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.

Variances 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)

If you have questions about your water quality, service or the information contained in this report, please call us at 209-753-2409 Monday-Friday from 9 am to 1 pm.

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 *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.*

In order to ensure that tap water is safe to drink, the USEPA and the state Department of Public Health (Department) 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 provide the same protection for public health.

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.

Tables 1, 2, 3, 4, 5, 6, and 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 Department 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.

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

How are your payments distributed?

In addition to the fees we collect to keep the plant operating and water flowing, there are fees that we collect and pass on to other entities.

PUC fees are based on 1.5% of the basic and metered water fees. These fees were established by the California State Legislature in 1982 to fund the regulation of public utilities by the California Public Utilities Commission. 100% of these surcharges are collected by LAWC and paid to the state.

SDWSRF fees are directed to retire the Safe Drinking Water State Revolving Fund. This low interest loan was issued to LAWC in 2004 to pay for the new treatment plant and building. 100% of these surcharges are collected by LAWC and paid to the state.

The service fees and metered water charges are used to pay for all operations and capital improvements to the treatment and distribution system. Here is a breakdown of how the fees are used:

25%	System operators
20%	Capital improvements
15%	Customer service & office management
12%	Government Fees and Taxes
4%	Treatment chemicals and lab testing
7%	Electricity, fuel and vehicles
5%	General Supplies
5%	Accountants & Consultants
5%	Insurance
2%	Interest

Lake Alpine Water Company

2010 Water Quality Report

Since 1964

This report shows the results of water monitoring for the period of January 1 - December 31, 2010.

PO Box 5013 Bear Valley, CA 95223

Office: 209-753-2409

Email: info@lakealpinewater.com

Plant: 209-753-6241

Improvements to the Lake Alpine Water System

During 2010, we made several improvements and investments that keep the treatment and distribution systems running efficiently and with consistent quality.

- *System Improvements* Summer is the most active time for long term improvements to the LAWC system. During 2010, LAWC completed 14 infrastructure projects including: 5 hydrant replacements, 7 valve repairs and 2 sections of distribution mains.

- *Water Quality Management* LAWC operators manage the water pH, alkalinity and hardness to reduce the leaching of lead and copper from your plumbing into the tap water. In 2010, both rounds of lead and copper tests indicated undetectable levels of lead and reduced levels of copper.

- *Water Distribution* This summer, LAWC also focused on finding and fixing leaks throughout the distribution lines. With acoustic equipment and meter reading comparisons, LAWC greatly reduced unaccounted for water which in turn reduces power, chemical and operational costs.

- *Meter Audits* LAWC operators audited 10% of the metered connections this summer and will continue auditing a portion of the meters each year. 100% of the tested meters were found to be accurate and functioning properly.

- *Water Conservation* Based on meter readings, LAWC sends an email notice or postcard if leaks are detected at your home. This service will help you find and repair leaks and save you money on quantity charges. Monthly leak alerts have dropped from an average of 35 during 2009 to 9 by December 2010.

- *Customer Service* LAWC continues to explore ways to increase customer satisfaction while decreasing expenses. Staff is available on a regular basis, responding to phone, email and in-person inquires for prompt resolution of your questions and concerns. Streamlining administrative tasks such as billing and sending notices via email has reduced office expenses by 11% over the last year.

TABLES 1, 2, 3 DETECTION OF CONTAMINANTS						
Microbiological Contaminants	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**	
Total Coliform Bacteria	0 (In a mo.)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment	
Fecal Coliform or *E. coli*	0 (In a year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste	
Lead and Copper	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	20	<5.0 ug/l	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	20	0.68 mg/l	0	1.3	0.17	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	08/03/2010	1.4 ppm		none	none	Salt present in water and is generally naturally occurring
Hardness (ppm)	08/03/2010	18 ppm		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and usually naturally occurring

***Any violation of an MCL or AL is marked with an asterisk. Additional information regarding the violation is provided later in this report.*

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**
Barium	8/3/10	.014 ppm		1 ppm	2 ppm	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Xylenes	8/3/10	.00071 ppm		1.75 ppm	1.8 ppm	Discharge from petroleum and chemical factories; fuel solvent
Copper	8/3/10	.0029 ppm		AL=1.3 ppm	0.3 ppm	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Trihalomethanes (TTHM)	10/5/10	76 ppb	47-76 ppb	80 ppb	NA	By-products of drinking water disinfection
Haloacetic Acids	10/5/10	46 ppb	46-57 ppb	60 ppb	NA	

TABLE 5 - SECONDARY STANDARDS-AESHETIC STANDARDS						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	*MCL*	**PHG (MCLG)**	*Typical Source of Contaminant*
Specific conductance (umho/cm)	8/3/10	32.2		1600		Substances that form ions when in water; Seawater influence
Color (units)	8/3/10	25*		15		Naturally occurring organic materials
Iron (ppb)	8/3/10	490*		300		Leaching from natural deposits/industrial wastes
Manganese (ppb)	8/3/10	92*		50		Leaching from natural deposits
Total dissolved solids (ppm)	8/3/10	52		1000		Runoff/leaching from natural deposits
Odor (units)	8/3/10	1		3		Naturally occurring organic materials
Turbidity	8/3/10	3.6		5		Soil runoff
Zinc (ppm)	8/3/10	.005		5		Runoff/leaching from natural deposits; industrial wastes
Sulfate	8/3/10	.59		500		Runoff/leaching from natural deposits/industrial wastes

*Color, iron and manganese in the raw water do not pose any significant health threat since they are filtered out to below MCL in the drinking water.

TABLE 6 - UNREGULATED CONTAMINANTS - NONE DETECTED

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [(a)](Type of approved filtration technology used)	Membrane microfiltration system
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 % All months met TPS#1
Highest single turbidity measurement during the year	.110 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.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided earlier in this report.*

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 USEPA'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. USEPA/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).