Yuima Municipal Water District

2024 Water Quality Report

Consumer Confidence Report

INSIDE THIS REPORT

OUR MISSION

To provide a diversified, sustainable water supply for water service to our Pauma Valley customers that exceeds all standards of quality and reliability at fair, reasonable, and equitable rates.

Board Meetings

Regular Meetings of the Board of Directors are generally held on the fourth Monday of each month at 2:00 p.m. at the District office
34928 Valley Center Road
Pauma Valley, CA

Dear Valued YMWD Customer:

Yuima Municipal Water District (YMWD) is pleased to present its annual water quality report. Once again, we provided you with consistently high-quality drinking water throughout 2024. This annual water quality report shows how YMWD continues to meet or surpass all drinking water quality standards established by the State Water Resources Control Board.

YMWD is committed to providing a safe, high-quality and reliable water supply, while protecting public health. By efficiently maintaining and operating our facilities and conducting rigorous monitoring and testing of the water we serve, YMWD is able to provide our customers with high-quality water. Water samples are collected throughout the year from YMWD's water sources to carefully test for contaminants and impurities.

The State Water Resources Control Board requires that YMWD customers receive an annual copy of this report which summarizes the results of water quality tests and provides specific details about sources and quality of the water served in your community.

We encourage you to read this report and if you have any questions, please feel free to call contact me at (760) 742-3704.

Thank you for being part of the YMWD family—we're here to serve you.

Amy Reeh

Amy Reeh
General Manager
Yuima Municipal Water District

About Regulations

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- MICROBIAL CONTAMINANTS, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and/or wildlife.
- INORGANIC CONTAMINANTS, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic waste water discharges, oil and gas production, mining and/or farming.
- PESTICIDES AND HERBICIDES, which may come from a variety of sources such as agriculture, urban storm water runoff and/or residential uses.
- ORGANIC CHEMICAL CONTAMINANTS, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, agricultural operations, urban storm water runoff and septic systems.
- RADIOACTIVE CONTAMINANTS, which can be naturally occurring or present as a result of contamination from mining or other activities.
- PFAS CHEMICALS, there are thousands of different PFAS, some of which have been more widely used and studied than others. Scientific research suggests that exposure to certain PFAS may lead to adverse health outcomes. Research is still ongoing to dertmine how exposure to these different PFAS chemicals occurs and how they can affect human health.

NITRATE

Nitrate in drinking water at levels above 10 parts per million (PPM) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 PPM may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should seek advice from your health care provider.

PERCHLORATE

Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and to thereby reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

LEAD AND COPPER

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Yuima Municipal Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does n ot remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Yuima Municipal Water District at (760) 742-3704. A service line inventory has been prepared and can be and is available to the public by contact Yuima Municipal Water District

Lead & Copper **(testing done in 2023)**	**No. of Samples Collected**	**90th Percentile Level Detected**	No. Sites Exceeding RAL	RAL	PHG	Typical Source of Contaminant
Lead (ppb) Yuima IDA	5 5	ND ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from Industrial manufacturers; erosion of natural deposits
Copper (ppm) Yuima IDA	5 5	0.011 0.175	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

