ANNUAL WATER QUALITY REPORT

Reporting Year 2024

Presented By

CITY OF FULLERTON
CALIFORNIA

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.

이 보고서에는 식수에 관한 중요한 정보가 포함되어 있습니다. 번역해 보세요, 아니면 이해해주는 사람이랑 얘기해봐

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Dịch nó, hoặc nói chuyện với người hiểu nó

يحتوي هذا التقرير على معلومات هامة حول مياه الشرب الخاصة بك. ترجمه، أو التحدث مع شخص يفهم ذلك

该报告包含有关您的饮用水的重要信息。翻译一下，或与理解它的人交谈

このレポートには、飲料水に関する重要な情報が含まれています。それを翻訳して、またはそれを理解している人に相談してください

Your 2025 Water Quality Report

Since 1990, California water utilities have been providing an annual Water Quality Report to their customers. This year's report covers water quality testing for 2024 and has been prepared in compliance with regulations called for in the 1996 reauthorization of the Safe Drinking Water Act (SDWA). The reauthorization charged the U.S. Environmental Protection Agency (U.S. EPA) with updating and strengthening the tap water regulatory program.

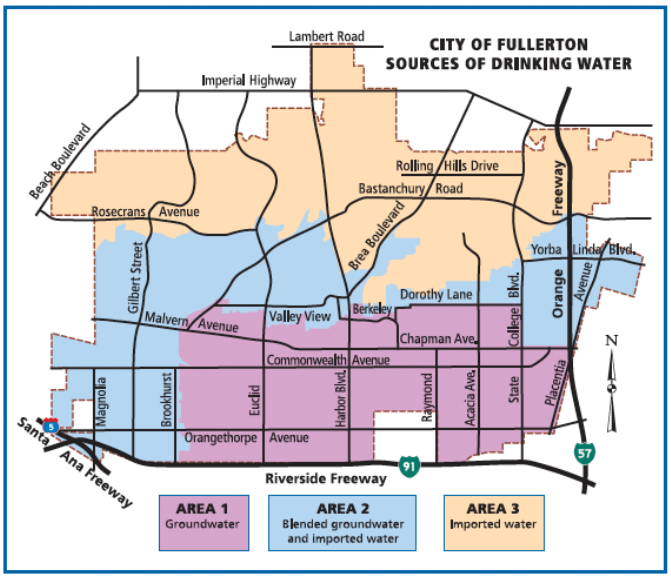
U.S. EPA and the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) are the agencies responsible for establishing drinking water quality standards. To ensure that your tap water is safe to drink, U.S. EPA and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. The federal Food and Drug Administration also sets regulations for bottled water.

The City of Fullerton vigilantly safeguards its water supply, and as in years past, the water delivered to your home meets the standards required by the state and federal regulatory agencies. In accordance with the SDWA, the City monitors over 100 compounds in your water supply. This report includes only the compounds actually detected in the water. In some cases, the City goes beyond what is required by testing for unregulated contaminants that may have known health risks. For example, the Orange County Water District (OCWD), which manages our groundwater basin, monitors our groundwater for regulated and unregulated solvents, herbicides, and pesticides. Unregulated contaminant monitoring helps U.S. EPA determine where certain contaminants occur and whether it needs to establish regulations for those contaminants. 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, is more than a year old.

Sources of Supply

Your drinking water is a blend of primarily groundwater from the Orange County groundwater basin and also surface water imported by the Metropolitan Water District of Southern California (MWDSC). MWDSC's imported water sources are the State Water Project from Northern California and the Colorado River Aqueduct. Your groundwater comes from a natural underground reservoir that stretches from the Prado Dam across the northwestern portion of Orange County, excluding the communities of Brea and La Habra, and stretching as far south as the El Toro Y.

The area map presented here will help you determine which source of water you are most likely to receive. Area 1 receives primarily groundwater and Area 3 imported water. Area 2 receives a mix of groundwater and imported water. Fullerton's water system was built with maximum flexibility. We have eight active wells located in the southern portion of Fullerton and north Anaheim and seven active imported water connections. This means that under emergency, drought, or other unusual conditions, the source of water for any area may change. The area map reflects the source of water each area receives a majority of the time.



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.

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

For information about this report, or your water quality in general, please contact the City of Fullerton Water Quality Supervisor at (714) 738-2835. The city council meets on the first and third Tuesday of the month at 5:30 p.m. in Council Chambers at City Hall, 303 West Commonwealth Avenue. Please feel free to participate in these meetings.

