



2024 Water Quality Report



Your water is routinely tested for about 90 different substances to ensure that the water is of the highest quality. This report lists the substances that were detected during 2024 and includes details about where your water comes from. For more information about your water, please call Jordan Alejo at (760) 435-5823.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse a la ciudad de Oceanside a (760) 435-5800 para asistirlo en español.

Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. USEPA/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 at (800) 426-4791.

The City of Oceanside is committed to providing all customers with **safe & reliable drinking water.**

Oceanside's Water Sources

The City of Oceanside (City) has three sources of drinking water. One source of water supply is imported water that is purchased untreated (raw) from the **San Diego County Water Authority (SDCWA)**. This raw water is then treated at Oceanside's **Robert A. Weese (Weese)** water treatment plant. This facility filters and disinfects water from lakes and rivers, supplying about 75% of the drinking water used in Oceanside. The second source is treated drinking water purchased directly from the SDCWA which is blended with water from the **Carlsbad Desalination Plant (CDP)**; this is about 12% of Oceanside's water supply. The remaining 13% of water supply comes from Oceanside's **Mission Basin Groundwater Purification Facility (MBGPF)**. This facility treats brackish groundwater from wells located in the San Luis Rey River valley. The groundwater is purified by reverse osmosis and then disinfected.

Approximately 75% of the water we use in Oceanside is imported from hundreds of miles away. This is "surface water" from lakes and rivers in Northern California and the Colorado River Basin. The **Metropolitan Water District of Southern California (MWDSC)** imports this water to Southern California via a 242-mile-long aqueduct that carries Colorado River water from Lake Havasu, and a 444-mile-long aqueduct that brings water from the Sacramento-San Joaquin Delta. Both aqueducts terminate in Lake Skinner in Riverside County, where these waters are combined. The SDCWA purchases this imported water from MWDSC and distributes it to water agencies throughout San Diego County, including the City of Oceanside. (continued on page 3)



The R.A. Weese Water Treatment Plant is maintained and operated by highly trained and certified individuals.



The Mission Basin Groundwater Purification Facility uses reverse osmosis to treat local brackish groundwater extracted from the Mission Basin aquifer.

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Pure Water Oceanside (PWO) provides a new water source for Oceanside. PWO purifies recycled water treated at the San Luis Rey Water Reclamation Facility (SLRWRF). The recycled water undergoes state-of-the-art water purification processes including filtration, reverse osmosis and ultraviolet light with advanced oxidation. The advanced water purification process creates a new local source of high-quality drinking water that is clean, safe, drought-proof and environmentally sound. PWO is a water source that is injected into the groundwater aquifer, travels to the MBGPF and is treated again prior to entering the water distribution system. Since PWO water is not directly introduced into the water distribution system, its water quality data is reflected by the MBGPF water which directly enters the system. For more information about the City's water, visit <https://www.ci.oceanside.ca.us/government/water-utilities/>.

Source Water Assessment

In December 2002, MWDSC completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to contamination from recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A summary of the assessment can be obtained by contacting MWDSC by phone at (213) 217-5696. The Carlsbad Desalination Plant (CDP) completed a Watershed Sanitary Survey in March 2020. The survey was performed to investigate potential contaminant sources in the Pacific Ocean in the vicinity of the intake structure and in the watershed of the Agua Hedionda Lagoon. The potential contaminant sources evaluated in the Watershed Sanitary Survey are not likely to impact the water quality at the desalination plant. A summary of the assessment can be obtained by contacting CDP by phone at (760) 655-3900.



Ground Water Assessment

An assessment of the current groundwater sources for the City was completed in February 2002. Sources are considered most vulnerable to contamination from the following activities: sewer collections and/or agricultural/irrigation wells. A copy of the complete assessment is available at the City of Oceanside Water Utilities Department at 300 North Coast Highway in Oceanside. You may request a summary of the assessment by contacting (760) 435-5800.

To ensure tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations 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 contacting the USEPA's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.



