

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Leadership Today. Water Tomorrow.

2023

One  Water



> Metropolitan Leads

Metropolitan's proud legacy and forward-looking leadership has for decades helped Southern California meet tomorrow's water challenges.

- » Metropolitan was established in 1928 to provide a reliable water supply to a growing Southern California and tasked with building and operating the Colorado River Aqueduct. Today, Metropolitan continues to meet this challenge in the face of extraordinary regional growth, drought cycles and climate change.
- » The post-World War II boom prompted a huge expansion of Metropolitan's service area as new cities sought additional water supplies. In the 1960s and '70s, Metropolitan worked with other public water agencies and the state to build the State Water Project, including the California Aqueduct, to deliver water from Northern California.
- » Today, Metropolitan is working to ensure future water supply reliability for Southern California using a One Water approach, which explores all parts of the water cycle as potential sources and considers both community and ecosystem needs in planning and decision making.
- » Water from the State Water Project and the Colorado River continue to be impacted by drought cycles and a changing climate, Metropolitan is working to maintain the reliability of its imported supplies through investments in infrastructure and the development of an innovative mix of exchange, transfer and storage agreements.
- » Metropolitan also is making huge investments in sustainable, climate-resilient local supplies — including developing what will be one of the largest water recycling programs in the world — to reduce the region's reliance on imported supplies.
- » Metropolitan has employed an aggressive agenda to reduce its carbon footprint, strengthen its resiliency to climate change, and continue its leadership in environmental sustainability.
- » As part of its commitment to improving communities across the region, Metropolitan has approved a Project Labor Agreement for the majority of its construction projects, which will provide quality jobs and expand opportunities through apprenticeship and training programs.
- » Metropolitan's foundation for future success is anchored by its commitment to the integration of smart water management for infrastructure, inclusion of all voices to create a shared water future, and innovation that fosters creative solutions to the challenges ahead.
- » Metropolitan has prioritized fostering and supporting a diverse and inclusive workplace by ensuring greater access, opportunity, empowerment and advancement for all employees.



Metropolitan's service
area is home to:

