award of DB scope.
 The project delivery method for this project is Design-Build (DB). Design milestones are from Design Build contractor's current schedule forecast.

3. This represents the award of the overall design-build contract DB-132 which includes Preconstruction & Construction phases / The project Initiation Forecast Cost was based on funding availability.

4. The project is being delivered through the existing construction contract under the Biosolids Digester Facilities project.

# II. WWE F&I Quarterly Report

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

# 6. PROJECT PERFORMANCE SUMMARY\*

All costs are shown in \$1,000s

Project Name	Active Phase (a)	CIP Approved Budget (b)	Current Approved Budget (c)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d)	% Cost Changes (g=f/c)	CIP Completion Date (h)	Approved Completion Date (i)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j)
	(**)	(+)	(++)			(+++)	(+++)	(+)	(++)		(+++)
Facilities and Infrastructure Prog	ram										
Facilities and Infrastructure	Program										
10033820 Southeast Outfall Condition Assessment and Rehabilitation	PL	\$9,192	\$9,192	\$9,192	\$2,326	\$0	0%	03/31/27	03/31/27	03/31/27	0
10015546 New Treasure Island Wastewater Treatment Plant	CN	\$222,170	\$222,170	\$222,170	\$85,555	\$0	0%	08/26/26	08/26/26	08/26/26	0
10015554 Ocean Beach Climate Change Adaptation Project	CN	\$209,589	\$209,589	\$209,589	\$29,839	\$0	0%	07/20/33	07/20/33	02/20/35	(580)
10015557 Islais Creek Outfall Crossing	DS	\$13,000	\$13,000	\$13,000	\$11,115	\$0	0%	06/30/25	06/30/25	06/30/25	0
10040511 Interim Sidestream Nutrient Removal	CN	\$18,000	\$18,000	\$18,000	\$1,352	\$0	0%	06/30/26	06/30/26	06/30/26	0

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

** Phase Status Legend									
PL Planning	DS Design								
BA Bid & Award	CN Construction	MP Multi-Phase							

Footnotes:

- (+) **CIP Approved Budget and Project Completion Date:** The budget and schedule approved as part of 10-year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

# 7. PROJECT STATUS REPORT

## 10033820 - Southeast Outfall Condition Assessment and Rehabilitation

**Project Description:** The goal of the Southeast Outfall (SEO) project is to determine the pipeline condition of the onshore force main and offshore diffuser 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.

<b>Program:</b> Facilities and Infrastructure Program			Project Status: Planning				Environmental Status: Not Initiated (TBD)			
Project Cost: Approved Forecast Actual				\$ 9.19 M \$ 9.19 M \$ 2.33 M	Project Sche Approved 07/0 Forecast 07/0 Project Perc	01/19 01/19	plete: 25.8%	_	03/31/27 03/31/27	
Key Milestones		Environme Approva		Bid Adv	ertisement	Cons	struction NTP	Constructi Comple		
Current Forecast	А	08/29/25	5	07/	04/01/2		04/01/26	09/30/26		

#### **Progress and Status:**

This quarter, the project team delivered a draft combined Needs Assessment, Alternatives Analysis, and Conceptual Engineering Report. The project team has since received input from the Environmental and Right-of-Way (ROW) teams on the document. An updated draft combined report has been submitted to Wastewater Enterprise for review. Diffuser replacement work is currently being evaluated in coordination with the Environmental team to determine permitting requirements and replacement methods. Coordination with San Francisco Port and WWE Regulatory team has also commenced to discuss logistics of construction.

# Issues and Challenges:



Southeast Outfall Segments

# 10015546 - New Treasure Island Wastewater Treatment Plant

**Project Description:** The objective of Treasure Island Water Resource Recovery (TIWRRF) project is to provide tertiary treatment 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 to support the on-going development on the Treasure Island. Project will produce recycled water for non-potable water demands on the Treasure Island. 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 and handling systems consisting of internally fed drum screens with 2 mm perforations; and washer/compactor(3) Biological Nutrient Removal and Membrane bioreactor (MBR) tarins; (4) Ultraviolet (UV) system providing disinfection for recycled water (5) Solids handling facility consisting of waste activated sludge (WAS) holding tanks, aeration blowers, thickener feed pumps, rotary drum thickeners, sludge transfer/truck loading pumps. (6) Odor control system consisting of bio trickling filter followed by carbon adsorber; (7) Distributed Control System (DCS) to integrate and optimize performance of all processes. The power to the TIWRRF will be provided by SFPUC Power Enterprise.

<b>Program:</b> Facilities and Infrastructure Program		Project Status: C	Construction	Environmenta (EIR)	Environmental Status: Completed (EIR)			
Project Cost: Approved Forecast Actual		\$ 222.17 M \$ 222.17 M \$ 85.55 M		01/11	08/26/26 08/26/26			
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion			
Current Forecast	04/18/19	A 12/2	27/21 A	08/21/23 A	02/27/26			

#### **Progress and Status:**

The project delivery method for this project is Fixed Price Design-Build. During the reporting period, Design-Builder placed concrete for Administration and Maintenance building slab-on-grade and made first pour for both buildings walls using shotcrete. Design-builder commenced excavating for trash capture unit in wetland area. Design-builder started in-slab conduits for Main Electrical Structure. Site-wide electrical distribution network work continued this quarter. Steel frame installation in Membrane Bioreactor process area was completed this quarter.

#### **Issues and Challenges:**



Steel Framework for Biological Nutrient Removal Facility

# 10015554 - Ocean Beach Climate Change Adaptation Project

**Project Description:** 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.

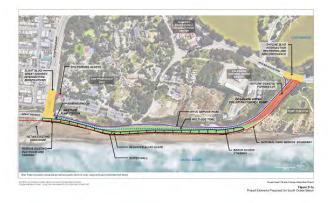
<b>Program:</b> Facilities and Infrastructure Program		Project Status: Construction				Environmental Status: Active (Various)		
Project Cost: Approved Forecast Actual				\$ 209.59 M \$ 209.59 M \$ 29.84 M	Project Schu Approved 07/2 Forecast 07/2 Project Perc	07/20/33 02/20/35		
		Environme Approva			vertisement Cor		truction NTP	Construction Final Completion
	А	09/10/14	A		N/A		6/02/21 A	09/30/21 A
	В	02/09/21	A	09/*	09/14/15 A		1/07/16 A	06/30/28
Current Foresot	С	09/30/26	5	11/	11/02/26		06/01/27	05/30/31
Current Forecast	D 09/30/26		5 11/		1/02/26		06/01/27	05/30/31
	Е	09/30/26	6	11/	11/02/28		06/01/29	08/15/34

#### **Progress and Status:**

A) Army Corps of Engineers: Construction completed 2021-2022. Closeout activities have been completed. B) Short Term Improvements: The short-term improvements project represents multi-year, as-needed protection of the bluff that overlays the Lake Merced Tunnel. Annual monitoring was finalized; draft report has been submitted. Sand backpassing sandbag repair and replacement activities and are recommended this wet weather season. Sandbags are stored at the SF Zoo and will be deployed, under contract WW-714. C/D/E) Long Term Improvements: The permit hearing with the California Coastal Commission was postponed to address their additional surface improvement elements, and negotiations with Coastal Commission are underway and the potential changes could result in the need to update the Terms Agreement with SF Rec and Park. Currently estimating an 18-month delay to the start of construction. The project has combined contracts (C) Intersection, and (D) Seawall together, thus the Long Term Improvements project will be executed in two separate contracts (C)/(D) and (E).

