

2025

Annual Drinking Water Quality Report



PUBLIC WATER SYSTEM 3710020

QUALITY | VALUE | RELIABILITY | CUSTOMER SERVICE

City of San Diego's Tap Water Supply Meets All State and Federal Health Standards in 2025

The City of San Diego is committed to providing you with a clean, safe and stable water supply. It's the priority of every employee of the City's Public Utilities Department. Those efforts matter. Based on the water quality monitoring data collected in 2025, the City's tap water met all state and federal drinking water health standards, which are the primary standards for treating and monitoring water. The U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board mandate all water agencies produce an annual document educating customers about their drinking water quality for the previous year. This annual Drinking Water Quality Report details the origin of the City's water supply, what it contains and how it meets health standards.



Message from the Public Utilities Director

The 2025 Drinking Water Quality Report is more than a regulatory requirement; it is a reflection of the City of San Diego's ongoing commitment to delivering safe, reliable and high-quality drinking water to every household and business in our service area.

Clean water is fundamental to our community's well-being. That is why the City continues to invest in upgrades, pursue new technologies and engage with our customers to address concerns and answer questions.

The City of San Diego Public Utilities Department works year-round to deliver safe, clean and reliable drinking water to our customers. Highlights of the past year include:

- Development of the City's Urban Water Management Plan. The long-range plan explains where our water will come from and how we will keep it reliable for the next 25 years.
- Public Utilities customers continue to receive excellent service and support from the City. Customer call wait times have continuously been under two minutes since March 2025.
- Construction on Phase 1 of the Pure Water Project is now 90% complete, and the project is expected to begin delivering purified drinking water in early 2027. The advanced water purification program will provide San Diego with a reliable local water supply and cost savings to both water and wastewater customers.

Thank you for your ongoing support and confidence in our services. Together, we will continue to protect and enhance the quality of our drinking water for generations to come.

Thank you,

Lisa Celaya, Interim Director of Public Utilities, City of San Diego

CONTACT

Public Utilities Emergency Hotline.....	619-515-3525
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Water Quality Lab.....	619-668-3232
.....	drinkingwaterquality@sandiego.gov
Capital Improvements Projects.....	619-533-4207
City Reservoirs Recreation.....	619-668-2050
Pure Water Program.....	619-533-6638
Stormwater Pollution Prevention.....	619-235-1000
Report Water Waste.....	619-533-5271

VISIT

City of San Diego Public Utilities.....	sandiego.gov/public-utilities
San Diego County Water Authority.....	sdcwa.org
Metropolitan Water District.....	mwdh2o.com
California Division of Drinking Water.....	waterboards.ca.gov
U.S. EPA.....	water.epa.gov/drink
American Water Works Association.....	awwa.org
Be Water Wise.....	bewaterwise.com
Pure Water Program.....	purewatersd.org
Think Blue.....	thinkblue.org

ENGAGE

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sandiego.gov/get-it-done






WATER SUPPLY

What's in Your Water Before It's Treated?

To safeguard public health, the U.S. Environmental Protection Agency (US EPA) and State Water Resources Control Board (SWRCB) regulate contaminant levels in public water supplies. Similarly, the U.S. Food and Drug Administration (US FDA) and California law establish quality standards for bottled water. Drinking water, including bottled water, may reasonably be expected to contain small amounts of contaminants. The presence of these substances does not necessarily indicate a risk to health.

Drinking water sources, including tap and bottled, originate from rivers, lakes, streams, reservoirs, springs, and wells. As water travels over the land or filters through the ground, it may absorb naturally occurring minerals and, in some cases, radioactive substances. It can also carry contaminants from animals or human activity.

Potential contaminants in source water include:

-  Microbial contaminants like viruses and bacteria, which can come from septic systems, wastewater treatment plants, livestock, or wildlife.
-  Inorganic contaminants such as salts and metals, which may occur naturally or result from farming, mining, industrial discharges, or urban runoff.
-  Pesticides and herbicides that stem from agriculture, landscape maintenance, or urban runoff.
-  Organic chemical contaminants, including synthetic and volatile organics, that arise from industrial processes, petroleum production, gas stations, and septic systems.
-  Radioactive contaminants, which can be naturally present or linked to mining and energy production.

To help protect our drinking water sources, the City of San Diego, Public Utilities Department (PUD) conducts comprehensive sanitary surveys of local watersheds at least once every five years. These surveys cover the El Capitan, Murray, San Vicente, Sutherland, Barrett, Morena, Otay, Upper Otay, Hodges, and Miramar watersheds. The most recent survey, completed in 2025, identified several potential sources of contamination, including wildfire-related runoff, erosion, geological fault activity, and naturally occurring metals. Additional potential vulnerabilities include impacts from wildlife and livestock, aging or failing septic systems, recreational activities, urban stormwater runoff, and nearby transportation infrastructure.

To review the complete Watershed Sanitary Surveys please visit the following link: [Watershed Sanitary Survey](#) | [City of San Diego Official Website](#)