The data tables below and on the following page list all the substances that were detected in the drinking water during 2024 or the most recent sampling within the last five years. The presence of these substances does not necessarily constitute a health risk. The tables contain the name of each substance, the unit of measurement, the highest level allowed, the ideal goals, the detection level, the amount detected, and the usual source of the substance. Some substances are not tested each year because the concentrations do not vary significantly from year to year. For these substances, the tables include data from the most recent testing completed.

Name	Unit	MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Waters					Sources in Drinking Water
						R.A. Weese Treatment Effluent	MBGPF Treatment Effluent	SDCWA Twin Oaks Plant	MWDSC Skinner Plant	Carlsbad Desalination Plant	
PRIMARY DRINKING WATER STANDARDS (PDWS) -- Mandatory Health-related Standards											
Combined Filter Effluent Turbidity (a)	NTU	TT=1 NTU	NA	NA	Highest	0.20	0.30	0.10	0.07	0.08	Soil runoff
					%<0.3 NTU	100	92	95	100	100	
INORGANIC											
Aluminum (b)	mg/L	1	0.6	0.05	Range	ND - ND	NA	ND - 0.16	ND - 0.16	ND	Erosion of natural deposits; residue from surface water treatment process
					Average	ND	ND	0.05	0.07	ND	
Arsenic	µg/L	10	0.004	2	Range	NA	NA	NA	NA	ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
					Average	ND	ND	ND	ND	ND	
Barium	mg/L	1	2	0.1	Range	NA	NA	0.095 - 0.122	NA	ND	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
					Average	0.1	ND	0.113	ND	ND	
Fluoride Natural	mg/L	2.0	1	0.1	Range	0.27 - 0.28	ND - 0.10	0.6 - 1.2	0.2 - 0.3	0.77 - 0.92	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	0.27	ND	0.7	0.2	0.85	
Fluoride Added (c)	mg/L	2.0	Optimal	Control	Range	NA	NA	0.6 - 0.7	0.6 - 0.8	0.61 - 0.79	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
			1	0.1	Average	Not added	Not added	0.64	0.7	0.69	
Nitrate as N	mg/L	10	10	0.4	Range	ND - ND	ND - 1.3	NA	NA	ND	Runoff & leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
					Average	ND	0.86	ND	ND	ND	
Copper (d)	mg/L	1.3 (AL)	0.3	0.05	Range for 50 homes sampled = 0.02 - 0.40 90th percentile for 50 homes sampled = 0.24						Internal corrosion of household plumbing; leaching of wood preservatives; erosion of natural deposits
Lead (d)	µg/L	15 (AL)	0.2	5	Range for 50 homes sampled = 0.24 - 9.8 90th percentile for 50 homes sampled = 1.2						Internal corrosion of household plumbing; discharges from industrial manufacturers; erosion of natural deposits
MICROBIOLOGICAL											
Total Coliform Bacteria (e)	%	TT	(0)	NA	Range	ND - ND					Naturally present in the environment
					Highest	Distribution System Highest LRRA = 0					
RADIOLOGICAL (f)											
Gross Alpha	pCi/L	15	(0)	3	Range	NA	NA	NA	ND - 4	ND	Erosion of natural deposits
					Average	3.1	5.0	ND	ND	ND	
Gross Beta	pCi/L	50	(0)	4	Range	NA	NA	NA	ND - 5	ND	Decay of natural and man-made products
					Average	NA	NA	4.23	4	ND	
Uranium	pCi/L	20	0.43	1	Range	NA	3.2 - 4.6	1.7 - 2.8	ND - 3	ND	Erosion of natural deposits
					Average	2.5	4.2	2.3	2	ND	
Combined Radium	pCi/L	5	(0)	1	Range	0.13 - 0.24	0.32 - 1.6	ND - ND	ND - ND	0.29 - 0.93	Erosion of natural deposits
					Average	0.2	0.96	ND	ND	0.49	
DISINFECTION BY PRODUCTS (DBP)											
Total Chlorine (g)	mg/L	(RAA) [4.0]	[4.0]	NA	Distribution System wide range = 0.2 - 3.8 Distribution System highest RAA = 2.6						Drinking water disinfectant added for treatment
HAA5 (h)	µg/L	(LRAA) 60	NA	1	Distribution System wide range = 5.0 - 26 Distribution System highest LRAA = 20						By-product of drinking water disinfection
Total Trihalo-methanes (h)	µg/L	(LRAA) 80	NA	1	Distribution System wide range = 13 - 68 Distribution System highest LRAA = 51						By-product of drinking water disinfection

