

SSIP FY22/23

Annual Report



San Francisco
Water
Power
Sewer

Services of the San Francisco
Public Utilities Commission

**SEWER
SYSTEM**
IMPROVEMENT PROGRAM
Grey. Green. Clean.

Adapting to our Changing Environment.



What's Inside

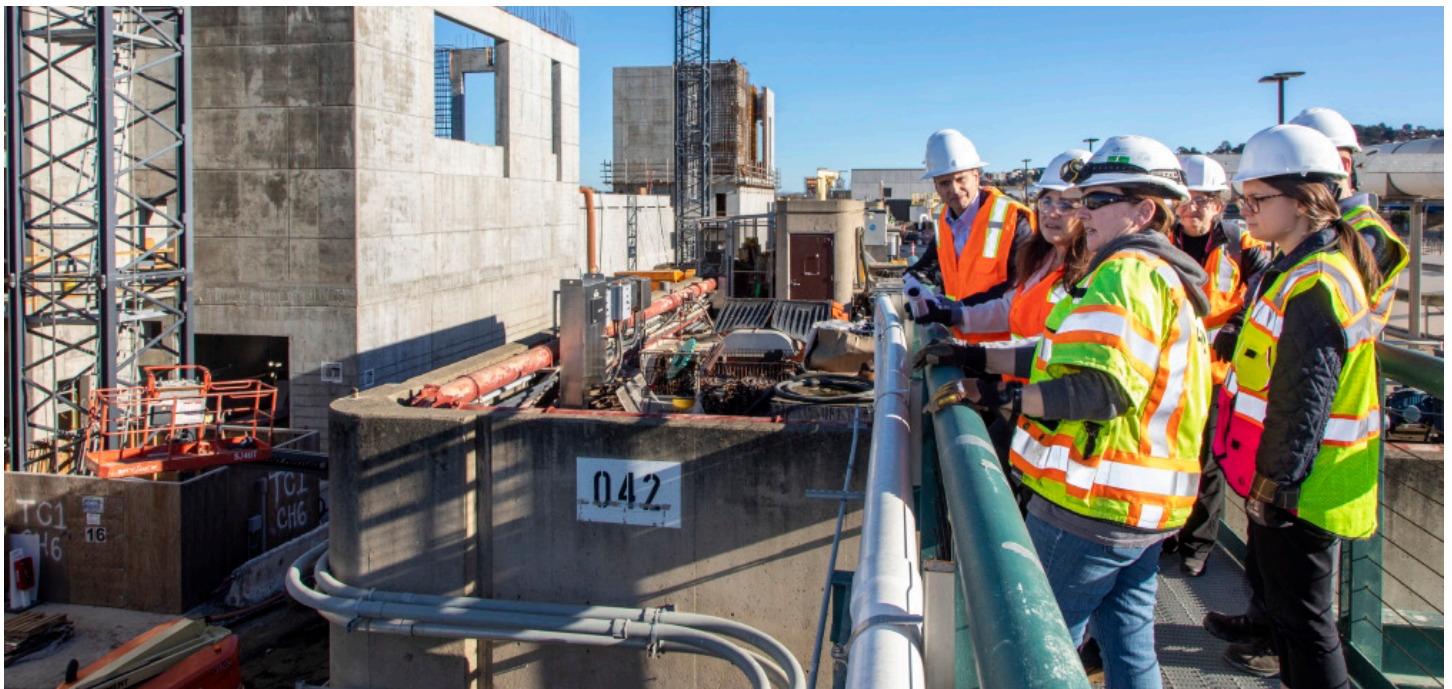
Welcome to the San Francisco Public Utilities Commission's Wastewater Capital Improvement Program's FY22-23 Annual Report.

The purpose of this report is to provide a recap of the Program's projects and accomplishments, identify resources for obtaining more information, and preview next year's activities. You will also learn about our community benefit activities and workforce development achievements. This edition covers July 2022 – June 2023.

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Photography by Robin Scheswohl and Sabrina Wong, SFPUC staff photographers.



Southeast Projects (Biosolids, Headworks, 1550 Evans Community Center) Tour with representatives from New York DEP. List of attendees: Rit Aggarwala (Commissioner), Anna Ponting (Acting Chief of Staff), Nerissa Moray (Senior Advisor), Jen Garigliano (Chief of Staff, Bureau of Water Supply), Adam Reaves (Director of Water Treatment Operations, Bureau of Water Supply), Angela DeLillo (Acting Deputy Commissioner, Bureau of Wastewater Treatment), LuAnn McVicker (Field Contracts Administrator) leading a tour of the Headworks Project.

The SFPUC is Adapting to our Changing Environment

The environment around us continues to change, and we continue to adapt to ensure our combined sewer system is reliable, resilient, and sustainable for all those who live, work and play in San Francisco. This report is adapting as well and while this will be the last year that focuses solely on the Sewer System Improvement Program, we are including information on the entire capital program.

The [Wastewater Capital Improvement Program](#), which includes the Sewer System Improvement Program (SSIP), the Wastewater Enterprise (WWE) Facilities and Infrastructure program, and the WWE Renewal and Replacement Program, is a major component of the SFPUC comprehensive approach to deliver on 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.

The Capital Improvement Program (CIP) is implementing projects across San Francisco that are responsive to the issues of: Aging Infrastructure, Seismic Vulnerability, Climate Change and Stormwater Management, Water Quality, and Responsible Resource Recovery by incorporating new technologies to improve our communities and quality of life. Over the last several years, we've evolved our capital planning and budgeting to craft a sustainable, adaptable approach to prioritizing our investments with an eye to affordability for our ratepayers and flexibility in the face of a multitude of challenges.

For the Sewer System Improvement Program, 2022/2023 was a period of progress, we continued to successfully navigate the shifting economic, labor and supply chain landscape, upgrade critical sewer system infrastructure while responding to the needs of the City and its residents. Through these challenging times, our projects have offered job training and contracting opportunities to the local community, kept people working and have made steady progress improving our system.

This fiscal year saw the completion of many essential projects: Sunset Boulevard Greenway Phase 2, the first phase on both the Geary and L-Taraval Corridor Improvement Projects completed sewer upgrade work, SEP Seismic Reliability and Condition Assessment Improvements, and the completed construction of grant funded green infrastructure. Major construction continued at the Southeast Treatment Plant, with construction advancing through site preparation and completion of foundation work on the future SEP Biosolids Digester Facilities Project, while major progress was made on the SEP New Headworks Facility Project as it prepares for the installation of a new power feed.