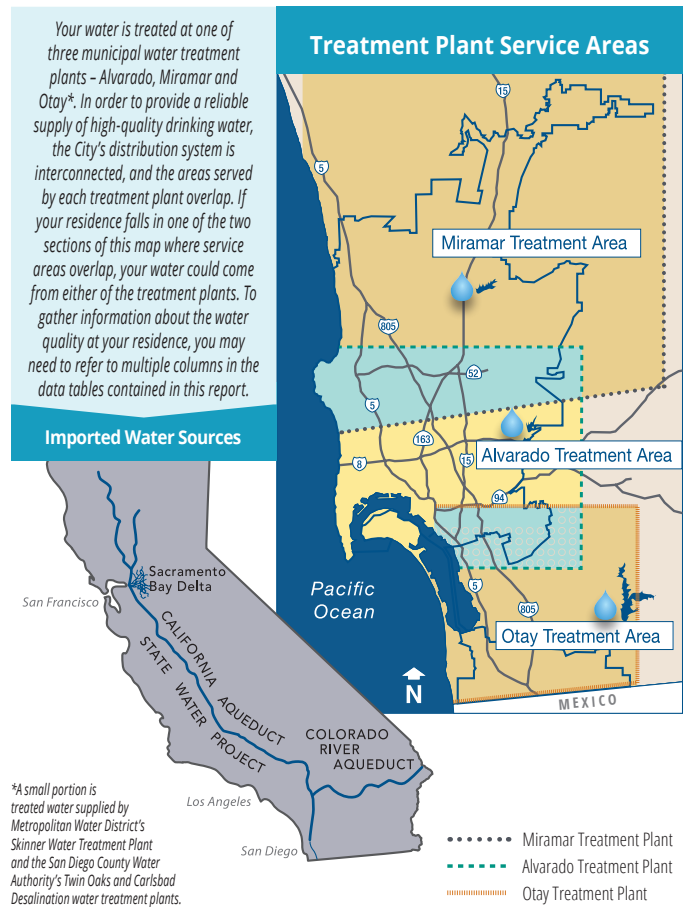
Imported Water Supply and the Impact on Water Quality

The City of San Diego currently imports most of its water supply, the bulk of which is raw (untreated) water purchased from the San Diego County Water Authority (CWA). All raw water is treated before entering the City's drinking water distribution system.

Less than 10% of the imported water purchased from the County Water Authority is a blend of treated water from the Metropolitan Water District's Skinner Water Treatment Plant, the County Water Authority's Twin Oaks Valley Water Treatment Plant and the Carlsbad Desalination Plant.

Most of the imported water from the County Water Authority is a blend from the Colorado River and State Water Project (see map below).

Throughout the year, the ratio of water from each source changes. The constituents that make up the City's source water are influenced by the water source, climate, geology and the land activities that they flow through. The City continually monitors the source water and adjusts its treatment process to ensure that the water is always healthy and safe.



HOW DO WE MAKE WATER DRINKABLE?

Water Treatment

The City's Public Utilities Department (PUD) provides high-quality drinking water by utilizing proven technology, modern facilities and state-certified operators. Water is treated using several processes, with each process providing additional water quality improvements. Using several treatment processes provides multiple barriers for added levels of safety. Our treatment plants employ a combination of time-tested conventional water treatment processes and innovative disinfection strategies. Both Alvarado and Miramar water treatment plants use ozone for primary disinfection, while the Otay Water Treatment Plant uses chlorine dioxide. Conventional water treatment consists of coagulation, flocculation, sedimentation and sand/multimedia filtration. This cost-effective, proven method of treatment is used throughout the modern world.

Stages of our Water Treatment

WATERSHED PROTECTION: Protecting the watersheds prevents contamination of our water supply and is the most cost-effective process in water treatment. Extensive measures are taken to prevent contamination of our local and imported water. If you see "No Swimming" or "No Dumping" signs posted near water supplies, this is for the protection of your drinking water. The latest Watershed Sanitary Survey, which contains information on the City's watersheds, including water quality and vulnerabilities, is available at: sandiego.gov/public-utilities/water-quality/watersheds/sanitary-survey

COAGULATION: This is the chemical process of rapidly mixing coagulants into the water entering the water treatment plant. Many of the particles in the source water have negative charges, causing them to repel each other, much like two magnets when the negative ends are put together. Coagulation changes these negative charges to neutral.

FLOCCULATION: Coagulated water is slowly mixed causing the neutral particles to collide. When the collisions occur, the particles clump together forming floc. As the floc is formed, particles in the water are trapped within the floc. The floc looks like snowflakes suspended in the water.

SEDIMENTATION: The floc particles are heavier than water. Mixing is stopped and the water slowly flows through the sedimentation basins, during which the floc settles to the bottom and is removed. The clear water is collected from the top of the sedimentation basins.

DISINFECTION, PRIMARY: Drinking water is further treated to remove or inactivate viruses, bacteria and other pathogenic organisms. Disinfection is accomplished in a variety of methods. The Alvarado and Miramar water treatment plants use ozone as the primary disinfectant. The Otay Water Treatment Plant uses chlorine dioxide as the primary disinfectant. These are advanced disinfection processes and have the advantage of providing higher quality water with better taste.

FILTRATION: Water is passed through deep filtration beds to produce water that is crystal clear. Extremely small particles are removed during this process. San Diego's water treatment plants produce water with turbidity (cloudiness) significantly better than drinking water standards, indicating a highly effective treatment process and resulting in high-quality drinking water.

