



**LAKE ARROWHEAD MANOR  
COUNTY SERVICE AREA 70  
IMPROVEMENT ZONE CG  
2007 CONSUMER CONFIDENCE REPORT  
GENERAL DISTRICT INFORMATION**

**CSA 70 CG** routinely monitors for constituents in the District's drinking water according to Federal and State laws. The tables show the results of the District's monitoring for the period of January 1<sup>st</sup> through December 31<sup>st</sup>, 2007

Questions about this report or concerning the water system?

Contact Bill Stone,  
Water Operations  
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(760) 955-9885 or  
(800) 554-0565

**Office Hours:**  
Monday through  
Friday  
8:00 am – 5:00 pm  
Closed on Holidays

**MUY  
IMPORTANTE !**  
Este informe  
contiene información  
muy importante  
sobre su agua  
beber. Tradúzcalo ó  
hable con alguien  
que lo entienda bien.

County Service Area 70, Improvement Zone CG (CSA 70 CG), a water district within the Special Districts Department Water and Sanitation Division (Division), is a Board-governed district providing water services to approximately 1,129 customers in the Lake Arrowhead Manor Water System. The water system consists of a horizontal water well, Perched water tunnel, CLAWA connection, and five water tanks with a combined capacity of 660,000 gallons. There are 342 water connections within the district.

**For more information visit the District website @  
<http://www.specialdistricts.org/2/>**

It is important to keep customers informed about the quality of water delivered over the past year. This year's annual water quality report also known as a Consumer Confidence Report (CCR), contains information about the contaminants tested and detected from 2007. The Division's goal is to provide a safe and dependable supply of drinking water.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Health Services (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 must provide the same protection for public health.

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 (1-800-426-4791) or at their web site: <http://www.usepa.gov/safewater/>

The subsequent tables provide many terms and abbreviations customers may not be familiar with. To understand these terms, the district has provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present or not tested.

*MG* – Million gallons

*Parts per million (ppm)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb)* - one part per billion corresponds to one minute in 2,000 years.

*Parts per trillion (ppt)* - one part per trillion corresponds to one minute in 2,000,000 years.

*Parts per quadrillion (ppq)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

*Maximum Residual Disinfectant Level (MRDL)* – The level of a disinfectant added for water treatment that may not be exceeded at the customer’s tap.

*Maximum Residual Disinfectant Level Goal (MRDLG)* – The level of a disinfectant added for water treatment below which there is no known or expected health risk. MRDLGs are set by the U.S. Environmental Protection Agency.

*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.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*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.

*Primary Drinking Water Standard (PDWS)* – MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

*Regulatory Action Level (AL)* – The concentrations of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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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 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.

## CSA 70 CG – PRIMARY STANDARDS

### TEST RESULTS –

Data is obtained from most recent sampling and may be from previous years.

#### Lead and Copper 2007

**Action levels for: Lead = .015 ppm Copper = 1.3 ppm**

90th percentile (14 samples) Lead = .016 ppm Copper = 1.8 ppm

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.

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.

### General Physical Tests for 2007

Contaminant	Violation Y/N	Average Level Detected	Range of Detection	Unit Measurement	MCL	Likely Source of Contamination
Color	N	.25	0-5	NTU	15	
Odor—Threshold	N	1	1-1	Units	3	Naturally-occurring organic materials
Turbidity	N	.34	.1-1.3	Units	5	Soil runoff

### Regulated Chemicals Tested for in 2007

Contaminant	Violation Y/N	Average Level Detected	Range of Detection	Unit Measurement	MCL	Likely Source of Contamination
Fluoride	N	ND	ND	ppm	2	Erosion of natural deposits; water additive
Nitrate	N	5	4.5-5.5	ppm	45	Runoff and leaching from fertilizer use; leaching from septic tanks. Sewage; erosion of natural deposits

**CRESTLINE-LAKE ARROWHEAD WATER AGENCY  
WATER QUALITY DATA 2007**

**TEST RESULTS**

Contaminant	Average Level Detected	Range Of Levels Detected	Units	MCL	PHG	Major Sources in Drinking Water
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**PRIMARY STANDARDS**

