August 2024

FAQ OVERVIEW

WESTSIDE ENHANCED WATER RECYCLING PROJECT

PROJECT OVERVIEW

What is the Westside Enhanced Water Recycling Project?

The Westside Enhanced Water Recycling Project will produce a recycled water supply for non-potable uses on the west side of San Francisco and is an important element of the San Francisco Public Utilities Commission's (SFPUC) local water resource management planning effort.

The project includes the construction of a new recycled water treatment facility located within the limits of the SFPUC's Oceanside Wastewater Treatment Plant; almost 8 miles of new recycled water pipelines built mostly in city streets, to convey the recycled water from the new treatment facility to irrigated areas; an 840,000 gallon underground reservoir; and an above-ground recycled water pump station in Golden Gate Park which will pump recycled water up to Lincoln Park Golf Course.

The Westside Enhanced Water Recycling Project allows us to diversify our water sources. The SFPUC's current local water management approaches include conservation, recycled water, groundwater, and onsite water reuse. To further enhance the sustainability of the City's drinking water supply and meet the its long-term needs, the SFPUC is continuing to explore ways to diversify our sources of water through water transfers, water reuse for drinking (purified water), and desalination. Potential investment in alternative water supplies can help ensure that San Francisco's water supply is less vulnerable to risks of disruption, such as regulatory changes, climate change, earthquakes, drought, and maintenance activities.

What is recycled water?

Recycled water is highly-treated wastewater that has undergone multiple levels of treatment. Recycled water is safe and suitable for many non-drinking uses. In San Francisco, recycled water is used to irrigate Harding and Fleming Golf Courses in partnership with the City of Daly City. In other areas within California and across the U.S., recycled water is being used for applications such as irrigating parks, playgrounds, soccer fields, and golf courses. Recycled water is also used for used for toilet flushing, water features, cooling, dust control, and industrial processing.

How much recycled water will be available through the Project?

Starting in 2026, the project will provide 1.6 million gallons per day (mgd), on average per year, to meet current identified demands in Golden Gate Park and the Panhandle. The project is designed to deliver up to 2 mgd, on an average annual basis, and a peak demand at any given time of 4 mgd.

When will recycled water be delivered to Golden Gate Park and the Panhandle?

Recycled water deliveries are scheduled to begin at the end of 2026.

San Francisco Water Power Sewer
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RECYCLED WATER QUALITY

How will recycled water be produced at the Westside Enhanced Water Recycling Plant?

The SFPUC's Oceanside Plant treats residential wastewater from the western part of San Francisco. That wastewater goes through several treatment processes to produce "secondary effluent," which is then discharged into the Pacific Ocean. The new recycled water treatment facility that will be located at the plant, will take a portion of this secondary effluent flow prior to its discharge, and treat it further with membrane filtration and reverse osmosis. The recycled water will then be disinfected with ultraviolet (UV) light prior to being delivered to municipal customers for non-drinking water purposes. This treatment technology will produce "enhanced" recycled water.

What is the difference between recycled water and "enhanced" recycled water?

This project is different than a typical recycled water project because it will utilize the additional treatment step of reverse osmosis to produce recycled water at a quality that will exceed California's stringent recycled water standards.

Why are you using reverse osmosis?

The primary use of the recycled water will be for irrigation and lake-fill in Golden Gate Park. This high level of water quality is necessary to meet water quality needs for sensitive plant species and lake refilling. Reverse osmosis is the best available technology to remove both salts and nutrients/ammonia from water. To minimize impacts of salts (sodium, chloride) on park vegetation, and the impact of nutrients (nitrogen, phosphorus) and ammonia on park lakes, this higher level of treatment will be used.

How is the quality of recycled water monitored?

Recycled water quality will be monitored very closely and at various steps throughout its production. The treatment process itself includes water quality monitoring before and after membrane filtration for turbidity (a measure of solids in the water). The treatment process also includes online, continuous monitoring of the integrity of each system (membrane filters, reverse osmosis, and UV light systems); any indication of a potential malfunction will shut down the treatment system and halt distribution. In compliance with the state's recycled water regulations, daily samples will also be collected at the end of the treatment process (after disinfection) and tested for total coliform bacteria and turbidity.