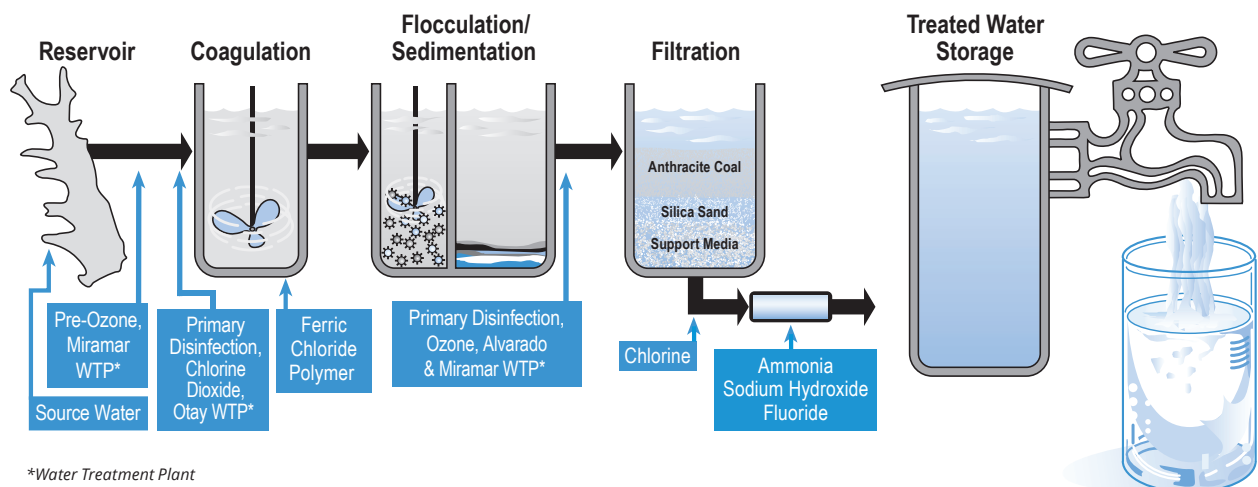
DISINFECTION, SECONDARY: Chloramines are created by adding chlorine and ammonia to the water. Chloramines help prevent microbial contamination from occurring in the water distribution system, the series of pipes that deliver water from the treatment plants to homes and businesses.

CORROSION CONTROL: The corrosivity of the water is controlled by adjusting the pH.

NOTICE OF VIOLATIONS:

In 2023, the State Water Board determined that the City had not fully implemented a cross-connection control program in compliance with California Code of Regulations (CCR), Title 17, Sections 7584(c) and 7604. Specifically, 11,543 services required a survey to identify whether a backflow protection device is required to be installed.

The City will continue working with customers and developers to ensure that appropriate backflow protection devices are installed according to City standards. To date, a total of 6,385 services have been surveyed and determined not to require backflow protection or have had backflow prevention devices successfully installed, and in 2025, the City achieved its first compliance milestone, completing 45% of required surveys 2 years ahead of schedule.



*Water Treatment Plant

WATER QUALITY REPORT CARD

**This Water Quality Report Card shows the state of your water.
This year, our water met all federal and state standards.**

Potential Contaminants	Microbes Microscopic organisms such as Coliform bacteria, Giardia and Cryptosporidium	Copper and Lead	Disinfection byproducts formed during the disinfection of drinking water - trihalomethanes and haloacetic acids	Turbidity – cloudiness of water from suspended particles in the water	Fluoride
Why We Test for It	Can make people sick after drinking several glasses	High levels can cause health issues over an extended period of time	High levels can cause health issues over an extended period of time	Less turbid water indicates high water quality	High levels can cause marks on teeth over an extended period of time
Likely Source	Naturally present in the environment or from animals or human activity	Corrosion of indoor plumbing	Water disinfection process	Soil Runoff	Erosion of natural deposits and mandated water additive for dental health
Your Water Source	Surpasses state and federal water quality requirements	Surpasses state and federal water quality requirements	Surpasses state and federal water quality requirements	Surpasses state and federal water quality requirements	At the optimal CDC recommended level



The U.S. Environmental Protection Agency’s Lead and Copper Rule Revisions (LCRR) require the City to identify the pipe material of the customer-owned service lines between the water meter and your home or business and the City-owned service line to the water main to determine if lead is present. The City has completed its initial inventory, which did not identify any lead in the system, and has completed additional verifications that are required under the LCRR. If you would like more information, please visit sandiego.gov/service-line-inventory.





City Makes Progress with Pure Water Projects



Work continues to progress on Pure Water San Diego, the City's advanced water purification program that will provide San Diego with a reliable, locally controlled water supply and significantly reduce treated wastewater discharges to the Pacific Ocean. With construction on Phase 1 now nearly 90% complete, the commissioning process will soon kick off, and the project is expected to begin delivering purified drinking water early next year. As construction on the City's largest infrastructure project wraps up, Public Utilities staff and contractors are working closely with communities to minimize impacts as much as possible in Morena, Bay Park, Clairemont, University City, Miramar and Scripps Ranch.

The Pure Water program offers a cost-effective investment for San Diego's water and wastewater needs. Pure Water will be essential to our quality of life in San Diego today and for generations to come.

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 and some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/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 EPA Safe Drinking Water Hotline ([1-800-426-4791](tel:1-800-426-4791)).

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 EPA Safe Drinking Water Hotline at 1-800-426-4791. For detailed information on drinking water regulations, visit the California Division of Drinking Water (DDW) website at: waterboards.ca.gov/drinking_water

CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium and *Giardia* are microbial contaminants that are naturally present in the environment and found in surface water throughout the United States. Disinfection and filtration are highly effective in removing these contaminants; however, the disinfection and filtration methods cannot guarantee 100% removal. During calendar year 2025, the water supply to each of the City's water treatment plants was monitored for *Cryptosporidium* and *Giardia*, and neither was detected.

HOW TO READ THE TABLES

The tables on the following pages list parameters that DDW requires the City to monitor, which may be associated with primary (health), secondary (aesthetic) or no established standards. These tables summarize monitoring from January through December 2025. The tables list all parameters that were detected at or above DDW's Detection Limit for Purposes of Reporting (DLR). The map on page 2 of this report can be used to determine the treatment plant or plants that supply water to your residence. Less than 10% of San Diego's total water use comes from purchased treated water, which is a blend of water treated at the Metropolitan Water District's Skinner Water Treatment Plant, the San Diego County Water Authority's Twin Oaks Valley Water Treatment Plant and the Carlsbad Desalination Plant.



Definition of Terms:

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

DLR (Detection Limit for Reporting): The lowest level of a contaminant that a lab can reliably measure and report, ensuring accurate and consistent reporting of contaminant levels in water samples.

