7837 Fair Oaks Boulevard
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(916) 483-2452
carmichaelwd.org

Board of Directors

Division 1: Ron Davis

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Division 4: Ron Greenwood

Division 5: Paul Selsky

2023 Consumer Confidence Report

Protect Our Source Water!!

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.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Dispose of medications properly; utilize medicine take-back programs.

Carmichael Water District

2023 Consumer Confidence Report

This report contains important information about your drinking water.

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

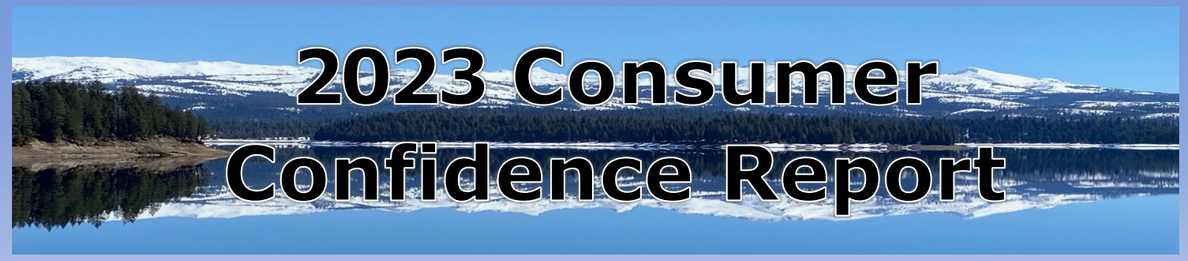
Public Meetings

The Carmichael Water District Board of Directors typically meets at 6:00 pm on the third Tuesday of each month at the Carmichael Water District office. Meeting dates and times are posted at our website. The public is welcome to attend.

Water Efficiency

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. Our website, www.carmichaelwd.org, is the best place for information regarding tips and our free water efficiency programs. If you prefer you can call our office at (916) 483-2452.

Copies of the complete Source Water Assessment and Sanitary Survey are available for inspection at the Carmichael Water District (District) office, 7837 Fair Oaks Blvd., Carmichael, CA, 95608. You may request a summary of the assessment be sent to you by contacting the District at (916) 483-2452.



About This Report

In 2023, as in years past, **Carmichael Water District** (District) met all U.S. Environmental Protection Agency (USEPA) and State Water Resources Control Board (State Board) drinking water health standards. The District routinely tests for over 140 contaminants to ensure safe and healthy drinking water for our customers. Once again, we are proud to report that our system has not violated any maximum contaminant level (MCL) or any other water quality standards. This brochure is a snapshot of the District's 2023 water quality. Also included are details about where your water comes from, what it contains, and how it compares to State Board standards.

While the District is required to list only those contaminates that were detected in this report, a complete listing of all tested constituents, as required by state and federal regulations, is available in the District's 2023 Annual Water Quality Report which is available on our website, www.carmichaelwd.org or at our main office.

High Quality Drinking Water is Carmichael Water District's Top Priority

Demonstrating their commitment to public health protection and the public's right-to-know about local environmental information, the USEPA and the State Board require water suppliers to provide annual drinking water quality reports to its customers. This publication summarizes the most recent testing and includes a comparison of detectable contaminates in your drinking water against established federal and state standards.

This year's report concludes that, once again, your drinking water meets or exceeds all federal and state drinking water standards.

Where Does Our Water Come From?

The District's approximately 44,000 customers receive on average 75 percent of their water from the American River (surface water) and 25 percent from District's groundwater wells during normal water supply conditions. During drought years, and when subject to surface water curtailments, the District relies more heavily on groundwater supplies than surface water. The District's current groundwater sources are from 5 primary wells. The wells are operated seasonally, May through September. Our water is tested for more than 140 contaminates on a regular basis. Water samples are subject to the most up-to-date testing methods and then are retested for accuracy. Samples are then measured against state and federal standards to ensure quality.

The State Board requires water providers to conduct a Source Water Assessment to help protect the quality of future water supplies. This assessment describes where a water system's drinking water comes from, the types of polluting activities that may threaten source water quality and an evaluation of the water's vulnerability to those threats.

