



ANNUAL WATER  
QUALITY  
REPORT

*Water testing performed in 2009*



*Presented By:*  
**CITY OF PASO ROBLES**

PWS ID#: 4010007

## Continuing Our Commitment

This report includes all testing performed between January 1, 2009, and December 31, 2009. We are pleased to tell you that our compliance with all state and federal drinking water standards remains exemplary. We are committed to delivering safe and reliable drinking water of the highest quality. To that end, we remain vigilant in meeting the challenges of source water protection and water conservation, and maintaining reliable water supplies.

## 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. EPA/CDC (Centers for Disease Control and Prevention) 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 [www.epa.gov/safewater/hotline/](http://www.epa.gov/safewater/hotline/).



## Community Participation

We welcome your comments and concerns regarding your drinking water. We encourage you to directly contact the city Utilities Department at (805) 237-3861, or you can voice your concerns at the City of Paso Robles city council meetings during the public comment portion. The meetings are held on the first and third Tuesdays of each month at 7:30 p.m. at the City Hall/Library Complex, 1000 Spring Street.

To view a copy of this report or get more information regarding the Water Division and city council activities, visit the City of Paso Robles Web site at [www.prcity.com](http://www.prcity.com).

## Water Conservation -- Now More Than Ever

To prevent water shortages this summer, please cut back on outdoor watering and water only on the three assigned days for your area. To help you reduce your water use, the City provides rebates for toilet replacements and converting turf to water-wise landscaping. For information, call 227-7250 or visit [www.pasowater.com](http://www.pasowater.com). Here are some additional tips:

- Water during the early morning when winds and temperatures are the lowest.
- Limit spray-irrigation run times to 12 minutes on assigned days. (This is a guideline and may be adjusted depending on your site.)
- Adjust sprinkler heads to minimize spray onto sidewalks and driveways.
- When brown spots occur in your lawn, check first for coverage problems before increasing run times.
- Water brown spots by hand instead of increasing run times.
- Regularly inspect irrigation equipment in operation, and repair drip line leaks and broken sprinkler heads.
- Trim plants that prevent spray from reaching its target.
- Use a higher setting to mow lawns. Longer lawns need less water.
- Aerate your lawn to increase air and water transfer to the root zone.

For more information, visit [www.pasowater.com](http://www.pasowater.com)

## Questions?

For more information about this report, or for any questions relating to your drinking water, please call Kelly Dunham, Paso Robles Water Division, at (805) 237-3866.

## Where Does My Water Come From?

The City of Paso Robles currently relies on groundwater as its only source of water. In 2009, we pumped more than 2.1 billion gallons of water. This total was 16 percent less than in 2008 due to an exemplary community-wide conservation effort in response to summer-time water shortages. Twelve wells pump from the deeper portion of the Paso Robles Groundwater Basin. We also have seven wells located near the Salinas River that pump from the river underflow. Water that is not immediately used in the system fills water storage tanks with approximately 12 million gallons of capacity. These tanks provide for system emergencies, fire fighting, and maintaining system pressure.

### **Nacimiento Water – Improved Water Quality and Water Supply Reliability**

The much-needed Lake Nacimiento water treatment plant, now scheduled for completion in 2012, will provide improved water quality and water supply reliability for Paso Robles. With the significant reduction in hardness and total dissolved solids, the use of water softeners can be greatly reduced or eliminated. Water supply reliability will be increased by reducing our dependence on the Paso Robles groundwater basin. Currently, the city's wells cannot produce enough water to meet daily summer demands without water restrictions in place. This is because the City's basin wells produce approximately 60 percent of their original capacity due to groundwater level declines. Nacimiento water will provide the supplemental source of water needed to reliably provide for the community on a year-round basis.

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

## 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. Environmental Protection Agency (U.S. EPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must 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.

## Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4-6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.

## Lead and Drinking Water

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 2 minutes before using water for drinking or cooking. 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 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The tables below show only those contaminants that were detected in the water.

