



# COUNTY SERVICE AREA 70 J 2014 CONSUMER CONFIDENCE REPORT GENERAL DISTRICT INFORMATION

### CSA 70 J

Is routinely monitored 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>, 2014

### PUBLIC PARTICIPATION

The CSA 70 J Municipal Advisory Committee meets regularly throughout the year. The next meeting is scheduled for July 15, 2015 at 7:00 p.m. at the Oak Hills Community Center (Fire Station #40).

### Questions about this report or concerning the water system?

Contact:  
Steven Samaras  
Acting Deputy Director

(760) 955-9885 or  
(800) 554-0565

### Office Hours:

Monday through Friday  
(Except Wednesday)  
8:00 am - 5:00 pm  
Wednesdays  
8:30am - 5:00pm  
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 J (CSA 70 J) a water district within the Special Districts Department, Water and Sanitation Division, is a Board-governed district providing water service to approximately 11,492 customers in the community of Oak Hills.

The water system consists of five wells, ten water reservoirs and two de-sanding tanks with a combined capacity of 3,949,000 gallons. There are approximately 148 miles of water line and 3,209 metered water connections.

Management and staff of CSA 70 J 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 2014 and previous years. The Division's responsibility 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.

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).

This document is not a substitute for regulations, nor is it a regulation itself. Thus, it does not impose legally-binding requirements on the Department or water suppliers, and may not apply to a particular situation based upon any member of the public.



**Jeff Rigney**  
Director of Special Districts

"Water quality and water availability are vital for the health and growth of our County. As the Director for the County Special Districts Department, it is my responsibility to ensure that providing both of these to our water customers remains our top priority."



**Steve Samaras**  
Acting Deputy Director

"The Division Staff are working on your behalf each and every day to ensure your community's water needs are met. It continues to be our pleasure to serve as your water purveyor."



# WATER SOURCES

- Well 1: Ground Water; located in the Alto Subarea Water Basin
- Well 2: Ground Water; located in the Alto Subarea Water Basin
- Well 3: Ground Water; located in the Alto Subarea Water Basin
- Well 4: Ground Water; located in the Alto Subarea Water Basin
- Well 5: Ground Water; located in the Alto Subarea Water Basin

## SOURCE WATER ASSESSMENT

Source water assessments were conducted for the CSA 70 J water system in 2014. A copy of the complete assessment may be viewed at the County of San Bernardino Special Districts Department, Water and Sanitation Division's office. Vulnerability to contamination based on the assessment findings are septic systems, both high and low density.

Funding to Pilot Test Hexavalent Chromium treatment processes has been approved and will be available July 1, 2015. These Pilot Tests will provide CSA 70 J with the necessary tools to select the best treatment technology in regards to operation and maintenance expenses and to provide the best water to its customers.

## SOURCE WATER PROTECTION TIPS

**Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:**

- Eliminate excess use of lawn and garden fertilizers and pesticides—they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources.
- Dispose of chemicals properly; take used motor oil to a recycling center.

## WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference—try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.

## 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.

**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.

**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

**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.

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

## Primary Drinking Water Standards

Detection of Lead and Copper							
Lead and Copper (CCR Units)	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source
Lead (ppb)	2014	20	0	0	15	0.2	Internal corrosion of household plumbing; erosion of natural deposits
Copper (ppm)	2014	20	0	0	1.3	0.3	Internal corrosion of household plumbing; erosion of natural deposits

Microbiological Contaminants						
Contaminants	Sample Date	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source
Total Coliform	2014	0	0	More than 1 sample in a month with a detection	ND	Human and animal fecal waste
E. Coli	2014	0	0	A routine sample and a repeat sample detect total Coliform and either sample also detects fecal coliform or E. Coli	ND	Human and animal fecal waste

Radioactive Contaminants							
Chemical or Constituent (CCR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
Gross Alpha (pCi/L)	2014	0.17	0 - 3.1	15	0	NO	Erosion of natural deposits

Inorganic Contaminants							
Chemical or Constituent (CCR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
Nitrate (ppm)	2014	10.26	7.50 - 14	45	45	NO	Runoff and leaching from fertilizer use; erosion of natural deposits
Fluoride (ppm)	2014	0.44	0.32 - 0.58	2	1	NO	Erosion of natural deposits; water additive that promotes strong teeth
Arsenic (ppb)	2014	5.10	4.70 - 5.90	10	0.004	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chromium - Total Cr (ppb)	2014	16.11	9.8 - 23	50	(100)	NO	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Hexavalent Chromium (ppb) 	2014	17.5	9.7 - 23	10	0.02	YES	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits

Disinfectant Byproducts and Chemical Disinfectant							
Chemical or Constituent (CCR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
Cl Res Total (ppm)	2014	0.88	0 - 1.89	4	4	NO	Drinking water disinfectant added for treatment
Total Trihalomethanes - TTHM - (ppb)	2014	4.34	0 - 45.20	80	N/A	NO	Byproduct of drinking water chlorination
Total Haloacetic Acids - HAA5 - (ppb)	2014	0.32	0 - 2.50	60	N/A	NO	Byproduct of drinking water disinfection

## Secondary Drinking Water Standards

Chemical or Constituent (CCR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG)	MCL Violation	Typical Source of Contaminant
Odor Threshold (Units)	2014	1	1 - 1	3	N/A	NO	Naturally occurring organic materials
Turbidity (Units)	2014	0.02	0 - 0.20	5	N/A	NO	Soil runoff
Chloride (ppm)	2014	11.53	9.20 - 15	500	N/A	NO	Runoff/leaching from natural deposits; sea-water influence
Specific Conductance (uS/cm)	2014	204	200 - 220	1,600	N/A	NO	Substances that form ions when in water; seawater influence
Total Filterable Residue/TDS (ppm)	2014	134	130 - 140	1,000	N/A	NO	Runoff/leaching from natural deposits
Sulfate (ppm)	2014	4.40	3.30 - 5.20	500	N/A	NO	Runoff/leaching from natural deposits
Apparent Color (Units)	2014	0	0	15	N/A	NO	Naturally occurring organic materials
Aluminum (Al) (ppb)	2014	13.80	0 - 69.0	200	N/A	NO	Erosion of natural deposits; residual from some surface water treatment processes

## Additional Constituents

Chemical or Constituent	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
pH (Lab)	2014	8.60	8.50 - 8.80	N/A	N/A	N/A
Aggressive Index	2014	11.66	11.61 - 11.77	N/A	N/A	N/A
Alkalinity, Total (as CaCO <sub>3</sub> )	2014	74.80	72 - 84	N/A	N/A	N/A
Bicarbonate (HCO <sub>3</sub> )	2014	81.40	77 - 90	N/A	N/A	N/A
Hardness, Total (as CaCO <sub>3</sub> )	2014	15.80	12 - 19	N/A	N/A	N/A
Calcium (Ca)	2014	6.38	4.90 - 7.80	N/A	N/A	N/A
Potassium (K)	2014	0.68	0 - 1.40	N/A	N/A	N/A
Sodium (Na)	2014	33.60	31 - 40	N/A	N/A	N/A
Total Anions	2014	2.04	1.90 - 2.30	N/A	N/A	N/A
Carbonate (CO <sub>3</sub> )	2014	3.36	0 - 6.20			N/A


## Detection of Unregulated Constituents

Chemical or Constituent (CCR Units)	Sample Date	Average Level	Range of Detections	Notification Level	Health Effects Language
Vanadium (ppb)	2014	70.20	53 - 91	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

## SHOULD CUSTOMERS BE CONCERNED?

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).

 **Hexavalent Chromium Health Effects:** Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.