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

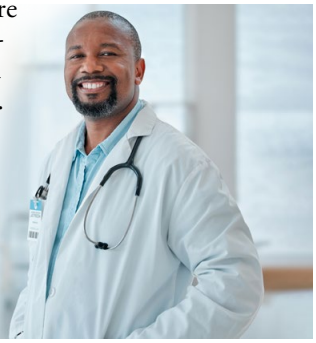
To learn more about water conservation and rebates:

- bewaterwise.com
- ocwatersmart.com

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

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

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).

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 home plumbing. City of Fullerton Water System Management 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 it is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling 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, or doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead and wish to have your water tested, contact the City of Fullerton Water Quality Supervisor at (714) 738-2835. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

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. Please visit epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule to learn more. For more information about Fullerton's service line inventory, please visit cityoffullerton.com/government/departments/public-works/water-system/water-quality/service-line-inventory.

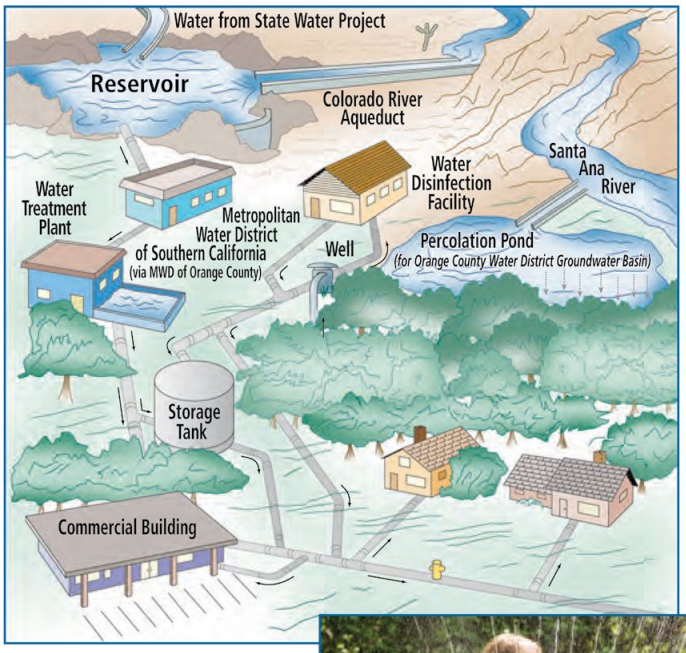
Where Does Our Water Comes From? And How Does it Get to Us?

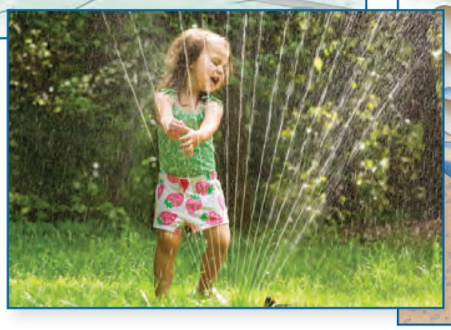
Have you ever wondered where your water comes from? Here in the City of Fullerton, our water is drawn from local groundwater supplies, then blended with water imported from Northern California and the Colorado River. Water from Northern California travels to us through a complex delivery system known 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 to flow 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.

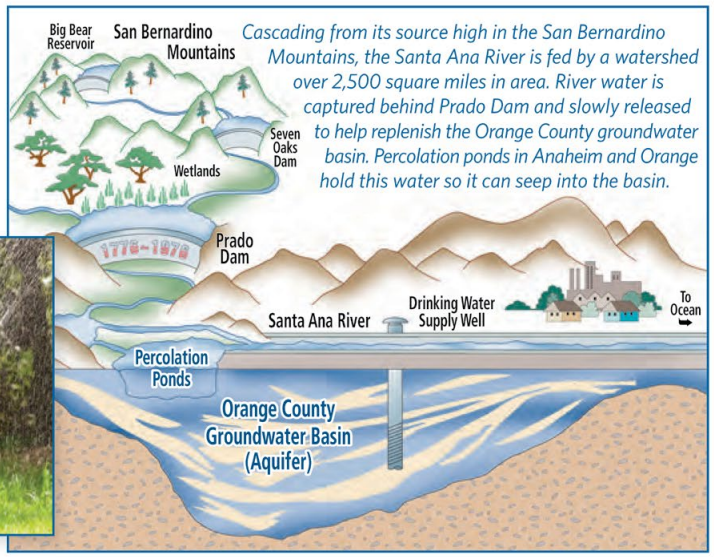




The City of Fullerton, Water System Management vigorously works to ensure the safety of your drinking water and, in conjunction with the MWDSC and OCWD, continuously monitors the water to verify adherence with drinking water regulations.

