



WEST BASIN CELEBRATES THE COMPLETION OF ITS CUSTOM ENGINEERED MEMBRANE FILTRATION SYSTEM AT THE JUANITA MILLENDER-MCDONALD CARSON REGIONAL WATER RECYCLING PLANT

CARSON, Calif. – West Basin Municipal Water District (West Basin or District) has made a significant investment in leading-edge infrastructure and recycled water treatment technology through the completion of the Juanita Millender-McDonald Carson Regional Water Recycling Plant (JMMCRWRP) Phase II Expansion Project. The substantial upgrades involved construction of a new Custom-Engineered Membrane Filtration (CEMF) system which significantly increases the low-pressure boiler feed supply capacity and reinforces West Basin’s commitment to water innovation and resource management.

The newly installed CEMF system is an open platform microfiltration system that can accommodate up to six different membranes in the treatment skids and is able to process nearly six million gallons of recycled water per day, marking a milestone in the District’s water recycling ingenuity. The CEMF system will allow West Basin to obtain cost-competitive pricing to replace the membranes as needed, rather than being limited to replacement membranes from only the original equipment manufacturer. This expansion project significantly increases the plant’s capacity while improving the system maintenance and reliability of recycled water deliveries to Marathon Petroleum’s Los Angeles Refinery in Carson for its cooling towers and boiler system.

“The upgrades to the JMMCRWRP were made possible through the collaboration and investments between West Basin, Marathon Petroleum, the State Water Resources Control Board and Cal Water,” said West Basin Board President and Division II Director Gloria Gray. “The completion of this project exemplifies the power of commercial, industrial and institutional partnerships in addressing the need to utilize recycled water in every capacity possible to conserve potable water in California and contributing to environmental stewardship.”

The State Water Board helped bring the project to fruition with \$15.7 million in assistance from the Clean Water State Revolving Fund and a \$8 million grant from voter-approved Proposition 1.

“West Basin’s innovative infrastructure project will produce a reliable water source supporting the local economy and move California closer to producing 800,000 acre-feet of recycled water by 2030, a goal of Governor Newsom’s Water Supply Strategy,” said State Water Board Member Nichole Morgan. “Recycled water is critical to mitigating climate change impacts and it will help make up for the anticipated loss of 10% of the state’s water supplies by 2040 due to hotter, drier conditions.”

The design allows for more efficient cleaning and restoration of membrane permeability, ultimately enhancing the system’s overall performance through improved system maintenance, water quality, and operational efficiency. The increased capacity to meet the rising demand for recycled water eliminates the need to use potable water for non-potable purposes.

“As Mayor of Carson, I’m proud of the progress we’re making with West Basin’s Phase II Expansion Project at the Juanita Millender-McDonald Carson Regional Water Recycling Plant,” said Mayor Lula Davis-Holmes. “This initiative underscores our commitment to sustainability by maximizing recycled water usage and reducing our reliance on imported water. The Custom Engineered Microfiltration system not only enhances our capacity but also ensures reliable water delivery to Marathon Petroleum’s Refinery here in Carson. This project exemplifies our dedication to water resiliency and sets a benchmark for the industry.”

West Basin was recognized for this project at multiple water industry conventions in 2023, including a Poster Session at the WaterReuse Symposium. This recognition highlights the impactful investment in this new technology and reinforces the District's leadership and dedication to sustainable water management.

The JMMCRWRP Phase II Expansion Project aligns with the District's broader sustainability efforts, ensuring that recycled water continues to play a pivotal role in the region's water portfolio. By reducing reliance on imported water and minimizing the use of potable water for industrial purposes, this project further solidifies West Basin's role as a leader in water resource management to advance treatment technologies and infrastructure projects that support the growing demand for sustainable water resources.

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West Basin Municipal Water District (West Basin) is a wholesale water agency that serves nearly one million people in 17 cities and unincorporated areas in Los Angeles County. West Basin provides imported drinking water, recycled water, and conservation and education programs. Through its Water for Tomorrow Program, West Basin is committed to protecting, diversifying, and securing our water supply for the future while continuing a history of innovation and industry leadership. Visit www.westbasin.org to learn more.