

#### 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 1st through December 31st, 2019 or the most recent results as indicated.

#### PUBLIC PARTICIPATION

The CSA 70J Municipal Advisory Committee meets regularly at 7:00 p.m. at the Oak Hills Community Center (Fire Station #40) on the 3rd Tuesday of every other month.

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

Contact:

Steve Samaras  
Division Manager  
(760) 955-9885 or  
(800) 554-0565

#### Office Hours:

Monday through Friday  
9:00 a.m. – 4:00 p.m.  
Closed on Holidays



**Trevor Leja** Deputy Director

*"We strive for efficiency and sustainability while promoting the safety and health of the communities we serve."*



**Steve Samaras** Division Manager

*"Our team of State-licensed experts work diligently to provide the essential water services to your community. This year's CCR represents a summary of the water quality testing conducted during 2019 to protect your health."*

County Service Area 70 J (CSA 70 J), a water district within the Special Districts Department (Department), Water and Sanitation Division, is a Board-governed district formed in December 1971 that currently provides water service to approximately 12,317 customers in the community of Oak Hills.

The water system consists of five wells, eleven 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 3,352 metered water connections.

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 monitor 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 2019 and previous years. The Department'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 State Water Resources Control Board, (State Board), prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health website <https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx>.

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 at 1-800-426-4791 or visit their website at <https://www.epa.gov/dwstandardsregulations/drinking-water-contaminant-human-health-effects-information>.

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

This CCR reflects changes in drinking water regulatory requirements during 2019. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The USEPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.



#### ¡MUY IMPORTANTE!

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

## 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 August, 2012. A copy of the complete assessment may be viewed at the Department's office. Vulnerability to contamination is based on the assessment findings which are septic systems, both high and low density.

Funding to Pilot Test Hexavalent Chromium treatment processes was approved and made 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. To date, all pilot testing has been completed and is available at our web site at <http://www.specialdistricts.org/index.aspx?page=104>.

## 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 and general information:

**1, 2, 3-trichloropropane (1,2,3-TCP)** had a notification level (NL) of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective.

**Hexavalent Chromium** there is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

**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.

**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 techno-logically 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.

**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.

**MG** Million gallons

**Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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

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

**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.

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

## 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.
- 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 10 to 25 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving to save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 740 gallons a month.
- Fix leaking toilets and faucets.
- Teach your kids about water conservation to ensure a future generation that uses water wisely.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproduct of industrial processes and petroleum production, and can also come from gas stations, urban stormwater run-off, agricultural application, and septic systems.

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

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

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

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

**Pesticides and herbicides**, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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

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

**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.

**Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.

**Regulatory Action Level (AL)**

The concentrations of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**UCMR4 Statement** Additional Unregulated Pollutants were added to the UCMR4 monitoring list.

**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 are included on the following pages:



## PRIMARY DRINKING WATER STANDARDS

County of San Bernardino – CSA 70 J							
Lead and Copper (CCR Units)	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source
<b>Lead</b> (ppb)	2019	30	0	0	15	0.2	Internal corrosion of household plumbing; erosion of natural deposits
<b>Copper</b> (ppm)	2019	30	0	0	1.3	0.3	Internal corrosion of household plumbing; erosion of natural deposits
Microbiological Contaminants							
Contaminants	Sample Period	Highest No. of Detections	No. of Months in Violation	MCL		MCLG	Typical Source of Bacteria
<b>Total Coliform</b> (State Total Coliform Rule)	2019	0	0	1 positive monthly sample		0	Naturally present in the environment
<b>Fecal Coliform or E. coli</b> (State Total Coliform Rule)	2019	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		0	Human and animal fecal waste
<b>E. Coli</b> (Federal Revised Total Coliform Rule)	2019	0	0	(a)		0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .							
Radioactive Contaminants							
Chemical or Constituent (CRR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
<b>Gross Alpha</b> (pCi/L)	2014	0.52	0.43–0.64	15	0	NO	Erosion of natural deposits
Inorganic Contaminants							
Chemical or Constituent (CRR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
<b>Nitrate as N (NO3-N)</b> (ppm)	2019	2.38	2–2.9	10	10	NO	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women
<b>Fluoride</b> (ppm)	2017	0.31	0.31	2.0	1	NO	Erosion of natural deposits; water additive that promotes strong teeth
<b>Arsenic</b> (ppb)	2017	4.48	3.5–5.6	10	0.004	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
<b>Chromium – Total Cr</b> (ppb)	2019	18.05	0–25	50	(100)	NO	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits

This report shows corrected data from previous reports. Errors were found in some data automatically imported to 2017 and earlier reports.



