SAN FRANCISCO PUBLIC UTILITIES COMMISSION

WATER RESOURCES DIVISION ANNUAL REPORT

Fiscal Year 2024-2025

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

Dear Partners and Customers:

The top priority of SFPUC's Water Resources Division is a secure and sustainable water supply for San Francisco and our 2.7 million customers in the Bay Area. To ensure this, our team continues to work with residents, businesses, and partners to introduce new programs, expand outreach efforts, and explore innovative alternative water supplies. We remain committed to leading the way in water efficiency.

In FY 2024-2025, SFPUC's Water Conservation team:

- Rolled out the new **Irrigation Controller Rebate Program**, which offers residential and commercial customers rebates on irrigation controllers that use the soil or weather to improve the efficiency of irrigation systems. When these controllers replace older ones, customers may save more water while maintaining a healthy landscape.

- Created the new **Ultra-High Efficiency Toilet Rebate Program**, which will help customers replace toilets with ultra-high efficiency models that can be up to 37% more efficient than the current California standard, which requires toilets installed after 2014 to have a flush rate of 1.28 gallons.

- Increased the rebate amount for the **Commercial Equipment Retrofit Rebate Program**, which helps businesses cut costs and conserve water by replacing inefficient water-using equipment with efficient upgrades.

INNOVATIVE PARTNERSHIPS

We continue to seek creative approaches to expanding our water supplies, including forming new partnerships. We joined forces with the National Blue Ribbon Commission to launch **BILD (Building Infrastructure Locally for Decentralized Water Systems)**. BILD is a groundbreaking collaborative effort with worldwide water leaders, all focused on one goal: making it easier to implement innovative, local water systems. These "decentralized" systems—like the one in Salesforce Tower—are key to our future because they allow buildings and neighborhoods to capture and reuse their own water, reducing our reliance on traditional water supplies.

Since the earth has the same amount of water now that it did when it was formed, all water has been used over and over again. Recycled water is wastewater that has been cleaned and meets requirements for industrial and irrigation use. In partnership with neighboring utilities, the SFPUC is irrigating Harding Park, Fleming, and Sharp Park Golf Courses with recycled water. When the irrigation system updates are complete, recycled water will be used to water Golden Gate Park, the Panhandle, and Lincoln Park Golf Course. Recycled water will also be delivered to the San Francisco Zoo for future non-potable uses such as irrigation, animal exhibit washdown, and animal pool filling, and irrigation of the Lower Great Highway.

THE NEXT 100 YEARS

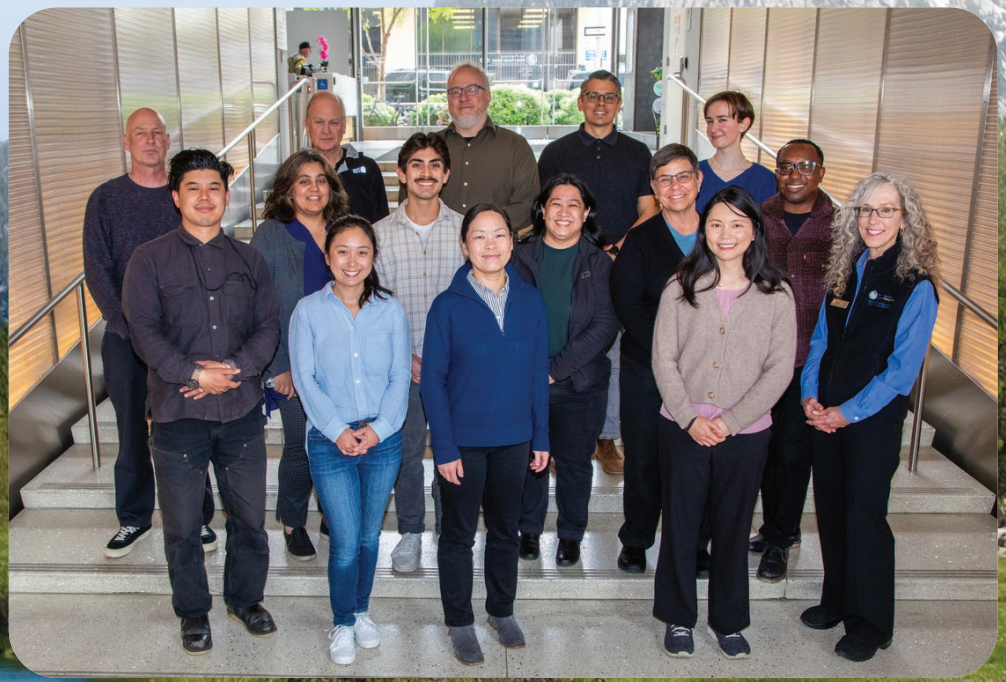
The SFPUC has been a leader in water management for nearly 100 years. Continuing this legacy means looking ahead to prepare for potential challenges our water supply will face. This is why the **Alternative Water Supply Program** is reimagining the sources of water we serve to our customers. The SFPUC is planning a purified water program, PureWaterSF, to further enhance future local water supply resilience within the City. Purified water is drinking water that comes from highly treated recycled water that has gone through additional advanced treatment to meet—and even surpass—drinking water quality standards. Purified water has been used in other parts of the United States and around the world for decades, and testing has shown that purified water is cleaner than most bottled water.

San Francisco's water future is a shared effort. Whether it's choosing a water-efficient appliance or simply remembering to turn off the tap, every action you take makes a difference. We are incredibly grateful for your partnership as we continue to build a sustainable water supply for generations to come.

