2025 WATER QUALITY REPORT

Reporting Year 2024

Santa Margarita Water District

Serving San Juan Capistrano

Through comprehensive water quality compliance testing programs, your drinking water is monitored from source to tap, to ensure that it meets or surpasses all federal and state Drinking Water regulations.

Your 2025 Water Quality Report

Since 1990, California public water utilities have been providing an annual Water Quality Report to their customers. **This year's report covers drinking water quality testing and reporting for 2024.** Santa Margarita Water District (SMWD) vigilantly safeguards its water supply, and as in years past, the water delivered to your home meets or surpasses the quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards.

The drinking water supply includes treated local groundwater and treated surface water imported from Irvine Ranch Water District (IRWD) and Metropolitan Water District of Southern California (MWDSC). IRWD and MWDSC test for regulated and unregulated chemicals in the delivered drinking water. SMWD conducts similar testing on the local groundwater and its distribution system as well. Unregulated chemical monitoring helps U.S. EPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals to protect public health. The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Our data, though more than a year old, is representative.

Sources of Supply

Your drinking water comes from three sources. Local groundwater is pumped to the San Juan Groundwater Plant, where it is treated by SMWD staff. Additional water is purchased from IRWD and MWDSC. IRWD's Baker Water Treatment Plant uses surface water from both MWDSC and Santiago Reservoir (Irvine Lake). MWDSC's imported water sources are the Colorado River and the State Water Project, which draws water from the Sacramento–San Joaquin River Delta.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. EPA/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).

Learn More About Your Water's Quality

For information about this report, or your water quality in general, please contact Customer Care at (949) 459-6420 or CustomerCare@smwd.com. SMWD has several board meetings each month. Meeting details can be found on the district's website at smwd.com/meetings. Please feel free to participate in these meetings.

Source Water Assessment

Imported (MWDSC) Water Assessment

Every five years, MWDSC is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. The most recent surveys for MWDSC's source waters are the Colorado River Watershed Sanitary Survey—2020 Update and the State Water Project Watershed Sanitary Survey—2021 Update. The IRWD's watershed sanitary survey for Santiago Reservoir (Irvine Lake) was updated in 2019. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater.

U.S. EPA also requires MWDSC to complete a source water assessment (SWA) that uses information collected in the watershed sanitary surveys. MWDSC completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Copies of the most recent summary of the Watershed Sanitary Surveys or the SWA can be obtained by calling SMWD Customer Care at (949) 459-6420.

Groundwater Assessment

A copy of the assessment of the drinking water sources completed in March 2001 is available at State Water Resources Control Board, Division of Drinking Water, 2 MacArthur Place, Suite 150, Santa Ana, CA 92707 or by contacting SMWD Customer Care at (949) 459-6420.

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información importante sobre su agua potable. Traducirlo, o hablar con alguien que lo entienda.

Quality Water is Our Priority

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different. Delivering high-quality drinking water to our customers is a scientific and engineering feat that requires considerable effort and talent to ensure the water is always there, always safe to drink. Because tap water is highly regulated by state and federal laws, water treatment and distribution operators must be licensed.

Our licensed water professionals have an understanding of a wide range of subjects, including mathematics, biology, chemistry, physics, and engineering. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind every drop.

Total Dissolved Solids, Alkalinity, and Hardness

Total dissolved solids (TDS) are an indicator of the aesthetic characteristics of drinking water and a gauge of a broad array of chemical constituents within the water. It is a measure of all the combined inorganic and organic substances, and while it is not associated with any health effects, TDS can impact the appearance and taste of water.

TDS is mainly inorganic salts, as well as a small amount of organic matter. Common inorganic salts found in water include calcium, magnesium, potassium, and sodium, along with nitrates, chlorides, and sulfates. These minerals originate from a variety of sources, both natural and caused by human activity.

