

Contaminants in 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 EPA's Safe Drinking Water Hotline.

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 can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which 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 & herbicides*, which may come from a variety of sources such as agriculture and residential use.
- *Radioactive contaminants*, which are naturally occurring.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban stormwater runoff, and septic systems.

Water Quality Data

The table in this report lists all the drinking water contaminants we detected during the 2010 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table are from testing done January 1 through December 31, 2010. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old. We are required to monitor your drinking water for specific contaminants on a regular basis.

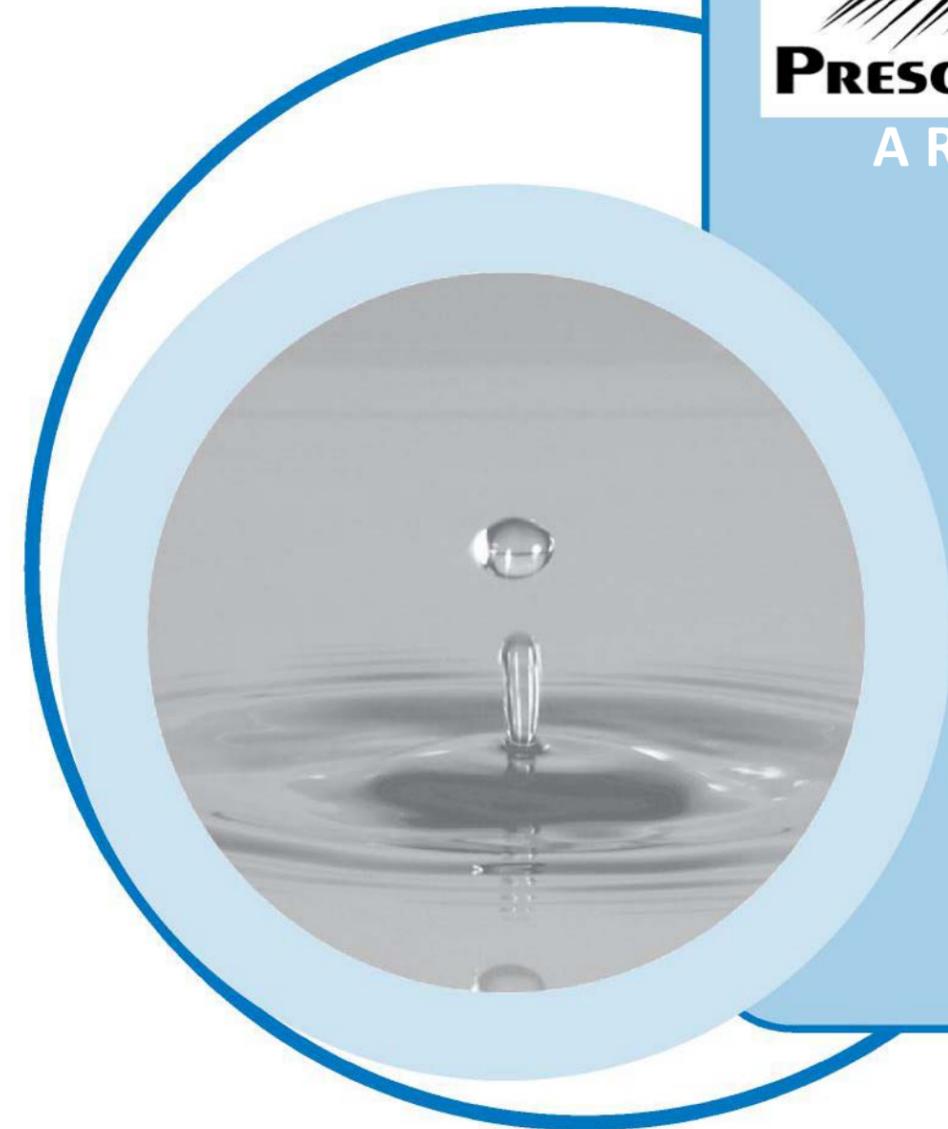


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2010

WATER QUALITY REPORT



Drinking Water Sources

The Prescott Valley Water System serves a population of about 44,170 people in four different water systems and serves an average of 5,085,000 gallons of fresh water to our customers every single day. Our water comes from aquifers below the ground and is chlorinated before it is put into our water system. We maintain a chlorine residual of 0.2 – 0.4 mg/l to keep the system free from bacteria.

