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## **BOARD OF DIRECTORS** Philip E. Paule **Board President** Division 2 Division 1 Randy A. Record **Board Member Board Member Board Member** Division 4 Division 3 Division 5

#### **EMWD: A PARTNER IN SUSTAINABILITY**

Eastern Municipal Water District (EMWD) is proud of its longstanding commitment to deliver environmentally sustainable and socially equitable services to its customers through a sound governance structure established by its Board of Directors.

Our Strategic Priorities Progress Report is designed to provide a comprehensive look at how EMWD fulfills that promise to its communities, while also providing a preview of how our organization is positioned to remain an industry

As California's sixth-largest retail water agency, EMWD has taken a progressive approach to meet the needs of our diverse communities, and doing so in a transparent and environmentally sustainable manner. These commitments are a high priority for our publicly-elected Board of Directors and a part of our mission "To deliver value to our diverse customers and the communities we serve by providing safe, reliable, economical, and environmentally

**JOE MOUAWAD, P.E. General Manager** 

sustainable water, wastewater and recycled water services." EMWD's Triennial Strategic Plan clearly establishes our road map to providing safe, reliable,

economical and environmentally sustainable services. These standards of excellence align with the principles of environmental stewardship, social responsibility and accountable governance.

In this report, you will learn how EMWD meets those standards of excellence each day. From investments in sustainable energy practices, workforce development, an unparalleled safety culture, to proactive engagement with our customers, we are proud to be a trusted and respected leader.

Water agencies are facing unprecedented challenges. Climate change is altering our water supply reliability, trust in government is a growing issue, and water access and affordability is a concern throughout California and the entire United States. That is why we must invest in programs that can address all of these issues. Our customers can trust that we are working in their best interest while promoting long-term initiatives to be responsible members of our communities.

We look forward to the future investments — in infrastructure, environmental stewardship and human capital — that we will make to create a sustainable future and maintain EMWD as a leader within our industry.

Joe Mouawad, P.E. General Manager



#### **AN ENVIRONMENTAL PARTNER**

STRATEGIC PRIORITY: Protection of public and environmental health

EMWD is the water, wastewater and recycled water service provider to nearly 1 million people throughout a 558-square mile service area in Riverside County, California. EMWD approaches this responsibility through the lens of being an environmentalfocused organization that is committed to sustainable resource management.

Climate change and environmental regulations have resulted in California and the western United States facing unprecedented challenges in securing water supplies. It is why agencies must do their part to reduce their environmental footprint by investing in sustainable projects and programs through modernized infrastructure and customer-focused programs.

EMWD is an industry leader in this effort. It has worked to proactively reduce its carbon footprint through investments in clean energy infrastructure, fleet vehicles, and technology that has minimized cost increases and promoted environmental sustainability.

Among the initiatives taken to be a leader in the environment and resource management:

- Investments in solar generation facilities and clean energy vehicles:
- Assisted customers in replacing more than 10 million square feet of grass with climate appropriate landscaping throughout its service area:
- As a leading agency in recycled water, EMWD has reduced the need for additional water imported from hundreds of miles away.

EMWD has been recognized as a climate action leader by The Climate Registry and its programs and policies have received recognition from industry associations across the United States, in large part because of their innovative approach to sustainability.

EMWD is an active participant and hosted engagement sessions with regional partners in helping The Metropolitan Water District of Southern California (Metropolitan) develop its Climate Action Master Plan For Water. EMWD is a member agency of Metropolitan, which is the regional water wholesaler for 19 million people in Southern California and the largest water agency in the United States.

As the water industry faces evolving challenges, EMWD is wellpositioned to sustain cost-effective services while working to further implement efforts that will lesson its environmental impact for future generations.



### CLIMATE ACTION PLAN

STRATEGIC PRIORITY: Protection of public and environmental health

EMWD is modernizing its facilities and operations to further reduce its Greenhouse Gas Emissions and meet statewide targets for public agencies through the implementation of its Climate Action Plan.

In 2006, California established statewide goals through the Global Warming Solutions Act to reduce Greenhouse Gas Emissions to well below 1990 levels by 2030.

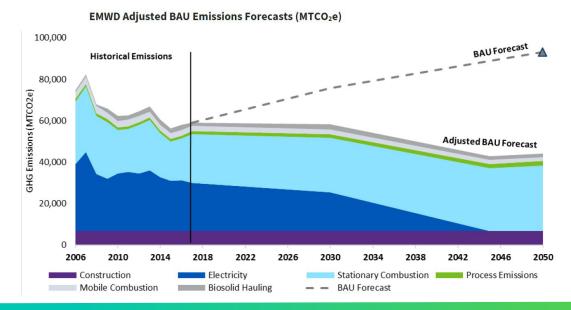
From 2006 to 2017, EMWD reduced its Greenhouse Gas Emissions from 74,600 Metric Tons to a per-capita adjusted 59,000 Metric Tons. To meet the statewide targets, when accounting for projected service area population growth, EMWD must reach an emissions target of 58,000 Metric Tons by 2030.

EMWD's Climate Action Plan, adopted by its Board of Directors in 2022, outlines a path forward for it to continue to meet statewide and agency targets through climate-focused investments, operational efficiencies and technological advances. EMWD reports its Greenhouse Gas Emissions to The Climate Registry, which performs third-party verification on the accuracy of the figures reported.

By 2030, EMWD plans to replace internal combustion engines at 14 water booster or sewer lift stations with electric pumps. In total, these projects are anticipated to cumulatively reduce annual Greenhouse Gas Emissions by 6,700 Metric Tons of Carbon Dioxide equivalents by 2045.

Because the carbon intensity of electricity is lower than natural gas, and California has long-term objectives to further reduce the carbon footprint of its electrical system, EMWD will see significant benefits through these investments in modernized facilities.

EMWD's adjusted Business As Usual forecasts (BAU) show that EMWD will continue to see a significant decrease in emissions when compared to maintaining the status quo as it works to meet statewide targets in the coming decades.







### RESOURCE MANAGEMENT

STRATEGIC PRIORITY: Highly reliable and cost-effective water, wastewater and recycled water service

Through proactive investments supported by its customers, EMWD has developed one of California's most diverse and resilient water supply portfolios.

EMWD has prioritized investments in local resource management to reduce its reliance on imported water supplies from the Sacramento-San Joaquin Delta and Colorado River systems. As California continues to face extreme weather variations induced by climate change, there has never been a more critical time for agencies to expand local water supply sources and incentivize customer efficiency through policy decisions.

EMWD has proactively worked with local land use agencies since 2015 to require all new development to install climate-appropriate front yard landscaping at the time of development.

In 2002, EMWD commissioned its first of three groundwater desalination facilities to remove salts from brackish groundwater in the western portion of its service area. In 2022, EMWD further increased its local water supply resiliency with its new Perris II Desalination Facility, which treats enough brackish groundwater to provide for more than 15,000 households annually.

EMWD is also expanding its local water supplies through its Perris North Groundwater Program, which will remediate groundwater quality issues in the Moreno Valley area and generate clean, potable water out of otherwise undrinkable groundwater supplies.

POPULATION SERVED 888,268

#### EMWD'S 2022 WATER SUPPLY PORTFOLIO

- Recycled Water 54,771 Acre Feet (37%)
- Groundwater 13,854 Acre Feet (9%)
- Desalters 7,306 Acre Feet (5%)
- Colorado River and State Water Project from Metropolitan Water District 73,802 Acre Feet (49%)

As climate change intensifies, California will continue to face more prolonged droughts interspersed with periods of extreme rainfall. To accommodate these new weather patterns, EMWD is adapting its infrastructure.