Location-based Running Annual Average (LRAA): The average of the most recent four quarters of monitoring performed at a distinct location in the distribution system. Location-based Running Annual Averages are calculated quarterly using 12 months of data and may include values obtained in 2023.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary Maximum Contaminant Levels are set as close to the Public Health Goals or Maximum Contaminant Level Goals as is economically and technologically feasible.

Secondary Maximum Contaminant Levels 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 health risk. Maximum Contaminant Level Goals 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. Maximum Residual Disinfectant Level Goals do not reflect the benefits of the use of disinfectants to control microbial contaminants.

MRL (Minimum Reporting Limit): The lowest concentration of a chemical that

a laboratory can reliably measure and report for a specific analytical method.

Notification Level (NL): Health-based advisory levels established by the Division of Drinking Water for chemicals in drinking water that lack Maximum Contaminant Levels. When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Public Health Goal (PHG): The level of a contaminant in drinking water that does not pose a significant risk to health. Public Health Goals are not regulatory standards.

Primary Drinking Water Standard (PDWS): Maximum Contaminant Levels, Maximum Residual Disinfection Levels and treatment techniques for contaminants that affect health, along with their monitoring and reporting requirements.

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

Abbreviations

A: absent

CA SMCL: California Secondary Maximum Contaminant Level

CU: color units

DLR: detection limit for reporting

gr/Gal: grains per gallon

MDL: City of San Diego Water Quality Laboratory Method Detection Limit – the lowest quantifiable concentration of a measured parameter detectable by the laboratory.

mL: milliliter

n/a: not applicable

ND: not detected (less than DLR, where applicable)

NTU: nephelometric turbidity units

OU: odor units

pCi/L: picocuries per liter (a measure of radiation)

pH: potential of hydrogen. pH is a measure of how acidic or basic water is. The range goes from 0 – 14, with 7 being neutral. pHs of less than 7 indicate acidity, whereas pHs greater than 7 are basic.

ppb: parts per billion or micrograms per liter ($\mu\text{g/L}$) – [1 ppb = 0.001 ppm]

ppm: parts per million or milligrams per liter (mg/L) – [1 ppm = 1,000 ppb]

ppt: parts per trillion or nanograms per liter (ng/L) - [1 ppt = 0.001 ppb]

$\mu\text{S/cm}$: micro-siemens/centimeter

< less than

> greater than

ENVIRONMENTAL MONITORING AND TECHNICAL SERVICES CONSUMER CONFIDENCE REPORT DATA - 2025

PRIMARY STANDARDS (Mandatory Health Related Standards)

CHEMICAL PARAMETERS	UNITS	MCL	PHG	DLR	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER		MAJOR SOURCES IN DRINKING WATER
					ALVARADO		MIRAMAR		OTAY		AVG.	RANGE	
					AVG.	RANGE	AVG.	RANGE	AVG.	RANGE			
Aluminum	ppm	1	0.6	0.05	ND	ND - ND	ND	ND - ND	ND	ND - ND	0.02	ND - 0.1	Erosion of natural deposits; residue from some surface water treatment processes.
Barium	ppm	1	2	0.1	ND	ND - ND	0.1	ND - 0.1	ND	ND - ND	0.1	ND - 0.1	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.
Hexavalent Chromium	ppb	10	0.02	0.1	ND	ND - ND	ND	ND - ND	ND	ND - ND	0.1	ND - 0.4	Transformation of naturally occurring trivalent chromium to hexavalent chromium by natural and human processes.
Fluoride (naturally occurring)	ppm	2	1	0.1	0.2	0.2 - 0.3	0.2	0.2 - 0.3	0.3	0.2 - 0.4	0.5	0.2 - 0.9	Erosion of natural deposits
Fluoride (treatment-related) ^A	ppm	2	1	0.1	0.8	0.6 - 0.9	0.7	0.6 - 0.8	0.6	0.2 - 0.7	0.7	0.2 - 0.9	Erosion of natural deposits; water additive that promotes strong teeth
Nitrate (as N)	ppm	10	10	0.4	ND	ND - ND	ND	ND - ND	ND	ND - 0.4	ND	ND - 0.5	Erosion of natural deposits; runoff and leaching from fertilizer use

^A Optimal Fluoride Level as established by US Dept. of Health and Human Services and the State Water Resources Control Board is 0.7 ppm.

Primary standards (MCLs) are developed for the purpose of protecting the public from possible health risks associated with long-term exposure to contaminants. In this table there are five primary standards listed, which means that of the many primary standards set by DDW and the EPA, only these were detected at or above the DLR in San Diego's drinking water. These results are significantly below their respective MCLs. In general, no health hazard is expected to exist when contaminant levels are below a Primary MCL. A list of the parameters which were analyzed for, but not detected, in San Diego's drinking water is posted at sandiego.gov/public-utilities/water-quality/water-quality-reports.

California state law requires water agencies with more than 10,000 water service connections to supplement naturally-occurring fluoride in their drinking water. Our water system complies with this requirement to help prevent dental cavities in consumers. In 2025, the City of San Diego's source waters contained naturally-occurring fluoride between 0.2 and 0.4 ppm. State regulations require water producers to supplement this naturally-occurring fluoride to an optimum dose of 0.7 ppm. In 2025 treated water had fluoride concentrations ranging from 0.2 to 0.9 ppm, with an average value of 0.7 ppm. Information about fluoridation, oral health, and current issues is available at cdc.gov/fluoridation/index.html.

