

CALIFORNIA

WATER

ORANGE COUNTY 2025

MWDOC Leads
Efficiency Efforts

MOULTON NIGUEL
Invests in Emergency
Preparedness

OC SAN Turns Waste
into Resources

SMWD
Innovating through
Collaboration

Trampas Canyon Reservoir



SCAN FOR
DIGITAL EDITION

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Dear Readers,

Happy Water Awareness Month! As we dive into May, I'm excited to present the latest issue of *California Water Magazine*. This month, we emphasize the crucial role each of us plays in ensuring a sustainable water future for our state.

With rising costs of energy, construction materials, and the ongoing need for safe, high-quality water, it's clear that cutting back isn't the solution. Instead, strategic investments are essential to address these challenges. The Delta Conveyance Project, although seemingly expensive, is actually the most cost-effective way to secure our water future.

In our cover story, you'll hear from key voices in the water sector. They will provide regional and state perspectives on the Delta Conveyance Project's importance and challenges, as well as insights into the costs and effectiveness of the state's water delivery system.

Turning our focus to Orange County, we'll explore how the region can secure its water future and address the unique challenges it faces.

This month, we're also hosting our Haiku H2O contest on Instagram, inviting poets across the state to share their best water-themed haikus. Here's one to spark your creativity:

*Snow melts, rivers rise,
Flowing through our golden state,
Future's lifeblood flows.*

Feeling inspired? Visit @socalwater on Instagram and share your haikus with us!

I hope you find this issue both informative and inspiring. As always, I welcome your thoughts and questions. Let's keep the conversation going and work together for a brighter water future.

Warm regards,



Charley Wilson
Executive Director and CEO
Southern California Water Coalition



NO 'SILVER BULLET' SOLUTION

Water Managers Balance Resiliency with Affordability

/ By Elizabeth Smilor /

A common refrain in households across the nation goes something like this: "Why is everything so expensive?" or "Did you see the price of (insert item or service)?" Across the board, expenses are rising from grocery bills and travel to energy and, yes, even water bills.

Local, regional and state water managers say they are adapting to climate and economic changes to bolster resiliency and sustain California's affordable and reliable water supply system.

"The million-dollar question is how do you provide reliability and at the same time affordability," said Municipal Water District of Orange County (MWDOC) General Manager Harvey De La Torre. "There is starting to become a gradual acceptance that the historical financial structure that has worked for a growing Southern California needs to be revisited."

Water and wastewater rates remain relatively inexpensive, but the water industry is not immune to rising costs of materials, maintenance and labor. Industry leaders emphasized the need for creative financial solutions, partnerships and collaboration throughout the state, and investment into much-needed infrastructure updates — all of which will save money in the long run.

"There isn't a single silver bullet to affordability," said Deven Upadhyay, General Manager for the Metropolitan Water District of Southern California (Metropolitan), a 26-member cooperative that provides water for 19 million people in six counties. "It's a series of innovative revenue streams, programs with partners outside the service area and sound utility management programs that lead to more affordable outcomes for our public."

Last spring, the Metropolitan board approved a two-year budget that includes rate increases of 8.5% on Jan. 1 of this year and again on Jan. 1, 2026, charged to its 26 member agencies. For treated water, the rate increase will be 11% in 2025 and 10% in 2026. It also includes a small increase to the voter-approved property tax Metropolitan levies, amounting to an average increase of \$2-3 a month for the median value home.

"With the recent devastation from the Los Angeles County fires along with perennial droughts, water agencies are once more thrust into the spotlight. We must deliver safe and reliable water, adapt to ever increasing regulations, and be ready for emergencies, all while balancing it with the financial impacts on our customer," said Robert Grantham, General Manager of Santa Margarita Water District, a retail provider of water for more than 200,000 residents in 10 south Orange County communities. "Out of necessity, Southern California water agencies have had to be innovative. We must continually reimagine our business to meet our mission while maintaining the affordability of our service."

The effect of Metropolitan's rate adjustment varies by agency and geographic area. The southern part of Orange County is more heavily reliant on imported water, while the northern and central cities are able to store and draw water from the Orange County Groundwater Basin.

Publisher Sean Fitzgerald
Editor Elizabeth Smilor
Art Director Rachel Maples
Contributors Elizabeth Smilor
Charley Wilson

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The State Water Project supplies Southern California with imported water through a series of aqueducts and reservoirs from Northern California.



"The rate increases at Metropolitan have affected every community. For us in south Orange County, we are 100 percent reliant on imported water so that has a very direct effect; That has a cascading effect down to all of us," said Joone Kim-Lopez, General Manager and CEO of Moulton Niguel Water District that provides drinking water, recycled water, and wastewater services to more than 170,000 customers in Laguna Niguel, Aliso Viejo, Mission Viejo, Laguna Hills, Dana Point, and San Juan Capistrano. "We've done a lot at the retail level to mitigate cost."