The Mountain Avenue West Groundwater Replenishment Facility, completed in 2021, can replenish up to 30,000 acre feet of water annually into the groundwater basin, where it may be used in future years. And EMWD's San Jacinto Valley Pipeline, at 60 inches in diameter, is the largest conveyance pipeline EMWD has ever built and is designed to help move and ultimately replenish water during years of heavy or normal rainfall, when surplus water is available.

EMWD's Purified Water Replenishment program is yet another example of a local water supply investment. The program will purify recycled water and use it to improve the quality and quantity of the local groundwater basin while maintaining EMWD's commitment to 100 percent beneficial reuse of its recycled water supplies. As recycled water is typically a drought-resilient water source, EMWD's investments in this indirect potable reuse project will further strengthen its already robust water supply resiliency efforts.

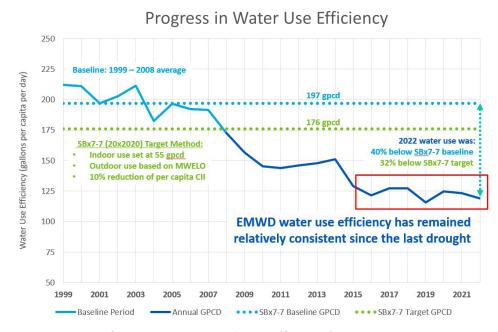
#### CULTURE OF EFFICIENCY

STRATEGIC PRIORITY: Highly reliable and cost-effective water, wastewater and recycled water service

EMWD has been a statewide leader in promoting a culture of water use efficiency among its customers through a series of programs and policies that are adopted through a lens of sustainability.

EMWD is a community partner in using resources efficiently and implements programs to further assist customers in embracing climate appropriate landscaping.

In 2008, EMWD adopted an allocation-based rate structure that provided unique water budgets for every property in its service area. A customers' water budget includes the number of people in the home, landscaped area, age of the home and monthly weather patterns (evapotransipiration rate). Since adopting the rate structure, EMWD customers have reduced per-capita water use by more than 40 percent. EMWD has far surpassed its water



use reduction target of 176 gallons under the Water Conservation Act of 2009 (SBx7-7) EMWD customers use approximately 120 gallons per person, per day and 86 percent remain within their water budget. By remaining within budget, customers are not only efficient but will remain within EMWD's two lowest pricing tiers.

EMWD participates in the turf removal program offered by regional water wholesaler The Metropolitan Water District of Southern California. In 2023, EMWD increased its contribution above and beyond the regional program to \$4 per square foot to further incentivize its customers to replace water intensive landscaping with climate appropriate options. EMWD customers have removed more than 10 million square feet of turf through participation in the program. Customers have also converted nearly 1.5 million square feet of landscaping from spray to drip irrigation, resulting in approximately 1,800 acre feet of water savings annually. In 2022, EMWD customers received \$1.52 million in turf removal rebates, including \$1.2 million for commercial, institutional and industrial customers.

In 2021, EMWD launched its Landscapes for Living program, which offers free and simple resources that empower homeowners to use water more efficiently in outdoor landscaping. Included in the program are free weather-based irrigation controllers, which update irrigation times daily based on weather patterns. EMWD not only funds the controller, but also installs them at no cost, thus removing a customers' financial resources from their ability to invest in water saving devices. Nearly 1,400 households have participated in the program. In 2022, EMWD provided more than 400 rebates on high-efficiency washing machines.

EMWD has also adopted policies that prohibit the irrigation of nonfunctional turf in public landscaping with potable water. By enacting policies that prohibit potable water from being used in areas with no active recreational benefit, EMWD can reduce its reliance on imported water while still promoting communities that enjoy climate appropriate landscaping.

EMWD's Climate Action Plan forecasts that EMWD will annually reduce its Greenhouse Gas Emissions by 1,115 Metric Tons of Carbon Dioxide by 2030 through its water use efficiency efforts.





#### GREEN ENERGY EXCELLENCE

#### STRATEGIC PRIORITY: Sound Planning and Operational Efficiency

For nearly a decade, EMWD has made proactive investments in solar energy programs that offer long-term cost savings to its customers.

In 2014, EMWD installed its first solar generation facility. In the decade since, it has expanded to a total of 11 different solar generation facilities that total 21.4 MegaWatts. Each year, EMWD's facilities produce more than 47 million KiloWatt hours of clean energy.

EMWD sells its renewable energy credits, which help provide a sustainable source of non-rate revenue to minimize long-term costs to customers. Those renewable energy credits reduce Greenhouse Gas Emissions by the equivalent of 85 million vehicle miles traveled each year.

In 2023, EMWD began the installation of five Tesla battery storage facilities, which allow EMWD to purchase energy at less expensive times throughout the day and use the batteries to power facilities at times when electricity costs are higher. They will also be used to power facilities in the event of a power outage. Over 10 years, the batteries will save EMWD ratepayers up to \$3 million in energy costs.

EMWD has previously used digester gas fuel cells at its wastewater reclamation facilities to produce power and is continually exploring cost-effective options to expand its clean energy investments.

EMWD has also used technology to lower its carbon footprint. Its Automated Metering Infrastructure has resulted in a reduction of 190,000 vehicle miles each year avoided compared to manually reading meters.

### **SOLAR FACILITIES**

11 21.4 **47**M

Facilities Installed MegaWatts Installed Annual kWh Production

EMWD's solar facilities provide the purchaser of the Renewable Energy Certificates enough clean power to offset the demands equivalent to:

6,500

85,000,000

Homes per year

Miles driven per year

### CLEAN VEHICLE FLEET

STRATEGIC PRIORITY: Sound Planning and Operational Efficiency

EMWD's efforts do not stop at clean energy infrastructure.

In recent years, EMWD has invested heavily in a clean energy fleet of electric and Compressed Natural Gas vehicles such as sewer cleaning trucks. As it modernizes its fleet to not only meet clean air regulatory requirements and save costs, it has reduced its carbon footprint in the process.

