

PILOT-SCALE BIOLOGICAL TREATMENT PROCESS

INLAND EMPIRE UTILITIES AGENCY



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

Biologically-Tailored Two-Stage Treatment Approach (BIOTTTA)

EVALUATING BIOLOGICAL TREATMENT OF ORGANIC AND NITRATE GROUNDWATER CONTAMINATION

Installed a pilot-scale BIOTTTA unit at two sites, which showed effective removal of nitrates and volatile organic compounds using indigenous bacteria that converts contaminants to innocuous by-products.

1

GOAL

Test effectiveness of a biological treatment system to remove groundwater contaminants

2

FINDINGS

Effective removal of contaminants with harmless by-products

3

NEXT STEPS

Receive regulatory approval; gather data from full-scale facilities; test removal of hexavalent chromium

WATER TOMORROW
Foundational Actions Funding Program



ISSUES ADDRESSING

Contaminated groundwater



POTENTIAL REGIONAL BENEFITS

Improve technology, lower cost groundwater treatment and increase future groundwater availability



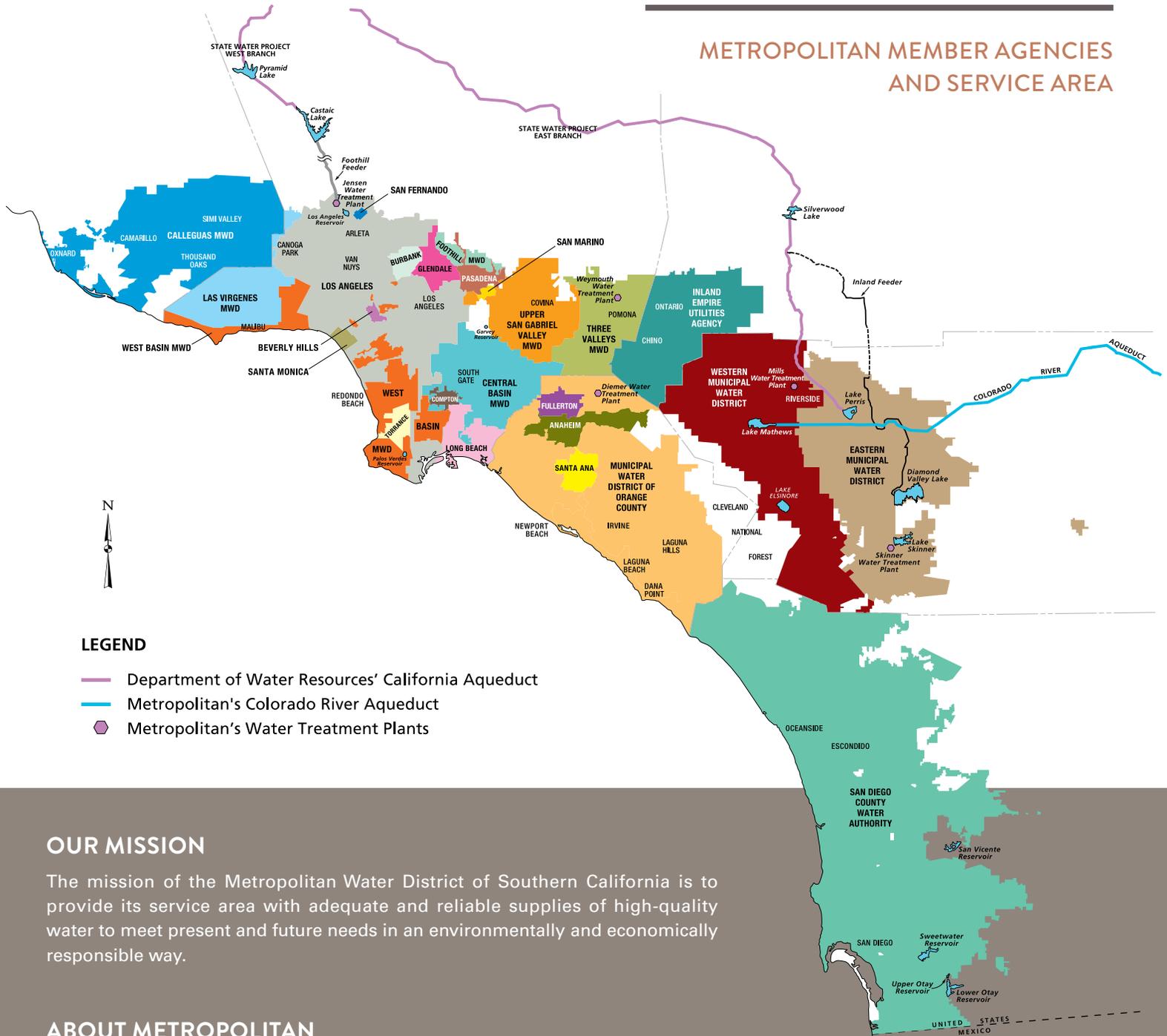
PROJECT PARTNERS

Western Municipal Water District
Chino Basin Desalter Authority
Cucamonga Valley Water District

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.

METROPOLITAN MEMBER AGENCIES AND SERVICE AREA



LEGEND

-  Department of Water Resources' California Aqueduct
-  Metropolitan's Colorado River Aqueduct
-  Metropolitan's Water Treatment Plants

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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