

## 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) or Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA. PHGs are set by the California EPA.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Maximum Residual Disinfectant Level Goal (MRDLG):** 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.

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

**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.

**Level 1 Assessment:** A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MDL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**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)

**ppq:** parts per quadrillion or picograms per liter (pg/L)

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

# 2018 Water Quality Report

For

## Mountain Gate Community Services District

Some of the best water in the country is enjoyed right here in Northern California! With this in mind, we strive to provide you with a safe and dependable drinking water supply. We want you to understand the efforts we make to continually monitor our drinking water quality and to protect our water resources.

We regularly test our drinking water for many different constituents as required by State and Federal Regulations. This "Consumer Confidence Report" includes those constituents that were *detected* in 2018 and may include earlier monitoring data.

Our drinking water is supplied by a **surface water source (Shasta Lake Intake)** and **three groundwater wells (Bass Wells 01A, 02 & 03)**. The wells are operational and running for one month per year.

The wells were evaluated by the county in May 2002, to determine if there were possible contaminating activities that might compromise the quality of the water. At the time, there were no contaminants detected in the water supply, however the sources were still considered vulnerable to a high density of

septic systems (more than 1 per acre) and chemical and petroleum processing and storage in the vicinity. As of January, 2003, Shasta Lake Intake was considered vulnerable to contaminants from water treatment processes and natural deposits. Copies of the reports are available from our office upon request.

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 Water Resources Control Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Please note that 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.

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.

US EPA/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).

*Este informe contiene información muy importante sobre su agua beber. Favor de comunicarse Mountain Gate a 275-3002 para asistirlo en español.*

For questions or concerns about your drinking water you may attend our monthly meeting held the **2<sup>nd</sup> Wednesday** of each month or you may contact:

**Tim Heck – Chief Operator  
(530) 275-3002**



These tables show only the drinking water contaminants that were detected during the most recent sampling for each constituent. The State Water Resources Control Board 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. Any violation of an AL, MCL, MRDL, or TT is asterisked and explained below.

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 (state Total Coliform Rule)	0 (in a month)	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0 (in the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	0 (in the year)	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	No. of schools requesting lead sampling	Typical Source of Contaminant
Lead (ppb) 10/05/18	10	ND	None	15	0.2	None	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 10/05/18	10	0.123	None	1.3	0.3	Not Applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

\* 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. Mountain Gate CSD 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	09/19/14	6		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	09/19/14	147		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG) (MRDLG)	Typical Source of Contaminant
Nitrate (as nitrogen, N) (ppm)	08/03/18	1.76		10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Haloacetic Acids (ppb)	03/09/18 04/06/18	15.3	6.43 - 24.1	80	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	03/09/18 04/06/18	19.3	8.87 - 29.8	60	N/A	Byproduct of drinking water disinfection
Radium 228 (pCi/L)	04/24/17 05/18/17	0.44	0.34 - 0.55	5	0.019	Erosion of natural deposits

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Turbidity (Units)	03/09/18	1.6		5	none	Soil runoff
Total Dissolved Solids (ppm)	09/19/14	200		1000	none	Runoff/leaching from natural deposits
Chloride (ppm)	09/19/14	4.3		500	none	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	09/19/14	325		1600	none	Substances that form ions when in water; seawater influence
Sulfate (ppm)	09/19/14	22.8		500	none	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent	Sample Date	Level Detected	PHG	Health Effects Language
Hexavalent Chromium (ppb)	2014	ND - 2.1	0.02+	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

+There is currently no MCL for hexavalent chromium. The previous MCL of 10ppb was withdrawn on 9/11/17.

Table 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES

Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	Direct filtration
Turbidity Performance Standards <sup>(b)</sup> (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 1 NTU for more than one continuous hour. 4 - Not exceed 1 NTU at four-hour intervals.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	100%
Highest single turbidity measurement during the year	0.281 NTU
Number of violations of any surface water treatment requirements	none

(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.