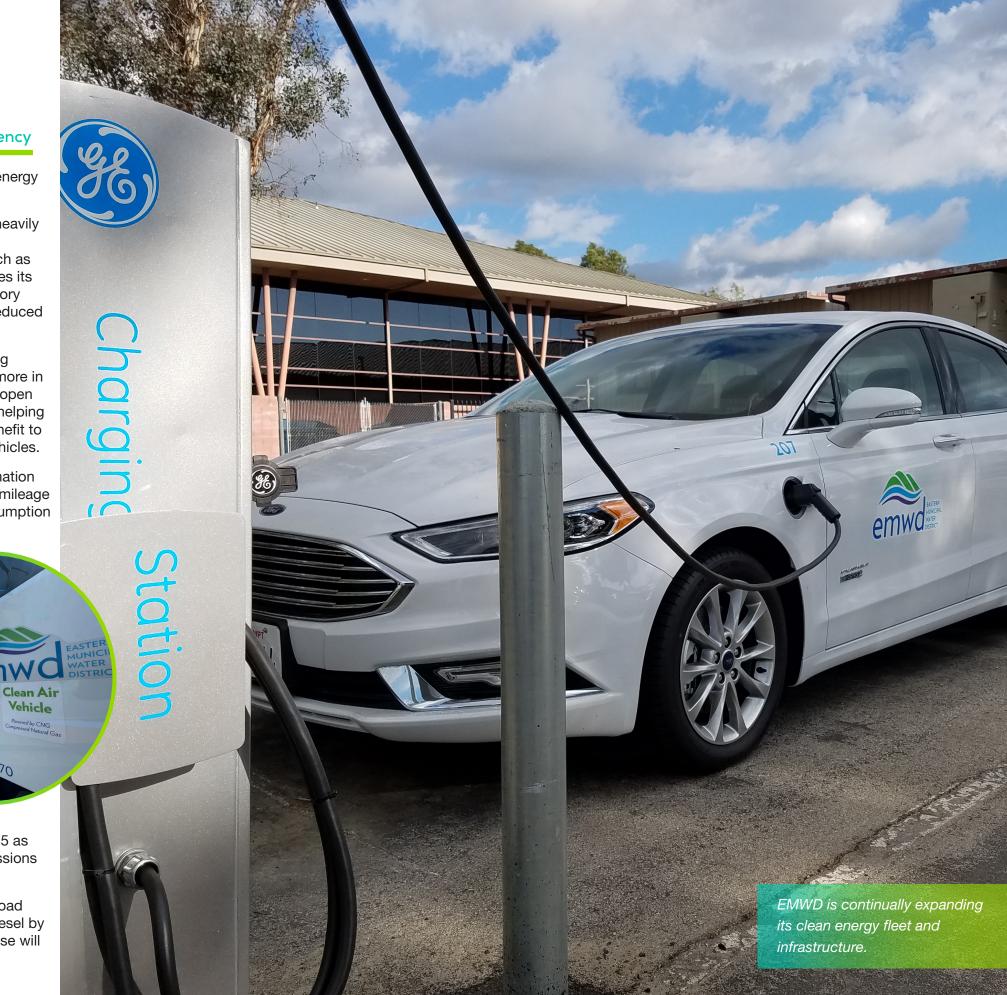
EMWD has 10 electric vehicle charging stations and plans to install up to 95 more in 2023. These charging stations will be open to the public and EMWD employees, helping to provide a long-term community benefit to encourage the use of clean energy vehicles.

EMWD also uses Geographical Information Systems to strategically maximize its mileage driven in an effort to reduce fuel consumption and the corresponding emissions.

In its fiscal year 2023-24 and 2024-25 budget cycles, forty-nine percent of EMWD's fleet vehicle replacement units are focused on alternative fuel and zeroemission units. EMWD's Climate

Action Plan anticipates an annual reduction of 604 Metric Tons of Carbon Dioxide by 2045 as a result of its investments in zero emissions fleet vehicles.

EMWD is currently converting its off-road petroleum diesel fleet to renewable diesel by January 2024 and its on-road diesel use will be completed in a similar time frame.



5
ELECTRIC OR
HYBRID VEHICLES

11
COMPRESSED
NATURAL GAS
VEHICLES

95
PLANNED INSTALLATION
OF ELECTRIC VEHICLE

2023

**CHARGING STATIONS IN** 

190,000

ANNUAL VEHICLE
MILES SAVED THROUGH
AUTOMATED METERING
INFRASTRUCTURE (AMI)
FOR RETAIL WATER
CUSTOMERS

24,500
GALLONS OF FUEL
SAVED ANNUALLY
THROUGH AMI



34

DRINKING WATER
SOURCES
TESTED

10,344

WATER SAMPLES
COLLECTED FOR
TESTING

47,216

WATER QUALITY
TESTS PERFORMED
IN 2022

209

CONTAMINANTS
AND IMPURITIES
TESTED FOR

# PROTECTING PUBLIC HEALTH THROUGH WATER QUALITY

STRATEGIC PRIORITY: Protection of public and environmental health

EMWD is committed to long-term efforts to manage the water quality in its groundwater basins and to promote public trust in the product it delivers to homes and business throughout the region.

EMWD conducts more than 47,000 water quality tests each year to test for more than 200 contaminants and impurities. Those results are published annually in its Consumer Confidence Report, which details the source and results of those tests.

Protecting public health through water quality begins before EMWD tests its water supplies at its state-certified laboratory.

Science-based data helps EMWD to best identify what types of contaminants and impurities are more prevalent in different portions of its service area, resulting in the construction of treatment facilities that include chlorine disinfection, granulated activated carbon, ultra- and micro-filtration, ultraviolet filtration, iron and manganese removal, and reverse osmosis.

These treatment options provide a highquality drinking water supply through the removal of harmful contaminants that would pose public health risks. As a result of these investments, EMWD continues to meet all state and federal drinking water standards.

EMWD takes a long-term approach to groundwater basin management through its desalination program. Each year, nearly 60,000 tons of salt are removed through a reverse osmosis treatment process at the Perris I, Menifee I, and Perris II Desalters. The brine byproduct of the treatment process is exported through the Inland Empire Brine Line and ultimately discharged into the ocean.

The program provides long-term water quality improvements to the groundwater basin in the western portion of EMWD's service area and provides a needed salt-offset so that EMWD is permitted by the Santa Ana Regional Water Quality Control Board to use recycled water in this area.

By managing the source water and identifying the appropriate treatment option, and testing continually, EMWD can provide high-quality water supplies to its communities on a daily basis.



### PFAS MANAGEMENT

STRATEGIC PRIORITY: Protection of public and environmental health

PFAS are per- and poly-flouroalkyl substances, which are a class of chemicals resistant to heat, water and oil that have commonly been used in consumer products such as cookware, cosmetics and packaging. These chemicals enter groundwater supplies and pose a public health risk and have been linked to increased rates of cancer.

EMWD is among the hundreds of water agencies nationwide affected by the growing impacts of PFAS, but is among the few that have successfully leveraged partnerships into solutions to benefit customers and address the "forever chemicals."

EMWD has wells that were impacted by PFAS from historical firefighting activities and training that took place at March Air Reserve Base, which is managed by the Department of Defense (DOD).

EMWD proactively sought a strategic partnership with the DOD to address and remediate the PFAS that entered local groundwater supplies. Through this proactive partnership and the support of EMWD's Congressional delegation, EMWD and the DOD entered into an agreement where the federal entity funded the construction of a granulated activated carbon treatment facility that removes PFAS from groundwater and allowed EMWD Well 59 to be placed back into service.

The DOD also funded the difference in cost of groundwater and the purchase of imported water supplies from The Metropolitan Water District of Southern California until the well could be placed back online.

EMWD has one other well that is above the State of California's threshold for PFAS, but below the level established by the United States Environmental Protection Agency. This well has been offline since detection above the State's PFAS regulatory levels. The DOD and EMWD have agreed to monitor the situation and in the event that the federal standards are reduced to where the well would be out of compliance for federal drinking water quality standards, the DOD would fund the remediation system for that facility, as well.

#### Annual Cost of Environmental Compliance

Environmental compliance					
Category	Service	Cost			
Compliance Labor	Water	\$1,050,739.11			
	Wastewater	\$1,928,807.31			
	Subtotal	\$2,979,546.42			
Department Costs	Water	\$77,048.16			
	Wastewater	\$90,447.84			
	Subtotal	\$167,496.00			
Laboratory Costs	Water	\$1,693,026.69			
	Wastewater	\$784,566.62			
	Subtotal	\$2,477,593.31			
CEQA Compliance	Water	\$2,389,129.36			
	Wastewater	\$56,310.54			
	Subtotal	\$2,445,439.90			
Permits/Fees	Water	\$759,759.57			
	Wastewater	\$571,959.76			
	Subtotal	\$1,331,719.33			
Subtotal	Water	\$5,969,702.88			
	Wastewater	\$3,432,092.07			
FY 2022-23 Total		\$9,401,794.95			

# ANNUAL COMPLIANCE COSTS

EMWD is committed to achieving compliance with all regulatory agencies and doing so in a cost-effective manner on behalf of its customers

In fiscal year 2022-23, EMWD customers paid \$3.05 per month toward the cost of environmental compliance. Sewer customers paid \$1.06 per month.

