

Annual
WATER
QUALITY
REPORT

Reporting Year 2012

Presented By _____
Tuolumne Utilities District

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

There When You Need Us

Tuolumne Utilities District (TUD) once again is proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2012. Over the years, TUD has been dedicated to bringing you and your family the highest quality drinking water that meets 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. Thank you for being a customer of Tuolumne Utilities District and for allowing us to continue providing you with high-quality drinking water.

To better assist you with the information provided in this report, please visit the TUD web site at www.tudwater.com to identify which water treatment plant serves your area. Should you ever have any questions or concerns about your water, we encourage you to contact us.

Community Participation

You are invited to attend our regularly scheduled Board meetings held on the second and fourth Tuesdays of each month, beginning at 2:00 p.m. in the Tuolumne Utilities District boardroom, at 18885 Nugget Boulevard, Sonora, California. Current information is available on our Web site: www.tudwater.com. The Board meetings can be viewed live on our web site and in our meeting archives.

Where Does My Water Come From?

The most important factor in water quality is its source. There are two sources of supply from which Tuolumne Utilities District (District, or TUD) receives its water: from surface water that originates from rainfall and runoff from snowpack in the Sierra Nevada Mountains, and from groundwater wells. The District is composed of 17 water service areas, 14 surface water treatment plants, and 21 active wells.

Approximately 96 percent of TUD's annual water needs are met with surface water; the other 4 percent is met with groundwater either as a primary source or a backup source. In 2012, the Sonora-Jamestown System supplied water to the Cuesta Center-Lambert Lakes System and supplemental water to the East Sonora and Mono Village Systems.

An assessment of the drinking water sources for all TUD water systems was completed in 2002 - 2003. A copy of the complete assessment of each system may be viewed at the Department of Health Services Water Field Operations Branch, Merced District Office, 265 W. Bullard Ave., Suite 101, Fresno, California 93704.

To learn more about our watershed on the Internet, go to the U.S. EPA's Surf Your Watershed at www.epa.gov/surf.

Important Health Information

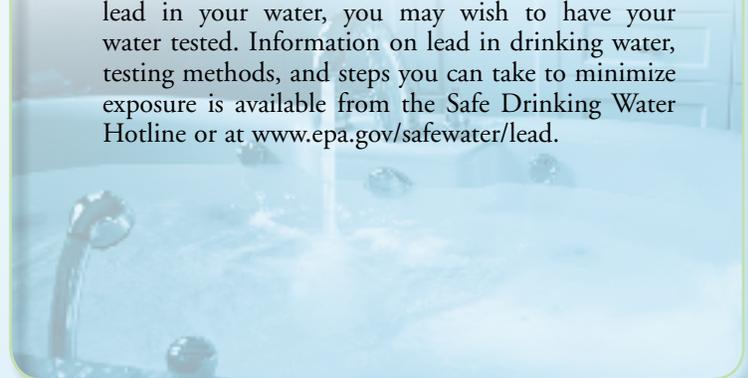
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants 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>.

QUESTIONS?

For more information about this report, or any questions relating to your drinking water, please call Don Perkins, Water Superintendent, at (209) 532-5536, extension 554.

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 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.



Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their web site at www.nrdc.org/water/drinking/bw/exesum.asp.

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, that are by-products of industrial processes and petroleum production and that 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.

Fact *or* Fiction

Water treatment began as a way to remove disease-causing agents. *(Fiction: It was only in the 1950s that scientists began to suspect that water might carry diseases. Although earlier treatment of water could make the water safer, it was mainly done merely to improve the taste, smell, or appearance of the water.)*

About half of the world's water supply is available for drinking. *(Fiction: If all the world's water were fit into a gallon jug, the fresh water available for us to use would equal only about one tablespoon.)*

Due to its unique nature, water boils at the same temperature anywhere on the planet. *(Fiction: At sea level, water boils at 212 degrees Fahrenheit, but on top of Mt. Everest, water boils at 154 degrees.)*

Water regulates the temperature of the Earth. *(Fact: As in the human body, the water in our oceans, lakes, and streams plays a major role in regulating planetary temperatures.)*

The Mississippi River is longer than the Amazon River. *(Fiction: At 3,902 miles the Mississippi River is not as long as the Amazon River, which flows for 4,000 miles.)*

Forty trillion gallons of water a day are carried in the atmosphere across the United States. *(Fact: Forty percent of the atmosphere's moisture content falls as precipitation each day.)*

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 often 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.