This 2022-2023 annual report provides a review of our efforts and recent accomplishments, and a look ahead to the year to come as we continue to invest in our critical facilities, the people who build and run them, and the communities in which they're located.

Programmatic Overview

The [Sewer System Improvement Program \(SSIP\)](#) is charged with implementing efficient, high quality, and reliable wastewater projects that directly support our quality of life.

We operate our wastewater system 24 hours a day, 7 days a week, 365 days a year, in a manner that is inclusive of environmental and community interests, and that sustains the resources entrusted to our care. The [Wastewater Enterprise](#) is responsible for more

than 1,000 miles of sewers, 25,000 storm drains, and three treatment facilities, the oldest and largest all-weather facility of which was built in 1952—the [Southeast Treatment Plant](#).

The SSIP supplements our Renewal and Replacement Program by making significant capital investments to upgrade and modernize our aging system to ensure a resilient, reliable, and sustainable system now and for generations to come.



Southeast Wastewater Treatment Plant: Biosolids Digester Facilities Project: Facility 610 (Anaerobic Digestion). Reinforcing for mat slab at B615 basement.

San Francisco's Challenges and SSIP Levels of Service (LOS)

Committed to a Measurable, Results-Driven Approach

The SSIP uses specific, measurable criteria and factors, known as Levels of Service (LOS), to prioritize projects and evaluate Program success as we address current and future challenges. The LOS goals were developed specifically for the SSIP to ensure that the projects not only meet our technical needs but work to balance social, environmental, and financial factors, while managing program and project-level risk.

Levels of Service (LOS) Guide our Work:



Provide a Reliable and Resilient System that can Respond to Catastrophic Events. Ensuring treatment of flows within 72 hours of a major earthquake.



Integrate Green and Grey Infrastructure to Manage Stormwater and Minimize Flooding. Reducing stormwater impacts on neighborhoods and the sewer system.



Provide Benefits to Impacted Communities. Reducing odors and other impacts while providing both economic and job opportunities.



Modify the System to Adapt to Climate Change. Incorporating climate change design criteria into construction projects to respond more effectively to the rising sea level and other impacts.



Achieve Economic and Environmental Sustainability. Reusing and conserving the by-products of our wastewater and stormwater treatment systems.



Maintain Ratepayer Affordability. Keeping customer bills less than 2.5% of an average household income for a single-family residence.



2022 San Francisco Collaborative Partnering Awards - The annual Collaborative Partnering Awards Program recognizes project teams demonstrating excellence in collaboration and the application of partnering best practices. This year, three SFPUC projects won awards. SFPUC also partnered on a SF MTA project that received an award.



GM Dennis Herrera in Conversation with Radhika Fox - Radhika Fox was the Assistant Administrator for the U.S. Environmental Protection Agency's Office of Water. Formerly, she was SFPUC's Director for Policy and Government Affairs.

Performance Metrics

Entering this fiscal year, SSIP management continues to utilize the rolling two-year budget and 10-year capital planning cycles process to regularly evaluate and prioritize future projects. This process provides a more adaptable and sustainable approach to review and refine scope needs and establish more accurate schedule and budget forecasts. Below are metrics that demonstrate progress across the Program. More detailed information can be found in our [Quarterly Reports](#).

SSIP Project Count by Phase

Planning **\$20m** (1 Projects)

Design **\$177m** (6 Projects)

Bid & Award **\$0** (0 Projects)

Construction **\$3,646m** (11 Projects)

Close-Out **\$102m** (9 Projects)

Completed **\$357m** (43 Projects)

TOTAL **\$4,302m** (70 Projects)

Total Budget Spent

Budget: **\$4.402B**

Spent: **\$2.486B**

SSIP Phase 1 Completion **46.4%**

All data is through June 2023



Wastewater staff at Oceanside Wastewater Treatment Plant: Todd Banks (Stationary Engineer) monitoring processes and treatment in the Control Room at Oceanside Plant (OSP).



Southeast Wastewater Plant Tour with District 10 Supervisors and Biosolids, Headworks, and Senior Management staff: Stephen Robinson (Assistant General Manager, Infrastructure).

Investing in our Infrastructure, our Workforce and our Communities

By exceeding the City's local hiring requirements and meeting the City's local, small business requirements with our infrastructure investments, the SFPUC is contributing to San Francisco's ongoing economic vitality by strengthening its neighborhoods, businesses, and workforce through:

Jobs and Local Hours: Our projects are covered by the San Francisco Local Hiring Policy for Construction, most of which have a local (San Francisco resident) worker participation requirement of 30%. For apprentices, or entry-level workers, the requirement is 50%. The following numbers are estimates based on Certified Payroll Records submitted by contractors.

San Francisco residents have worked more than 967,000 of the total 2,714,264 craft hours on SSIP projects. This equates to 35.6% of the total hours, exceeding the Local Hire requirements. San Francisco apprentices have worked over 226,000 hours, which accounts for 61.5% of all apprentice hours worked on SSIP and exceeds the 50% local apprentice requirement.

Contracts: The City also has a mandate for local, small businesses (contractors, professional services, trucking firms, and suppliers, etc.) to participate. Although the requirements vary by contract, the SFPUC is committed to maximizing local participation on every project. On SSIP projects, Local Business Enterprise (LBE) prime and subcontractors have been awarded \$597 million, which is approximately one out of every four dollars awarded on SSIP projects.

** The Office of Economic and Workforce Development (OEWD) administers the Policy and makes the final determination on each individual project's Local Hire compliance achievements against the requirements. These numbers do not reflect any adjustments calculated by OEWD in their final percentages.*

Percentage of Hours Worked

(required vs. actual)

All San Francisco Residents

Goal **30%** Actual **35.6%**

San Francisco Apprentices

Goal **50%** Actual **61.5%**

All data is through June 2023



Southeast Wastewater Treatment Plant (SEP), Headworks Facility Project: Women in Construction week 2023.

