

CITY OF TULELAKE

2014 ANNUAL DRINKING WATER QUALITY REPORT

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality and safety of your water.

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, 2014

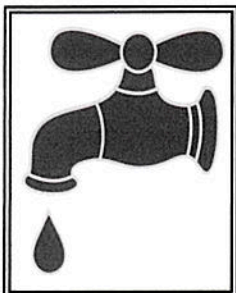
Where does your water come from?

Our water source is well #3. It is located at the end of Highway Street in the north-west corner of the City. This is an abundant supply of high quality water and does not vary appreciably from season to season. This well has a very good static level and recovers quickly. Since 2011, the well level has only dropped approximately 15 feet, even in these drought years. The City is in the process of establishing an emergency water source referred to as Well #1. It is located in the water yard next to our ground tank and booster station.



How is the water treated and monitored?

Water from Well #3 is chlorinated before it is delivered to our customers. Water samples are taken twice a month to check for the presence of coliform bacteria. These samples are taken to Spring Street Analytical for immediate results.



How do we verify that the water is free from harmful bacteria?

Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.

Contaminants that may be present in source 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, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Types of contaminants include:

Microbial contaminants, such as viruses and bacteria that may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals that can be naturally occurring or results from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming.

Pesticides and herbicides, which 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, and septic systems.

Radioactive contaminants, which 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 California Department of Public Health 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.

Water Quality Tables: Tables 1, 2, 3, 4 and 5 list all of the drinking water contaminants and water quality indicators 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 California Department of Public Health 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.

Note: To help you better understand the tables, definitions are provided on the following page.

TABLE 1—SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

| Microbiological Contaminants (Complete if bacteria detected) | Highest No. of Detections | No. of months in Violation | MCL | MCLG | Typical Source of Bacteria |
|---|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria | (In a month) 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> | (In the year) 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 (complete if lead or copper detected in the last sample set) | Sample Date | No. of samples collected | 90th percentile level detected | No. sites exceeding AL | AL | PHG | Typical Source of Contaminant |
|---|-------------|--------------------------|--------------------------------|------------------------|-----|-----|---|
| Lead (ppb) | | 10 | | 0 | 15 | 0.2 | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | | 10 | | 0 | 1.3 | 0.3 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |

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) | 1/22/15 | 51 mg/L | | none | none | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 1/22/15 | 37 mg/L | | 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 |
|--|-------------|----------------------|---------------------|------------|--------------------|--|
| Lead ug/L | 9/19/13 | n 90th percentile | Nd -16.9 | 15 | | Internal corrosion of household water plumbing systems |
| Copper mg/L | 9/19/13 | n 90th percentile | Nd - 0.322 | 1.30 | | Internal corrosion of household water plumbing systems |

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

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | MCL | PHG (MCLG) | Typical Source of Contaminant |
|--|-------------|----------------|---------------------|------|------------|-------------------------------|
| Total Dissolved Solids | 1/22/15 | ND | | 1000 | N/A | |
| Chloride | 1/22/15 | 13.9 mg/L | | 500 | N/A | |

In the table there are many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

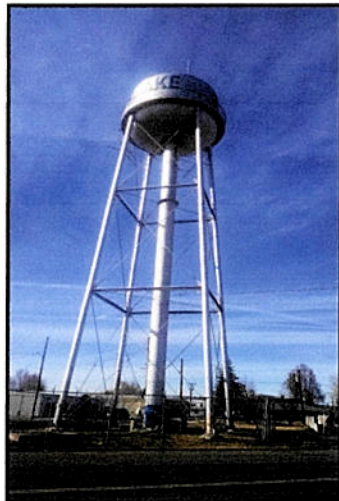
TERMS USED IN THIS REPORT:

| | |
|--|--|
| <p>(MCL) Maximum Contaminant Level: 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.</p> <p>(MCLG) Maximum Contaminant Level Goal: 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).</p> <p>(PHG) Public Health Goal: 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.</p> <p>(MRDL) Maximum Residual Disinfectant Level: 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.</p> <p>(MRDLG) Maximum Residual Disinfectant Level Goal: 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.</p> <p>(PDWS) Primary Drinking Water Standards: MCLs or MRDLs for contaminants that affect health along with their monitoring and</p> | <p>reporting requirements, and water treatment requirements.</p> <p>(SDWS) Secondary Drinking Water Standards: 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.</p> <p>(TT) Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.</p> <p>(AL) Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.</p> <p>Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.</p> <p>ND: Not detectable at testing limit</p> <p>ppm: parts per million or milligrams per liter (mg/L)</p> <p>ppb: parts per billion or micrograms per liter (ug/L)</p> <p>ppt: parts per trillion or nanograms per liter (ng/L)</p> <p>pCi/L: picocuries per liter (a measure of radiation)</p> <p>NTU: Nephelometric Turbidity Units</p> |
|--|--|

Additional 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 at 800-426-4791.



Important Health Information: Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbiological contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.



CITY OF TULELAKE
WATER TOWER



CITY OF TULELAKE
BOOSTER
STATION

Thank you for reading this Report and taking the time to learn about the efforts and challenges that are involved in providing high quality drinking water. If you have questions about this information, please contact Brett Nystrom, Director of Public Works, at 541-810-1915. Public participation is welcome at our City Council meetings, which are held at 5:30 pm on the first and third Tuesdays of every month at City Hall, located at 591 Main Street in Tulelake.

We take pride in providing safe, clean, quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The City of Tulelake is a proud member of:



California
Rural Water Association