This included all permits, fees, staffing, materials, and other costs.

As water and wastewater agencies face a continually evolving regulatory climate, EMWD will continue to meet the requirements set forth by oversight agencies and do so in a manner that reduces the financial burden on its customers.

#### GOING PAPERLESS

STRATEGIC PRIORITY: Superior customer service

EMWD has taken significant steps to reduce paper waste and reduce costs to its customers through its paperless billing efforts and other internal operational adjustments.

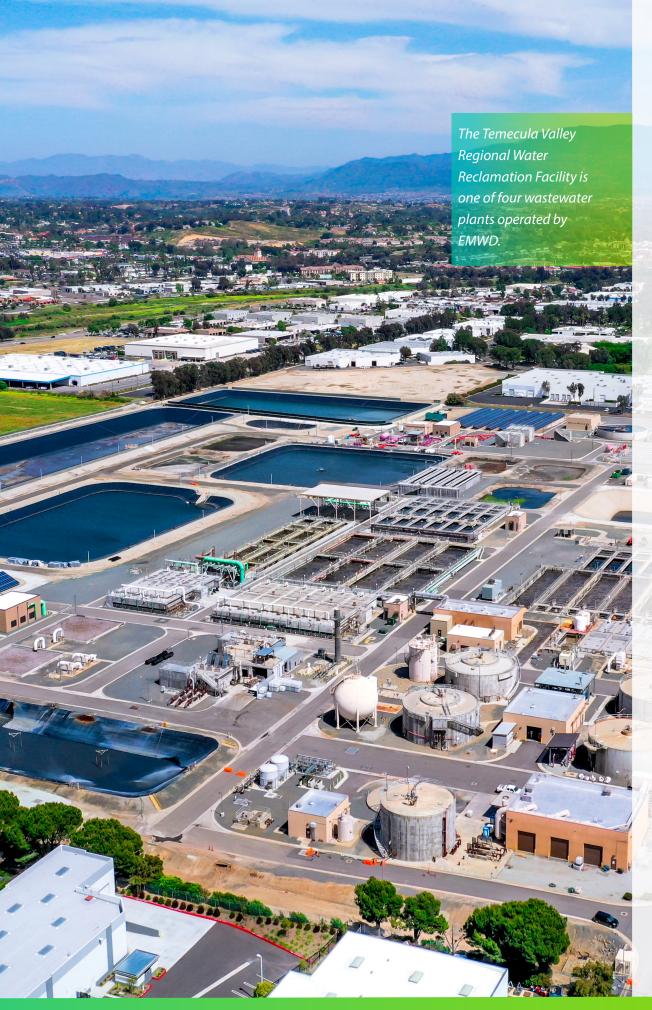
In 2023, 51 percent of EMWD customers had opted into paperless billing. These electronic billing options have created more than \$681,000 of annual savings through the reduction of printing and mailing paper bills, including costs for the bimonthly customer newsletter.

54%
Reduction
in paper use
since 2019

Participation in paperless billing has increased by 14 percent in the past five years, largely due to EMWD's investments in its online customer portal and billing system.

EMWD has also taken significant steps to reduce paper waste in its daily operations. In 2019, EMWD used just under 4.3 million pieces of paper. In 2022, it used less than 2 million — a 54-percent reduction in paper use. Based on 10,000 sheets of paper per tree, that is an equivalent savings of 230 trees per year.





#### WASTEWATER OPERATIONS

STRATEGIC PRIORITY: Highly reliable and cost-effective water, wastewater and recycled water service

EMWD has four operating Regional Water Reclamation Facilities (RWRF) — located in the cities of Moreno Valley, Perris, San Jacinto and Temecula — that collectively treat approximately 49 million gallons of wastewater per day and transform it into high-quality recycled water.

Nearly 2,000 miles of pipeline bring wastewater to the four facilities, which use a biological and chemical process to turn the wastewater into high-quality, tertiary treated recycled water. The recycled water meets California's Title 22 standards, which means it is safe for body contact and irrigation of food crops.

The four facilities produce approximately 55,000 wet tons of biosolids each year, which are safely exported to Arizona and used as fertilizer for non-food crops such as cotton. EMWD is successfully managing this resource and putting it to beneficial reuse as part of its longstanding commitment to resource management.

EMWD has taken steps to reduce its environmental impact through automation and renewable power supplies. Much of the wastewater collection system is fed through gravity sewer systems, reducing the need for a pressurized system. EMWD operates 51 sewer lift stations that provide additional flow assistance for areas where gravity systems must be bolstered due to elevation changes.



EMWD has also proactively worked with customers to keep its wastewater system operating efficiently through its Healthy Sewers campaign, which educates customers about the detrimental impacts of fats, oils, grease, and prescription medications in the sewer collection system.

The campaign, including its award-winning Patrick the Poo mascot, is also a supporting element to EMWD's planned Purified Water Replenishment (PWR) program that will be located at its San Jacinto RWRF. The PWR program will advance treat recycled water using ultrafiltration and reverse osmosis and use it for groundwater replenishment efforts.

### RECYCLED WATER

STRATEGIC PRIORITY: Highly reliable and cost-effective water, wastewater and recycled water service

EMWD is a national leader in recycled water usage, both by volume and in percentage of its overall water supply portfolio.

What began as a way to dispose of secondary treated wastewater by offering low-cost services to area farmers in the 1960s has transitioned to a high-quality tertiary water source that helps reduce demand on imported water supplies. It also has a beneficial impact to Greenhouse Gas Emissions.

Recycled water is also an environmentally friendlier water supply than other potential water sources. When upstream energy use is factored in, imported water has a higher carbon footprint than recycled water. The distribution and delivery of recycled water produces fewer Greenhouse Gas Emissions than other water supply sources.

EMWD in 2022 sold nearly 40,000 acre feet of recycled water, accounting for approximately 37 percent of its overall water supply portfolio. Approximately two-thirds of that demand goes to area agriculture, which has more than \$125 million annual economic impact to the region, according to the Riverside County Farm Department of Agriculture.

EMWD has developed a nationally-recognized Recycled Water Accelerated Retrofit Program, which retrofits existing landscape from potable to recycled water and converts nonfunctional turf to climate appropriate landscaping while providing a much-needed funding source and technical assistance.

By taking the lead on design, permitting and support, EMWD is able to quickly convert the sites to reduce potable water demand. EMWD funds the project on a per-acre foot of water cost, enabling an up-front financial means for organizations who previously found retrofits cost-prohibitive. The project costs are repaid through monthly bills.

To date, 50 sites have been retrofitted for a total water savings of approximately 1,000 acre feet per year. Another 25 are planned for an anticipated additional 400 acre feet of potable water savings.

In 2022, EMWD completed its most ambitious retrofit at The Lakes at Hemet West. In addition to the retrofit, more than 360,000 square feet of nonfunctional turf were removed. The community went from using 250 acre feet of potable water per year to 70 acre feet and 110 acre feet of recycled water.

