**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.

**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 amounts of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**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 stormwater 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 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* can be naturally-occurring or be the result of oil and gas production and mining activities.

**Tables 1 - 8 list all of the drinking water contaminants 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 State Board allows LAWC 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.

**Definitions**

**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 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 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 that a water system must follow.

**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)

*This report shows the results of water monitoring for the period of January 1 - December 31, 2021.*

**Lake Alpine Water Company**

2021 Water Quality Report



Since 1964

PO Box 5013

Bear Valley, CA 95223

Office: 209-753-2409

Email: info@lakealpinewater.com

Plant: 209-753-6241

**Lead in Home Plumbing**

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. Lake Alpine Water Company, Inc. 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

Completed Projects at LAWC

* *Bear Lake* Removed over 100 dead and dying trees and debris from the lake perimeter
* *Reba Dam* Installed 2 traffic bollards at Lake Road to prevent vehicles crossing the dam
* *Tanks* Divers cleaned the Spring Tank off Spring Cliff Road and contractors repaired leaks to the wooden tanks at the dam and Bloods Ridge
* *Hydrants* Replaced a leaking hydrant at Snowshoe Road
* *Water Conservation* Replaced leaking laterals on Spring Cliff Road and Bloods Ridge Road
* *Power Backup* Installed rechargeable batteries to provide power for tank monitors during electrical outages

**Importance of this Report**

* Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Lake Alpine Water Company a 209-753-2409 para asistirlo en español.
* Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Lake Alpine Water Company以获得中文的帮助: 209-753-2409
* Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Lake Alpine Water Company o tumawag sa 209-753-2409 para matulungan sa wikang Tagalog.
* Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Lake Alpine Water Company tại 209-753-2409 để được hỗ trợ giúp bằng tiếng Việt.
* Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Lake Alpine Water Company ntawm 209-753-2409 rau kev pab hauv lus Askiv.

**How are your payments distributed?**

The service fees and metered water charges are used to pay for all operations and capital improvements to the treatment and distribution system.

California Public Utilities Commission surcharge is based on 1.43% of the service and metered water fees. This surcharge was established by the California State Legislature in 1982 to fund the regulation of public utilities by the CPUC. 100% of this surcharge collected by LAWC is paid to the CPUC.

The SDWSRF surcharge is collected to retire the Safe Drinking Water State Loan. This low interest loan was issued to LAWC in 2004 to pay for the new treatment plant and building. 100% of this surcharge collected by LAWC is paid to the fiscal agent for the State Water Resources Control Board.

**Additional General 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 U.S. EPA’s Safe Drinking Water Hotline (1-800-426-4791).

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. U.S. 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)

The water source for LAWC is the Bear Lake Reservoir contained by an earthen dam in the town of Bear Valley. A source assessment was completed in October 2000 and is available at the LAWC office for review.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 1A – 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 mo.)  1 | | 0 | | | | 1 positive monthly sample (a) | | | 0 | Naturally present in the environment | |
| Fecal Coliform and *E. coli* | | | | | (In a year)  0 | | 0 | | | | 0 | | | NA | Human and animal fecal waste | |
| (a) For systems collecting fewer than 40 samples per month: two or more positive monthly samples is a violation of the total coliform MCL | | | | | | | | | | | | | | | | |
| **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** | **No. of Schools Requesting Lead Sampling** | | **Typical Source of Contaminant** |
| Lead (ppb) | | | | August 2021 | | | | 20 | | <5.0 | 0 | 15 | .2 | 1 | | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | | | | August 2021 | | | | 20 | | 0.190 | 0 | 1.3 | .3 | NA | | 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) | 7.7.2021 | 6.9 | NA | | | none | | | none | | Salt present in the water and is generally naturally occurring | | | | | | |
| Hardness (ppm) | 7.7.2021 | 33 | NA | | | none | | | none | | Sum of polyvalent cations (minerals) 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** | | | | | | |
| Chlorine (ppm) | 2021 | 0.52 | 0.330 – 0.70 | | | 4.0 | | | NA | | Drinking water disinfectant added for treatment | | | | | | |
| Haloacetic Acids (ppb) | 2021 | 52.23 | 22.60 – 78.4 | | | 60 | | | NA | | Byproduct of drinking water disinfection | | | | | | |
| Trihalomethane (ppb) | 2021 | 54.84 | 21.83 – 87.47 | | | 80 | | | NA | | Byproduct of drinking water disinfection | | | | | | |
| **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** | | | | | | |
| Manganese (ppb) | 2021 | 0.037 | 0.020 – 0.044 | | | 0.050 | | | NA | | Leaching from natural deposits | | | | | | |
| Iron (ppm) | 2021 | 0.108 | 0.10 – 0.19 | | | 0.30 | | | NA | | Leaching from natural deposits; industrial wastes | | | | | | |
| Turbidity (NTU) | 2021 | 0.090 | 0.027 – 0.090 | | | 5 | | | NA | | Soil run-off | | | | | | |
| **TAble 6 – detection of UNREGULATED CONTAMINANTS - NONE** | | | | | | | | | | | | | | | | | |
| **TAble 7 – Summary of Violations - None** | | | | | | | | | | | | | | | | | |

|  |  |
| --- | --- |
| **Table 8 - sampling results showing TREATMENT OF SURFACE WATER SOURCES** | |
| Treatment Technique (a) | Membrane microfiltration |
| 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 \_0.1\_\_\_\_ NTU in 95% of measurements in a month.  2 – Not exceed \_\_1.0\_\_\_ NTU for more than eight consecutive hours.  3 – Not exceed \_1.0\_\_\_ NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100% |
| Highest single turbidity measurement during the year | 0.090 NTU |
| 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.

### This Report reflects changes that occurred in drinking water regulatory requirements during 2021. These revisions, effective July 1, 2021, add the requirements of the federal Revised Total Coliform Rule to the existing state Total Coliform Rule. The revised rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria).  The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems.  Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist.  If found, these must be corrected by the water system.