



2013 Annual Water Quality Report A Consumer Confidence Report



This report contains important information about your drinking water. (Este informe contiene información muy importante sobre su agua potable. Tranúzcalo ó hable can alguien que lo enteinda bien.)

The City of Placerville and El Dorado Irrigation District (EID) take pride in the quality of water delivered to their customers. This report summarizes the test results of water samples taken by EID and City staff as required by the U. S. Department of Environmental Protection and the California Department of Public Health.

Things You Should Know About Your Drinking Water ~

- ◆ *Drinking water*, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The term “contaminant” as used in this document refers to any substance in water, other than pure water itself, that is regulated and monitored for health and aesthetic reasons. 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 USEPA’s Safe Drinking Water Hotline (800-426-4791) or by visiting <http://www.epa.gov/safewater/>
- ◆ 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 activities (see list at right).
- ◆ 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 (800-426-4791).
- ◆ In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants That May Be Present In Source Water ~

- ◆ **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 wastewater discharge, 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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.

Please be aware that the City is not responsible for plumbing and treatment devices installed on private property. Substandard, illegal, old, improperly installed and/or improperly maintained plumbing or water treatment devices installed by others may adversely affect the water quality coming from the taps inside your home or business.

Abbreviations & Definitions used in this report:

- MCL – Maximum Contaminant Level:** The highest level of 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.
- MCLG – Maximum Contaminant Level Goal:** Set by the USEPA, The level of a contaminant in drinking water below which there is no known or expected risk to health. State EPA goals are called PHG (Public Health Goals).
- MRDL – Maximum Residual Disinfectant Level:** The level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap.
- MRDLG – Maximum Residual Disinfectant Level Goal:** 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.
- ND:** Not detectable at testing limit.
- NTU – Nephelometric Turbidity Unit:** A measure of the clarity of the water. Turbidity is a measure of the cloudiness of the water.
- TT – Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

For more information about this report or to obtain additional copies, visit the City Hall Engineering Division at 3101 Center Street or call (530) 642-5250.

Source Water Quality - (El Dorado Irrigation District)

Source Water Quality - (El Dorado Irrigation District)									
Primary Standards - Health Based (units)	Primary	MCL	PHG (MCLG)	Highest Single Measurement	Average	Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Turbidity									
Highest single measurement of the Treated Surface Water (NTU)	TT = 1.0		n/a	0.22		n/a	No	2013	Soil runoff
Lowest Monthly % of the Treated Surface Water Meeting NTU Requirements	TT = 95% of samples \leq 0.3 NTU		n/a	100%		n/a	No	2013	Soil runoff
Secondary Standards - Aesthetic (units)	Secondary MCL		PHG (MCLG)	Range of Detection	Average	Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Chloride (mg/L)	500		n/a	2.8-5.3		4.2	No	2013	Runoff/leaching from natural deposits; seawater influence
Corrosivity (A.I.)	Non-corrosive		n/a	-2.26		-2.26	No	2013	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Odor-Threshold (units)	3		n/a	1-1		1	No	2013	Naturally-occurring organic materials
Specific Conductance (μ S/cm)	1600		n/a	44-78		58	No	2013	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	500		n/a	0.6-2.2		1.3	No	2013	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	1000		n/a	32-68		52	No	2013	Runoff/leaching from natural deposits
Other Parameters (units)	Notification Level		PHG (MCLG)	Range of Detection	Average	Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Alkalinity (mg/L)	Not Regulated		n/a	12-28		20	n/a	2013	No Known Typical Source of Constituent
Bicarbonate (mg/L)	Not Regulated		n/a	16-27		20	n/a	2013	
Calcium (mg/L)	Not Regulated		n/a	ND-8.5		4.9	n/a	2013	
Chlorate (ug/L)	Not Regulated		n/a	ND-8.5		4.9	n/a	2013	
Hardness as CaCO ₃ (mg/L)	Not Regulated		n/a	15-29		22	n/a	2013	
Hardness as CaCO ₃ (grains/gal)	Not Regulated		n/a	0.88-1.69		1.29	n/a	2013	
Hexavalent Chromium (ug/L)	n/a		0.02	ND-0.07		ND	n/a	2013	
Magnesium (mg/L)	Not Regulated		n/a	ND-3.3		2.2	n/a	2013	
N-nitroso-dimethylamine (NDMA)(ug/L)	0.01		0.003	ND-0.003		ND	n/a	2010	
Orthophosphate (mg/L)	Not Regulated		n/a	ND-0.22		0.15	n/a	2013	
pH (pH units)	Not Regulated		n/a	7.1-8.3		7.7	n/a	2013	
Sodium (mg/L)	Not Regulated		n/a	4.8-6.5		5.4	n/a	2013	
Strontium (ug/L)	n/a		n/a	ND-53		35	n/a	2013	
Vanadium (ug/L)	50		n/a	ND-0.63		0.18	n/a	2013	
Disinfection Byproduct Precursors (units)	Action	Level	PHG (MRDLG)	Range of Detection	Lowest 4- RAA Quarterly Average		MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Total Organic Carbon [TOC] Filtered water (mg/L)	TT= Removal		n/a	0.65-1.27		n/a	n/a	2013	Various natural and manmade sources
Total Organic Carbon [TOC] Removal Ratio (Actual/Required)	TT= \leq 1.0		n/a	n/a		1.00	No	2013	Various natural and manmade sources