Groundwater and Surface Water Assessment

To meet the State Board requirements and provide our customers with information about our water supply, the District completed the American River Watershed Sanitary Survey in 2023.

The results indicate that our surface water source, the American River, is considered most vulnerable to contamination from sewer system spills, body contact, recreation, erosion, urban runoff and industrial discharge of regulated and unregulated contaminants.

The groundwater sources are considered most vulnerable to contamination from illegal activities and unauthorized dumping, sewer collection systems, dry cleaners, automobile repair shops, chemical/petroleum pipelines, electrical/electronic manufacturing, underground storage tanks and gas stations. The contaminants to which groundwater sources are considered most vulnerable include the following: dry cleaning solvent (PCE), gasoline additive (MTBE), liquid rocket fuel (NDMA), and rocket fuel propellant (perchlorate) originating from the Aerojet Rocketdyne (Aerojet) superfund site. Aerojet is under the joint regulatory oversight of the USEPA, California Department of Toxic Substance Control and the California Regional Water Quality Control Board.

Per- and Polyfluoroalkyl Substances (PFAS) - What Are They?

Per- and polyfluoroalkyl substances (PFAS) are a large, complex group of synthetic chemicals that have been used in consumer products around the world since about the 1950s. Known for their resistance to heat, oil, stains, and water, PFAS are found in many common household products such as nonstick cookware, furniture, clothing, carpets, cosmetics, and food packaging. Concerns about the public health impact of PFAS have arisen for the following reasons: widespread occurrence, numerous exposures, persistent, and growing numbers. The District will monitor for PFAS in 2024 and publish the results upon completion.

What's In Our Water?

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.

The sources of drinking water, both tap 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.

In order to ensure that tap water is safe to drink, the USEPA and State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants that may be present in source water (pre-treated water) include:

- *Microbial constituents,* such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- *Inorganic constituents*, 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 and septic systems.
- *Radioactive constituents,* that can be naturally-occurring or be the result of oil and gas production and mining activities.

Sodium and Hardness:

Sodium is a naturally occurring chemical element that is present in our source water. The level of sodium measured was 3.2 ppm from our surface water source and an average of 14 ppm from our groundwater source.

Hardness of the water in our system depends on the seasonal source of supply and your service location within the District. The level of hardness measured during fall and winter was 30 ppm which classifies the water in the "soft" category based on water quality standards. During spring and summer when we supplement with groundwater, the hardness ranges from 29 ppm to 220 ppm depending on your location within the District.

Special Health Information:

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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

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 District 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 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 (1-800-426-4791) or their website at http://www.epa.gov/lead.

Note: In 2023, no schools requested lead sampling.

Detected Primary Drinking Water Constituents:

The District takes hundreds of water samples annually in order to determine the presence of any constituents. This is a table of **detected constituents**. The intent is to give you an idea of where the District stands with regard to water quality standards set by the State Board and the USEPA. The State Board allows us to monitor for some constituents less than once per year because the concentrations of these constituents do not change frequently. Some of our data, though representative, are more than one year old.

How to Read the Table:

1. Identify constituent in the left column.

2. Compare the detection range and averages to the Maximum Contaminant Level (MCL) and the Public Health Goal/Maximum Contaminant Level Goal (PHG/MCLG).

Table Definitions:

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 USEPA.

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 and MRDLs 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.

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

Secondary Drinking Water Standards (SDWS) – MCLs for contaminants that affect taste, odor or appearance of the drinking water. Contaminants with SDWS do not affect health at the MCL levels.

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

Not Applicable (N/A)

None Detected (ND) – Analyzed, not detectable at testing limit.

Water Quality Measurement Units:

Micromhos – A measure of the ability of water to conduct electricity.

NTU (Nephelometric Turbidity Units) – A measure of water's clarity. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion) – A measurement of the concentration of a substance roughly equivalent to one drop in one of the largest tanker trucks used to haul gasoline or one part in 1,000,000,000.

ppm (parts per million) – A measurement of the concentration of a substance roughly equivalent to 4 drops in 55 gallons or one part in 1,000,000.

pCi/L (picocuries per liter) – A measure of radioactivity.

