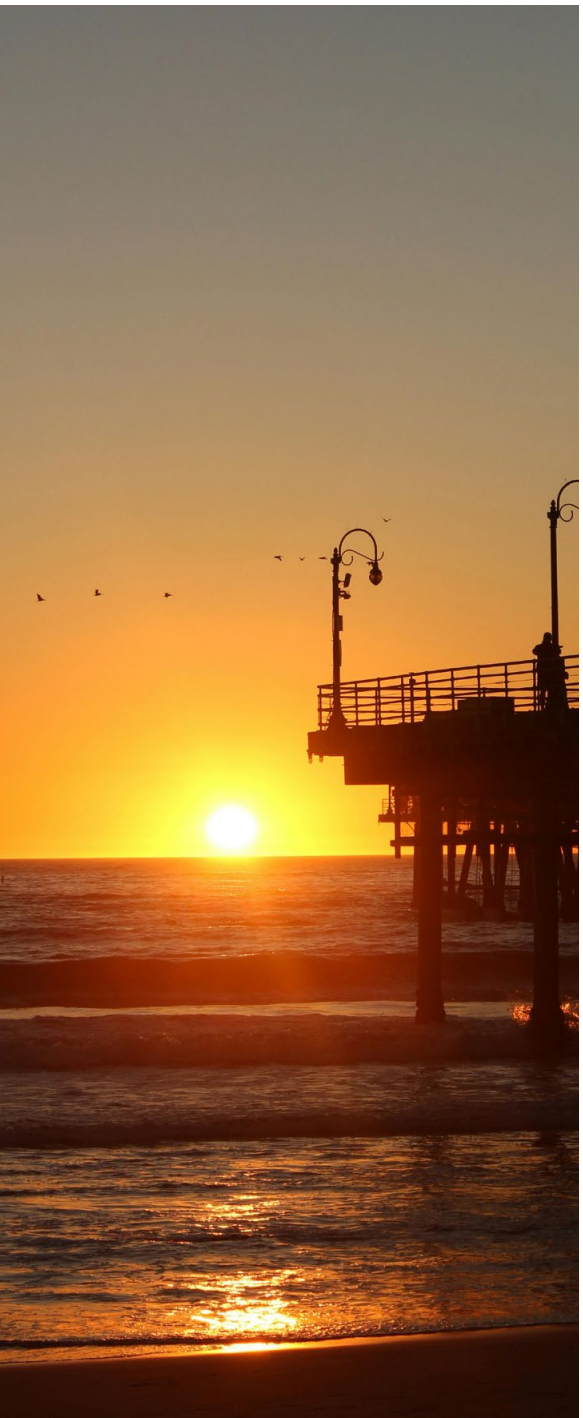
Presented by City of Huntington Beach Utilities Division

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



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 2025 Water Quality Report

Since 1990 California public and private water utilities have been providing an annual Drinking Water Quality Report to their customers. This year's report covers all drinking water quality testing performed in 2024. The City of Huntington Beach Public Works Utilities Division vigilantly safeguards your water supply, and as in years past, the water delivered to your home or business meets all drinking water quality standards required by federal and state regulatory agencies. The U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW) are the agencies responsible for establishing and enforcing drinking water quality standards in California. In some cases, the City goes beyond what is required by testing for unregulated chemicals that may have known health risks but do not have drinking water standards. In addition, the Orange County Water District (OCWD), which manages the groundwater basin, and the Metropolitan Water District of Southern California (MWDSC), which supplies treated, imported surface water to the City, also test for regulated and unregulated chemicals in our water supply. Monitoring for unregulated chemicals helps U.S. EPA and DDW determine where certain chemicals occur and whether new standards need to be established for those chemicals to protect public health. Your drinking water is constantly monitored from source to tap for regulated and unregulated constituents through drinking water quality testing programs carried out by OCWD for groundwater, MWDSC for treated, imported surface water, and the Huntington Beach Utilities Division at the City's groundwater wells, reservoirs, and distribution system. The State allows us to monitor for some chemicals less than once per year because the concentrations of these chemicals do not change frequently. Some of our data, though representative, may be more than one year old.

Sources of Supply

The City's water supply is a blend of groundwater from nine City wells and locally treated imported water originating from Northern California and the Colorado River by MWDSC via the Municipal Water District of Orange County (MWDOC) through three imported water connections. Groundwater comes from a natural underground aquifer that is replenished with water from the Santa Ana River, local rainfall, Groundwater Replenishment System (GWRS) recycled water, and imported water. The groundwater basin, which is managed by OCWD, is about 350 square miles. It lies beneath north and central Orange County, from Irvine to the Los Angeles County border and from Yorba Linda to the Pacific Ocean. More than 19 cities and retail water districts draw from the basin to provide water to homes and businesses.