Thank you,

Paula Kehoe

Paula Kehoe,
Director of Water Resources



Water Resources Team

Contents

WATER RESOURCES DIVISION HIGHLIGHTS

58 Operating Onsite Water Systems

44 MILLION GALLONS Recycled Water Used for Irrigation

9 MILLION GALLONS PER DAY of Additional Dry Year Supplies Being Explored

Water Conservation Program Activity Since 2009

INCENTIVES

194,450 Devices Distributed

57,608 Shower Heads

52,205 Toilets

29,798 Clothes Washers

1,862 Urinals

2,255 Rain Barrels, Cisterns, and Graywater Kits

396 Landscape

10 Commercial Equipment Rebates

WATER-WISE EVALUATIONS

51,472 Evaluations Performed

OUTREACH & EDUCATION

24,160 Conservation Info Line Calls

21,031 Top User Letters

3,509 Waste of Water Alerts

1,528 Presentations & Field Trips

WATER MANAGEMENT TOOLS

112,566 My Account REGISTRATIONS

152,506 LEAK ALERTS

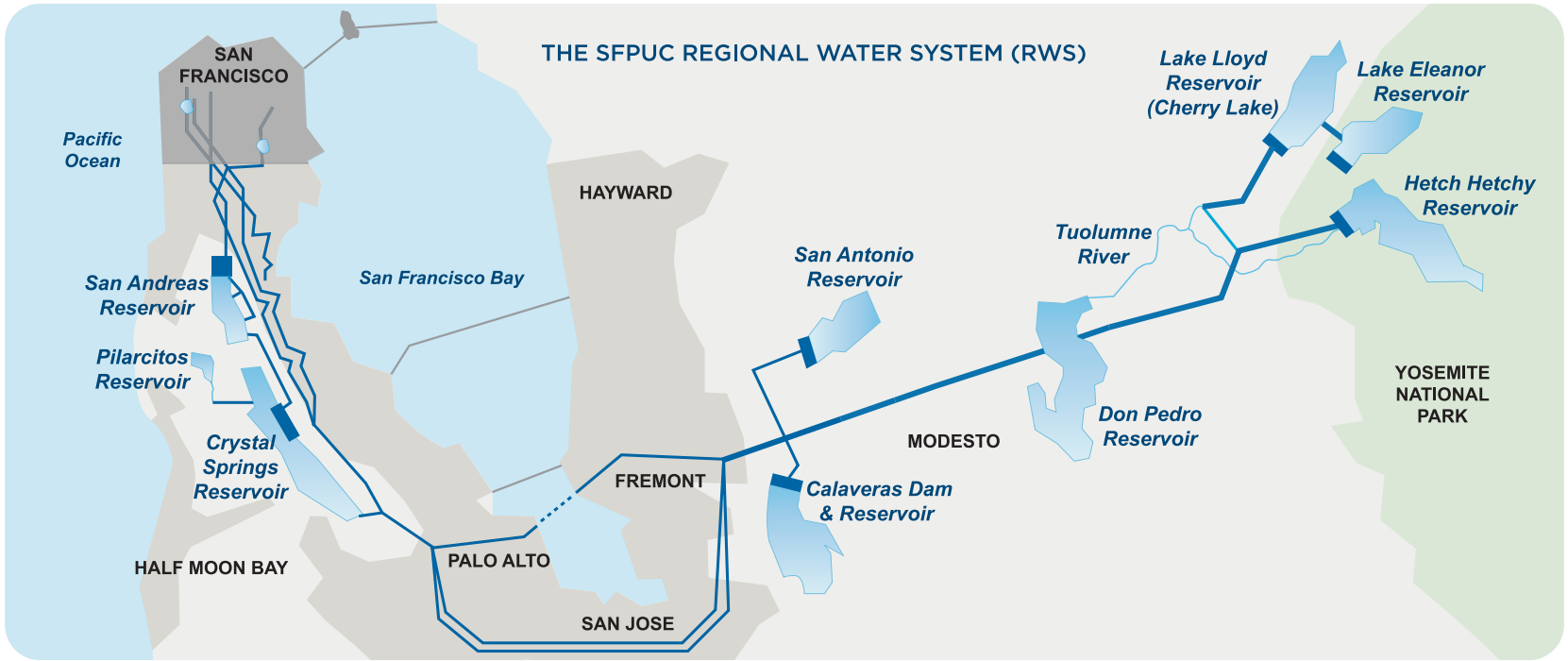
Notes:

- Devices distributed include: aerators, toilet flappers, fill valves, pre-rinse spray valves, nozzles, soil moisture meters
- Tracking of participation in measure started later than 2009 for rain barrels, cisterns, graywater kits, top user letters, waste of water alters, My Account registrations and leak alerts.
- Landscape incentives include: Water Efficient Irrigation Ordinance projects, landscape audits, and community irrigation grants and rebates
- Commercial equipment rebates include: ice machines, industrial dishwashers, and sterilization equipment.
- Conservation info line calls do not include calls to the SFPUC's General Call Center regarding conservation

OUR WATER SOURCES

The SFPUC Regional Water System (RWS) is a public asset that delivers high-quality drinking water to 2.7 million residents and businesses in the Bay Area. The system collects water from the Tuolumne River in the Sierra Nevada, from protected local watersheds in the East Bay and on the Peninsula, and from groundwater stored in a deep aquifer located in San Francisco and San Mateo counties. The SFPUC delivers water to 27 wholesale customers in Alameda, Santa Clara, and San Mateo counties and provides direct retail water service to customers in San Francisco and some customers outside of San Francisco. The Bay Area Water Supply & Conservation Agency (BAWSCA) represents 26 of the wholesale customers and coordinates their water conservation activities.

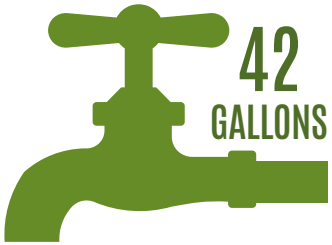
By relying on multiple sources of water supply, we help protect our customers from potential disruptions associated with emergencies such as drought, global climate change, or natural disasters. A diverse mix of water sources also increases our resilience to long-term water vulnerabilities such as global climate change, regulatory changes that reduce the amount of water we can use from creeks and rivers, and population growth. By choosing the right water source for its best use, we are ensuring the reliability of our water supply for today and future generations.



FY 2024-2025 San Francisco Residential Water Use

San Francisco Population

Water Used by San Francisco Residential Customers

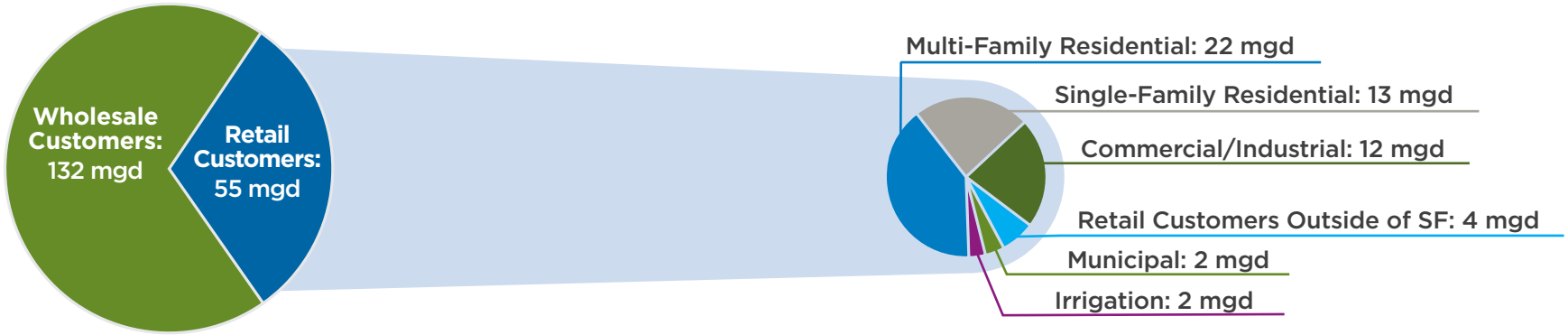


Residential Water Use Per Person, Per Day

FY 2024-2025 Regional Water System Sales and Retail Water Use

Regional Water System Sales

Retail Water Use



Notes:

- San Francisco Population information is from the California Department of Finance, E-5 Population and Housing Estimates For Cities, Counties, and the State, January 2021-2025 with 2020 Benchmark.
- The Retail Water Use data does not reflect water used for pipe flushing, firefighting, street cleaning, and water loss from supply-side main and pipe breaks.
- Irrigation data are from dedicated irrigation accounts only and do not include irrigation use from water accounts that jointly serve both indoor and outdoor demands.

OUR WATER SOURCES
Groundwater Program

The SFPUC's groundwater supply comes from the 40-square-mile Westside Basin, an aquifer extending from Golden Gate Park in San Francisco southward through Millbrae. The depths of production wells installed by the SFPUC range from 270 to 750 feet below ground. The Westside Basin is a vital local drinking water resource for San Francisco and neighboring communities in San Mateo County. Our customers benefit from the storage, reliable yield, and consistent quality of water provided by this local resource.