## Disinfectant Byproducts and Chemical Disinfectant

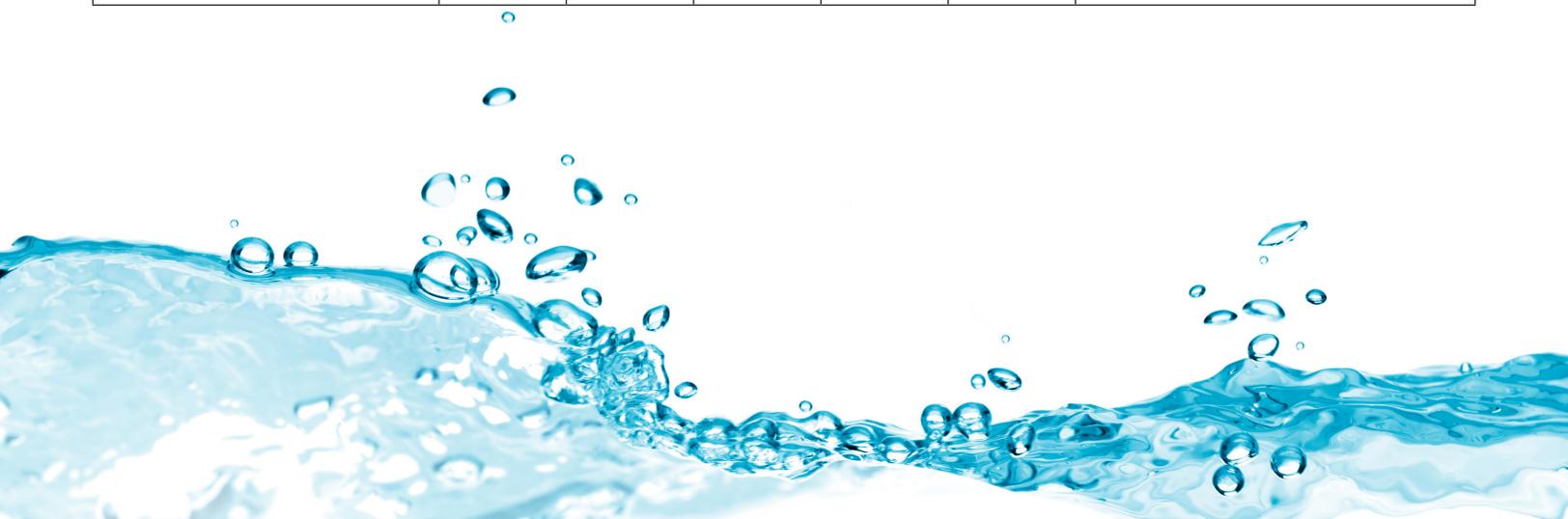
Chemical or Constituent (CRR Units)	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	MCL Violation	Typical Source of Contaminant
<b>Cl REs Total</b> (ppm)	2019	0.91	0.21–1.6	4	4	NO	Drinking water disinfectant added for treatment
<b>Total Trihalomethanes – TTHM –</b> (ppb)	2019	4.34	0–22.4	80	N/A	NO	Byproduct of drinking water chlorination
<b>Total Haloacetic Acids – HAA5 –</b> (ppb)	2019	0.05	0–1.1	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
<b>Odor Threshold</b> (Units)	2019	1	1–1	3	N/A	NO	Naturally occurring organic materials
<b>Turbidity</b> (Units)	2019	0–0.41	0–1.33	5	N/A	NO	Soil runoff
<b>Chloride</b> (ppm)	2017	9.9	8.3–11	500	N/A	NO	Runoff/leaching from natural deposits; seawater influence
<b>Specific Conductance</b> (umhos/cm)	2017	206	200–220	1,600	N/A	NO	Substances that form ions when in water; seawater influence
<b>Total Dissolved Solids/TDS</b> (ppm)	2017	112	100–130	1,000	N/A	NO	Runoff/leaching from natural deposits
<b>Sulfate</b> (ppm)	2017	4.58	3.7–4.9	500	N/A	NO	Runoff/leaching from natural deposits
<b>Apparent Color</b> (Units)	2019	ND	ND	15	N/A	NO	Naturally occurring organic materials
<b>Aluminum (Al)</b> (ppb)	2017	ND	ND	200	N/A	NO	Erosion of natural deposits; residual from some surface water treatment plants

## ADDITIONAL CONSTITUENTS

Chemical or Constituent	Sample Date	Average Level	Range of Detections	MCL [MRDL]	PHG (MCLG)	Typical Source of Contaminant
<b>pH (Lab)</b>	2017	8.4	8.3–8.6	N/A	N/A	N/A
<b>Aggressive Index</b>	2014	11.66	11.61–11.77	N/A	N/A	N/A
<b>Alkalinity, Total (as CaCO<sub>3</sub>)</b> (mg/L)	2017	74.6	70–85	N/A	N/A	N/A
<b>Bicarbonate (HCO<sub>3</sub>)</b> (mg/L)	2017	88.4	84	N/A	N/A	N/A
<b>Hardness, Total (as CaCO<sub>3</sub>)</b> (mg/L)	2017	16.4	13–20	N/A	N/A	N/A
<b>Calcium (Ca)</b> (mg/L)	2017	6.6	5–8.2	N/A	N/A	N/A
<b>Potassium (K)</b> (mg/L)	2017	1.24	1–1.5	N/A	N/A	N/A
<b>Sodium (Na)</b> (mg/L)	2017	38	35–44	N/A	N/A	N/A
<b>Total Anions</b> (meq/L)	2017	1.85	1.77–1.99	N/A	N/A	N/A
<b>Carbonate (CO<sub>3</sub>)</b> (mg/L)	2017	ND	ND	N/A	N/A	N/A



## DETECTION OF UNREGULATED CONSTITUENTS

Chemical or Constituent	Sample Date	Average Level	Range of Detections	Notification Level	Health Effects Language
<b>Vanadium</b> (ppb)	2017	96.4	59–180	15	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.
<b>Hexavalent Chromium</b> (ppb)	2019	18.6	10–25	N/A	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.

Synthetic Organic Contaminants including Pesticides and Herbicides							
Contaminant (CCR Units)	Sample Date	Average Level (PPM)	MCL (PPM)	PHG (PPB)	MCL Violation	Health Effects Language	Major Source in Drinking Water
<b>1, 2, 3 – Trichloropropane</b>	2018	0.00	0.000005	0.0007	NO	Some people who drink water containing 1,2,3 trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.	Discharge from industrial and agricultural chemicals factories; leaching from hazardous waste site; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

### SHOULD CUSTOMERS BE CONCERNED?

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:** there is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

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 USEPA 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.

Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