Projects

COLLECTION SYSTEM PROJECTS

LARGE SEWERS, TUNNELS, AND ODOR CONTROL

- 21 Mission Bay Loop Sewer Improvements
- 22 Kansas & Marin Streets Sewer Improvements
- 23 Cargo Way Sewer Box Odor Reduction
- 24 Rutland Sewer Improvements
- 25 Mission Street Brick Sewer Rehabilitation

PUMP STATIONS AND FORCE MAIN IMPROVEMENTS

- 30 Westside Pump Station Improvements
- 31 Griffith Pump Station Improvements
- 32 Hudson Avenue Pump Station and Outfall Improvements
- 33 Ceasar Chavez Pump Station Improvements
- 34 Marin Street Sewer Replacement
- 35 Mariposa Dry Weather Pump Station and Force Main Improvements
- 36 Force Main Rehab at Embarcadero & Jackson
- 37 North Shore to Channel Force Main Improvements
- 38 North Shore Pump Station Wet Weather Improvements

FLOOD RESILIENCE PROJECTS

- 40 Wawona Area Stormwater Improvement
- 41 Urbano/Victoria Hydraulic and Drainage Sewer Improvements
- 42 Joost/Foerster Hydraulic and Drainage Sewer Improvements
- 43 Lower Alemany & Southeast Area Stormwater Improvements
- 44 Folsom Area Stormwater Improvement Project

COMBINED SEWER DISCHARGE STRUCTURES AND TRANSPORT/STORAGE BOXES

- 50 Richmond Transport/Storage Tunnel Rehabilitation
- 51 Beach St. CSD Rehabilitation Backflow Prevention Monitor
- 52 Sansome St. CSD Rehabilitation Backflow Prevention Monitor
- 53 North Point Outfall System
- 54 Drumm & Jackson Streets Rehabilitation Sewer System Improvements
- 55 5th, North 6th & Division Streets CSD Rehabilitation and Backflow Prevention
- 56 Pierce Street CSD Rehabilitation and Backflow Prevention
- 57 Jackson Street CSD Rehabilitation and Backflow Prevention
- 58 Griffith Street CSD Rehabilitation and Backflow Prevention

GREEN INFRASTRUCTURE & EARLY IMPLEMENTATION PROJECTS

- 1 Baker Beach Green Streets
- 2 Sunset Boulevard Greenway
- 3 Holloway Green Street
- 4 Visitacion Valley Green Nodes
- 5 Mission and Valencia Streets Green Gateway
- 6 Upper Yosemite Creek Daylighting
- 7 Wiggle Neighborhood Green Corridor
- 8 Chinatown Living Alley

INTERDEPARTMENTAL PROJECTS

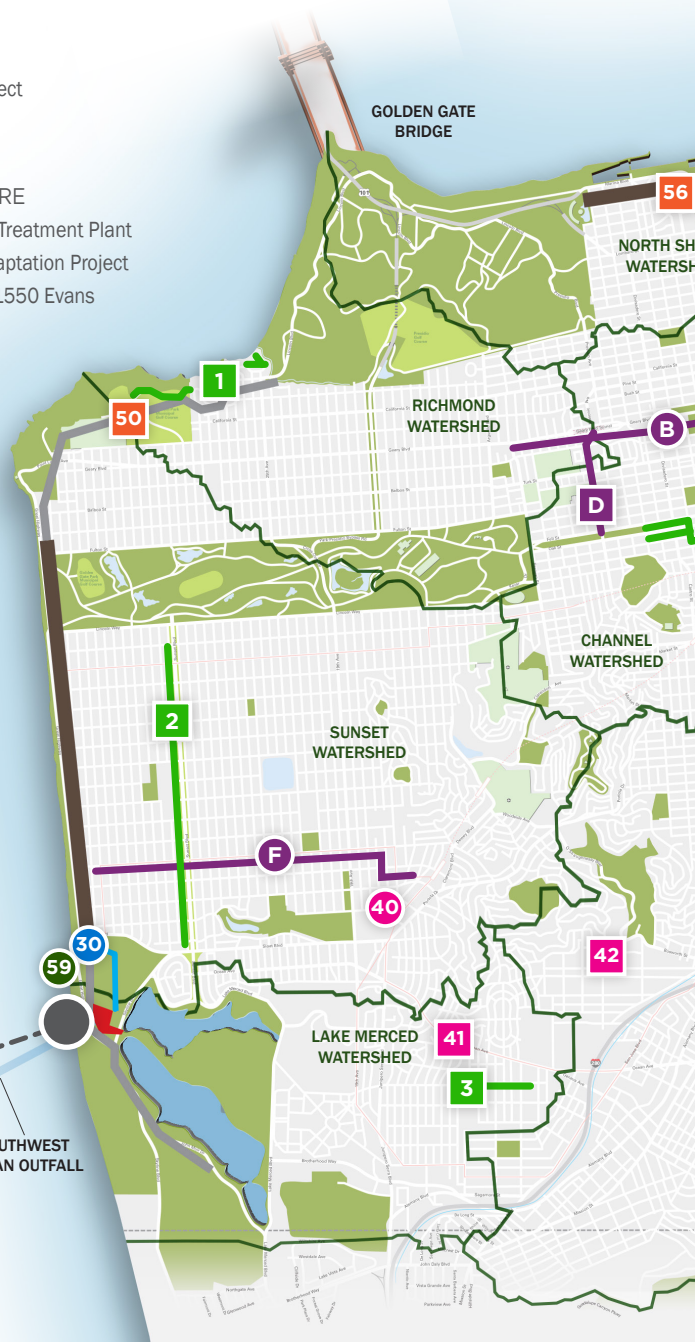
- A Van Ness Improvement Project
- B Geary Rapid Project
- C Central Subway Improvements
- D Masonic Avenue Streetscape Project
- E Better Market Street Project
- F L Taraval Improvement Project

FACILITY AND INFRASTRUCTURE

- 59 New Treasure Island Wastewater Treatment Plant
- 60 Ocean Beach Climate Change Adaptation Project
- 61 Southeast Community Center at 1550 Evans

LEGEND

- Treatment Facilities
- Deep Water Outfalls
- Transport/Storage Structures
- Tunnels
- Force Mains
- Interceptors & Tunnels
- Green Infrastructure



OCEANSIDE TREATMENT PLANT



SOUTHWEST OCEAN OUTFALL

- Structural and seismic improvements
- Westside Pump Station reliability improvements
- Odor control and energy efficiency enhancements

■ Squares indicate Completed Projects

● Circles indicate in-progress projects

Map and project areas not to scale



NORTH POINT WET-WEATHER FACILITY



- Upgrade operational reliability and efficiency
- Refurbish outfall structure
- Structural and seismic upgrades

SOUTHEAST TREATMENT PLANT



- Build new biosolids digesters facilities
- Replace headworks facility
- Improvements for odor control
- Enhance visual aspects
- Structural, seismic improvements, and treatment process

Treatment

Our SSIP treatment plant projects are bringing our facilities up to seismic standards, improve efficiency, enhance reliability, and prepare our system against the growing severity of climate change and sea level rise. These efforts are essential to maintaining our quality of life and strengthening our communities and economy.