Iron and manganese were found at levels that exceed the secondary MCLs (SMCLs) of 300 ppb and 50 ppb, respectively. These SMCLs were set to protect you against unpleasant aesthetic effects such as color, taste, odor, and the staining of plumbing fixtures and clothing while washing. Since violating these SMCLs does not pose a risk to public health, the state allows the affected community to decide whether or not to treat or remove it. The high iron and manganese levels come from our wells that are mainly used as back-up sources normally used during the annual ditch outage which is approximately seven days a year.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	PHG (MCLG) (MRDLG)	Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls/ Willow Springs	Cuesta Center/ Lambert Lakes	VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED (RANGE: LOW-HIGH)							
Barium (ppm)	2012	1	2	ND	ND	ND	ND (ND-0.12)	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2012	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.03 (0.53-1.3)	1.46 (1.3-1.6)	1.48 (1.4-1.6)	1.71 (1.5-1.9)	1.66 (1.6-1.7)	0.92 (0.72-1.13)	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (ppm)	2012	TT	NA	NA	NA	1.9 (1.7-2.4)	NA	1.9 (1.5-2.5)	2.5 (1.7-5.2)	No	Various natural and man-made sources
Fluoride (ppm)	2012	2.0	1	0.2 (0.13-0.2)	ND	ND (ND-0.23)	0.12 (ND-0.24)	0.09 (ND-0.2)	ND	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2006	15	(0)	0.2 (ND-2.5)	ND	0.7 (ND-1.38)	0.75 ¹ (ND-1.5)	0.44 (ND-2.3)	ND	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2012	60	NA	ND	39.5 (30-59)	28.3 (20-38)	46.1 (27-77)	40.8 (32-48)	9.9 (2.5-24)	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2012	45	45	1 (ND-3)	ND	ND	ND	ND	ND	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	3.5	49.3 (35-65)	28.5 (20-36)	44.3 (27-64)	41 (31-48)	37.5 (31-44)	No	By-product of drinking water disinfection
Turbidity⁴ (NTU)	2012	TT	NA	NA	0.17 (0.09-0.17)	0.2 (0.05-0.2)	0.31 (0.07-0.31)	0.54 (0.13-0.54)	0.3 (0.06-0.3)	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	NA	100	100	99.9	99.6	100	No	Soil runoff

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	East Sonora	Mono Village	Monte Grande/ Curtis Creek	Peaceful Pines	Phoenix Lake	Ponderosa	VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED (RANGE: LOW-HIGH)							
Barium (ppm)	2012	1	2	ND	ND	ND	ND	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2012	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.03 (0.5–1.37)	0.9 (0.61–1.38)	1.68 (1.5–1.9)	0.65 (0.36–0.98)	0.95 (0.6–1.27)	1.58 (1.5–1.8)	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (ppm)	2012	TT	NA	2.5 (1.7–5.2)	2.5 (1.7–5.2)	ND	NA	NA	2.1 (1.1–3.3)	No	Various natural and man-made sources
Fluoride (ppm)	2012	2.0	1	0.055 (ND–0.11)	ND	ND	0.23	0.16	ND	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2006	15	(0)	2.7 ¹ (ND–3.7)	0.84 ¹ (ND–2.0)	ND	1.08 ¹	2 (1.4–3.04)	ND	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2012	60	NA	33.3 (23–45)	31.5 (21–38)	40.8 (28–63)	3	12	29.8 (22–41)	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2012	45	45	5.5 (ND–11)	ND	ND	ND	ND	1	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	40.3 (27–53)	40.8 (27–55)	49.5 (34–61)	2.7	36	27.3 (20–36)	No	By-product of drinking water disinfection
Turbidity⁴ (NTU)	2012	TT	NA	0.3 (0.06–0.3)	0.3 (0.06–0.3)	0.18 (0.07–0.18)	NA	NA	1.0 (0.09–1.0)	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	NA	100	100	NA	NA	99.4	No	Soil runoff