Alone, dissolved solids are usually not a health hazard. Some people buy mineral water, which has naturally elevated levels of dissolved solids. The U.S. EPA includes TDS as a secondary standard, a voluntary guideline for aesthetic and cosmetic effects. Kept within the established guidelines, TDS can impart a favorable taste to water. Too little can give water a flat taste. There are issues, however, with high levels of TDS. Increased TDS concentrations can produce hard water, which stains household fixtures, corrodes pipes, and imparts a metallic taste. Within the SMWD system, you can be assured that TDS is kept well within the State of California's established secondary standard.

About Lead in Tap Water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Santa Margarita Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Santa Margarita Water District at CustomerCare@smwd.com or call (949)459-6420. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at: https://www.epa.gov/safewater/lead.

Lead Service Line Inventory

To address the presence of lead in drinking water and reduce the potential for lead exposure, the U.S. EPA mandated that all public water systems create and maintain an inventory of service line materials by October 16, 2024. This lead service line inventory is an essential step in ensuring the safety and quality of public water supplies. The SMWD has completed its initial lead service line inventory in 2024. After reviewing historical records and completing field investigations, SMWD has determined there is no lead or galvanized requiring replacement of any service lines in its distribution system. This includes any privately-owned service lines. A copy of the inventory is available for public review at smwd.com/553/Lead-FAQ.

Where Can You Learn More?

There's a wealth of information on the internet about drinking water quality and water issues in general. Some good sites to begin your research are:

- Metropolitan Water District of Southern California: mwdh2o.com
- California Department of Water Resources: water.ca.gov
- The Water Education Foundation: watereducation.org

To learn more about Water Conservation & Rebate Information:

- http://smwd.com/conservation

And to see the aqueducts in action, check out these two videos:

- Wings Over Water: youtu.be/8A1v1Rr2neU
- Wings Over Metropolitan's Colorado River Aqueduct: youtu.be/KipMQh5t0f4

2024 Santa Margarita Water District - ID9 Drinking Water Quality

2024 SANTA MARGARITA WATER DISTRICT - ID9 DISTRIBUTION SYSTEM WATER QUALITY

	MCL (MRDL/ MRDLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	45	5 - 39	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	17	ND - 15	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.6	1.33 - 1.9	No	Disinfectant Added for Treatment
Aesthetic Quality					
Color (color units)	15*	1	1	No	Erosion of Natural Deposits
Odor (threshold odor number)	3*	1	1	No	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	846	169 - 1,126	No	Erosion of Natural Deposits
Turbidity (NTU)	5*	0.08	0.05 - 0.20	No	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	503	270 - 610	n/a	Erosion of Natural Deposits
Unregulated Chemicals - Tested in 2024					
Alkalinity, total as CaCO3 (ppm)	Not Regulated	83	101 - 110	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	213	97 - 270	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	12	6 - 16	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	83	60 - 96	n/a	Salt Present in Water; Naturally Occuring

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; twelve** locations are tested monthly for color, odor and turbidity, and weekly for coliforms bacteria. MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; *Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color). ** 49 sites rotated weekly.

MICROBIOLOGICAL	MCL	MCLG	HIGHEST NUMBER OF DETECTIONS	NO. OF MONTHS IN VIOLATION	TYPICAL SOURCE OF BACTERIA
E. coli	(a)	0	0	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.

LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

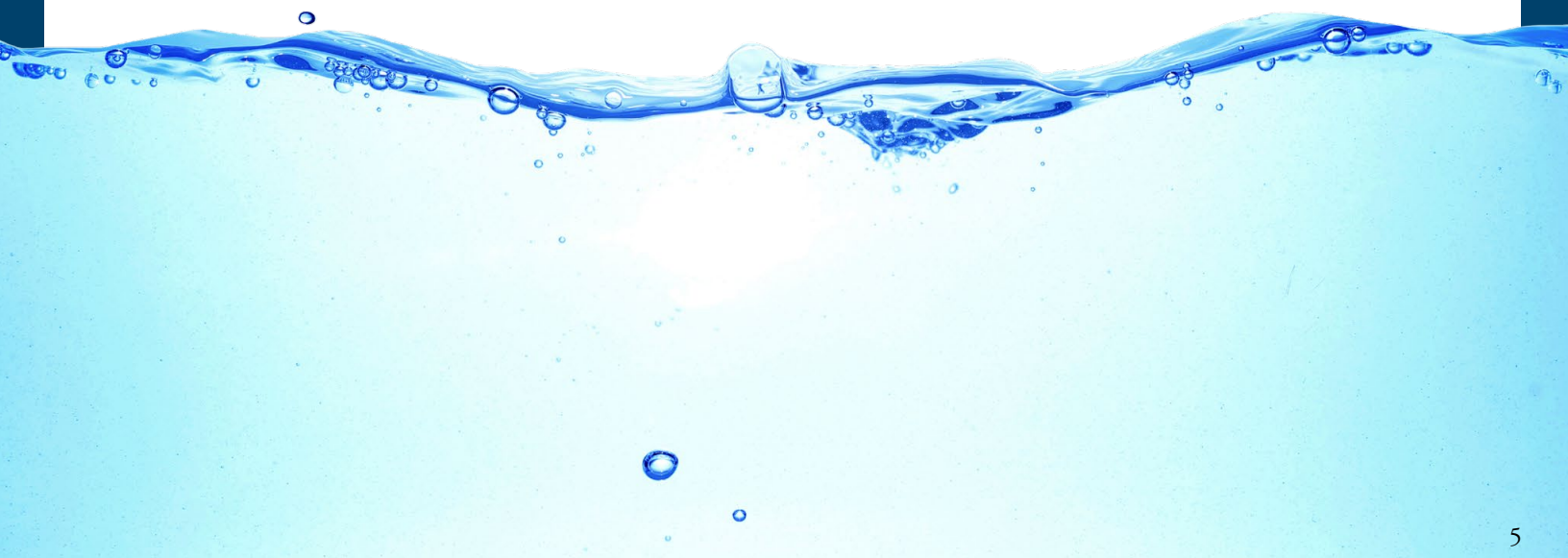
	ACTION LEVEL (AL)	PUBLIC HEALTH GOAL	90TH PERCENTILE VALUE	SITES EXCEEDING AL / NUMBER OF SITES	AL VIOLATION?	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	15	0.2	ND	0 / 31	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.088	0 / 31	No	Corrosion of Household Plumbing

Every three years, selected residences are tested for lead and copper at-the-tap. The most recent set of thirty-one samples was collected in 2024. Lead was not detected in any home. Copper was detected in 14 homes, none of which exceeded the copper regulatory Action Level (AL). A regulatory Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

2024 SAN JUAN CAPISTRANO TREATED GROUNDWATER QUALITY

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	MOST RECENT SAMPLING DATE	TYPICAL SOURCE OF CHEMICAL
Radiologicals							
Alpha Radiation (pCi/L)	15	(0)	ND	ND	No	2023	Erosion of Natural Deposits
Uranium (pCi/L)	20	0.43	ND	ND	No	2023	Erosion of Natural Deposits
Organic Chemicals							
Methyl-Tert-Butyl Ether (ppb)	13	13	ND	ND	No	2024	Leaking Underground Storage Tanks; Industrial Discharge
Inorganic Chemicals							
Arsenic (ppb)	10	0.004	ND	ND	No	2024	Erosion of Natural Deposits
Fluoride (ppm)	2	1	ND	ND	No	2022	Erosion of Natural Deposits
Secondary Standards*							
Chloride (ppm)	500*	n/a	18.2	5.3 - 38	No	2024	Erosion of Natural Deposits
Iron (ppb)	300*	n/a	ND	ND	No	2024	Erosion of Natural Deposits
Manganese (ppb)	50*	n/a	3.7	ND - 32	No	2024	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	267	170 - 420	No	2024	Substances Form Ions in Water
Sulfate (ppm)	500*	n/a	12.6	0.99 - 40	No	2024	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	140	74 - 220	No	2024	Erosion of Natural Deposits
Turbidity (NTU)	5*	n/a	0.12	ND - 0.47	No	2024	Erosion of Natural Deposits
Unregulated Chemicals							
Alkalinity, total (ppm as CaCO3)	Not Regulated	n/a	ND	ND	n/a	2024	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	3.2	0.1 - 10	n/a	2024	Erosion of Natural Deposits
Hardness, total (ppm as CaCO3)	Not Regulated	n/a	11.5	ND - 38	n/a	2024	Erosion of Natural Deposits
Hardness, total (grains per gallon)	Not Regulated	n/a	0.67	ND - 2.2	n/a	2024	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	0.9	ND - 3.1	n/a	2024	Erosion of Natural Deposits
pH (pH units)	Not Regulated	n/a	7.68	7.1 - 8.2	n/a	2024	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	0.2	ND - 0.61	n/a	2024	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	51	38 - 68	n/a	2024	Erosion of Natural Deposits

ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; NTU = nephelometric turbidity units; ND = not detected; n/a = not applicable; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; µmho/cm = micromho per centimeter; *Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).



2024 IRVINE RANCH WATER DISTRICT BAKER WATER TREATMENT PLANT

CHEMICAL	MCL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE OF CHEMICAL
Radiologicals - Tested in 2024						
Gross Alpha Particle Activity (pCi/L)	15	MCLG = 0	3.8	3.8	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	MCLG = 0	4.6	4.6	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	2.2	2.2	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2024						
Arsenic (ppb)	10	0.004	2	2 - 2.27	No	Erosion of Natural Deposits
Barium (ppm)	1	2	0.129	0.113 - 0.141	No	Refinery Discharge, Erosion of Natural Deposits
Chlorine Dioxide (ppb)	MRDL = 800	MRDLG = 800	98.5	ND - 680	No	Drinking Water Disinfectant Added for Treatment
Chlorite (ppm)	1.0	0.05	ND	ND - 0.09	No	Byproduct of Drinking Water Chlorination
Fluoride (ppm)	2.0	1	0.35	0.31 - 0.38	No	Erosion of Natural Deposits; Water Additive for Dental Health
Secondary Standards* - Tested in 2024						
Chloride (ppm)	500*	n/a	112	98.4 - 119	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	ND	ND - 8	No	Naturally-occurring Organic Materials
Manganese (ppb)	50*	n/a	1.44	ND - 47	No	Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	2	ND - 4	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	1,065	1,008 - 1,126	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	237	228 - 243	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	642	588 - 712	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	ND	ND - 0.3	No	Soil Runoff
Unregulated Chemicals - Tested in 2024						
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	124	115 - 144	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.138	0.127 - 0.153	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	72.7	67.2 - 79.5	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	295	281 - 313	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	17	16 - 18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	27.9	26.2 - 29.8	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	7.9	7.4 - 8.6	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	5.9	4.83 - 21.2	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	105	90.3 - 114	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	1.9	1.9	n/a	Various Natural and Man-made Sources

ppb = parts per billion; ppm = parts per million; pCi/L = picoCuries per liter; µmho/cm = micromhos per centimeter; NTU = nephelometric turbidity units; MCL = Maximum Contaminant Level; PHG = California Public Health Goal; MCLG = federal MCL Goal; MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; NL = Notification Level; n/a = not applicable; TT = treatment technique. * Chemical is regulated by a secondary standard.

IRVINE RANCH WATER DISTRICT BAKER WATER TREATMENT PLANT	TREATMENT TECHNIQUE	TURBIDITY MEASUREMENTS	TT VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Turbidity - combined filter effluent				
1) Highest single turbidity measurement (NTU)	0.1	0.043	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in the treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT). A treatment technique is a required process intended to reduce the level of chemicals in drinking water that are difficult and sometimes impossible to measure directly. NTU = Nephelometric Turbidity Units

UNREGULATED CHEMICALS REQUIRING MONITORING

CHEMICAL	NOTIFICATION LEVEL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	50	43 - 57	2024