Southeast Treatment Plant

We are investing over \$3 billion in critical upgrades into San Francisco's largest treatment plant, located in the Bayview neighborhood, to deliver a sustainable, resilient, and attractive modern resource recovery center. Our vision is to transform the facility into a source of pride for our staff, our ratepayers, our neighbors and all who live, work, and visit San Francisco.

New Headworks Facility Project

This past year, the most complex project in the entire Program, the [New Headworks Facility Project](#), completed installation of the key structural components, odor control and removed the 84" bypass pipe, which paves the way for work on the external art wall. The unique challenge of maintaining operations and



Southeast Wastewater Plant Tour with District 10 Supervisor together with Biosolids, Headworks, and Senior Management staff. Shamann Walton (Supervisor).



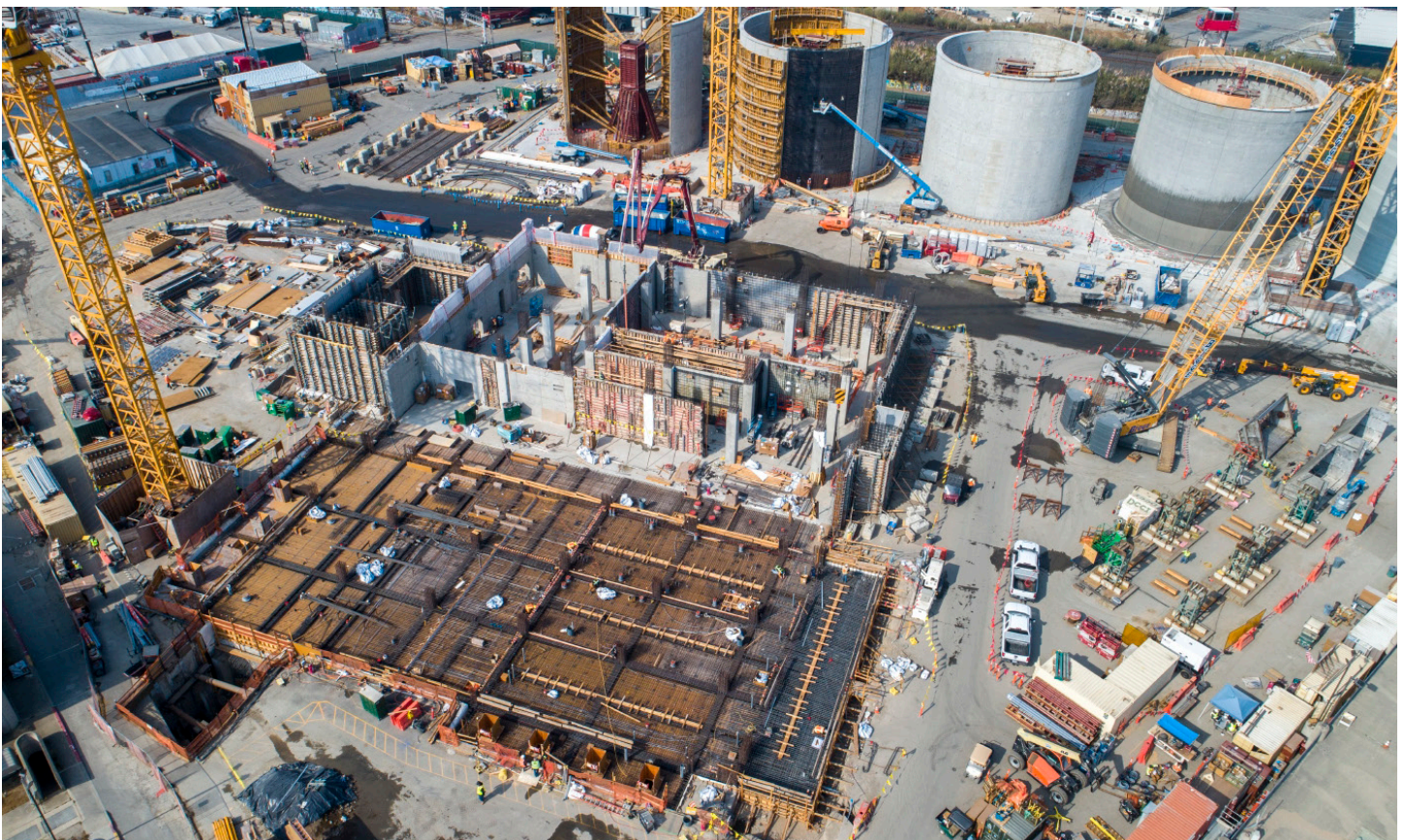
Southeast Wastewater Treatment Plant (SEP), Headworks Facility Project: Headworks Electrical Area, Screening Handling Area, Grit Tank Area, and Grit Handling Area.

coordinating with adjacent SEP projects while maneuvering in the space constraints, make it our most complex project. Much of the heavy construction activities will conclude in the next year and we look forward to completing the signature gateway art wall along Evans Avenue in early 2024.

The new facilities are designed for controlling a seismic event of a magnitude 7.9 earthquake occurring on the San Andreas fault and will help minimize odors, reduce operational costs and increase SEP's efficiency. In partnership with the SF Arts Commission, the project developed a temporary art program, launched last year, to feature four local artists' artwork on the Evans Avenue construction fence, each for a period of one year. This summer will see art from Malik Seneferu replaced by artwork from Afatasi The Artist with assistance from Sophia Tupuola.

Biosolids Digester Facilities Project

Delivering our largest project, the [Biosolids Digester Facilities Project \(BDFP\)](#), with an emphasis on safety and fiscal stewardship is a top priority for the SFPUC. This year we began to build up, with the five digesters and solids pretreatment building starting to take shape. The project is at over 40% completion with close to 90% of the construction bids awarded. The project also initiated the Biogas Utilization Project to achieve 100% beneficial use of SEP biogas. The Biogas Utilization Project would convert the biogas to pipeline-quality renewable natural gas (RNG). A Public Private Partnership (P3) delivery method is proposed, that could provide financing, design, construction, operation, and/or maintenance of the biogas utilization facilities, and/or sales and marketing of the produced fuel and renewable fuel credits.



Southeast Wastewater Treatment Plant: Biosolids Digester Facilities Project - Aerial drone footage of both Solids Pretreatment.

The BDFP will replace the existing solids treatment facilities along Phelps Street and Jerrold Avenue with state-of-the-art facilities located farther away from residents. The new facilities will capture and treat odors more efficiently, produce a higher quality biosolids, and maximize biogas utilization.

Oceanside Treatment Plant

The Oceanside Treatment Plant (OSP) and Westside Pump Station (WSS) wastewater treatment facilities are located next to the San Francisco Zoo and treat 20% of the City's wastewater.