For the whole of Southern California, about 30% of water is from Northern California via the State Water Project (SWP) and 20% is from the Colorado River via the Colorado River Aqueduct.

"The reason Metropolitan was brought into being was to build the Colorado River aqueduct. In reality, we were a financial innovation. ... We were created to help bear that cost," Upadhyay explained. The Colorado River aqueduct was developed in the 1930s and the State Water Project was built in the 1960s. Preventative maintenance has greatly extended the life of those systems and Metropolitan capital investments are for refurbishment and replacement of the vast network that carries the water to and throughout the region, he said.

"We need this infrastructure. What we see on the horizon is more climate risk and more swings in climate that we will be prepared for, but the reason we will be prepared is because we're steadily chipping away at that risk with this investment in infrastructure," Upadhyay said.

Securing the Most Affordable Water

Orange County draws water from the groundwater basin in the north, desalination in the south and the production of recycled water throughout, while also importing water from the State Water Project and Colorado River. MWDOC is a Metropolitan member and the wholesale water supplier for 3.2 million Orange County residents through 27 retail water agencies. MWDOC's service area covers all of Orange County with the exception of the cities of Anaheim, Fullerton and Santa Ana.

Moulton Niguel and Santa Margarita water districts are retailers and members of MWDOC, which buys imported water from Metropolitan. Like most agencies, they are developing local supplies such as recycled water but also recognize the need for projects that secure imported water, such as the Delta Conveyance Project, a one-tunnel delivery improvement in the San Joaquin-Sacramento river delta.

"This isn't an either/or conversation. It is about trying to piece together all the puzzle pieces of a water portfolio in the most affordable way," said Jennifer Pierre, General Manager of the State Water Contractors, a statewide, non-profit association representing the 27 State Water Project contractors, including Metropolitan.

"Agencies should take their most affordable source and maximize that supply and then make investments in other sources that provide more expensive, but perhaps more reliable water. That's what most are doing."

The most affordable source, water managers agree, comes from the State Water Project, which encompasses a service area economy worth \$2.3 trillion. This imported water is also necessary for blending usable recycled water.

"State Water Project deliveries have allowed Southern California to take water supply for granted," said California Department of Water Resources Director Karla Nemeth. "But the stakes are high, and after 60 years, re-investment is needed. In an outsized way, the Delta Conveyance Project will protect Southern California water supplies from drastic loss in a hotter, drier future."

In 2024, DWR released a benefit-cost analysis of the Delta Conveyance Project that showed the present value of improved water supply reliability is estimated to be worth, on average, more than \$33 billion in 2023 dollars over the project's lifetime,

/ See affordability, p 14 /



Pure Water Southern California regional recycled water project is being developed by Metropolitan and the Sanitation Districts of Los Angeles County.
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FROM WASTE TO RESOURCE:

The Journey of OC San's Water

The Orange County Sanitation District (OC San) plays a vital role in managing wastewater across central and northwestern Orange County. Serving 2.6 million people across 479 square miles, OC San safely collects and treats an average of 190 million gallons of wastewater daily. With a strong focus on efficient operations, recycling water, energy and nutrient recovery, and the proper waste disposal. OC San transforms wastewater into valuable resources that benefit the environment, economy, and community.

A Comprehensive System for Wastewater Management

OC San operates a robust and extensive wastewater management system, ensuring the efficient treatment and recycling of wastewater for the benefit of the community. The system spans 388 miles of sewer pipelines, 15 pump stations, and includes two reclamation facilities located in Huntington Beach and Fountain Valley, covering more than 100 acres per plant.

Each day, wastewater from residential, commercial, and industrial sources flows through these systems to be treated and recycled. A key component of OC San's efforts is ensuring that every drop of water that can be recycled is made available to the Orange County Water District (OCWD) for the Groundwater Replenishment System (GWRS).



Ryan Gallagher
Board Chairman
OC San

Chairman's Vision

"As essential, critical infrastructure, OC San strives to exceed its mission of protecting public health and the environment by taking proactive actions and finding innovative solutions to the challenges faced," said OC San Board Chairman Ryan Gallagher. "Our fiscal stewardship and foresight have allowed us to maintain our level of service over the years."



Rob Thompson
General Manager
OC San

OC San's Commitment to Planning and Collaboration

"Effective planning and collaboration keep our facilities running smoothly," said General Manager Rob Thompson. Our staff are highly qualified and knowledgeable professionals. They understand the importance of planning for any eventuality in an uncertain world. We are preparing for today, tomorrow, and the future to ensure that we can continue to provide effective wastewater treatment for generations to come."