PV Water District (Upper) System serves a population of more than 33,557, has approximately 13,974 service connections and pumps an average of 3.84 million gallons per day.

PV Water District (Lower) System serves a population of more than 5,628, has approximately 2,345 service connections and pumps an average of 581,000 gallons per day.

Mingus West Water System was developed in 1999 and became a public water system in 2000. The system serves a population of more than 300, has approximately 125 service connections including the Yavapai County Fairgrounds and pumps an average of 114,000 gallons per day.

Viewpoint Water System was developed in 1996 and became a public water system in January of 1997. The system serves a population of more than 4,685 and has approximately 1,952 service connections and pumps an average of 550,000 gallons per day.

If you are unsure of which region you reside in; please call the number listed below, go to the Official Web site for the Town of Prescott and copy the following link into your address bar, <http://www.pvaz.net/Modules/ShowDocument.aspx?documentid=306> or refer to the enclosed water service area map.

Water Quality Monitoring

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Este informe contiene información muy importante sobre el agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Public Participation Opportunities

If you would like to participate in the decision-making processes that affect drinking water quality, please attend the regularly scheduled meetings of the Water District, usually on the second and fourth Thursday of every month. Call 928-759-3070 for more information.

Your Water Meets All State and Federal Regulations

Last year we conducted more than 3000 tests for over 65 drinking water contaminants. This brochure is a snapshot of the quality of the water we provided in 2010. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) standards. We are committed to providing you with the information because we want you to be informed. For more information about your water call Juan Mancha at 928/759-9062.

Special Population Advisory

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/Center For Disease Control guidelines on how to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791.

Terms & Abbreviations

AL: Action Level – the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

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: 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.

N/A: Not Applicable

ND: Not Detectable at testing limit

NTU: Nephelometric Turbidity Units

pCi/l: Picocuries per liter (a measure of radioactivity)

PPM: Parts per million or milligrams per liter – (corresponds to one minute in two years)

