

2021 Consumer Confidence Report

Water System Name: PAUMA VALLEY WATER COMPANY Report Date: June 30, 2022

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 to December 31, 2021 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Pauma Valley Water Company, P.O. Box 401 Pauma Valley, Ca. 92061 (760) 742-1127 para asistirlo en español.

Type of water source(s) in use: Groundwater Wells

Name & general location of source(s): San Luis Rey River wells (River Wells 1,3,4,5,6, 7 & 9) Alluvial Fan (Fan Wells 8 & 10)

Drinking Water Source Assessment information: On file with the State Water Resources Control Board, Division of Drinking Water. The assessments were conducted in 2002 and the wells are most vulnerable to, farm chemical distributor/application service, septic systems – low density (</acre), and wells – Agricultural/Irrigation.

Time and place of regularly scheduled board meetings for public participation: The second Tuesday of each month at 3:00 pm. At 10950 Highway 76, Pala, Ca. 92059

For more information, contact: Kathy Biondi, Secretary/Treasurer Phone: 760-742-1127

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): 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 MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (U.S. EPA).

Public Health Goal (PHG): 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, 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.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Tables 1, 2, 3, 4, 5, 6 and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample ^(a)	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year)	0	(b)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL

(b) 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*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	8-31-21	5	ND -1.8 ug/L	0	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8-31-21	5	0.0083 – 0.15 mg/L	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing

								systems; erosion of natural deposits; leaching from wood preservatives
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TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (mg/L)	2021	63	ND -63	None	None	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	2021	428	266 - 590	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Aluminum (ug/L)	2021	<50	ND - <50	1000	600	Residue from water treatment process; natural deposits erosion
Arsenic (ug/L)	2021	6	ND - 6	10	0.004	Natural deposits erosion, glass and electronics production wastes
Antimony (ug/L)	2021	<6	ND - <6	6	1	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Atrazine (ug/L)	2021	<0.5	<0.5	1	0.15	Runoff from herbicide used on row crops and along railroad and highway right-of-ways
Barium (ug/L)	2021	37	<100 – 37	1000	2000	Oil and metal refineries discharges; natural deposits erosion
Bentazon (ug/L)	2021	<2	<2	18	200	Runoff/leaching from herbicide used on beans, peppers, corn, peanuts, rice, and ornamental grasses
Benzo(a)pyrene(PAH) (ng/L)	2021	0.1	0.1	200	7	Leaching from linings of water storage tanks and distribution mains
Beryllium (ug/L)	2021	<1	ND - <1	4	1	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, & defense indu
Chromium (ug/L)	2021	<10	ND - <10	50	(100)	Industrial waste discharge; could be naturally present as well.
Cadmium (ug/L)	2021	<1	ND - <1	5	1	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Cyanide (ug/L)	2021	<100	<100	150	150	Discharge from steel/metal, plastic and fertilizer factories
Dalapon (ug/L)	2021	<10	<10	200	790	Runoff from herbicide used on rights-of-ways, and crops and landscape maintenance
Fluoride (mg/L)	2021	.25	ND - .25	2.0	1	Water additive for dental health
Lead (ug/L)	2021	<5	ND - <5	AL = 15	0.2	House pipes internal corrosion; erosion of natural deposits
Mercury (ug/L)	2021	<1	<1	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel (ug/L)	2021	<10	<10 – 3	100	12	Erosion of natural deposits; discharge from metal factories
Nitrate (mg/L)	2021	22 *	ND - 22 *	10	10	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion.

Nitrite (as N) (mg/L)	2021	<0.4	<0.4 - ND	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (ug/L)	2021	<4	<4	6	1	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.
Selenium (ug/L)	2021	53.8 *	7.6 – 100 *	50	30	Refineries, Mines, and chemical waste discharge; runoff from livestock lots.
Thallium (ug/L)	2021	<1	<1 - ND	2	0.1	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
2,4-D (ug/L)	2021	<10	<10	70	20	Runoff from herbicide used on row crops, range land, lawns, and aquatic weeds
2,4,5-TP (Silvex) (ug/L)	2021	<1	<1	50	3	Residue of banned herbicide
Gross Alpha (pci/L)	2020	7.54	2.78 – 7.54	15	(0)	Certain minerals are radioactive and may emit a form of radiation known as alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color (units)	2021	1	ND – 2.5	15	NA	Naturally-occurring organic materials
Chloride (ug/L)	2021	.19	<0.5 – 0.22	.5	NA	Runoff/leaching from natural deposits; seawater influence
Copper (mg/L)	2021	0.0071	ND -0.0071	1	NA	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Foaming Agents (MBAS) (ug/L)	2021	<50	<50	500	NA	Municipal and industrial waste discharges
Iron (ug/L)	2021	ND	ND	300	NA	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	2021	ND	ND	50	NA	Leaching from natural deposits
Odor—Threshold (units)	2021	<1	<1	3	NA	Naturally-occurring organic materials
Specific Conductance (uS/cm)	2021	1115	960 – 1300	1600	NA	Substances that form ions when in water; seawater influence.
Sulfate (mg/L)	2021	59	59	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (mg/L)	2021	1000	1000	1000	NA	Runoff/leaching from natural deposits.
Turbidity (ntu)	2021	.22	.22	5	NA	Soil runoff
Zinc (mg/L)	2021	ND	ND	5	NA	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections		Health Effects Language
Alkalinity (mg/L)	2021	110	110		
Corrosivity (as Aggressiveness Index)	2021	12	12		Elemental balance in water; affected by temperature, other factors.

Additional General Information on 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead-Specific Language: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Pauma Valley Water Company is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/lead>.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7 - VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NITRATE MCL	Exceeds MCL in 2021.	ON GOING	System provides monthly public notification "Drinking Water Warning" to advise residents of unsafe water. Currently working towards consolidation with Yuima MWD to provide potable water to existing domestic and commercial services. In 2020 the system received a planning grant to do engineering design for consolidation/annexation to Yuima for domestic and commercial parcels to provide potable drinking water ¹ . The estimated time to complete the annexation with Yuima is 3 – 5 years.	See (1) below
LT2ESWTR TT	Uncovered and untreated finished water reservoirs	ON GOING	System provided monthly public notification "Important Information about Drinking Water" to advise residents of unsafe water. Currently working towards consolidation with Yuima MWD to provide potable water to existing domestic and commercial services.	Inadequately protected water may contain disease causing organisms. These organisms include bacteria, viruses and parasites which can cause symptoms such as diarrhea, nausea, cramps and associated headaches. These symptoms, however, are not caused only by organisms in the drinking water, but also by other factors.

- (1) Nitrate in drinking water at levels above 10 mg/L 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 serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.

For Water Systems Providing Groundwater as a Source of Drinking Water

**TABLE 8 – SAMPLING RESULTS SHOWING
FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES**

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	(In the year) 0	Quarterly 3/2/21; 6/1/21; 9/1/21 & 12/1/21	0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0		TT	N/A	Human and animal fecal waste
Coliphage	(In the year) 0		TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE				
none				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
LT2ESWTR TT	Uncovered and untreated finished water reservoirs	On going	Working to annex the domestic and commercial parcels to Yuima MWD for potable water.	