The investments at OSP and WSS will enable efficient operation, improve operational safety and seismic reliability, maintain permit compliance and enable these facilities continue to protect public health and the environment. Ongoing construction activities

during this past year for the OSP Digester Gas Utilization Upgrades Project includes installation of the digester gas piping, the co-gen engine combustion exhaust system, as well as ongoing process piping and electrical upgrades. The project will replace and upgrade the existing biogas energy recovery system at OSP. Biogas, the natural byproduct from the wastewater treatment process, provides a 100% renewable alternative energy source to fossil-fuel that helps co-generate electrical power and produce hot water required for the plant wastewater treatment processes. Final construction is anticipated in 2024.

The Westside Pump Station Reliability Improvements Project

The WSS and associated facilities have been in service for numerous decades in the harsh marine environment. As part of the SSIP, the project is implementing improvements and



Westside Enhanced Water Recycling Project: Oceanside Treatment Plant (OSP), aerial drone view of digesters.

modifications to enable the WSS is reliable and operationally flexible, that it contains equipment redundancy, and remains compliant with State and Federal regulations. This year the project completed the Discharge Pipe Manifold upgrade, construction of the new electrical building followed by installation of the electrical substation switchgear equipment within the facility, and initiated installation of the new underground conduit at the Great Highway. Construction on the project began in April 2021 and is anticipated to be complete in summer 2025.

North Point Wet Weather Facility

Located near Fisherman’s Wharf, the North Point Wet Weather Facility (NPF) provides additional wet weather treatment capacity on the Bayside above and beyond the capacity provided by SEP. As an exclusive wet-weather treatment facility dedicated to reducing the rain’s impact on the City’s Bayside system, the NPF provides pre- treatment and primary-level

treatment with disinfection of wastewater before discharging into the Bay during heavy storms.

Construction of the North Shore Wet Weather Pump Station Project began in spring of 2021. The project will replace four dry weather pumps with larger units providing redundancy during wet weather, upgrade electrical distributed control systems (DCS), address corrosion and enable this facility to continue protecting our community and the health of the Bay.

Two of the four major dry weather pumps have been installed this year. Crews have also completed installation of the new 36-inch diameter piping, valves, and structural steel framing as part of these improvements, upgraded the Distributed Control System (DCS) in the North Shore Pump Station control room and in other North Point Facility locations, installed the new Uninterruptible Power Supply (UPS) which powers the DCS equipment, and continues installing electrical upgrades for the new dry weather pumps and various equipment to be connected with the new DCS.



North Shore Pump Station Wet Weather Improvements: Driving 12 torque down piles into bedrock. The piles, along with rebar and concrete, will be part of creating a firm foundation upon which two ferrous chloride tanks will be placed.

Collection

A vast city under the City, including sewer pipes, pump stations and catch basins, collects and conveys wastewater and stormwater to our treatment facilities where it is cleaned and discharged into the San Francisco Bay or Pacific Ocean. These facilities are critical components of San Francisco's wastewater operations. The Collection System improvements in the SSIP include upgrades that enhance collection system condition and reliability, improvements to stormwater management to reduce flooding, protection of assets against sea level rise, increase flexibility for wet weather operations, and protection of water quality. By completing these projects, SFPUC will continue to offer reliable and high-quality sewer services to all who live, work, and play in San Francisco.

Pump Station Upgrades

Originally built in 1954, the [Mariposa Pump Station](#) is a dry-weather pump station that flows wastewater from the surrounding Mission Bay area to the Southeast Treatment Plant for treatment.



Mariposa Pump Station Improvements Project: Exterior of pump station.

The Mariposa Pump Station Improvements Project reached substantial completion in August 2022, resulting in a new, higher-capacity pump station, and also included replacement of the existing dry-weather force main with a larger force main to accommodate the full buildout of the Mission Bay community, the new Chase Center, and planned population growth in the Potrero Hill neighborhood.

The Seacliff No. 1 and Seacliff No. 2 Pump Station and Force Main Upgrade projects

will rehabilitate/replace and upgrade these facilities. Project teams have completed field investigations including topographic survey and geotechnical investigations, and have advanced design towards 95% completion. SFPUC Communications has begun community engagement to share project information with nearby stakeholders for an anticipated groundbreaking for these two projects in 2024.

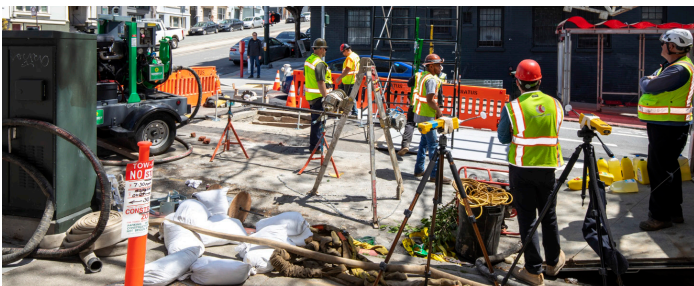
Collection System Reliability Program

These projects help enable the wastewater and stormwater are safely captured and delivered to our treatment plants 24/7.

Much of our work overlaps, literally and figuratively, with other city infrastructure projects, and the SFPUC partners with SFMTA and SFPW to “dig once” where feasible to reduce impacts to the community and efficiently deliver projects. These interdepartmental projects include joint projects like the Geary Rapid Transit Program, L Taraval Improvement Project and the Better Market Street Improvement Projects. Ongoing coordination allows us to upgrade aging sewer infrastructure while the City performs above ground surface and transit improvements. The partnership ensures maximization of City resources and minimization of disruption to the communities we serve.

Based on ongoing the condition assessment of large-diameter sewers (sewers larger than 36-inches in diameter), three additional projects have advanced into planning and design.

For many large diameter sewer rehabilitation projects, the SFPUC is using a trenchless method called Cured-in-Place-Lining (CIPL), which involves accessing the pipe through existing manholes and rehabilitating the pipe from the inside. This method reduces construction duration and is less disruptive to neighbors, as well as avoiding loud, messy, and highly disruptive open-trench excavation and street repaving. Using CIPL methodology, the New Montgomery Brick Sewer Rehabilitation Project launched in late 2021 and was completed during this fiscal year, and several other projects will commence construction in late 2022.



Various Locations Brick Sewer Improvements: Preparing to lower pipe lining - cured-in-place liner (CIPL) on Leavenworth Street at California Street.

