

ANNUAL WATER QUALITY REPORT

Reporting Year 2025



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.

Your 2026 Water Quality Report

This year's report covers drinking water quality testing and reporting for 2025. The City of San Clemente remains committed to safeguarding the water supply, and as in previous years, the water delivered to your home meets or exceeds the quality standards set 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) establish and enforce drinking water quality standards. To ensure safe drinking water, these agencies regulate the amount of substances permitted in public water systems. In addition to required testing, some regional water agencies conduct voluntary monitoring for unregulated chemicals that may pose health risks but do not yet have established drinking water standards.

Ensuring Safe Drinking Water

Water quality testing is conducted by multiple entities, including:

- Imported surface water suppliers like the Metropolitan Water District of Southern California (MWDSC), which provides treated water from the Colorado River and State Water Project.
- Local water treatment facilities operated by the City of San Clemente, which ensure proper treatment and distribution of potable water.

Regular monitoring, including for unregulated contaminants, helps federal and state agencies determine if new regulatory standards are necessary. Through comprehensive water quality compliance testing, your drinking water is continuously monitored from source to tap for regulated and unregulated constituents.

The City of San Clemente remains dedicated to transparency, safety, and the continued delivery of high-quality drinking water. This report provides valuable information about your water sources, quality testing results, and regulatory compliance, reaffirming that your tap water meets all Safe Drinking Water Act requirements. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Sources of Supply

Your drinking water is a blend of surface water imported by the MWDSC and local groundwater. MWDSC's imported water sources are the State Water Project, which draws water from the Sacramento–San Joaquin Delta, and the Colorado River. In 2025, the City's groundwater treatment plant was offline to complete a rehabilitation project to improve system reliability and performance. Groundwater was not a source of supply in 2025; therefore, no groundwater quality table is included in this year's report. Beginning in 2017, the City began to receive water from the Irvine Ranch Water District (IRWD), processed through the Baker Water Treatment Plant as an additional source to further ensure a constant water supply to its customers. Some areas in the City of San Clemente receive their drinking water from an outside water agency, including Talega (Santa Margarita Water District) and portions of north San Clemente (South Coast Water District). Please check your water bill to confirm which water agency provides your drinking water, and refer to its water quality report. You may also contact the City of San Clemente Utilities Division for clarification on whether this water quality report pertains to the drinking water being provided to your home or business.

We Invite You to Learn More About Your Water's Quality

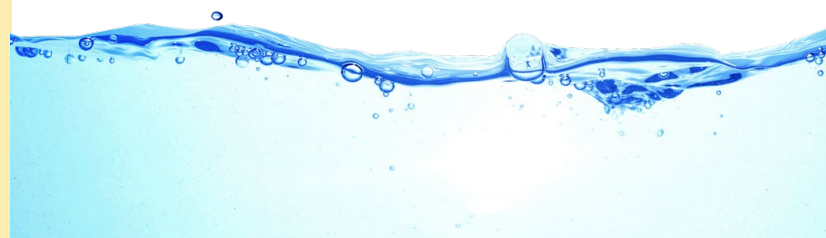
For information about this report, or your water quality in general, please contact Utilities Manager Dustin Burnside at (949) 366-1553. The City of San Clemente City Council meets at 5:30 p.m. on the first and third Tuesday of each month, and public participation is welcomed. Visit sanclemente.gov for information about the location and specific dates of City Council meetings.

Quality Water is Our Priority - Depend on Us

Turn the tap and the water flows, as if by magic. Or so it seems. The reality is considerably different, however. 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.





Groundwater Assessment

The City of San Clemente Utilities Division completed an assessment of drinking water sources for its water supply in October 2001 and again in 2008. The City's wells are considered safe, but vulnerable to the following Possible Contamination Activities (PCAs) associated with some contaminants detected in the water supply: maintenance yards, above-ground fuel tanks, a historic dump site, an electrical switching station, and a site for temporary deposition of street sweeper debris. Residences, parks, sewers, roads, and storm drains represent additional PCAs. While PCAs exist within the source water assessment area, the water sources are protected from immediate contamination threats by the confining nature of the aquifer, and the significant depth of well perforations at each water source. Copies of each water assessment are located at the City of San Clemente Utilities Division administration office, 380 Avenida Pico, Building N, San Clemente, California. You may review these water source assessments by contacting the Utilities Manager at (949) 366-1553.

Drinking Water Fluoridation

Fluoride has been added to U.S. drinking water supplies since 1945 to help prevent tooth decay. As of today, the majority of public water suppliers in the country, including the MWDSC, fluoridate their water. MWDSC began adding fluoride in December 2007, complying with all provisions of California's fluoridation system requirements. Fluoride levels in drinking water are regulated in California and limited to a maximum of 2 parts per million (ppm). Some local groundwater supplies naturally contain fluoride, but they are not supplemented with additional fluoride.

Additional Information

For more details on water fluoridation, please visit:

- **U.S. Centers for Disease Control and Prevention (CDC):** cdc.gov/fluoridation or (800) 232-4636
- **State Water Resources Control Board, Division of Drinking Water:** waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.html
- **American Dental Association:** ada.org
- **American Water Works Association:** awwa.org

For specific inquiries about MWDSC's fluoridation program, please call Edgar G. Dymally at (213) 217-5709 or edyally@mwdh2o.com.

