

# CONSUMER CONFIDENCE REPORT 2025

*Serving the City of Orange for Over 100 Years*



City of Orange  
Public Works Department  
Water Division

*This report contains important information about your drinking water. Translate it, or speak with someone who understands it.*

*Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.*

*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。は、変換、またはそれを理解している人と話すことになって*  
*いる。*

**이 보고서는 식수에 대한 중요한 정보가 포함되어 있습니다. 그것은 번역, 또는 알고 있는 사람들과 이야기하고 있다.**

***Ang ulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa iyong mga inuming tubig. Isalin ang mga ito, o makipag-usap sa isang tao na nauunawaan ito.***

**这个报告包含关于您的饮用水的重要信息。翻译它或者与了解它的人讲话。**

**Báo cáo này có chứa thông tin quan trọng về nước uống của bạn. Dịch nó, hoặc nói chuyện với một ai đó hiểu nó.**

# CITY OF ORANGE CONSUMER CONFIDENCE REPORT - 2025

Since 1990, the City of Orange has provided its water customers an annual water quality report. The federal government has adopted guidelines for water agencies to follow when communicating water quality information to consumers. The State of California tailored these guidelines and the former water quality report is now called the Consumer Confidence Report. The new format is intended to provide customers a summary of the water quality data, key definitions, and other related information.

This report summarizes the quality of the water provided in 2025. It includes details about water sources, what the water contains, and how it compares to standards set by the State of California. Orange vigilantly monitors and safeguards its water supplies. We are pleased to report that your tap water met all Federal and State drinking water health standards. For more information about your water, call (714) 288-2475 and ask for Water Quality Section.

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. 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 (800-426-4791).

Orange's water comes from three sources. The primary source is groundwater drawn from 7 municipal wells drilled about 1000 feet into the Santa Ana River Aquifer. Well water goes directly into the distribution system, is disinfected with chlorine and meets all state regulations. The second source is water imported by the Metropolitan Water District, from the Colorado River and from northern California (San Francisco-San Joaquin Bay Delta). Metropolitan water is treated and disinfected with chloramines. Orange also purchases a small amount of water from the Serrano Water District. This source is primarily treated surface water, but also includes local treated well water.

The Orange City Council meets on the second and fourth Tuesday of each month at 6:00pm in the City Hall Council Chambers, 300 East Chapman Avenue. The community is welcome to participate in these meetings.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

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. It also can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before it is treated include:

- Microbial contaminants, such as viruses and bacteria, which 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, which may come from a variety of sources such as agriculture, urban storm water runoff and residential uses.
- Radioactive contaminants, can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agriculture applications, and septic systems.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. US Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that must provide the same protection for public health.

## WATER QUALITY DATA

The table below lists all the drinking water contaminants detected by the City of Orange during the 2025 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 through December 31, 2025. The SWRCB requires the City of Orange to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Terms and abbreviations used below:

- **ppb**: parts per billion
- **ppm**: parts per million
- **ppt**: parts per trillion
- **µmho/cm**: micromhos per centimeter
- **pCi/L**: pico curies per liter
- **NTU**: nephelometric turbidity units
- **ND**: not detected
- **n/a**: not applicable
- **MCL**: Maximum Contaminant Level
- **MCLG**: federal MCL Goal
- **MRDL**: Maximum Residual Disinfectant Level
- **MRDLG**: Maximum Residual Disinfectant Level Goal
- **PHG**: California Public Health Goal
- **NL**: Notification Level
- **TT**: treatment technique
- **AL**: Action Level

- (1) Compliance is determined based on a locational running annual average (LRAA); the highest LRAA is included as the average.
- (2) Compliance is determined based on a running annual average (RAA); the highest RAA is included as the average.
- (3) In 2024, 50 residences were tested for lead and copper at-the-tap. Lead was detected in one sample; none of which exceeded the AL for lead. Copper was detected in 39 samples, none of which exceeded the AL for copper. A regulatory action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- (4) Contaminant is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).
- (5) Effective October 29, 2025, the NLs for PFHxS, PFOA, and PFOS were revised to 3.0 ppt, 4.0 ppt, and 4.0 ppt, respectively. A NL for PFHxA of 1,000 ppt was also established.
- (6) 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 Water District (MWD) treated surface water (Diemer Plant) and Serrano Water District (Serrano) treated surface 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.