2024 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TREATED SURFACE WATER

CONSTITUENT	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Radiologicals - Tested in 2023 and 2024						
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND - 5	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	4	ND - 5	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	1	ND - 3	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2024						
Aluminum (ppm)	1	0.6	ND	ND - 0.11	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.124	0.124	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	ND	ND - 1.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm)	2	1	0.7	0.6 - 0.8	No	Water Additive for Dental Health
Secondary Standards* - Tested in 2024						
Aluminum (ppb)	200*	600	ND	ND - 110	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	104	93 - 116	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	2	1 - 2	No	Naturally-occurring Organic Materials
Odor (threshold odor number)	3*	n/a	1	1	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	979	888 - 1,070	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	224	196 - 253	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	621	556 - 686	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals - Tested in 2024						
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	114	105 - 123	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.14	0.14	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	58 - 78	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	270	235 - 305	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	16	14 - 18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	26	22 - 29	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.2	8.2	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.9	4.4 - 5.4	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	103	90 - 116	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.4	2 - 2.5	n/a	Various Natural and Man-made Sources

ppb = parts per billion; ppm = parts per million; pCi/L = picoCuries per liter; µmho/cm = micromhos per centimeter; ND = not detected; MCL = Maximum Contaminant Level; (MCLG) = federal MCL Goal; PHG = California Public Health Goal; NL = Notification Level; n/a = not applicable; TT = treatment technique. * Chemical is regulated by a secondary standard.

METROPOLITAN WATER DISTRICT DIEMER FILTRATION PLANT	TREATMENT TECHNIQUE	TURBIDITY MEASUREMENTS	TT VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Turbidity - combined filter effluent				
1) Highest single turbidity measurement (NTU)	0.3	0.06	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "treatment technique" (TT). A treatment technique is a required process intended to reduce the level of chemicals in drinking water that are difficult and sometimes impossible to measure directly. NTU = Nephelometric Turbidity Units

UNREGULATED CHEMICALS REQUIRING MONITORING

CHEMICAL	NOTIFICATION LEVEL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	48	39 - 57	2024

Drinking Water Definitions

What are water quality standards?

Drinking water standards established by U.S. EPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water.

The tables in this report show the following types of water quality standards:

- **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.
- **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.
- **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.
- **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 concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

What is a water quality goal?

In addition to mandatory water quality standards, U.S. EPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices.

The tables in this report include three types of water quality goals:

- **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 U.S. EPA.
- **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.
- **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 EPA.

How are contaminants measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L)
- Parts per billion (ppb) or micrograms per liter (µg/L)
- Parts per trillion (ppt) or nanograms per liter (ng/L)

Drinking Water Contaminants

The 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:

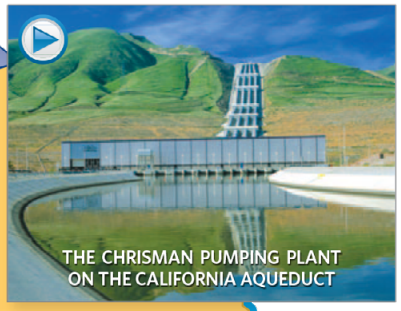
- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or 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 the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA and SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Where Does Our Water Comes From? And How Does it Get to Us?

Have you ever wondered where your water comes from? Here in the City of San Juan Capistrano, our water is drawn from local groundwater supplies, then blended with water imported from Northern California and the Colorado River. Water from Northern California travels to us through a complex delivery system known as the California State Water Project. Designed and built in the 1960s, the State Water Project is one of the largest public water and power utilities in the world, providing drinking water for more than 25 million people statewide. Managed by the California Department of Water Resources, the project stretches over 700 miles from Lake Oroville in the north to Lake Perris in the south. Water stored in Lake Oroville, Folsom Lake, and other tributaries and fed by snowmelt from the Sierra Nevada Mountains flows into the Sacramento and San Joaquin Rivers, and from there into reservoirs in the Bay-Delta region. From the Bay-Delta, giant pumps lift the water into the 444-mile-long California Aqueduct, from which it flows southward to cities and farms in Central and Southern California. Composed mainly of concrete-lined canals, the aqueduct includes over 20 miles of tunnels, over 130 miles of pipelines, and 27 miles of siphons. Along the way, the water is pumped 2,882 feet over the Tehachapi Mountains. The Edmonston Pumping Plant alone lifts millions of gallons a day up 1,926 feet, the highest single water lift in the world. Is it any wonder the State Water Project is the largest single consumer of power in California?