#### **Issues and Challenges:**

The schedule impacts have been forecasted but potential budget implications are not quantified. The schedule variance is



Proposed Project Components

due to on-going interdepartmental issues and significant delays to design associated with a delayed permit hearing with the Coastal Commission.

# 10015557 - Islais Creek Outfall Crossing

**Project Description:** 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.

<b>Program:</b> Facilities and Infrastructure Program		Project Status: Design			Environmental Status: Not Applicable		
Project Cost: Approved Forecast Actual		\$ 13.00 M \$ 13.00 M \$ 11.11 M	Forecast 09/2	26/16 26/16	plete: 94.1%		06/30/25 06/30/25
Key Milestones	Environme Approva		Bid Advertisement Co		truction NTP	Construction Final Completion	
Current Forecast	N/A		N/A		N/A N/		N/A

## **Progress and Status:**

During this reporting period, the project team completed the 42inch pipe inspection report. The project team and permitting manager met with regulatory agencies in this quarter to discuss the bypass life extension. The Conceptual Engineering Report was initiated for the bypass life extension scope of work.

# **Issues and Challenges:**



Current Pipeline Crossing at Islais Creek

# 10040511 - Interim Sidestream Nutrient Removal

**Project Description:** 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.

<b>Program:</b> Facilities and Infrastructure Program		Project Status: (	Construction		Environmental Status: Completed (Minor Project Modification)		
Project Cost: Approved Forecast Actual		\$ 18.00 M \$ 18.00 M \$ 1.35 M		01/23	06/30/26 06/30/26		
Key Milestones	Environme Approva		vertisement	Construction NTP	Construction Final Completion		
Current Forecast	02/12/24	A	N/A	04/15/24 A	12/31/25		

#### **Progress and Status:**

The environmental portion of the project was completed under 10015796 SEP Biosolids Digester Facilities Project. The final Conceptual Engineering Report (CER) was issued last quarter. To meet the aggressive completion schedule (completion by early 2026), the project will be delivered through the Biosolids Digester Facilities' existing design and construction contracts. The last design deliverable was completed during this quarter. The proposed construction cost and schedule provided by the contractor is under review. Coordination is underway with equipment vendors with major equipment already on order. The construction cost is currently under review by the project team. It is anticipated that cost may exceed the approved budget.

# **Issues and Challenges:**

Southeast Plant- Abandoned DAF Units

# II. WWE F&I Quarterly Report

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

# 8. On-Going Construction\*

Construction		Schedule		Bue	dget	Variance (Approved - Forecast)		Percent		
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete		
Facilities and Infrastructure Program	Facilities and Infrastructure Program									
10015554 - Ocean Beach Climate Change Adaptation Project - (Contract B, WW-714)	04/04/22	04/02/25	06/30/28	\$3,134,000	\$3,134,000	(1,185)	\$0	12.0%		
10015546 - New Treasure Island Wastewater Treatment Plant - Design Build Construction portion - (DB-132)	08/21/23	02/27/26	02/27/26	\$151,515,204	\$151,515,204	0	\$0	33.0%		
10040511 - Interim Sidestream Nutrient Removal (COs via WW-647R Contract)	04/15/24	12/31/25	12/31/25	\$15,000,000	\$15,000,000	0	\$0	0.4%		

	Approved	Current	Variance		
	Contract Cost	Forecast Cost	Cost	Percent	
Program Total for On- Going Construction	\$169,649,204	\$169,649,204	\$0	0%	

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

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

# 9. PROJECTS IN CLOSEOUT

No projects are currently in closeout.

# **10. COMPLETED PROJECTS**

No project is currently completed.

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# **III. Renewal and Replacement Program**

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# **1. PROGRAM DESCRIPTION**

The Wastewater Enterprise (WWE) Renewal and Replacement Program (R&R) is an on-going annual program that seeks to address deficiencies in two wastewater infrastructure categories: R&R Collection System and R&R Treatment Facilities. The goal of the R&R Program is to meet the endorsed levels of service goals, regulatory permit compliance, system reliability and functionality, and sustainable operations of the City's sewer system. The R&R Program also complies with the State requirement that a provision be made for the periodic repair and replacement of sewer system facilities.

In general, the R&R Program's projects and priorities are led by WWE. The R&R Collection System projects are prioritized based on WWE's asset management approach, which factors in the physical condition of the sewer, age, location, risk, public safety, San Francisco Public Work's street paving schedule, and various other factors.

The R&R Treatment Facilities projects are prioritized based upon regulatory compliance, condition assessments, Operation staff recommendations, and Level of Service goals. These projects seek to extend the useful life of wastewater collection systems and treatment facility assets throughout San Francisco by helping to maintain their collection, conveyance, storage and treatment capacities and performance.

More importantly, this Program provides ongoing support and asset improvements to augment the ongoing operation & maintenance work performed by WWE staffs on the wastewater systems, and helps maintain compliance with various regulatory bodies, including the Regional Water Quality Control Board (RWQCB) for the National Pollutant Discharge Elimination System (NPDES) permits and Bay Area Air Quality Management District (BAAQMD) requirements.

# 2. PROGRAM STATUS

This Quarterly Report presents the progress made on the Renewal and Replacement Program (R&R) projects between July 1, 2024 and September 30, 2024.

The approved project budget and schedule were developed and approved by the appropriate Wastewater Enterprise Manager on September 30, 2024. This is based on the project team's best assessment of the projects at this time. However, it should be noted that the project team is currently focused on validating these estimates.

Figures 2.1, 2.2, and 2.3 depict the total number of active projects remaining in each phase of the R&R Collection systems and R&R Treatment Facilities programs as of September 30, 2024.