RADIOACTIVE PARAMETERS	UNITS	MCL	PHG (MCLG)	DLR	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER		MAJOR SOURCES IN DRINKING WATER
					ALVARADO		MIRAMAR ^c		OTAY ^c		AVG.	RANGE	
					AVG.	RANGE	AVG.	RANGE	AVG.	RANGE			
Gross Alpha Particle Activity	pCi/L	15	(0)	3	4.4	Single Sample	ND	Single Sample	ND	Single Sample	ND	ND - 4	Erosion of natural deposits
Gross Beta Particle Activity	pCi/L	50 ^b	(0)	4	5.1	Single Sample	5.0	Single Sample	4.5	Single Sample	1	ND - 5	Decay of natural and man-made deposits
Radium 226	pCi/L	N/A	0.05	1	ND	Single Sample	ND	Single Sample	ND	Single Sample	ND	ND - ND	
Radium 228	pCi/L	N/A	0.019	1	ND	Single Sample	ND	Single Sample	ND	Single Sample	ND	ND - ND	Erosion of natural deposits
Uranium	pCi/L	20	0.43	1	2.2	Single Sample	2.1	Single Sample	1.3	Single Sample	1	ND - 3	Erosion of natural deposits

^b The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles.

^c Miramar and Otay data from 2024 required by EPA regulations (40 CFR 141) on a six-year monitoring cycle.

As water travels over the surface of the land or in underground aquifers, it dissolves naturally-occurring minerals and, in some cases, radioactive material. Radioactive materials can be naturally-occurring or a result of oil and gas mining activities. The results in the table above are presented in units of picocuries per liter (pCi/L), a standard measurement that represents an amount of radiation per liter of water. San Diego's drinking water is substantially lower than the MCL for all radioactive parameters.

MICROBIOLOGICAL	UNITS	MCL	MCLG	DLR	CITY OF SAN DIEGO DISTRIBUTION SYSTEM		MAJOR SOURCES IN DRINKING WATER
					AVERAGE ^b	RANGE ^b	
Total Coliform Bacteria	% Positive	5%	0	N/A	0.13%	0 - 0.56%	Naturally present in the environment
E. Coli (State Revised Total Coliform Rule)	Number	0	0	N/A	0	0	Human and animal fecal waste

^b Based on Monthly Percentages of Positive Total Coliform samples for a system collecting at least 40 samples per month.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2021. These revisions added the requirements of the federal Revised Total Coliform Rule, effective since April 1, 2016, to the existing state Total Coliform Rule. The revised 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 U.S. EPA anticipates greater public health protection as the 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. The state Revised Total Coliform Rule became effective July 1, 2021.

DDW regulations require the City to test a minimum of 330 samples per month throughout our distribution

system for total coliform bacteria, and to report the results, including the percentage of total coliform positive samples in a given month. To meet this requirement, in 2025 the City of San Diego collected and analyzed 6917 total coliform samples from the distribution system, an average of 133 per week. The test also examines the presence of E. coli, which is a subgroup of total coliform. The MCL for E. coli is 0 positive samples and for total coliform is the presence of coliform in 5 percent or more of the samples analyzed in one month, meaning that if 100 samples are collected in March for example, and five contain total coliform, a violation of the MCL has occurred. The regulations are written as a percentage of monthly samples because multiple variables can cause a positive result, including localized contamination at the sampling tap. In 2025, the City did not exceed the monthly MCL for total coliform or E. coli. The maximum value recorded in 2025 was 0.56 percent of monthly samples. When any sample tests positive for total coliform or E. coli, additional samples associated with that site are collected and the cause of the positive result is investigated.

TURBIDITY	UNITS	MCL	PHG	DLR	CITY OF SAN DIEGO TREATMENT PLANTS			PURCHASED TREATED WATER	MAJOR SOURCES IN DRINKING WATER
					ALVARADO	MIRAMAR	OTAY		
Turbidity	NTU	TT = 1 NTU	N/A	N/A	Max Level Found = 0.13	Max Level Found = 0.10	Max Level Found = 0.14	Max Level Found = 0.07	Soil Runoff
		TT = 95% of samples ≤ 0.3 NTU			100% of samples ≤ 0.3	100% of samples ≤ 0.3	100% of samples ≤ 0.3	100% of samples ≤ 0.3	

Turbidity is a measure of the cloudiness of the water and is regulated as a Treatment Technique (TT)—an indicator of the effectiveness of our treatment. The City's three water treatment plants (WTPs) monitor turbidity every 15 minutes to ensure consistent, high-quality drinking water production for our customers. TT performance goals established by DDW state that all samples should have turbidity less than 1 NTU, and 95% of the samples should have turbidity less than 0.3 NTU. All three of our treatment plants had 100% of turbidity values less than 0.3 NTU; the maximum values measured in 2025 were 0.13 NTU for Alvarado WTP, 0.10 NTU for Miramar WTP and 0.14 for Otay WTP. These consistent and very low turbidity results have led to our treatment plants

receiving performance awards. For example:

- The Otay WTP has been awarded the Director's Award from the American Water Works Association (AWWA) Partnership for Safe Water (PSW) Program for sixteen consecutive years.
- The Miramar WTP has received the Director's Award for eleven years and the President's Award for eleven consecutive years.
- The Alvarado WTP was awarded the Partnership for Safe Water Directors Award this year.

LEAD AND COPPER STUDY E	UNITS	ACTION LEVEL	PHG	DLR	SAMPLES TAKEN FROM CUSTOMER TAPS					NUMBER OF SCHOOLS SAMPLED FOR LEAD	MAJOR SOURCES IN DRINKING WATER
					90th PERCENTILE CONCENTRATION	SAMPLING SITES	RANGE OF TAP RESULTS	NUMBER EXCEEDING AL	VIOLATION		
Copper	ppm	1.3	0.3	0.05	0.6	56	ND - 0.006	1	NO	281 ^F	Internal corrosion of household plumbing systems
Lead	ppb	15	0.2	5	ND	56	ND - 1.4	0	NO		Internal corrosion of household plumbing systems

In addition to the EPA Lead and Copper study and schools sampling, the City of San Diego analyzed 72 samples from our three drinking water treatment plants in 2025. All results were below the DLR.