Managed by the MWDSC, the Colorado River Aqueduct begins near Parker Dam on the Colorado River. There, the Gene Pumping Station lifts the water over 300 feet as it begins its 242-mile journey to Lake Mathews, just outside the City of Corona. Along the way, the water passes through two reservoirs, five pumping stations, 62 miles of canals, and 176 miles of tunnels, buried conduits, and siphons. All told, the water is lifted four times, for a total of more than 1,300 feet.

After its journey across the Mojave Desert, the water descends into the Coachella Valley and through the San Gorgonio Pass. Near Cabazon, the aqueduct flows underground, passing beneath the San Jacinto Mountains and continuing until it reaches its terminus at Lake Mathews. From there, 156 miles of distribution lines, along with eight more tunnels and five drinking water treatment plants, deliver treated water throughout Southern California.

Disinfectants and Disinfection By-Products in Drinking Water

Disinfection of drinking water was one of the greatest public health advancements of the 20th century, significantly reducing the spread of waterborne diseases caused by bacteria and viruses. Today chlorine and chloramines are commonly used disinfectants to ensure safe drinking water.

How Disinfection Works

- Chlorine is added at the water source (groundwater wells or treatment plants) to kill harmful microorganisms.
- Residual chlorine remains in the distribution system to prevent bacterial growth in the pipes that carry water to homes and businesses.
- Chloramines, a combination of chlorine and ammonia, are also used as a disinfectant and help reduce certain by-products.

Disinfection By-Products and Regulations

While effective, chlorine and chloramines can react with naturally occurring materials in water, forming disinfection by-products (DBPs), which may pose health risks. The most common DBPs are trihalomethanes (THMs) and haloacetic acids (HAAs).

To protect public health, the U.S. U.S. EPA regulates DBPs under the Safe Drinking Water Act:

- In 1979 the U.S. EPA set the maximum allowable total THM level at 100 parts per billion (ppb).
- In 2002 the Stage 1 Disinfectants/Disinfection Byproducts Rule lowered the limit to 80 ppb and added HAAs to the list of regulated chemicals.
- In 2006 the Stage 2 Disinfectants/Disinfection Byproducts Rule introduced further monitoring and control measures.
- Full compliance began in 2012.

Your drinking water meets or surpasses all state and federal standards, with rigorous monitoring in place.

Important Considerations

- **Fish and aquatic pets:** Chloramines can be toxic to fish and should be removed from water used in aquariums.
- **Kidney dialysis patients:** Chloramines must be filtered from water used in dialysis treatment—consult your health-care provider.

For more information on water quality and regulations, visit:

- **U.S. EPA water regulations:** epa.gov/sdwa
- **SWRCB:** waterboards.ca.gov

PFAS Advisory

Per- and polyfluoroalkyl substances (PFAS) are a group of human-made chemicals that have been used in various consumer products since the 1940s due to their resistance to heat, water, oils, and stains. These chemicals are prevalent in the environment and have been detected in water supplies nationwide. Studies suggest that exposure to certain PFAS may pose health risks. The U.S. EPA and DDW have established health-based advisories for PFAS. If PFAS levels exceed these guidelines, water agencies must notify their governing bodies and take necessary actions, such as removing affected sources from service or implementing treatment solutions.

To address PFAS contamination, water providers have conducted testing and taken proactive steps to ensure safe drinking water.

