

## 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 City of Mount Shasta

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 **three groundwater sources: Cold Springs**, located on McCloud Road; **Well 01**, located on Everitt Memorial and Washington; and **Well 02**, located behind the High School on Rockfellow and Adams. In 2018 the City of Mt. Shasta received multiple Tier 2 and RTR L2 assessments due to the presence of coliform bacteria in the water system. As a water user you were notified of these issues at the time they occurred.

These water sources were evaluated by the State Water Resources Control Board, Division of Drinking Water, to determine if there were possible contaminating activities that might compromise the quality of the water. A copy of the complete report is available 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 City of Mount Shasta a 530-926-7526 para asistirlo en español.*

For questions or concerns about your drinking water you may attend our monthly meetings held on the **2<sup>nd</sup> and 4<sup>th</sup> Monday** of each month or you may contact:

**Rod Bryan at 530-926-7526**



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)  | (in a month)<br><b>2*</b> | <b>6</b>                   | 1 positive monthly sample  | 0    | (b)                          |
| Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)   | (in the year)<br>0        | 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)   | (in the year)<br>0        | 0                          | (a)  | 0    | Human and animal fecal waste |
| (a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> . |                           |                            |  |      |                              |
| (b) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.                  |                           |                            |  |      |                              |

| 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) 2016   | 20                       | ND   | None                   | 15  | 0.2 | None                                    | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) 2016   | 20                       | 0.921                                      | <b>1*</b>              | 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. City of Mt. Shasta 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)                                       | 05/24/16    | 3              |                     | none | none       | Salt present in the water and is generally naturally occurring   |
| Hardness (ppm)                                     | 05/24/16    | 18             |                     | 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 |
| Radium 228 (pCi/L)   | 05/24/16    | 1.14           | 0.81 - 1.46         | 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   |
| Aluminum (ppb)   | 05/22/18-08/28/18 | 51             | ND - 153            | 200  | N/A        | Erosion of natural deposits; residual from some surface water treatment processes |
| Sulfate (ppm)  | 05/24/16          | 0.60           |                     | 500  | N/A        | Runoff/leaching from natural deposits; industrial wastes                          |
| Total Dissolved Solids (ppm)   | 05/24/16          | 53             |                     | 1000 | N/A        | Runoff/leaching from natural deposits   |

| TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS |             |                |                     |                    |                         |
|---|-------------|----------------|---------------------|--------------------|-------------------------|
| Chemical or Constituent (and reporting units)   | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|   |             |                |                     |                    |                         |