# ANNUAL WATER OUALITY REPORT

**Reporting Year 2023** 

## Presented By City of Paso Robles

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

## **Our Commitment**

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. The Water Division's constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

#### Source Water Assessment

The City of Paso Robles has completed an assessment of our drinking water sources. The assessment found our sources potentially vulnerable to agricultural drainage, auto repair shops, gas stations, home manufacturing, low-density

septic systems, sewer collection systems, metal plating/finishing/fabricating, animal operations, agriculture and irrigation wells, and plastic and synthetics producers. This simply means that these activities take place in the general vicinity of some wells. It does not mean there are any problems resulting from these activities, only that a potential vulnerability exists.

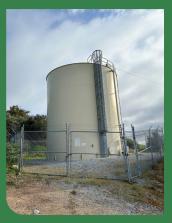
If you would like to view the completed assessments or have questions regarding them, please contact Chris Stanley at the Paso Robles Water Division at (805) 237-3866.

#### How Long Can I Store Drinking Water?

The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth. For more information on water storage visit https://www.cdc.gov/healthywater/emergency/creatingstoring-emergency-water-supply.html.

### Where Does My Water Come From?

The City of Paso Robles produces groundwater from 18 wells and surface water from Lake Nacimiento. Surface water is treated at our water treatment plant. Water that is not immediately used in the system fills storage tanks with approximately 12 million gallons of capacity. These tanks maintain system pressure while providing storage for emergencies and firefighting.





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. We

> are responsible for providing high-quality drinking water, but we 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 two 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

#### **Important Health Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people



should seek advice about drinking water from their health care providers. The U.S. Environmental Protection Agency (EPA)/ Centers for Disease Control and Prevention (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 at (800) 426-4791 or http:// water.epa.gov/drink/hotline.

**QUESTIONS?** For more information about this report, or for any questions relating to your drinking water, please call Chris Stanley at (805) 237-3866 or email water@prcity.com.

When the well is dry, we know the worth of water." -Benjamin Franklin

#### Substances That Could Be in Water

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.

In order to ensure that tap water is safe to drink, the U.S. EPA 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. 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. 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.

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 can 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, which are by-products of industrial processes and petroleum production and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

#### **Additional Monitoring**

Routine testing of the city's groundwater wells in 2023 indicated the presence of iron in Well 21 at concentrations of 2,200 and 2,800 parts per billion (ppb), which is above the secondary maximum containment level of 300 ppb. Iron in water is due to leaching from natural deposits and industrial waste. Iron falls under secondary drinking water standards, which means this contaminant is not a threat to health. The effects of high iron in water are reddishbrown stains on bathroom fixtures, laundry, and dishes as well as a metallic taste and smell. Soon after the high iron test results, the pump failed on Well 21. When the pump was examined, excessive wear to the pump chambers was discovered. Numerous sampling results at this well were below the laboratory detection limit for iron before this incident, so the high levels are believed to be caused by deterioration of the pump.



#### **Test Results**

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
1,1-Dichloroethylene (ppb)	2023	6	10	0.03	ND-0.61	No	Discharge from industrial chemical factories	
Arsenic (ppb)	2023	10	0.004	1.21	ND-6.1	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Barium (ppm)	2023	1	2	0.0333	ND-0.330	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chlorine (ppm)	2023	[4.0 (as Cl2)]	[4 (as Cl2)]	1.2	0.4–2.2	No	Drinking water disinfectant added for treatment	
Fluoride (ppm)	2023	2.0	1	0.18	ND-0.4	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Gross Alpha Particle Activity (pCi/L)	2022	15	(0)	1.16	ND-7.2	No	Erosion of natural deposits	
HAA5 [sum of 5 haloacetic acids]–Stage 2 (ppb)	2023	60	NA	18.97	12.2–33.7	No	By-product of drinking water disinfection	
Nitrate [as nitrogen] (ppm)	2023	10	10	1.17	ND-6.7	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Nitrate + Nitrite [as N] (ppm)	2023	10	10	1.02	ND-4.2	No	Runoff and leaching from fertilizer use; leaching from septic tanks sewage; erosion of natural deposits	
<b>Selenium</b> (ppb)	2023	50	30	4.74	ND-30	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)	
<b>Tetrachloroethylene [PCE]</b> (ppb)	2023	5	0.06	0.01	ND-0.59	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)	
Thallium (ppb)	2023	2	0.1	0.0004	ND-1.1	No	Leaching from ore processing sites; discharge from electronics, glass, and drug factories	
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2023	80	NA	41.96	23.4–56.9	No	By-product of drinking water disinfection	
Turbidity (NTU)	2023	TT	NA	0.060	0.015-0.060	No	Soil runoff	
Turbidity [lowest monthly percent of samples meeting limit]	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff	

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	0.3	0.420	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2022	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED SMCL		PHG (MCLG)	AMOUNT RANGE DETECTED LOW-HIGH		VIOLATION	TYPICAL SOURCE	
Chloride (ppm)	2023	500	NS	31.09	4.9–230	No	Runoff/leaching from natural deposits; seawater influence	
Color (units)	2023	15	NS	1.99	ND-3	No	Naturally occurring organic materials	
Copper (ppm)	2023	1.0	NS	0.00099	ND-0.061	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Iron (ppb)	2023	300	NS	54.23	ND-2,800	No	Leaching from natural deposits; industrial wastes	
Manganese (ppb)	2023	50	NS	0.68	ND-2.5	No	Leaching from natural deposits	
<b>Odor, Threshold</b> (units)	2023	3	NS	1.14	1-4	No	Naturally occurring organic materials	
Specific Conductance (µS/cm)	2023	1,600	NS	534.19	250–1,200	No	Substances that form ions when in water; seawater influence	
Sulfate (ppm)	2023	500	NS	64.95	19–150	No	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (ppm)	2023	1,000	NS	350.34	160–760	No	Runoff/leaching from natural deposits	
Turbidity (NTU)	2023	5	NS	0.31	0.1–0.7	No	Soil runoff	
Zinc (ppm)	2023	5.0	NS	0.000044	ND-0.11	No	Runoff/leaching from natural deposits; industrial wastes	

#### UNREGULATED SUBSTANCES<sup>1</sup>

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bicarbonate (ppm)	2023	204.38	110-376.7	NA
Boron (ppb)	2023	60.93	ND-790	NA
Calcium (ppm)	2023	55.21	29–110	NA
Chromium-6 (ppb)	2023	0.05	ND-2.0	NA
Hardness, Total [as CaCO3] (grains/gal)	2023	225.04	110-490	NA
<b>pH</b> (units)	2023	7.75	7.2-8.1	NA
Potassium (ppm)	2023	1.43	1.1–2.8	NA
Sodium (ppm)	2023	29.75	10-140	NA
Total Alkalinity (ppm)	2023	166.63	91–310	NA
Vanadium (ppb)	2023	7.45	ND-48	NA

<sup>1</sup>Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

### Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

grains/gal (grains per gallon): Grains of compound per gallon of water.

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 MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

#### NS: No standard.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

**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 EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

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

 $\mu$ S/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.