The Water Treatment Process: Turning Waste into Resources

Most people don't think twice about what happens after flushing a toilet or running the dishwasher. But OC San is constantly working behind the scenes to make sure that water gets a second life. Here's how the process works:

1. Pretreatment Starts with You

For our residential users, 3 Ps—pee, poop, and (toilet) paper are the only things to flush. By doing so, this helps support the pretreatment process. We collaborate with our industrial users to ensure that discharges into the sewer system meet state requirements and are compatible with recycling. This is just the beginning.

2. Collecting and Cleaning the Water

OC San receives an average of 190 million gallons of wastewater daily from across north-central Orange County. Once the wastewater enters the reclamation facilities, it undergoes a series of cleaning processes designed to remove impurities and safeguard public health.

3. Giving Water a Second Life

After the wastewater is treated, the reclaimable water is sent to OCWD for the GWRS. This state-of-the-art system purifies the water further and helps replenish Orange County's groundwater supply, which is an essential part of the region's drinking water system.

4. Turning Waste into Energy

OC San doesn't stop at cleaning the water; it also turns the residual solids into energy. The solids removed during treatment are processed through anaerobic digestion, which breaks down about 65 percent of the organic materials producing biogas—essentially natural gas. This biogas is captured and converted into renewable electricity and heat, helping to power the reclamation plants in Huntington Beach and Fountain Valley.

5. Creating Sustainable Fertilizer

The remaining solids from the treatment process are transformed into biosolids, a nutrient-rich material that is safely used as fertilizer for agriculture. These biosolids are applied on farms in California and neighboring states to improve soil quality and support the growth of non-edible crops.



Resource Innovation for a Sustainable Environment

Cutting-Edge Wastewater Management: The RISE Program

For over 70 years, OC San has been an industry leader in wastewater treatment and management, pioneering innovative technologies and approaches to improve services and protect the environment. Through its Resource Innovation for a Sustainable Environment (RISE) program, OC San is advancing research and developing new technologies to address future challenges and needs.

This includes ongoing sustainability initiatives such as Source Control, Beneficial Reuse & Recycling, the Groundwater Replenishment System, and Dry Weather Urban Runoff. By investing in cutting-edge processes and equipment, OC San is improving its operations in water, energy, solids, and air management.

Future Technologies: Supercritical Water Oxidation Project

One of OC San's most exciting initiatives is its Supercritical Water Oxidation (SCWO) project. As part of its commitment to innovation, OC San is working with 374Water to build a six-ton-per-day demonstration facility called AirSCWO Nix6. This project will use heated and pressurized water to break down organic materials, including complex compounds like per- and polyfluoroalkyl substances (PFAS) and microplastics, which are difficult to treat with current technology.

The potential benefits of this technology include:

- Reduced solids processing and trucking costs
- Enhanced energy conversion efficiency
- Improved treatment of emerging contaminants
- Conversion of food waste to energy

Expected to be operational later this year, the AirSCWO Nix6 project underscores OC San's commitment to sustainability and environmental leadership.

With a total investment of nearly \$8 million, OC San's innovation will not only help the region meet its current needs but also pave the way for solving other challenges facing California's wastewater and water treatment sectors.

A Sustainable Solution for Biosolids Management

In an era where environmental concerns are at the forefront of global discussions, finding sustainable solutions for managing biosolids is more critical than ever. The proposed Deep Well Injection (DWI) project presents another innovative approach to managing biosolids. This method eliminates the need for long-haul truck transportation, thereby cutting down carbon emissions and associated costs.

DWI provides a forever home for forever chemicals like PFAS, microplastics, and pharmaceuticals, as well as removing carbon from the air and nutrients from the ocean. The DWI project intends to inject biosolids more than 5,000 feet below OC San's reclamation plant in Fountain Valley into a sand layer sandwiched between layers of rock thousands of feet below, and completely isolated from, the groundwater aquifer. This naturally warm sand layer functions as an anaerobic digester converting the biosolids into methane and carbon dioxide.

DWI is a proven technology as a local agency, the City of Los Angeles has been doing this exact process for 17 years at its Terminal Island Treatment Plant. DWI ensures that these contaminants are safely sequestered deep underground, preventing their release into the environment and safeguarding public health for generations to come.

OC San's Commitment to Sustainability: Mobile Fleet Electrification

OC San is taking a major step towards achieving its sustainability and zero-emission goals with the procurement of a 65-foot hybrid-powered research vessel for ocean monitoring. All American Marine will design and build the vessel featuring a plug-in hybrid propulsion system that offers the flexibility to be upgraded to full electric if necessary. This upgrade capability ensures the vessel will meet future zero-emission standards set by the California Air Resources Board.