In 2024 City of Huntington Beach source water consisted of 85 percent local groundwater and 15 percent imported, treated surface water. Huntington Beach also has emergency water connections with the neighboring Cities of Fountain Valley, Seal Beach, and Westminster.

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

If you have questions about this report, please contact City of Huntington Beach Water Quality at (714) 536-5921. You may also address your concerns at the regularly scheduled City Council meetings held on the first and third Tuesday of each month at 6:00 p.m. in Council Chambers, City Hall, 2000 Main Street, or at the monthly Public Works Commission meeting held on the third Wednesday of every month at 5:00 p.m. Visit huntingtonbeachca.gov/ for location. Please feel free to participate in these meetings. The City firmly believes in the public's right to know as much as possible about the quality of their drinking water. Your input and concerns are very important to us.

Source Water Assessment

Imported (MWDSC) Water Assessment

Every five years, MWDSC is required by DDW to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. The most recent surveys for MWDSC's source waters are the Colorado River Watershed Sanitary Survey – 2020 Update and the State Water Project Watershed Sanitary Survey – 2021 Update. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/storm water 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 survey. 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 (800-225-5693).

Groundwater Assessment

An assessment of the groundwater sources for Huntington Beach was completed in December 2002. The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants: dry cleaners, electrical/electronic manufacturing, gas stations, known contaminant plumes, metal plating/finishing/fabricating, military installations, and plastics/synthetics producers.

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 available to drink. Because tap water is highly regulated by state and federal laws, water treatment and distribution operators must be licensed and are required to complete on-the-job training and technical education before becoming a state-certified operator. 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 ensure optimal water quality;
- 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.

Orange County's Water Future

For years Orange County has enjoyed an abundant, seemingly endless supply of high-quality water. However, as water demand continues to increase statewide, we must be even more conscientious about our water supply and maximize the efficient use of this precious natural resource. OCWD implements and operates new and innovative water management and supply development programs, including water recycling, wetlands and recharge facility expansion, groundwater cleanup projects, storage programs, and water education programs for children and adults. The Municipal Water District of Orange County (MWDOC) offers rebates and incentives to promote water-use efficiency and provides water education programs. Both agencies work cooperatively with Orange County retail water agencies to complete studies to assess water reliability in Orange County. These efforts are helping to enhance long-term countywide water reliability and quality and a healthy water future for Orange County. Your local and regional water agencies are committed to making the necessary investments in new water management projects today to ensure an abundant and high-quality water supply for generations to come.

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 Huntington Beach Utilities Division 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 City of Huntington Beach Water Quality at (714) 536-5921. 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. The City of Huntington Beach completed the initial lead service line inventory required by U.S. EPA's Lead and Copper Rule Revisions. Through completing a historical records review and field investigations, the City of Huntington Beach has determined it has no lead or galvanized service lines requiring replacement in its distribution system. This includes any privately or customer-owned service lines. This statement may be found on huntingtonbeachca.gov/waterquality.

Important Health Information

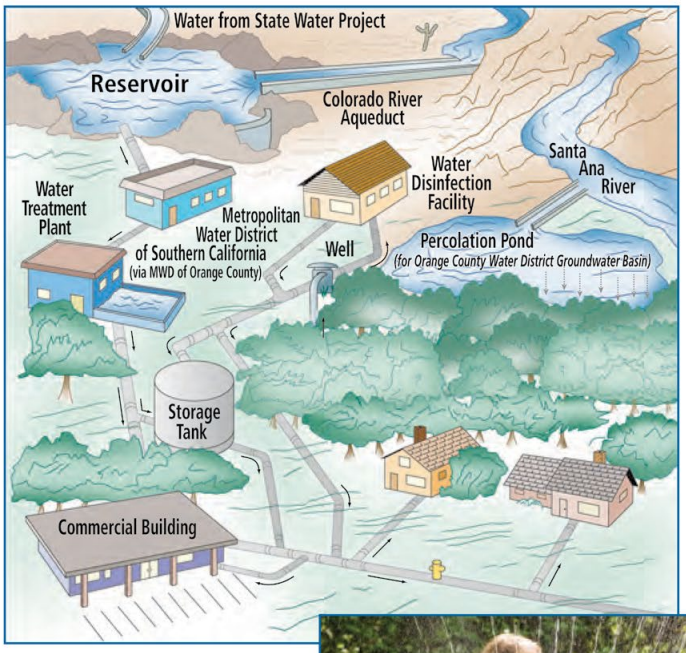
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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).