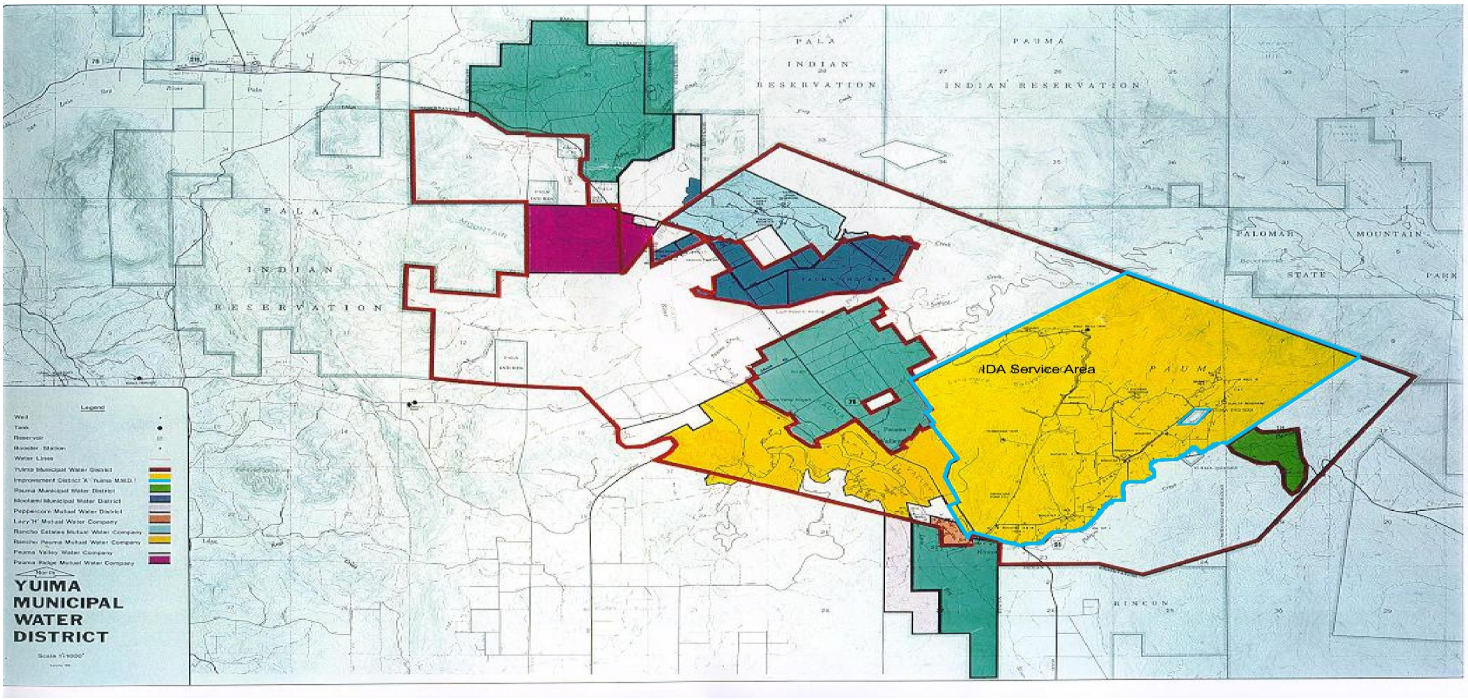
Where Your Water Comes From

Yuima relies on two main sources: local groundwater and imported treated surface water. The imported water quality issues that affect groundwater and imported surface water are somewhat different.

- LOCAL GROUNDWATER is pumped from underground wells throughout Pauma Valley. This aquifer is known as the Pauma Valley Groundwater Basin. YMWD uses a sodium hypochlorite solution (chlorine) to treat and disinfect its well water to remove potential bacteria contamination found naturally in the environment.
- IMPORTED WATER is purchased by YMWD from the San Diego County Water Authority (SDCWA), which in turn purchases the majority of its imported water from Metropolitan Water District of Southern California (MWD). MWD imports water into Southern California from two sources: the Colorado River, and the State Water Project (SWP).

YMWD Service Area

- Yuima Municipal Water District Service Area is all lands that fall within the red outlined area below. YMWD relies on imported treated surface water, with a portion of the northwestern part of the service area that also is supplied by a leased well. If you live in YMWD service area, please read the "Yuima" and "Imported Water" columns of the water quality tables.
- The Improvement District A (IDA) service area is the yellow highlighted area that falls within the blue outlined area below. IDA uses a blend of imported water and the IDA wells. If you live in the IDA service area, please read the "IDA" and "Imported Water" columns of the Water Quality Tables.



This report contains important information about your drinking water. Please contact Yuima Municipal Water District at (760) 742-3704 for assistance in Spanish.

Este informe contiene información muy importane sobre su aqua para beber. Favor de comunicarse Yuima Municipal Water District a (760) 742-3704 o vicitenos a 34928 Valley Center Road, Pauma Valley, CA. para asistirlo en español.

PROTECTING YOUR DRINKING WATER

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer and undergoing chemotherapy, organ transplant recipients, and those with HIV/AIDS or other immune system disorders, including elderly and infants who can be particularly at risk. These people should seek advice about drinking water from their health care provider.

The sources of drinking water (both tap and bottled) include rivers, lakes, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. The land that the water comes into contact with is called the watershed; everything that happens to or in the watershed can affect the quality of your drinking water supply.

In 2016, YMWD started using Ammonia as well as Chlorine for disinfection in the water treatment. Chloramine is produced by combining Chlorine and Ammonia. Chloramine is chiefly a secondary disinfectant. Secondary disinfectants are added to water that has already been disinfected with a primary disinfectant and are used to help protect treated water from re-contamination as it flows through the distribution network to the customer.