The vessel aligns with OC San's commitment to adopting the cleanest technologies available and reducing environmental impacts. The hybrid-powered research vessel is a significant part of OC San's broader strategy to comply with California Air Resources Board rules by transitioning to zero-emission mobile equipment, depending on factors like availability, cost, reliability, and regulatory compliance. This initiative underscores OC San's dedication to sustainability and advancing the use of clean technologies in all aspects of its operations.



OC San's newly designed hybrid-powered research vessel for ocean monitoring set for delivery in September 2027.

Continuing with OC San's dedication to reducing its environmental impact, it has adopted the cleanest technologies available for daily operations. OC San is transitioning its mobile fleet to zero emissions by acquiring electric vehicles whenever feasible.

Want to Learn More?

To see how OC San transforms wastewater into a valuable resource, sign up for a tour at: www.ocsan.gov/tours. Explore how the agency is creating a cleaner, greener future for Orange County while ensuring a sustainable water supply for generations to come.

For more information on the RISE program and OC San's innovation in wastewater management over the years, visit www.ocsan.gov/RISE.



OC AGENCIES PARTNER FOR GREATER RESILIENCY IN THE FACE OF GROWING DISASTERS

“This partnership is a win for the entire region.”

Duane D. Cave
Moulton Niguel Water District
Board President


moulton niguel
water district



The devastating L.A. wildfires have shed light on the state’s water system readiness and resiliency.

While water agencies, public safety and many first responders have worked tirelessly to prepare for natural disasters, there’s still more work to be done to enhance our resiliency. Infrastructure systems built a half-century ago were never designed to withstand catastrophic events at the scale and intensity we’re currently seeing due to the effects of climate change.

To close the gap, local government agencies in Orange County are joining forces to enhance the region’s emergency preparedness and long-term water reliability.

The City of Santa Ana, Moulton Niguel Water District, and Orange County Water District (OCWD), in collaboration with the Municipal Water District of Orange County, are exploring an emergency interconnection project that will provide relief to South Orange County when catastrophic events cut off imported water to nearly 200,000 residents in the region.

Under the agreement, Moulton Niguel will invest more than \$20 million in the construction of new groundwater production, treatment systems, pumping facilities, and other critical water infrastructure in Santa Ana that will convey water from the North County groundwater basin in an emergency.

For residents of Santa Ana, this new water infrastructure will enhance the city’s daily water service capabilities and provide improved emergency readiness. Planned enhancements include increased groundwater production, upgraded backup power, and other resiliency features designed to keep water flowing even in the most difficult circumstances.

“The City of Santa Ana is proud to partner on this important regional effort to strengthen water resiliency,” said Mayor Valerie Amezcu. “This joint effort by Moulton Niguel, Santa Ana, and Orange County Water District exemplifies how proactive planning and cross-agency collaboration can create lasting value for Orange County.”

For Moulton Niguel’s customers, this infrastructure will provide emergency access to the expansive groundwater basin that is managed by OCWD. Currently, Moulton Niguel and other South Orange County agencies rely on the Metropolitan Water District of Southern California for their drinking water supplies. A new

interconnection creates a backup source of water for South Orange County residents in case Metropolitan is unable to provide drinking water during an emergency. Recent natural disasters underscore the importance of preparedness and reliable access to water supplies.

“This partnership is a win for the entire region,” said Moulton Niguel President Duane D. Cave. “Through our joint effort, we will be better prepared for natural disasters and emergencies. This level of coordination sets a new standard. We’re investing in infrastructure to protect our community and secure our future.”

Over the past two decades, OCWD has been a global leader in groundwater management. The agency’s Groundwater Replenishment System is the world’s largest water purification system for indirect potable reuse. During an emergency, this interconnection will allow OCWD water to flow further south to residents in South Orange County.

“Orange County Water District has made substantial investments in our water infrastructure that can ensure ongoing access to water for all of Orange County,” said OCWD Board President Denis Bilodeau. “This collaboration demonstrates how agencies can strengthen our preparedness, increase regional water reliability, and keep costs low for our customers.”

This project will provide a road map to additional opportunities to enhance regional efforts to build resiliency by working together throughout Orange County. ○



Left, Orange County Fire Authority can now access a helicopter hydrant in Aliso Viejo, installed with the help of Moulton Niguel Water District. Above, Moulton Niguel employees service and maintain approximately 7,000 fire hydrants in South Orange County. Below, Orange County Water District operates the world’s largest water purification system for indirect potable reuse.