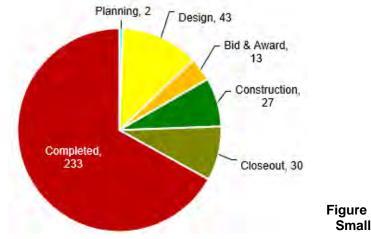


Figure 2.1 R&R Collection Systems – Small Diameter Projects by Phase

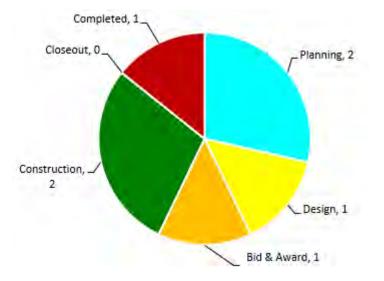


Figure 2.2 R&R Collection Systems – Large Diameter Projects by Phase

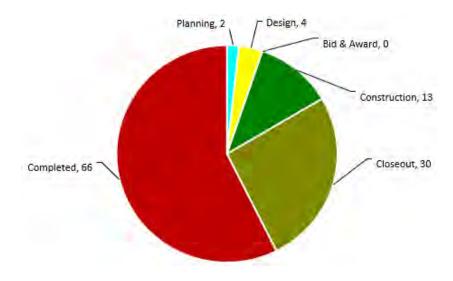


Figure 2.3 R&R Treatment Facilities Projects by Phase by Phase

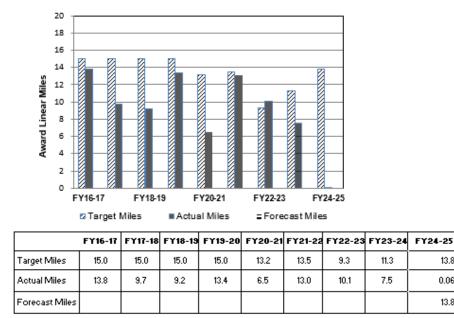
The Wastewater R&R Collection System Small Diameter Sewer Improvements Program has an annual budget of \$61.4 million in FY25 to award a target of 13.8 miles of sewer replacement work in San Francisco. The Wastewater R&R Collection System Large Diameter Sewer Improvements has an annual budget of \$21.2 million in FY25 to award a target of 1 mile of sewer improvement work in San Francisco.

Figure 2.4 depicts the target and actual award miles of sewer improvement projects that have been awarded to date and are forecasted to be awarded. The Wastewater R&R Collection System Small Diameter Sewer Improvements Program has awarded approximately 0.06 miles of sewer replacement work in FY25.

13.8

0.06

13.8



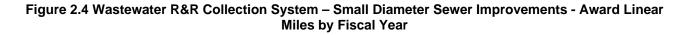


Figure 2.5 shows the annual total program expenditure by fiscal year for the R&R Collection System Small Diameter Sewer Replacement program.

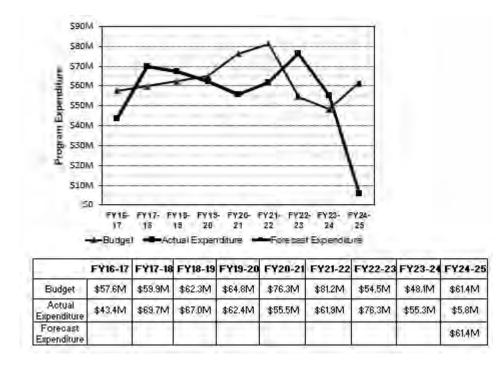


Figure 2.5 Wastewater R&R Collection System – Small Diameter Sewer Improvements -**Program Expenditure by Fiscal Year** 

# **3. PROGRAM COST SUMMARY**

Table 3 provides an overall program-level cost summary of the R&R Program. It shows the Expenditures to Date; Current Approved Budget and Current Forecasted Cost; and the Cost Variance between the Approved Budget and Forecasted Cost.

The total Approved Budget and the Current Forecasted Cost at completion for the R&R Program are the same at \$1,411.9 million.

Subprograms	Expenditures to Date (\$ Million) (A)	Current Approved Budget (\$ Million) (B)	Current Forecasted Cost (\$ Million) (C)	Cost Variance (\$ Million) (D = B - C)
R&R Collection Systems – Small Diameter	\$893.4	\$1,132.6	\$1,132.6	-
R&R Collection Systems – Large Diameter	\$3.3	\$57.7	\$57.7	-
R&R Treatment Facilities	\$175.8	\$221.6	\$221.6	-
Program Total	\$1,072.5	\$1,411.9	\$1,411.9	-

**Table 3. Program Cost Summary** 

# 4. PROGRAM SCHEDULE SUMMARY

Figure 4 and Table 4 depict the Current Approved and Current Forecasted Schedules for the R&R program. The Approved Schedule and Forecast completion for the overall R&R program is March 2026.

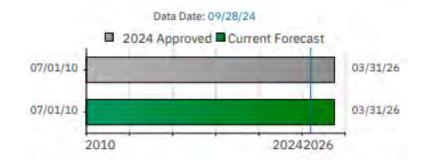


Figure 4. Program Schedule Summary

Sub-Program	Current Approved Project Start	Actual Start	Current Approved Completion	Current Forecasted Completion	Schedule Variance (Months)
R&R Collection Systems – Small Diameter	07/01/10	07/01/10 A*	03/31/26	03/31/26	-
R&R Collection Systems – Large Diameter	07/01/22	07/01/22 A*	03/31/26	03/31/26	-
R&R Treatment Facilities	07/01/10	07/01/10 A*	02/14/25	02/14/25	-
Overall Program	07/01/10	07/01/10 A*	03/31/26	03/31/26	-

" "A" represents the actual date.

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

# 5. PROJECT PERFORMANCE SUMMARY\*

All costs are shown in \$1,000s

Project Name	Active Phase (a)	CIP Approved Budget (b)	Current Approved Budget (c)	Current Forecast Cost (d)	Expenditures to Date (e)	Cost Variance (f=c-d)	% Cost Changes (g=f/c)	CIP Completion Date (h)	Approved Completion Date (i)	Forecast Completion Date (j)	Schedule Variance (Days) (k=i-j)
	(**)	(+)	(++)			(+++)	(+++)	(+)	(++)		(+++)
Collection Systems											
Renewal & Replacement Pro	ogram										
R&R Collection Systems - Small Diameter	MP	\$1,132,600	\$1,132,600	\$1,132,600	\$893,429	\$0	0%	03/31/26	03/31/26	03/31/26	0
R&R Collection Systems - Large Diameter	MP	\$57,701	\$57,701	\$57,701	\$3,255	\$0	0%	03/31/26	03/31/26	03/31/26	0
Treatment Facilities											
Renewal & Replacement Pro	ogram										
R&R Treatment Facilities	MP	\$221,553	\$221,553	\$221,553	\$175,773	\$0	0%	02/14/25	02/14/25	02/14/25	0

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

** Phase Status Leg	end	
PL Planning	DS Design	
BA Bid & Award	CN Construction	MP Multiple-Phase

#### Footnotes:

- (+) CIP Approved Budget and Project Completion Date: The budget and schedule approved as part of 10year CIP for FY25-34.
- (++) Current Approved Budget and Schedule: The budget and schedule approved as part of 10-year CIP for FY25-34, plus any additional budget and schedule changes approved by the Commission as part of construction contract award.
- (+++) Negative number reflects cost overrun (or schedule delay) and positive number reflects cost underrun (or ahead of schedule). Projects with a forecasted cost overrun greater than 10%, or forecasted delay of greater than 6 months or 10%, will be highlighted in grey.