In recent years, the fastest growing recycled water segment has been public landscaping for irrigation of streetscapes.

Much of that increase has been because of EMWD's longstanding partnership with Valley-Wide Recreation and Park District. In the past decade, Valley-Wide has increased the number of sites using recycled water for

Sites completed through Recycled Water **Accelerated Retrofit** Program (ARP) Annual acre feet of potable This property is water savings through ARP efficiently irrigated with Recycled Water 25 Additional sites planned. The right water for the right use which will achieve nearly 400 acre feet of potable water savings annually irrigation purposes by 2 1/2 times -- including more than doubling the

total streetscapes using recycled water.

Valley-Wide has increased from 440 acre feet to more than 1,000 acre feet of recycled water use in the past decade and now manages more than 100 sites using recycled water. Another 17 sites that will total 200 acre feet of annual usage are in various stages of planning or construction. Valley-Wide saves more than \$1.2 million annually through its recycled water commitments when compared to potable water usage.

Recycled water also provides environmental benefits at the San Jacinto Wildlife Area, a state-managed facility that is a major stopover on the Pacific Flyway for migratory birds and water fowl. It is the only California Department of Fish and Wildlife facility that is reliant on recycled water for environmental benefits. Recycled water is also used at EMWD's San Jacinto Wetlands, located at its San Jacinto Valley Regional Water Reclamation Facility and hosts bird tours throughout portions of the year.



### A COMMUNITY PARTNER

STRATEGIC PRIORITY: Effective communication, advocacy and community partnerships

For nearly 75 years, EMWD has been an integrated partner with the communities it serves.

From its award-winning school education program to its involvement in community events, Chambers of Commerce, Tribal and civic organizations, EMWD is committed to establishing and maintaining public trust by being transparent and accessible to its customers.

By having a well-informed customer base, EMWD is able to gain public acceptance for necessary investments and customer efficiency needs during times of water supply shortages.

EMWD employees give back through a wide range of charitable and community-focused programs and are proud to represent and wear the EMWD logo.

EMWD is proudly committed to social justice, customer equity and being a part of the community its calls home.



### COMMUNITY WATER ACCESS

STRATEGIC PRIORITY: Effective communication, advocacy and community partnerships

As part of its commitment toward promoting equitable access to clean drinking water and to promote the social responsibility of reducing plastic waste, EMWD has installed Water Bottle Fill Stations at 123 schools throughout its service area.

Every school in EMWD's service area has been offered a free fill station that provides students access to clean and reliable water to easily refill reusable water bottles throughout the day.

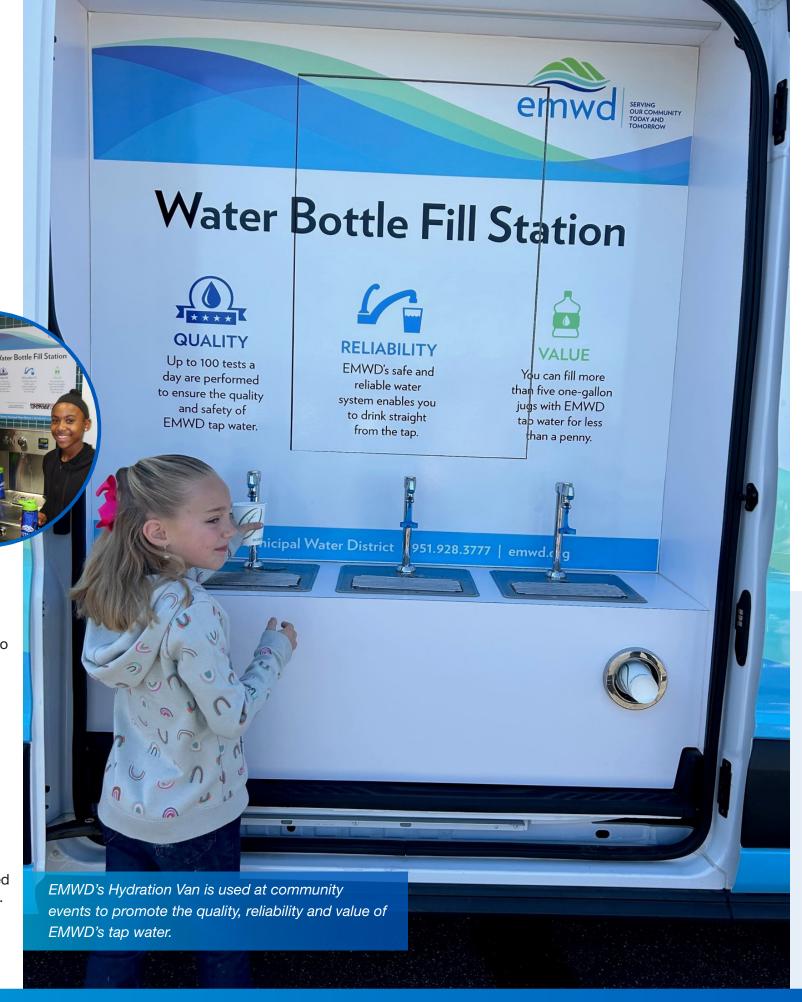
EMWD has also placed fill stations in public parks, libraries and community centers. In total, there are 163 units in the community.

EMWD also brings high-quality tap water to community events.

EMWD's Hydration Station Van is a mobile water unit that debuted in 2021. EMWD deploys the van to community festivals and programs throughout its service area, allowing guests access to free and safe drinking water.

Customers can also learn about EMWD's commitment to water quality and how EMWD performs more than 40,000 water quality tests each year so that its drinking water supplies continually meet and exceed state and federal drinking water standards.

The fill stations and Hydration Van have collectively saved hundreds of thousands of plastic bottles from entering landfills.



### **ASSISTANCE PROGRAMS**

STRATEGIC PRIORITY: Superior customer service

EMWD has worked to develop partnerships and programs that assist those in financial need and who are at risk for service being shut off due to nonpayment.

Established in early 2020, EMWD created its Help2Others program to provide financial assistance for those who are delinquent on their water bills.



The program utilizes non-rate revenue funds and a community partnership with the Inland SoCal United Way, who administers the payment assistance program.

Customers are eligible to receive an amount equal to two months of their average water bill, once per year.

Program participants also receive free home audits to help increase water use efficiency and reduce future water bills if there are wasteful practices. To date, more than 1,100 customers have received assistance totaling more than \$150,000 on their past-due water bills.

EMWD also promotes the Low Income Household Water Assistance Program, which is administered by the County of Riverside. EMWD customers received \$772,000 in funding from the program in 2022.

### **ENSURING AFFORDABILITY**

STRATEGIC PRIORITY: Fiscal responsibility and appropriate investment

EMWD has partnered with the University of California, Riverside, to conduct nationally-recognized water affordability studies.

A study published in 2020 analyzed eight years of EMWD customer bills and found that monthly water and sewer costs accounted for approximately 1.5 percent of the median monthly household income in EMWD's service area. This is well below the United States Environmental Protection Agency's affordability threshold of 4.5 percent.

EMWD continues to be at the forefront of affordability discussions and is committed to continuing academic partnerships to study this issue.

#### **ENGAGING & EDUCATING**

STRATEGIC PRIORITY: Effective communication, advocacy and community partnerships

EMWD has developed a forward-thinking strategic communications plan to increase public confidence through an education and outreach program that extends to schools, community organizations, public events, and the media.