The state requires us to monitor 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
Aluminum (ppm)	2009	1	0.6	0.00761	ND–0.077	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic <sup>1</sup> (ppb)	2009	10	0.004	2.66	ND–6.3	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2009	1	2	0.07	ND–0.25	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2009	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	1.1	0.9–1.2	No	Drinking water disinfectant added for treatment
Chromium (ppb)	2009	50	(100)	0.67	ND–12	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	2009	2.0	1	0.38	0.17–1.20	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2009	15	(0)	2.29	ND–8.10	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2009	60	NA	4.1	3.1–5.1	No	By-product of drinking water disinfection
Nitrate [as nitrate] <sup>2</sup> (ppm)	2009	45	45	7.02	ND–28.5	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium <sup>3</sup> (ppb)	2009	50	(50)	4.51	ND–23.50	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes] (ppb)	2009	80	NA	21.9	14.2–29.6	No	By-product of drinking water chlorination
Total Coliform Bacteria [Total Coliform Rule] (# positive samples)	2009	No more than 1 positive monthly sample	(0)	1	NA	No	Naturally present in the environment
Turbidity <sup>4</sup> (NTU)	2009	TT	NA	0.047	0.009–0.047	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2009	TT	NA	100	NA	No	Soil runoff
Uranium (pCi/L)	2009	20	0.43	1.96	ND–5.3	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community (lead was not detected)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2007	1.3	0.3	0.31	1/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Aluminum</b> (ppb)	2009	200	NS	7.61	ND–77	No	Erosion of natural deposits; residual from some surface water treatment processes
<b>Chloride</b> (ppm)	2009	500	NS	68.28	35–150	No	Runoff/leaching from natural deposits; seawater influence
<b>Color</b> (Units)	2009	15	NS	0.28	ND–5	No	Naturally occurring organic materials
<b>Manganese</b> <sup>5</sup> (ppb)	2009	50	NS	3.25	ND–27	No	Leaching from natural deposits
<b>Odor–Threshold</b> (Units)	2009	3	NS	1.2	1–2	No	Naturally occurring organic materials
<b>Specific Conductance</b> (µS/cm)	2009	1600	NS	865.56	600–1200	No	Substances that form ions when in water; seawater influence
<b>Sulfate</b> (ppm)	2009	500	NS	95.78	25–240	No	Runoff/leaching from natural deposits; industrial wastes
<b>Total Dissolved Solids</b> (ppm)	2009	1000	NS	548.89	370–740	No	Runoff/leaching from natural deposits
<b>Turbidity</b> (Units)	2009	5	NS	0.09	ND–0.4	No	Soil runoff

## UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
<b>Bicarbonate (HC03)</b> (ppm)	2009	326.11	270–440
<b>Boron</b> (ppb)	2009	313.33	ND–990
<b>Calcium</b> (ppm)	2009	69.61	11–130
<b>Magnesium</b> (ppm)	2009	29.42	3.6–48
<b>N-Nitrosodimethylamine</b> (ppb)	2008	0.0034	0.0024–0.0048
<b>Nitrate &amp; Nitrite as Nitrogen (N)</b> (ppb)	2009	1487.22	ND–3500
<b>pH</b> (Units)	2009	7.7	7.2–8.3
<b>Potassium</b> (ppm)	2009	2.14	1.5–3.7
<b>Sodium</b> (ppm)	2009	83.39	39–250
<b>Total Alkalinity (as CaCO3)</b> (ppm)	2009	267.78	220–360
<b>Total Hardness (as CaCO3)</b> (grains/gal)	2009	16.94	7.6–32.7
<b>Vanadium</b> (ppb)	2009	16.08	ND–53

<sup>1</sup> Treatment plant effluent results were used for Sherwood wells.

<sup>2</sup> Butterfield 12 Well is on a quarterly sampling schedule for nitrates.

<sup>3</sup> Tbird wells 10 and 13 are blended to ensure compliance.

<sup>4</sup> Filtration required on Ronconi wells only. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

<sup>5</sup> Ronconi treatment plant effluent results were used.

## Definitions

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

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**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.