#### 6. PROJECT STATUS REPORT

#### **R&R Collection Systems - Small Diameter**

**Project Description:** 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.

<b>Program:</b> Renewal & R Program	eplacement Pro	Project Status: Multi-Phases			Environmental Status: Complete		
Project Cost: Approved Forecast Actual		\$ 1132.60 M \$ 1132.60 M \$ 893.43 M	Project Sche Approved 07/0 Forecast 07/0 Project Perc	01/10 01/10	plete: 78.0%		03/31/26 03/31/26
Key Milestones	Environmental Approval	Bid Adv	Bid Advertisement Cor		struction NTP	Constructio Complet	
Current Forecast	See Note ++	V	arious		Various	Variou	IS

#### **Progress and Status:**

See Section 7 for the active construction contracts information. ++On-Going Construction Projects identified in Section 7. were all covered under exemption determinations. The summary below shows the total number of R&R Collection Systems-Small Diameter projects in each phase of the program as of September 30, 2024. The three-hundred forty-eight (348) WWE Collection System-Small Diameter projects are distributed as follows:

Planning:	2
Design:	43
Bid & Award:	13
Construction:	27
Closeout:	30
Completed:	233

During this Quarter, 4 new projects were initiated, 10 projects were advertised, 1 project was awarded/awaiting Notice To Proceed (NTP), 4 projects received NTP, 2 projects completed construction and 1 project closed out.

#### **Issues and Challenges:**

None at this time.



Preparing 24-inch Main Sewer Pipe for Open Excavation Trench Installation on Irwin Street, San Francisco

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

**Project Description:** 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.

Program: Renewal & Replacement Program Project Status: M			Multi-Phases		Environmental	Status: Cor	mpleted
Project Cost:Approved\$ 57.70 MForecast\$ 57.70 MActual\$ 3.25 M			Forecast 07/	01/22 01/22	plete: 5.6%		03/31/26 03/31/26
Key Milestones	ilestones Environme Approva		Bid Advertisement		truction NTP	Construc Comp	tion Final letion
Current Forecast	See Note	++ \	Various		Various	Various	

#### **Progress and Status:**

See Section 7 for the active construction contracts information. ++On-Going Construction Projects identified in Section 7. were all covered under exemption determinations. The summary below shows the total number of R&R Collection Systems-Large Diameter projects in each phase of the program as of September 30, 2024. The WWE Collection System-Large Diameter projects are distributed as follows:

Closeout: 0	Planning:	2
Construction: 2 Closeout: 0	Design:	1
Closeout: 0	Bid & Award:	1
	Construction:	2
Completed: 1	Closeout:	0
Completed. I	Completed:	1

During this Quarter, 2 new projects were initiated, 1 project was advertised and 1 project received Notice To Proceed.

#### **Issues and Challenges:**

None at this time.



Pre-cleaning Inspection and Debris Measurements at La Playa & Lincoln

#### 15724 - R&R Treatment Facilities

**Project Description:** 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.

Program: Renewal & Replacement Program		Project Status: Multi-Phases			Environmental	I Status: Active	e
Project Cost: Project Schedule:							
Approved\$ 221.55 MForecast\$ 221.55 MActual\$ 175.77 M			Forecast 07/01/10 02/14/25				02/14/25 02/14/25
Key Milestones	Environment Approval	al Bid Adv	ertisement	Const	ruction NTP	Constructio Comple	
Current Forecast	See Note +-	+ V	arious	\	/arious	Various	

#### **Progress and Status:**

See Section 7 for the active construction contracts information. ++ Projects will be reviewed for CEQA compliance as they proceed. The summary below shows the total number of the remaining 115 projects in each phase of the program as of September 30, 2024.

Planning:2Design:4Bid/Award:0Construction:13Closeout:30Construction:20

Completed: 66

Equipment Purchase FY25 to Date: Eight (8) equipment purchases completed totaling \$549,371.30.

#### **Issues and Challenges:**

None at this time.



Core drilling through SEP 940 roof for utilities

# 7. On-Going Construction\*

Construction		Schedule		Buc	lget	Varia (Approved	Percent	
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete
Collections Systems								
10034813 - As-Needed Main Sewer Replacement No. 8 (WW-697)	11/30/20	01/03/25	01/03/25	\$7,373,000	\$7,373,000	0	\$0	93.6%
10035308 - Various Locations Sewer Replacement No. 10 (WW-705)	01/09/23	10/29/24	10/29/24	\$4,739,540	\$4,739,540	0	\$0	95.6%
10035615 - Various Locations Sewer Replacement No. 13 (WW-709R)	02/21/23	12/31/24	12/31/24	\$9,497,156	\$9,497,156	0	\$0	86.5%
10037691 - As-Needed Main Sewer Replacement No. 10 (WW-720)	09/30/24	09/03/26	09/03/26	\$16,028,745	\$16,028,745	0	\$0	0.0%
10038001 - Various Locations Sewer Replacement No. 14 (WW-725)	06/24/24	10/28/25	10/28/25	\$7,422,911	\$7,422,911	0	\$0	20.0%
10038766 - As-Needed Sewer Inspection (FY23) (WW-733)	04/10/23	10/30/24	10/30/24	\$1,698,300	\$1,698,300	0	\$0	94.7%
10038815 - Various Locations Main Sewer Inspection No. 1 (WW-735)	08/07/23	11/18/24	11/18/24	\$2,176,788	\$2,176,788	0	\$0	89.6%
10040033 - As-Needed Spot Sewer Replacement No. 45 (WW-748)	05/31/24	07/04/25	07/04/25	\$9,881,978	\$9,881,978	0	\$0	30.6%
10040188 - As-Needed Sewer Inspection (FY24) (WW-751)	09/23/24	09/20/25	09/20/25	\$2,972,000	\$2,972,000	0	\$0	1.9%
10040190 - Various Locations Main Sewer Inspection No. 2 (WW-752R)	09/23/24	11/21/25	11/21/25	\$3,544,000	\$3,544,000	0	\$0	1.7%
10041074 - Hayes Valley Sewer Improvements (WW-753)	09/09/24	11/02/25	11/02/25	\$10,842,325	\$10,842,325	0	\$0	1.0%
Treatment Facilities								

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

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

# Q1-FY2024-2025 (07/01/24 - 09/30/24)

Construction		Schedule		Buc	lget		ance - Forecast)	Percent
Contract	NTP Date	Approved Construction Final Completion	Current Forecast Construction Final Completion**	Approved Contract Cost	Current Forecast Cost**	Schedule (Cal Days)	Cost	Complete
10015731 - Southeast Water Pollution Control Plant HVAC and Mechanical Upgrades - (WW-543)	12/07/22	08/22/25	08/22/25	\$12,947,014	\$12,947,014	0	\$0	30.3%

	Approved	Current	Variance	
	Contract Cost	Forecast Cost	Cost	Percent
Program Total for On- Going Construction	\$89,123,757	\$89,123,757	\$0	0%

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

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

# 8. PROGRAMS IN CLOSEOUT

No program is currently under closeout.

# 9. COMPLETED PROGRAMS

No program is currently completed.