Regulatory actions: The U.S. EPA announced final National Primary Drinking Water Regulations for six PFAS in April 2024. Public water systems are required to monitor these substances, with full reporting and compliance expected by 2027.

For more details on PFAS regulations and water safety, visit:

- **California State Water Resources Control Board Division of Drinking Water:** waterboards.ca.gov/pfas
- **U.S. EPA:** epa.gov/pfas

Water Conservation: Making Every Drop Count

Water is a limited natural resource, and using it efficiently is essential in both wet and dry years. Outdoor watering makes up about 60 percent of home water use, making it the biggest opportunity for savings.

Start Outdoors: Use Water Wisely in Your Yard

- Choose water-wise plants and drought-tolerant landscaping.
- Adjust sprinklers to avoid watering sidewalks and streets.
- Water in the early morning or late evening to reduce evaporation.
- Fix leaks in irrigation systems—a small leak can waste thousands of gallons per year.
- Use mulch to retain moisture and keep plants healthy.
- Visit bewaterwise.com for more landscaping ideas and rebates.

Indoor Water-Saving Tips

- Take shorter showers—a five-minute shower uses much less water than a bath.
- Turn off the tap while brushing your teeth, shaving, or washing dishes.
- Fix leaks—a dripping faucet or running toilet can waste thousands of gallons per year.
- Run dishwashers and washing machines only when full to save up to 1,000 gallons per month.
- Keep a pitcher of drinking water in the refrigerator to avoid running the tap for cold water.

Monitor and Manage Your Water Use

Many cities offer online water usage tracking to help residents monitor their water consumption in real time. By identifying leaks and adjusting usage habits, homeowners can save both water and money.

Why Conservation Matters

Southern California's arid climate and reliance on imported water make conservation essential. Water is transported hundreds of miles through aqueducts from the Colorado River and Northern California, with high costs for pumping and treatment.

Small Actions, Big Impact

By making small changes in daily habits and using water more efficiently, we can protect this vital resource for future generations.

To learn more about Water Conservation & Rebate Information:

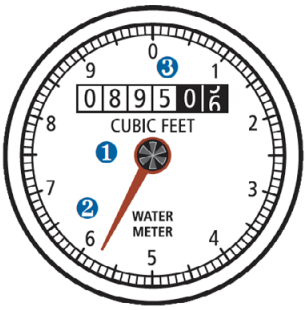
- http://smwd.com/conservation

Cross Connection Control

In cooperation with the State Water Resources Control Board Division of Drinking Water, SMWD's major goal is to ensure the distribution of a reliable potable water supply to all domestic water users. In order for the District to achieve this goal, a Cross-Connection Control Management Plan (CCCMP) has been developed with an effective date of July 1, 2025. The District's CCCMP was developed pursuant to the requirements set forth in the Cross-Connection Control Policy Handbook (CCCPH) which replaced the State of California Administrative Code Title 17, Sections §7583 through §7605 and applies to all State of California Public Water Systems, as defined in California's Health and Safety Cost (CHSC, section 116275(h)).

How To Read Your Residential Water Meter

Your water meter is usually located between the sidewalk and curb under a cement cover. Remove the cover by inserting a screwdriver in the hole in the lid, and then carefully lift the cover. The meter reads straight across, like the odometer in your car. Read only the white numbers (0895).



If you are trying to determine if you have a leak, turn off all the water in your home, both indoor and outdoor faucets, and then check the red or black triangular dial for any movement of the low-flow indicator. If there is movement, that indicates a leak between the meter and your plumbing system.

Understanding Your Water Meter

- **Low-flow indicator:** This will spin if any water is flowing through the meter.
- **Sweep hand:** Each full revolution of the sweep hand indicates that one cubic foot of water (7.48 gallons) has passed through the meter. The markings at the outer edge of the dial indicate tenths and hundredths of a cubic foot.
- **Meter register:** The meter register is a lot like the odometer in your car. The numbers keep a running total of all the water that has passed through the meter. The register shown here indicates that 89,505 cubic feet of water has passed through this meter.

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