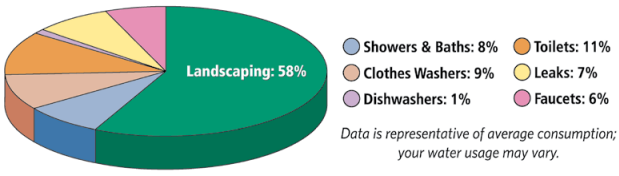
How Does Our Water Get to Us?

Importing water from hundreds of miles away is only the start to providing you clean, fresh water. Once the water is in Southern California, it is distributed to individual agencies and municipalities throughout the Southland by the MWDSC. The OCWD, which manages the groundwater basin beneath the county, ensures the quality and supply of groundwater throughout its service area. The City of Fullerton sits atop the county aquifer and draws some of its water from this local source.



Where Do We Use Water the Most?

Outdoor watering of lawns and gardens makes up approximately 60 percent of home water use. By reducing your outdoor water use by either cutting back on irrigation or planting more drought-tolerant landscaping, you can dramatically reduce your overall water use. Save the most where you use the most—make your outdoor use efficient.



Data is representative of average consumption; your water usage may vary.

Cross Connections

Effective July 1, 2024, the State Water Resources Control Board (SWRCB) implemented updates to the Cross-Connection Control Policy Handbook (CCCPH). For information regarding the City of Fullerton's Cross-Connection Control (CCC) Policy Handbook, please visit the official city website at www.cityoffullerton.com.

2024 City of Fullerton 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.

2024 CITY OF FULLERTON DISTRIBUTION SYSTEM WATER QUALITY

	MCL (MRDL/ MRDLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	42	7 - 33	No	Byproducts of Chlorine Disinfection
Haloacetic Acids (ppb)	60	15	ND - 11	No	Byproducts of Chlorine Disinfection
Chlorine Residual (ppm)	(4 / 4)	1.17	ND - 3.3	No	Disinfectant Added for Treatment
Fluoride (ppm)	2	0.6	0.41 - 0.69	No	Erosion of Natural Deposits
Aesthetic Quality					
Color (color units)	15*	0.1	ND - 2	No	Erosion of Natural Deposits
pH (pH Units)	Not Regulated	7.7	6.4 - 8.8	n/a	Acidity, Hydrogen Ions
Turbidity (ntu)	5*	ND	ND - 0.6	No	Erosion of Natural Deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids. Thirty locations are tested monthly for color, odor and turbidity. Odor was not detected in 2024.
MRDL = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal; **ntu** = nephelometric turbidity unit; **ND** = not detected;
*Contaminant is regulated by a secondary standard to maintain aesthetic qualities.

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 / 54	No	Corrosion of Household Plumbing
Copper (ppm)	1.3	0.3	0.19	0 / 54	No	Corrosion of Household Plumbing

Every three years, at least 50 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2024. Copper was found in 35 homes; none exceeded the regulatory action level (AL). Lead was not detected in any home. The regulatory action level is the concentration which, if exceeded in more than ten percent of the homes tested, triggers treatment or other requirements that a water system must follow. The City of Fullerton complies with the lead and copper ALs.

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)