To support the responsible and sustainable management and protection of the groundwater basin, the SFPUC is committed to groundwater level and quality monitoring as one of its top priorities. Our monitoring network has expanded to 101 wells since the first wells were installed in 1989. We collect data from these wells to assess the quality of the water and how the groundwater basin responds to our operations. This allows us to adapt our groundwater pumping in response to changes in the aquifer so we can sustain this important resource.

SAN FRANCISCO GROUNDWATER SUPPLY PROJECT

The San Francisco Groundwater Supply Project has allowed us to supplement our drinking water sources by blending a small amount of groundwater with water from the Regional Water System since 2017. We will incrementally build up to a maximum of 4 mgd of groundwater production in San Francisco.

Regional Groundwater Storage and Recovery Project at Linear Park located in San Mateo County.

OUR WATER SOURCES
Groundwater Program

REGIONAL GROUNDWATER STORAGE AND RECOVERY PROJECT

The Regional Groundwater Storage and Recovery Project is a partnership among the SFPUC, the California Water Service Company (serving South San Francisco and Colma), the City of Daly City, and the City of San Bruno. This project is a sustainable, conjunctive use project that has storage and recovery components. Conjunctive water management is a strategy for coordinating the use of both surface water and groundwater to maximize the overall availability and reliability of our region's water supply. During storage periods of normal to above-average annual rainfall, the SFPUC provides additional surface water from the Regional Water System to the partner agencies to reduce the amount of groundwater pumped from the southern Westside Groundwater Basin.

Over time, the reduced pumping results in increased groundwater storage of up to 20 billion gallons from ongoing groundwater recharge. The stored groundwater serves as an additional water supply during drought. After the first year of drought, the project may begin a recovery period by withdrawing the stored groundwater. As of June 30, 2025, the SFPUC had accumulated approximately 13.2 billion gallons of groundwater storage credits (about 40,400 acre-feet).

For more than 100 years, the Westside Groundwater Basin, a 40-square-mile underground reservoir that extends from Golden Gate Park in San Francisco to Millbrae, has been a critical source of drinking water for Daly City, South San Francisco, and San Bruno.

WATER CONSERVATION PROGRAM

Rain or shine, we provide a comprehensive water conservation program for residents and businesses in our retail service area. Our program offers a variety of incentives, services, and tools to improve water efficiency and reduce water waste. In addition, the SFPUC has helped develop and implement local requirements that mandate water efficiency.

On the research front, we continued to participate in important national and state-level research studies with the Water Research Foundation (WRF) and California Department of Water Resources. These studies included analyses of residential water use trends. We also completed participation in a WRF study of potential expanded uses of Automated Metering Infrastructure (AMI) data for customer engagement and other utility operations.

In December 2024, we submitted the SFPUC's first annual report in response to new state regulations for "Making Conservation a California Way of Life," which establishes unique water efficiency goals for each urban retail water supplier in California. The SFPUC met all indoor and outdoor water efficiency standards. We also met various performance measures related to non-residential water use, including identifying the business and industry type of customer accounts, as well as identifying and offering assistance programs to the highest water users and to those that irrigate large sites with mixed use meters.

WATER CONSERVATION PROGRAM

FY 2024-2025 HIGHLIGHTS

Conservation

1,292 Water-Wise Evaluations/ Phone Consults

- **391** Single-Family
- **802** Multi-Family
- **80** Non-Residential
- **19** Landscape

1,516 Devices Distributed

- **927** Aerators
- **363** Shower Heads
- **226** Spray nozzles, flappers, fill valves, etc.

1,413 Fixture Rebates & Installations

- **1,207** Toilets
- **194** Clothes Washers
- **12** Hot Water Pumps

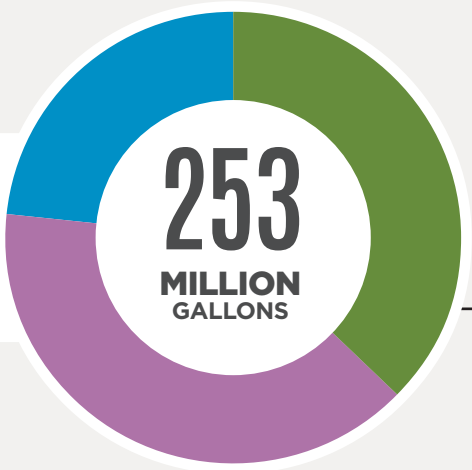
Outreach & Education

- **13,786** Leak Alert Notifications
- **1,438** Conservation Phone Calls
- **107** Water Waste Reports
- **75** Class Presentations and Field Trips

Landscape Programs

- **19** Rain Barrels
- **1** Laundry-to-Landscape

FY 2024-2025 water conservation program activities are estimated to have a potential 30-year water savings of 253 million gallons.



80 Million Gallons — Single-Family
82 Million Gallons — Multi-Family
91 Million Gallons — Non-Residential

Note: Estimated water savings for replacement of 1.6 gallons-per-flush toilets are provisional and will be finalized as part of the SFPUC's 2025 Water Conservation Plan. The final savings estimate for these toilets may cause a slight change in the total estimated conservation program savings for FY 2024-2025.

WATER CONSERVATION PROGRAM

Water-Wise Evaluations

We continue to support customers with their water-saving efforts. This year we conducted 1,292 Water-Wise Evaluations for residential and commercial properties, including restaurants, office buildings, hotels, laundromats, museums, schools, and colleges. Outdoor Water-Wise Evaluations consist of identifying irrigation efficiency improvements and low water-use plant recommendations for customers looking to improve water efficiency and reduce irrigation runoff. Field inspection staff manually run irrigation systems, observe system operations, flag areas needing repairs, reconnect loose drip irrigation fittings, review weekly watering schedules, and show customers their irrigation timer programming features. Landscapes for these evaluations include residential yards, large commercial/municipal landscapes, multi-family buildings with perimeter and rooftop gardens, and homeowner association common areas. Indoor Water-Wise Evaluations help customers identify old plumbing fixtures that qualify for financial replacement incentives and provide free water-efficient plumbing devices, including shower heads, aerators, and toilet leak repair parts.

Free High-Efficiency Plumbing Devices

All retail customers are eligible to receive free plumbing devices. In FY 2024-2025, we provided 1,516 water-efficient shower heads, faucet aerators, garden spray hose nozzles, soil moisture meters, and toilet leak repair parts to help residential and commercial properties achieve immediate water savings.

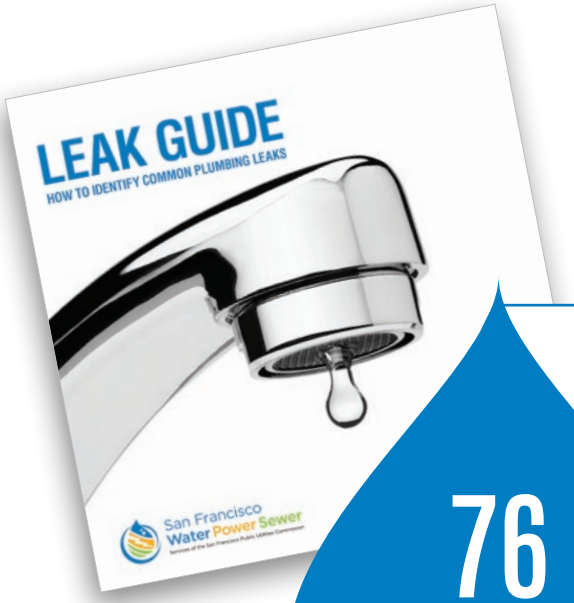
Water-Wise Evaluation

Water-Efficient Garden Spray Hose

WATER CONSERVATION PROGRAM

Leak Alert Program

Our Leak Alert Program helps SFPUC notify single-family, multi-family, irrigation, commercial, and municipal customers when our hourly automated meter data screening detects constant and unusual water use that could indicate a leak. We send alerts by phone, text message, email, letter, and door hangers. This year, we issued 13,786 leak notifications and continued to improve the program by adding customized outreach to customers with the largest leaks in our service area.