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# APPENDICES

- A. PROJECT DESCRIPTIONS
- B. APPROVED PROJECT-LEVEL SCHEDULE
- C. LIST OF ACRONYMS

# APPENDIX A. PROJECT DESCRIPTION

#### SSIP

## Sewer System Improvement Program Phase 1

#### 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.

## 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.

# 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.

## 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.

# 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.

#### 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.

#### 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.

#### 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.

#### 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.

## 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-ofway. 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.

## 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.

# 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.

# 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.

# 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.

## 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.

## 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.

# 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.

## 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.

# 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-Compacters 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.

## 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).

# 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.

# 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.

#### 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 wells 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 wells 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 wells 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 wells 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.

## 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".

## 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.

# 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.

## 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.

# 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".

# 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.

# 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.

# 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.

# 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

## 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.

# 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.

# 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.

# 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.

# 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.

# 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.

## 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.

# 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 dryweather or all-weather pump station improvements. Therefore, this project completed the Draft AAR.

# 10029726 Watershed Stormwater Management (Planning Only)

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.

## 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 realtime. 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.

## 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.

## 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.

## 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.

## 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 1.54acre 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.

## 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.

## 10029736 Westside Pump Station Reliability Improvements

The project includes construction of a new electrical building and associated electrical gear, new wetweather 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.

## 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.

## 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.

# 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.

# 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 CWWSIPCSSR02). 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.

# 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.

# 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 \$930,000 per acre of impervious surface managed, up to \$2 million per project.

## 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 dryweather 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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 devise 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.

# 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.

# 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 doo; 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.

## 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 lighting for 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.).

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

## 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.

#### 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 which are old and in disrepair. Improvements to the WSPS and OSP radio communication.

## 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.

## 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.

## 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 VPSA, 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.

## 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.

## 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).

## 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.

## 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.

## 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.

## 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.

## 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).

## 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.

## 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.

## 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.

## 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.

## 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.

## CSD-8 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.

## **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.

## **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.

## NPF-3 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.

## 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.

## **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 CWWSIPSE07 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.

## **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-14 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.

## **PS-15 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.

## 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. Projectbased 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

## APPENDIX A. PROJECT DESCRIPTION

## RNR

## **Renewal & Replacement Program**

## 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.

## 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.

## 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.

## APPENDIX A. PROJECT DESCRIPTION

#### FI

## **Facilities and Infrastructure Program**

## 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) tarins; (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.

## 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.

## 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.

## 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.

## **ITS ITS Capital Projects**

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

## 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.

lame	Start	Finish	FY2021 FQ1 F F FQ4 F I	FY2022	FY2023 FQ1 FQ2 F F	FY2024 FQ1 F FQ3 F	FY202		FY2026	FY2027 FQ1 FQ2 F F	FY2028 FQ1 F FQ3 F	FY2029 FQ1 F FQ3 F	FY2030	FY2031 F FQ2 F F	FQ1 FQ2
SIP Sewer System Improvement Program	01-Jul-11	30-Jun-34				1.61 1 1.69 1	1.2.1		~		10111001	1.61 1 1.60 1			10110-
Sewer System Improvement Program Phase 1	01-Jul-11	30-Jun-34													
Treatment Facilities	01-Jul-11	11-May-29													
Biofuel Alternative Energy (CWWBAE01)	01-Jul-11	31-Mar-16													
SEP Biosolids Digester Failties Project (CWWSIPDP01)	01-Jul-11	11-May-29	-									_			
SEP New Headworks (Grit) Replacement (CWWSIPSE02)	01-Mar-13	31-Aug-27									÷				
SEP Existing Digester Roof Repairs (CWWSIPSE03)	01-Apr-13	03-Mar-16													
Oxygen Generation Plant (CWWSIPSE01)	23-Aug-12	10-Jun-16													
SEP Primary and Secondary clairifier Upgreades (CWWSIPSE04)	01-Jul-13	21-Jan-19													
SEP 521/522 and Disinfection Upgrades (SEP Building 521 Replacement) (CW	03-Jun-13	30-Jun-21													
Primary Sludge Handling Improvements (CWWSIPSE06)	03-Jun-13	10-Feb-16													
Facility-wide Distribution Control System Upgrade (CWWSIPSE07)	13-Feb-14	30-Dec-27	-												
SEP Seismic Reliability and Condition Assessment Improvements (CWWSIPSE	03-Jun-13	31-Mar-23													
SEP Existing Digester Gas Handling Improvements (CWWSIPSE09)	16-Jun-14	28-Feb-20													
SEP Power Feed and Primary Switchgear Upgrades (CWWSIPSE10)	23-Jun-14	31-Mar-26						-	_						
SEP Oxygen Generation Plant 01 (CWWSIPSE11)	01-Apr-16	21-Nov-19				+									
NPF Outfall System Rehabilitation (CWWSIPTPNP01)	22-May-13	31-Oct-18													
North Shore Pump Station Wet Weather Improvements (CWWSIPTPNP02)	15-Aug-13	30-Jun-25		_											
OSP Fine Screen and Grit Removal Enhancements (CWWSIPTPOP01)		20-Nov-15													
Westside Pump Station Reliability Improvements (CWWSIPTPOP02)	13-Jun-13	30-Jun-26						_							
OSP Digester Gas Utilization Upgrades (CWWSIPTPOP03)	01-Oct-13	02-Jun-25				<u></u>									+
Westside Pumpstation Redundant Force Main Improvements (CWWSIPTPOP04	) 02-Jan-14	29-Jan-16													
OSP Condition Asseessment Repairs (CWWSIPTPOP05)	31-Jul-14	29-Jan-21													
OSP Odor Control Optimization (CWWSIPTPOP06)	31-Jul-14	05-Feb-20													
Collection System	29-May-12	16-Oct-26													
Channel Tunnel/Bayside Drainage (CBSIP) (CWWSIPCT01)	02-Jul-12					1									
Baker/Laguna/Pierce CSD & Outfall (CWWSIPCSCD02)		20-Nov-15													
Hudson Ave Pump Station (CWWSIPCSPS01)	31-Mar-14														
Beach and Sansome Street CSD Rehabilitation (CWWSIPCSCD03)	14-Mar-16														
CSD Backflow Prevention and Monitoring (CWWSIPCSCD04)	25-Jul-16	28-Jun-24				<u> </u>									
Force Main Rehab at Embarcadero and Jackson Streets (CWWSIPCSPS02)	07-Jul-14					÷									
Northshore To Channel Force Main (CWWSIPNC01)	29-May-12														
Richmond Transport/Storage Tunnel Rehabilitation (CWWSIPCSCD01)		31-Dec-20													
5th, North 6th and Division Street CSD Rehabilitation (CWWSIPCSCD05)	01-Jul-16														
	51 041 10	10 Van 24													

