# 2024 WATER QUALITY REPORT





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te incluye información importante sobre el agua potable. al telefono (407) 423-9018.

## A WORD FROM OUR **GENERAL MANAGER & CEO**

At OUC, we're committed to delivering clean, safe and great-tasting water to our customers and community. The 2024 OUC Water Quality Report provides a detailed overview, using data and test results, of how we uphold this commitment.

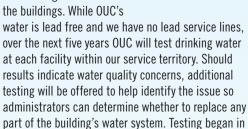
To maintain the highest quality standards, the OUC Water Quality Lab conducts thousands of chemical and bacteriological tests annually, monitoring more than 135 regulated and unregulated substances. Summaries of our findings are included in this report.

Water is tested at our wells, water plants, and multiple points throughout our delivery system. The lab complies with all state and federal regulations and is prepared to meet any new requirements set by the Environmental Protection Agency (EPA) and other regulatory agencies. I'd like to highlight OUC's recent actions on three specific items of importance to regulators and our community.

In 2024, the EPA announced newly established national limits for six types of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in drinking water. OUC complies with federal PFAS regulations, and we will continue regular testing and reporting as required.

As this report goes to print, we're monitoring any potential regulatory changes from the federal level with the Environmental Protection Agency or changes in law that may result from the 2025 Florida legislative session.

The EPA also recommended that schools and childcare facilities regularly test drinking water for lead in their facilities. Although OUC does not own or maintain pipes or fixtures within these facilities, we are assisting with testing water inside the buildings. While OUC's



March and results will be available at OUC.com/lcp.

Rest assured, OUC is focused on maintaining a water supply that meets the needs of our Central Florida community now and into the future. In April 2024, OUC's Board of Commissioners approved a new reverse osmosis water treatment plant in Lake Nona that will draw water from deeper within the Lower-Lower Floridan Aquifer than our current sources. Additionally, we are working closely with fellow utilities, water management districts, and other stakeholders as part of the Central Florida Water Initiatives to meet the growing demand for water in our region.

Thank you for taking the time to read this report. If you have questions, please contact OUC's Water Quality Lab at 407-434-2549.

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**OUC General Manager & CEO** 



## SAFE, RELIABLE DRINKING WATER FOR GENERATIONS TO COME

#### A Naturally Clean Water Source

OUC's water comes from the Lower Floridan aguifer, an underground reservoir that, in many places, is a quarter-mile below parts of the Earth's surface. The aguifer is fed by rainwater that goes through a filtration process as it seeps through hundreds of feet of sand and rock. OUC pumps water from the aguifer to facilities where it's treated to meet standards that ensure the water is safe to drink.

#### **Promoting Water Conservation**

OUC works year-round to educate the community about the importance of protecting such a precious — and limited — natural resource. From water-conservation themed events, campaigns and student projects to proactive social media outreach during times of low rainfall or drought, we are committed to helping our customers understand the vital role water plays in everyday life and how crucial their role is in protecting and conserving our most vital resources.

OUC also offers services that help customers become water-wise consumers. Our conservation team conducts water audits to search for potential sources of water loss and make recommendations for water efficiency. Some recommended upgrades may be eligible for OUC rebates, including EPA WaterSense labeled smart irrigation controllers. high-efficiency toilets, and the installation of water cisterns. Customers also have online access to water conservation tips and information covering such topics as leak detection, water-wise landscaping, smart irrigation guidelines, and more. For additional information, visit OUC.com/water.

#### **Ozone Process Produces Great-Tasting Tap Water**

OUC uses ozone treatment at our seven waterservice plants as part of a process to produce high-quality, great-tasting tap water we call H<sub>2</sub>OUC. Ozone oxidizes hydrogen sulfide to improve taste. eliminate odor and reduce the amount of chlorine that's added to water. By law, we are required to add chlorine to our water to maintain its high quality as it flows through pipes to customers' taps. Fluoride also is added to promote healthy teeth, and we add sodium hydroxide to adjust the pH, preventing copper and lead from leaching into the drinking water from customers' plumbing, the primary source of these elements.

#### **Protecting Our Water Facilities**

Because the safety of your water is of the utmost importance, OUC goes to great lengths to keep our water treatment facilities secure. All OUC water plants are equipped with state-of-the-art security, including intrusion-detection systems, alarms, cameras and fences around the perimeter of properties. Armed security guards and law enforcement officers regularly patrol the facilities.



## MAKING WATER CONSERVATION A FUN LEARNING EXPERIENCE

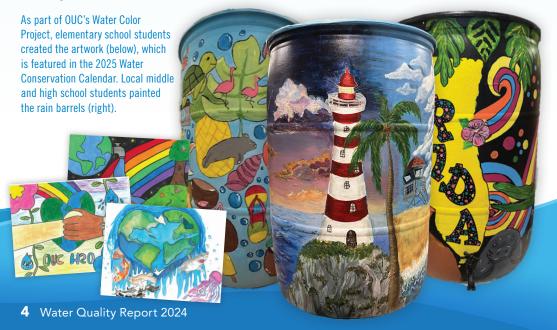
Through water-conservation-themed classroom programs, OUC is teaching public school students about the importance of preserving and protecting Florida's water supply. Since 2006, more than 162,000 local students have participated in OUC's Water Color Project and Project AWESOME in 2009 (Alternative Water & Energy Supply, Observation, Methods and Education). The Water Color Project encourages Orange County students to use their artistic talents to promote conservation. Fourthand fifth-graders compete to have their artwork featured in OUC's annual Water Conservation Calendar while middle and high school students paint water-themed rain barrels for judging.

Project AWESOME delivers an interactive lab to fifth graders in Orange and Osceola counties. For water efficiency, students gain an understanding of how water is supplied by community water systems and learn the importance of water conservation. For renewable energy, students discover how to harness Florida's natural resource, the sun, to its greatest advantage.

OUC's efforts to spread the word on water conservation go beyond the classroom. Everyone can help save water by following a few simple tips:

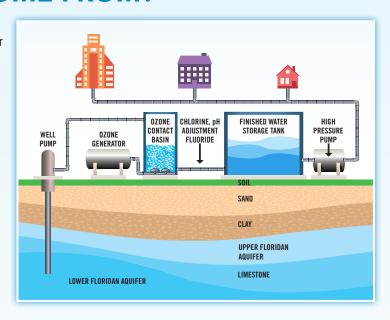
- Water only as needed and then water only a maximum of once per week in cooler months and twice per week in warmer months in accordance with the SJRWMD watering restrictions at www.sjrwmd.com/wateringrestrictions.
- Water your lawn before 10 a.m. or after 4 p.m. to minimize the amount lost to evaporation.
- Water your lawn only as needed and just for 35-45 minutes to provide no more than 1/2"-3/4" of water per zone per day. Turn off your irrigation system if it has rained or install a smart irrigation controller.
- Repair leaking faucets and toilets immediately.
- Install FPA WaterSense labeled shower heads and take shorter showers.

For more ways to save water, visit www.ouc.com/waterconservation.



## WHERE DOES YOUR WATER COME FROM?

Well pumps at OUC's water treatment plants draw water from a natural underground reservoir called the Lower Floridan aguifer, After being sent through ozone contact basins, the water is treated with chlorine and fluoride. The water is then pumped into a finished water storage tank and distributed to residential. commercial and industrial customers. OUC pumps about 32.3 billion gallons of water per year to customers across a 200-square-mile service area.



#### The History of Orlando's Water

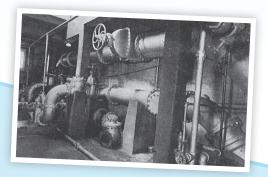
The foundation for what would eventually become the Orlando Utilities Commission was laid even before the 20th century began. Through much of the 1800s, the community's only source of water was a town well located next to the Orange County Court House at the corner of Central and Main.

The Orlando Water Company was formed in 1886 and consisted of a plant and distribution system, which used Lake Highland as its source. In 1889, additional water mains — including about 13.5 miles of pipe — were laid to serve many areas of Orlando with a safe domestic supply and fire protection.

Four years later, a foreclosure resulted in a new corporation, the Orlando Water and Sewerage Company, which was purchased within a year to form the Orlando Water & Light Company (OWLC). Using an additional water supply, Lake Concord, OWLC boosted the system to 23 miles of mains and pipes, covering every part of the City and more than 100 fire hydrants.