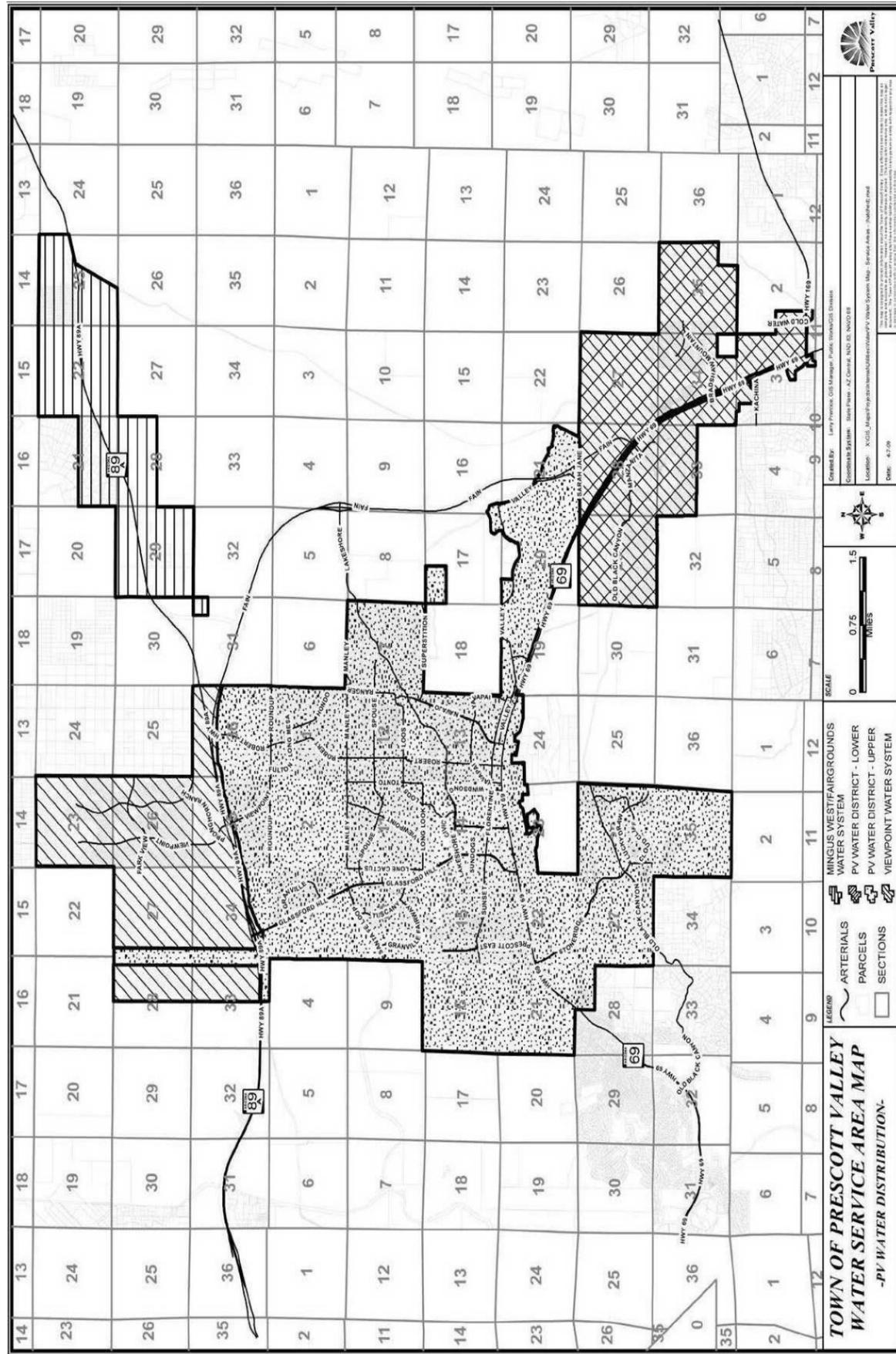
PPB: Parts per billion or micrograms per liter – (corresponds to one minute in 2,000 years)

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

Lead Advisory

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. Prescott Valley Water System 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 drinking 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>.





Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (ug/L)
CFU/100 mL	Colony Forming Units per 100 milliliters
pCi/L	picocuries per liter (a measure of radioactivity)
mrem/year	millirems per year (a measure of radiation absorbed by the body)
NA	NA: not applicable
ND	ND: not detected
Important Drinking Water Definitions	
Term	Definition
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.
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.
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.
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.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (CFU/100 mL)	<5% positive	0	0	NA	N	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (CFU/100 mL)	<5% positive	0	0	NA	N	Human and animal fecal waste
Radioactive Contaminants						
Alpha emitters (pCi/l)	15	0	3.8	0.8 - 3.8	N	Erosion of natural deposits
Inorganic Contaminants						
Arsenic (ppb)	10	0	6.6	4 – 6.6	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Arsenic (ppb) Entry Point 809	10	0	8 Average	5 - 11	N * SEE NOTE BELOW	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.029	0.0055 - 0.029	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	15	1 - 15	N	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	1.3 (AL)	1.3	0.31	0.02 - 0.31	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	0.45	0.18 - 0.45	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	15 (AL)	0	4	ND - 4	N	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (ppm)	10	10	1.3	0.21 – 1.3	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectants and Disinfection By-Products						
Chlorine Residual (ppm)	4	4	0.36	0.22 - 0.36	N	Disinfection of water
TTHMs (Total Trihalomethanes) (ppb)	80	N/A	6.8	0.5 - 6.8	N	By-product of drinking water chlorination
HAA5 (Haloacetic Acids) (ppb)	60	N/A	ND	ND	N	By-product of drinking water chlorination

