

June 2022

# Westside Enhanced Water Recycling Project

## **Summary**

The San Francisco Public Utilities Commission, SFPUC, works to make the most of our precious drinking water resources in wet years and dry. An important part of our ongoing program is to save drinking water for drinking, and find other sources of water for non-drinking purposes such as irrigation and flushing toilets. The Westside Enhanced Water Recycling Project, located at our Oceanside Wastewater Treatment Plant, will produce high quality recycled water to irrigate Golden Gate Park and the Panhandle, and eventually Lincoln Park.

The SFPUC constructed a new recycled water treatment facility within our Oceanside Wastewater Treatment Plant, an above ground pump station, and almost 8 miles of pipeline to deliver that water from the treatment facility to irrigated areas The treatment facility will produce an average of 1.6 million gallons of highly-treated recycled water a day to irrigate Golden Gate Park and eventually Lincoln Park.

The groundwater wells that previously irrigated the park will be connected to our existing drinking water system and provide enough drinking water to serve 47,000 San Franciscans.

The SFPUC serves water from multiple sources. By relying on multiple sources of water supply, we help protect our customers from potential disruptions in water supply from emergencies or natural disasters. A diverse mix of water sources also helps us be more resilient 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. This project is particularly important now that we are in the third year of a prolonged drought

#### **Questions and Answers**

#### 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 California and across the U.S., recycled water is being used for applications such as irrigating parks, playgrounds, soccer fields, golf courses and other landscaping, as well as wildlife habitat. It is also used for toilet flushing, water features, cooling, dust control, industrial processing, as well as other uses.

The recycled water from this project includes important treatment steps including membrane filtration, reverse osmosis, and disinfection. This produces recycled water at a quality that will exceed California's stringent recycled water standards.

#### Where does this water come from?

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 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.

# How much recycled water will be available through the Project?

The project is designed to deliver up to 2 million gallons of water a day, on an average annual basis, and a peak demand at any given time of 4 million gallons of water a day.

# 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.

## 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.

# Why build it now?

Our water supplies are vulnerable over the long term. Issues out of our control will have a direct impact on our ability to continue to meet the needs of our customers. These include global climate change, population growth, and regulations that will reduce the amount of water we can use from some of our current sources.

As good stewards of the resources in our care, we must find new sources of supply. Finding new sources of water is incredibly complicated here in the Bay Area and takes decades to plan and design.

## When will recycled water be delivered?

Recycled water deliveries are scheduled to begin in fall 2022.

#### Why are signs up in the Park already?

The Westside Enhanced Water Recycling Project is complex and contained multiple contracts and contractors to bring to fruition. The contractor in charge of modifications to the irrigation system, are 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. Therefore, the signs were placed months prior to the actual delivery of recycled water to the Parks.

#### How are you making the most of our water supplies?

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 advanced treated recycled water through our Recycled Water Program.
- Reusing water in buildings by collecting and treating water onsite for toilet flushing in lieu of using drinking water, through our Non-potable Water Program.
- Maximizing local water sources by blending groundwater with surface water supplies through our Groundwater Program.

Learn more at sfpuc.org