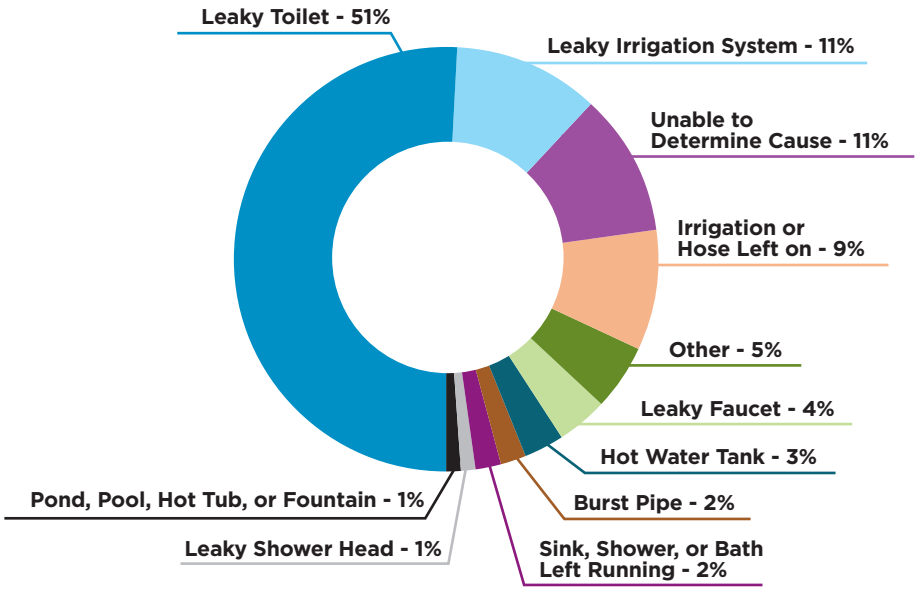


Estimated Leak Alert Program Water Savings in FY 2024-2025

76 Million Gallons

Our customer leak alert surveys provide insight to the types of leaks occurring in San Francisco. Survey results indicate toilets as the leading cause for indoor leaks. Outdoor leaks, including a leaky irrigation system or irrigation/hose left on, account for approximately 20% of responses. The remaining mix of indoor leaks, such as a leaky faucet, hot water tank, or shower head, a burst pipe, and fixtures left running, account for the remainder of the leak types reported. The survey results include the responses of over 5,300 single-family and small multi-family leak alert recipients.

Cause of Leaks Reported by Customers



WATER CONSERVATION PROGRAM

Community Outreach

We value the long-standing partnerships that we have established with the diverse communities we serve. We strive to engage our customers and share important agency updates in a transparent and timely fashion. We use both traditional and innovative outreach channels, including bill inserts, print newsletters, social posts, public hearings, community events, newspaper and radio ads, and educational campaigns.

We provided valuable conservation updates and messaging to over:

120,000 customers

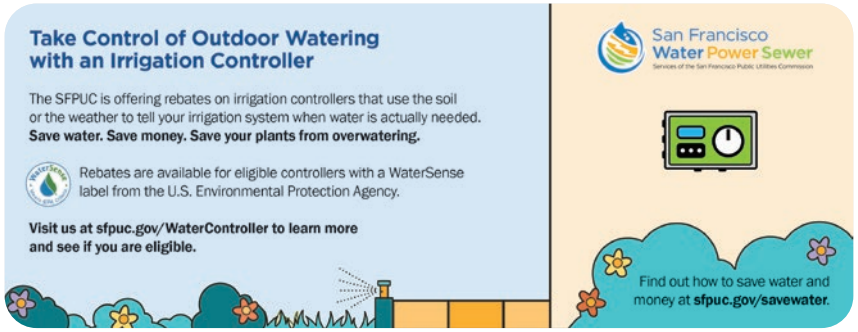
45,000 followers

49,000 subscribers

California legislation titled, "Making Conservation a California Way of Life" requires us to meet annual urban water use efficiency standards for indoor and outdoor water use. While these regulations aren't enforced at the individual business or property level, we always ask our customers to maintain water-efficient practices.

In response to this regulation, we identified the top 20% of commercial, industrial, and institutional (CII) water users in our service area and reported their collective water use to the state. We contacted over 3,000 customers to let them know about the wide range of conservation assistance measures we offer that could help maximize their water efficiency.

Water Conservation staff table events in the community.



Bill inserts help SFPUC customers learn about our programs.

WATER CONSERVATION PROGRAM

Based on a recommendation from the Pacific Institute, we also expanded our residential top user notifications from the top 2% of users to the top 10%. These courtesy notices help customers to understand more about their water use and the services we provide to help them save water and money. This year, we notified over 11,000 single-family and multi-family customers. In response we saw a marked increase in requests for our Water-Wise Evaluations and other services.

A big highlight of our outreach this year was our continued partnership with the San Francisco Giants. The “Pitch in to Save Water” campaign that shared easy, everyday tips to lower water usage, sent a direct email to over 70,000 fans providing them information about how to save water, aired a public service announcement with team mascot Lou Seal before home games, and spotlighted the team’s efforts to save water. Thanks to these efforts and the commitment of our customers, water use in San Francisco remains some of the lowest in the state.

WATER CONSERVATION PROGRAM

Plumbing Fixture Replacement Program

The SFPUC's decades of toilet replacement incentives have encouraged the removal of most high-flow toilets in our service area. To accelerate the replacement of remaining old, water-wasting toilets and urinals, we launched the Plumbing Fixture Replacement Program (PREP) in 2016. In the continued pursuit of more water savings, we updated the program to include replacement of 1.6 gallon flush toilets with even more efficient models. This new incentive opened a much bigger market for water savings in San Francisco.

This year, 1,207 ultra-efficient toilets were installed through PREP, bringing the current program total to over 7,500 efficient toilets and urinals since 2016. After nine successful years, the program closed to new applicants in summer 2025. The SFPUC's new Ultra-High Efficiency Toilet Rebate Program will be available for all eligible customers seeking to install ultra-high efficiency toilets.

NEW! Ultra-High Efficiency Toilet Rebate Program

The SFPUC created the new Ultra-High Efficiency Toilet Rebate Program to continue to help customers replace old toilets. Qualifying residential, commercial, industrial, and institutional customers will be eligible to receive a rebate of up to $200 to replace old 1.6- gallon flush or greater tank type toilets with qualifying ultra-high efficiency models. At 1.1 gallons per flush or less, ultra-high efficiency toilets can be up to 37% more efficient than current California standards.

