

West Basin Municipal Water District Recycled Water Program



The West Basin recycled water program helps ensure water supply reliability throughout the region by producing a locally-controlled, sustainable source of water.

Introduction

In response to severe drought in the 1980s and early 1990s, West Basin began developing a local, sustainable water supply. This new source of water would increase regional water reliability by utilizing an environmentally friendly alternative to imported water.

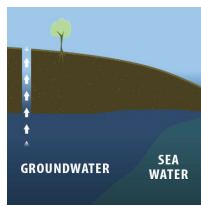
Today, West Basin receives treated wastewater via the District's pump station at the Hyperion Water Reclamation Plant in Playa Del Rey. The District then treats the source water for reuse, producing up to 40 million gallons of recycled water daily for a diverse set of customers and purposes.

Where is Recycled Water Used?

The following end users are the primary recipients of the total supply of recycled water.



Refineries
62%



Seawater Barrier
24%



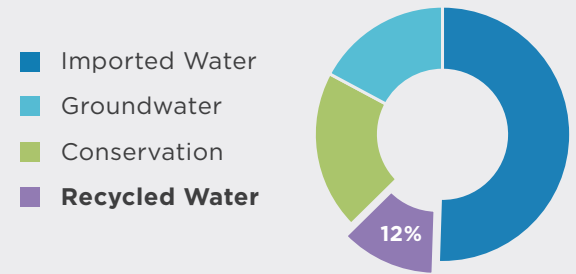
Irrigation & Other
14%

Building Resiliency

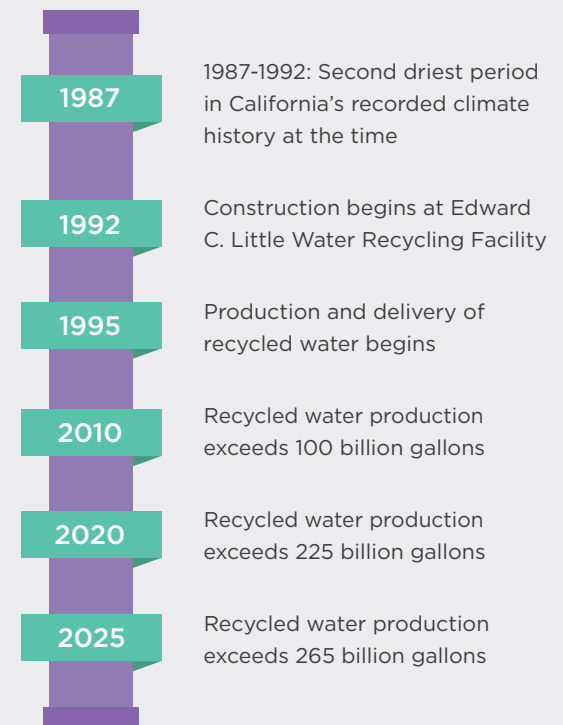
To confront climate change impacts to our water supply and build resilience, West Basin is partnering with regional water suppliers to expand water reuse in Los Angeles County.

Water Supply Portfolio

Recycled water provides nearly 12% of the District's portfolio, with additional infrastructure being added each year. Data is based on the 2020 Urban Water Management Plan.



West Basin Recycled Water History

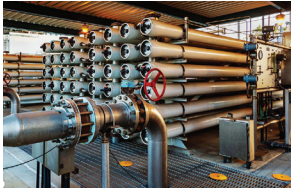


Benefits of Recycled Water

- Local, reliable, drought-proof source
- Supports important industries and economies
- Uses significantly less energy than imported water
- Improves ocean water quality by reducing local sewer water discharges
- Less costly than imported water and most other water sources
- Conserves drinking water for other uses

Recycled Water Treatment Facilities

West Basin operates four coordinated treatment facilities to provide recycled water.



Edward C. Little Water Recycling Facility

El Segundo, CA
30-40 MGD



Chevron Nitrification Plant

El Segundo, CA
<1 MGD



Juanita Millender-McDonald Carson Regional Water Recycling Plant

Carson, CA
3-4 MGD



Torrance Refinery Water Recycling Plant

Torrance, CA
6 MGD

MGD = Million Gallons Per Day

Five Types of Recycled Water

The District produces and delivers five types of customer-specific recycled water.



Irrigation Water

Tertiary treated water filtered and disinfected for industrial and irrigation use.



Cooling Tower Water

Ammonia removed for industrial cooling tower use.



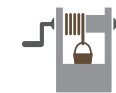
Low-Pressure Boiler Feed Water

Membrane filtration and reverse osmosis treatment.



High-Pressure Boiler Feed Water

Membrane filtration and two passes through reverse osmosis membranes.

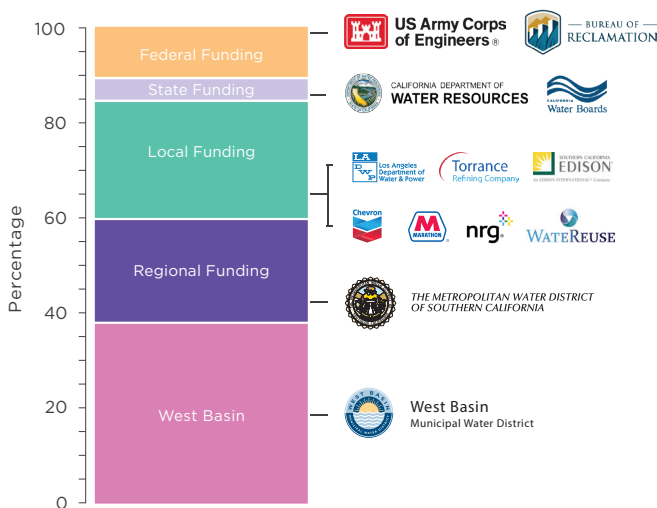


Groundwater Replenishment Water

Membrane filtration, reverse osmosis membrane treatment and disinfection for groundwater replenishment and as a barrier against seawater intrusion.

Investments in Recycled Water

More than \$800 million has been invested in West Basin's recycled water program by the following partners:



Recycled Water Customers

The District maintains approximately 100 miles of recycled water pipeline with more than 500 connections, including:



Recycled water is also used at many local schools, parks and golf courses!