1 of 2 Californians and

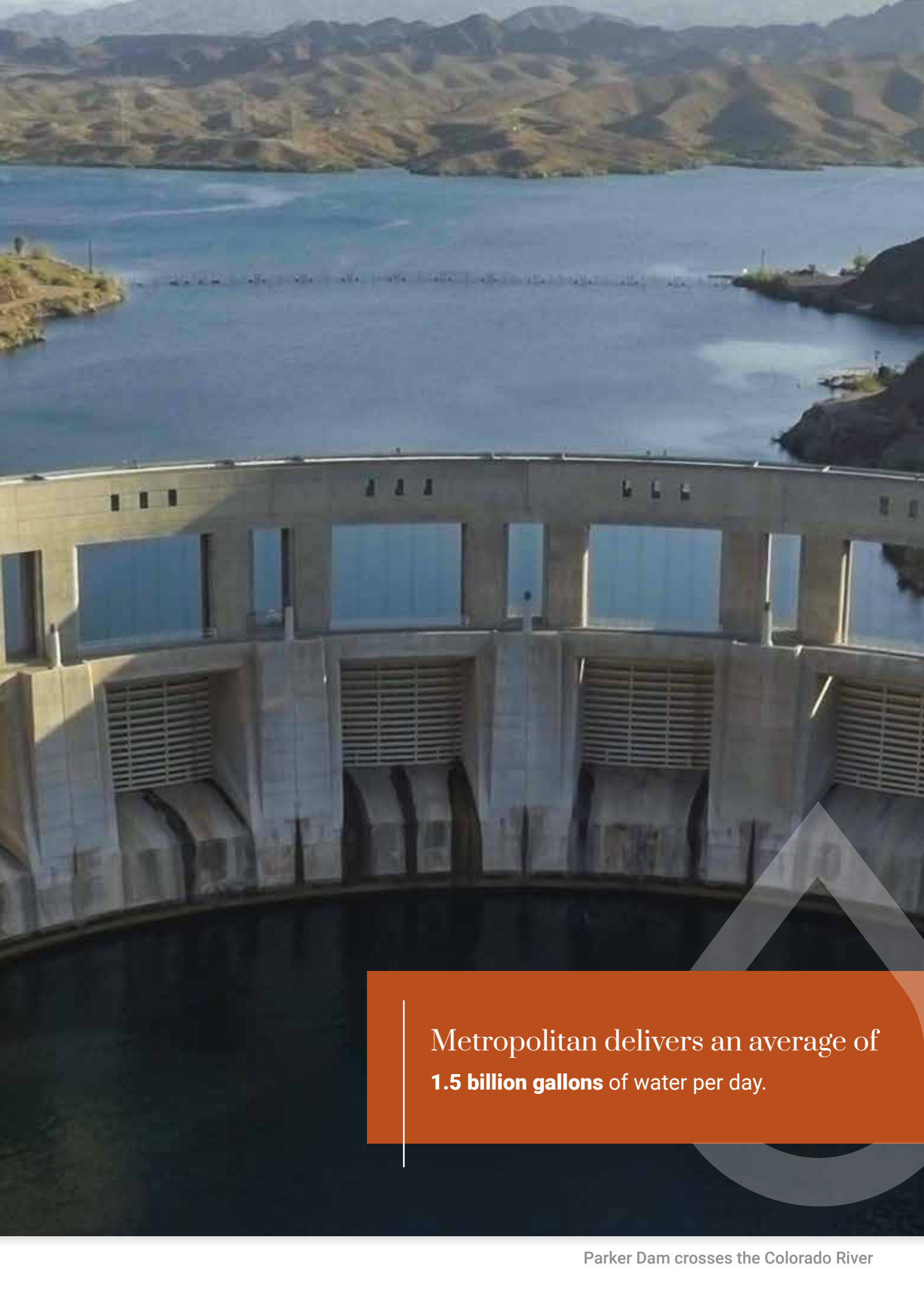
1 of 17 Americans



Metropolitan Delivers

Metropolitan built, operates and maintains a water supply system that is the cornerstone of the region's \$1.6 trillion economy.

- » As the largest supplier of treated water in the country, Metropolitan delivers water to 26 member agencies that serve 19 million people across Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties. Metropolitan is grounded through wise investments, innovative thinking and leadership from its 38-member board.
- » Metropolitan owns and operates an extensive water system that includes three major reservoirs, six smaller reservoirs, 830 miles of large-scale pipelines, about 400 connections to member agencies, 16 hydroelectric facilities and five water treatment plants.
- » Metropolitan's water supplies come from two main sources. The State Water Project delivers, on average, about 30 percent of the region's water from Northern California through the California Aqueduct, and Metropolitan's Colorado River Aqueduct delivers about 25 percent of the region's water supply from the Colorado River through a 242-mile system of canals, tunnels and siphons. The balance of Southern California's supply comes from local resources.
- » Metropolitan and its member agencies are increasingly investing in local resources, including groundwater recharge and cleanup, stormwater capture, desalting projects and water recycling. Growing investments in conservation programs also help reduce water demands.
- » Metropolitan supports the state of California's plan to modernize the State Water Project's delivery system in the Sacramento-San Joaquin Delta by upgrading the system with improved conveyance that can more reliably capture and move supplies. Metropolitan also supports water quality and habitat improvements along with projects to address sea level rise and better protect supplies from anticipated seismic and flood risks.
- » Metropolitan's five-year average use of Colorado River water had dropped by one-third in the past 25 years thanks to water efficiency, and new partnerships with the agricultural community that benefit both urban areas and farmers. But faced with a dire situation from long-term drought, Metropolitan is working with other states and water agencies in the Colorado River Basin to further reduce demands and restore reliability.



Metropolitan delivers an average of
1.5 billion gallons of water per day.

Parker Dam crosses the Colorado River

> Metropolitan Protects

Metropolitan is well-positioned to adapt and lead as new water quality challenges emerge, guided by a staff of highly skilled experts and investments in innovative technology.

- » Metropolitan is a national leader in treating and providing safe drinking water that meets or exceeds stringent state and federal water quality standards.
- » Metropolitan's scientists are nationally known for developing innovative methods for the early detection of constituents of concern and play a significant role in the development of future regulatory requirements.
- » The highly skilled staff of scientists, engineers and technicians with specialties in chemistry, microbiology, limnology (the study of rivers and lakes) and process engineering work at Metropolitan's Water Quality Laboratory at the F.E. Weymouth Water Treatment Plant in La Verne. Each of Metropolitan's four other water treatment plants also have their own satellite laboratories.
- » Thanks to a system-wide retrofit completed in 2017, Metropolitan's treatment plants now use ozone as the primary disinfectant. This process is more effective than traditional chlorine disinfection and reduces disinfection byproducts associated with chlorination.
- » Metropolitan's laboratory has played a key role in evaluating the water quality of Pure Water Southern California, the pilot regional recycled water program that could be the forerunner to the largest recycled water program in the U.S.
- » By making investments in watershed protection programs, Metropolitan safeguards its source waters of the Colorado River and State Water Project, helping to prevent contaminants from entering the distribution system.
- » Invasive species in watersheds can have significant effects on water quality and aquatic ecosystem health, so Metropolitan supports programs and coordinated efforts to prevent and manage the spread of quagga and zebra mussels, and other non-native species.



Metropolitan's
Water Quality Laboratory
oversees the safety of Southland
drinking water.

Metropolitan's Water Quality Laboratory is slated for a major renovation

> Metropolitan Plans

Metropolitan uses comprehensive and strategic planning to ensure water supply reliability for Southern California as the climate changes and the region's needs evolve.

- » Metropolitan effectively manages water system operations to ensure the sustainability of communities, businesses and the natural environment.
- » In recent years, California has experienced some of its worst droughts in state history; climate change is making these dry periods even more severe. If not for Metropolitan's smart planning, including conservation investments and building Diamond Valley Lake – Southern California's largest reservoir – the region would have faced even more severe shortages.
- » Planning for tomorrow's water needs is done with an ever-evolving, long-term comprehensive water strategy known as the Integrated Water Resources Plan. The planning is coordinated with other long-term plans such as the Climate Action Plan and Metropolitan's 2020 Urban Water Management Plan, through a collaborative process with member agency, organizations representing diverse interests, and the public.
- » The latest ongoing IRP update continues decades of work to diversify the region's water portfolio by maintaining the reliability of imported supplies, expanding local supply development and reducing demand through conservation and water-use efficiency initiatives. It includes a regional needs assessment and One Water implementation strategy that considers different scenarios to:
 - Increase** water conservation savings with a greater emphasis on outdoor water efficiency
 - Develop** local supplies, including groundwater management, stormwater, desalination and recycling
 - Manage** Colorado River Aqueduct supplies and State Water Project supplies
 - Maximize** the effectiveness of water storage
- » As an agency responsible for delivering water in one of the world's most seismically active regions, Metropolitan is investing in a comprehensive plan to enhance the resiliency of infrastructure and water deliveries in response to earthquakes.



A NEW SOURCE OF WATER FOR SOUTHERN CALIFORNIA



Metropolitan and its member agencies deliver less water today to serve nearly **19 million people** than in 1990 when the region had **14 million people**, thanks to investments in conservation and local resources.



Metropolitan Invests

Metropolitan continues to provide reliable water supplies to Southern California and maintains some of the nation’s highest credit ratings.

- » To keep Metropolitan’s vast water delivery system running smoothly and able to meet Southern California’s water demands, the district makes forward-thinking investments – in supplies, in storage, in conservation and in infrastructure. These strategically important programs together provide Metropolitan operational flexibility to deliver water from diverse sources, meeting regional demands, while also storing available water in wet years for use in dry ones.
- » Water rates are set in an open and transparent public process to recover the costs of providing water service as part of Metropolitan’s biennial budget process.
- » The district’s budget includes capital spending of approximately \$500 million, largely to rehabilitate existing facilities so they are well-maintained, reliable and seismically sound.
- » Among some of Metropolitan’s largest strategic investments in recent years:

Storage: Metropolitan has developed more than 5.5 million acre-feet of storage capacity – a 13 times increase in capacity since 1990. An acre-foot is enough water to serve three typical Southland families annually.

DEI initiatives and succession planning: Metropolitan has an ongoing, dynamic effort to promote greater diversity and inclusion within its workforce and to ensure the strongest possible future for Metropolitan by tapping the best talent, training employees, and developing leaders for the future.

Pure Water Southern California: In partnership with the Los Angeles County Sanitation Districts, a demonstration facility in Carson has been built to test new treatment methods to purify wastewater to produce a new, sustainable source of high-quality water for Southern California. The facility is paving the way for one of the nation’s largest water recycling facilities.

Local Resources Program: Metropolitan has provided financial incentives totaling more than \$700 million to help local and member agencies develop water recycling, groundwater recovery and seawater desalination projects. Local projects funded under the LRP have helped produce about 4.2 million acre-feet of water to date.

Drought resiliency projects: Metropolitan is fast-tracking a set of drought emergency projects to move locally stored water into parts of Southern California that have been depending on extremely limited supplies from the State Water Project from Northern California. State funding of \$50 million has been provided to accelerate this effort.



Because of its fiscal
integrity and sound
business practices,
Metropolitan maintains
some of the nation's
highest credit ratings
among government agencies.

Metropolitan Conserves

Since the 1990s, investments of more than \$1.6 billion in conservation, recycled water and groundwater recovery have led to a nearly 40 percent reduction in per capita potable water use.

- » At the urging of Metropolitan and its member agencies, the California Legislature in 2009 mandated that urban retail water providers achieve a 20 percent per capita reduction in potable water use by the year 2020. To meet this goal, Metropolitan's Board of Directors adopted a Long-Term Conservation Plan, developed in collaboration with its member agencies, retail agencies and other stakeholders.
- » Southern Californians have made conservation a sustainable way of life by cutting average per capita potable water use from about 205 gallons per day in 1990 to about 129 gallons per day now — a 38 percent reduction, far exceeding that 20 percent goal.
- » Diverse local resource programs like water recycling, desalination, groundwater recovery and storage have provided over 7 million acre-feet to the region's resource mix and increased our resiliency and reliability.
- » Over the years, Metropolitan has invested nearly \$864 million in conservation programs, including rebates for high-efficiency toilets, turf removal, sprinklers and smart irrigation controllers and custom efficiency projects for the region's businesses and industries.
- » While early conservation efforts greatly improved indoor water use, Metropolitan is now focused on saving water outdoors, where up to 75 percent of water is used. We have the nation's largest turf removal program and have a long list of incentives for water-saving devices like irrigation controllers and sprinkler heads..
- » Metropolitan's commitment to conservation is bolstered through strong strategic partnerships with schools, universities, community groups, environmental organizations and energy utilities, with an emphasis on programs that reach and serve underrepresented and disadvantaged communities.
- » Eliminating non-functional turf is becoming an increasingly valuable tool to quickly and permanently decrease water use and Metropolitan has adopted a resolution that recommends cities and water agencies across Southern California pass ordinances permanently prohibiting the installation and irrigation of non-functional turf.
- » Metropolitan's award-winning advertising and outreach campaign provides important water conservation messages in multiple languages. The multi-lingual campaign has featured advertising on television, radio, outdoor signs and transit shelters, social and digital media, ethnic grocery stores and electric vehicle charging stations, as well and partnerships with major league sports teams and social media influencers to attract public and media attention across diverse audiences.



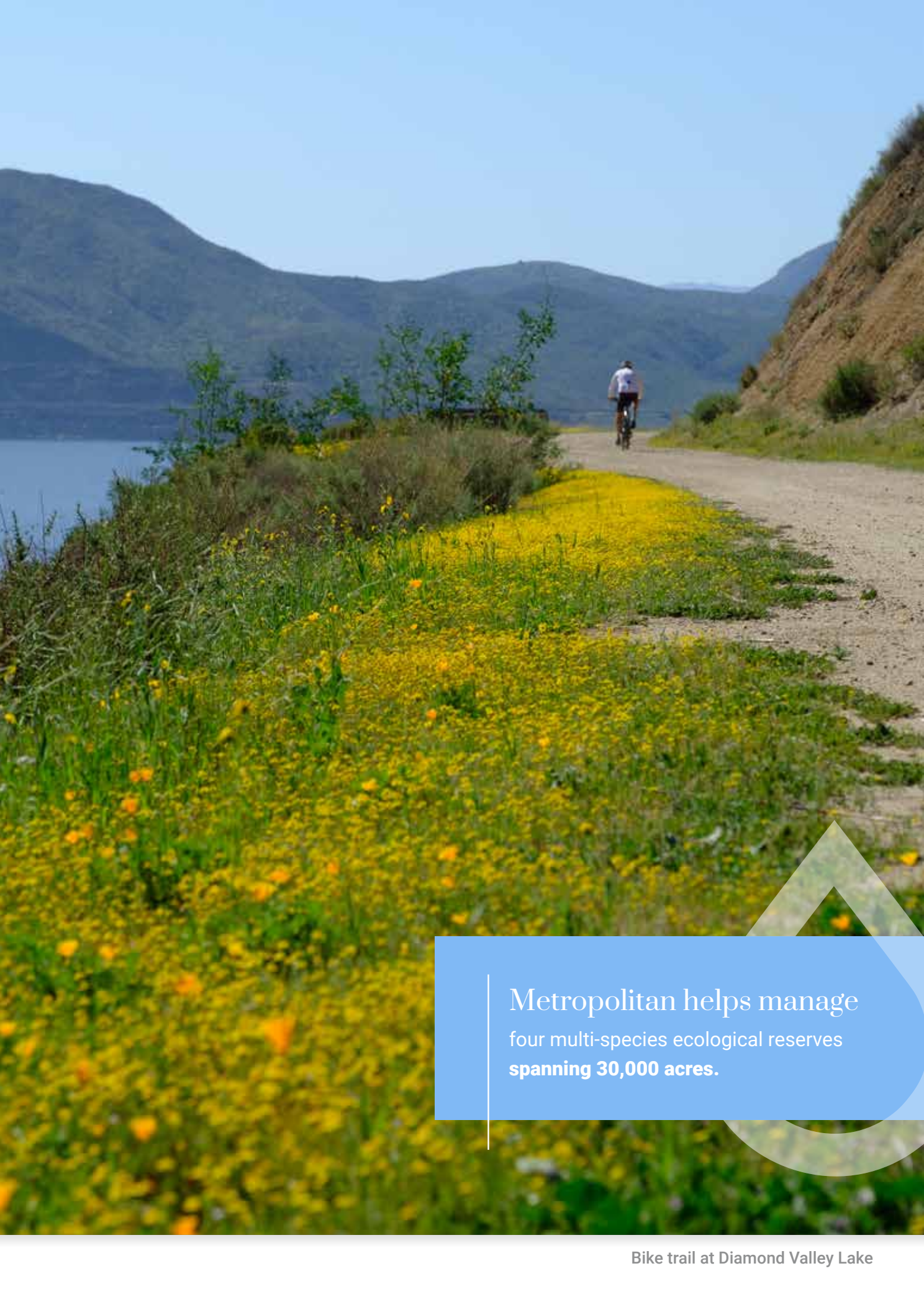
Conversion of lawns to California
Friendly® landscapes restores
natural beauty and **saves water**.