*The original arsenic sample collected in January 2010, yielded an arsenic concentration of 11 ppb; a value considerably higher than normal for this entry point. Therefore, the Arizona Department of Environmental Quality (ADEQ) determined taking a repeat sample was appropriate. The repeat sample showed an arsenic concentration of only 5 ppb, which is within the typical range for this entry point. Based on the repeat sample, the ADEQ concluded this entry point was in compliance with the arsenic MCL when the average of the initial and confirmation samples equaled an average of 8 ppb, and no violation had occurred even though the highest sample result is shown.

Prescott Valley Viewpoint/Pronghorn Water System 13-314

Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (CFU/100 mL)	<5% positive	0	0	NA	N	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (CFU/100 mL)	<5% positive	0	0	NA	N	Human and animal fecal waste
Inorganic Contaminants						
Nitrate (ppm)	10	10	0.37	0.31 - 0.37	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectants						
Chlorine Residual (ppm)	4	4	0.45	0.29 - 0.45	N	Disinfection of water

	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Microbiological Contaminants						
Total Coliform Bacteria (CFU/100 mL)	<5% positive	0	0	NA	N	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (CFU/100 mL)	<5% positive	0	0	NA	N	Human and animal fecal waste
Radioactive Contaminants						
Alpha emitters (pCi/l)	15	0	4.5	1.1 – 4.5	N	Erosion of natural deposits
Inorganic Contaminants						
Arsenic (ppb)	10	0	2.2	1.3 - 2.2	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.015	0.0035 - 0.015	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	5.2	2.0 - 5.2	N	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	1.3 (AL)	1.3	0.97	0.25 - 0.97	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	0.14	0.12 - 0.14	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	15 (AL)	0	3	1 - 3	N	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (ppm)	10	10	1.4	1.2 – 1.4	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectant and Disinfection By-Products						
Chlorine Residual (ppm)	4	4	0.58	0.25 - 0.58	N	Disinfection of water
TTHMs (Total Trihalomethanes) (ppb)	80	N/A	0.8	ND - 0.8	N	By-product of drinking water chlorination
HAA5 (Haloacetic Acids) (ppb)	60	N/A	ND	ND	N	By-product of drinking water chlorination

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Microbiological Contaminants						
Total Coliform Bacteria (CFU/100 mL)	<5% positive	0	0	NA	N	Naturally present in the environment
Fecal Coliform and <i>E. coli</i> (CFU/100 mL)	<5% positive	0	0	NA	N	Human and animal fecal waste
Radioactive Contaminants						
Alpha emitters (pCi/l)	15	0	4.3	1.8 - 4.3	N	Erosion of natural deposits
Inorganic Contaminants						
Arsenic (ppb)	10	0	5.2	2.2 - 5.2	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.11	0.022 - 0.11	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100	100	11	1.1 - 11	N	Discharge from steel and pulp mills; Erosion of natural deposits
Copper (ppm)	1.3 (AL)	1.3	0.16	0.01 - 0.16	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride (ppm)	4	4	0.48	0.15 - 0.48	N	Erosion of natural deposits; water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead (ppb)	15 (AL)	0	12	ND - 12	N	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (ppm)	10	10	4.78	0.33 – 4.78	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Disinfectant and Disinfection By-Products						
Chlorine Residual (ppm)	4	4	0.83	0.21 - 0.83	N	Disinfection of water
HAA5 (Haloacetic Acids) (ppb)	60	N/A	ND	ND	N	By-product of drinking water chlorination