

2006

Water Quality Report



Prescott Valley
Arizona



Drinking water sources

The Prescott Valley Water System serves a population of more than 40,417 from two separate systems. The upper system consists of Approx. 14,206 meters and pumps an average of 3.94 million gallons of water per day. The lower system consists of 1,961 meters and pumps an average of 581,000 gallons of water per day. The water source for Prescott Valley is groundwater, which is pumped into the distribution system by any one of its 20 wells. Chlorine is added to the water maintaining a residual of 0.2 to 0.4 mg/L.

The Viewpoint Water System was developed in 1996 and became a public water system in January 1997. The System serves a population of more than 4,537 or approximately 1,815 meters. The water source for Viewpoint is groundwater, which is pumped into two ground storage tanks totaling 1,750,000 gallons and then distributed by gravity to the consumers. Chlorine is added to water maintaining a residual of 0.5 to 0.8 mg/L.

The Mingus Water System was developed in 1999 and became a public water system in 2000. The Mingus system including the Yavapai County fairgrounds complex consists of approximately 121 meters. The water source for the Mingus system is groundwater, which is pumped into two 250,000 gallon groundwater storage tanks. It is then distributed by gravity to the consumers. On average, 114,000 gallons are pumped per day. Chlorine is added to the water maintaining a residual of 0.2 to 0.4 mg/L.

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 500 tests for over 97 drinking water contaminants. This brochure is a snapshot of the quality of the water we provided in 2006. 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 John Bowman 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}

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 2006 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, 2006. 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.

Violation at system 13-314: In August and September of 2006, the Viewpoint water system incurred a minor violation for insufficient sample quantity for Total Coliform Bacteria. Do to additional connections, increased sampling quantities were required. This oversight has been corrected and sampling is now being performed at the frequency required by Arizona Department of Environmental Quality.

Violation at system 13-048: During the 2005 monitoring year the required annual Nitrate sample and test was not performed for the Prescott Valley Water District's Upper System – Santa Fe Well. The well was inactive while on-site upgrades were being completed and sampling could not be performed. The well is now active and all sampling required by Arizona Department of Environmental Quality is being performed.

Mingus Water System #13-247

Substance	MCL	MCLG	Highest % exceeding limits	Lowest % of samples meeting limits	Violation (Y or N)	Typical Source of Contamination
Total Coliform Bacteria	<5% positive	0	0	0	N	Naturally present in the environment
Fecal Coliform and E. coli	positive	0	0	0	N	Human and animal fecal waste
Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Nitrate (ppm)	10	10	1.40	0.73 - 1.40	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppb)	1	1	<0.10	_____	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total trihalomethanes] (ppb)	80	N/A	3.3	0.5 - 3.3	N	By-product of drinking water chlorination

Prescott Valley Water System (upper) #13-048

Substance	MCL	MCLG	Highest % exceeding limits	Lowest % of samples meeting limits	Violation (Y or N)	Typical Source of Contamination
Total Coliform Bacteria	<5% positive	0	0	0	N	Naturally present in the environment
Fecal Coliform and E. coli	positive	0	0	0	N	Human and animal fecal waste
Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Nitrate (ppm)	10	10	1.16	0.21 - 1.16	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppb)	1	1	<0.10	_____	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total trihalomethanes] (ppb)	80	N/A	14.4	<0.5 - 14.4	N	By-product of drinking water chlorination

Viewpoint Water System #13-314

Substance	MCL	MCLG	Highest % exceeding limits	Lowest % of samples meeting limits	Violation (Y or N)	Typical Source of Contamination
Total Coliform Bacteria	<5% positive	0	0	0	N	Naturally present in the environment
Fecal Coliform and E. coli	positive	0	0	0	N	Human and animal fecal waste
Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Nitrate (ppm)	10	10	0.34	0.28 - 0.34	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppb)	1	1	<0.10	_____	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Benzene (ppb)	5	0	<0.5	_____	N	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	5	0	<0.5	_____	N	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	100	100	<0.5	_____	N	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	600	600	<0.5	_____	N	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	75	75	<0.5	_____	N	Discharge from industrial chemical factories
1,2-dichloroethane (ppb)	5	0	<0.5	_____	N	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	7	7	<0.5	_____	N	Discharge from industrial chemical factories
cis-1,2-Dichloroethylen (ppb)	70	70	<0.5	_____	N	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	100	100	<0.5	_____	N	Discharge from industrial chemical factories
Dichloromethane (ppb)	5	0	<0.5	_____	N	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	5	0	<0.5	_____	N	Discharge from industrial chemical factories
Ethylbenzene (ppb)	700	700	<0.5	_____	N	Discharge from petroleum refineries
Styrene (ppb)	100	100	<0.5	_____	N	Discharge from rubber and plastic factories; Leaching from landfills
Tetrachloroethylene (ppb)	5	0	<0.5	_____	N	Leaching from PVC pipes; Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	70	70	<0.5	_____	N	Discharge from textile- finishing factories
1,1,1-Trichloroethane (ppb)	200	200	<0.5	_____	N	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	5	3	<0.5	_____	N	Discharge from industrial chemical factories
Trichloroethylene (ppb)	5	0	<0.5	_____	N	Discharge from metal degreasing sites and other factories
TTHMs [Total trihalomethanes] (ppb)	80	N/A	<0.5	N/A	N	By-product of drinking water chlorination
Toluene (ppm)	1	1	<0.0005	_____	N	Discharge from petroleum factories
Vinyl Chloride (ppb)	2	0	<0.3	_____	N	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	10	<0.001	_____	N	Discharge from petroleum factories; Discharge from chemical factories

Prescott Valley Water System (lower) #13-063

Substance	MCL	MCLG	Highest % exceeding limits	Lowest % of samples meeting limits	Violation (Y or N)	Typical Source of Contamination
Total Coliform Bacteria	<5% positive	0	0	0	NO	Naturally present in the environment
Fecal Coliform and E. coli	positive	0	0	0	NO	Human and animal fecal waste
Substance	MCL	MCLG	Our Water	Range of Detection	Violation (Y or N)	Typical Source of Contamination
Nitrate (ppm)	10	10	4.59	0.31 - 4.59	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite (ppb)	1	1	<0.10	_____	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total trihalomethanes] (ppb)	80	N/A	2.8	<0.5-2.8	NO	By-product of drinking water chlorination