Flood Resilience Projects

Each year, more than 10 billion gallons of rain falls on our city, and with climate change, heavy storms (such as atmospheric rivers) mean much of this water hits our streets at once. Storms wash pollutants like motor oil and street litter into our city's mostly combined sewer system. They mix with sanitary sewage (i.e. from toilets, showers, and sinks) before getting sent to treatment plants for cleaning and released back to the Bay or ocean.

The SFPUC continues to deliver programs, policies, and projects to enable San Francisco to be as resilient and sustainable as possible in the face of intensifying storms. Several

SSIP projects are in development to upgrade the facilities to meet SFPUC's recommended stormwater management design objective:

Folsom Area Stormwater Improvement Project, located in the low-lying inner Mission neighborhood around 17th and 18th streets; the Lower Alemany Area Stormwater Improvement Project surrounding the US 101 and I-280 interchange; and the Wawona Area Stormwater Improvement Project, located around 15th Avenue & Wawona Street. By June 2023, crews reached 95% completion on the Wawona Area Stormwater Improvement Project, with project completion anticipated in January 2024. Upgrades as part of this project include reducing the risk of flooding in the 15th and Wawona area by diverting stormwater flows to a new large sewer pipe installed under Vicente Street, from Wawona Street to 34th Avenue, increasing the ability to capture and divert street runoff with newly constructed stormwater inlets around 15th Avenue and Wawona Street intersection, and upgrades to the aging water transmission and distribution mains along Vicente and Wawona Portable Emergency Water for Firefighting pipes on Vicente Street.

Due to the project's immense scope and impact, the Folsom Area Stormwater Improvement Project will be implemented through four contracts. In 2023, the project team reached 65% design for the Division Sewer Box work, completed modeling for the final Strategy Report to Caltrans for the pile modification work, and advertised the first contract WW-719A for necessary upstream sewer upgrades. Community outreach to impacted stakeholders including residents and business owners will begin in late 2023.

The Lower Alemany Area Stormwater Improvement Project team reached 35% design by June 2023 with geotechnical investigations, computational models, and potholing plans for the box sewer being initiated. Community outreach to impacted stakeholders including residents and business owners will begin in late 2023/early 2024.

Additional flood resilience and stormwater management projects are included in the 10-year Capital Improvement Plan. We're doing important work, but we can't do it all on our own. That's why we're partnering with other City departments and also providing our customers with grants to help protect their properties from the impacts of heavy rains. Learn more at sfpuc.org/rain-ready.

Green Infrastructure Stormwater Management Projects

As we upgrade our aging combined sewer system, we're integrating a mix of green and grey infrastructure projects to better manage stormwater and reduce the pressure on the City's combined sewer system during heavy rains. Green infrastructure is a stormwater management tool that takes advantage of the natural processes of soils and plants in order to slow it down, clean it naturally, and divert it from the collection system into the groundwater.

The SFPUC is moving closer to the City's goal of managing one billion gallons of stormwater each year with green infrastructure by 2050. The Upper Yosemite Creek Daylighting project continues progressing towards 65% design. During this year project scope modifications were shared with and endorsed by the projects' stakeholders, Wastewater Enterprise and the San Francisco Recreation & Parks Department, which would reduce the Yosemite Station structural improvements and allow the plaza design to be more consistent with the character of McLaren Park.

Sunset Boulevard Greenway Phase II:

- Stormwater Managed: 5.6 million gallons per year
- Drainage Area: 21.1 acres
- Total Rain Garden Areas: 25,420 square feet
- Completed construction in 2021



Sunset Boulevard Greenway: Sunset Boulevard & Kirkham Street.

Baker Beach Green Street Project:

- Stormwater Managed: The Baker Beach Green Street Project is estimated to have reduced the total volume of stormwater entering the sewer system from the project area by 96% or 3.1 million gallons per year
- Drainage area: 15.8 acres
- Baker BMP footprints:
 - Bioretention 6,048 square feet
 - Permeable Pavement 5,820 square feet
 - Infiltration Galleries 6,738 square feet
- Total 18,606 square feet



Baker Beach Green Streets: El Camino Del Mar between Legion of Honor Drive to 32nd Avenue.

Green Infrastructure Grant Program

During FY22-23, the project held two application cycles, awarding just under \$11 million in funding to 9 projects. With a high level of interest in the grant program, the grant team worked to conduct site visits for interested projects, pre-application review meetings, and continued to monitor the design active grant projects. 3 projects went into construction at the end of the FY and are expected to be complete early 2024.

Status of Early Implementation Projects

The table to the right represents the status, drainage management area, performance, and green infrastructure technology features of all eight early implementation projects, each constructed in one of San Francisco's eight watersheds.