2024 CITY OF FULLERTON GROUNDWATER QUALITY

CHEMICAL	MCL	PHG (MCLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	MOST RECENT SAMPLING DATE	TYPICAL SOURCE OF CONTAMINATION
Radiologicals							
Uranium (pCi/L)	20	0.43	2.8	1.3 - 6.4	No	2024	Erosion of Natural Deposits
Organic Chemicals							
Tetrachloroethylene, PCE (ppb)	5	0.06	ND	ND - 1.3	No	2024	Industrial Waste Discharge
Trichloroethylene, TCE (ppb)	5	1.7	ND	ND - 0.8	No	2024	Industrial Waste Discharge
Inorganic Chemicals							
Arsenic (ppb)	10	0.004	ND	ND - 3	No	2024	Erosion of Natural Deposits
Fluoride (ppm)	2	1	0.52	0.47 - 0.57	No	2024	Erosion of Natural Deposits
Hexavalent Chromium (ppb)	10	0.02	0.44	ND - 1.4	No	2024	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	2.2	1.2 - 5.8	No	2024	Fertilizers, Septic Tanks
Nitrate+Nitrite (ppm as N)	10	10	2.2	1.2 - 5.8	No	2024	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	1	ND	ND - 2.2	No	2024	Industrial Discharge
Selenium (ppb)	50	30	ND	ND - 10	No	2024	Erosion of Natural Deposits
Secondary Standards*							
Chloride (ppm)	500*	n/a	72	59 - 83	No	2024	Erosion of Natural Deposits
Specific Conductance (µmho/cm)	1,600*	n/a	764	625 - 1,080	No	2024	Erosion of Natural Deposits
Sulfate (ppm)	500*	n/a	131	101 - 200	No	2024	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	484	400 - 706	No	2024	Erosion of Natural Deposits
Turbidity (ntu)	5*	n/a	0.13	ND - 0.35	No	2024	Erosion of Natural Deposits
Unregulated Chemicals							
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	139	114 - 212	n/a	2024	Erosion of Natural Deposits
Bicarbonate (ppm as HCO3)	Not Regulated	n/a	168	140 - 258	n/a	2024	Erosion of Natural Deposits
Boron (ppm)	NL=1	n/a	0.18	0.15 - 0.21	n/a	2024	Erosion of Natural Deposits
Calcium (ppm)	Not Regulated	n/a	71	60 - 95	n/a	2024	Erosion of Natural Deposits
Hardness, total (grains per gallon)	Not Regulated	n/a	14	11 - 22	n/a	2024	Erosion of Natural Deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	241	195 - 375	n/a	2024	Erosion of Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	16	11 - 33	n/a	2024	Erosion of Natural Deposits
Perfluoro Butane Sulfonic Acid (ppt)	NL = 500	n/a	3.6	ND - 6.9	n/a	2024	Industrial Waste Discharge
Perfluoro Butanoic Acid (ppt)	Not Regulated	n/a	ND	ND - 6.3	n/a	2024	Industrial Waste Discharge
Perfluoro Heptanoic Acid (ppt)	Not Regulated	n/a	ND	ND - 4.5	n/a	2024	Industrial Waste Discharge
Perfluoro Hexane Sulfonic Acid (ppt)	NL = 3	n/a	3	ND - 7	n/a	2024	Industrial Waste Discharge
Perfluoro Hexanoic Acid (ppt)	Not Regulated	n/a	6.2	ND - 12	n/a	2024	Industrial Waste Discharge
Perfluoro Octane Sulfonic Acid (ppt)	NL = 6.5	1	6.4	ND - 14	n/a	2024	Industrial Waste Discharge
Perfluoro Octanoic Acid (ppt)	NL = 5.1	0.007	5.2	ND - 11	n/a	2024	Industrial Waste Discharge
Perfluoro Pentanoic Acid (ppt)	Not Regulated	n/a	7.8	ND - 13	n/a	2024	Industrial Waste Discharge
pH (pH unit)	Not Regulated	n/a	7.9	7.8 - 8	n/a	2024	Erosion of Natural Deposits
Potassium (ppm)	Not Regulated	n/a	3.8	3 - 4.1	n/a	2024	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	68	57 - 84	n/a	2024	Erosion of Natural Deposits

ppb = parts-per-billion; **ppm** = parts-per-million; **ppt** = parts-per-trillion; **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** = micromhos per centimeter; **NL** = Notification Level;

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

UNREGULATED CHEMICALS REQUIRING MONITORING

CHEMICAL	NOTIFICATION LEVEL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	4.6	ND - 22.9	2024
Perfluoro Butane Sulfonic Acid (ppt)**	NL = 500	n/a	3	ND - 6.9	2024
Perfluoro Butanoic Acid (ppt)**	n/a	n/a	ND	ND - 5.9	2024
Perfluoro Heptanoic Acid (ppt)**	n/a	n/a	ND	ND - 4.3	2024
Perfluoro Hexane Sulfonic Acid (ppt)**	NL = 3	n/a	ND	ND - 6.2	2024
Perfluoro Hexanoic Acid (ppt)**	n/a	n/a	5.7	ND - 12	2024
Perfluoro Octane Sulfonic Acid (ppt)**	NL = 6.5	1	5.2	ND - 13	2024
Perfluoro Octanoic Acid (ppt)**	NL = 5.1	0.007	4.2	ND - 11	2024
Perfluoro Pentanoic Acid (ppt)**	n/a	n/a	6.5	ND - 13	2024

** Contaminant was also included as part of the unregulated chemicals requiring monitoring.

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).