City of Placerville Distribution System Water Quality - Main System¹

Microbiological Constituents (units)	Primary	MCL	PHG (MCLG)	Value	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent	
Total Coliform Bacteria > 12 Samples/Month (Present / Absent)	No more than 5% positive monthly sample		(0)	Highest number of monthly samples positive was 1	No	2013	Naturally present in the environment	
Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)		PHG (MRDLG)	Range of Detection	Highest Running Annual Average (RAA)	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Chlorine [as Cl ₂] (mg/L)	(4.0)		(4)	.58-1.11	0.94	No	2013	Drinking water disinfectant added for treatment
HAA5 [Total of five Haloacetic Acids] (ug/L)	60		n/a	40-72.5	55	No	2013	Byproduct of drinking water disinfection
TTHMs [Total of four Trihalomethanes] (ug/L)	80		n/a	30-64	53	No	2013	Byproduct of drinking water disinfection
Inorganic Constituents (units)	Action	Level	PHG (MCLG)	Sampe Data	90th % Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Copper (mg/L)[at the tap]		1.3	0.3	20 Samples	0.17	No	2012	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ug/L)[at the tap]		15	2	20 Samples	0.001	No	2012	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

¹ The Main System is comprised of all City water customers not in the Sierra System (see page 2). Should you have questions about which system you're in please contact the Engineering Division at (530) 642-5250.

City of Placerville Distribution System Water Quality - Sierra System¹

Microbiological Constituents (units)	Primary MCL	PHG (MCLG)	Value	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent	
Total Coliform Bacteria > 1 Sample/Month (Present / Absent)	No more than 5% positive monthly sample	(0)	No samples tested positive	No	2013	Naturally present in the environment	
Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Highest Running Annual Average (RAA)	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Chlorine [as Cl ₂] (mg/L)	(4.0)	(4)	.71-1.11	0.94	No	2013	Drinking water disinfectant added for treatment
HAA5 [Total of five Haloacetic Acids] (ug/L)	60	n/a	27-64	61	Yes	2013	Byproduct of drinking water disinfection
TTHMs [Total of four Trihalomethanes] (ug/L)	80	n/a	28-47	42	No	2013	Byproduct of drinking water disinfection
Inorganic Constituents (units)	Action Level	PHG (MCLG)	Sampe Data	90th % Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Copper (mg/L)[at the tap]	1.3	0.3	5 Samples	0.14	No	2012	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ug/L)[at the tap]	15	2	5 Samples	0.0008	No	2012	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

¹ The Sierra System is comprised of City water customers located in the Country Club Drive area including Sean Dr, Jeffrey Ln, Brendan Way, Barrett Dr, Pheasant Run Dr, Nesting Way, Covey Dr, and also includes the Eskaton Development located at the end of Blairs Lane. Should you have questions about which system you're in please contact the Engineering Division at (530) 642-5250.

Summary Information for Violation of MCL

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
MCL for HAA5 (Sierra System)	Increased water age in the pipeline; higher chlorine residuals from source EID water	Exceedance of Running Annual Average during the 2nd Quarter 2013	Increase system flushing, bypass of Sierra Tank during the winter months	The California Department of Public Health (CDPH) sets drinking water maximum contaminant levels and also requires the disinfection of drinking water. However, when used in the treatment of drinking water, disinfectants react with naturally-occurring organic and inorganic matter present in water to form chemicals called disinfection byproducts (DBPs). CDPH has determined that a number of DBPs are a health concern at certain levels of exposure. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.