

# Sierra Lakes County Water District

## 2009 Consumer Confidence Report

(Prepared June, 2010)

The Sierra Lakes County Water District (SLCWD) Board of Directors and Maintenance and Operations staff are pleased to present to you the 2009 Consumer Confidence Report. Any questions should be directed to the SLCWD M&O office, at (530) 426-7802. California water suppliers are required by law to inform customers about the quality of their drinking water. The Federal Government through the Safe Drinking Water Act of 1974 regulates drinking water quality. The United States Environmental Protection Agency (USEPA) establishes uniform standards for this regulation. In California, the Department of Public Health (CDPH) enforces these standards.

### Public Meetings

The Sierra Lakes County Water District Board of Directors meets regularly each month at the Administration Office, 7305 Short Road, in Serene Lakes. For more information call Anna Nickerson at 530-426-7800 or 530-426-1120 (fax).

### Your Water Source

Water for the SLCWD system is obtained from Lake Serena, the northern lake of the two located in Serene Lakes. In emergency situations, a well is available as a back-up water source; the well was not utilized in the past year. *Because Lake Serena is our drinking water source, swimming (humans and pets) in this lake is prohibited. Swimming is allowed only in Lake Dulzura. The use of gasoline powered motorcraft is prohibited on both lakes.*

### Explanation of Terms

To help you better understand the terms and abbreviations that *may* be used in the report, we've provided the following definitions:

**MCL: Maximum Contaminant Level** – the highest level of a contaminant that is allowed in drinking water.

MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLs are set by the USEPA.

**MCLG: Maximum Contaminant Level Goal** – the level of a contaminant in drinking water below which there is no known or expected health risks. MCLGs are set by the USEPA.

**Primary Drinking Water Standard MCL:** - legally enforceable standards that protect public health by limiting the levels of contaminants in drinking water.

**Secondary Drinking Water Standard MCL:** standards for contaminants that affect taste, odor, or appearance (aesthetics) of the drinking water. Contaminants do not affect health at the MCL levels.

**NTU: Nephelometric Turbidity Unit** – a measure of the clarity of water.

**PHG: Public Health Goal** – the level of a contaminant in drinking water below which there is no known health risk. PHG's are set by the California EPA.

**TT: Treatment Technique**

**ACU: Apparent Color Unit** - A measure of color in drinking water.

**AL: Regulatory Action Level** – The level of contaminant which when exceeded, triggers treatment or other requirements that a water system must follow.

**ppm: parts per million** – or milligrams per liter (mg/l). The equivalent of 1¢ in \$10,000.

**ppb: parts per billion** – or micrograms per liter (ug/l). The equivalent of 1¢ in \$10,000,000.

**Lab Detection Level:** lowest level of a contaminant the laboratory is required to detect.

**NS: No Standard:** A standard has not been established by the USEPA.

### About Water Quality

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 (in some cases radioactive material) and can pick up substances resulting from the presence of animal or human activity.

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### Additional General Information on Drinking Water

All 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 Safe Drinking 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/Center 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).

### 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 gasoline production, mining, or farming.
- **Pesticides and herbicides**, which 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, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gasoline production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and CDPH 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.

### Explanation of the Water Quality Data Tables

In the tables below, a summary of data on detected regulated and unregulated contaminants is given. The detected contaminants are within State and Federal limits. An independent laboratory performed all testing except for turbidity measurements, which were performed by the SLCWD lab. **Table 1** is provided to inform you of filtration performance and filtration regulatory standards. **Table 2** is provided to inform you of lead and copper levels found in 10 samples taken from Serene Lakes homes. This sampling effort is required by the Environmental Protection Agency and is being accomplished through the cooperation of homeowners and residents. **Table 3** through **6** lists the drinking water contaminants that were detected during the most recent sampling for the constituent. All contaminants detected were below allowed limits. The CDPH requires us to monitor for certain contaminants less frequently than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All sampling results in the following tables were taken in 2007 – 2008 with the exception of **Table 4**. Nearly all sampling for the year 2009 was waived by the California Department of Public Health.

