



# COUNTY SERVICE AREA 70 IMPROVEMENT ZONE CG 2010 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>, 2010

Questions about this report or concerning the water system?

Contact Steve Samaras, Operations Manager at:

(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 service to approximately 1,129 customers in Cedar Glen. The water system consists of a horizontal water well, perched water tunnel, CLAWA connection, and five water tanks with a combined capacity of 741,600 gallons. There are currently 331 water connections within the district.

For more information visit Special Districts website @  
<http://www.specialdistricts.org/2/>

Management and staff of CSA 70 CG work as a team to ensure that the highest quality water is provided to our customers. A diligent regimen of testing and analysis for bacteriological, chemical, and radiological contaminants, along with physical qualities of the water is conducted throughout the year to ensure the highest water quality.

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 detected in 2010. 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 California 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 must provide the same level of 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 that 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 CEDAR GLEN - PRIMARY STANDARDS

### TEST RESULTS

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

#### Microbiological Contaminants

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Total Coliform bacteria	N	0		P/A		0	Naturally present in the environment

#### Radioactive Contaminants

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Gross Alpha	N	0.83	0 to 3.8	pCi/L	15	0	Erosion of natural deposits

#### Inorganic Contaminants

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Fluoride	N	0.14	.14 to .14	ppm	2	1	Erosion of natural deposits water additive
Nitrate	N	3.4	2 to 4.5	ppm	45	45	Runoff and leaching from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits

#### Volatile Organic Contaminants

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Total Xylenes	N	ND		ppb	1.75		Discharge from petroleum and chemical factories; fuel solvent

#### Disinfectant Byproducts Monitoring

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Total Trihalomethane (THM / TTHM)	N	5.6	2.2 to 13	ppb	80	N/A	Byproduct from drinking water chlorination
Total Haloacetic Acids (HAA5)	N	2.45	2.2 to 2.7	ppb	60	N/A	Byproduct from drinking water chlorination

## CHEMICAL DISINFECTANT

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL [ MRDL ]	PHG (MCLG) [ MRDLG ]	Likely Source of Contamination
Chlorine	N	0.45	.28 - .61	ppm	[ 4 ]	[ 4 ]	Disinfectant added to water for treatment.

## CSA 70 Cedar Glen Secondary Standards

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

Contaminant	Violation Y / N	Average Level Detected	Range of Detection	Unit of Measure	MCL	PHG (MCLG)	Likely Source of Contamination
Color	N	5.35	5 to 7.5	NTU	15		Naturally occurring organic materials
Odor - Threshold	N	1.14	1 to 2	Units	3		Naturally occurring organic materials
Turbidity	N	0.62	.5 to 1.6	Units	5		Soil runoff
Specific Conductance	N	200	180 to 220	umhos	16,000		Substance that form ions when in water; seawater influence
Total Dissolved Solid	N	125	100 to 140	ppm	1,000		Runoff/leaching from natural deposits
Corrosivity (Aggressive Index)	N	11.31	11.23 to 11.39	Units	Non-corrosive		Naturally or industrially influence balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Nitrate+Nitrite as N	N	705	450 to 960	ppm	10,000		Runoff and leaching from fertilizer; leaching from septic tanks and sewage; erosion of natural deposits
Chloride	N	5.85	5.8-5.9	mg/L	500		Runoff/leaching from natural deposits; seawater influence
Sulfate	N	2.8	2.7-2.9	mg/L	500		Runoff/leaching from natural deposits; industrial wastes

## CSA 70 Cedar Glen Additional Constituents Found

Constituent	Average	Range	Unit of Measure
Alkalinity	93	86-110	ppm
Bicarbonate	120	110-130	ppm
Calcium	24	20-29	ppm
Hardness	100	100-100	ppm
Magnesium	6.6	5.7-7.5	ppm

Constituent	Average	Range	Unit of Measure
PH	7.3	7.2-7.6	
Potassium	2.75	2.5-3	ppm
Sodium	12.5	12 to 13	ppm
Vanadium	1.85	0-3.7	ppm

### LEAD and COPPER 2010

Action Level for: Lead = .015ppm    Copper = 1.3 ppm  
 90th percentile (20 samples) Lead = .010 ppm    Copper = 1.9 ppm  
 Number of sites exceeding the AL = 6

Due to the levels of Lead and Copper in some of the samples collected exceeding State and Federal water quality standards, the County of San Bernardino, Special Districts Department, Water and Sanitation Division and The California Department of Health Services (DHS), are concerned about the potential for lead in your drinking water. Although most homes have very low levels of lead in their drinking water, some homes in the community have lead levels above the state and federal action level of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). Under state and federal law we are required to begin a corrosion control study to determine the cause and corrective measures necessary to mitigate the issue.

Health Effects of Lead: Lead is a common metal found throughout the environment in lead –based paint, air, soil, household dust, food, certain types of pottery porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and can cause damage to the brain, red blood cells and kidneys. The greatest risk is to your children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. In addition, a child at play often comes into contact with sources of lead contamination—like dirt and dust—that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

Lead in Drinking Water: Lead in drinking water, although *rarely* the sole cause of lead poisoning can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. The U.S. Environmental Protection Agency estimates that drinking water can make up 20 percent or more of a person's total exposure to lead.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome plated brass faucets, and in some cases, pipes made of lead that connect your house to the water main (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%. In California, a similar law prohibiting the use of both lead solder and lead pipe was enacted in 1985.