REGULATED SUBSTANCES

				Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Wards Ferry		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	PHG (MCLG) (MRDLG)	AMOUNT DETECTED (RANGE: LOW-HIGH)	VIOLATION	TYPICAL SOURCE				
Barium (ppm)	2012	1	2	ND	ND	ND	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chlorine (ppm)	2012	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.64 (1.5–2.0)	1.52 (1.4–1.6)	1.49 (1.4–1.7)	1.66 (1.5–1.9)	0.53 (0.22–0.94)	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (ppm)	2012	TT	NA	2.5 (1.7–3.1)	2.5 (1.7–5.2)	2.8 (1.8–2.9)	2 (1.6–2.8)	NA	No	Various natural and man-made sources
Fluoride (ppm)	2012	2.0	1	ND	ND	ND	0.05 (ND–0.2)	ND	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2006	15	(0)	9 ² (ND–24)	ND	ND	0.88 ¹ (ND–4.25)	ND	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2012	60	NA	16.8 (9–25)	28.8 (17–49)	22.5 (11–29)	34.3 (24–44)	ND	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2012	45	45	ND	ND	ND	ND	11	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	25.8 (23–30)	36.7 (21–61)	31 (13–42)	26.5 (20–31)	4	No	By-product of drinking water disinfection
Turbidity⁴ (NTU)	2012	TT	NA	0.24 (0.07–0.24)	0.3 (0.06–0.3)	0.25 (0.03–0.25)	0.25 (0.06–0.25)	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	100	100	100	100	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls/ Willow Springs	Cuesta Center/ Lambert Lakes		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	90TH PERCENTILE (SITES ABOVE AL/ TOTAL SITES)	VIOLATION	TYPICAL SOURCE					
Copper (ppm)	2011	1.3	0.3	0.535 (0/5)	0.0014 (0/10)	0.084 (0/10)	0.11 (0/20)	0.15 ³ (0/20)	0.19 (0/5)	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2011	15	0.2	1.3 (0/5)	ND (1/10)	4.9 (1/10)	4 (1/20)	6.1 ³ (1/20)	7.9 (0/5)	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				East Sonora	Mono Village	Monte Grande/ Curtis Creek	Peaceful Pines	Phoenix Lake	Ponderosa		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	90TH PERCENTILE (SITES ABOVE AL/ TOTAL SITES)	VIOLATION	TYPICAL SOURCE					
Copper (ppm)	2011	1.3	0.3	0.18 (0/5)	0.18 ⁵ (0/10)	0.17 (0/10)	0.034 (0/5)	0.34 (0/5)	0.11 ⁵ (0/10)	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2011	15	0.2	1.2 (0/5)	ND ³ (0/10)	ND (1/10)	1.1 (0/5)	2.5 (0/5)	ND ⁵ (1/10)	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