Detected Primary Drinking Water Constituents

Constituents	Unit of Measure	MCL or [MRDL]	PHG or (MCLG)	Surface Water Average	Ground-water Range	Ground-water Average	Typical Source
Microbiological Constituents (2023)							
Turbidity, percent of time less than 0.1 NTU (a)	NTU	TT=95% of sample <0.1	N/A	100%	N/A	N/A	Soil Runoff
Turbidity, max level found (a)	NTU	TT	N/A	0.02	ND-0.22	0.07	Soil runoff
Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.							
(a) only surface water sources must comply with PDWS for turbidity							
Radioactive Constituents (2023)							
Gross Alpha Activity*	pCi/L	15	0	ND	ND-1.74	0.58	Erosion of natural deposits
Uranium*	pCi/L	20	0.43	ND	ND-2.8	0.93	Erosion of natural deposits
Inorganic Constituents (2023)							
Arsenic	ppb	10	0.004	ND	ND-2.5	0.833	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	ppm	1	2	ND	ND-0.18	0.32	Erosion of natural deposits
Cyanide	ppb	150	150	ND	ND—6.9	2.3	Discharge from steel/metal, plastic and fertilizer factories
Nitrate (as N)	ppm	10	10	ND	.36-5.4	1.9	Runoff and leaching from fertilizer use; leaching from septic tanks; erosion of natural deposits
*Surface water samples collected in 2023. Groundwater samples collected in 2023 except when indicated.							
Organic Constituents (2023)							
Tetrachloroethylene (PCE)	ppb	5	0.06	ND	ND-5.2	2.4	Discharge from factories, dry cleaners and auto shops (metal degreaser)
Detected Secondary Drinking Water Constituents (regulated for aesthetic qualities)(2023)							
Odor-Threshold	TON (units)	3	N/A	1	ND	ND	Naturally-occurring organic materials
Total Dissolved Solids	ppm	1000	N/A	55	120-330	217	Runoff/leaching from natural deposits
Specific Conductance	micromhos	1600	N/A	60	130-440	273	Substances that form ions when in water
Chloride	ppm	500	N/A	2.6	2.5-25	11.4	Runoff/leaching from natural deposits
Manganese	ppm	.05	N/A	N/D	N/D - .085	.028	Leaching from natural deposits
Sulfate	ppm	500	N/A	1.3	3.5-16	8.6	Runoff/leaching from natural deposits; industrial wastes
Other Unregulated Constituents of Interest (2023)							
Sodium	ppm	N/A	N/A	1.6	6.0-17	10.1	Naturally occurring salt in the water
Alkalinity	ppm	N/A	N/A	23	69-170	119	Indicates the buffering capacity in the basic pH range of the water
Calcium	ppm	N/A	N/A	4.5	10-45	25	Erosion of natural deposits
Hardness	ppm	N/A	N/A	23	53-210	121	The sum of polyvalent cations present, generally naturally occurring magnesium and calcium
Magnesium	ppm	N/A	N/A	1.5	6.5-23	14	Erosion of natural deposits

Organic Samples from the Distribution System (2023)

Constituents	Unit of Measure	MCL or [MRDL]	PHG or [MRDLG]	Range	Average	Typical Source
Chlorine Residual	ppm	[4]	[4]	0.34-1.26	0.91	Drinking water disinfectant added for treatment
TTHM (Total Trihalomethanes)(b)	ppb	80	N/A	ND-49	17.5	By-product of drinking water disinfection
HAA5 (Haloacetic Acids)(b)	ppb	60	N/A	ND-31	11	By-product of drinking water disinfection
TOC (Total Organic Carbon) (c)	ppm	TT	N/A	N/A	0.9	Various natural and manmade sources

(b) based on the running annual average, (c) raw water

Lead and Copper (30 Sites Sampled 2/2024)

Constituents	Unit of Measure	AL	PHG	90th Percentile	No of sites exceeding AL	Typical Source
Copper	ppm	1.3	0.3	ND	1	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	0.2	ND	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits