



**ELSINORE VALLEY**

MUNICIPAL WATER DISTRICT

EVMWD.com

**Elsinore Valley Municipal Water District (EVMWD), located in Riverside County, California approximately 90 miles northeast of San Diego, provides high-quality water, wastewater, and recycled water services to more than 159,000 customers.**



EVMWD Headquarters

# PFAS: HIGH COST OF COMPLIANCE REQUIRES PARTNERING FOR SOLUTIONS



Like in many communities across California, including Elsinore Valley, low levels of two of the most widely understood per- and polyfluoroalkyl substances (PFAS – PFOA and PFOS) – have been detected in local water supplies.

Since PFAS poses a threat to public health, water districts, like EVMWD, are left to carry the burden and find solutions to lower PFAS and other emerging contaminants in drinking water. However, the cost for the required infrastructure and treatment is significant, affecting not only our customers but, more significantly, our disadvantaged communities.

## CAUSES:



**RUNOFF**



**HOME**



**LANDFILLS**



**MANUFACTURING**

## What we know

- ✓ Significant financial impacts to disadvantaged communities
- ✓ Treatment will impact families throughout California and create additional costs for our customers
- ✓ Removal from water supplies requires more advanced treatment than conventional processes
- ✓ PFAS have entered local water supplies and at certain levels may cause health impacts
- ✓ People are exposed to PFAS daily through common consumer products
- ✓ Removal of PFAS uses more energy creating greenhouse gas emissions

## What we don't know

- × What levels of PFAS in drinking water pose a threat
- × What standard is appropriate- USEPA offers different guidance than California
- × Extent of treatment costs and impact on affordability for our customers
- × Process for disposing of waste product after treatment
- × Potential of future regulations on wastewater and recycled water



## CANYON LAKE WATER TREATMENT PLANT (CLWTP): THE ONLY SURFACE WATER SOURCE AFFECTED BY PFAS ON THE WEST COAST

EVMWD CLWTP is undergoing modifications to incorporate treatment for removal of PFAS.

### PFAS: HIGH COST OF COMPLIANCE REQUIRES PARTNERING FOR SOLUTIONS

**ESTIMATED TOTAL PROJECT COST IS NOW AT \$62 MILLION**

#### Canyon Lake Water Treatment Plant (CLWTP):

- In 2019, PFAS contamination in Canyon Lake water exceeded California response level.
- In 2020, a 9-month pilot study was conducted to evaluate treatment alternatives for removing PFAS from Canyon Lake water.
- Double-barrier approach of granular activated carbon (GAC) followed by ion exchange was identified as the preferred treatment strategy downstream of media filtration at the CLWTP.
- PFAS removal in a surface water reservoir has unique treatment challenges and EVMWD investigated innovative approaches as part of the pilot program.

**Project Funding: \$780,000 Secured in Federal Relief Funds and \$3.4M in congressional directed appropriations to upgrade CRITICAL Water Sources to complete the pilot program**

- Treatment plant was removed from service due to PFAS levels
- EVMWD is investing millions of dollars to construct state-of-the-art treatment technologies which will also help with other emerging contaminants.
- Will help maximize utilization of local run-off in the San Jacinto Watershed and improve resiliency
- Anticipate construction to start early 2024 and end in 2027.

### Disadvantaged Communities Are At Risk

We serve disadvantaged and severely disadvantaged communities. Delivering clean, reliable and affordable water to our customers is a top priority. New, costly regulations that require new advanced treatment facilities and heavier reliance on imported water supplies will continue to drive water rates up throughout California and directly impact Disadvantaged Communities.

**1/3 of EVMWD parcels are located in disadvantaged communities.**



## LEE LAKE WELLS PFAS TREATMENT - A SOLUTION FOR PFAS TREATMENT

EVMWD is increasing local supply resiliency by building two new groundwater wells with PFAS treatment.

**ESTIMATED TOTAL PROJECT COST IS \$11.6 M**

#### System Includes:

- Granulated activated carbon (GAC) treatment system technology
- Two Wells
- PFAS treatment
- Pump Station

**Community Project Funding: \$3.04 Million secured via Prop 84 funding.**

- Once PFAS treatment has been implemented, this project will produce a safe and reliable water supply increasing local resiliency in EVMWD's service area.
- Up to 1,000 AFY of local supplies



## ELSINORE GROUNDWATER BASIN WELLS

Groundwater sources are more reliable, resilient, and cost-effective compared to imported water supply via Northern California or the Colorado River.

**Approximately 1/3 of EVMWD's supplies come from local groundwater sources.**

#### Challenges

- Regulations: Concerns over proposed regulatory landscape surrounding PFAS compounds.
- Costs: Estimated cost for treating local groundwater supplies in excess of \$50 million
- Capacity: Nearly all of EVMWD's drinking water wells will require treatment to comply with the draft Maximum Contaminant Level (MCL) proposed by the USEPA.