MWDOC

A Leader in Water Use Efficiency and Conservation

The persistent challenges of climate change and prolonged drought have made water conservation a top priority in California and Orange County. The Municipal Water District of Orange County (MWDOC) is meeting those challenges by helping its customers and suppliers make water use efficiency a way of life.

MWDOC develops, implements, and evaluates water use efficiency programs that significantly improve water supply reliability for Orange County. Water efficiency strategies are cost-effective, offer a reliable water supply, save energy, and reduce runoff and pollution. It's a win-win.

Senate Bill 606 and Assembly Bill 1668 are the laws that establish comprehensive water efficiency standards for urban and agricultural sectors. "This is the state's response to help water agencies prepare for climate change. By increasing our efficiency, we are going to be more prepared to deal with climate change," said Joe Berg, MWDOC's Director of Water Use Efficiency.

"The public has already demonstrated a strong commitment to be efficient. Our total water use today is less than it was in 1990 and we are supporting over three quarters of a million more people countywide. We can do this," Berg said.

He continued, "We do still need to reduce our water use and the area we need to do this in is landscaping. Exterior water use is up to 68 percent of residential water use for single-family homes. We're not saying don't have grass, we're saying have grass only in areas where you will use it. And check your irrigation system. Run it once a month and look for broken sprinkler heads and leaks, and adjust sprinkler heads to get that water off the sidewalks. Use smart timers. Let's reduce runoff and overspray, this also reduces pollution."

Orange County water suppliers have risen to meet the new water efficiency standards assigned by the State Water Resources Control Board (Water Board) by offering a variety of innovative programs and resources targeting both water suppliers and consumers countywide. The standards assigned by the Water Board are tailored to each water agency's unique conditions, including climate, land use and population. Water suppliers are preparing detailed plans for drought and water shortages; and complying with annual reporting to the Water Board that demonstrates progress toward compliance by 2027.

Southern California has responded with a mix of infrastructure investments, community engagement, and policy enforcement. These include water recycling projects such as the Groundwater Replenishment System in Orange County, which turns wastewater into potable water by recycling all wastewater generated in North Orange County. Enhanced drought contingency plans and partnerships with technology companies have also led to innovative solutions like using apps to track household water use and AI-driven systems for agricultural irrigation efficiency.

MWDOC offers many successful water-use efficiency programs, including educational classes, performance reporting, water use surveys, turf replacement rebate program, and incentives for indoor and outdoor water-efficient devices for residents and businesses. MWDOC offers water-saving landscaping and irrigation ideas, tips to reduce runoff at home, and more. [Visit https://www.mwdoc.com/save-water/water-use-efficiency/](https://www.mwdoc.com/save-water/water-use-efficiency/). Orange County saves over 18.5 billion gallons of water each year through MWDOC's award-winning programs!



Finally, urban retail water suppliers will need to demonstrate compliance with the newer state standards beginning January 1, 2027. MWDOC is here to help, providing its member agencies access to consultants offering one-on-one technical assistance to prepare for compliance.

As MWDOC leads the way to a more secure water future in Orange County, Berg said residents and business owners should know they can always reach out for help cutting their water use. "If you are ever unsure how to save water, call your local water district. Just call them up and ask them and they will be happy to help you." ○



Water Emergency Response Organization of Orange County (WEROC) Focuses on Disaster Preparedness

January's devastating fires in the Pacific Palisades and Altadena occurred in neighboring Los Angeles County, but Orange County faces the same risks, hazards and weather conditions for a similarly lethal, large-scale urban wildfire. We must be prepared.

That's where The Water Emergency Response Organization of Orange County (WEROC) comes in. WEROC is a unique program administered by the Municipal Water District of Orange County (MWDOC) that supports and manages countywide emergency preparedness, planning, response, and recovery efforts among Orange County water and wastewater utilities.

"WEROC stands out as a unique entity in Southern California. Unlike neighboring areas, including Los Angeles, no equivalent organization is dedicated solely to water emergency coordination. This makes WEROC not only vital for Orange County but also a model of regional resilience and preparedness," said Orange County Fire Authority Chief Brian Fennessy.

To carry out its mission, WEROC provides essential resources, trainings, and exercises to member agencies and coordinating partners throughout the county and state. The program maintains two Emergency Operations Centers (EOCs) – including a mobile EOC – used to coordinate emergency response operations during large-scale disasters. WEROC's Mobile EOC serves as a vital backup to traditional brick-and-mortar facilities. This versatility ensures that emergency response efforts can continue if primary facilities are compromised.

"This vehicle provides our team and member agencies with the flexibility and resources needed to effectively manage disaster response operations from virtually any location," said Vicki Osborn, MWDOC's Director of Emergency Management. The Mobile EOC is available to any WEROC member agency that needs a mobile command vehicle at an incident location.

