

SACRAMENTO COUNTY WATER AGENCY

2021 WATER QUALITY REPORT - CENTRAL & SOUTH SERVICE AREA (CSA & SSA) (See Note #1)

LEGEND:

AL...Regulatory Action Level	NA...Not Analyzed	NR...Not Required	PPB...Parts per Billion (ug/l)	TOC...Total Organic Carbon
MFL...Million Fibers Per Liter	n/a...Not Applicable	NTU...Nephelometric Turbidity Units	PPM...Parts per Million (mg/l)	TT...Treatment Technique
MO...Monitored Only	ND...Non-Detected	PDWS...Primary Drinking Water Standard	PPT...Parts per Trillion (ng/l)	WTP...Water Treatment Plant
MPN...Most Probable Number	NL...Notification Level	pCi/L...Pico Curies per Liter	RL...Response Level	

PARTS PER MILLION (PPM) OR MILLIGRAMS PER LITER (mg/L)

Parts per million (PPM) and milligrams per liter (mg/L) are units of measurement to determine the amount of a chemical in water. If we thought of each "part" or "milligram" as a second in a period of time, the following time frames would be an appropriate or accurate comparison:

1 milligram per liter (mg/L)	or	1 part per million (PPM)	=1 second in 11.5 days
1 microgram per liter (µg/L)	or	1 part per billion (PPB)	=1 second in nearly 32 years
1 nanogram per liter (ng/L)	or	1 part per trillion (PPT)	=1 second in nearly 32,000 years
1 picogram per liter (pg/L)	or	1 part per quadrillion (PPQ)	=1 second in nearly 32,000,000 years

In 2021, SCWA blended its water for the CSA/SSA from three sources. Approximately 32% surface water from its Vineyard Surface Water Treatment Plant, 6% from the City of Sacramento, and approximately 62% groundwater from its thirty-four (34) groundwater wells and nine (9) water treatment plants (WTPs). For more detailed information regarding this report or SCWA water quality, call Aaron Wyley @ (916) 875-5815.

FEDERAL UNREGULATED CONTAMINANT MONITORING RULE (UCMR 4) - Established by USEPA (See Note 17)

CHEMICAL	SAMPLE DATE	UNITS	Minimum Reporting Level	MAJOR SOURCES IN DRINKING WATER	DISTRIBUTION SYSTEM		SURFACE WATER		GROUNDWATER	
					RANGE	AVERAGE	RANGE	WTD. AVG.	RANGE	WTD. AVG.
Manganese	2018 - 2019	PPB	0.4	Leaching from natural deposits	NA	NA	ND - 1.2	0.3	ND - 25	6.25
Germanium	2018 - 2019	PPB	0.3		NA	NA	ND	ND	ND - 1.9	0.84
Bromide	2018 - 2019	PPB	n/a		NA	NA	ND - 25	5	NA	NA
18. Total Organic Carbon	2018 - 2019	PPM	n/a	Various natural and manmade sources	NA	NA	1.4 - 2.8	1.96	NA	NA
HAA5	2018 - 2019	PPB	n/a	Byproduct of drinking water disinfection	0.24 - 22	11.6	NA	NA	NA	NA
HAA6Br	2018 - 2019	PPB	n/a	Byproduct of drinking water disinfection	ND - 4.95	2.73	NA	NA	NA	NA
HAA9	2018 - 2019	PPB	n/a	Byproduct of drinking water disinfection	0.24 - 25.45	14.06	NA	NA	NA	NA

Cyanotoxins (see Note 19)

Additional Chemical Contaminants

Cyanotoxin	Sample Date	Units	Minimum Reporting Level	Source	Contaminant	Source	Contaminant	Source	Contaminant
Total Microcystin	2018 - 2019	PPB	0.4	Leaching from natural deposits	Germanium	2018 - 2019	PPB	0.3	Tebuconazole
Microcystin-LA	2018 - 2019	PPB	n/a		Manganese	2018 - 2019	PPB	0.4	Dimethipin
Microcystin-LF	2018 - 2019	PPB	n/a		Alpha-hexachlorocyclohexane	2018 - 2019	PPB	n/a	Total Permethrin (cis- & trans-)
Microcystin-LR	2018 - 2019	PPB	n/a		Profenofos	2018 - 2019	PPB	n/a	Ethoprop
Microcystin-LY	2018 - 2019	PPB	n/a		Chlorpyrifos	2018 - 2019	PPB	n/a	Tribufos