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 Huntington Beach, 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, there to flow southward to cities and farms in Central and Southern California. Composed mainly of concrete-lined canals, the aqueduct also includes over 20 miles of tunnels, more than 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?

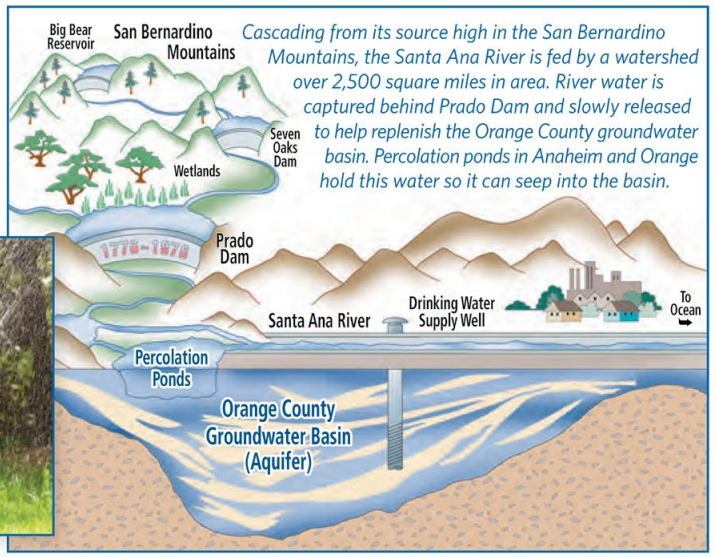
Managed by the Metropolitan Water District of Southern California (MWDSC), the Colorado River Aqueduct begins near Parker Dam on the Colorado River. There, the Gene Pumping Station lifts the water over 300 feet as it begins its 242-mile journey to Lake Mathews, just outside the City of Corona. Along 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.

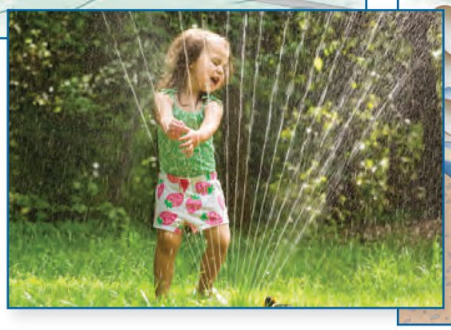
After its journey across the Mojave Desert, the water descends into the Coachella Valley and through the San Gorgonio Pass. Near Cabazon, the aqueduct flows underground, passing beneath the San Jacinto Mountains and continuing until it reaches its terminus at Lake Mathews. From there, 156 miles of distribution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



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 Huntington Beach sits atop the county aquifer and draws some of its water from this local source.

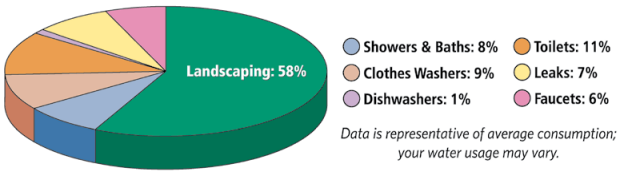




The City of Huntington Beach Utilities Division vigorously works to ensure the safety of your drinking water and, in conjunction with MWDSC and OCWD, continuously monitors the water to verify adherence with drinking water regulations.

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.



Groundwater Replenishment Systems

The Groundwater Replenishment System (GWRS) is a joint project of the OCWD and the Orange County Sanitation District. The GWRS is the world's largest water purification system for indirect potable reuse. Every day, this state-of-the-art water purification project can produce up to 130 million gallons of high-quality water that meets or exceeds all state and federal drinking water standards. This helps decrease Southern California's dependence on imported water from the Sacramento-San Joaquin River Delta and the Colorado River. While other Southern California counties rely mostly on imported water supplies to meet their water needs, Orange County does not. We have a vast groundwater aquifer basin from which we draw a substantial amount of our water, and the GWRS helps supply about 35 percent of the water that refills the basin each year. The GWRS is leading the way in water recycling, creating a locally controlled, reliable supply of high-quality water that is drought-resilient. For more information, visit ocwd.com/gwrs/.

2024 City of Huntington Beach 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 HUNTINGTON BEACH DISTRIBUTION SYSTEM WATER QUALITY

	MCL (MRDL/ MRDLG)	AVERAGE AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION	TYPICAL SOURCE OF CONTAMINANT
Disinfection Byproducts					
Total Trihalomethanes (ppb)	80	49	8.1 - 41	No	Byproducts of chlorine disinfection
Haloacetic Acids (ppb)	60	19	6.2 - 28	No	Byproducts of chlorine disinfection
Chlorine Residual (ppm)	(4 / 4)	0.91	0.76 - 1.1	No	Disinfectant added for treatment
Aesthetic Quality					
Color (color units)	15*	ND	ND - 14	No	Erosion of natural deposits
Odor (threshold odor number)	3*	1	1 - 8	No	Naturally-occuring Organic Materials
Turbidity (ntu)	5*	0.16	0.04 - 2.63	No	Erosion of natural deposits

Eight locations in the distribution system are tested quarterly for total trihalomethanes and haloacetic acids; eleven locations are tested weekly for color, odor, and turbidity.
MRDL = Maximum Residual Disinfectant Level; **MRDLG** = Maximum Residual Disinfectant Level Goal;
*Contaminant 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	SITES EXCEEDING AL / NUMBER OF SITES	AL VIOLATION?	TYPICAL SOURCE OF CONTAMINANT
Lead (ppb)	15	0.2	ND	0 out of 52	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.3	0.24	0 out of 52	No	Corrosion of household plumbing

Every three years, at least 50 selected residences are tested for lead and copper at-the-tap. The most recent set of 52 samples was collected in 2024. Lead was not detected in any sample. Copper was detected in 39 samples, none of which exceeded the regulatory copper action level (AL). A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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 HUNTINGTON BEACH DRINKING WATER QUALITY
LOCAL GROUNDWATER AND METROPOLITAN WATER DISTRICT TREATED SURFACE WATER

CHEMICAL	MCL	PHG (MCLG)	AVERAGE LOCAL GROUNDWATER	AVERAGE MWD SURFACE WATER	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE OF CONTAMINATION
Radiologicals - Tested in 2023 and 2024							
Alpha Radiation (pCi/L)	15	(0)	ND	ND	ND - 5	No	Erosion of Natural Deposits
Beta Radiation (pCi/L)	50	(0)	NR	4	ND - 5	No	Decay of Natural and Man-made Deposits
Uranium (pCi/L)	20	0.43	3.1	1	ND - 6	No	Erosion of Natural Deposits
Inorganic Chemicals - Tested in 2023 and 2024							
Aluminum (ppb)	1	0.6	ND	ND	ND - 0.11	No	Treatment Process Residue, Natural Deposits
Arsenic (ppb)	10	0.004	ND	ND	ND - 2.6	No	Treatment Process Residue, Natural Deposits
Barium (ppm)	1	2	ND	0.124	ND - 0.124	No	Refinery Discharge, Erosion of Natural Deposits
Bromate (ppb)	10	0.1	NR	ND	ND - 1.6	No	Byproduct of Drinking Water Ozonation
Fluoride (ppm) naturally-occurring	2	1	0.39	NR	0.3 - 0.53	No	Erosion of Natural Deposits
Fluoride (ppm) treatment-related*	2	1	0.8	0.7	0.5 - 1	No	Water Additive for Dental Health
Hexavalent Chromium (ppb)	10	0.02	0.16	ND	ND - 0.4	No	Erosion of Natural Deposits; Industrial Discharge
Nitrate as N (ppm)	10	10	ND	ND	ND - 1.32	No	Agriculture Runoff and Sewage
Nitrate+Nitrite as N (ppm)	10	10	ND	ND	ND - 1.32	No	Agriculture Runoff and Sewage
Secondary Standards - Tested in 2023 and 2024**							
Aluminum (ppm)	200**	600	ND	ND	ND - 110	No	Treatment Process Residue, Natural Deposits
Chloride (ppm)	500**	n/a	44	104	13 - 118	No	Runoff or Leaching from Natural Deposits
Color (color units)	15**	n/a	ND	2	ND - 5	No	Naturally-occurring Organic Materials
Odor (threshold odor number)	3**	n/a	ND	1	ND - 2	No	Naturally-occurring Organic Materials
Specific Conductance (µmho/cm)	1,600**	n/a	526	979	324 - 1,070	No	Substances that Form Ions in Water
Sulfate (ppm)	500**	n/a	50	224	28 - 253	No	Runoff or Leaching from Natural Deposits
Total Dissolved Solids (ppm)	1,000**	n/a	309	621	214 - 686	No	Runoff or Leaching from Natural Deposits
Turbidity (NTU)	5**	n/a	ND	ND	ND - 0.35	No	Runoff or Leaching from Natural Deposits
Zinc (ppm)	5**	n/a	ND	ND	ND - 0.052	No	Runoff or Leaching from Natural Deposits