Name	Unit	MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Source Waters					Sources in Drinking Water
						R.A. Weese Treatment Effluent	MBGPF Treatment Effluent	SDCWA Twin Oaks Plant	MWDSC Skinner Plant	Carlsbad Desalination Plant	
SECONDARY STANDARDS -- Aesthetic Standards											
Chloride	mg/L	500	NA	NA	Range	77 - 100	ND - 120	NA	92 - 100	48 - 110	Runoff/leaching from natural deposits; seawater influence
					Average	92.2	115	NA	96	80	
Color	Units	15	NA	NA	Distribution System Range = ND - 3			ND - 1	1 - 2	ND	Naturally occurring organic materials
					Distribution System Average = ND			ND	2	ND	
Odor	Units	3	NA	NA	Distribution System Range = ND - 3			NA	NA	ND	Naturally occurring organic materials
					Distribution System Average = ND			ND	1	ND	
Sulfate	mg/L	500	NA	NA	Range	100 - 210	ND - 141	152 - 217	195 - 203	12.0 - 17.0	Runoff/leaching from natural deposits; industrial wastes
					Average	186	138	191	199	14.8	
Specific Conductance	µS/cm	1,600	NA	NA	Range	653 - 1070	794 - 863	NA	903 - 917	242 - 551	Substances that form ions when in water; seawater influence
					Average	887	821	827	910	431	
Total Dissolved Solids	mg/L	1000	NA	NA	Range	NA	NA	474 - 614	560 - 572	149 - 311	Runoff/leaching from natural deposits
					Average	488	494	545	566	240	
Turbidity (i)	Units	5	NA	NA	Distribution System wide range = 0.1 - 1.8 Distribution System wide average = 0.15					Soil runoff	
Manganese	µg/L	50	500 (NL)	NA	Range	NA	1.4 - 13	NA	NA	ND	Leaching from natural deposits
					Average	NA	3.5	ND	ND	ND	
UNREGULATED CONTAMINANTS (UCMR5) (j)											
Lithium	µg/L	NA	NA	9	Range	NA	NA	NA	24 - 32	NA	Metal; pharmaceutical
					Average	NA	NA	NA	28	NA	
PFOS (Perfluorooctanesulfonic acid)	ng/L	NA	6.5 (NL)	4	Range	NA	ND - ND	NA	NA	NA	PFAS
					Average	NA	ND	ND	ND	NA	
PFBS (Perfluorobutanesulfonic acid)	ng/L	NA	500 (NL)	3	Range	NA	ND - 2.8	NA	NA	NA	PFAS
					Average	NA	2.4	ND	ND	NA	
ADDITIONAL PARAMETERS											
Alkalinity as CaCO ₃	mg/L	NA	NA	NA	Range	96.0 - 133	86.0 - 98.0	99 - 120	103 - 107	47 - 88	Leaching from natural deposits
					Average	115	92.6	112	105	66	
Boron	µg/L	1000(NL)	NA	100	Range	NA	NA	NA	NA	0.44 - 0.92	Fertilizer and pesticide runoff; Leaching from natural deposits
					Average	NA	NA	NA	130	1	
Calcium	mg/L	NA	NA	NA	Range	41 - 83	48 - 58	NA	61 - 62	20 - 60	Leaching from natural deposits
					Average	63	52	NA	62	23	
Magnesium	mg/L	NA	NA	NA	Range	16 - 26	24 - 28	NA	22 - 23	1.2 - 1.5	Leaching from natural deposits
					Average	21	25	NA	22	1.4	
pH	pH units	NA	NA	NA	Range	7.9 - 8.5	8.0 - 8.4	7.5 - 8.7	NA	8.30 - 8.76	Measure of the acidic or basic character of water.
					Average	8.2	8.2	8.4	8.1	8.5	
Sodium	mg/L	NA	NA	NA	Range	NA	NA	NA	91 - 95	55 - 62	Salt present in the water, usually naturally occurring
					Average	81	68	NA	93	57.0	
Total Hardness	mg/L	NA	NA	NA	Range	170 - 310	220 - 260	NA	242 - 243	60.4 - 75.2	Sum of magnesium and calcium, naturally occurring in the environment
					Average	245	234	NA	242	68.1	
Total Hardness	grains/gal	NA	NA	NA	Range	9.9 - 18	12 - 15	NA	14.1 - 14.2	3.5 - 4.4	Sum of magnesium and calcium, naturally occurring in the environment
					Average	14	14	NA	14.1	4.0	