Building robust partnerships and keeping open lines of communication between Orange County fire and water agencies starts well before a crisis hits and helps all to have a stronger emergency response.

"During wildland fires, WEROC has been alongside our incident management teams to provide critical information in real time to ensure collaboration and coordination of water resources are addressed quickly and efficiently. Their rapid coordination helped expedite community re-entry. Their rapid coordination ensured we had the necessary water pressure and supply to combat the situation effectively," the fire chief said.

Chief Fennessy further emphasized the importance of joint training and exercises that help everyone involved understand the nuances of managing emergencies involving fire and water services. Also through WEROC, access to additional water resources and logistical support has bolstered firefighting capabilities. Better communication is critical too, with WEROC maintaining open lines of communication so firefighters have real-time information they need to make timely and effective decisions.

From a healthcare standpoint, Orange County Health Officer Dr. Regina Chinsio-Kwong said WEROC has been an essential partner in local emergency response efforts, particularly during wildland fires and disasters.

"Our partnership with WEROC has been key in enabling timely public health actions, including the issuance of a Declaration of Local Health Emergency when public health is threatened," Dr. Chinsio-Kwong said.

WEROC recently played a key role in the planning meeting for the statewide health exercise, offering invaluable training for hospitals and long-term care facilities, she said. Their expertise helped these facilities better understand their water needs and how water systems function during an emergency. This support is vital because healthcare facilities must have a water resiliency plan to remain operational for at least 72 hours, she said.

WEROC is supported by a group of Orange County water and wastewater agencies and is funded by the cities of Anaheim, Fullerton, and Santa Ana, MWDOC, the Orange County Sanitation District, Orange County Water District, and the South Orange County Wastewater Authority.

Chief Fennessy said, "Together, we are setting a standard for safety and preparedness in Orange County and beyond." ○

HOW INNOVATION AND COLLABORATION ARE RESHAPING THE FUTURE OF WATER



Santa Margarita
Water District

Trampas Canyon Reservoir

Santa Margarita Water District (SMWD) is embracing growth and change as it continues its legacy of innovation and excellence.

The District serves one of the most dynamic corners of South Orange County. It is home to thriving new developments and some of the region's most well-established communities. Over the next decade, roughly 7,000 new homes will be added to Rancho Mission Viejo, while nearby cities like San Juan Capistrano continue to preserve their historic charm. This dual identity offers powerful opportunities.

"Our responsibility is to be forward-thinking stewards of water for all our communities — new and historic," said Board President Betty Olson, PhD. "By prioritizing innovation and collaboration, we ensure future generations inherit a sustainable water system."

Water doesn't recognize jurisdictional borders, and neither does the District's approach. SMWD has a proud legacy of project innovation, consistently pioneering solutions that shape the future of water management. Today, it builds upon that foundation, embarking on a regional water resource master plan that brings everyone to the table — helping agencies plan together, solve problems, and ensure efficient regional water services.

"Regional collaboration is essential," said Robert Grantham, SMWD General Manager. "By working across jurisdictions, we are creating smarter, more resilient systems that benefit our collective community."

With overwhelming community support, SMWD welcomed the City of San Juan Capistrano into its service area in 2021. This partnership brings new energy and investment to the city's aging infrastructure, ensuring reliable fire flow protection, improved water quality, and reliable wastewater services. It also added the San Juan Groundwater Recovery Plant to the portfolio — southern Orange County's only local groundwater source.

"This partnership is about more than infrastructure — it is about building trust and securing the future," said San Juan Capistrano City Manager Ben Siegel. "SMWD is making long-term investments that protect the health and prosperity of our residents and businesses."

Landmark projects like the Trampas Canyon Dam and Reservoir — California's largest recycled water reservoir — can hold up to 1.6 billion gallons of drought-resilient water, supporting local landscaping and environmental conservation. Meanwhile, the District's Ranch Water Filtration Plant will produce high-quality drinking water from local groundwater, stormwater, and indirect potable reuse.

Improving access to local groundwater, bolstering recycled water supply, and being adaptive are essential to the District's goal of a 30% local supply by 2030, which will lessen its reliance on imported drinking water from northern California and the Colorado River.

Santa Margarita Water District demonstrates what is possible when leadership meets regional collaboration. With a steadfast focus on sustainability and efficiency, SMWD is serving today's needs while laying the foundation for a resilient tomorrow.

Learn more about your water provider at the 2025 Water Festival, www.smwd.com/Festival. 



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What Matters
Water TV & Podcast

How Wildfires Could Rewrite Water Infrastructure

WILDFIRES ARE CHANGING. IS OUR WATER INFRASTRUCTURE READY?