#### Appendix B.1 Sewer System Improvement Program (SSIP) Phase 1 - Approved Project Level Schedules Project Name FQ1 FQ2 F F FQ1 F FQ3 F FQ1 F FQ4 F FQ2 F F FQ1 FQ2 F F FQ1 F FQ3 F FQ1 F FQ3 F F FQ2 F FQ4 F FQ2 F F FQ1 FQ2 F F FQ1 F F FQ4 F FQ2 F F Marin Street Sewer Replacement (CWWSIPCSPS05) 01-Jul-15 23-Jan-20 Griffith Pump Station Improvements (CWWSIPCSPS06) 14-Mar-16 30-Dec-22 Van Ness BRT Sewer Improvements (CWWSIPCSSR04) 01-Oct-13 31-Dec-24 Better Market Street Sewer Improvements (CWWSIPCSSR05) 06-Jan-14 28-Jun-24 Geary BRT Sewer Improvements (CWWSIPCSSR06) 06-Jan-14 10-May-24 Central Subway Sewer Improvements (CWWSIPCSSR07) 06-Jan-14 28-Jun-19 Mission Bay Loop Sewer Improvement (CWWSIPCSSR08) 02-May-14 28-Jun-24 Drumm and Jackson Streets Sewer System Improvement (CWWSIPCSSR09) 26-May-15 31-Dec-20 Masonic Avenue Sewer Improvements (CWWSIPCSSR10) 27-Oct-14 28-Jun-19 Rutland Sewer Improvements (CWWSIPCSSR12) 30-Oct-17 21-Sep-18 Taraval Sewer Improvements (CWWSIPCSSR13) 14-Mar-16 31-Jul-25 Richmond Transport Modeling (CWWSIPCSSR01) 25-Mar-13 30-Jun-14 Collection System Condition Assessment (CWWSIPCSSR02) 09-May-13 31-Mar-21 Kansas and Marin Streets Sewer Improvements (CWWSIPCSSR03) 10-Jun-13 16-Oct-26 Cargo Way Sewer Box Odor Reduction (CWWSIPCSSR11) 13-Apr-15 30-Jun-23 Mariposa Dry-Weather Pump Station & Force Main Improvements (CWWSIPCSF 01-Jul-14 28-Jun-24 Cesar Chavez Pump Station (CWWSIPCSPS04) 08-Sep-14 26-May-16 Geary BRT Sewer Improvements Phase 2 (10033106) 15-Mar-18 08-Apr-24 SSIP Sewer Improvements Projects (10033745) 02-Jul-18 30-Nov-22 Stormwater Management 01-Jul-11 30-Jun-34 Major Trunk Sewers (CWWSIPUW04) 01-Jul-11 31-Oct-12 Lake Merced Drainage (CWWSIPUW03) 01-Jul-11 31-Oct-12 Fulton St Sewer (CWWSIPUW02) 01-Jul-11 31-Oct-12 Urban Watershed Asesement Planning (CWWSIPUW01) 07-Oct-11 30-Jun-17 Urban Watershed Assesment and Planning Initiation (CWWSIPUW00) 01-Jul-11 28-Jun-13 Sunset Green Infrastructure (CWWSIPFCDB01) 03-Dec-12 31-Oct-22 NorhtShore Green Infrastructure (CWWSIPFCDB02) 03-Dec-12 31-Dec-18 Lake Merced Green Infrastructure (CWWSIPFCDB03) 03-Dec-12 24-Apr-18 Sunnydale Green Infrastructure (CWWSIPFCDB04) 03-Dec-12 30-Sep-19 Richmond Green Infrastructure (CWWSIPFCDB05) 03-Dec-12 30-Sep-22 Yosemite Green Infrastructure (CWWSIPFCDB06) 03-Dec-12 08-Nov-28 Channel Green Infrastructure (CWWSIPFCDB08) 21-Feb-14 31-Aug-18 Islais Creek Green Infrastructure (CWWSIPFCDB09) 08-Feb-16 24-Apr-18 Wawona St and 15th Ave Stormwater Detention Project (CWWSIPFCDB12) 01-Jul-16 02-Dec-24 Construction Mgmt Project Management Environmental **Right-of-Way** Closeout Planning Bid & Award Construction Program Mgmt Design

ime	Start	Finish	FY2021	FY2022 24 F FQ2 F	F FQ1 FQ2 F F	FY2024 FQ1 F FQ3 F	FY2025 FO1 F F FO4	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031 4 F FO2 F	F F01 F02
Watershed Stormwater Management (Planning Only) (CWWSIPFCGI01)	11-Jul-16	30-Jun-34												
Advanced Rainfall Prediction - Part 1 (CWWSIPFCRP01)	01-Apr-13	29-Jun-18												
Operational Decision System Phase 1 (CWWSIPFCRP02)	01-Aug-13	30-Sep-16												
Operational Decision System Phase 2 (CWWSIPFCRP03)	01-Feb-17	31-Jul-24	-			<u> </u>	•							
No FSP Project ID	04-Sep-12	24-Apr-18	-											
Flood Resilience Projects	01-Apr-13	31-Dec-24	-											
17th and Folsom Wet Weather Storage (CWWSIPFCDB07)	01-Apr-13	06-May-16												
Flood Resilience Analysis (Planning Phase Only) (CWWSIPFCDB10)	30-Jun-15	28-Feb-17												
Flood Resilience-Early Project (Planning Phase Only) (CWWSIPFCDB11)	26-Oct-15	30-Dec-16												
Cayuga Ave Stormwater Detention Project (CWWSIPFCDB13)	01-Jul-16	29-Mar-19												
Folsom Area Stormwater Improvement Project (CWWSIPFCDB14)	01-Jul-16	31-Dec-24		<u> </u>		<u>i m </u>								
17th and Folsom Permanet Barriers (CWWSIPFCDB15)	20-May-16	29-Mar-19	-											
Hydraulic and Drainage Sewer Improvements (CWWSPIFCDB16)	01-Jul-16	30-Jun-23								-				
Land Reuse	17-Sep-13	24-Dec-21	-											
Land Reuseof 1800 Jerrold Avenue (CWWSIPPRPL91)	17-Sep-13	31-Dec-19												
Land Reuse 1800 Jerrold Avenue (CWWSIPPRPL92)	30-Sep-13	24-Dec-21	-											
Program Management	01-Sep-11	01-May-29	-											
SSIP Program Management (CWWSIPPL01)	01-Sep-11	01-Dec-15								-				
SSIP Program Management (CWWSIPRPL01)	01-Sep-11	01-May-29		1 11		· · · · · · · · · · · · · · · · · · ·			-		· · · · ·			