WATER CONSERVATION PROGRAM

Hot Water Recirculation Pump Rebates

The SFPUC continues to promote the use of hot water recirculation pumps to reduce wait times for hot water to arrive at shower heads and taps, leading to saved water and money. Recirculation pumps pull hot water from a water heater, while simultaneously sending cool water from the hot water lines back to the water heater to be reheated and reused. These pumps are either installed at water heaters or under kitchen or bathroom sinks that have electrical outlets. This year, we rebated 12 hot water recirculation pumps.

Clothes Washer Rebates

The SFPUC provides rebates of $100 per washer for the purchase and installation of qualifying residential ENERGY STAR® efficient clothes washers in our retail service area. To support access to public laundry facilities for San Francisco neighborhoods that rely on them, the SFPUC worked with the Board of Supervisors on a temporary City initiative to support local laundromats. We increased the commercial washer rebate to up to $5,000 per washer for customers installing qualifying high-efficiency, commercial-style clothes washers in laundromats, large multi-family common area laundry rooms, and other commercial facilities. This year, 94 commercial washers and 100 residential washer were rebated. With the budget from the temporary initiative fully expended, SFPUC will now offer up to $1,000 per eligible washer as part of our ongoing core programming, doubling the program's original $500 rebate.

Commercial Equipment Retrofit Rebates

The Commercial Equipment Retrofit Rebate Program provides funding for businesses to replace inefficient water-using equipment with efficient upgrades. After this year's program updates, it now includes metered and unmetered projects, increased rebate amounts, and lowered minimum annual water savings qualification requirements. Businesses can receive rebates for medical equipment, restaurant equipment, commercial laundry retrofits, and custom site-specific equipment retrofits or custom projects.

WATER CONSERVATION PROGRAM

Rainbarrel and Cistern Rebates

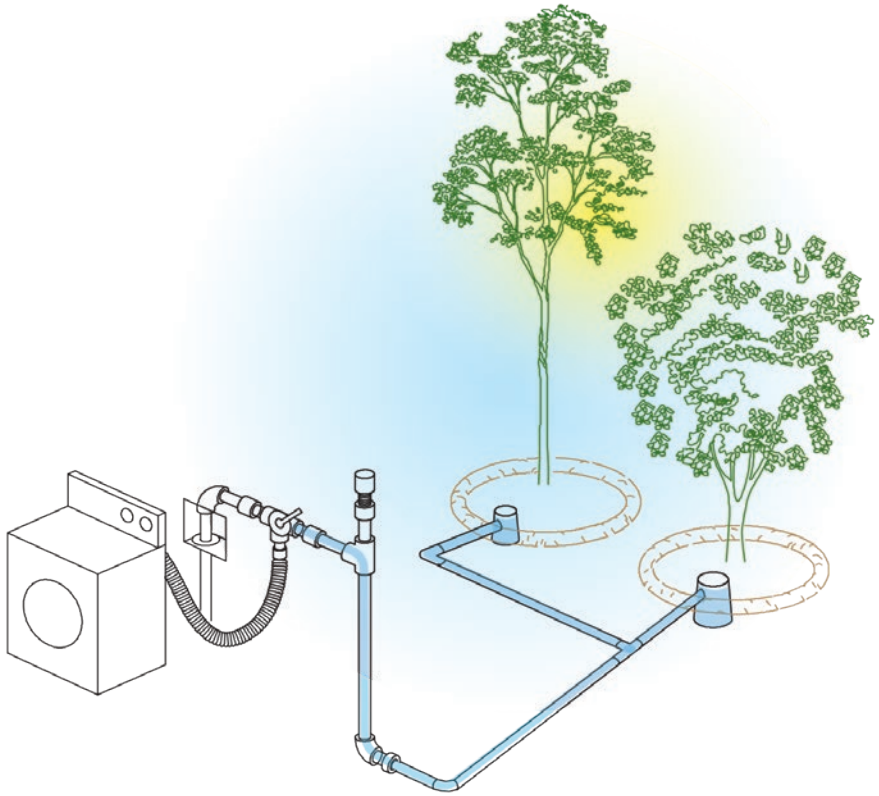
Capturing rainwater at homes and businesses can reduce potable water used for irrigation and reduce flows to the SFPUC's combined sewer system during storm events. Our Rainwater Harvesting Program provides rebates for rain barrels and cisterns. Eligible customers can receive a $100 rebate for up to two rain barrels or a $350 rebate for one cistern. The SFPUC's Rainwater Harvesting Program provided residents and businesses with 19 rain barrels this year.

NEW! Irrigation Controller Rebates

The Irrigation Controller Rebate Program offers residential and commercial customers rebates on irrigation controllers that use the soil or the weather to improve the efficiency of irrigation systems. When these controllers replace older versions, customers may save more water and money while maintaining a healthy landscape. Rebates for residential landscapes start at $250 per eligible U.S. Environmental Protection Agency's WaterSense-labeled controller. Additionally, larger commercial landscapes can receive rebates starting at $35 per active irrigation zone.

Residential Laundry-to-Landscape Rebates

Our Laundry-to-Landscape Rebate Program offers single-family and small multi-family properties a $100 rebate on essential laundry-to-landscape components for installing simple systems that use graywater to provide sub-surface irrigation. The SFPUC continues to provide an extensive "do it yourself" guide to planning, installing, and maintaining simple graywater systems, available on our website.



Laundry-to-Landscape System

WATER CONSERVATION PROGRAM

Large Landscape Grant Program and Community Garden Assistance

The Large Landscape Grant Program helps customers with irrigated landscapes over 10,000 square feet implement irrigation and planting improvements that reduce water use. To date, 14 projects have received funding through this program, representing about 85 acres of land and an estimated water savings of 33 million gallons per year.

The SFPUC also administers San Francisco's Water Efficient Irrigation Ordinance, which requires that landscapes meet water-efficient standards. New landscape projects calculate their annual total water use and ensure it remains below the water budget established by state law. In FY 2024-2025, plans for 20 projects representing close to 135 acres of landscape were submitted for review. Since the ordinance passed in 2009, 355 projects representing over 385 acres have been reviewed and approved for compliance.

The Community Garden Grant Program waives the cost of irrigation meters to help customers better monitor and efficiently manage water use. In FY 2024-2025, we continued to issue monthly informational water use reports to all sites that received irrigation meters through our program.

Florence Fang Community Farm

The College Hill Learning Garden is a public education and demonstration garden owned and operated by the SFPUC.

WATER CONSERVATION PROGRAM

Garden for the Environment

The SFPUC owns the land that is home to Garden for the Environment, San Francisco's demonstration garden. We provide funds for educational programs that promote water-efficient, organic gardening. Located in a dense urban environment at 7th Avenue and Lawton, the garden provides a unique opportunity for San Franciscans to learn through hands-on, skills-based workshops and interpretive learning. The demonstration garden helps residents reduce water use with water-wise gardening, improve water quality through pollution prevention, and reduce toxins through organic gardening and composting. Thousands of people visit the garden every year to attend workshops, volunteer, or simply enjoy the beautiful setting.