When water stands in lead pipes or plumbing systems containing lead for several hours or more, the lead may dissolve into your drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon after returning from work or school, can contain fairly high levels of lead.

Steps You Can Take in the Home to Reduce Exposure to Lead in Drinking Water: To find out whether you need to take action in your own home, have the drinking water tested to determine if it contains excessive concentrations of lead. Testing the water is essential because you cannot see, taste, or smell lead in drinking water. Some local laboratories that can provide this service are listed at the end of this notification. For more information on having your water tested, please call 760-955-9885.

**If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 ppb, then you should take the following precautions:**

- Let the water run from the tap before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. The longer water resides in your home's plumbing the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder, usually about 15 to 30 seconds. If your house has a lead service line to the water main, you may have to flush the water for a longer time, perhaps one minute, before drinking.
- Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your family's health. It usually uses less than one or two gallons of water and costs less than **\$1.00** per month. To conserve water, fill a couple of bottles for drinking water after flushing the tap, and whenever possible use the first flush water to wash the dishes or water the plants. Try not to cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and heat it on the stove.
- Remove loose lead solder and debris from the plumbing materials installed in newly constructed homes, or homes in which the plumbing has recently been replaced, by removing the faucet strainers from all taps and running the water from 3 to 5 minutes. Thereafter, periodically remove the strainers and flush out any debris that has accumulated over time.
- If your copper pipes are joined with lead solder that has been installed illegally since it was banned in 1986, notify the plumber who did the work and request that he or she replace the lead solder with lead-free solder. Lead solder looks dull gray, and when scratched with a key looks shiny. In addition, notify the California Department of Health Services and your local environmental health department about the violation.
- Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, corrosion may be greater. Check with a licensed electrician or your local electrical code to determine if your wiring can be grounded elsewhere. **DO NOT** attempt to change the wiring yourself because improper grounding can cause electrical shock and fire hazards.
- The following is a list of some state approved laboratories in your area that you can call to have your water tested for lead. **Clinical Laboratory of San Bernardino Inc at 909-825-7693 or Test America at 949-261-1022.**

## CRESTLINE-LAKE ARROWHEAD WATER AGENCY WATER QUALITY DATA 2010

<b>TEST RESULTS</b>						
Contaminant	Average Level Detected	Range Of Levels Detected	Units	MCL	PHG	Major Sources in Drinking Water
<b>PRIMARY STANDARDS</b>						
Turbidity	.18	0-1.7	TT	0.3	N/A	Soil runoff
The TT requirement is: at least 95% of samples must be less than 0.3 NTU. *						
Total Trihalomethanes	12	0-32.5**	uG/l	80	N/A	By-product of drinking water disinfection
Haloacetic Acids	6	0-26.9**	uG/l	60	N/A	By-product of drinking water disinfection
<b>Inorganic Chemicals</b>						
Aluminum	.05	0-.2	mg/l	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride (naturally occurring)	.04	0-.15	mg/l	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead	.69	0-11	uG/l	AL=15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Nitrate (as NO3)	1.86	0-3.9	mg/l	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>SECONDARY STANDARDS</b>						
Chloride	80.44	64-110	mg/l	500	N/A	Runoff/leaching from natural deposits; seawater influence
Manganese	10.47	8-14	mg/l	50	N/A	Leaching from natural deposits
Sulfate	46.88	39-57	mg/l	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	303.75	280-350	mg/l	1000	N/A	Erosion of natural deposits
<b>OTHER CONSTITUENTS</b>						
Sodium	64.75	56-84	mg/l	N/A	N/A	"Sodium" refers to the salt present in the water and is generally naturally occurring
Total Hardness	100	88-120	mg/l	N/A	N/A	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring.
Odor - Threshold	1	1-1	TON	3	N/A	Naturally occurring organic materials
<b>Unregulated Contaminants</b>						
Boron	151.88	120-260	uG/l	1,000	N/A	Erosion of natural deposits
Vanadium	3.56	0-7.4	uG/l	50	N/A	Erosion of natural deposits
pH	7.55	7.1-8	Unit	6.5-8.5	N/A	

\*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 Range of Levels Detected for Total Trihalomethanes and Haloacetic Acids includes the IDSE sample sites, as required by the Federal EPA Stage 2 D/DBPR.

## 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).

### **Improvement Projects completed in 2010**

- ***The completion of the new 471,200 gallon water tank on Western.***
- ***Installed new eight inch piping on Pine Avenue.***

### **Improvement Projects planned for 2011**

- ***Complete the new 3,100 feet of new 8 inch waterline installation.***
- ***Construct an additional 20,000 feet of waterline with hydrants.***
- ***Drill a second production well northeast of Papoose Lake. Construct three new 250,000 gallon water reservoirs***

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.