

2013 Consumer Confidence Report

Water System Name:	Trinity Co. Waterworks 531002	Report Date:	3/1/2014
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We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2013.

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

Type of water source(s) in use:	Surface		
Name & location of source(s):	Big Creek and Ewing Reservoir		
Drinking Water Source Assessment information:	<u>Contact Redding office of the California Department of Public Health, Division of Drinking Water, 530-224-4800</u>		
Time and place of regularly scheduled board meetings for public participation:	Third Tuesday of each month at the Office on Reservoir Road at 2:00 P.M.		
<i>For more information, contact:</i>	Craig Hair Jr.	<i>Phone:</i>	(530)628-5449
<u>TERMS USED IN THIS REPORT:</u>			

Maximum Contaminant Level (MCL): 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 are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): 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 (USEPA).

Public Health Goal (PHG): 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.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

(µS/cm): microSiemens per centimeter

pCi/L: picocuries per liter (a measure of radiation)

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 storm water 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 storm water 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 storm water runoff, agricultural application, and septic systems.

Radioactive contaminants that 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, the USEPA and the state Department of Health Services (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.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA						
Microbiological Contaminants	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste	

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) 9/8/2011	10	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppb) 9/8/2011	10	502	0	1,300	300	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
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Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL	PHG	Typical Source of Contaminant
Sodium (ppm)	4/10/2013	2.55ppm		None	none	Generally found in ground & surface water
Hardness (ppm)	4/10/2013	78 ppm		None	none	Generally found in ground & surface water

**Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.*

TABLE 4 – DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD						
Chemical or Constituent	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
Total Trihalomethanes (ppb)	2013	47.2	27.4-47.2	80	Not Applicable	By-product of drinking water disinfection
Haloacetic Acids (ppb)	2013	46.8	11.5-46.8	60	Not Applicable	By-product of drinking water disinfection
Total Chromium (ppb)	8/3/2004	2.1	2.1	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Aesbestos (million fibers per liter)						
Gross Alpha Particle Activity (pCi/L)	7/9/2008	0.4	0.4	7	7	Erosion of natural deposits

TABLE 5 – DETECT ION OF CONTA MINANT S WITH A SECON DARY DRINKI NG WATER STANDA RD	10/5/2006	1	0.34 – 1.0	15	(0)	Erosion of natural deposits
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Chemical or Constituent					
	Sample Date	Level Detected	MCL	PHG	Typical Source of Contaminant
Manganese (ppb)	4/10/2013	35.2	50	Not Applicable	Leaching from natural deposits
Total Dissolved Solids (ppm)	8/3/2004	81	1,000	Not Applicable	Runoff/leaching from natural deposits
Sulfate (ppm)	8/3/2004	2.1	500	Not Applicable	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance ($\mu\text{S}/\text{cm}$)	8/3/2004	130	1,600	Not Applicable	Substances that form ions when in water; seawater influence
Chloride (ppm)	8/3/2004	0.300	500	Not Applicable	Runoff/leaching from natural deposits; seawater influence
Iron	4/10/2013	327	300	Not Applicable	Natural Waters
Turbidity	7/17/2010	.80	.5 NTU	Not Applicable	Run off of natural waters

**Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA'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).



Summary Information for Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

<p>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 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).</p> <p>July of 2010 we were faced with situation of very high flows and issues with our primary clarifier. These translated to us not maintaining the standard for turbidity for a 24 hour period. We have made some physical changes to the clarifier and have completed the irrigation system that will take several of our large irrigators off of the domestic system—(lowering the demand on the water plant during peak periods)</p>	
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For Systems Providing Surface Water as a Source Of Drinking Water:
(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

TABLE 7 – SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

<i>Treatment Technique</i> ^(a) (Type of approved filtration technology used)	<u>Conventional filtration when the upflow clarifier is in use:</u> <u>Direct filtration when the clarifier is bypassed.</u>
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	<u>Turbidity of the filtered water must:</u> 1 – Be less than or equal to 0.5 NTU in 95% of measurements in a month. 2 – Not exceed 0.5 NTU for more than eight consecutive hours. 3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	90% (in 2010, daily average turbidities were always less than 0.5 NTU)
Highest single turbidity measurement during the year	>.5
Number of violations of any surface water treatment requirements	0

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Surface Water Treatment

Both conventional filtration and direct filtration are approved Surface Water Treatment filtration methods. Filtration performance standards are consistently met.

Revised Jan 2007