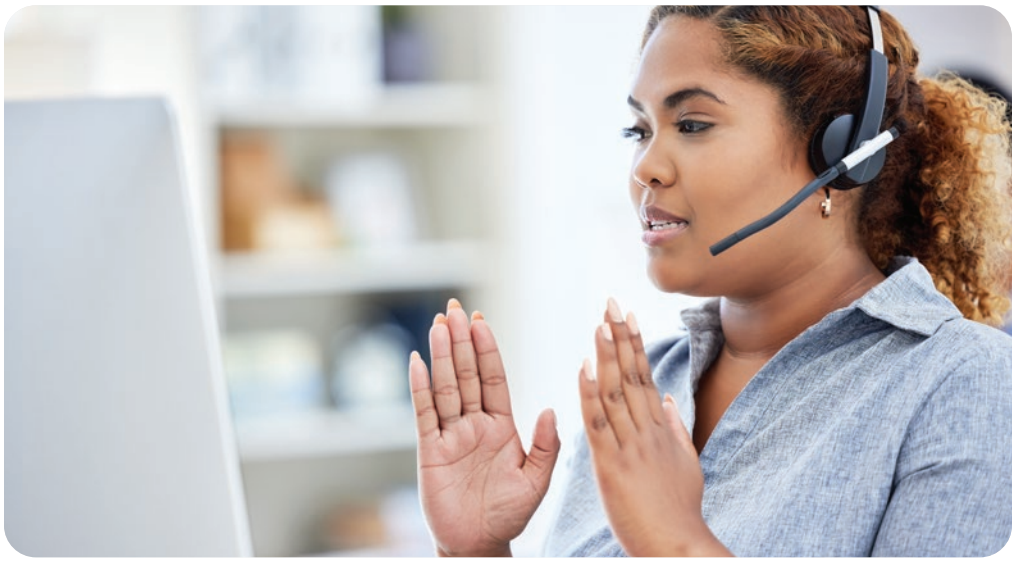
We are also committed to fostering the next generation of environmental stewards through class presentations and field trips. This year, we sponsored 31 field trips to the Garden for the Environment and 44 presentations for San Francisco students, all designed to teach students how they can help protect our natural resources and prevent pollution. In addition to this youth-specific outreach and engagement, thousands of residents have visited the garden as volunteers or for an educational tour.

Garden for the Environment at 7th Avenue and Lawton

Water-Efficient and Organic Gardening

WATER CONSERVATION PROGRAM

My Account Customer Portal



The SFPUC helps residents to avoid wasting water.

My Account Customer Portal

The SFPUC's My Account web portal helps customers easily pay and view their water bills online and see their hourly, daily, weekly, and monthly water use, which can help identify water use patterns and unusual spikes in water use. Since its launch in 2014, registration for My Account has steadily increased. This year, we lowered the SFPUC's aggregate residential per capita goal from 50 gallons per person per day to 45 gallons per person per day. Residential My Account users can track how their water use aligns with this conservation target. Account holders can register at the **My Account webpage**.

Waste of Water Program

The SFPUC enacts and administers restrictions against wasteful outdoor water use practices such as irrigating during a rain event, irrigation that causes runoff, irrigation of non-functional turf on City and commercial properties, and other wasteful activities. Residents can report water waste through San Francisco's 311 system. We work with reported properties to provide guidance, resources, and best practices to improve their water efficiency and reduce water waste. This year, in addition to investigating and responding to 107 reports of water waste, our staff visited sites and helped residents and businesses identify irrigation leaks that can waste thousands of gallons per day.

RECYCLED WATER PROGRAM

Water is too precious a resource to use just once. Using recycled water for non-drinking purposes such as landscape irrigation, toilet flushing, street cleaning, and cooling helps preserve drinking water supplies–especially during droughts. We continue to work with our partners at Harding Park, Fleming, and Sharp Park Golf Courses so that we can provide recycled water for irrigation. In FY 2024-2025 a total of almost 44 million gallons of recycled water was produced by our partners and was used to irrigate Harding Park and Sharp Park Golf Courses.

In San Francisco, construction is almost complete for the Westside Enhanced Water Recycling Project. The project includes a new recycled water treatment facility, storage reservoirs, and pump stations to deliver recycled water. Water produced by this project will be used primarily to irrigate Golden Gate Park, the Panhandle, Lincoln Park Golf Course, and the San Francisco Zoo. Construction has been completed on approximately 8 miles of recycled water pipelines. The irrigation system retrofits are complete at Golden Gate Park, the Panhandle, and Lincoln Park Golf Course with recycled water deliveries expected in 2027. This project will save approximately 2 million gallons of potable water every day.

The SFPUC is currently constructing a new recycled water pipeline from the Westside Recycled Water Treatment Facility to the San Francisco Zoo for future non-potable uses such as irrigation, animal exhibit washdown, and animal pool filling at the Zoo and irrigation of the Lower Great Highway.

The SFPUC published the Rules and Regulations for Users Receiving Recycled Water Service in the City and County of San Francisco (Recycled Water Rules and Regs) in March 2024 as a guide for future users of recycled water. The Recycled Water Rules and Regulations outlines the process for obtaining municipal recycled water service and is applicable for use of recycled water for landscape irrigation and other outdoor non-potable uses.

For more information please visit our **Recycled Water Program webpage**.

San Francisco Zoo Recycled Water Project: Installation of water pipeline on Sloat Boulevard at Skyline Boulevard.

ONSITE WATER REUSE PROGRAM

Led by the efforts of the SFPUC, San Francisco became the first municipality in the country to adopt a groundbreaking program that encourages buildings to collect, treat, and reuse water onsite to meet non-potable demands such as toilet flushing and irrigation. Launched in 2012, San Francisco's Onsite Water Reuse Program established a streamlined process for allowing alternate water sources, such as rainwater, stormwater, foundation drainage, graywater, and blackwater, to be reused in commercial, mixed-use, and residential buildings. In 2015, the Non-potable Water Ordinance began requiring onsite water systems in buildings to treat water for non-potable end uses. Now it is mandatory for new development projects of 100,000 square feet or more to install and operate an onsite non-potable water system.

To date, the SFPUC has received a total of 121 water budget applications, 58 of which are now operating onsite water systems. By 2050, the total potable water offset associated with the Onsite Water Reuse Program will be approximately 1.55 million gallons per day. For more information, visit the **Onsite Water Reuse Program webpage**.

The Exploratorium treats water from the San Francisco Bay for its heating and cooling system and uses rainwater for toilet and urinal flushing. (image coutesy of Fabrice Florin from Mill Valley, USA /CC BY-SA)

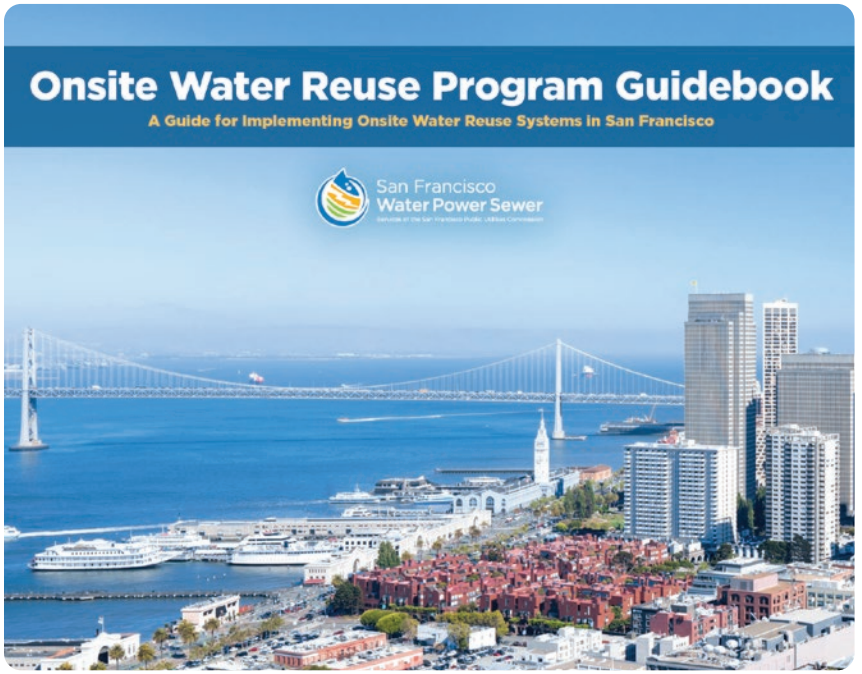
The new San Francisco Permit Center where graywater and rainwater are treated and reused for toilet flushing and irrigation. (image courtesy of SF.gov)