Name	Start	Finish	FY2024 FQ2 FQ3 FQ4 F	FY2025 Q1 FQ2 FQ3 FQ4	FY2026 4 FQ1 FQ2 FQ3 FQ4	FY2027 FQ1 FQ2 FQ3 FQ4	FQ1 FQ2 FQ3 FQ	FY2029 4 FQ1 FQ2 FQ3 FQ	FY2030 24 FQ1 FQ2 FQ3 FQ4	FY2031 FQ1 FQ2 FQ3 FQ4	FY2032 FQ1 FQ2 FQ3 FQ4	FY2033 FQ1 FQ2 FQ3 FQ4	FY20. FQ1 FQ2 F
SIP Sewer System Improvement Program	03-Mar-18	29-Nov-39											
Sewer System Improvement Program Phase 1	03-Mar-18	29-Nov-39											
Treatment Facilities	03-Mar-18	29-Nov-39											
OSP Condition Improvement Projects - Part 2	03-Mar-18	28-Jun-30	-							L			
Admin Bldg (NPF 930) Evaluation & Interim H&S Improvements	01-Mar-22	29-Sep-28				1		-					
Primary Treatment (SEP 040/041) H&S Improvements	04-Jan-21	31-Mar-28				÷							
Maintenance Building (SEP 940) Interim Improvement	12-Jan-21	04-Feb-28											
SEP 550 Booster PS Condition Inspection & Interim	12-Jan-21	30-Jun-28											
Solids Thickening (OSP 011) Process Upgrade	25-Jan-22	10-Mar-28											
OSP Plant-wide Ventilation (HVAC) Upgrades	26-Jan-22	16-Jul-27											
Admin Bldg (OSP 930) Health & Safety Improvements	01-Feb-22	08-Jul-27					 						
OSP & WSPS Security Enhancements (10037777)	02-Aug-21	01-Mar-28											
NPF & NSS Security Enhancements (10037904)	18-Jan-22	01-Mar-28			; 	·							
NPF DCS Upgrades (Construction)	01-Nov-21	30-Dec-27											
SEP, Booster PS, & BFS Security Enhancements	18-Jan-22	01-Mar-28			; <mark>- 1 1 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1</mark>	· · · · · · · · · · · · · · · · · · ·							
Secondary Clarifiers (SEP230) Rehabilitation	03-Oct-22	30-Nov-29										}	+
Gaseous Oxygen System (OSP 011) Upgrades	03-Jan-23	08-May-29						<u> </u>					
New Trades & Maintenance Building	01-Nov-22	31-Aug-28				- - - -		-					
Sedimentation (NPF 040/041) Tanks Condition Improvements	14-Nov-22	30-Aug-30			1					-			
SEP Condition Improvement Projects - Part 1	03-Apr-23	29-Oct-27											
SEP Mainstream Nutrient Reduction	01-Oct-24	29-Nov-39								1			
Westside FM Reliability Project – PLANNING	03-Jul-23	26-Dec-24											
Collection System	01-Aug-19	30-Sep-30											
Geary BRT Sewer Improvements - Phase 2 (CON)	04-Mar-24	28-Feb-28		-									
Large Sewer Condition Assessment and Improvements	01-Aug-19	07-Dec-26											
Baker (009) Baffle Improvements	07-Dec-20	10-Oct-24											
Brannan (019) CSD Gate & Baffle Rehab	07-Dec-20	28-Apr-28											
Seacliff No. 2 PS & FM Upgrade	14-Dec-20	03-Apr-28											
Seacliff No. 1 PS & FM Upgrade	07-Dec-20	31-Mar-27											
Sunnydale PS Safety Improvements	14-Dec-20	23-May-28					: :						
Geary Underpass PS Safe Access Enhancements	10-Jan-22	29-May-26										}	
System-wide CSD & T/S Monitoring Equipment Assessment	18-Jan-22	17-Mar-28											
Pump Station Security Upgrades (Cesar Chavez, GFS,CHS, MMS)	01-Jun-22	13-Sep-27		- <mark></mark>									
CSD Structure Rehab & Upgrades - Part 1	03-Jan-22	31-Jan-29		-									

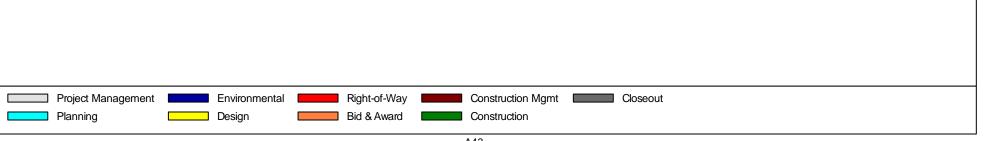
# Appendix B.1 Sewer System Improvement Program (SSIP) Other - Approved Project Level Schedules

me	Start	Finish	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034
			FQ2 FQ3 FQ4	FQ1 FQ2 FQ3 F0	Q4 FQ1 FQ2 FQ3 FQ	4 FQ1 FQ2 FQ3 FQ	24 FQ1 FQ2 FQ3 FQ	4 FQ1 FQ2 FQ3 FQ	4 FQ1 FQ2 FQ3 FQ4	FQ1 FQ2 FQ3 FQ4	4 FQ1 FQ2 FQ3 FQ4	FQ1 FQ2 FQ3 FQ4	FQ1 FQ2 FQ3
CHFM Inspection and Rehabilitation - Southern Port	01-Apr-24	30-Sep-30											
Griffith DW FM Rehab	01-Oct-24	03-Oct-28				-							
Stormwater Management	01-Jul-18	30-Jun-33											
Regional School/Park: Giannini Middle School	04-Apr-24	30-Jun-29					-						
Green Infrastructure grant Program (10034553)	01-Jul-18	30-Jun-33											
Balboa High School Regional Runoff Reduction Project	03-Jul-23	03-Oct-28	_										
Buchanan Street Mall	03-Oct-22	28-Dec-26											
Flood Resilience Projects	02-Jan-19	27-Dec-34											
Lower Alemany Area Stromwater Improvement Project (10034360)	02-Jan-19	01-Nov-28			-			-					
Folsom Area Stormwater Imp. Project Phase 2	17-Oct-22	16-Feb-29											
Flood Resiliency Planning	03-Oct-22	29-Jun-29					-						
Floodwater Management Grant Assistance Program (Grant)	16-Oct-23	27-Dec-34											
Program Management	03-Jul-23	30-Jun-37											
Program Management - Phase 2	03-Jul-23	30-Jun-37											<u> </u>

Project Management Planning	Environmental Design	-	ight-of-Way	Construction Mgmt	Closeout Program Mgmt

# Appendix B.2 WWE Facilities & Infrastructure (F&I) - Approved Project Level Schedules

Name	Start	Finish	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY 2031	FY2032	FY2033	
			F F F F	F F F	F F F F F	FFFFFF	F F F F	F F F F	F F F F	F F F F	F F F F	F F F	F
Vastewater Facilities & Infrastructure Programs	01-Jan-11	20-Jul-33											
CWP11001 New Treasure Island Wastewater Treatment Plant	01-Jan-11	26-Aug-26											
CWWFAC01 Ocean Beach Climate Change Adaptation Project	23-Jul-12	20-Jul-33					1		1	1	1		-
CWWFAC04 Islais Creek Outfall Crossing	26-Sep-16	30-Jun-25											
10033820 Southeast Outfall Condition Assessment and Rehabilitation	01-Jul-19	31-Mar-27						1 1 1 1 1 1					
10040511 Interim Sidestream Nutrient Removal	01-Sep-23	30-Jun-26				3							-
10038793 Customer Service System	01-Jul-22	30-Jun-27											
$TBD-08 \hspace{0.1 cm} SEP \hspace{0.1 cm} South \hspace{0.1 cm} Jerrold \hspace{0.1 cm} A \hspace{1 cm} venue \hspace{0.1 cm} Campus \hspace{0.1 cm} (Planning \hspace{0.1 cm} and \hspace{0.1 cm} Environmental$	02-Jan-26	30-Dec-28			_								
ITS ITS Capital Projects	01-Jul-24	30-Jun-30											