NOTES:

- The Fourth Unregulated Contaminants Monitoring Rule (UCMR 4 / 2018 - 2019 Monitoring) with Notification Levels help determine where certain contaminants occur and whether they need to be regulated.
- According to UCMR4, the two indicators (TOC & Bromide) need to be monitored at the source water intake (raw water) for surface water (i.e., the Sacramento River).
- SCWA is required by the fourth Federal UCMR to monitor for ten (10) **cyanotoxins** at the entry point to the distribution system during a 4-consecutive month period, according to the list of constituents above. SCWA was also required to monitor for twenty (20) **additional chemical contaminants** at the entry point to the distribution system and indicators (TOC & Bromide) during a 12-month period. The Haloacetic Acids (HAAs) need to be monitored in the distribution system. For more information about the Federal UCMR4, go online at <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>.
- The HAAs (HAA5, HAA6Br & HAA9) each comprise of a different combination of the Haloacetic Acids Chlorodibromoacetic acid, Dichloroacetic acid, Monochloroacetic acid, Trichloroacetic acid, Bromochloroacetic acid, Dibromoacetic acid, Monobromoacetic acid, Tribromoacetic acid, Bromodichloroacetic acid and Dibromochloroacetic acid.

DEFINITIONS

Average: The annual average of all tests for a particular substance.

Detection Limit for Reporting: The limit at or above which a contaminant is detected.

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting 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.

Range (Lo - Hi): The range between the lowest and highest values of a specific substance measured throughout the course of the year.

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

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Weighted Average (WTD AVG): An average of water quality samples in which each sample is assigned a weight. Each sample's contribution (or weight) is based on the amount of water the corresponding water source produces for the whole system. Instead of each of the sample results contributing equally to the final average, some of the results contribute more than others.

State Mandated Information for Arsenic & Lead:

Arsenic:

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 costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

Lead:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Sacramento County Water Agency is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

Cryptosporidium:

Cryptosporidium is a microbial pathogen found in surface water (e.g., rivers, lakes and streams) throughout the U.S. SCWA's monitoring indicates the presence of these organisms in our source water, which is the Sacramento River. Between May 2015 and April 2017 SCWA took monthly samples for Giardia and Cryptosporidium, as well as turbidity and E. coli. Of the 24 samples taken, only one detected the presence of these organisms. The results ranged from non-detect (ND) to 0.182 Oocysts per liter. The maximum average is below the threshold of 0.075 oocysts per liter. SCWA's surface water is treated with a thorough disinfection and filtration process to remove Cryptosporidium before distribution to the customer; however, the most commonly-used filtration methods cannot guarantee 100 percent removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people, infants and small children and the elderly are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

SOURCE WATER ASSESSMENT

To help protect the quality of existing and future groundwater supplies, the Drinking Water Source Assessment and Protection (DWSAP) program calls for examining the vulnerability of drinking water sources to potential contamination. The Water Agency completed its latest comprehensive report in May 2019. The Water Agency's report identified the following potential contamination results:

Arden Park Vista & Northgate:

Most vulnerable to commercial types of activities such as the dry cleaning business, gas stations, a sewer collection system and a leaking underground storage tank, electronic manufacturers and photo processors.

Central & South Service Area (CSA & SSA)

Most vulnerable to activities including automobile-gas stations; boat services/ repair/ refinishing; chemical/ petroleum pipelines; dry cleaners; fleet/ truck/ bus terminal; grazing; historic waste dumps/ landfills; leaking underground storage tanks; other animal operations; pesticides/ fertilizer/ petroleum storage transfer areas; plastics/ synthetics producers; research laboratory; wells-agricultural/ irrigation types; wells-oil, gas, and geothermal types; wood preserving/ treating and sewer collection systems

Hood, East Walnut Grove and Delta Estates:

Most vulnerable to irrigated crops and septic systems.

North Service Area (NSA):

Most vulnerable to commercial types of activities such as grazing, known contaminant plumes, low-density septic systems, sewer collection systems and wells-agricultural irrigation types