# PRIMARY DRINKING WATER STANDARDS

(Mandatory Health Related Standards Established by the U.S. EPA & State Water Resources Control Board)

Contaminant	MCL (MRDL/MRDLG)	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Sampling Date	Typical Source of Contaminant
<b>Radiologicals</b>							
Gross Alpha Particle Activity (pCi/l)	15	( 0 )	ND	ND-5	No	2025	Erosion of Natural Deposits
Gross Beta Particle Activity (pCi/l)	50	( 0 )	ND	ND-6	No	2025	Decay of Natural and Man-made Deposits
Combined Radium (pCi/l)	5	( 0 )	ND	ND-1.1	No	2023	Erosion of Natural Deposits
Uranium (pCi/l)	20	0.43	1.8	ND-9.2	No	2025	Erosion of Natural Deposits
<b>Inorganic Contaminants</b>							
Aluminum (ppm)	1	0.6	ND	ND-0.18	No	2025	Erosion of Natural Deposits
Barium (ppm)	1	2	ND	ND-0.13	No	2025	Erosion of Natural Deposits
Bromate (ppb)	10	0.1	1.2	ND-8.4	No	2025	Byproduct of Drinking Water Ozonation
Fluoride (ppm)	2	1	0.36	0.15-0.8	No	2025	Erosion of Natural Deposits; Water Additive for Dental Health
Hexavalent Chromium (ppb)	10	0.02	0.13	ND-1.3	No	2025	Erosion of Natural Deposits
Nitrate (ppm as N)	10	10	0.75	ND-4.5	No	2025	Fertilizers, Septic Tanks
Nitrate + Nitrite (ppm as N)	10	10	0.75	ND-4.5	No	2025	Fertilizers, Septic Tanks
Perchlorate (ppb)	6	1	ND	ND-2.3	No	2025	Industrial Discharge
<b>Disinfection By-Products and Disinfectant Residual</b>							
Total Trihalomethanes (ppb)(1)	80	n/a	50	6.6-83	No	2025	Byproduct of Chlorine Disinfection
Haloacetic Acids (ppb)(1)	60	n/a	8	ND-18	No	2025	Byproduct of Chlorine Disinfection
Chlorine Residual (ppm)(2)	(4/4)	n/a	1.1	ND-2.88	No	2025	Disinfectant Added for Treatment
<b>Lead and Copper Action Levels at Residential Taps (3)</b>							
Lead (ppb)	Action Level (AL) = 15	0.2	90th % = ND	ND-5 (0/50 homes above AL)	AL Violation? No	2024	Corrosion of Household Plumbing Systems; Erosion of Natural Deposits
Copper (ppm)	AL=1.3	0.3	90th % = 0.204	ND-0.32 (0/50 homes above AL)	AL Violation? No	2024	Internal Corrosion of Household Plumbing Systems; Erosion of Natural Deposits; Leaching from Wood Preservatives

Lead & Copper Service Line Inventory Completed 2025. Non-Lead Service Line Designation Statement is Posted on the City Website.

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Orange is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact The City of Orange Water Quality Section at (714) 288-2475. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>.

# SECONDARY DRINKING WATER STANDARDS (4)

(Aesthetics Standards Established by the U.S. EPA & State Water Resources Control Board)

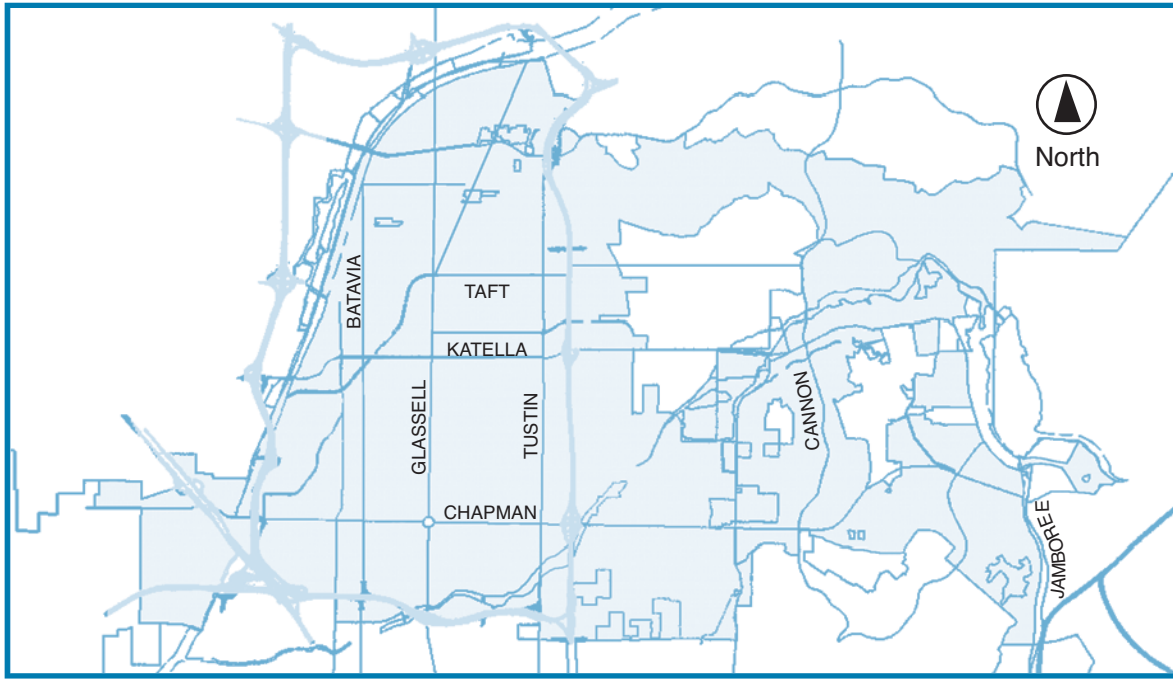
Contaminant	MCL (MRDL/MRDLG)	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Sampling Date	Typical Source of Contaminant
Aluminum (ppb)	200	600	ND	ND-180	No	2025	Erosion of Natural Deposits
Chloride (ppm)	500	n/a	75	26-120	No	2025	Erosion of Natural Deposits
Color (color units)	15	n/a	ND	ND-3	No	2025	Naturally-occurring Organic Matter
Manganese (ppb)	50	n/a	0.21	ND-40	No	2025	Erosion of Natural Deposits
Odor (threshold odor number)	3	n/a	ND	ND-4	No	2025	Erosion of Natural Deposits
Specific Conductance ( $\mu\text{mho/cm}$ )	1,600	n/a	868	460-990	No	2025	Erosion of Natural Deposits
Sulfate (ppm)	500	n/a	175	47-238	No	2025	Erosion of Natural Deposits
Total Dissolved Solids (ppm)	1,000	n/a	564	280-710	No	2025	Erosion of Natural Deposits
Turbidity (NTU)	5	n/a	ND	ND-0.25	No	2025	Soil Runoff
<b>Sodium and Hardness</b>							
Hardness, total (ppm as $\text{CaCO}_3$ )	Not Regulated	n/a	300	130-380	n/a	2025	Erosion of Natural Deposits
Hardness, total (grains per gallon)	Not Regulated	n/a	18	8-22	n/a	2025	Erosion of Natural Deposits
Sodium (ppm)	Not Regulated	n/a	69	41-97	n/a	2025	Erosion of Natural Deposits

Unregulated Contaminants							
Contaminant	MCL (MRDL/MRDLG)	PHG (MCLG)	Average Amount	Range of Detections	MCL Violation?	Sampling Date	Typical Source of Contaminant
Perfluorobutanoic Acid (PFBA) (ppt)	Not Regulated	n/a	ND	ND-12	n/a	2025	Industrial Discharge
Perfluorobutane Sulfonic Acid (PFBS) (ppt)	NL=500	n/a	ND	ND-3.5	n/a	2025	Industrial Discharge
Perfluorohexanoic Acid (PFHxA) (ppt)	Not Regulated (5)	n/a	3.1	ND-13	n/a	2025	Industrial Discharge
Perfluorohexane Sulfonic Acid (PFHxS) (ppt)	NL=3 (5)	n/a	ND	ND-11	n/a	2025	Industrial Discharge
Perfluorooctanoic Acid (PFOA) (ppt)	NL=5.1 (5)	0.007	ND	ND-10	n/a	2025	Industrial Discharge
Perfluorooctane Sulfonic Acid (PFOS) (ppt)	NL=6.5 (5)	1	ND	ND-19	n/a	2025	Industrial Discharge
Perfluoropentanoic Acid (PFPeA) (ppt)	Not Regulated	n/a	5.8	ND-19	n/a	2025	Industrial Discharge
Turbidity - combined filter effluent (6)			Treatment Technique	Turbidity Measurements MWD	Serrano	TT Violation?	Typical Source of Contaminant
1) Highest single turbidity measurement (NTU)			0.3	0.05	0.25	No	Soil Runoff
2) Percentage of samples less than or equal to 0.3 NTU			95%	100%	100%	No	Soil Runoff
Fifth Unregulated Contaminant Monitoring Rule (UCMR 5)							
Contaminant			Notification Level	PHG	Average Amount	Range of Detections	Most Recent Sampling Date
Lithium (ppb)			n/a	n/a	ND	ND-11	2025
Perfluorohexane Sulfonic Acid (PFHxS) (ppt)			3 (5)	n/a	ND	ND-10	2025
Perfluorooctane Sulfonic Acid (PFOS) (ppt)			6.5 (5)	1	4.4	ND-17	2025
Perfluorooctanoic Acid (PFOA) (ppt)			5.1 (5)	0.007	ND	ND-9.3	2025
Perfluorobutanoic Acid (PFBA) (ppt)			n/a	n/a	5.5	ND-10	2025
Perfluorobutane Sulfonic Acid (PFBS) (ppt)			NL=500	n/a	ND	ND-3.3	2025
Perfluorohexanoic Acid (PFHxA) (ppt)			n/a (5)	n/a	5.2	ND-10	2025
Perfluoropentanoic Acid (PFPeA) (ppt)			n/a	n/a	9.3	ND-18	2025