	Appendix 2.1 Was	stewater Enterpris	se Renewal a	and Replacer	nent - Aj	pproved	Project I	Level Sch	edules		
Project Name	Start	Finish FY2023	FY2024	FY2025 F	Y2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032
WWE Renewal & Replacement Program	01-Jul-10	FQ1         FQ2         FQ3         FQ           31-Mar-26	4 FQ1 FQ2 FQ3 FQ4 FQ	1 FQ2 FQ3 FQ4 FQ1 FQ	2 FQ3 FQ4 FQ1 I	FQ2 FQ3 FQ4 FQ	1 FQ2 FQ3 FQ4	FQ1 FQ2 FQ3 FQ4			
R&R Treatment Facilities	01-Jul-10	14-Feb-25		<b></b>							
R&R Collection Systems - Small Diameter	01-Jul-10	31-Mar-26									
R&R Collection Systems - Large Diameter	01-Jul-22	31-Mar-26									
Project Management	Environmental	Right-of-Wa		onstruction Mgmt		Closeout					
Planning	Design	Bid & Award		onstruction		Program N	/Igmt				
	-										

## Appendix C. Acronyms

## Q1-FY2024-2025 (07/01/24 - 09/30/24)

## **APPENDIX C. LIST OF ACRONYMS**

AAR	Alternative Analysis Report	CSAMP	Collection System Asset
ADA	Americans with Disabilities Act		Management Program
ACOE	Army Corps of Engineers (also	CSD	Combined Sewer Discharge
	shown as USACE)	DAF	Dissolved Air Flotation
BAAQMD	Bay Area Air Quality Management District	DB	Design-Build
BCTD	Bay Corridor and Transmission	DCS	Distributed Control System
BCID	Distribution	EIR	Environmental Impact Report
BDFP	Biosolids Digester Facilities Project	EOP	Early Out Package(s)
BFS	Bruce Flynn Pump Station	EPA	Environmental Protection Agency
BMP	Best Management Practices	F&I FASIP	Facilities and Infrastructure Folsom Area Stormwater
BNR	Biological Nutrient Removal		Improvement Project
BPS	Booster Pump Station	FM	Force Main
BRT	Bus Rapid Transit	FR	Flood Resiliency
BVHP	Bayview Hunters Point	FRP	Fiberglass Reinforced Plastic
CAC	Citizens Advisor Committee	FY	Fiscal Year
Caltrans	California Department of Transportation	GBT	Gravity Belt Thickener
CBSIP	Central Bayside System	GFS	Griffith Street Pump Station
•=•	Improvement Project	GGNRA	Golden Gate National Recreation
CCS	Customer Cloud Service		Area
CCTV	Closed-Circuit Television	GI	Green Infrastructure
CEQA	California Environmental Quality Act	GIGP	Green Infrastructure Grant
CER	Conceptual Engineering Report		Program
CFRP	Carbon-fiber-reinforced polymers	GOX	Gaseous Oxygen
CHFM	Channel Force Main	H&S	Health and Safety
CHS	Channel (Street) Pump Station	HDPE	High Density Polyethylene
CIP	Capital Improvement Program;	HPU	Hydraulic Power Unit
<b></b> .	Cast-Iron Pipe	HVAC	Heating, Ventilation, and Air
CIPL	Cured-in-Place Lining		Conditioning
CIS	Customer Information System	I&C	Instrumentation and Controls
CM/GC	Construction Manager/General Contractor	JOC IC	Internal Combustion Job Order Contract
CN	Construction	LID	Low Impact Development
CO	Change Order	LED	Light-Emitting Diode
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Appendix C	. Acronyms	Q1-F	Y2024-2025 (07/01/24 – 09/30/24)
LF	Linear Feet	R&R	Renewal and Replacement (also
LOS	Levels of Service		shown as RnR)
LOX	Liquid Oxygen	RDT	Rotary Drum Thickener
MBR	Membrane bioreactor	RCP	Reinforced Concrete Pipe
MCC	Motor Control Center	RFP	Request for Proposal
MGD	Million Gallons per Day	RFQ	Request for Qualification
MMS	Merlin Morris Pump Station	ROV	Remote Operated Vehicle
MND	Mitigated Negative Declaration	ROW	Right-of-Way
MOU	Memorandum of Understanding	RWQCB	Regional Water Quality Control Board
N/A	Not Applicable	SCADA	Supervisory control and data
NAR	Needs Assessment Report	JUADA	acquisition
NPDES	National Pollutant Discharge Elimination System	SEO	Southeast Outfall
NPF	Northpoint (Wet-Weather) Facility	SEP	Southeast Wastewater Treatment
NSCFM	North Shore to Channel Force Main		Plant
NSFM	North Shore Force Main	SF	San Francisco
NSS	North Shore Pump Station (also	SFMTA	San Francisco Municipal
NOO	shown as NSPS)		Transportation Agency (also
NTP	Notice to Proceed		shown as MTA)
O&M	Operations and Maintenance	SFPUC	San Francisco Public Utilities
OCU	Odor Control Units		Commission
OSP	Oceanside Water Pollution Control	SFPW	San Francisco Public Works
P3	Public-Private Partnership		(formerly SFDPW)
PA	Public Address	SOMA	South of Market
PG&E	Pacific Gas & Electric	SOW	Scope of Work
PLC	Programmable Logic Controllers	SSIP	Sewer System Improvement
PM	Program Management; Project	T/S	Program Transport and Storage
РМС	Manager	TBD	To Be Determined
PreCon	Program Management Consultant Pre-Construction	TBL	Triple Bottom Line
PRV	Pressure Relief Valve	ТВМ	Tunnel Boring Machine
PS		THP	Thermal Hydrolysis Process
PSA	Pump Station; Primary Sludge Pressure Swing Absorption	TIWRRF	Treasure Island Water Resource
PUC	Pressure Swing Absorption Public Utilities Commission		Recovery
QA/QC		тм	Technical Memorandum
	Quality Assurance/Quality Control		

# Appendix C. Acronyms

TPAS	Thickened Primary Activated
	Sludge
UPS	Uninterruptable Power Supply
UV	Ultraviolet
UWA	Urban Watershed Assessment
VCP	Vitrified Clay Pipe
VFD	Variable Frequency Drives
VPSA	Vacuum Pressure Swing
	Adsorption
WAS	Waste Activated Sludge
WSPS	West Side Pump Station (also
	shown as WSS)
WSS	Westside Pump Station (also
	shown as WSPS)
WWE	Wastewater Enterprise

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