Contaminants in Source Water

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 the following...

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 which can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

Terms and Abbreviations

AL - Action Level, the regulatory concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

DLR - Detection Limit for purposes of Reporting, the lowest level that can be reliably detected and quantified.

Grains Per Gallon - is a unit of water hardness defined as 1 grain (64.8 milligrams) of calcium carbonate dissolved in 1 US gallon of water (3.785 liters). It translates to 17.1 parts per million.

HAA5 - Sum of Five Regulated Haloacetic Acids (HAAs), i.e., Monochloroacetic Acid, Monobromoacetic Acid, Dichloroacetic Acid, Dibromoacetic Acid, and Trichloroacetic Acid.

LRAA - Locational Running Annual Average, the monthly average of all samples computed each quarter and averaged for four consecutive quarters at a particular monitoring location.

MCL - Maximum Contaminant Level, 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. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

MCLG - Maximum Contaminant Level Goal, the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

µg/L - micrograms per liter

mg/L - milligrams per liter

MRDL - Maximum Residual Disinfectant Level, 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.

MRDLG - Maximum Residual Disinfectant Level Goal, 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.

NA - Not Applicable or not specified.

NL - Notification Level, detection above a proposed MCL

ND - Not Detected

NTU - Nephelometric Turbidity Units, Units for measured turbidity

pCi/L - Picocuries per liter, a measure of radiation.

PDWS - Primary Drinking Water Standard, MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG - Public Health Goal, 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 Environmental Protection Agency.

RAA - Running Annual Average, the monthly average of all samples computed each quarter and averaged for four consecutive quarters.

TT - Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

Table Footnotes

- a) Turbidity is a measure of the cloudiness of the water. We monitor it because it indicates the effectiveness of our filtration system. Treatment plant effluent turbidity is recorded every 15 minutes. The turbidity of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month. Turbidity for the Carlsbad Desalination Plant effluent is required to be less than or equal to 0.1 NTU in 95% of the measurements taken each month. Turbidity shall not exceed 1.0 NTU at any time.
- b) Aluminum also has a secondary MCL of 0.2 mg/L.
- c) MWDSC started fluoridation treatment in 2007. Some MWDSC water is used to supplement Oceanside's treated water. Oceanside does not currently fluoridate during treatment.
- d) Lead and Copper are sampled every three years at consumer's taps and was last sampled in 2024. If the Action Level is exceeded in 10% of the samples (90th percentile) then the water supplier must modify the treatment process to prevent the leaching of these metals into the water from the plumbing. None of the samples exceeded the Action Levels.
- e) No more than 5.0% of all monthly samples taken in the distribution system may be Total Coliform positive. In 2024 there were 1,643 samples taken throughout the City and all samples were negative.
- f) Some locations are analyzed up to every nine years. Oceanside sampled for radiological constituents in 2023 and uranium at MBGPF was sampled in 2024. SDCWA sampled for radiological constituents in 2024. MWDSC sampled quarterly for gross beta and annually for tritium and strontium-90; all remaining constituents were sampled in 2023.
- g) Compliance is based on a running annual average (RAA) of at least 124 distribution system samples taken each month. The City of Oceanside uses chloramines for disinfection.
- h) Compliance is based on a locational running annual average (LRAA) of 8 distribution system sample locations taken every quarter.
- i) Turbidity is also tested at 31 locations each month within the distribution system and reported under Secondary Standards.
- j) UCMR5 = Unregulated Contaminants Monitoring Rule 5. The EPA requires monitoring in order to determine if there is a need to regulate these compounds. UCMR5 requires sample collection for 30 chemical contaminants between 2024 and 2025. Detected contaminants entering the distribution system are reflected in the table, and detections in source water are not included in the table.