Cross Connections

In cooperation with the DDW, the City of San Clemente Utilities Division's major goal is to ensure the distribution of a safe potable water supply to all domestic water users. For the City of San Clemente Utilities Division to achieve this goal, a Cross-Connection Control Management Plan (CCCMP) was developed with an effective date of July 1, 2025. The City of San Clemente Utilities Division's CCCMP was developed pursuant to the requirements set forth in the Cross-Connection Control Policy Handbook (CCCPC), which replaced California Administrative Code title 17, sections 7583 through 7605 and applies to all California public water systems, as defined in California's Health and Safety Code (CHSC, section 116275(h)).

Baker Water Treatment Plant (IRWD)

The Baker Water Treatment Plant receives untreated surface water from MWDSC and untreated surface water from Santiago Reservoir. The surface water assessment of Santiago Reservoir is provided by Serrano Water District, which also uses source water from Santiago Reservoir. The most recent sanitary survey for Santiago Reservoir was updated in 2025. Water supplies from Santiago Reservoir are most vulnerable to septic systems and wildfires. The Source Water Assessment for Santiago Reservoir was completed in April 2001. The assessment was conducted for the Serrano Water District by Boyle Engineering Corporation with assistance from the Serrano Water District staff. A copy of the complete assessment may be viewed at the IRWD Water Quality Department, 3512 Michelson Drive, Irvine. You may request a summary of the assessment by writing to District Secretary, Irvine Ranch Water District, 15600 Sand Canyon Avenue, Irvine, California 92618.

Want Additional Information?

There's a wealth of information on the internet about drinking water quality and water issues in general.

- **City of San Clemente:** sanclemente.gov
- **Metropolitan Water District of Southern California:** mwdh2o.com
- **State Water Resources Control Board, Division of Drinking Water:** waterboards.ca.gov/drinking_water/programs
- **Municipal Water District of Orange County:** mwdoc.com
- **U.S. EPA:** epa.gov



2025 City of San Clemente Drinking Water Quality

For more information about the health effects of the listed contaminants in the following tables, call the U.S. EPA hotline at (800) 426-4791.

2025 CITY OF SAN CLEMENTE DISTRIBUTION SYSTEM WATER QUALITY

CHEMICAL	MCL (MRDL/ MRDLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION	TYPICAL SOURCE OF CHEMICAL
Disinfection Byproducts and Disinfectant Residual					
Chlorine Residual (ppm)	(4 / 4)	1.86	0.33 - 3.11	No	Disinfectant Added for Treatment
Haloacetic Acids (ppb)	60	17	5 - 21	No	Byproducts of Chlorine Disinfection
Total Trihalomethanes (ppb)	80	41	23 - 56	No	Byproducts of Chlorine Disinfection
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
Turbidity (NTU)	5*	0.085	0.02 - 0.19	No	Erosion of Natural Deposits
Others					
Fluoride (ppm)	2	0.77	0.45 - 1.38	No	Erosion of Natural Deposits; Water Additive for Dental Health
pH (pH units)	Not Regulated	8.17	8 - 8.38	n/a	Hydrogen Ion Concentration

Four locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; twenty locations are tested monthly for color, odor and turbidity. **MRDL** = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **NTU** = nephelometric turbidity units;

*Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).

LEAD AND COPPER ACTION LEVELS AT RESIDENTIAL TAPS

	ACTION LEVEL (AL)	PUBLIC HEALTH GOAL	90TH PERCENTILE VALUE	RANGE OF DETECTIONS	SITES EXCEEDING AL / NUMBER OF SITES	AL VIOLATION?	TYPICAL SOURCE OF CHEMICAL
Copper (ppm)	1.3	0.3	0.098	ND - 0.15	0/30	No	Corrosion of Household Plumbing
Lead (ppb)	15	0.2	ND	ND	0/30	No	Corrosion of Household Plumbing

In 2025, 30 residences were tested for lead and copper at-the-tap. Lead was not detected in any of 30 samples. Copper was detected in 6 of 30 samples. None of the samples exceeded the regulatory Action Level (AL). A regulatory action level is the concentration of a chemical which, if exceeded, triggers treatment or other requirements that a water system must follow.

Source Water Assessment

Every five years, MWDSC is required by the 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—2022 Update, and the State Water Project Watershed Sanitary Survey—2021 Update. 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 utilizes 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. A copy of the most recent summary of the Watershed Sanitary Survey or the SWA can be obtained by calling MWDSC at (800) CALL-MWD or (800) 225-5693.