California wildfires aren't just getting more frequent—they're getting bigger, faster, and more destructive. When the flames rise, water is our most powerful firefighting tool. But can our water systems handle the demand?

Join us as we talk with:



Dr. Erica Fischer,
Fire-resilient infrastructure
expert from Oregon State
University

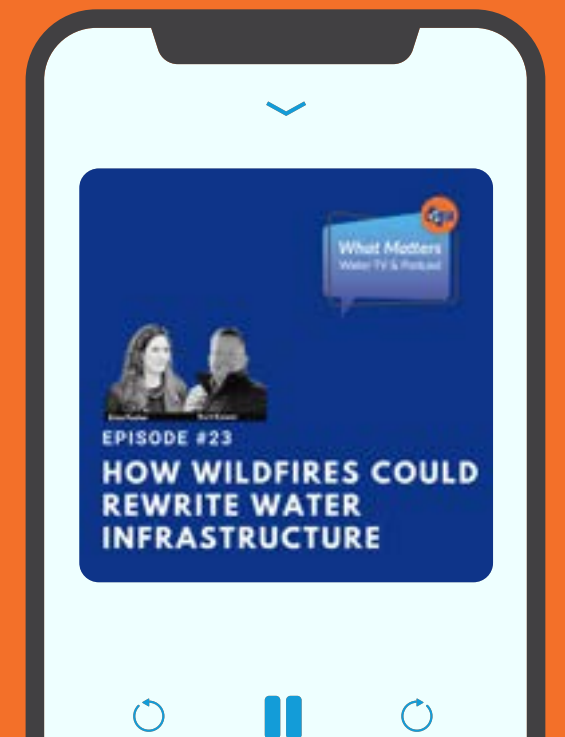


Kurt Kowar,
Public Works Director
who navigated Colorado's
Marshall Fire crisis



Watch on YouTube
now by scanning
the QR code.

EPISODE 23



LISTEN NOW!



/ Affordability from, p 3 /

Nemeth said. The analysis found that for every dollar spent, \$2.20 in benefits would be generated. It also showed how economical State Water Project supplies are compared to the cost of stormwater capture, desalination, and recycling.

“The combined costs of an all-of-the-above water supply strategy are daunting,” Nemeth said. “But water shortages are expensive and put public safety at risk when supplies for drinking, cooking, and bathing run low. Water supply disruptions or even the threat of disruption can drive away business and commercial and industrial investment over time.”

Partnerships Are Vital

MWDOC also is a resource planning agency and works with its members and Metropolitan to develop and strengthen water knowledge, reliability, and affordability. Some of MWDOC’s shared resources include education, conservation rebates, emergency coordination and leak detection.

“If we can do things in a collective manner, we can save agencies money and resources,” De La Torre said. “MWDOC offers a shared service to identify leaks. We’re helping cities to save water and that provides a benefit on the conservation side but also protects that water to be sold, which enhances their revenue capability.”



MWDOC assists retail agencies through rebates and education on water efficiency. Saving water on outdoor landscaping also saves money.

On a regional level, De La Torre says partnerships allow agencies to come to agreements with agricultural partners or prepurchase water through Metropolitan for later use; both cost-saving methods.

“There has to be a willingness to change in our industry. Water is a scarce resource,” said Kim-Lopez of Moulton Niguel. “The cost of water along with everything will not go down.”

She said her agency’s lean operations and budget-based rate structure keep rates at one of the lowest in south Orange County. She also emphasized the importance of data and in-house rate analysis. Kim-Lopez is the founder of the non-profit California Data Collaborative that brings data-driven solutions to water agencies representing 21 million Californians.

“When you set the rates, you also have to live with the experience. Creating models in-house creates a continuity,” she said. “The budget-based pricing encourages customers to use less water. For those who choose to use more water, they pay a higher rate that is invested back for the benefit of all.”

Santa Margarita Water District recognizes the need to maintain water affordability. To support its customers with their monthly water bills, the district offers a rate assistance program for qualified customers. To address rising operational costs, the District has invested in innovative technologies and alternative energy sources. It has also expanded its infrastructure to enhance local recycled water storage. A major milestone in this effort was the completion of Trampas Canyon Reservoir in 2020, California’s largest recycled water reservoir, which can store up to 1.6 billion gallons of recycled water.

“There isn’t a single silver bullet to affordability.”