2024 CITY OF HUNTINGTON BEACH DRINKING WATER QUALITY
LOCAL GROUNDWATER AND METROPOLITAN WATER DISTRICT TREATED SURFACE WATER (CONTINUED)

CHEMICAL	MCL	PHG (MCLG)	AVERAGE GROUNDWATER AMOUNT	AVERAGE IMPORTED MWD AMOUNT	RANGE OF DETECTIONS	MCL VIOLATION?	TYPICAL SOURCE OF CONTAMINATION
Unregulated Chemicals - Tested in 2023 and 2024							
Alkalinity, total as CaCO3 (ppm)	Not Regulated	n/a	146	114	105 - 160	n/a	Runoff or Leaching from Natural Deposits
Boron (ppm)	NL=1	n/a	0.02	0.14	ND - 0.14	n/a	Runoff or Leaching from Natural Deposits
Calcium (ppm)	Not Regulated	n/a	50	68	21 - 78	n/a	Runoff or Leaching from Natural Deposits
Hardness, total as CaCO3 (ppm)	Not Regulated	n/a	170	270	58 - 340	n/a	Runoff or Leaching from Natural Deposits
Hardness, total (grains/gallon)	Not Regulated	n/a	10	16	3.4 - 20	n/a	Runoff or Leaching from Natural Deposits
Magnesium (ppm)	Not Regulated	n/a	6.8	26	1.6 - 29	n/a	Runoff or Leaching from Natural Deposits
Perfluoro Hexane Sulfonic Acid (ppt)	NL = 3	1	ND	ND	ND - 6.4	n/a	Industrial Discharge
Perfluoro Octane Sulfonic Acid (ppt)	NL = 6.5	0.007	ND	ND	ND - 9.3	n/a	Industrial Discharge
pH (pH unit)	Not Regulated	n/a	8.1	8.2	8 - 8.3	n/a	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	2.4	4.9	1.6 - 5.4	n/a	Runoff or Leaching from Natural Deposits
Sodium (ppm)	Not Regulated	n/a	47	103	38 - 116	n/a	Runoff or Leaching from Natural Deposits
Total Organic Carbon (ppm)	TT	n/a	0.12	2.4	ND - 2.5	n/a	Various Natural and Man-made Sources
Vanadium, Total (ppb)	NL=50	n/a	1.6	ND	ND - 6.9	n/a	Runoff or Leaching from Natural Deposits

ppb = parts-per-billion; **ppm** = parts-per-million; **ppt** = parts-per-trillion; **pCi/L** = picoCuries per liter; **NTU** = nephelometric turbidity units; **µmho/cm** = micromhos per centimeter; **NR** = Not Required to be analyzed; **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;
* The City of Huntington Beach and the Metropolitan Water District of Southern California add fluoride to the naturally-occurring levels in order to help prevent dental cavities. The fluoride level in the treated water is maintained within an optimal range of 0.6 to 1.2 as required by the State Water Resources Control Board, Division of Drinking Water regulations.
** Contaminant is regulated by a secondary standard.

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

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

UNREGULATED CONSTITUENTS REQUIRING MONITORING

CONSTITUENT	NOTIFICATION LEVEL	PHG	AVERAGE GROUNDWATER	AVERAGE IMPORTED MWD AMOUNT	RANGE OF DETECTIONS	MOST RECENT SAMPLING DATE
Lithium (ppb)	n/a	n/a	ND	22	ND - 36	2023

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. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (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).

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:

- State Water Resources Control Board, Division of Drinking Water: waterboards.ca.gov/pfas
- Orange County Water District PFAS Resource Page: ocwd.com/what-we-do/water-quality/pfas/
- U.S. EPA: epa.gov/pfas

Drinking Water Fluoridation

Fluoride has been added to U.S. public water supplies since 1945 to help prevent tooth decay, especially in children. Following a community-approved vote in the early 1970s, the City of Huntington Beach began supplementing naturally occurring fluoride levels in its local water supply.

In compliance with California law, which requires large water systems to fluoridate, the City adjusts fluoride levels to meet the State Water Resources Control Board, Division of Drinking Water (DDW) recommended range of 0.6 to 1.2 parts per million (ppm). The Metropolitan Water District of Southern California (MWDSC), which supplies a portion of Huntington Beach's water, began fluoridating in December 2007, also adhering to all state requirements. In California, the maximum allowable fluoride level in drinking water is 2.0 ppm. 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.

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 that 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.

City of Huntington Beach Utilities Division
19001 Huntington Street • Huntington Beach, CA 92648
(714) 536-5921 • huntingtonbeachca.gov

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 and 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

Cross Connections

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

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.