Native plant garden in El Sereno. *Photo courtesy Theodore Payne Foundation.*

> Metropolitan Sustains

Metropolitan's commitment to environmental stewardship is reflected in everything it does – from producing and using renewable energy, to investing in ecosystem protection and restoration, to promoting sustainable landscapes.

- » Through a highly collaborative process, Metropolitan adopted a Climate Action Plan establishing a pathway to the state's target of reducing greenhouse gas emissions 40 percent below 1990 levels by 2030, and Metropolitan's goal of carbon neutrality by 2045. This plan provides nine strategies that include utility improvements at Metropolitan facilities, a zero emissions fleet, and increased support of conservation and local water resources programs.
- » Metropolitan was the first agency to join the California Climate Change Action Registry and also is supporting other climate programs.
- » Metropolitan has built 15 in-stream hydroelectric plants throughout our distribution system with a total capacity of about 130 megawatts. Metropolitan also has installed 5½ megawatts of photovoltaic solar power at its facilities and is building battery energy storage to store green energy when power rates are low and discharge that energy when rates are higher.
- » A sustainability initiative helped achieve a LEED certification for Metropolitan's headquarters building in downtown Los Angeles and an ENERGY STAR score of 97/100.
- » Four multi-species reserves encompassing about 30,000 acres of protected open space are the cornerstone of Metropolitan's investments in environmental conservation and stewardship. These reserves help address the mitigation for impacts from construction of Metropolitan infrastructure projects, watershed protection around reservoirs and protection of habitat for native species.
- » As part of its role in the Lower Colorado River Multi-Species Conservation Program, Metropolitan has been part of a comprehensive restoration effort through the states of Arizona, Nevada and California. The program, with support from Metropolitan funding, has made great advances in the restoration of native habitats and natural processes for about 7,000 acres of riparian, marsh and backwater habitats.
- » With an investment of tens of millions of dollars annually for environmental and science-based activities in the Sacramento-San Joaquin Delta, Metropolitan supports research to improve water supply reliability, protect Delta smelt and other native species, and restore the Delta ecosystem.
- » Metropolitan's acquisition of four islands in the Delta allows the strategically located islands to be used for research and to identify potential projects that support water system reliability, restore habitat and promote sustainable agricultural practices.



Metropolitan helps manage
four multi-species ecological reserves
spanning 30,000 acres.

> Metropolitan Innovates

Metropolitan drives water innovation not only in our own operations, but also with entrepreneurs across the country and internationally through collaboration, outreach and evaluation of new technologies and exchange of ideas.

» Programs include:

An **Employee Innovation Council** working collaboratively and contributing time, expertise and resources to drive innovation forward with new technologies and ideas to deliver safe, reliable water to Southern California.