				Scenic View	Sonora/ Jamestown	Tuolumne	Upper Basin	Wards Ferry		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	90TH PERCENTILE (SITES ABOVE AL/ TOTAL SITES)	VIOLATION	TYPICAL SOURCE				
Copper (ppm)	2011	1.3	0.3	0.09 ⁵ (0/10)	0.026 ³ (0/30)	0.082 ⁵ (0/10)	0.09 (0/10)	0.42 ⁵ (0/5)	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2011	15	0.2	ND ⁵ (0/10)	ND ³ (0/30)	6.8 ⁵ (0/10)	9 (1/10)	ND ⁵ (0/5)	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls/Willow Springs		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED (RANGE: LOW-HIGH)	EXCEEDANCE	TYPICAL SOURCE				
Iron (ppb)	2012	300	NS	50 (ND-150)	ND	ND (ND-1300)	ND (ND-820)	336 (ND-790)	Yes ⁶	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2012	50	NS	16 (ND-48)	ND	ND (ND-150)	ND (ND-31)	95 (ND-220)	Yes ⁷	Leaching from natural deposits
Sulfate (ppm)	2012	500	NS	8.4 (5-13)	ND	ND (ND-7.1)	ND (ND-8.8)	3.4 (ND-6)	No	Runoff/leaching from natural deposits; industrial wastes
Zinc (ppm)	2012	5.0	NS	NA	ND	ND (ND-0.057)	ND (ND-0.21)	0.21 (ND-0.51)	No	Runoff/leaching from natural deposits; industrial wastes

SECONDARY SUBSTANCES

				Cuesta Center/ Lambert Lakes	East Sonora	Mono Village	Peaceful Pines	Phoenix Lake	Ponderosa		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED (RANGE: LOW-HIGH)	EXCEEDANCE	TYPICAL SOURCE					
Iron (ppb)	2012	300	NS	ND	ND	ND	ND	ND	ND	Yes ⁶	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2012	50	NS	23	11.5 (ND–23)	NA	62 (61–62)	NA	ND	Yes ⁷	Leaching from natural deposits
Sulfate (ppm)	2012	500	NS	ND	5.5 (ND–11)	9.6	4.2	4.1	ND	No	Runoff/leaching from natural deposits; industrial wastes
Zinc (ppm)	2012	5.0	NS	ND	ND	ND	ND	ND	ND	No	Runoff/leaching from natural deposits; industrial wastes

				Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Wards Ferry			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED (RANGE: LOW-HIGH)	EXCEEDANCE	TYPICAL SOURCE					
Iron (ppb)	2012	300	NS	ND	ND	ND	4028 (ND–27000)	ND	Yes ⁶	Leaching from natural deposits; industrial wastes	
Manganese (ppb)	2012	50	NS	42	23	ND	153 (ND–350)	NA	Yes ⁷	Leaching from natural deposits	
Sulfate (ppm)	2012	500	NS	ND	ND	ND	4.4 (ND–7.3)	3.5	No	Runoff/leaching from natural deposits; industrial wastes	
Zinc (ppm)	2012	5.0	NS	ND	ND	ND	0.104 (ND–0.21)	ND	No	Runoff/leaching from natural deposits; industrial wastes	

OTHER SUBSTANCES

		Apple Valley	Big Hill	Cedar Ridge	Columbia/Gibbs	Crystal Falls/ Willow Springs	Cuesta Center/ Lambert Lakes	East Sonora	Mono Village	Monte Grande/ Curtis Creek	Peaceful Pines
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED (RANGE: LOW-HIGH)									
Sodium (ppm)	2012	13.3 (13–14)	7.7	4.1 (4.1–5.5)	5.6 (5.6–6.3)	7.9 (5.1–10)	4.6	7.8 (4.6–11)	12	6.6	14
Hardness (ppm)	2012	163 (130–190)	11	10 (10–120)	11 (11–300)	40.6 (9.3–71)	18	69 (18–120)	110	12	73

OTHER SUBSTANCES

		Phoenix Lake	Ponderosa	Scenic View	Sonora/Jamestown	Tuolumne	Upper Basin	Wards Ferry
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED (RANGE: LOW-HIGH)						
Sodium (ppm)	2012	16	4.4	4.6	4.6	6.6	7.6 (5.5–8.9)	9.9
Hardness (ppm)	2012	270	11	13	18	13	48 (10–84)	150

¹ Sampled in 2005.

² Sampled in 2009.

³ Sampled in 2010.

⁴ 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.

⁵ Sampled in 2012.

⁶ Violations occurred in Crystal Falls/Willow Springs and Upper Basin only.

⁷ Violations occurred in Crystal Falls/Willow Springs, Upper Basin and Peaceful Pines only.

Definitions

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

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.