Fluoride

Oceanside has three sources of water: raw water that is treated at the R.A. Weese water treatment plant, groundwater that is treated at the MBGPF and treated water purchased from SDCWA. Oceanside does not add fluoride during treatment at R.A. Weese or the MBGPF. The fluoride found in these raw water sources is naturally occurring. Only imported, treated water purchased from SDCWA has added fluoride. The area south of Oceanside Blvd. usually receives this fluoridated water with an average concentration of 0.40 ppm. The water delivered to all other areas in the City usually has an average fluoride level of 0.33 ppm. However, when the City's treatment plants are not operating at full capacity, some or all of the water supply for Oceanside can contain added fluoride up to a maximum of 0.76 ppm.

Lead

The City's drinking water is tested for lead every three years and was last tested in 2024. Samples were collected inside fifty private homes and at the entry points to the water distribution system. **There was no lead detected in the water entering the distribution system**, and one detection of lead in a private residence, which was under the AL. All homes were under the 90th percentile limit and compliant with the action level. A service line inventory has been prepared and is publicly available. Please contact Martin Popma at (760) 435-5948 to request the service line inventory. 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 plumbing. The City of Oceanside is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead or galvanized service line requiring replacement, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Oceanside Water Utilities at (760) 435-5800. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.



Drinking Water Disinfection

It is important to disinfect treated drinking water in order to destroy pathogens that can make people sick. The disinfectant must be present in the drinking water system all the way to each home, business and industry. In order to achieve this long-lasting residual, the City uses chloramines to disinfect the drinking water from each source. **Chloramines provide a stable residual throughout the distribution system delivering safe drinking water to each of our customers.**

Contaminants in Drinking Water

Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations 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 USEPA's Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater.

Utilities Commission Meetings

The Oceanside Utilities Commission meets bi-monthly in the City Council Chambers at 300 North Coast Highway. The public is welcome to participate in these meetings. For more information, please call (760) 435-5800.

Behind every drop of water is a system and a team you can count on.

Come join the Oceanside Water Utilities Department! Water Utilities plays a vital role in ensuring the health and sustainability of our communities by delivering clean, safe and reliable water to homes and businesses. From sourcing and treating water to maintaining an extensive network of pipes, reservoirs and treatment facilities – our staff are on the front-line and ensuring public health and sustainability.



One of the biggest departments
in the City of Oceanside,
156 employees strong!



98% of our Operations Staff
have professional certifications
and keep on learning!



Employees love their job –
with our longest serving employee
on the job for 40 years!

Whether you're a fresh graduate or a seasoned professional, the City of Oceanside has a job for you. Careers with Oceanside Water Utilities span a wide range of disciplines, including engineering, environmental science, finance, operations and customer service. The City of Oceanside has both full-time and part-time positions and offers extensive on-the-job training. **Come make a splash with Oceanside!**

Water Tip from the City of Oceanside

Using water wisely helps protect our precious resources and keeps your water bill in check. An easy way to track your water use and identify leaks early is by signing up for *WaterSmart!* Visit **oceanside.watersmart.com** to get started today and take control of your water use.