Total Coliform Bacteria are naturally present in the environment and are generally not harmful. Coliform bacteria may occur in soil, vegetation, animal waste, sewage, and surface waters. YMWD routinely tests for the presence of coliform bacteria as an indicator of the sanitary quality of drinking water. YMWD also tests for *E. coli* bacteria, which indicates fecal or sewage contamination. A positive coliform test result does not necessarily mean a maximum contaminant level (MCL) has been exceeded, or that there is a problem in the water system.
More information and general guidelines on ways to lessen the risk of infection by microbes are available from the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Vulnerability Assessment

- Imported Treated Surface Water—The Colorado River water is vulnerable to factors such as urbanization in the watershed, and waste water.
- The State Water Project supplies are considered most vulnerable due to urban storm runoff, wildlife, agriculture, recreation, and waste water. The most recent surveys for MWD's source waters are the Colorado River Watershed Sanitary Survey—2015 Update, and the State Water Project Watershed Sanitary Survey—2016 Update. For more info, a copy of MWD's CCR can be obtained online at http://www.mwdh2o.com.
- YMWD Wells—The most significant identified sources of possible contamination are fertilizer and pesticide use from agriculture groves in the areas surrounding District wells. All drinking water sources in YMWD are secured from vandalism by locked entrance gates and fencing. The initial vulnerability assessments were completed in 2003 and 2011. You can view the vulnerability assessments online at https://merritt.cdlib.org/m/ucd_ice_swap and then search for "Yuima".

Protecting the sources of drinking water helps protect our health. It's everyone's responsibility, and here are a few ways you can help:

- Eliminate excess use of lawn and garden fertilizers and pesticides. They can contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil to a recycling center.

Microbiological Contaminants	Highest No. of Detections Yuima	No. of Months in Violation Yuima	Highest No. of Detections IDA	No. of Months in Violation IDA	MCL	MCLG	Typical Source of Bacteria
E. coli	0	0	0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

DISTRIBUTION SYSTEM Results are from the distribution system and not representative of the sources

Parameter	Units	State MCL [MRDL]	PHG (MCLG)	State DLR (RL)	Yuima Range / Yuima Average	IDA Range / IDA Average	Imported Water Range / Imported Water Average	Major Sources in Drinking Water
Nitrate (as Nitrogen)	ppm	10	10	0.4	6.4-6.9 6.65	ND-7.5 3.74	ND ND	Runoff and leaching from fertilizer use; leaching from septic tank and sewage; erosion of natural deposits
Perchlorate	ppb	6	1	1	ND	ND-1.2 0.03	ND	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Total Trihalomethanes (TTHM)	ppb	80	NA	1.0	11-20 LRAA=20		14-42 42	Byproduct of drinking water chlorination
Sum of Five Haloacetic Acids (HAA5)	ppb	60	NA	1.0	ND-7.4 LRAA=7.4		ND-2.8 2.8	Byproduct of drinking water chlorination
Bromate	ppm	MRDL = 4.0	MRDL = 4.0	NA	0.1-2.8 1.25	0.3-3.6 1.96	ND-6 2.00	Drinking water disinfectant added for treatment
Total Chlorine Residual	ppm	MRDL = 4.0	MRDL = 4.0	(0.05)	0.04-3.6 1.84	0.01-4.7 2.35	2.0-3.9 3.10	Drinking water disinfectant added for treatment
Total Organic Carbon (TOC)	ppm	TT	0.1	1.0	NA	NA	ND-8.5 1.7	Byproduct of drinking water ozonation