## SOURCE WATER ASSESSMENT

City of Orange water supplies are from various sources including groundwater, purchased water from northern California and the Colorado River, and local watersheds. An assessment of our drinking water sources was completed between 2001-2002 along with surface water assessments by Metropolitan and Serrano Water districts. These districts are required to conduct these assessments every five years and most recently completed them in 2022 and 2024 respectively. Water sources are considered most vulnerable to contamination from those activities associated with urban industrial environments such as chemical processing, petroleum pipelines and storage, gas stations and sewer collection systems. The City of Orange carefully tests all water supply sources to assure the safety and compliance with all Drinking Water Standards. A copy of the assessment summary is available at the City of Orange Public Works Department Water Division, located at 189 S. Water St., or you may request a summary be sent to you by contacting the City of Orange Public Works Department Water Division at (714) 288-2475.

# City of Orange Water Service Area Map



City of Orange Public Works Department  
Water Division  
P.O. Box 449, Orange, CA 92866  
(714) 288-2475  
[www.cityoforange.org](http://www.cityoforange.org)

24 Hour Emergency (714) 538-1961

Water Quality (714) 288-2475

Water Engineering (714) 288-2475

Water Billing (714) 744-2233

[www.cityoforange.org/ccr](http://www.cityoforange.org/ccr)

## Water Supply, Water Quality, and Related Topics

**CUSTOMER SERVICE:** We are committed to provide prompt courteous service to our customers. If you have questions about water quality, pressure or other supply issues, please call (714) 288-2475 or after regular business hours call (714) 538-1961. Questions about your bill should be directed to our utility billing office at (714) 744-2233.

**ONGOING WATER QUALITY PROGRAMS AND ACTIVITIES:** The City of Orange adheres to strict regulatory standards for materials used in our water system. Rigorous third party testing assures all materials are approved for use in potable water systems. With testing performed by other public and private laboratories, we are able to assure that our water supply meets or exceeds all applicable drinking water standards. In addition, our staff administers a cross-connection control program to check that water service connections are protected where there is a possibility of reverse flow contaminating our water system.

**DISINFECTION:** Water supplies are made safe to drink in several ways. All of the city's well water sources are naturally filtered as the water percolates through the ground removing impurities. As an added protection, the city chlorinates all well water pumped into the distribution system. Other water sources require treatment at facilities designed to remove impurities and make water safe to drink. Water treatment facilities use various forms of disinfection including chlorine, chloramines, and ozone. Each, or a combination of these, may be used to treat surface water purchased by the city for delivery to our customers. All treatment methods are designed to make the water safe for human consumption. Chloramine disinfection can be toxic to fish and other aquatic animals and is of concern for kidney dialysis patients. Water supplied with chloramines generally make

up about 15% to 25% of our total supply. Pet fish owners should take appropriate remedies when changing or adding water from the tap to fishponds or fish tanks. Dialysis patients should consult a health care professional for appropriate precautions.

**FIRE HYDRANTS:** The City of Orange maintains high standards for water supplies available for fire protection. We have over 4,500 public fire hydrants located throughout our service area. Many other hydrants are privately owned and maintained by the property owner. The city tests all public hydrants on a regular interval, usually once each year. It is very important that hydrants function properly and are accessible to firefighters when emergency supplies are needed. **If there is a hydrant in front of your home or on your property, please maintain a sufficiently clear, three-foot minimum area around the hydrant. Bushes, shrubs, trees, etc. should be trimmed to keep the hydrant visible and accessible.**

**REGIONAL WATER SUPPLY SOURCES:** Water supplies throughout Southern California are derived from several sources. These sources include water from Northern California via the State Water Project, the Colorado River, local groundwater basins, local watersheds, reclamation and water reuse projects, and ocean desalination. The combination of some or all of these sources is available to the City of Orange. Reliable water supplies are essential to our health, safety, and welfare. **No single source is sufficient to meet all of our water supply needs. The challenge is to find a cost-effective, reliable combination that will ensure adequate water supplies now and into the future. Please help recognize the value of a reliable water supply. Use what you need, but please don't waste water. For water conservation information, please visit, [www.mwdoc.com/savewater](http://www.mwdoc.com/savewater).**