

INNOVATIVE INDIRECT POTABLE REUSE TREATMENT TRAIN

UPPER SAN GABRIEL VALLEY MUNICIPAL WATER DISTRICT



OZONATION PROCESS CLOSE UP

This project was funded in part through Metropolitan’s Foundational Actions Funding Program. The study report is available on mwdh2o.com/AboutYourWater/FAFprogram.

Maximizing Recycled Water and Minimizing Blending Requirements

PILOT-TESTED OZONATION, BIOFILTRATION, AND SOIL AQUIFER TREATMENT (SAT)

Total Organic Carbon (TOC) standards limit the percentage of recycled water that can be used for groundwater recharge. Minimizing the TOC content in recycled water through optimization of ozonation, biofiltration and SAT will increase the proportion of recycled water for recharge.

WATER TOMORROW
Foundational Actions Funding Program



ISSUES ADDRESSING

Indirect potable reuse blend requirements



POTENTIAL REGIONAL BENEFITS

Increase recycled water recharge while reducing blending water requirements and treatment costs

1

GOAL

Define limits of TOC reduction achievable by a treatment train of ozonation, biofiltration, and SAT while identifying other water quality operational factors important to full-scale implementation

2

FINDINGS

Demonstrated the feasibility of an indirect potable reuse treatment train and developed basic design criteria for this process; results could be applied to other treatment facilities

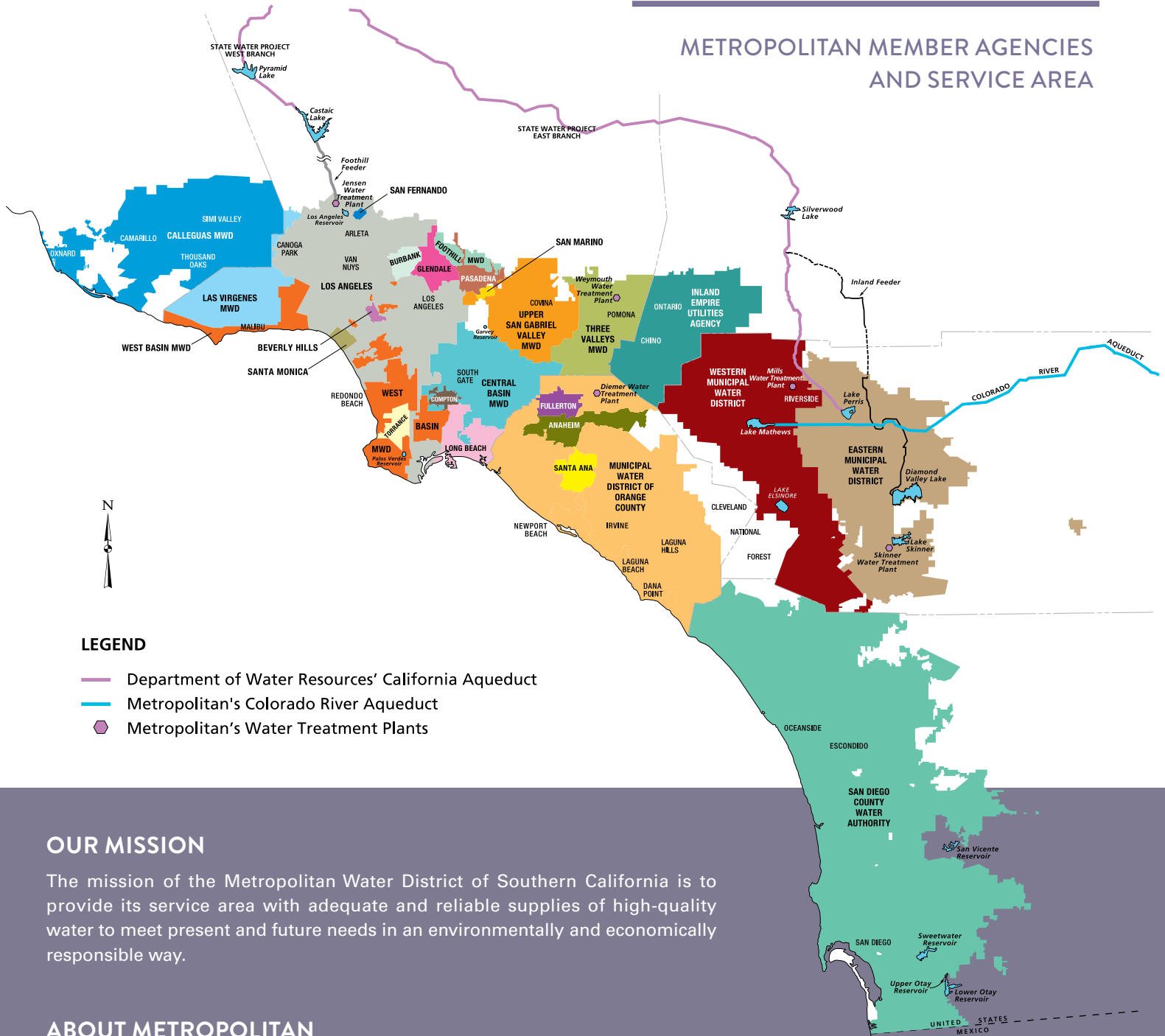
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NEXT STEPS

Perform cost-benefit analysis and pilot testing at other facilities to confirm and further optimize performance

Reducing Barriers to Future Water Resource Production

Metropolitan’s Integrated Water Resources Plan was developed as a blueprint for water supply reliability for Southern California. To implement this plan and address future water supply uncertainties, Metropolitan’s Board of Directors approved a pilot funding program for technical studies and pilot projects that reduce barriers to future production of groundwater, recycled water, seawater desalination and stormwater. The request for proposals to Metropolitan’s Member Agencies resulted in agreements for 13 projects totaling approximately \$3 million in funding. These projects evaluated new water treatment technologies, developed data to inform regulations, studied options for infrastructure innovation and identified future resource potential.



OUR MISSION

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

ABOUT METROPOLITAN

The Metropolitan Water District of Southern California is a state-established cooperative of 26 member agencies – cities and public water agencies – that serve nearly 19 million people in six counties. Metropolitan imports water from the Colorado River and Northern California to supplement local supplies and helps its members develop increased water conservation, recycling, storage and other resource management programs.

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