^E Lead and Copper Rule Monitoring mandated every three years. Most recent monitoring conducted in 2023. ^F Represents total number of schools sampled in 2017, 2018, and 2019.

Lead and Copper were Non-Detectable above the State DLR in the water produced at San Diego's water treatment plants. However, lead and copper can enter drinking water through plumbing materials used in homes or businesses. Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage. In 1991, the EPA published the Lead and Copper Rule (LCR) which, along with corrosion control and other treatment practices, requires monitoring of lead and copper at customer taps. The purpose of the LCR residential sampling is to assess the potential of lead and copper to leach into drinking water from the plumbing installed between the water meter and the tap in homes and businesses. If 90th percentile lead concentrations at customer taps exceed an Action Level (AL) of 15 ppb or copper concentrations exceed an AL of 1.3 ppm in more than 10% of taps sampled, we are required to inform the public and undertake a number of additional actions to ensure comprehensive corrosion control.

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 City of San Diego is responsible for providing high quality drinking water but cannot control the variety of materials used in home premise plumbing components. If you suspect that you may have elevated levels of lead in your drinking water, there are several steps you can take to reduce your risk. 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; Using cold water is recommended. You should also regularly clean your sink's aerators. Filters

are also available, but make sure that it is certified to remove lead and you replace it at the recommended intervals. 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 at 1-800-426-4791 or at <http://www.epa.gov/lead>.

According to current regulations, Lead and Copper Rule monitoring must be conducted every three years. In 2023, 56 customers provided samples from their taps to the City of San Diego for lead and copper analysis. None of the residences had a lead result above the AL, and only one residence had a copper level above the AL. Because less than 10% of our results were above the AL for both lead and copper, our water is considered non-corrosive, and no additional actions are required. Our next system-wide study will take place in 2026. Select eligible homes will be contacted for participation.

In 2017, DDW issued a Permit Amendment requiring water utilities to sample for lead in the drinking water of any school requesting testing. Additionally, Assembly Bill 746 was signed into law in October 2017, requiring California water providers to conduct lead testing at public K-12 schools within their service area to determine if lead is present in the school's private plumbing or water fixtures. The table lists the total number of schools the Public Utilities Department tested under these programs. To obtain testing results from individual schools, please contact the school directly or visit the district website.

Detected Disinfection Byproducts, Disinfectant Residual and Disinfection Byproduct Precursors

	UNITS	MCL	PHG	DLR	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER		MAJOR SOURCES IN DRINKING WATER
					ALVARADO		MIRAMAR		OTAY		AVG.	RANGE	
					AVG.	RANGE	AVG.	RANGE	AVG.	RANGE			
Bromate ^G	ppb	10	0.1	5.0/1.0 ^I	ND	ND-8.8	ND	ND - ND	N/A	N/A	3.4	ND - 13	Byproduct of drinking water disinfection
Chlorate ^H	ppb	NL=800 PPB		20	N/A	N/A	N/A	N/A	206	81.7 - 981	152	ND - 460	Byproduct of drinking water disinfection
Chlorite ^H	ppm	1.0	0.05	0.02	N/A	N/A	N/A	N/A	0.33	0.028 - 0.68	N/A	N/A	Byproduct of drinking water disinfection
Total Organic Carbon (TOC)	ppm	TT	N/A	(0.7)	2.9	2.4 - 3.5	2.4	2.0 - 2.8	4.3	3.1 - 6.1	2.4 ^J	1.8 - 2.8	Various natural and manmade sources; Precursor for the formation of disinfection byproducts

^G Required for Alvarado, Miramar, and Purchased Treated Water; compliance is determined by the quarterly Running Annual Average (RAA);

^H Required for Otay; ^I City of San Diego DLR= 5, Purchased Treated Water DLR = 1; ^J Highest Running Annual Average

	UNITS	MCL [MRDL]	PHG [MRDLG]	DLR (MDL)	CITY OF SAN DIEGO DISTRIBUTION SYSTEM			MAJOR SOURCES IN DRINKING WATER
Disinfectant Residual (Chloramines as Cl ₂)	ppm	[4.0] ^L	[4]	(0.1)	Distribution system average = 1.75	Range = ND - 3.80	N/A	Drinking water disinfectant added for treatment
Chlorite ^K	ppm	1.0	0.05	0.020	Distribution system average = 0.31	Range = 0.11 - 0.49	N/A	Byproduct of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	60 ^L	N/A	N/A	Maximum LRAA = 15	Range = 1.3 - 21.2	Violation - NO	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM's)	ppb	80 ^M	N/A	N/A	Maximum LRAA = 55	Range = 8.6 - 87.0	Violation - NO	Byproduct of drinking water chlorination

^K Chlorite monitoring required only in the Southern section of the distribution system. ^L Compliance is determined by the distribution system average.

^M Total Trihalomethane and HAA5 compliance is based on quarterly Locational Running Annual Averages (LRAA).

Drinking water is disinfected to inactivate potentially harmful microorganisms. Water utilities across the United States use a variety of disinfection strategies, and San Diego employs some of the more advanced treatment technologies available. The City's treatment plants use combinations of ozone or chlorine dioxide followed by chloramines to provide effective disinfection while maintaining water quality throughout the distribution system.