EMWD's curriculum-based education program includes grade-level appropriate presentations, field trips, classroom presentations and coordination with local school district Career Technical Education programs that offer diverse ways to connect with students from preschool through college.

In the 2022-23 academic year, more than 44,000 students participated in programs offered by EMWD's education program.

Many of EMWD's programs are offered in English and Spanish as part of an expanding bilingual program to meet the needs of a service area population that is 49 percent Latino, based on 2020 Census data.

EMWD conducts proactive outreach for its Capital Improvement Projects to promote public confidence that EMWD is working on behalf of its customers. It is active in providing community presentations, print and online customer communications, social media engagement, and more to keep

our communities informed. In fiscal year 2022-23, EMWD initiated more than 5 million customer contacts through its various communications platforms.

By engaging our community from school aged children through adulthood, EMWD has developed a customer base that is invested in their water supply future and has embraced a culture of efficiency and trust in government.

44,000 **STUDENTS WHO PARTICIPATED IN EMWD'S EDUCATION PROGRAM IN** 2022-23





### FINANCIAL LEADERSHIP

STRATEGIC PRIORITY: Fiscal responsibility and appropriate investment

EMWD is committed to managing its budget to maintain financial stability and responsible stewardship by controlling costs through careful planning, a sound investment strategy, safeguarding reserves and active debt management.

This approach has enabled EMWD to sustain a financial model that is praised by rating agencies and has positioned the organization to be financially sustainable in light of the ebbs and flows associated with water sales due to seasonal demands and statewide water supply conditions.

EMWD's Board of Directors adopts a biennial budget that provides a financial road map to establishing water rates that recover costs in compliance with statewide laws and regulations. A five-year Capital Improvement Plan is also developed and regularly updated to provide sufficient funding for the necessary infrastructure investments that provide service reliability for EMWD's rapidly growing service area, which added 4,800 connections in 2022.

EMWD has secured AAA ratings from Fitch. These excellent ratings result in lower interest rates when issuing bonds for critical infrastructure projects, which helps keep rates low for customers.

The Board also adopted an updated financial reserves policy in 2021 that provides operating liquidity and financial flexibility while maintaining

the overall financial health of the organization. EMWD formed a Retirement Trust Fund in 2022 and its Board of Directors has committed to fully fund all employee pensions by 2030. EMWD has fully funded its Other Post Employment Benefits.

EMWD's Allocation-Based Rate Structure, established in 2009, is also widely considered the industry standard in promoting financial equity among ratepayers and is routinely updated through Cost of Service Studies. EMWD's Board of Directors has long taken the approach of instituting nominal annual rate increases to avoid large rate spikes for customers.

In 2022, EMWD also completed a Recycled Water Rate, Market and Affordability Study, which shows its commitment to agriculture and the beneficial reuse of recycled water through appropriate pricing structures.

EMWD has established monthly charges on customer bills that fund the replacement and refurbishment of

EMWD's Perris North Groundwater Treatment Facility is funded in part by a nearly \$62.5 million grant from the State Water Resources Control Board, the largest single grant in EMWD's history.

aging portions of the system to provide continued reliability and hedge against the costs associated with emergency repairs.

The organization has also placed an appropriate financial commitment on new development, which pays a Financial Participation Charge to connect into the system. This water and wastewater charge funds the construction or expansion of facilities needed to meet the demands to accommodate new construction within the region. New development often constructs infrastructure then turns it over to EMWD to operate and maintain the facilities.

EMWD has been recognized with the Excellence in Financial Reporting award by the Government Finance Officers Association for 19 consecutive years. These sound financial policies help allow EMWD to be a financially sound and cost-effective organization for its customers through a reliable and transparent service model.

\$557M

FISCAL YEAR 2023-24 ANNUAL BUDGET \$686M

PLANNED FIVE YEAR

CAPITAL IMPROVEMENT

PLAN BUDGET

\$95.7B

SERVICE AREA PROPERTY VALUATION

\$71M

CONNECTION FEE
REVENUE IN FISCAL
YEAR 2022-23

\$680M

CASH RESERVES
AS OF FISCAL YEAR
END 2023

\$6.2B

CURRENT SYSTEM VALUATION



#### LEGISLATIVE ADVOCACY

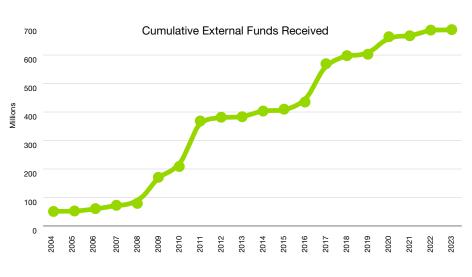
STRATEGIC PRIORITY: Effective communication, advocacy and community partnerships

EMWD has developed and implemented one of the nation's most active state and federal legislative advocacy programs to provide direct and tangible benefits to its customers and its industry.

The focus of EMWD's state and federal legislative efforts are to promote EMWD's interests and communicate regularly with legislators, regulatory agencies, and opinion leaders on issues of concern to EMWD and its ratepayers.

The program has two strategic priorities: To shield customers from risks and unintended consequences that may occur as a result of problematic legislation and regulations, and to secure funding for our customers by bringing tax dollars back into their community.

In addressing potential customer risk, EMWD actively engages the legislative and regulatory community through expert feedback, formal correspondence, briefings, committee hearing testimony, and other opportunities. Because of this, EMWD's leadership is often



requested as subject matter experts by decision makers who wish to understand the real-world impact of any legislative or regulatory actions.

EMWD is also active in working with legislators to secure state and federal funding and help return customers' tax money back into the community to be reinvested in local projects that improve system reliability and keep costs low for customers. In the past 20 years, EMWD has leveraged those partnerships into approximately \$696 million in grants, low-interest or principal forgiveness loans.

EMWD's Board of Directors has adopted four overarching policy principles for its legislative program:

- Preserve and protect local control;
- Recognize and respect regional differences and diversity;
- Pursue funding to address mandates, technology innovations, and offsets costs for development of projects to further diversify and improve the resilience of EMWD's water supply portfolio; and
- Encourage and actively pursue integration and deployment of tested and reliable technologies to streamline, support, and protect EMWD operations.

EMWD's legislative program has also established longstanding, mutually-beneficial strategic partnerships with state and federal agencies, including the State Water Resources Control Board, the Department of Defense and the United States Army Corps of Engineers. These agencies have collaborated with EMWD for projects and programs that have created a more sustainable and environmentally resilient water, wastewater and recycled water future for the region.

### AN UNMATCHED SAFETY CULTURE

STRATEGIC PRIORITY: Exemplary employer

The safety of EMWD's employees, contractors and community is at the forefront of its decisions each day.

EMWD has developed an industry-leading safety culture that spans decades and is evidenced through an organizational wide commitment to accountability, safety training and reporting of all incidents which are designed to continually improve working conditions and learning opportunities.

EMWD has been a member agency of the California Occupational Safety and Health Administration (Cal OSHA) Voluntary Protection Plan/STAR program since 1999. EMWD was the first public agency in California to be a part of this program, which goes above and beyond industry best practices.

EMWD's three-year injury rate ending in 2022 was 2.2 percent, well below the industry average of 3.3 percent. EMWD's three-year lost workday rate was 0.19 percent, also below the industry average of 1.2 percent.