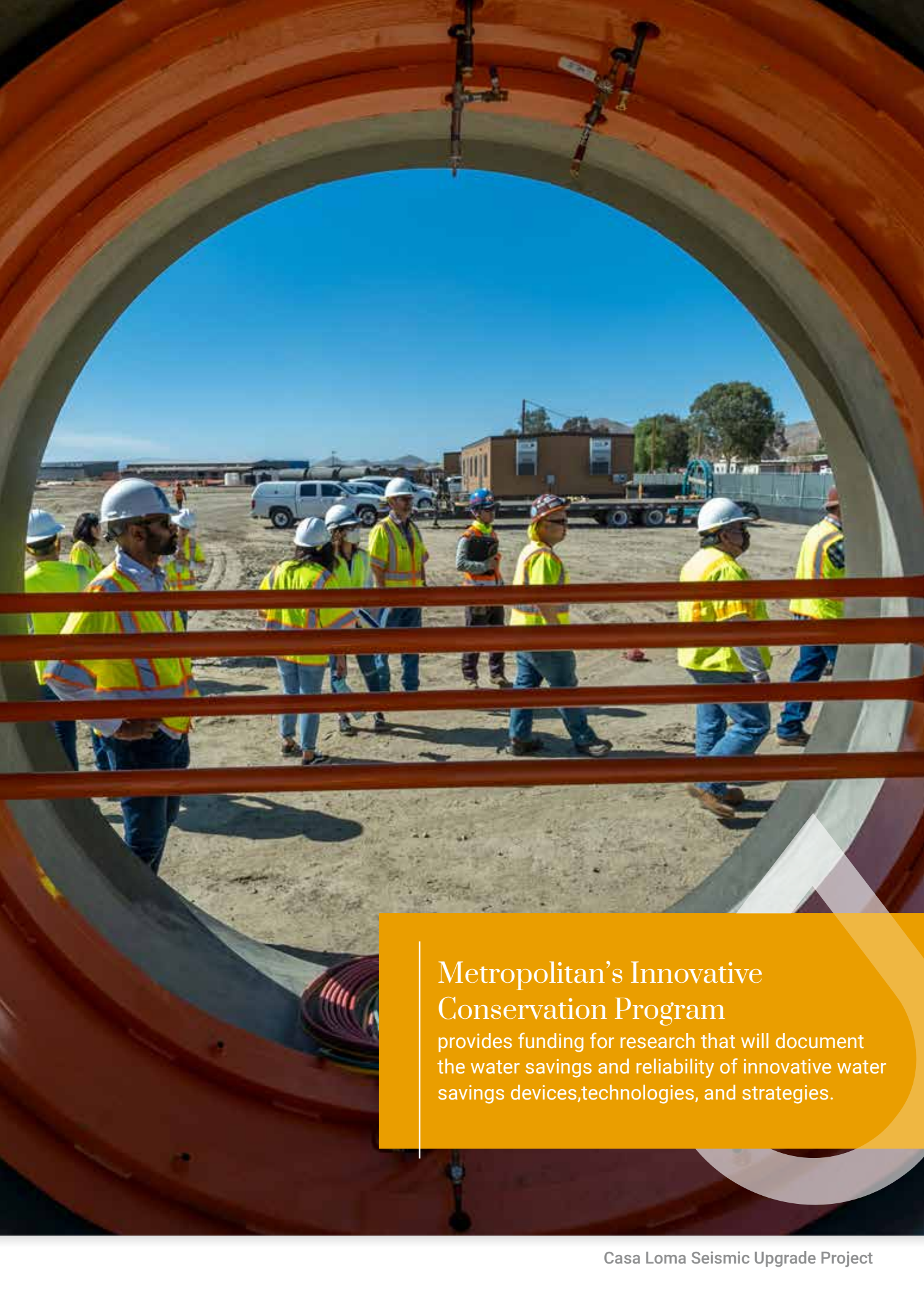
An **online incubator** in partnership with Water Start's Channels of Innovation to link water industry professions with entrepreneurs and investors and provides other resources for about 1,000 members.

A **Technology Feedback Forum** to offer innovators and entrepreneurs an opportunity to pitch new technologies or services, and receive helpful information to improve the marketability and application of their projects.

The **Future Supply Actions Program** to help fund research projects for recycled water, seawater desalination, groundwater recovery and local stormwater. The focus is to promote low-cost, low-risk investments that address technological, regulatory, and institutional barriers to new supplies.

The **Water Savings Incentive Program** to encourage innovation at commercial, industrial and agricultural facilities. More than 125 facilities have received funding for customized projects that have resulted in nearly 30,000 acre-feet of water savings.

The **Innovative Conservation Program** to fund novel water-saving devices and strategies in cooperation with SoCalGas.



