

# DONNER SUMMIT PUBLIC UTILITY DISTRICT

## 2012 CONSUMER CONFIDENCE REPORT

PWS No. 2910016

### IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

**Este informe contiene información muy importante sobre su agua potable.**

**Tradúzcalo o hable con alguien que lo entienda bien.**

The Donner Summit Public Utility District provides this Consumer Confidence Report to its customers. This report is to ensure that the water user is informed of the standards and quality of water in the District. If you have any question regarding this information, or if you experience any problems with your water, please contact Mr. Jim King or Mr. Tom Skjelstad at the District Offices at (530) 426-3456 or (530) 426-9144. You may also E-mail us at [tskjelstad@dspud.com](mailto:tskjelstad@dspud.com) or at [jking@dspud.com](mailto:jking@dspud.com). Our District Board meets on the 3<sup>rd</sup> Tuesday of each month at the District Office located at 53823 Sherritt Lane, Soda Springs, CA, call the office (530) 426-3456 for a meeting schedule. Please feel free to participate in these meetings.

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 (1-800-426-4791).

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. USEPA/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 Drinking Water Hotline (1-800-426-4791).

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.

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 result from urban stormwater runoff, industrial or domestic waste water 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 that are byproducts 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, USEPA and the California Department of Public Health, Division Office of Drinking Water prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. We treat our water according to the Department's regulations. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

All of the Drinking Water for the District is obtained from our Surface Storage Facility at Lake Angela. Lake Angela is located in Nevada County at the end of Lake Angel Dr. off of Donner Pass Road (Latitude: 39.3221, Longitude: -120.3269) at an elevation of 7172'. The districts last water shed survey was completed in 2002.

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. High turbidity can hinder the effectiveness of disinfectants.

Our Donner Summit Public Utility District water system (DSPUD) recently violated drinking water standards. Although this incident was not an emergency, as our customers, you have a right to know what happened and what was done to correct this situation.

The actual quality of the DSPUD's water has not changed. The recent turbidity violations are due to the treatment plant being reclassified to in-line treatment. It was also determined that the clear-well, used to get the contact time or CT for disinfection limit its effectiveness per Department of Health standards. This resulted in the below mentioned violations.

The disinfection standards require water in the treatment plant to be in contact with chlorine or a similar disinfectant for a minimum amount of time. DSPUD continually disinfects filtered water at the water treatment plant (Plant) with chlorine in order to ensure proper disinfection. The California Department of Public Health (CDPH) assessment has found that the water treatment plant configuration should receive less credit for disinfection. Based on the CDPH assessment numbers, the DSPUD chlorine contact calculations showed that for the plant can at times fail to provide the required contact time. To insure adequate disinfection we have increased or chlorine feed rate from 1.0 parts per million to 2.0 parts per million.

The DSPUD surface water treatment plant filtration process has been categorized by the CDPH as in-line filtration. This filtration process is an unapproved alternative technology per Section 64653, Chapter 17, Title 22, of the California Code of Regulations, unless the filtration process produces a finished water that has a turbidity of less than 0.1 NTUs in 95% of the water samples taken each month. DSPUD routinely monitors your water for turbidity (cloudiness). This parameter measures the effectiveness of the filtration of a water treatment process. DSPUD has not consistently met the new performance requirement. This occurred during the months of January through December of 2012. Monthly readings were less than or equal to 0.1 NTUs in only 70% and 75%, respectively, of the total number of readings taken. Therefore, DSPUD cannot consistently meet the CDPH standard for in-line filtration.

#### **What should you do?**

**You do not need to boil your water or take other corrective actions.**

This is not an emergency. If it had been, you would have been notified immediately.

Although chlorine disinfection quickly kills most bacteria, it is less effective against organisms such as viruses and parasites. For this reason, water needs to have a contact time mix with chlorine for a longer time period to kill such organisms. The amount of time necessary, or the "contact time", depends on the amount of disinfectant in the water and the temperature of the water. The organisms killed by disinfection include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.

If you have other health issues concerning the consumption of this water, you may consult your doctor.

### What Happened? What Was Done?

The water treatment plant at Donner Summit Public Utility District (DSPUD) has been found by CDPH to have deficiencies that can affect performance and rated capacity to meet drinking water standards. DSPUD has done the following to correct the situation: DSPUD has as of June 2013 received funding to begin the process to make structural modifications to the water treatment plant to ensure that DSPUD can meet all CDPH requirements for filtration and disinfection. The modifications and upgrades are scheduled to begin in the spring of 2014. DSPUD is continually looking at some interim measures for modifying plant operations to help meet all disinfection and turbidity performance requirements until the above mentioned upgrades are complete.

The highest single turbidity measurement for the year was 0.4 NTU, and the lowest monthly percentage of samples meeting the requirements for filtered water was 72%.