RECYCLED WATER QUALITY (continued)

What agencies oversee recycled water production and use?

The State Water Resources Control Board and the San Francisco Regional Water Quality Control Board have adopted strict public health and safety requirements and guidelines for recycled water production and use in California. These agencies oversee the design and operation of recycled water systems, sets the standards for the levels of treatment and water quality monitoring requirements, as well as regulating the types of uses and proper applications of recycled water. In addition, the local San Francisco Department of Public Health in conjunction with the SFPUC, is responsible for cross-connection inspections and making sure that the potable water and recycled water systems are kept completely separate. SFPUC is permitted by these agencies to operate, produce, and use the recycled water.

Is there any danger to pets that may come into contact with the recycled water?

There is no danger to pets or wildlife. Recycled water is highly treated to meet stringent quality and safety standards set by the state of California. The additional treatment step of reverse osmosis provides the highest quality of recycled water possible.

PROJECT INFRASTRUCTURE AND IMPACTS TO RECREATION AND PARKS

Where in Golden Gate Park is the new reservoir and pump station?

The new facilities are located at San Francisco Recreation and Park Department's (SFRPD) Central Pump Station site, near Transverse and JFK Drives. This is the site of SFRPD's existing irrigation pump station and reservoir and is also the site of their composting and chipping operation. The site is already considered a "maintenance yard" area, and is not open to the public, so there will be no loss of recreational space. The new facilities are built adjacent to the existing reservoir and pump station, which will be converted to be used for storing and pumping recycled water for park use.

Is there a backup irrigation supply for Golden Gate Park if delivery of recycled water is disrupted? (e.g., planned or unplanned maintenance)

Yes, the primary backup irrigation supply is groundwater from the Central Pump Station well.

What impact will the Project have on park operations, traffic, and parking?

We anticipate no impact on traffic or parking. The change to recycled water use will require some changes to the operation of the park irrigation system. Some park walkways may be temporarily closed during active daytime irrigation, particularly in those areas where sprinklers may "overspray" these paths. Section gardeners will put up A-frames with signs indicating the temporary closure. Park patrons will need to cross the street and use the walkway on the other side.

Will the park's irrigation systems be modified to use recycled water?

Yes – most of the changes include simple replacement of irrigation components (sprinkler heads, valve box covers, etc.) with purple-colored versions to indicate the use of recycled water. For areas currently served by potable water, additional plumbing changes will be required to connect those areas to the recycled water pipeline "loop." Signs will be placed throughout the park to indicate recycled water use.

Why are signs up in Golden Gate Park and Panhandle already?

The Westside Enhanced Water Recycling Project is complex and contained multiple contracts and contractors. The contractor in charge of modifications to the irrigation system, is also responsible for the installation of the regulatory signage, and their contract expires before the delivery of recycled water to Golden Gate Park and Lincoln Park Golf Course. Therefore, the signs were placed months prior to the actual delivery of recycled water to the Parks.

How are you diversifying San Francisco's water supply portfolio?

The SFPUC is committed to diversifying its water supply portfolio through developing local water supplies by:

- Creating a water-efficient San Francisco by promoting water use efficiency, and reducing wasteful consumption in homes and businesses, through our Water Conservation Program.
- Irrigating San Francisco's large parks and golf courses with recycled water through our Recycled Water Program.
- Reusing water in buildings by requiring new developments to collect and treat water onsite for toilet flushing and irrigation in lieu of using drinking water, through our Onsite Water Recycling Program.
- Maximizing local water sources by blending groundwater with surface water supplies through our Groundwater Program.
- Encouraging homeowners to irrigate their landscape using rainwater and graywater through our Residential Programs.

To learn more about the Westside Enhanced Water Recycling Project and our Local Water Program, please visit sfwater.org/recycledwater.