2024 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA TREATED SURFACE WATER

CONSTITUENT	MCL	PHG (MCLG)	DIEMER AVERAGE	WEYMOUTH AVERAGE	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	ND - 5	No	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/L)	50	(0)	4	ND	ND - 5	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	1	ND	ND - 3	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2024							
Aluminum (ppm)	1	0.6	ND	0.093	ND - 0.15	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	0.124	0.124	0.124	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	ND	2	ND - 9.2	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) treatment-related	2	1	0.7	0.7	0.3 - 0.8	No	Water Additive for Dental Health
Secondary Standards* - Tested in 2024							
Aluminum (ppb)	200*	600	ND	93	ND - 150	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500*	n/a	104	106	93 - 116	No	Runoff or Leaching from Natural Deposits
Color (color units)	15*	n/a	2	1	1 - 2	No	Runoff or Leaching from Natural Deposits
Odor (threshold odor number)	3*	n/a	1	ND	ND - 1	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600*	n/a	979	996	888 - 1,080	No	Substances that Form Ions in Water
Sulfate (ppm)	500*	n/a	224	225	196 - 253	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000*	n/a	621	632	556 - 690	No	Runoff or Leaching from Natural Deposits
Unregulated Chemicals - Tested in 2024							
Alkalinity, total (ppm as CaCO3)	Not Regulated	n/a	114	118	105 - 127	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	Not Regulated	n/a	0.14	0.14	0.14	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	68	68	58 - 78	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (ppm as CaCO3)	Not Regulated	n/a	270	272	235 - 305	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gal)	Not Regulated	n/a	16	16	14 - 18	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	26	26	22 - 29	n/a	Runoff or Leaching from Natural Deposits
pH (units)	Not Regulated	n/a	8.2	8.2	8.2	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	4.9	5	4.4 - 5.4	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	103	105	90 - 117	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	Not Regulated	n/a	2.4	2.4	2 - 2.6	n/a	Various Natural and Man-made Sources

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

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

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA UNREGULATED CONSTITUENTS REQUIRING MONITORING

CONSTITUENT	NL	PHG	AVERAGE AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	21	ND - 35	2023

NL = Notification Level

Source Water Assessment

Imported (MWDSC) 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—2020 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 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. A copy of the most recent summary of the Watershed Sanitary Surveys or the SWA can be obtained by calling MWD at (800) CALL-MWD (800-225-5693).

Groundwater Assessment

An assessment of the drinking water sources for the City of Fullerton was completed in May 2002. The groundwater sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: chemical/petroleum processing/storage, dry cleaners, gas stations, known contaminant plumes, metal plating/finishing/fabricating, and plastics/synthetics producers. The groundwater sources are considered most vulnerable to the following: airport maintenance/fueling areas, confirmed leaking underground storage tanks, and high-density housing. A copy of the complete assessment is available at State Water Resources Control Board, Division of Drinking Water, 605 West Santa Ana Boulevard, Building 28, Room 325, Santa Ana, CA 92701. You may request a summary of the assessment by contacting the Water Quality Supervisor, City of Fullerton, 1580 West Commonwealth Avenue, Fullerton, CA 92833-2728 or (714) 738-2835.

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.

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

Your drinking water is treated, tested, and monitored to ensure it remains safe and reliable for you and your community.

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 contact MWDSC directly at (800) 225-5693.

Cryptosporidium

Cryptosporidium is a microscopic organism that originates from animal and human waste and may be present in surface water. When ingested, it can cause diarrhea, fever, and other gastrointestinal symptoms. In 2024, the MWDSC tested for Cryptosporidium and did not detect its presence in any water after it had been treated. If Cryptosporidium is ever detected in drinking water, it is effectively removed through a combination of sedimentation, filtration, and disinfection.

The U.S. EPA and the Centers for Disease Control and Prevention (CDC) provide guidelines on how to reduce the risk of infection from Cryptosporidium and other microbial contaminants. For more information, contact the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791 or visit epa.gov/safewater.

Nitrate Advisory

Nitrate in drinking water at levels above 10 milligrams per liter (mg/L) is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health-care provider.

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
- Orange County Water District: www.ocwd.com/what-we-do/water-quality/pfas
- U.S. EPA: epa.gov/pfas

Subsequent testing detected levels at or above response levels, and the City responded by temporarily discontinuing use of sources until appropriate treatment can be installed and/or notification can be provided. As of June 2021, We brought our first PFAS treatment plant online and a second treatment plant was brought online in October of 2024

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