We have maintained a chlorine residual of 0.2 mg/l throughout the District, which is the Department requirement. We maintain a pH of approximately 7.5. This pH makes the water less aggressive to any lead solder that may have been used in your pipes. A total of 24 coliform samples were taken this year, out of which none tested positive for the possible presence of coliform bacteria. Coliform bacteria are naturally present in the environment. Test results less than the detectable limit are not included in this report.

The districts water distribution system involves a number of elevation changes, which can cause the system to have significant pressure fluctuations. There is one Pressure Reducing Station located within the system at Snow Lab Road and Donner Pass Road. This station reduces water pressure down to between 35 and 40 Pounds Per Square Inch (PSI). Due to elevation changes following this station the pressure can increase to between 60 and 120 PSI farther down the line. Pressure changes can also occur due to high water use, line breaks and fire hydrant use. To combat the problems this can create at a residential or commercial hookup the district recommends that the service line coming in have a Pressure Reducing Valve (PRV) installed. This will help protect fixtures and appliances from damage that can be caused by excessive water pressure.

The table below lists all the drinking water contaminants that we detected during the 1997-2012 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. For the contaminants the State requires us to monitor less than once per year our most recent result are used. Some of the data, though representative of the water quality, is more than one year old.

Terms & abbreviations used below

- **MCL = Maximum Contaminant Level:** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHG (or MCLGs) as is economically and technologically feasible. Secondary MCLs 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. Environmental Protection Agency.
- **AL = Regulatory Action Level:** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **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 Environmental Protection Agency.
- **PDWS = Primary Drinking Water Standard:** MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
- **ppm** parts per million
- **ppb** parts per billion

CONSTITUENT	MCL	MCLG PHG	DSPUD Water	Sample Date	Major Sources in Drinking Water
<b>PRIMARY STANDARDS - HEALTH RELATED</b>					
TREATED WATER					
REGULATED ORGANIC CHEMICALS					
Nitrate as N			0.051	2012	
Total Trihalomethanes (TTHMs)( ppb)	80		23.8	2012	Chlorine for Disinfection
Haloacetic Acids (HAAS) (ppb)	60		36.0	2012	

INORGANIC CHEMICALS					
Aluminum (ppb)	1000	None	107	2010	erosion of natural deposits: residue from the surface water treatment process
Total recoverable Antimony			ND	2010	
Total recoverable Beryllium			ND	2010	
Total recoverable Nickel			ND	2010	erosion of natural deposits
Fluoride (ppb)	1,400-2,400		ND	2010	
Total recoverable Thallium			ND	2010	
SECONDARY STANDARDS – Aesthetic					
Chlorides (ppm)	500	250	3.3	2010	runoff/leaching from natural deposits
Manganese (ppb)	50		ND	2012	leaching from natural deposits
Sulfate (ppm)	500	250	7.1	2010	runoff/leaching from natural deposits
TDS (ppm)	1000		ND	2012	runoff/leaching from natural deposits
Specific Conductance (uS/cm)	1600		21	2012	substances that form ions when in water
Iron (ppm)	0.3		0.26	2012	leaching from natural deposits
ADDITIONAL CONSTITUENTS ANALYZED					
Alkalinity (Totals) (ppm)	No Standard	None	18	2010	
Bicarbonate (HCO <sub>3</sub> ) (ppm)	No Standard	None	22	2010	
Magnesium (ppm)	No Standard	None	0.14	2010	
Carbonate as CO <sub>3</sub> (ppm)	No Standard	None	ND	2010	
Hydroxide (ppm)	No Standard	None	ND	2010	
Total Recoverable Calcium (ppm)	No Standard	None	2.41	2010	
Total Recoverable Magnesium (ppm)	No Standard	None	0.14	2010	
Total recoverable Potassium (ppm)	No Standard	None	0.83	2010	
pH (units)	No Standard	None	7.7	2012	
Sodium (ppm)	No Standard	None	10.6	2010	
Gross Alpha Radioactivity	No Standard	None	ND	2010	
Radium 228	No Standard	None	<1.0	2010	
Lead & Copper	AL	MCLG	DSPUD	10 Sites	
			Water	Found Above	
				The AL	
				2010	
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		ND	0	plumbing systems
Lead (ppb)	15		42.2	1	corrosion of household
copper {ppb}	1,300		0.863	0	plumbing systems
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		0.106	0	plumbing systems
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		0.071	0	plumbing systems
Lead (ppb)	15		8	0	corrosion of household
copper {ppb}	1,300		0.164	0	plumbing systems
Lead & Copper	AL	MCLG	DSPUD	10 Sites	
			Water	Found Above	
				The AL	
				2010	
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		0.077	0	plumbing systems
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		0.148	0	plumbing systems
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		ND	0	plumbing systems
Lead (ppb)	15		ND	0	corrosion of household
copper {ppb}	1,300		ND	0	plumbing systems
Lead (ppb)	15		7.3	0	corrosion of household
copper {ppb}	1,300		0.137	0	plumbing systems

- **Lead:**

*Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and/or flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (1-800-426-4791).*

*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. Donner Summit PUD 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>.*