In January 2023, EMWD launched "Safety First Week" to further its commitment to raising awareness of workplace safety issues. In 2022, EMWD's injury rate was 2.63 percent. In the first six months of 2023, that rate dropped to 1.52 percent. Reporting of potential safety issues also increased as a result of Safety First Week. In 2022, EMWD employees filed four near miss reports and six unsafe condition reports. In the

first six months of 2023, employees filed 25 near miss reports and 14 unsafe condition reports.

These reports are critical toward examining on-the-job safety risks and creating policies and learning opportunities to reduce risks to employees and the community.

EMWD's safety culture is promoted by extensive job related training every employee must complete on an annual basis.

To keep its employees healthy, EMWD offers a wide range of programs such as a wellness fair, a fitness center, walking paths, and other engagement opportunities to promote a sound body and mind so that employees are best prepared to do their jobs safely.

EMWD employees regularly participate in safety training in order to do their jobs safely as part of EMWD's industryleading safety culture. 0.19% **THREE-YEAR LOST WORKDAY RATE, ENDING** IN 2022.

#### WORKFORCE DEVELOPMENT

STRATEGIC PRIORITY: Exemplary employer

More than 600 employees proudly do their part to help EMWD provide water, wastewater and recycled water service to customers throughout western Riverside County.

EMWD continually invests in its employees and has developed a broad range of programs to promote employee growth, diversity, and succession planning to maintain organizational continuity.

EMWD employees undergo continuous training to be prepared to carry out job duties using the latest information, equipment, technology and safety protocols.

Annual Diversity, Equity and Inclusion training is also completed by all EMWD employees. EMWD has seen a major increase in workforce diversity in the past two decades. In 2000, 75 percent of its workforce was White. By 2021, that figure was 55 percent.

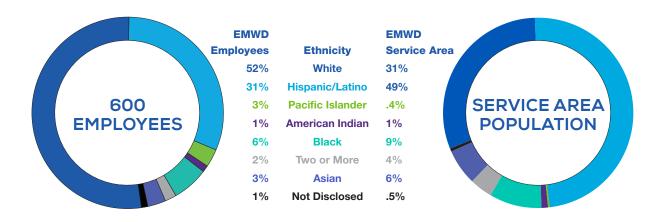
EMWD has also established a broad range of career development opportunities for the community, including internship programs and a Youth Ecology Corps that offers young adults job-training through a partnership with the Riverside County Workforce Development Board. EMWD also participates in and serves on the Board of Directors of IE Works, a regional job training program for water and wastewater utilities.

EMWD has launched an organizational-wide succession planning effort. In 2023, 38 percent of EMWD employees were already retirement eligible, and 55 percent would be eligible within five years. Given the wave of impending retirements impacting the organization and industry, EMWD is committed to making sure that its workforce is positioned to move into leadership positions when they become vacant.

EMWD also expanded its employee communications so all staff is informed on organizational efforts and priorities and can remain EMWD's best and most valuable asset in the community.



#### EMPLOYEE SEGMENTATION DATA



**GENDER DATA: ALL EMPLOYEES** 

 Male
 Female:

 70.4%
 29.6%

EMWD'S WORKFORCE
HAS A 15-PERCENT
HIGHER RATE OF GENDER
DIVERSITY THAN THE

**INDUSTRY AVERAGE** 

**DEPARTMENT DIRECTORS** 

Male 76.5%

Female: 23.5%

11.5% EMPLOYEES ARE VETERANS





000

26
AVERAGE REQUIRED
TRAINING COURSES
PER EMPLOYEE

**11.6 YEARS** 

**AVERAGE TENURE OF** 

**EMWD EMPLOYEES** 

O.19
THREE-YEAR LOST
WORKDAY INJURY
RATE





38%
ARE CURRENTLY
RETIREMENT
ELIGIBLE

55%
ELIGIBLE FOR
RETIREMENT WITHIN
FIVE YEARS



### TRIBAL PARTNERSHIPS

STRATEGIC PRIORITY: Effective communication, advocacy and community partnerships

EMWD has developed a positive and mutually beneficial relationship with its tribal partners throughout its service area.

The two primary tribal partners are the Soboba Band of Luiseño Indians near San Jacinto and the Pechanga Band of Luiseño Indians near Temecula. Both tribes have strong leadership that is committed to working collaboratively with EMWD to provide water, wastewater and recycled water services.

Both tribes operate resort-casinos that are connected to EMWD wastewater facilities. EMWD and the tribes have regular coordination efforts to help maintain mutually beneficial and partnerships.

The Soboba Band of Luiseño Indians experienced impacts to its groundwater supplies as a result of the Colorado River Aqueduct construction in the 1930s. Groundwater from tribal land seeped into the Aqueduct, resulting in a loss of water to the tribe.

As part of a settlement, EMWD and regional partners developed a long-term solution through the construction of an Integrated Recharge and Recovery Program, which established groundwater replenishment efforts and pumping limits to protect the long-term health of the basin. The Hemet-San Jacinto Watermaster was formed to provide oversight to the management of the basin.

Today, EMWD is the lead agency in operating facilities that replenishes a 10-year average of 7,500 acre feet per year into the groundwater basin so that the tribe and all regional partners have a sustainable and responsibly managed groundwater basin to rely on.

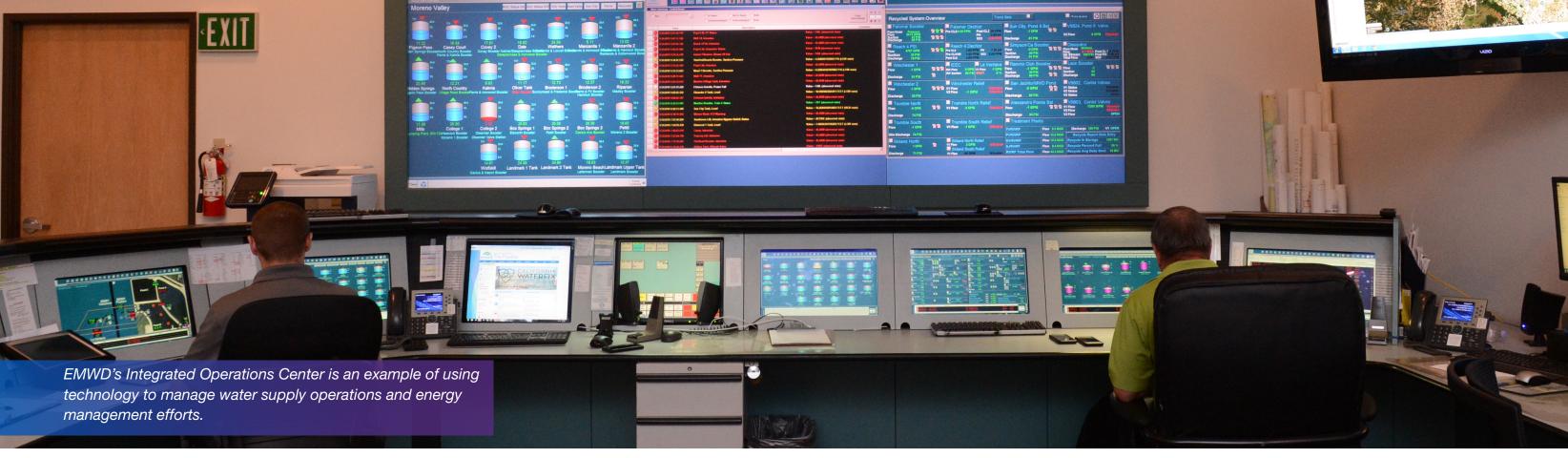
EMWD and the Pechanga Band of Luiseño Indians have also coordinated on water and wastewater infrastructure and management programs.