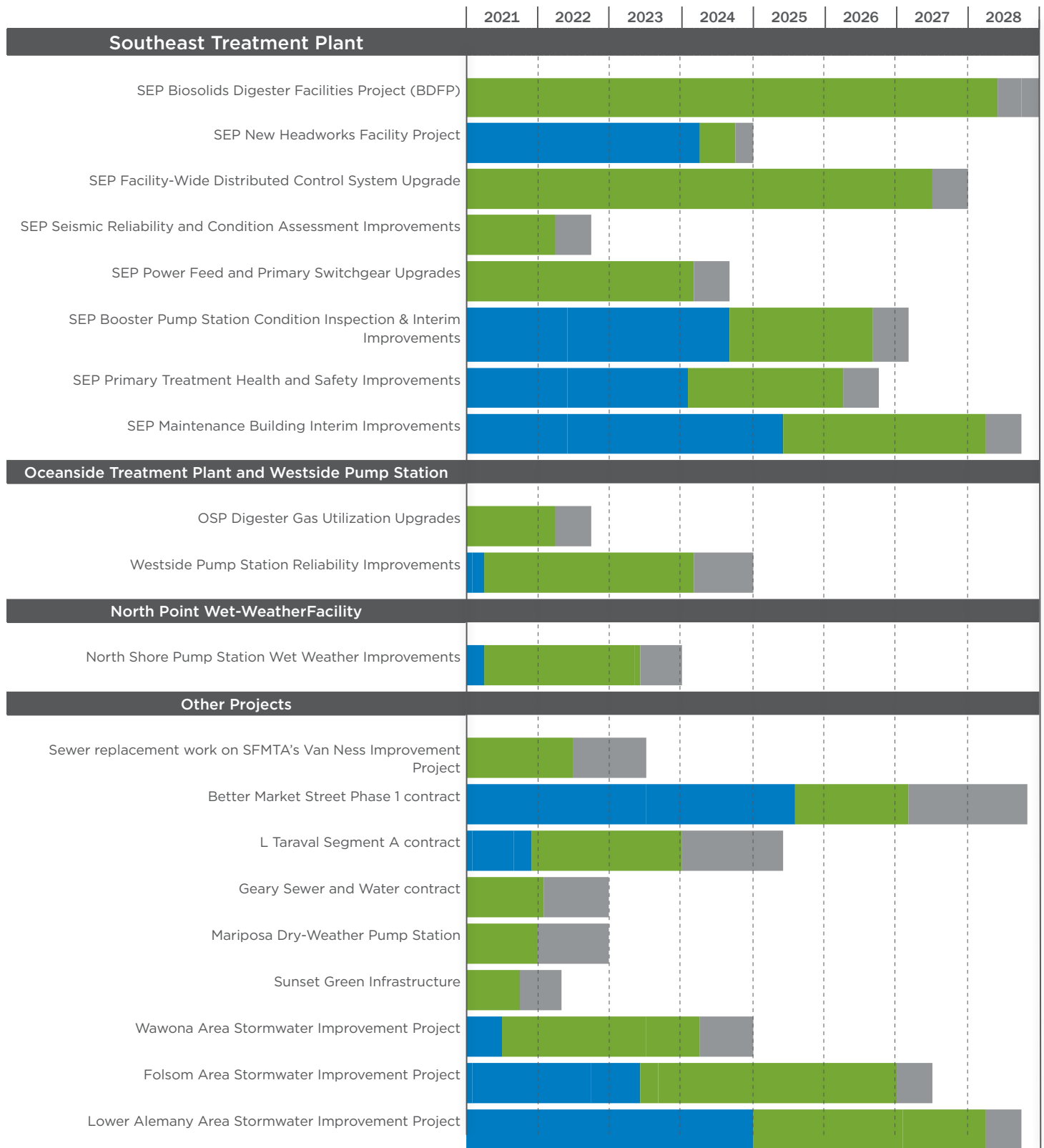
Green Infrastructure Training at San Francisco Unified School District (SFUSD) sites: high school juniors and seniors from John O'Connell High School train students at Miraloma Elementary School on how to grow plants in gardening containers and how to use rainwater harvesting systems (cisterns).

Stormwater Management Performance

Watershed	Project	Annual Runoff Removed from Sewer (gal/yr)
Northshore	Chinatown Living Alley	3,000
Channel	Wiggle Neighborhood Green Corridor	1,815,000
Islais Creek	Mission & Valencia Green Gateway	1,121,000
Yosemite	Yosemite Creek Daylighting Project	7,000,000
Sunnydale	Visitacion Valley Green Nodes	994,000
Lake Merced	Holloway Green Street	897,000
Sunset	Sunset Boulevard Greenway	5,333,000
Richmond	Baker Beach Green Streets	3,132,000
Total		20,295,000
Total Without Yosemite		13,295,000

Projects	Status	Drainage Management Area (In Acres)	Performance (gallons of Stormwater per year)	Features
Baker Beach Green Street	Completed	5.1	3M	15.8 acres of Drainage area, 6,048 square feet of Bioretention, 5,820 square feet of Permeable Pavement 6,738 square feet of Infiltration Galleries
Chinatown Green Alley	Completed	0.095	0.032M	203 Sft. of flow-through planters
Holloway Green Street	Completed	2	0.95M	18,444 square feet of permeable pavement/concrete; 2,250 square feet of rain gardens
Mission and Valencia Green Streets Gateway	Completed	2.2	1M	3,379 square feet of Rain gardens 1,215 square feet of Infiltration gallery
Visitacion Valley Green Nodes	Completed	1.85	1M	3,745 square feet of rain gardens
Wiggle Neighborhood Green Corridor	Completed	3.9	1.2M	1045 square feet of rain gardens; 7651 square feet permeable pavement
Sunset Boulevard Greenway	Completed	7.7	5.3M	16,826 square feet of rain gardens
Upper Yosemite Creek Daylighting	Design	106	7.3M	Daylighting of historic creek at McLaren Park

Project Status



Project Phases: ■ Planning - Bid & Award ■ Construction ■ Close-out

Community Outreach

As we make critical investments in our infrastructure, the SFPUC aims to be a good neighbor by supporting our ratepayers, reaching out to our communities, engaging local businesses, expanding job training, and supporting neighborhood improvement initiatives.

Meeting (Virtually) in Your Neighborhood

The SFPUC Communications Team is focused on providing a variety of ways for our customers, ratepayers and stakeholders to participate in the planning and delivery of these critical projects. This includes our participation (virtually and in-person) in local organization events, citywide announcements and small group presentations and briefings.

With the easing of COVID-19 restrictions, the traditional ways of connecting and engaging with our stakeholders continue to evolve, providing a variety of ways to connect. All the while, our crews continued to deliver essential upgrades to ensure we continue to serve our communities.

Social Media and Online Engagement

Social media continues to be an excellent avenue to share information with community members and residents about the programs and projects taking place in their neighborhood. Video content continues to rise in popularity as our communications team continues to share information across multiple social media platforms. Videos continue to be a great way to share programs and partnerships and share profiles of the amazing staff behind these important projects. Where large scale projects are underway, like at our Southeast Treatment Plant in the Bayview, sharing regular bi-weekly construction updates keeps the community updated on progress and construction activities.

8,000+ eNewsletter Subscribers

10 Community Meetings and Workshops

6 SEP Construction Site Tours

45 news articles/video segments

All data is through June 2023



Green Infrastructure Training at San Francisco Unified School District (SFUSD) sites: high school juniors and seniors from John O'Connell High School train students at Miraloma Elementary School on how to grow plants in gardening containers and how to use rainwater harvesting systems (cisterns).

Community Engagement

The SFPUC is the first public utility in the nation to adopt Environmental Justice and Community Benefits policies. Our “good neighbor” policies ensure we are giving back to the communities where we provide high-quality water, power, and sewer services. We are especially committed to working with communities that are most impacted by our operations. Guided by these policies, the SSIP is a once in a lifetime opportunity to leverage our investments and partnerships to support environmental, workforce, education, and art initiatives in the Bayview-Hunters Point neighborhood, which is home to our Southeast Treatment Plant.

Youth Employment: CityWorks

We are committed to supporting programs that educate, inspire, and prepare the next generation of our workforce for careers that support the critical systems on which we all rely. The [CityWorks Internship Program](#) concluded its eleventh year of providing paid summer internships to students from San Francisco’s Southeast neighborhoods. This program is managed by [Young Community Developers \(YCD\)](#) and sponsored by internship hosts like SFPUC and private engineering firms fulfilling their social impact commitments.