All disinfection methods have the potential to form byproducts, which are carefully monitored and regulated. At the Alvarado and Miramar Water Treatment Plants, ozone is used as the primary disinfectant followed by chloramines. Ozone is highly effective and typically produces fewer disinfection byproducts than chlorine or chloramines alone; however, it can form bromate, which is monitored as a regulated disinfection byproduct. Compliance with the U.S. Environmental Protection Agency's Stage 2 Disinfection Byproduct (DBP) Rule is based on the running annual average (RAA) of results collected at each treatment plant effluent location. The maximum contaminant level (MCL) for bromate is 10 parts per billion (ppb), expressed as an RAA. In 2024-2025, the highest RAA for bromate (calculated quarterly) was below the DLR, and individual sample results ranged from non-detect to 8.8 ppb.

At the Otay Water Treatment Plant, chlorine dioxide is used as the primary disinfectant, followed by chloramines. This treatment process can form chlorite and chlorate, which are monitored in the plant effluent and distribution system. All 2025 chlorite results were below the chlorite MCL. Chlorate does not have an MCL but does have a California Notification Level (NL) of 800 ppb. One initial chlorate sample result was above the NL; however, the confirmation sample was lower, and the average of the initial and confirmation sample results did not exceed the NL. The range shown in the table includes all results from samples collected in 2025. This includes the individual initial sample result above the NL and confirmation sample result. Additional daily chlorate monitoring was conducted for the remainder of 2025, and no results exceeded the NL.

Total Organic Carbon (TOC) does not have a direct health-based standard but is monitored because it indicates the potential for disinfection byproduct formation.

Another category of disinfection byproducts that the EPA and DDW regulate are Total Trihalomethanes (THMs) and Haloacetic Acids (HAA5). Compliance with EPA's Stage 2 Disinfection By-Product (DBP) rule is based on the RAA at each location monitored in the distribution system. The MCL for THMs is a Locational Running Annual Average (LRAA) of 80 ppb, and the MCL for HAA5 is an LRAA of 60 ppb. In 2025, our highest LRAA for TTHM was 55 ppb, and individual measurements ranged from 8.6 - 87.0 ppb. For HAA5, our highest LRAA was 15 ppb, and individual measurements ranged from 1.3 to 21.2 ppb. The City has had no violations of the EPA Stage 1 and Stage 2 DBP MCLs since the program was formalized in 2002.

As drinking water travels from the City's WTPs through the distribution system to homes and businesses, a disinfectant residual must be maintained in order to prevent growth of potentially harmful microbes. In San Diego, chloramines are used for this purpose. The City performs frequent and comprehensive monitoring to ensure that disinfectant levels remain in the proper range throughout our large and complex distribution system. The Maximum Residual Disinfectant Level (MRDL) is 4.0 ppm. In 2025 the City analyzed 7691 samples for chloramines throughout the distribution system; the average residual was 1.75 the range was ND to 3.80 ppm.

SECONDARY STANDARDS (Aesthetics Standards)

	UNITS	CA SMCL	DLR (MDL)	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER		MAJOR SOURCES IN DRINKING WATER
				ALVARADO		MIRAMAR		OTAY		AVG.	RANGE	
				AVG.	RANGE	AVG.	RANGE	AVG.	RANGE			
Aluminum	ppb	200	50	ND	ND - ND	ND	ND - ND	ND	ND - ND	19	ND - 120	Erosion of natural deposits; residue from some surface water treatment processes
Chloride	ppm	500	(4)	94.9	80.0 - 104	90.2	80.8 - 99.8	156	121 - 204	87	59.0 - 110	Runoff/leaching from natural deposits; seawater influence
Color	CU	15	(1)	ND	ND - 5	ND	ND - ND	1	ND - 3	ND	ND - 1	Naturally - occurring organic materials
Manganese	ppb	50	(5)	ND	ND - 14.3	ND	ND - ND	ND	ND - ND	ND	ND - ND	Leaching from natural deposits
Odor - Threshold	OU	3	(1)	1	1 - 1	ND	ND - ND	ND	ND - 2	ND	ND - ND	Naturally - occurring organic materials
Specific Conductance	µS/cm @ 25°C	1,600	N/A	875	752 - 964	833	753 - 985	968	768 - 1,140	706	235 - 847	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	(4)	154	100 - 187	162	124 - 215	117	84.6 - 151	109	12.0 - 171	Runoff/leaching from natural deposits; industrial wastes
Total Filterable Residue (TDS)	ppm	1,000	(10)	532	434 - 590	533	474 - 611	585	508 - 634	361	105 - 513	Runoff/leaching from natural deposits

Secondary standards (Secondary MCLs) are set to protect the odor, taste, and appearance of drinking water. If present at or above the Secondary MCL, these parameters may cause the water to appear cloudy or colored, cause staining of household plumbing fixtures, or to have a different or unusual taste or odor. These parameters are not considered to present a risk to human health at or above Secondary MCL levels. All measurements of Secondary Standards were at or below the Secondary MCL in 2025.

OTHER PARAMETERS THAT MAY BE OF INTEREST

	UNITS	MCL	PHG	MDL	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER	
					ALVARADO		MIRAMAR		OTAY		AVG.	RANGE
					AVG.	RANGE	AVG.	RANGE	AVG.	RANGE		
Sodium	ppm	N/A	N/A	0.5	87.8	73.1 - 102	86.2	76.6 - 98.4	111	92.5 - 136	71.2	47.8 - 87.0
Total Hardness	ppm	N/A	N/A	10	237	203 - 270	242	200 - 285	243	201 - 271	145	54.4 - 232
Total Hardness	gr/Gal	N/A	N/A	0.6	13.8	11.9 - 15.8	14.1	11.7 - 16.6	14.2	11.7 - 15.8	8.5	3.18 - 13.6
Alkalinity - Total as CaCO ₃	ppm	N/A	N/A	5	119	108 - 130	110	95.6 - 126	121	83.3 - 155	96.0	46.0 - 120
pH	SU	N/A	N/A	N/A	8.29	7.66 - 8.58	8.27	7.74 - 8.64	8.07	7.56 - 8.48	8.40	7.40 - 9.00

Water quality parameters that may be of interest to our consumers, but do not have MCLs or PHGs and are not considered to present a risk to human health, are included in the table above. Although sodium and hardness do not have MCLs, they are of interest to many consumers who are concerned about sodium intake and may believe that the hardness of the water could affect their health. Therefore, monitoring and reporting are required by DDW. Sodium refers to the salt present in the water and is generally naturally occurring. "Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. These minerals are usually naturally occurring. Alkalinity and pH are included here because they have proven to be of interest to our customers.

