



*Annual*  
**WATER**  
**QUALITY**  
**REPORT**  
*Reporting Year 2012*



*Presented By* \_\_\_\_\_  
**City of Paso Robles**

PWS ID#: 4010007

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

## There When You Need Us

We are once again proud to present our annual water quality report, covering all testing performed between January 1 and December 31, 2012. Over the years, we have dedicated ourselves to producing drinking water that meets or exceeds all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you, should you ever have any questions or concerns about your water.

## Where Does My Water Come From?

The City of Paso Robles currently relies on groundwater as its only source of water. In 2012, we pumped more than 2.2 billion gallons of water. This total was 15 percent less than in 2008, due to an exemplary community-wide conservation effort. 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.

### Lake Nacimiento Water – Moving Forward

The Lake Nacimiento water treatment plant project is moving forward, providing improved water quality and water supply reliability. Currently, the city's wells cannot produce enough water to meet daily summer demands without implementation of periodic watering restrictions. This is because regional groundwater level declines have reduced the production capacity of the city's basin wells. The Nacimiento water supply will be significantly lower in hardness and total dissolved solids, so the use of water softeners can be reduced. The design of the water treatment plant will be completed in mid-2013, with construction scheduled for 2014-15.

## 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 California 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.

## Lead in Home Plumbing

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 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).

## 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 <http://water.epa.gov/drink/hotline>.

## 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 Kelly Dunham at the Paso Robles Water Division, at (805) 237-3866.

## Community Participation

We welcome your comments, questions, 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 City of Paso Robles Water Division, visit us at [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 at (805) 237-3866 or email us at [water@prcity.com](mailto:water@prcity.com).

## Water ... Use It Wisely

### Reduce Outdoor Water Use with Irrigation System Maintenance and Scheduling

With regular irrigation maintenance and attention to water scheduling, most homeowners and businesses can achieve significant water savings. That's good for your pocketbook, for the community, and the environment. To make sure your irrigation system is working at peak efficiency this year, try these basic tune-up steps:

#### Irrigation Maintenance Basics

1. Turn on your system and look for geysers! Fix or replace broken spray heads and drip emitters.
2. Look for sunken and tilted heads that misdirect spray (a common problem). Dig out and straighten heads, or add an extension to raise the head to the proper height.
3. Trim plants that block spray from getting to the target area.
4. Dry spots on the lawn indicate poor sprinkler coverage or problems with heads. If you still have dry spots after performing maintenance, water spots by hand instead of increasing run times.
5. If heads are clogged, unscrew the top of the head and clean the plastic debris screen.
6. Turn on drip lines and walk each line to check and repair leaks. Make sure each emitter is flowing water. Unclog or replace clogged emitters.

#### Irrigation Scheduling Tips

When and how much water to apply are questions every homeowner faces. Many of us unknowingly use more water than our landscape needs. In setting your irrigation timers this year, follow a few basic rules-of-thumb to avoid over-watering.

1. Water 1-2 days per week in spring and fall, and 3 days per week during June to mid-September.
2. Water in the early morning hours, 5 a.m. to 9 a.m., when winds and temperatures are low and you can see problems like stuck valves or broken sprinklers and drip lines.
3. The number of minutes per station needed each water day depends on sprinkler head output, head spacing and coverage, soils, and the micro-climate of your yard. Start in the spring with 5-7 minutes per station on water days. Increase times from there as needed for your situation and as the summer weather heats up. (Note: Rotary heads require greater run times.)
4. To avoid water runoff on steep slopes, break the total minutes into 2 or 3 shorter sprinkler runs.
5. Learn the features of your timer to enable you to adjust watering schedules throughout the irrigation season. If you don't have a manual for your timer, try downloading a copy at [www.sprinklerwarehouse.com/irrigation-Product-Manuals-s/779.htm](http://www.sprinklerwarehouse.com/irrigation-Product-Manuals-s/779.htm).