In Summer 2022, 11 interns got to spend nine weeks working with various organizations on projects happening in their community.

While SFPUC was unable to host Cityworks interns this year, a number of our firm partners continued to support YCD and provided opportunities for students to learn about the professional services and training related to SFPUC service delivery and infrastructure upgrades.

CityWorks interns learned valuable on-the-job skills across multiple sectors. To date, over 100 students have participated in the CityWorks Internship Program, 38 interns have graduated college, 31 are currently attending a university, and 18 are currently enrolled in community college.



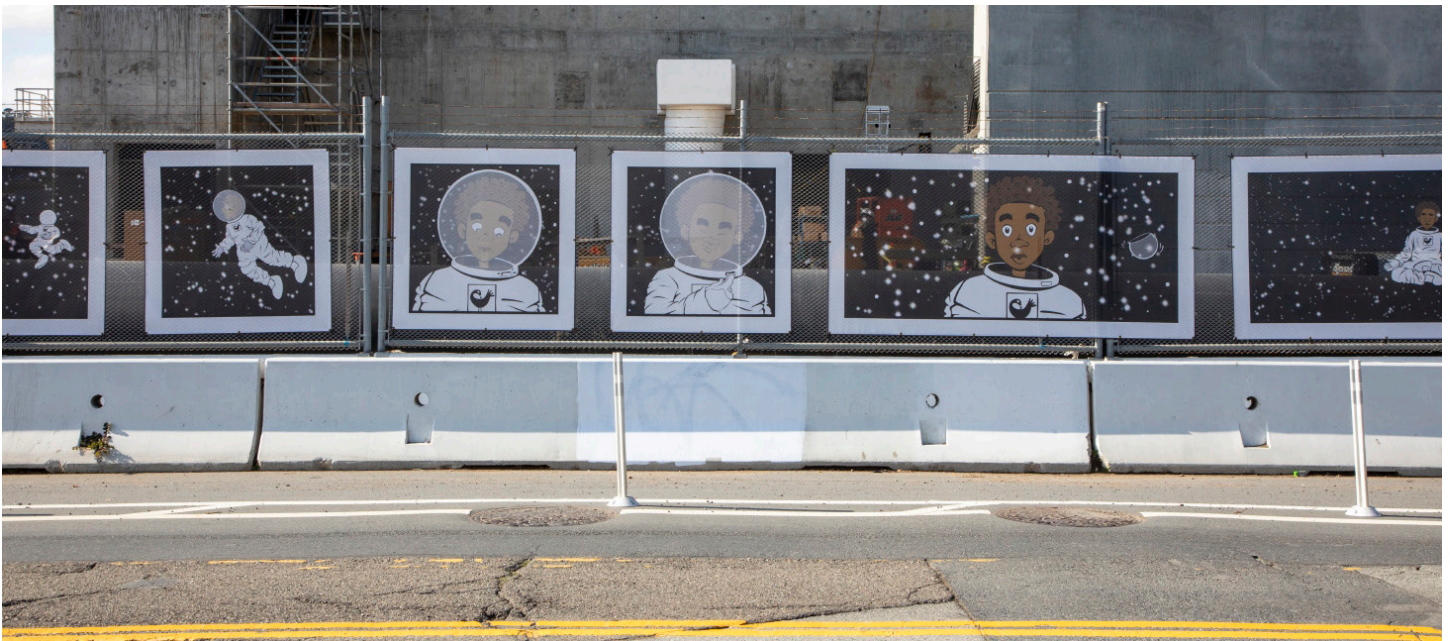
Southeast Projects (Biosolids, Headworks, 1550 Evans Community Center) Tour with representatives from New York DEP.

Fulfilling Our Art Commitments and Beautifying Our Community

As part of our city's Public Art Ordinance, the SFPUC is required to commit two percent of all above-ground infrastructure project costs to support arts enrichment. With a great deal of our SSIP projects taking place in the Bayview, we partnered with the San Francisco Arts Commission (SFAC) to create the Bayview Artist Registry. The registry allows local artists to submit their qualifications for public art opportunities related to a range of upcoming City construction projects in the Bayview, including improvements to the Southeast Treatment Plant and the new Southeast Community Center at 1550 Evans, which celebrated the grand opening in October 2023. As part of our mission to be inclusive of environmental and community interests, we are proud to work with Bayview residents, the SFAC, and artists to ensure that SSIP's public art inspires our community and fosters respect for the environmental resources entrusted to our care.

Small Business Development: Contractors Assistance Center

We remain committed to supporting local and small businesses by providing them with the tools and resources to adequately get ACCESS to, COMPETE for, and PARTICIPATE in upcoming contracting opportunities. The [Contractors Assistance Center](#) helps these businesses build capacity and provides technical/administrative assistance to help make them competitive candidates for contracting opportunities around the City and on capital programs like the SSIP.



Jamari's Journey: Mural Art at Southeast Treatment Plant (SEP) - Jamari's Journey is a temporary mural by Nancy Cato installed along the construction fence adjacent to the Southeast Treatment Plant New Headworks Facility Project site located on Evans Avenue. Using humor, wit, and compassion, Nancy Cato's pen and ink illustrations reflect the Black experience and engage everyday people in serious social conversations. Cato's panelized narrative mural tells the story of Jamari, a young child who is frustrated with the oppressive forces around him - pollution, violence, gentrification, and displacement. To escape these injustices, Jamari creates a portal to the Universe, where he can breathe and find serenity. When called home by his mother, Jamari, who now embodies the Universe, brings this new-found inner peace with him.

Moving Forward

We are excited to see major construction milestones occur in the coming years. As we advance into FY23/24 seven of the eight green infrastructure stormwater management projects will have been completed, and construction of major pump stations will be complete or nearing completion, and the Southeast Treatment Plant improvements will be over the halfway mark.

As all our Wastewater Capital projects continue across our beautiful City, our goal remains the same: Be a good neighbor. We will work with residents to minimize construction impacts and continue to help our community leverage the benefits of project construction work by providing opportunities for local residents and businesses to participate in the investments in their own communities. We are working 24/7/365 to upgrade and modernize our combined sewer system for current and future generations. We look forward to seeing projects the community has helped plan become a reality in the coming years.



Southeast Community Center at 1550 Evans: Community Center's main lobby, Phillip Hua created a three-dimensional photo-collage mural, "Building a Better Bayview", that commemorates the six founders of the Southeast Community Center: Alex Pitcher, Eloise Westbrook, Espanola Jackson, Harold Madison, Ethel Garlington, and Shirley Jones.



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