

# 2012 Water Quality Report – PSWID

## **Spanish (Español)**

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

## **Is my water safe?**

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

## **Do I need to take special precautions?**

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. 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 Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

The Pine-Strawberry Water Improvement District (PSWID) is supplied exclusively by ground water pumped from the district's 33 wells, which draw from the Lower Verde watershed. The water is treated with a small amount of chlorine as a preventative disinfectant, stored in a series of storage tanks and then pumped through a complex delivery system by use of booster pumps and pressure tanks through main transmission lines and service connections.

## **Source water assessment and its availability**

The Arizona Department of Environmental Quality (ADEQ) evaluates all water sources that provide to the public. The ADEQ issued PSWID sources a low risk designation indicating "most source water protection measures are already in place or the hydrogeology is such that the source water protection will have little impact on protection." You can obtain a Source Water Assessment Report from the ADEQ at 1110 W. Washington St. Phoenix, AZ 85007 or visit [www.azdeq.gov](http://www.azdeq.gov) for more information.

## **Why are there contaminants in my 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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

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:

- 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, which 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, which 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 can also come from gas stations, urban stormwater runoff, and septic systems
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **How can I get involved?**

Your comments and suggestions are always welcome. Please contact PSWID with any questions, suggestions or comments at (928)476-4222 or [www.pswid.org](http://www.pswid.org). For our public meetings schedule, please visit the website.

### **Monitoring and reporting of compliance data violations**

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. In January 2012, we became aware that our system had not been performing the quarterly sampling for Volatile Organic Compounds (VOCs) at monitoring location #EPDS013 as required by Arizona Department of Environmental Quality (ADEQ). Therefore we cannot be sure of the quality of our drinking water during that time. Since the time that we were made aware of this requirement, we have completed all our required sampling and did not show detection for any contaminant in the VOC category. Thus, ADEQ has granted reduced monitoring from quarterly to annual sampling for EPDS013.

In addition, during the month of September 2012, we failed to submit the second half of our nine routine monthly bacteriological samples to ADEQ by the required reporting deadline. While this did not result in a violation from ADEQ, we would like to inform you of what happened. On September 28, 2012, we shipped four of our required bacteriological samples to our contract laboratory for analysis. Unfortunately, the samples arrived at the laboratory past the maximum holding time for bacteriological samples and at an elevated temperature and could not be analyzed. Because the samples were invalidated, ADEQ allowed us to resample the four monitoring locations and submit the test results as required for required monthly bacteriological samples.

### **Additional Information for Lead**

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. Pine-Strawberry Water Improvement District 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 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 <http://www.epa.gov/safewater/lead>.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water</u>	<u>Range</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
				<u>Low</u>	<u>High</u>			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
TTHMs [Total Trihalomethanes] (ppb)	NA	80	0.0136	ND	0.0136	2012	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	0.0063	ND	0.0063	2012	No	By-product of drinking water chlorination
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	1.26	0.23	1.26	2012	No	Water additive used to control microbes
<b>Inorganic Contaminants</b>								
Nitrate [measured as Nitrogen] (ppm)	10	10	1.4	ND	1.4	2012	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic (ppb)	0	10	2	ND	2	2011	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.46	0.12	0.46	2011	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits

Fluoride (ppm)	4	4	0.12	0.089	0.12	2011	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Sodium (optional) (ppm)	NA	MPL	12	3.7	12	2011	No	Erosion of natural deposits; Leaching
<b>Microbiological Contaminants</b>								
Total Coliform (positive samples/month)	0	1	1	NA	NA	2012	No	Naturally present in the environment
<b>Radioactive Contaminants</b>								
Alpha emitters (pCi/L)	0	15	6.3	2	6.3	2011	No	Erosion of natural deposits
<b>Volatile Organic Contaminants</b>								
Toluene (ppm)	1	1	0.00086	ND	0.00086	2011	No	Discharge from petroleum factories
Carbon Tetrachloride (ppb)	0	5	1.4	ND	1.4	2011	No	Discharge from chemical plants and other industrial activities
<b>Contaminants</b>	<b>MCLG</b>	<b>AL</b>	<b>Your Water</b>	<b>Sample Date</b>	<b># Samples Exceeding AL</b>	<b>Exceeds AL</b>	<b>Typical Source</b>	
<b>Inorganic Contaminants</b>								
Lead - action level at consumer taps (ppb)	0	15	5	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Copper - action level at consumer taps (ppm)	1.3	1.3	0.28	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits	

## Undetected Contaminants

The following contaminants were monitored for, but not detected, in your water.

<b>Contaminants</b>	<b>MCLG or MRDLG</b>	<b>MCL or MRDL</b>	<b>Your Water</b>	<b>Violation</b>	<b>Typical Source</b>
Nitrite [measured as Nitrogen] (ppm)	1	1	ND	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

<b>Unit Descriptions</b>	
<b>Term</b>	<b>Definition</b>
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)

positive samples/month	positive samples/month: Number of samples taken monthly that were found to be positive
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	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 allow for a margin of safety.
MCL	MCL: Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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.
MRDL	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

**For more information please contact:**

Contact Name: Brad Cole  
Phone: 928.476.4222  
[www.pswid.org](http://www.pswid.org)