MAMMOTH COMMUNITY WATER DISTRICT
CONSUMER CONFIDENCE REPORT – 2012

This brochure is intended to provide the consumer information about the sources and quality of their drinking water. The information includes levels of detected contaminants, compliance with drinking water regulations, and health related materials in 2012.

Water System Information

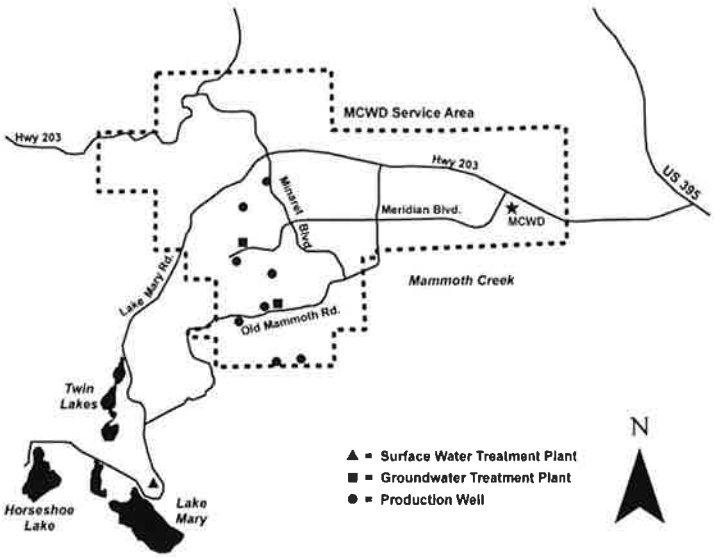
This water quality report contains important information about your drinking water supplied by the Mammoth Community Water District Water System to the Town of Mammoth Lakes. *Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien. Si usted necisita ayuda para traducer este rerporte en español por favor contacte el Distrito al numero (760) 934-2596.*

Questions about this water quality report may be addressed by mail to the Mammoth Community Water District, attention Pat Hayes, P.O. Box 597, Mammoth Lakes, California 93546; by telephone at (760) 934-2596 x 238; or by e-mail at Phayes@mcwd.dst.ca.us. This report may also be seen on the District's web site at www.mcwd.dst.ca.us.

Members of the public have the opportunity to participate in decisions that affect drinking water quality by attending any of the District's regularly scheduled Board of Directors meetings. These meetings are held at 5:30 p.m. on the third Thursday of each month and are located at the Mammoth Community Water District offices on 1315 Meridian Boulevard across from the Industrial Park.

Sources of Water

Water provided to District customers comes from both surface water and groundwater sources. Surface water from Lake Mary is collected, filtered, and disinfected, and groundwater is pumped from eight wells located within the community in the Mammoth Basin watershed. Water from all but one of the wells is treated with chlorine and ferric chloride and filtered to remove iron, manganese, and arsenic prior to delivery to customers. Depending on where you live in the community, you may receive all surface water, all well water, or a combination of the two. The source of your water may also change depending on the season. If you are interested in which water source is being supplied to you at any time, please contact the District.



Source Water Assessments were conducted for the wells and surface water supplies of the Mammoth Community Water District Water System between 2001 - 2009. The purpose of the assessments was to identify potential sources of drinking water contamination. The assessment showed that the District's groundwater production wells are considered most vulnerable to contamination from the sewer collection system. In addition, raw surface water supplies are considered most vulnerable to recreation activities and the sewer collection system. A copy of the complete assessment may be viewed at Mammoth Community Water District office or at CDPH San Bernardino District Office, 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessment be sent to you by contacting the CDPH District Engineer at (909) 383-4328 or by contacting MCWD, (760) 934-2596 or (760) 934-4080 (fax). In 2011, the District updated its Watershed Sanitary Survey, which identifies potential sources of contamination to the surface water supplies and is available at the District offices.

Definitions

The following are definitions of key terms that consumers will need to understand the data listed in the tables that shows the level of each detected contaminant.

