Completing our Water Cycle, Securing our Future

#### What is Pure Water San Diego?

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What are the steps to purify recycled water?

The water purification process include five steps: ozonation, biological activate carbon filters, membrane filtration, re osmosis, and ultraviolet light with advoxidation. The water purification process in constantly monitored to make sure water meets water quality standards.

How was it determined that purifying recycled water is sa Pure Water San Diego is the City of San Diego's phased, multi-year program that will provide nearly half of San Diego's water supply locally by the end of 2035. The Pure Water Program will use proven water purification technology to clean recycled water to produce safe, highquality drinking water. The Program offers a cost-effective investment for San Diego's

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## purifying recycled water is safe?

Pure Water is as pure and safe as the water you drink now. It goes through a stateof-the-art, five-step treatment process that starts with water that has already been cleaned three times - known as "recycled water." This water is purified so that all potentially harmful substances are taken out of the product water. More than 50,000 tests have been performed to date on the purified water at the San Diego Pure Water Demonstration Facility with outstanding water purification results. Like the rest of our water, Pure Water is subject to stringent regulations for quality.

#### What other places have implemented water purification projects?

There are several similar operating projects, including the Groundwater Replenishment System in Orange County, which has operated since January 2008 and uses nearly the exact same technology to purify its water. There are several other potable water facilities in the United States as well as internationally.



### When will the water be part of the drinking water supply?

By 2035, the City will produce 83 million gallons of purified water daily, which is nearly half of San Diego's water supply needs. At full build out, the purified water will be distributed to all communities in the City of San Diego.

#### Where are the Pure Water facilities being built?

The new advanced treatment facility for Phase 1 of Pure Water San Diego is being built across the street from the North City Water Reclamation Facility in the University City area, and the pipelines that will take the water to Miramar Reservoir go along Miramar Road and through parts of Mira Mesa and Scripps Ranch.

#### What's the schedule for the Pure Water Program?

Phase 1 of the Pure Water Program will begin producing purified water in 2025, starting with purified water production of approximately 7.5 million gallons per day (mgd) and then ramping up to 30 mgd once the Morena Pump Station comes on line (likely a year after the launch of operations). We expect Phase 1 to conduct start-up testing efforts in 2025, and distribution of the water to begin thereafter. Phase 2 is set to produce an additional 53 mgd of new purified water by the end of 2035. All in all, the Pure Water program will provide a year-round supply with an annual average of 93,000 acre-feet per year. An acre-foot is a measurement that equates to filling one acre with one foot of water.

#### How much will the program cost?

The Pure Water Program is a forward-thinking, cost-effective investment for the City of San Diego that will help ensure a local, sustainable water supply for generations to come. Phase 1 of Pure Water will cost approximately \$1.5 billion for planning, design and construction. The operations and maintenance costs for Phase 1 are projected to be a little less than \$60 million per year. Phase 2 costs are currently being prepared.

### How will Pure Water San Diego be funded?

The City has received and continues to apply for grants and low-interest loans from both the federal and state governments, which will accrue direct savings to ratepayers. Grants do not have to be repaid, but loans must be repaid over time. To fund the Phase 1 projects, the City has been diligent in pursuing and securing as much federal and state funding as possible. To date, the City has received low-interest loans totaling \$733.50 million from the Federal government and \$664 million from the State of California, as well as \$81.5 million in grants. The costs for Pure Water Phase 1 were included in recent water and wastewater cost of service studies conducted by the City of San Diego, and are then factored into water and wastewater rates.

# How will Pure Water San Diego impact my water and wastewater rates?

We anticipate rates will increase at a slower rate because of this project compared to the cost of water without this project. The cost of the project will be spread across the entire ratepayer base that includes both residents and businesses. You will always get a notice in advance of any proposed increase in water and wastewater rates – no matter the reason why rates are being raised – and rate changes adhere to the California Proposition 218 process for public utility rate-setting.

# How does the cost of water purification compare with other sources?

Costs associated with our traditional sources of imported water increase annually and are reflected in your water bill. Imported water costs have more than tripled since 2000 and are projected to continue to rise in the future. Having local water supply sources will continue to be vital to protect our economy and quality of life in San Diego. Within the next 10 to 15 years, the City expects that the cost of purified water will be comparable to or less than imported sources. This new, local, drought-proof water supply is very cost competitive with other new supplies such as ocean desalination and will be available year-round.

### How else will the Pure Water program benefit San Diego?

The City of San Diego operates the Point Loma Wastewater Treatment Plant (PLWTP), which currently processes the wastewater generated by 2.5 million people from the City of San Diego and 15 adjacent cities. The PLWTP began operation in 1963 and is located on a constrained 40-acre site on a bluff facing the Pacific Ocean. Upgrading this facility from its current advanced primary treatment level to the federal standard secondary treatment level would be logistically challenging and exceedingly expensive due to its difficult location. In an effort to find an alternative to the expensive and environmentally impactful upgrades to the PLWTP, a coalition of City leaders, environmental organizations, business groups and residents pursued the idea of potable reuse for San Diego, which ultimately became Pure Water San Diego. The City has been able to work with the Federal Government on proposed modifications to the Clean Water Act by agreeing to advance Pure Water San Diego, which significantly curtails future wastewater flows to the PLWTP. Ultimately, Pure Water San Diego will significantly reduce treated discharges into the Pacific Ocean, in addition being a local water supply source for San Diego.

Local **residents**, community **groups**, environmental **organizations** and local **businesses** support the **Pure Water** Program.

Do you support Pure Water? Like us, follow us:











#### Want to Know More?

Visit <u>purewatersd.org</u> for more information on the Pure Water Program and the individual projects that make it possible.