ONSITE WATER REUSE PROGRAM

The SFPUC continues to be at the forefront of innovation in advancing onsite water reuse in North America. As chair of the National Blue Ribbon Commission for Onsite Water Systems, we are leading a national collaborative of municipalities, water utilities, and public health agencies from 15 states, the District of Columbia, the City of Vancouver, the City of Toronto, U.S. Environmental Protection Agency, and U.S. Army Engineers Research and Development Center. The National Blue Ribbon Commission is focused on addressing key institutional and regulatory barriers to widespread adoption of onsite non-potable water systems. Efforts have included developing a risk-based water quality framework for onsite water reuse and establishing model policies for municipalities that support local implementation of onsite water reuse.

Most recently, the SFPUC and the National Blue Ribbon Commission have launched a new initiative called Building Infrastructure Locally for Decentralized Water Systems (BILD) to promote cross-sector coalitions to expand decentralized water systems. BILD was formed as a collaborative global community to discover opportunities, advance implementation, and spread transformative solutions to support the efficient use and reuse of water. BILD is working on a roadmap to advance decentralized water systems that includes key priorities, actionable next steps, and partners to complete actions. The roadmap is anticipated to be completed by early 2026.

For more information, visit the **National Blue Ribbon Commission** and **BILD** webpages.



ONSITE WATER REUSE PROGRAM

Salesforce Blackwater System

Salesforce Tower at 415 Mission Street

Salesforce Tower is a 61-story office building and the second-tallest building in California. Salesforce Tower has a rainwater harvesting system as well as a 30,000 gallon per day blackwater recycling system. Both water reuse systems are used for toilet and urinal flushing water, irrigation of trees on the plaza and landscape on the 5th floor, and cooling tower make-up water. The system is in operation and estimated to save 5.6 million gallons of water annually.


Energy Center San Francisco

Energy Center San Francisco-BART Foundation Drainage Project

Energy Center San Francisco (ECSF) is a district steam heating system operator. It provides steam for heating hot water and provides process steam to hotels and buildings in downtown San Francisco. Driven by their commitment to water use efficiency, ECSF partnered with BART on a project to reclaim foundation drainage at the Powell Street BART station and redirect it to its District Energy Plant, located nearby on Jessie Street, where it could be used in the district "steam loop," the network of underground pipes. ECSF's onsite water treatment system includes a raw water collection tank with a coarse strainer, microfiltration (MF), and closed-circuit reverse osmosis (CCRO). The water also undergoes softening to remove minerals that interfere with the process of steam production. The system is in operation and saves over 30 million gallons of water annually.


SFMOMA Green Wall

San Francisco Museum of Modern Art

The San Francisco Museum of Modern Art (SFMOMA) is a world-renowned modern art museum. The museum's onsite water system captures rainwater and treats it through a 50-micron filtration filter and a 20-micron bag type filter. After treatment, the water is disinfected and distributed for non-potable applications, which includes toilet flushing, make-up water for the cooling towers, and drip irrigation of the gardens and living wall. Overall, the system saves 365,000 gallons of potable water annually.

LOOKING AHEAD

Lake Merced

Lake Merced is made up of four interconnected lakes and provides a vital link for wildlife, particularly migrating birds. The lake also provides a regional recreational venue offering fishing, boating, bicycling, and wildlife viewing. In an emergency, Lake Merced water can also be used for firefighting or sanitation purposes if no other water sources are available. The SFPUC aims to maintain water levels in the lake to support various recreational activities and provide a reliable non-potable water supply for emergencies.

From 1934 to 2015, the Pacific Rod and Gun Club operated skeet and trap shooting facilities at Lake Merced. This resulted in lead shotgun pellets and other debris falling onto the site and into the lake. The SFPUC conducted an initial site remediation to address elevated levels of lead and polyaromatic hydrocarbons in the soil because of historical club activities. San Francisco's Recreation and Parks Department prepared and published the Draft Environmental Impact Report (EIR) in December 2021 to facilitate recreational redevelopment of the site and the Final EIR was certified in February 2023.

The SFPUC completed design for demolition and final remediation onsite and went out to bid in summer 2024. Demolition and final site remediation was completed in April 2025. The Recreation and Parks Department will implement an open bid solicitation to facilitate site redevelopment which is currently envisioned to include a recreational facility and a wide variety of outdoor recreational activities, such as picnic areas, playgrounds, boat docks, a ropes course, a skateboarding park, birdwatching benches, basketball, and multipurpose sports courts.

The four interconnected lakes at Lake Merced offer ample opportunity for regional recreation and help to recharge the groundwater basin.

LOOKING AHEAD

Alternative Water Supply Program

The Alternative Water Supply Program aims to identify and evaluate new water supply projects that can be implemented to supplement the Regional Water System through prolonged droughts when our surface water supplies are most vulnerable. Alternative water supply options could include expanding storage, groundwater banking, water transfers, purified water, and desalination. In addition to helping make our water supply deliveries more resilient in the face of climate change and regulatory change, expanding our water supplies helps the SFPUC diversify and develop more local sources to face other emergencies too.

Developing alternative water supplies often involves partnering with other water and wastewater utilities. It also involves different forms of treatment and different permitting than our Regional Water System supplies. We evaluate each project on the basis of technical, institutional, and financial feasibility. In FY 2024-2025, a number of projects being evaluated reached key milestones in their feasibility analyses. As a result, there have been changes to the projects identified in the 2024 Alternative Water Supply Plan. Three projects have been deferred (Daly City Recycled Water Expansion, ACWD-USD Purified Water, and Calaveras Reservoir Expansion) and one project has been canceled (Los Vaqueros Reservoir Expansion). The South Bay Purified Water Project is undergoing changes. The projects below are currently being developed through the program.

PUREWATER PENINSULA

The SFPUC is currently planning a purified water project that could provide 6 million gallons of water supply per day through reservoir augmentation at Crystal Springs Reservoir. Treated wastewater from Silicon Valley Clean Water would flow through a new advanced water treatment plant to produce purified water that meets stringent State of California requirements. The purified water would then be blended with regional surface water supplies before passing through the Harry Tracy Water Treatment Plant and being distributed. A subsequent phase of the project is contemplated and could produce another 6 mgd in partnership with the City of San Mateo and other water utilities providing more regional benefits in the future.

Our Partnership Team with Silicon Valley Clean Water

LOOKING AHEAD
Alternative Water Supply Program continued

SOUTH BAY PURIFIED WATER

This project could provide drought-proof water supply in the region. The SFPUC completed a feasibility study in partnership with San Jose and Santa Clara in 2023 and found it to be technically feasible. Currently, the cities of San Jose and Santa Clara are working with Valley Water to evaluate additional water supply benefits through a broader partnership. This project could provide a source of supply to support the future needs of San Jose and Santa Clara, as well as dry year benefits for the broader region, including SFPUC customers.

PUREWATERSF

In addition to the two regional projects that provide water supply benefits to all SFPUC customers, the SFPUC is also planning a purified water program–PureWaterSF–that will further enhance local water supply resilience within the City. The PureWaterSF program is evaluating two new drinking water treatment plants on the east and west sides of the City, as well as public-facing demonstration and operator training facilities. Planning for the PureWaterSF program is currently underway.

SFPUC-BAWSCA toured the Silicon Valley Advanced Water Purification Center in San Jose with Valley Water staff.

LOOKING AHEAD

Water Resources Innovation Program

Innovation propels us to lead the world in transforming how we deliver water resources to proactively meet challenges in an ever-changing environment.

In 2016, OneWaterSF formalized a new way of thinking at the SFPUC, adopting a truly innovative approach to making the most of our limited resources. The term “one water” is an integrated planning and implementation approach to managing finite water resources for long-term resiliency and reliability, meeting both community and ecosystem needs.

The OneWaterSF approach encourages working across traditional silos to create additional benefits and efficiencies. We define resources broadly to include water, energy, financial, human, community partnerships, and natural resources. Our focus has been on a cultural shift in our approach to resource management that embraces collaboration, innovation, and technology.

A solar-powered panel is capable of harvesting 4 to 5 liters of water per day from the air at the Hummingbird Farm Community Garden.

For the Water Resources Division, adopting this holistic OneWaterSF approach is at the heart of how we view water resources management for the future. Onsite Water Reuse and Alternative Water Supply are examples of how the Division is addressing some of the regulatory and climate uncertainty effects on water demands and supplies. Examples of other challenges we face are related to resource availability and affordability. Through our Innovations Program, the Water Resources Division is encouraging a culture of creativity and collaboration. Initiatives from the Innovations Program include piloting atmospheric water generation technology, providing grants for heat recovery in non-potable systems, and offering guidance for breweries treating process water for reuse.

LOOKING AHEAD

Water Resources Innovation Program

The Water Resources Innovations Program promotes exploration of new ways we can conserve and reuse water, recover resources, and diversify our water supply. We are evaluating emergent technologies such as single-family graywater systems, recirculating clothes washers, and recirculating showers as additional opportunities for water savings. The Program facilitates testing of forward-thinking ideas, technologies, and research to help meet San Francisco's long-term water needs and ensuring that there is a path toward successful implementation.

WE ARE LOOKING FOR INNOVATION PARTNERS!

Share your ideas with us. We are focused on the following ideas and projects:

NEW TECHNOLOGIES & PILOT TESTING

Energy efficient treatment for water reuse applications

Cost-effective sensors and monitoring for water reuse applications

Commercially available water efficient technologies at municipal and decentralized scales

RESEARCH PARTNERSHIPS & PROGRAMS

Distribution system effects of blending conventional and alternative supplies

Strategies for water use efficiency and water reuse

Brine management

Intermittent reverse osmosis (RO) use

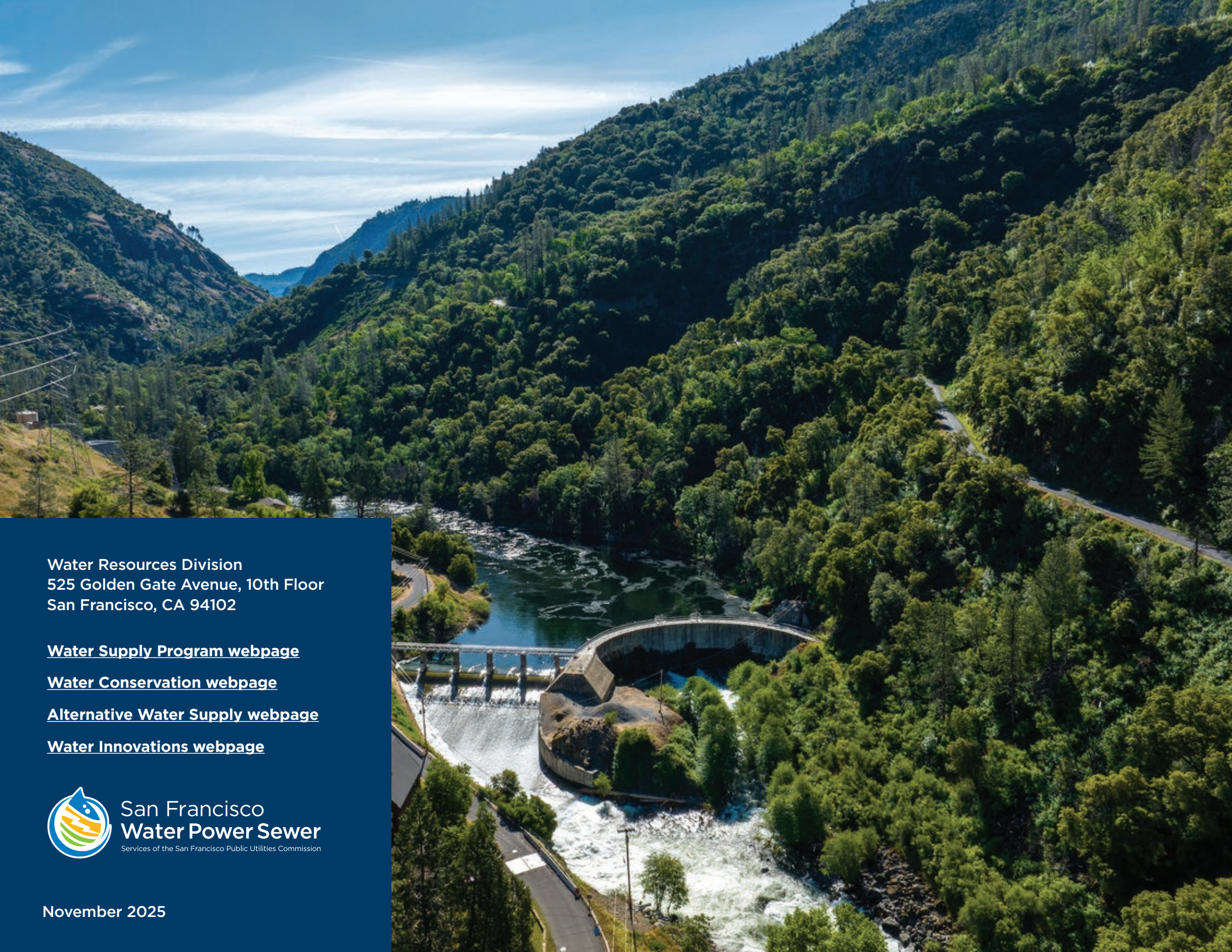
FIND OUT MORE

Visit our **Innovations webpage** to learn more about of focus areas, projects, and opportunities for partnerships.

CONNECT WITH US!

Stay informed about our latest programs and project updates as well as ways to save water and money.
Follow us on social media or subscribe to our agency newsletter.

San Francisco Water Power Sewer (@MySFPUC)



Water Resources Division
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Water Supply Program webpage

Water Conservation webpage

Alternative Water Supply webpage

Water Innovations webpage

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

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