DETECTED UNREGULATED PARAMETERS

	UNITS	NOTIFICATION LEVEL	DLR (PHG) [CCRDL]	CITY OF SAN DIEGO TREATMENT PLANTS						PURCHASED TREATED WATER	
				ALVARADO		MIRAMAR		OTAY		AVG.	RANGE
				AVG.	RANGE	AVG.	RANGE	AVG.	RANGE		
Boron	ppm	1	N/A	0.1	0.1 - 0.1	0.1	0.1 - 0.1	0.2	0.1 - 0.2	0.4	0.1 - 0.9
Perfluorobutanoic Acid (PFBA)	ppt	N/A	[5] ^N	5.4	ND - 7.0	ND	ND	ND	ND	ND	Single Sample

^N The CCRDL is based on the US EPA UCMR 5 minimum reporting levels (MRLs) for 25 EPA 533 constituents. Reference: epa.gov/system/files/documents/2022-02/ucmr5-factsheet.pdf

UCMR5 STUDY

UCMR5 PARAMETERS ^o	UNITS	UCMR5 MRL (MDL)	CITY OF SAN DIEGO TREATMENT PLANTS						CITY OF SAN DIEGO DISTRIBUTION SYSTEM	
			ALVARADO		MIRAMAR		OTAY		MAX LRAA	RANGE
			AVG.	RANGE	AVG.	RANGE	AVG.	RANGE		
Lithium	ppb	9	32.8	25.0 - 42.0	49.5	33.0 - 65.0	38.8	25.0 - 60.0	N/A	N/A

^o UCMR5 samples were collected in 2023.

The parameters listed in the Detected Unregulated Parameters section are not regulated by DDW or the EPA, and monitoring is not currently required. Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated. Boron and N-Nitrosodimethylamine (NDMA) have been issued Notification Levels (NL) by DDW. If detected above the NL, customers must be notified of the presence of these parameters. The results presented here are significantly lower than the NL. As part of the 1996 Safe Drinking Water Act (SDWA) amendments, every five years EPA selects from the Contaminant Candidate List (CCL) up to 30 unregulated contaminants to be monitored by public water systems as part of the Unregulated Contaminant Monitoring Rule (UCMR) program. The CCL is a list of contaminants that are not regulated but are known or anticipated to occur in public water systems and may warrant future regulation under the Safe Drinking Water Act. The results of UCMR studies provide a basis for future regulatory actions to protect public health. The City of San Diego conducted UCMR5 sampling in 2023.

In 2023, San Diego's drinking water was tested for 30 unregulated contaminants during the UCMR5 study. 29 per- and polyfluoroalkyl substances (PFAS) compounds were analyzed by the PUD Water Quality Laboratory, which received special approval by the EPA to conduct the UCMR5 PFAS analysis. Additionally, an EPA-approved contract laboratory conducted testing for lithium for the UCMR5 study. Of these 30 parameters, 29 were not detected above the EPA's UCMR5 minimum reporting level (MRL), and one was detected – lithium.

How to Get Involved:

Water quality policies are decided at San Diego City Council meetings at the City Administration Building, 202 C St., 12th floor. Calendar and agendas for City Council and committee meetings can be found at sandiego.gov/citywide-agendas-minutes.



This report contains important information about your drinking water. Please contact the City of San Diego Public Utilities Department at 619-515-3500 for assistance.

Farsi, Persian

تماس بگیرییداین گزارش حاوی اطلاعات مهمی در مورد آب آشامیدنی شماست. برای دریافت اطلاعات بیشتر با City of San Diego Public Utilities Department, 619-515-3500.

French

Ce rapport contient des informations importantes concernant votre eau potable. Veuillez contacter City of San Diego Public Utilities Department à 619-515-3500 pour de plus amples informations en français.

Hmong

Tsab ntawv no muaj cov ntsiab lus tseem ceeb hais txog koj cov dej haus. Thov hu rau City of San Diego Public Utilities Department ntawm 619-515-3500 yog koj xav tau kev pab hais lus Hmoob.

Japanese

この報告書には上水道に関する重要な情報が記されております。ご質問等ございましたら、City of San Diego Public Utilities Department, 619-515-3500 まで日本語でご連絡下さい。

Korean

이 보고서는 당신의 식수에 관한 중요한 정보를 포함하고 있습니다. 한국어로 된 도움을 원하시면 City of San Diego Public Utilities Department, 619-515-3500 로 문의 하시기 바랍니다.

Mandarin (Simplified)

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 City of San Diego Public Utilities Department 以获得中文的帮助: 619-515-3500.

Russian

Этот отчет содержит важную информацию о вашей питьевой воде. Пожалуйста, свяжитесь с City of San Diego Public Utilities Department по 619-515-3500 для получения помощи на русском языке.

Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse con City of San Diego Public Utilities Department al 619-515-3500 para asistirlo en español.


Tagalog

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa City of San Diego Public Utilities Department o tumawag sa 619-515-3500 para matulungan sa wikang Tagalog.

Vietnamese

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên lạc City of San Diego Public Utilities Department tại 619-515-3500 để được trợ giúp bằng tiếng Việt.

This information is available in alternative formats upon request.

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Annual Drinking Water Quality Report

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