Deven Upadhyay
Metropolitan General Manager

For its part, Metropolitan is investigating and implementing additional streams of revenue, such as tapping into federal funds by leaving water in the Colorado River and brokering trades with agriculture. With local reservoirs, including Diamond Valley Lake, at record high levels this type of agreement is possible and prevented even higher rate increases, said Upadhyay. Through the Climate Adaptation Master Plan, Metropolitan is adapting planning and strategies for long-term resiliency, and that includes financial modeling, he said. More fixed revenue streams versus volumetric water revenue for investments would lead to more predictable rates.

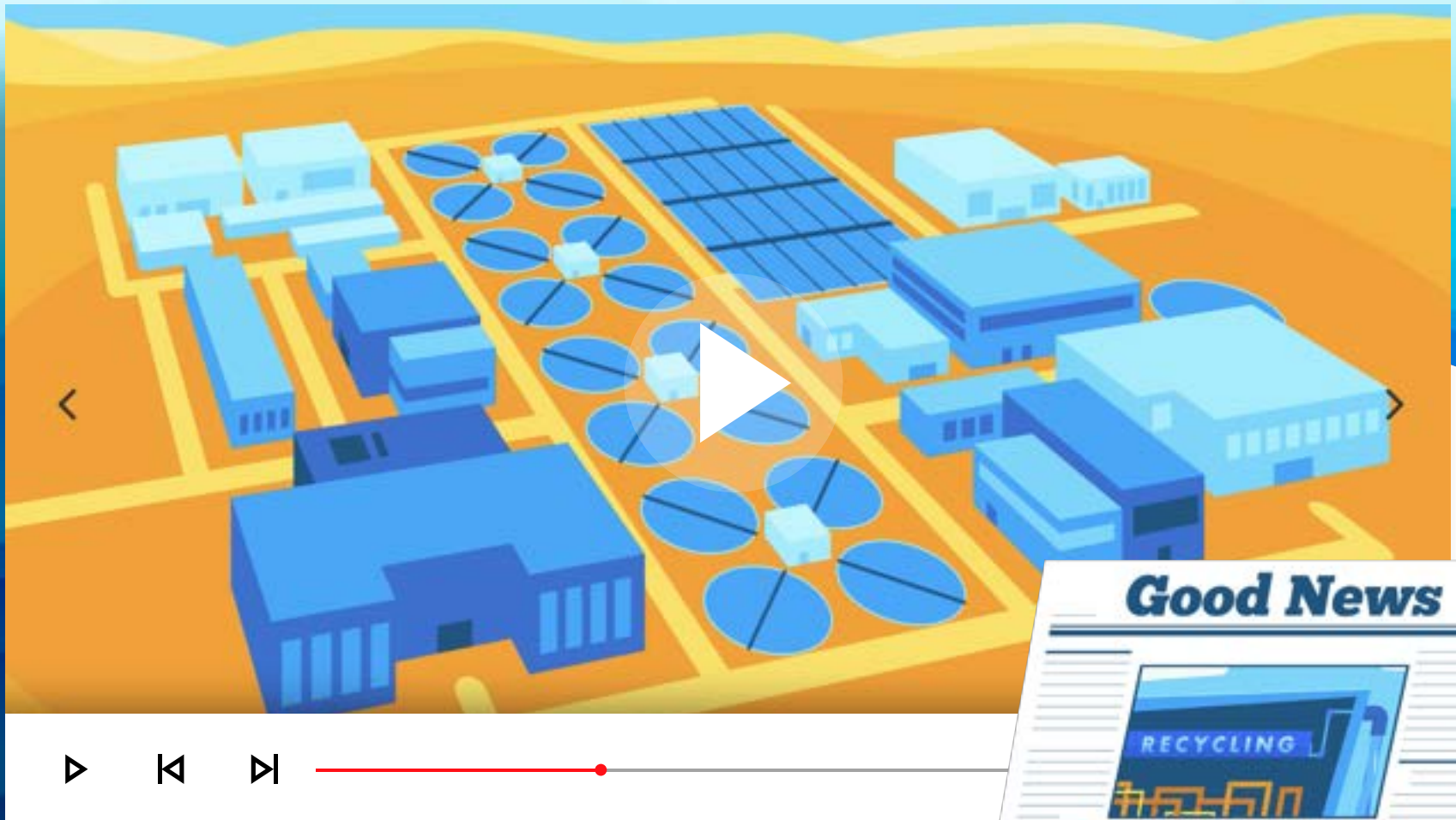
“So, you’re asking for efficiency on an ongoing basis, but in a managed way,” Upadhyay explained. “Then, you don’t have this vicious cycle of asking for water use reduction leading to rate spikes later. I see investment in supply programs that allow us to avoid those disruptions in deliveries also as a way of helping affordability over time.” ○

Metropolitan built Diamond Valley Lake in Hemet to store up to a six-month supply of water to improve local resiliency. The reservoir is near capacity now.





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