Turbidity	.11	.1-.2	NTU	0.3	NS	Soil runoff	
The TT requirement is: at least 95% of samples must be less than 0.3 NTU. 100% of our samples were less than 0.3 NTU *							
Total Trihalomethanes		39	8-52	uG/l	80	NS	By-product of drinking water chlorination
Haloacetic Acids		5	0-5	uG/l	60	NS	By-product of drinking water disinfection

**Inorganic Chemicals**

Aluminum		.088	0-.170	mg/l	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic		.46	0-2.6	uG/l	50	NS	
Nitrate (as NO3)		2.65	0-4.1	mg/l	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**SECONDARY STANDARDS**

Chloride		62	41-100	mg/l	500	NS	Erosion of natural deposits
Iron		8.75	0-140	uG/l	300	NS	Leaching from natural deposits; industrial wastes
Manganese		6.81	0-28	uG/l	50	NS	Leaching from natural deposits
Sulfate		40	29-52	mg/l	500	NS	Erosion of natural deposits
Total Dissolved Solids (TDS)		231	180-330	mg/l	1000	NS	Erosion of natural deposits

**OTHER CONSTITUENTS**

Sodium		65.3	41-81	mg/l	NS	NS	Erosion of natural deposits
Total Hardness		101.2	84-120	mg/l	NS	NS	Erosion of natural deposits
Odor - Threshold		1	1-1	TON	3	NS	Naturally occurring organic materials

**Unregulated Contaminants**

**AL**

Boron		92.5	0-160	uG/l	1,000	NS	Erosion of natural deposits
Vanadium		0.96	0-4.6	uG/l	50	NS	Erosion of natural deposits
pH		7.8	7.6-8	Unit	6.5-8.5	NS	

\*Turbidity is monitored continuously because it is a good indicator of the effectiveness of our treatment system. Turbidity measures the cloudiness of water. The Agency uses a conventional treatment process to reduce turbidity.

The Water and Sanitation Division of the Special Districts Department would like to remind customers to conserve water during Southern California Edison (SCE) rolling blackouts, and any other power outages in your area, as most production and transmission facilities may not have power for water production and delivery.  
SCE emergency contact number: call 1-800-611-1911.

## **Improvement Projects for 2008**

Phase I of the Redevelopment Grant funding improvements will begin this year. These improvements will include a reservoir replacement, a new well, and replacement of main lines.

### **NEW ARSENIC RULE**

In January 2006, the USEPA set a new MCL of 10 ppb for Arsenic. The California Department of Health Services has the authority to revise the MCL for Arsenic at or below the USEPA's new level for Arsenic of 10 ppb.


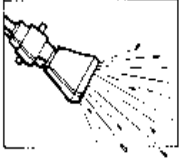
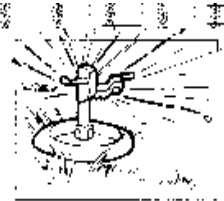
While your drinking water meets the current standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The California Department of Health Services continues 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.

### **SHOULD CUSTOMERS BE CONCERNED?**

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MCL's are set at very stringent levels. To understand the risk of possible health effects described for regulated contaminants, customers should know that a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. 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 microbiological contaminants are available from the Safe Drinking Water hotline (1-800-426-4791).

# Water Saving Hints

	<p><b>Have your toilet tanks checked for leaks.</b></p>	<p>Place a few drops of blue food coloring in the toilet tank. If coloring is seen in the toilet bowl without flushing, a wasteful leak needs to be repaired. A leaking toilet can waste up to 21,000 gallons of water per year.</p>
	<p><b>Install low-flow shower heads.</b></p>	<p>Low-flow shower heads can help you save up to 8 gallons of water for each minute of shower time. Also, you will use less hot water which saves energy.</p>
	<p><b>Lawns and shrubs should be watered only when they really need it.</b></p> <p><b>Water at the right time of day.</b></p>	<p>Check lawns and shrubs to see if they need water. A lawn that springs back after being stepped on doesn't need water. Watering may not be necessary in the winter.</p> <p>In summer water only during the cooler parts of the day. The sun can cause most of the water to evaporate before it is absorbed into the soil.</p>

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