YUIMA MWD 2024 WATER QUALITY INFORMATION

Parameter	Units	State MCL [MRDL]	PHG (MCLG)	State DLR (RL)	Yuima Range Yuima Average	IDA Range IDA Average	Imported Water Range Imported Water Average	Major Sources in Drinking Water
ORGANIC CHEMICALS - Volatile Organic Compounds								
Trichlorofluoromethane (Freon-11)	ppb	150	1,300	5	ND	ND-30 8.18	ND	Industrial factory discharge; degreasing solvent; propellant and refrigerant
INORGANIC CHEMICALS								
Aluminum	ppb	1000	600	50	ND	ND	ND-0.16 0.05	Residue from water treatment process; natural deposits erosion
Fluoride	ppm	2.0	1	0.1	0.20 Single Sample	0.12-0.21 0.17	0.12-0.21 0.17	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Barium	ppb	1000	2000	100	ND	0-130 42.50	95-122 113	Natural deposits erosion; oil and metal refineries discharge
Hexavalent Chromium	ppb	10	0.02	NA	ND	0.3-1.7 0.98	ND-0.32 0.03	Runoff and leaching from natural deposits; discharge from industrial waste factories
Selenium	ppb	50	30	5	ND Single Sample	ND-6.3 2.21	ND	Refineries, mines, and chemical waste discharge; runoff from livestock lots
RADIOLOGICALS								
Gross Alpha Particle Activity	pCi/L	15	MCLG = 0	3	ND	ND-4.48 2.19	ND Single Sample	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50	MCLG = 0	4	NA	NA	4.23 Single Sample	Decay of natural and man-made deposits
Radium-226	pCi/L	NA	0.05	1	NA	NA	ND	Erosion of natural deposits
Radium-228	pCi/L	NA	0.05	1	ND Single Sample	NA	ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	ND Single Sample	NA	1.7-2.8 2.3	Erosion of natural deposits
SECONDARY STANDARDS - Aesthetic Standards								
Aluminum	ppb	200	600	50	ND	ND	ND-0.16 0.05	Residue from water treatment process; natural deposits erosion
Chloride	ppm	500	NA	(2)	47.00 Single Sample	66-160 106	100 Single Sample	Runoff/leaching from natural deposits; seawater influence
Specific Conductance	µS/cm	1,600	NA	NA	570 Single Sample	700-1300 968	827 Single Sample	Substances that form ions in water; seawater influence
Sulfate	ppm	500	NA	0.5	110 Single Sample	110-190 144	152-217 191	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	ppm	1,000	NA	(2)	370 Single Sample	440-850 605	474-614 545.00	Runoff/leaching from natural deposits
Color	Color Units	15	NA	NA	ND	ND	ND-1 ND	Naturally-occurring organic materials
Turbidity	NTU	5	NA	0.1	ND	0-3.2 0.51	0-0.25 ND	Soil runoff
General Minerals								
Alkalinity (as $CaCO_3$)	ppm	NA	NA	(1)	100 Single Sample	110-240 174	99-120 112	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide,
Calcium	ppm	NA	NA	(0.1)	57 Single Sample	57-150 92	67-68 68	Runoff/leaching from natural deposits
Chlorate	ppm	NA	NA	(0.1)	NA	NA	220-380 291	By-product of drinking water chlorination; industrial processes
Hardness (as $CaCO_3$)	ppm	NA	NA	(1)	220 Single Sample	240-580 362.5	270 Single Sample	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
Magnesium	ppm	NA	NA	(0.01)	18.00 Single Sample	23-50 33	24 Single Sample	Runoff/leaching from natural deposits
Potassium	ppm	NA	NA	(0.2)	ND Single Sample	3.5-7.6 5.6	4.8 Single Sample	Salt present in the water; naturally-occurring
Sodium	ppm	NA	NA	(1)	31.00 Single Sample	42-72 56	99 Single Sample	Salt present in the water; naturally-occurring
Miscellaneous								
Aggressiveness Index (AI) -	AI units	NA	NA	NA	NA	12-13 12.26	13 Single Sample	Elemental balance in water; affected by temperature, other factors
Bicarbonate Alkalinity	ppm	NA	NA	(1)	100 Single Sample	110-230 166	ND	Runoff / leaching from natural deposits
Corrosivity (as Saturation Index, SI)	SI units	NA	NA	NA	NA	NA	0.82 Single Sample	Elemental balance in water; affected by temperature, other factors
pH	pH Units	NA	NA	NA	7.80 Single Sample	7.3-7.8 7.58	7.5-8.7 8.4	NA
PFAS								
Perflurobutane Sulfonic Acid (PFBS)	ppt	NL=500	NA	NA	NA	4.9-6.6 5.63	ND Single Sample	Perfluorobutane sulfonic acid exposures resulted in decreased thyroid hormone in pregnant female mice

ABBREVIATIONS USED IN THIS REPORT

- PDWS: Primary Drinking Water Standards - MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- SDWS: Secondary Drinking Water Standards - MCLs for contaminants that do not affect health but are used to monitor the aesthetics of the water.
- PHG: Public Health Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- MCLG: Maximum Contaminant Level Goal - The level of contaminant in drinking water below which there is no known expected risk to health. MCLG's are set by the U.S. Environmental Protection Agency.
- MCL: Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCL's are set to protect the odor, taste, and appearance of drinking water.
- MRDL: Maximum Residual Disinfectant Level - The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
- MRDLG: Maximum Residual Disinfectant Level Goal - The level of a disinfectant added for water treatment below which there is no known or expected risk to health.
- RAL: Regulatory Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- NA: Not applicable.
- NC: Not collected.
- ND: Not detectable at testing limit.
- NTU: Nephelometric Turbidity Units - a measure of the suspended material in water.
- ppb: parts per billion.
- ppm: parts per million.
- pCi/l: picocuries per liter - a measure of radioactivity
- µS/cm: microSiemens per centimeter - a measure of conductivity
- CFU/100 ml: colony forming units per 100 milliliters.
- µmho/cm: micromho per centimeter - a measure of electrical conductivity.
- TT: Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.