EMWD is a party to the Pechanga Settlement Agreement, which provides a long-term agreement between multiple water agencies and the tribe to provide water supply reliability through collaborative groundwater management, imported water supplies and recycled water use. Pechanga was EMWD's eight-largest recycled water customer in 2022 (502 acre feet).

Pechanga is EMWD's largest sewer customer with 2,130 EDU's, resulting in \$969,700 in revenue in fiscal year 2021-22. Soboba (330 EDU's) is EMWD's ninth-largest sewer customer.

EMWD is in alignment with its tribal partners longstanding commitment to environmental stewardship and is committed to honoring those efforts while respecting the sovereign nature of the tribes.





#### **TECHNOLOGY DRIVEN**

STRATEGIC PRIORITY: Superior customer service

EMWD is a technology-focused organization that has implemented industry best practices to increase operational efficiency, reduce energy demand, and protect customer data and operations through sound investments.

At the heart of EMWD's systems is its Integrated Operations Center (IOC). This 24-hours-per-day staffed facility provides real-time data on water operations, emergency alerts, and energy management efforts. It has the ability to switch between gas and electric pumps at facilities to maximize efficiencies and reduce costs. Each day, the IOC shuts down high-use facilities during 4 p.m. and 9 p.m. to minimize costs during hours when energy rates are the highest.

The IOC is the hub for EMWD's Demand Response Auction Mechanism partnership with Southern California Edison (SCE). During periods where the statewide energy grid is overwhelmed, EMWD shuts down or reduces use at facilities such as wells and treatment plants to reduce energy demand by up to 4.2 MegaWatts, equivalent to up to 200 residential homes of energy use. EMWD relies on reduced flows or water in storage during these periods to maintain levels of service to its customers. EMWD receives approximately \$250,000 annually for its participation in the program.

The IOC also manages EMWD's participation in SCE's Agricultural Pumping Interruption program, where it can reduce demand by 1.1 MegaWatts during times of peak statewide energy usage.

EMWD has also invested heavily in CyberSecurity to ensure its systems remain protected against potential threats. EMWD employees go through regular training to ensure they are doing their part to help protect the systems that operate critical infrastructure around the clock.

In 2019, EMWD completed installing Automated Metering Infrastructure throughout its service area, and in

2020 debuted its MyAccount customer portal. MyAccount provides real-time water use data, empowering customers to better understand and manage their water use. Approximately 1,300 new portal accounts are added monthly.

Subsequent upgrades to the portal have provided an expanded range of customer self-service options. The metering upgrades have also had an environmental benefit, as EMWD reduced its fleet vehicle miles by 190,000 per year as a result of no longer having to manually read meters. The program also reduces fuel consumption by 24,500 gallons per year. The metering infrastructure results in 99.7 percent of meters being successfully read and billed each month through the automated system.

In 2022, EMWD launched a Text-to-Disconnect program that notified customers via text message of impending shutoffs due to non-payment. In its first year, the program saved EMWD more than \$1 million in costs avoided in staff time, fuel and other resources to disconnect and then restore service upon payment.

In 2023, EMWD initiated an Artificial Intelligence pilot project with its wastewater systems to streamline operations. The project is moving into Phase 2 and EMWD staff is involved in working with the software development team to offer real-time feedback on the system.

#### \$1 MILLION

COSTS AVOIDED IN FISCAL
YEAR 2022-23 BY TEXTING
CUSTOMERS ABOUT
IMPENDING DISCONNECTIONS
FOR NONPAYMENT.

The pilot project focused on automated air flow into aeration basins to enhance efficiencies and improve effluent quality through minimizing ammonia bleed-through, reducing the need for disinfectants. The pilot project resulted in reducing energy consumption at the San Jacinto Valley Regional Water Reclamation Facility by 960 kilowatt hours per day, resulting in a projected \$42,000 in annual energy cost savings.

As systems continue to evolve, EMWD is committed to evolving with them. This includes continued upgrades to protect operational systems and efficiency measures designed to further reduce costs through sound investments in technology.



#### **FUTURE FOCUSED**

STRATEGIC PRIORITY: Sound planning and operational efficiency

With a service area 43 percent built-out, EMWD manages its resources and operations with a balance of today's needs and tomorrow's anticipated growth.

In the 2020 census, EMWD's population grew at a rate of 15 percent - higher than any region in California. In 2022, EMWD added approximately 5,000 new water connections and anticipates similar growth in the coming years. As a result, EMWD must plan its Capital Improvement Program (CIP) investments to be completed when needed but not so early that assets become underutilized.

EMWD has a five-year CIP budget of more than \$680 million. This includes more than 200 active projects and an anticipated \$115 million in external funding. EMWD's five-year CIP budget has increased by nearly \$300 over the past decade to keep up with inflation and the needs associated with service area growth.

EMWD also continues to adopt proactive water use efficiency policies that will create a culture of sustainability. All development since 2015 is required to have water efficient landscaping in nonrecreational

870,000 Service Area Population in 2020

410,000

Service Area Population in 1990

1,130,000

Projected Service Area Population in 2045

public spaces and in the front yards of new residential properties. In 2023, it supported statewide requirements that all nonfunctional turf could no longer be irrigated with potable water.

EMWD's facilities planning and development services team work collaboratively with its water resources team to meet customer needs in a cost-effective manner. Balancing social equity is also a key component of planning for the future.

EMWD's Board of Directors is committed to accommodating the future development demands while placing the cost of system expansion on the development community. Developers are responsible for expanding portions of EMWD's infrastructure through construction of those facilities or through Financial Participation Charges. This model prevents existing customers from being financially burdened to meet the infrastructure needs of new customers.

Through sound planning, responsible governance, financial equity and

resource management, EMWD is proud to be a leader in preparing for the future needs of the diverse communities it serves.

#### **KEY UPCOMING PROJECTS**

STRATEGIC PRIORITY: Fiscal responsibility and appropriate investment

Among the high-profile projects that EMWD will be advancing in the coming years:

Purified Water Replenishment: This program will purify recycled water with ultrafiltration and reverse osmosis and use the purified water to replenish the local groundwater basin, where it will ultimately become drinking water. EMWD is actively seeking additional external funding for this project which will improve the quality and quantity of local groundwater supplies.

San Jacinto Valley **Groundwater Treatment** 

Facility: This project (pictured at right) will be the final treatment facility for water extracted from the aquifer as part of the **Purified Water** Replenishment program. EMWD is seeking funding partnerships and hopes to begin construction in 2024.

Quail Valley Sewer System: This grant-funded project will bring sewer service to Subarea 4 of the Quail Valley community in Menifee. This highdensity, economically disadvantaged community has experienced a public and environmental health crisis due to failing septic systems which contaminate ground and surface water. EMWD is working on preliminary design and seeking additional external funding.

Wine Country Sewer Expansion: To accommodate the economic growth of Temecula's Wine Country, EMWD will be constructing additional sewer lines to accommodate wastewater flows from wineries currently using septic systems. EMWD has received funding commitments from the American Rescue Plan Act to advance the project.



2270 Trumble Road P.O. Box 8300 Perris, CA 92572-8300

**EMWD Main Phone Number:** 951.928.3777

**EMWD Customer Service:** 800.426.3693

**Careers:** 

www.emwd.org/joinemwd

**Climate Action Plan:** www.emwd.org/climateactionplan

**EMWD Water Quality Report** www.emwd.org/ccr

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