- **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.
- **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 Standard (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:** A required process intended to reduce the level of a contaminant in drinking water.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **pCi/L**: picocuries per liter (a measure of radiation)
- **N/A:** not applicable **ppb:** parts per billion or micrograms per liter **ppm:** parts per million or milligrams per liter **NTU:** Nephelometric Turbidity Units **µS/cm:** microsiemens per centimeter **ND**: below laboratory detection limits

Detected Contaminants

Note: The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Sampling Results Showing Detection of a Contaminant with a Primary Drinking Water Standard

Inorganic Contaminants	MCL	PHG (MCLG)	MCWD Water		Sample Date(s)	Violation?	Typical Source of Contaminant
			Average	Range			
Arsenic (ppb)	10	0.004	2.9	ND – 9.9	2012	No	Erosion of natural deposits
Fluoride (ppm)	2.0	1	0.39	ND – 0.7	2007 – 2012	No	Erosion of natural deposits
Gross Alpha	15	(0)	0.34	0 – 0.82	2011	No	Erosion of natural deposits
Disinfection Byproducts	**MCL (MRDL)**	**PHG (MRDLG)**	**MCWD Water**		**Sample Date(s)**	**Violation?**	**Typical Source Of Contaminant**
			Average	**Range**			
TTHMs [Total trihalomethanes] (ppb)	80	N/A	11.4	3.8 – 19	2012	No	Byproduct of drinking water chlorination
Haloacetic Acids (ppb)	60	N/A	7.5	ND – 15	2012	No	Byproduct of drinking water disinfection
Chlorine Residual (ppm)	(4)	(4)	0.53	0.05 – 1.0	2012	No	Drinking water disinfectant added for treatment

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Turbidity – Results of Direct Filtration Process of Surface Water

	MCL[1]	Highest single measurement in 2012	Lowest monthly percentage of samples meeting turbidity limits	Violation?	Typical Source of Contaminant
Turbidity (NTU)	5.0 NTU	0.098	N/A	No	Soil Runoff
	95% of samples <0.5 NTU	N/A	100%	No	

[1] The MCL for turbidity is based upon the effectiveness of the District's treatment technique or TT, which is direct filtration. Turbidity is a measurement of the cloudiness of water and is a good indicator of the effectiveness of our filtration system.

Inorganic Contaminants - Lead and Copper in Residential Taps in 2012

Contaminant	Action Level (AL)	PHG (MCLG)	Number of Samples Collected	90th Percentile Level Detected	Number of Sites Exceeding AL	Typical Source of Contaminant
Lead (ppb)	(15)	0.2	40	**19***	5	Internal corrosion of household water plumbing systems
Copper (ppm)	(1.3)	0.3	40	**1.8***	5	Internal corrosion of household water plumbing systems

Sampling Results Showing Detection of a Contaminant with a Secondary Drinking Water Standard

Inorganic Contaminants	Secondary MCL	MCWD Water		Sample Date(s)	Violation?	Typical Source of Contaminant
		Average	Range			
Iron (ppb)	300	27.1	ND – 340[2]	2012	No	Leaching from natural deposits
Sulfate (ppm)	500	17.3	3.7 - 42	2012	No	Runoff/leaching from natural deposits
Specific Conductance (µS/cm)	1600	308	42 - 430	2012	No	Substances that form ions when in water
Sodium (ppm)	N/A	25	0 - 54	2010 - 2012	N/A	[3]
Hardness (ppm)	N/A	99	13 - 200	2007 - 2012	N/A	[4]

[2] The iron range shows a value above the MCL, this was a single sample of a total of 70 samples and does not constitute a violation of the Secondary Drinking Water Standard. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sink) and clothing while washing.
[3] Sodium refers to the salt present in the water and is generally naturally occurring.
[4] Hardness is generally the sum of magnesium and calcium cations present in the water, which are usually naturally-occurring.

Sampling Results for Microbiological Analysis (Total Coliform Rule)

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or E. coli	0	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

***Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement**

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
AL for copper	5 of 40 samples exceeded the AL	N/A	(5)	(6)
AL for Lead	5 of 40 samples exceeded the AL	N/A	(5)	(7)

(5) MCWD is working with an engineering consulting firm to reduce the corrosive properties of our delivered water. Implementation of the treatment plant upgrades started in 2012 with construction currently taking place at one of the water treatment plants. Additional information is available from the Mammoth Community Water District at (760) 934-2596.
(6) Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
(7) Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

Additional General Information on Drinking Water

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. MCWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in the customer's plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead and copper exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead or copper 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.

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 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).

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 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 by-products 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 natural-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 U.S. Environmental Protection Agency (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.