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**TABLE 1 – Sampling Results Showing the Treatment of Surface Water Sources**

<i>Treatment Technique</i> (A required process intended to reduce the level of contaminants in drinking water).	Direct Filtration
<i>Turbidity Performance Standards</i> (must be met through the water treatment process). 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 that meet performance standards are considered to be in compliance with filtration requirements	Turbidity of the filtered water must: 1. Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2. 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	0.24 NTU (May)
The number of violations of any of the surface water treatment requirements	None

**TABLE 2 – Sampling Results Showing the Detection of Lead and Copper (Household Water Sources)**

Lead and Copper 2008 test results	No. of samples collected	90 <sup>th</sup> percentile level	No. Sites exceeding AL*	AL	MCLG	Typical Source of Contaminant
Lead (ppb)	10	5.3ppb	1	15 ppb	0.2 ppb	Internal corrosion of household plumbing systems
Copper (ppm)	10	.077ppm	none	1.3 ppm	0.3 ppm	Internal corrosion of household plumbing systems

\* 90% of the samples collected met the MCLG standard so no action is required

**TABLE 3 – Sampling Results for Sodium and Hardness**

Chemical or Constituent (and reporting units)	Sample Date	Lab Detection Level	Analysis Results	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	Sept-07	1.0 ppm	1.9 ppm	NS	NS	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Sept-07	1 ppm	7 ppm	NS	NS	Sum of polyvalent cations present in the water, generally magnesium and calcium, and usually naturally occurring

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**TABLE 4 – Sampling Results Showing the Detection of Primary Drinking Water Standards, Disinfection Byproducts (2009)**

Chemical or Constituent (and reporting units)	Sample Date	Lab Detection Level	High -Low	Average	MCL	PHG (MCLG)	Typical Source of Contaminant
Total Trihalomethanes (ppb)	Quarterly (2009)	0.5 ppb	45.0 -27.8 ppb	37.4 ppb	80 ppb	N/A	Byproduct of drinking water chlorination
Haloacetic Acid (ppb)	Quarterly (2009)	0.5 ppb	36.0 -22.0 ppb	26.7 ppb	60 ppb	N/A	Byproduct of drinking water chlorination

**TABLE 5 – Sampling Results Showing the Detection of Primary Drinking Water Standards, Inorganic Contaminants**

Chemical or Constituent (and reporting units)	Sample Date	Lab Detection Level	Analysis Results	MCL	PHG (MCLG)	Typical Source of Contaminant
Copper	Sept-07	10 ppb	13 ppb	1300 ppb	170 ppb	Erosion of natural deposits

**TABLE 6 – Sampling Results Showing the Detection of Secondary Drinking Water Standards (a)**

Chemical or Constituent (and reporting units)	Sample Date	Lab Detection Level	Analysis Results	MCL	PHG (MCLG)	Typical Source of Contaminant
Color at pH 7.7	Sept-07	3 Units (% Transmittance)	4 Units	15 Units	N/A	Naturally occurring organic materials
Odor- Threshold	Sept-07	1 Unit (Threshold Number)	3 Units	3 Units	N/A	Naturally occurring organic materials
Turbidity	Sept-07	0.1 NTU	1.4 NTU	5 NTU	N/A	Soil runoff
Total Dissolved Solids	Sept-07	10 ppm	31 ppm	1000 ppm	N/A	Runoff/leaching from natural deposits
Iron	Sept-07	10 ppb	115 ppb	300 ppb	N/A	Leaching from natural deposits
Sulfate	Sept-07	0.2 ppm	0.3 ppm	500 ppm	N/A	Runoff/leaching from natural deposits
Manganese	Sept-07	10 ppb	27 ppb	50 ppb	N/A	Leaching from natural deposits
Chloride	Sept-07	0.1 ppm	4.6 ppm	500 ppm	N/A	
Specific Conductance	Sept-07	0.5 uS/cm	45 uS/cm	1600 uS/cm	N/A	Substances that form ions when in water.

(a) There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.