In 1917, the first filtrated treatment facilities were built to begin treating lake water before passing it into the city mains.

In 1922, the City of Orlando purchased OWLC to form the Orlando Utilities Commission. OUC - The Reliable One, as you know us today, pumps water from the pristine Lower Floridan aguifer to provide safe, clean, great-tasting water to the residents of Orlando and parts of unincorporated Orange County.





## **WATER QUALITY TEST RESULTS**

As shown in the following tables, OUC routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2024. Data obtained before January 1, 2024, and presented in this report is from the most recent testing done in accordance with the laws, rules, and regulations.

#### **Inorganic Contaminants**

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	02/23	N	0.036	0.010-0.036	2	2	Erosion of natural deposits
Fluoride (ppm)	02/23	N	0.89	0.56-0.89	4	4	Erosion of natural deposits; water additive that promotes strong teeth when at the optimum level of 0.7 ppm
Nickel (ppb)	02/23	N	2	ND-2	N/A	100	Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	01/24	N	0.09	0.03-0.09	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	02/23	N	12.6	7.27–12.6	N/A	160	Salt water intrusion; leaching from soil

STAGE 1 DISINFECTANTS AND DISINFECTION BY-PRODUCTS										
Disinfectant or Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG or MRDLG	MCL or MRDL	Likely Source of Contamination			
Bromate (ppb)	01/24-12/24	N	3.7	ND-9.8	MCLG = 0	MCL = 10	By-product of drinking water disinfection			
Chlorine (ppm)	01/24-12/24	N	1.2	0.2–2.1	MRDLG = 4	MRDL = 4	Water additive used to control microbes			

For bromate and chlorine, the level detected is the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. The range of results is the range of results of all the individual samples collected during the past year.

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS									
Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination		
Haloacetic Acids (HAA5) (ppb)	02/24-11/24	N	33.02**	9.66-45.07	N/A	60	By-product of drinking water disinfection		
Total Trihalomethanes (TTHM) (ppb)	02/24-11/24	N	66.29**	18.87– 73.85	N/A	80	By-product of drinking water disinfection		

<sup>\*\*</sup> Compliance levels are based on the locational running annual averages and include results from previous quarters not reported under the Range of Results column.

#### **Radioactive Contaminants**

Contaminant and Unit of Measurement	Dates of Sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	02/23	N	3.5	ND-3.5	0	15	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	02/23	N	1.5	ND-1.5	0	5	Erosion of natural deposits

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## RESULTS OF COPPER AND LEAD SAMPLING AT CUSTOMER TAPS

The following results are from tests conducted in July 2023 (the most recent available in accordance with FDEP regulations). The tests confirm that the levels of lead and copper in tap water sampled in homes were below the Action Level (AL).

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded (Y/N)*	90th Percentile Result	Number of sampling sites exceeding the AL	Range of Tap Sample Results	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	07/23	N	0.5	1	0.0-1.4	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	07/23	N	2	0	ND-10	0	15	Corrosion of household plumbing systems; erosion of natural deposits

<sup>\*</sup> The Action Level (AL) is exceeded if the concentration in more than 10% of the tap samples (90th Percentile Result) is greater than the established AL.

#### **Unregulated Contaminants UCMR5**

There were no detectable quantities of lithium or any of the 29 per- and polyfluoroalkyl (PFAS) substances during the 2024 monitoring period. The 1996 Safe Drinking Water Act (SDWA) amendments require that once every five years the Environmental Protection Agency (EPA) issues a new list of no more than 30 unregulated contaminants to be monitored by public water systems (PWSs). The fifth Unregulated Contaminant Monitoring Rule (UCMRF) was published in the Federal Register on December 27, 2021. UCMR5 requires two rounds of monitoring for 29 per- and polyfluoroalkyl substances (PFAS) and lithium during a 12-month period between 2023 and 2025. If you would like more information on EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at 1-800-426-4791 or visit http://www.epa.gov/dw.cmr. To learn more or for the complete report, call our Water Quality Laboratory at 407-434-2549.