For more information on customer rebate programs, and ways to save water and money, visit [www.pasowater.com](http://www.pasowater.com) or call 227-7250.

## Sampling Results

During the past year, we have taken hundreds of water samples to confirm that water quality meets or exceeds standards established by federal and state health agencies. The table below shows only those substances 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
<b>Arsenic</b> <sup>1</sup> (ppb)	2012	10	0.004	1.85	ND–7.7	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
<b>Barium</b> (ppm)	2012	1	2	0.05944	ND–0.26	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
<b>Fluoride</b> (ppm)	2012	2.0	1	0.36	0.24–0.48	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Gross Alpha Particle Activity</b> (pCi/L)	2012	15	(0)	2.47	ND–7.6	No	Erosion of natural deposits
<b>Haloacetic Acids</b> (ppb)	2012	60	NA	6.1	4.6–7.6	No	By-product of drinking water disinfection
<b>Nickel</b> (ppb)	2012	100	12	0.44	ND–15	No	Erosion of natural deposits; discharge from metal factories
<b>Nitrate [as nitrate]</b> <sup>2</sup> (ppm)	2012	45	45	5.96	ND–31.5	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>Nitrate + Nitrite (as N)</b> (ppb)	2012	10,000	10,000	1,534.62	ND–3,600	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>Selenium</b> <sup>3</sup> (ppb)	2012	50	30	6.95	ND–41	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>TTHMs [Total Trihalomethanes]</b> (ppb)	2012	80	NA	15.45	13.6–17.3	No	By-product of drinking water disinfection
<b>Total Coliform Bacteria [Total Coliform Rule]</b> (# positive samples)	2012	No more than 1 positive monthly sample	(0)	1	NA	No	Naturally present in the environment
<b>Turbidity</b> <sup>4</sup> (NTU)	2012	TT=< 1 NTU	NA	0.068	0.010–0.068	No	Soil runoff
<b>Turbidity</b> (Lowest monthly percent of samples meeting limit)	2012	TT=95% of samples < 0.3 NTU	NA	100%	NA	No	Soil runoff
<b>Uranium</b> (pCi/L)	2012	20	0.43	2.19	ND–5.3	No	Erosion of natural deposits

### 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%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2010	1.3	0.3	0.29	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2012	500	NS	63.29	37-190	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2012	15	NS	0.95	ND-10	No	Naturally occurring organic materials
Foaming Agents [MBAS] (ppb)	2012	500	NS	0.07	ND-0.25	No	Municipal and industrial waste discharges
Iron (ppb)	2012	300	NS	1.01	ND-200	No	Leaching from natural deposits; industrial wastes
Odor-Threshold (Units)	2012	3	NS	1.13	1-3	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2012	1,600	NS	847.99	420-1,100	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2012	500	NS	106.85	23-210	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2012	1,000	NS	522.27	400-690	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2012	5	NS	0.10	ND-1.22	No	Soil runoff

## UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Bicarbonate (ppm)	2012	303.44	205-420
Boron (ppb)	2012	218.91	ND-870
Calcium (ppm)	2012	78.03	33-150
Lab pH (Units)	2012	7.92	7.3-8.3
Lead (ppb)	2012	1.01	ND-7.1
Magnesium (ppm)	2012	33.39	15-45
Potassium (ppm)	2012	1.65	ND-3.1
Sodium (ppm)	2012	61.84	33-150
Total Alkalinity [as CaCO <sub>3</sub> ] (ppm)	2012	249.39	210-340
Total Hardness (grains/gal)	2012	19	7.02-28.07
Vanadium (ppb)	2012	13.35	3.9-53

<sup>1</sup> TP effluent sampled at wells 9 and 11.

<sup>2</sup> Butterfield Well 12 on a quarterly monitoring schedule.

<sup>3</sup> Thunderbird 10 and 13 blended for compliance.

<sup>4</sup> 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. Ronconi TP only.

## 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.