Metropolitan's Innovative Conservation Program

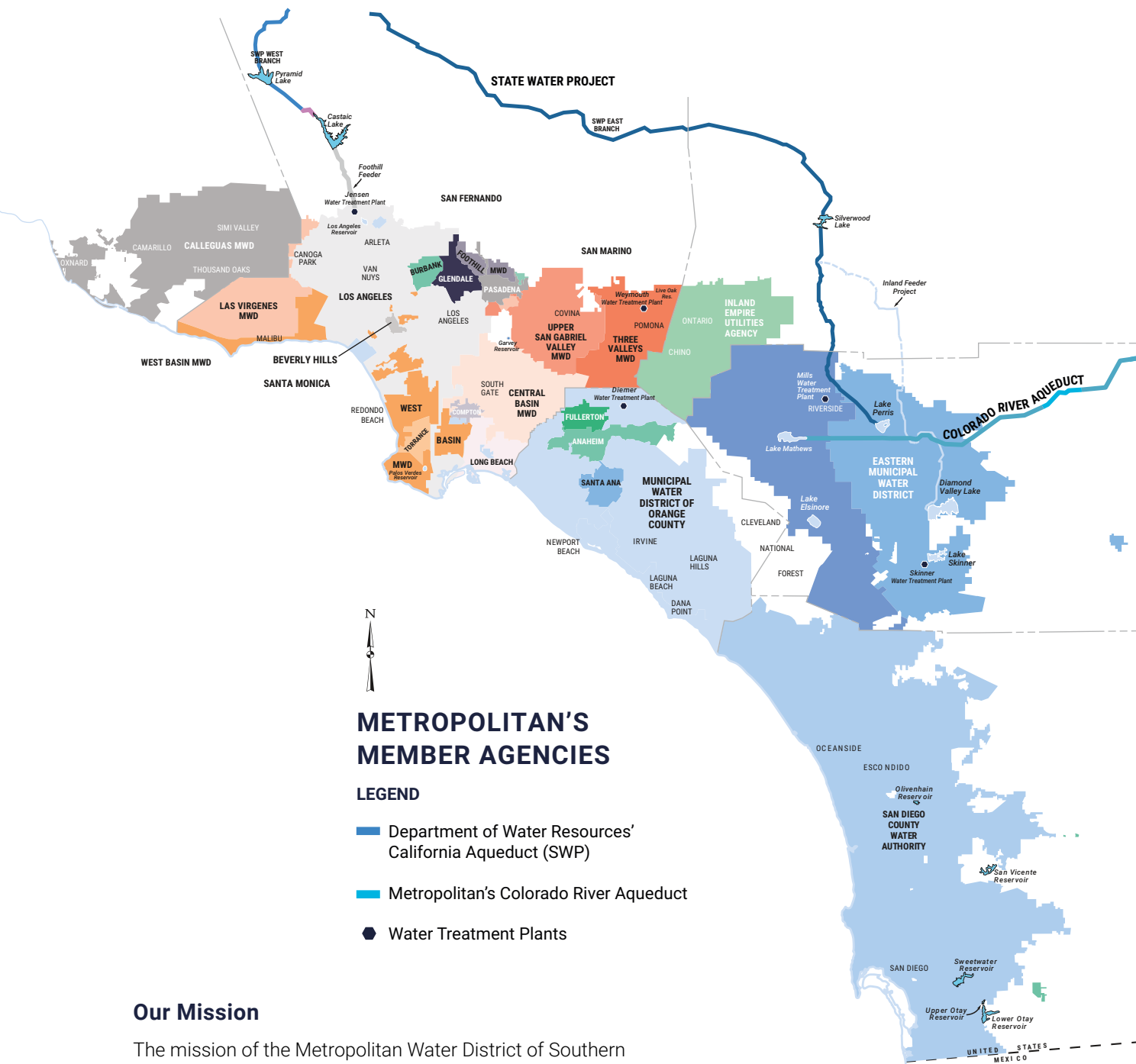
provides funding for research that will document the water savings and reliability of innovative water savings devices, technologies, and strategies.

Delivering Water to Southern California



Metropolitan imports supplies from the Colorado River through the Colorado River Aqueduct, which it owns and operates; from Northern California via its participation in the State Water Project; and from exchanges and transfer arrangements. An increasing percentage of Southern California's water supply comes from local resources, including water recycling and recovered groundwater.

Metropolitan's Member Agencies



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.



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