### **KEYS TO ABBREVIATIONS**

#### MCL: Maximum Contaminant Level.

The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

#### 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 allow for a margin of safety.

#### AL: Action Level.

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

#### ppm: Parts Per Million.

One part by weight of analyte to 1 million parts by weight of the water sample.

#### ppb: Parts Per Billion.

One part by weight of analyte to 1 billion parts by weight of the water sample.

## LRAA: Locational Running Annual Average.

The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

## RAA: Running Annual Average.

The average of results computed quarterly, of monthly averages of all samples collected during the previous four calendar quarters.

#### N/A: Not applicable.

ND: Not Detected.

Indicates that the substance was not found by laboratory analysis.

## 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.

#### 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.

pCi/L: Picocurie per liter.

Measure of the radioactivity in water

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#### **More About Lead and Copper**

The primary source of lead and copper in tap water is customer's plumbing. These elements can possibly leach into the water from a building's plumbing through corrosion if the water has been standing in the pipes for several hours. To prevent corrosion from occurring, OUC has effectively implemented system-wide corrosioncontrol treatment. At the treatment plants, sodium hypochlorite is added to the water to increase the water's pH and thus prevent corrosion.

Buildings at risk for lead or copper in the water are those that have lead services or that have lead solder in copper pipes.

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 in home plumbing. Orlando Utilities Commission is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in vour 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 service line or galvanized requiring replacement service line, 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 OUC Water Quality Laboratory at 407-434-2549. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa. gov/safewater/lead.

OUC has completed a comprehensive inventory of its water distribution system and found no lead service lines. This inventory has been published online and can be accessed at: ouc.com/ environment-community.

#### **Constantly Testing Your Water**

OUC's Water Quality Laboratory is certified by the Florida Department of Health (FDOH) and is accredited to perform a wide scope of analyses. Certification is maintained through an on-site assessment every two years and performance of proficiency testing twice a year. Chemists at OUC's Water Quality Laboratory perform thousands of chemical and bacteriological tests annually to ensure that your drinking water meets or exceeds all state and federal regulations. Customers can continue to enjoy OUC's water knowing that it is tested regularly and surpasses the highest quality standards. For more information about OUC's drinking water, call our Water Quality Laboratory at 407-434-2549 to talk to a water quality professional. Information is also available online at www.ouc.com.

#### Source Water Assessment

In 2024 the Florida Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are 76 unique potential sources of contamination identified for this system with low to high susceptibility levels. The results of the Source Water Assessment are not a reflection of our treated water quality, but rather a rating of susceptibility of contamination under guidelines of the Florida DEP SWAPP program. The latest Source Water Assessment was completed in 2024 and the report is available online at prodapps.dep.state. fl.us/swapp.

## **EPA STATEMENT ABOUT WATER RESOURCES, CONTAMINANTS**

Sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring, and, in some cases, radioactive materials. But it also picks up substances related to animals or human activity. Contaminants that may be present in source water 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, which 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 stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production, and mining activities.

In order to ensure that tap water provided by public water systems is safe to drink, the EPA prescribes regulations that limit the amounts of certain contaminants in water. Meanwhile, the U.S. Food and Drug Administration regulates limits for contaminants in bottled water, which must provide the same protection for public health.

All drinking water, including bottled water, may be reasonably expected to contain minute amounts of some contaminants. The presence of contaminants in water does not necessarily pose health risks. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791.

#### WHAT THE EPA SAYS ABOUT MCLs AND HEALTH EFFECTS

The Maximum Contaminant Levels (MCLs) established by the EPA are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those with cancer who are undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, and some elderly and infants, can be particularly at risk for infections. These people should consult with their healthcare providers about drinking water. EPA and Center for Disease Control and Prevention guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA Safe Drinking Water Hotline at 1-800-426-4791.



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100 West Anderson Street Orlando, Florida 32801

www.ouc.com



**MEETING SCHEDULE** 

March 4 August 12 April 8 September 1

September 16 October *(no meeting)* 

May 13 October *(no me* June *(no meeting)* November 4

Dates, times and locations subject to change.

December 9

For ways to attend an OUC Commission Meeting, please visit ouc.com/commission