About Lead in Tap Water

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 Clemente Utilities Division is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Utilities Manager Dustin Burnside at (949) 366-1553. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

2025 IRVINE RANCH WATER DISTRICT BAKER WATER TREATMENT PLANT

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE OF CHEMICAL
Radiologicals - Tested in 2025						
Uranium (pCi/L)	20	0.43	1.9	1.9	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2025						
Arsenic (ppb)	10	0.004	ND	ND - 2.2	No	Erosion of Natural Deposits
Barium (ppm)	1	2	0.129	0.119 - 0.141	No	Refinery Discharge, Erosion of Natural Deposits
Fluoride (ppm)	2.0	1	0.33	0.27 - 0.37	No	Erosion of Natural Deposits; Water Additive for Dental Health
Secondary Standards* - Tested in 2025						
Chloride (ppm)	500*	n/a	109	108 - 110	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	1	ND - 3	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	1,049	1,030 - 1,068	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	219	217 - 221	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	625	560 - 682	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5*	n/a	0.25	ND - 7**	No	Soil Runoff
Unregulated Chemicals - Tested in 2025						
Alkalinity, total as CaCO ₃ (ppm)	Not Regulated	n/a	119	106 - 129	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL = 1	n/a	0.143	0.13 - 0.186	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	73	65 - 81.3	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO ₃ (ppm)	Not Regulated	n/a	293	269 - 322	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	17	16 - 19	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	26.9	26 - 28.8	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	7.6	7 - 8	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	5.4	4.9 - 6	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	101	96.9 - 106	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.9	2.9	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.

** On January 21, 2025, a higher than normal (7 NTU) grab sample result was reported. This value is inconsistent with the continuous online analyzer which showed a reading of 0.0259 NTU at the same time that the grab sample was taken. The available evidence suggests that the higher than normal grab sample was not a valid representation of the water quality produced by the plant at the time. No other result above 0.1 NTU was reported throughout the year.

IRVINE RANCH WATER DISTRICT BAKER WATER TREATMENT PLANT	TREATMENT TECHNIQUE	TURBIDITY MEASUREMENTS	TT VIOLATION?	TYPICAL SOURCE OF CHEMICAL
Turbidity - combined filter effluent				
1) Highest single turbidity measurement (NTU)	0.1	0.030	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	41 - 60	2024

2025 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TREATED SURFACE WATER

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE IN DRINKING WATER
Radiologicals - Tested in 2023 and 2025						
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND - 5	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	ND	ND - 6	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 2025						
Aluminum (ppm)	1	0.6	0.058	ND - 0.082	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.13	0.13	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	2.4	ND - 8.4	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 2025						
Aluminum (ppb)	200*	600	58	ND - 82	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	92	84 - 99	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	1	1	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	873	759 - 987	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	182	146 - 218	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	545	465 - 625	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals - Tested in 2025						
Alkalinity, total as CaCO ₃ (ppm)	Not Regulated	n/a	108	93 - 122	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL=1	n/a	0.13	0.13	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	56	44 - 68	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO ₃ (ppm)	Not Regulated	n/a	236	191 - 280	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	14	11 - 16	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	22	19 - 25	n/a	Runoff or Leaching from Natural Deposits
pH (pH units)	Not Regulated	n/a	8.3	8.2 - 8.3	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.3	3.8 - 4.8	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	88	78 - 97	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	2.4	1.6 - 2.6	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	0.05		Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU	95%	100%		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	50	41 - 60	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: 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)

If this is difficult to imagine, think about these comparisons and equivalencies:

Parts per million (ppm or mg/L):

- 3 drops of liquid in 42 gallons
- 1 second in 12 days
- 1 inch in 16 miles

Parts per billion (ppb or µg/L):

- 3 drops of liquid in 14,000 gallons
- 1 second in 32 days
- 1 inch in 16,000 miles

Parts per trillion (ppt or ng/L):

- 10 drops of liquid in a Rose Bowl sized pool
- 1 second in 32,000 days
- 1 inch in 16 million miles



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 applications, 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).

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. 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 exceeds all state and federal standards, with rigorous monitoring in place. We regularly test for DBPs and adjust treatment methods to maintain a safe balance between disinfection and by-product control.

Chloramines

Imported and locally produced drinking water is treated with chloramines, a combination of chlorine and ammonia, as a disinfectant. Chloramines effectively eliminate bacteria and other microorganisms that may cause disease. Compared to chlorine alone, chloramines last longer in the distribution system, produce fewer disinfection by-products, and have little to no odor when used properly.

Precautions

- **Kidney dialysis patients:** Individuals using kidney dialysis machines should consult their health-care provider regarding appropriate water treatment.
- **Fish and aquatic life:** Chloramines are toxic to fish and other aquatic organisms. Customers maintaining fish ponds, tanks, or aquariums should adjust water treatment methods accordingly.

For more information, visit [epa.gov/dwreginfo/chloramines-drinking-water](https://www.epa.gov/dwreginfo/chloramines-drinking-water).

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 compliance expected by 2029.

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](https://www.epa.gov/pfas)

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/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).

Lead Service Line Inventory

To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. The Non-Lead Service Line Material Designation Statement can be found at <https://www.sanclemente.gov/180/Water-Information>. Please contact us if you would like more information about the inventory or any lead sampling that has been done.



City of San Clemente Utilities Division

380 Avenida Pico, Building N • San Clemente, CA 92672

(949) 366-1553 • watersewer@san-clemente.org

www.sanclemente.gov/180/Water-Information