## PUREWOTER SOUTHERN CALIFORNIA

OUR WATER | OUR FUTURE



## A New, Sustainable Source of Water for Southern California



THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



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Water is too precious to use just once. That's why The Metropolitan Water District of Southern California is partnering with the Los Angeles County Sanitation Districts on Pure Water Southern California, a regional water recycling program that would purify and reuse cleaned wastewater that currently flows into the ocean. At full scale, Pure Water Southern California would produce 150 million gallons of purified water each day.

By delivering a new, climate-resilient supply of locally available water, Pure Water Southern California would benefit the 19 million people living within Metropolitan's service area. It also would become one of the world's largest water recycling programs.

# Pure Water Southern California in Numbers



Would produce up to **150 million** gallons per day, enough water to meet the annual needs of about 500,000 homes



A new source of drought-resilient water that benefits **19 million people** 



Nearly **\$100 million** in grant and partnership funds secured



More than **15 program partners** and hundreds of program supporters



One of the largest recycling programs of its kind in the world

#### SETTING THE STANDARD

## **Commitment to Water Quality**

Metropolitan and the Sanitation Districts are committed to delivering high-quality water that protects public health. At the program's demonstration plant, the Grace F. Napolitano Pure Water Southern California Innovation Center, the agencies are studying a unique purification process that could increase efficiency in water recycling and improve water quality. The center features a three-step process that removes pharmaceuticals, pesticides, viruses, bacteria and other particles to produce highly purified water that meets or exceeds all water quality standards.



#### **STAGE 1**

#### Membrane Bioreactors

Microorganisms remove and transform nitrogen compounds, while membranes filter out tiny particles smaller than 1/100 of a grain of sand.

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#### STAGE 2

Reverse Osmosis

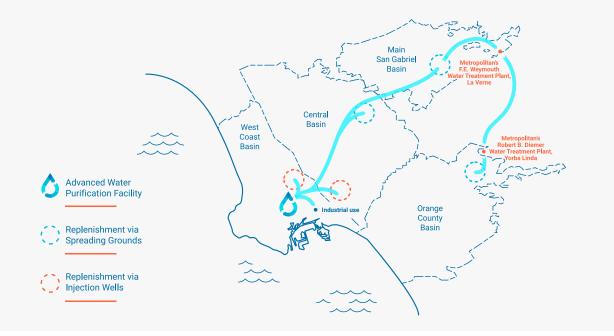
Pressurized membranes further remove microscopic materials, such as bacteria, pharmaceuticals and salts. Reverse osmosis eliminates more than 99% of all impurities. **STAGE 3** 

#### Ultraviolet Light/ Advanced Oxidation

Ultraviolet light and a powerful oxidant destroy any remaining viruses and remove trace chemical compounds.



Water quality test results from the Napolitano Innovation Center facility demonstrate an effective purification process that could set a new standard in water reuse.



#### BUILDING RELIABILITY

### Investments in Infrastructure

Pure Water Southern California would include construction of new infrastructure along with the use of existing facilities to deliver a reliable and sustainable water supply for future generations.

#### A Schedule for Implementation

Pure Water Southern California is currently in the environmental planning and review phase. Metropolitan and the Sanitation Districts are preparing an Environmental Impact Report for review and potential certification by Metropolitan's board.

If approved by Metropolitan's board, program construction could begin in 2026, with start-up and operations beginning in 2032.

The program would be developed in phases. The first phase would produce 115 million gallons of purified water daily. Second phase operations would begin a few years later and take the program to its full capacity of 150 million gallons per day.

TO LEARN MORE



The program benefits would go beyond water supply by fueling job creation and the local economy. A 2021 study, conducted by the Los Angeles Economic Development Corporation, found that the construction of Pure Water Southern California facilities could create **47,000** new jobs and **\$8.7 billion** in economic output. Metropolitan is exploring workforce development opportunities to support local hiring and provide necessary job training.

#### Partnerships at Work

Developing a regional program the scale of Pure Water Southern California requires partners. In addition to the Sanitation Districts, partners include several Metropolitan member agencies, local groundwater basin managers and water agencies in Nevada and Arizona that are interested in water exchanges to enhance water reliability across the southwestern U.S.

#### INFRASTRUCTURE INVESTMENTS MAY INCLUDE:

- A new advanced water purification facility to purify water. Other buildings for maintenance, warehouse, storage, training, community outreach meetings and educational tours may also be onsite.
- Up to 60 miles of new pipeline, pump stations and other facilities to deliver purified water to groundwater basins and water treatment plants.
- Upgrades at groundwater replenishment facilities across Los Angeles County, including construction of new wells.



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### LEARN MORE

You can register for a virtual or in-person tour of the Grace F. Napolitano Pure Water Southern California Innovation Center, conducted in English and Spanish.

TO LEARN MORE www.mwdh2o.com/purewater

BE INFORMED, BE INVOLVED www.mwdh2o.com



The Metropolitan Water District of Southern California is a state-established cooperative of 26 member agencies – cities and public water agencies that serve 19 million people in six counties. Metropolitan imports water from the Colorado River through the Colorado River Aqueduct, which it owns and operates; from Northern California via participation in the State Water Project; and from exchanges and transfer arrangements. An increasing percentage of Southern California's water supply comes through conservation and local supplies such as recycled water and recovered groundwater.

The Los Angeles County Sanitation Districts are a regional public agency consisting of 24 independent special districts serving over 5.6 million people in 78 cities and the unincorporated territory within Los Angeles County. The Sanitation Districts protect public health and the environment through innovative and cost-effective wastewater and solid waste management and, in doing so, convert waste into resources such as recycled water, energy and recycled materials. The Sanitation Districts operate 11 wastewater treatment plants. The A.K. Warren Water Resource Facility in Carson is the largest of these plants and one of the largest in the country.



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