

Nevada City Water Treatment Plant

Water Quality Report – 2013

Annual Water Quality Report Requirements. California water retailers must meet standards established by the Environmental Protection Agency (EPA) and the California Department of Health Services (the Department). The Department enforces drinking water standards within the State. Under State and Federal laws, we are required to send you an annual report on our water quality. Included are details about where your water comes from, what it contains, and how it compares to standards.

Our goal is, and always has been, to provide you with a safe and dependable supply of water. Your drinking water consistently meets and exceeds State and Federal standards. We are committed to providing you with information because informed customers are our best allies. For more information about your water please call Howard Schmitz at 530-265-2496.

Spanish Speaking Customers. Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Water Supply Source. The City of Nevada City water system is located in Nevada County CA, serving a population of 3068, with approximately 1,333 service connections. Water for the system is provided seasonally by surface water in Little Deer Creek watershed, and by the Nevada Irrigation District's DS Canal. General land uses in the watershed are residential dwellings, managed forests and undeveloped land. A surface water source assessment was completed for the Little Deer Creek watershed in August 2008. This surface water source is considered to be vulnerable to storm drain discharge; historic mining, propane storage tanks, septic systems, use of pesticides and herbicides, fertilizers, managed forests, streets, roads, and water supply wells. A complete copy of NID's complete assessment is available for review at Nevada City Hall, 317 Broad St., Nevada City CA 95959. You may also contact the California Department of Public Health, Division of Drinking Water, 364 Knollcrest Drive, Suite 101 Redding CA, 96002 to review either of the source water assessment reports.

About 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 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 (800-426-4791).

Environmental Influences on 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, radio-active material, 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 and herbicides**, which may come from a variety of sources such as agriculture and residential uses.
- **Radioactive contaminants**, that are naturally occurring or are the result of oil and gas production and mining activities..
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications and septic systems.

Ensuring Safety. In order to ensure that tap water is safe to drink, the EPA and the Department prescribe regulations, which 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, which must provide the same protection for public health.

Note to At-Risk Water Users. 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/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).

TERMS USED IN THIS REPORT:

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 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 which 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)

ppt: parts per trillion or nanograms per liter (ng/L)

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

2013 Water Quality Data. The table below lists all the drinking water contaminants that we detected. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. 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. Unless otherwise noted, the data presented in this table is from testing done January 1-December 31, 2013.

Regulated Contaminants with Primary MCLs (samples collected in 2013 unless noted)

Parameters/Constituents	Units	State MCL	MCLG (or PHG)	Range (avg.)	Detected Level	Likely Source of Contamination
Gross Alpha (2005)	pCi/L	15	0	<3	<3	Erosion of natural deposits
Total Trihalomethanes	ppb	80	n/a	11.0-30.0 (23.0)	30.0	Byproduct of drinking water chlorination
HAA5	ppb	60	n/a	12.0-35.0 (28.8)	35.0	Byproduct of drinking water chlorination

Regulated Contaminants with Secondary MCLs (samples collected in 2013 unless noted)

Parameters/Constituents	Units	State MCL	MCLG (or PHG)	Range (avg.)	Detected Level	Likely Source of Contamination
Total Dissolved Solids (2010)	ppm	1000	none	---	22	Runoff/leaching from natural sources
Specific Conductance	micro-mhos	1600	none	---	53	Substances that form ions when in water
Calcium (2010)	ppm	none	none	---	3.0	n/a
Magnesium (2012)	ppm	none	none	---	0.8	n/a
Chloride (2007)	ppm	500	none	---	4.0	Runoff/leaching from natural sources
Iron (2010)	ppb	300	None	---	100	Leaching from natural deposits; industrial wastes
Sulfate as SO ₄ (2010)	ppm	500	none	---	2.0	Runoff/leaching from natural sources

Sampling Results Showing Treatment of Surface Water Sources- Conventional Filtration (a)

Contaminant	MCL	PHG	Range	Sample Date	Violation	Typical Source
Turbidity	TT = 1 NTU	N/A	N/A	2013	No	Soil runoff
	TT = 95% of samples ≤0.3 NTU		N/A			
Turbidity Performance Standards (b) (that must be met through the water treatment process)			Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time.			
Lowest monthly percentage of samples that met Turbidity Performance Standards			100%			
Highest single turbidity measurement during the year			0.22			
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.

Additional Constituents Analyzed (samples collected in 2013 unless noted)

Parameters/Constituents	Units	State MCL	MCLG (or PHG)	Detected Level (avg)	Likely Source of Contamination
Total Hardness as CaCO ₃ (2010)	ppm	n/a	none	11	Naturally present
Total Alkalinity	ppm	n/a	none	10-18 (14)	Naturally present
Total Organic Carbon	ppm	n/a	None	0.3-.97 (1.1)	Naturally present
Barium	ppb	1000	none	23.8	Naturally present
Chlorine	ppm	4.0	4.0	1.4 Range(0.8-2.2)	Drinking water disinfectant
Aluminum	ppm	1000	600/200	129.1 Range (0-742)	Naturally present and residual from treatment process
Potassium (2011)	ppm	n/a	none	1.07	Naturally present
Sodium	ppm	n/a	none	1.5	Naturally present

Lead and Copper (Most Recent Sample 2012)

Parameters/Constituents	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	MCLG	Typical Source of Contaminant
Lead (ppb) (2011)	10	ND	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) (2011)	10	86.0	0	1300	0.3	“ “

Information On Lead. 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. Weimar Water Company 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>