

CENTRAL

2023 Annual Water Quality Reports



WHAT WE DO TODAY SHAPES TOMORROW'S FUTURE

Toho Water Authority is pleased to present its 2023 Annual Drinking Water Report, designed to inform you about the quality of the water we deliver every day. The report includes test results from water quality analyses conducted throughout 2023.

OUR ANNUAL DRINKING WATER REPORT

Toho Water Authority is pleased to present its annual drinking water report. The name of the report reflects the year the data was collected rather than the year published. This report is designed to inform you about the quality of the water we deliver every day. It is our pleasure to report that the drinking water we produce follows all federal and state water quality regulations. The water quality information in this report is organized by service areas and identified by the associated Public Water System (PWS) number. Use the map to determine your service area, then go to the associated water quality data. To request a printed copy of this report, please contact our Customer Service team at 407-944-5000.



CONTENTS

Serving Our Community	3
Toho's Promise	4
Water Source	5
Water Quality	6
State Regulations	7
Health Information	8 - 11
Glossary and Abbreviations	12
Service Area Map	13
Water Tables Explained	14
Water Quality Reports	15 - 18
You Could Be Selected	19
Proper Irrigation	20
Investing In The Future	21



SERVING OUR COMMUNITY

Toho Water Authority (Toho) is the largest provider of water, wastewater and reclaimed water services in Osceola County. Toho currently operates 17 water treatment facilities and nine wastewater treatment facilities with the purpose of providing efficient and reliable water services. With a 550 person workforce, Toho treats and distributes approximately 51.6 million gallons of potable water and reclaims 34.3 million gallons of wastewater each day. Toho was established for the sole purpose of providing regional stewardship over water resources in Osceola County.



TOHO'S PROMISE

**Our Customers, Our Community, Our Employees
Trust That Toho Cares**

As an integral part of the community, Toho is dedicated to delivering exceptional services. Whether it's through in-person interactions, phone conversations, or our website, one thing remains certain—we care.

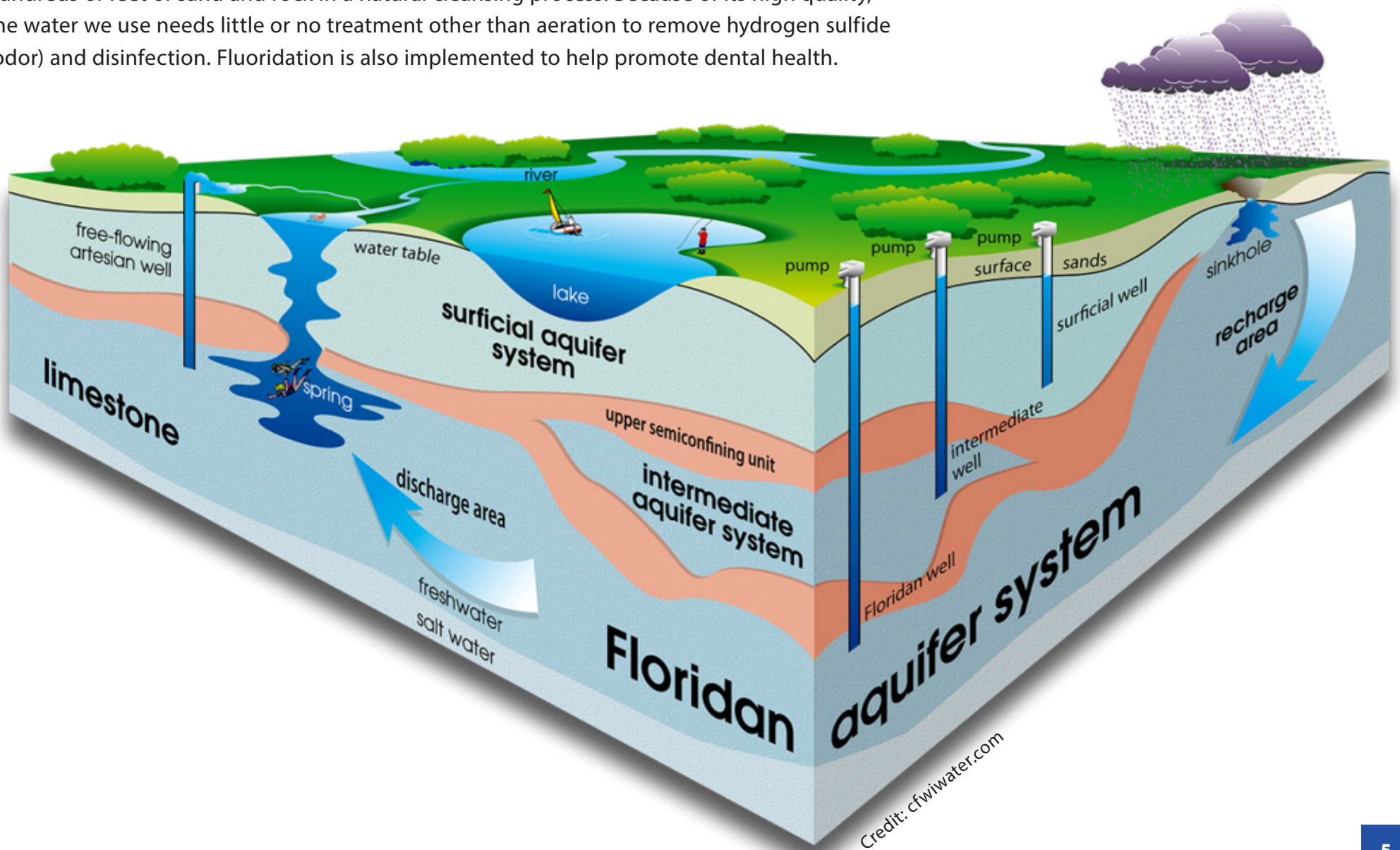
Toho is guided by a seven-member board of supervisors who oversee all operational policies and carefully manage the organization's budget. If you're interested in learning more about Toho, we encourage you to attend our regularly scheduled Board meetings. These meetings are open to the public and take place on the second Wednesday of every month at 5 p.m. in the Boardroom located at 951 Martin Luther King Blvd., Kissimmee, Florida 34741. To access the meeting agenda, please visit tohowater.com.

In compliance with Section 286.26 of the Florida Statutes, we prioritize inclusivity. If you require assistance to participate in any of these proceedings, please reach out to the office of the Executive Director beforehand. You can contact us at 407-944-5130 or via email at tohoattend@tohowater.com.



WATER SOURCE

Underneath Osceola County lies one of the largest pristine reservoirs of fresh groundwater in the country, the Floridan Aquifer. Water from this aquifer is of consistently high quality and is used as the source of potable water for Toho's water system. The aquifer is recharged by rainfall on the Lake Wales Ridge (US 27) in Osceola, Polk and Lake counties that is filtered through hundreds of feet of sand and rock in a natural cleansing process. Because of its high quality, the water we use needs little or no treatment other than aeration to remove hydrogen sulfide (odor) and disinfection. Fluoridation is also implemented to help promote dental health.



WATER QUALITY

Toho Water Authority (Toho) delivers to you water that is constantly tested for compliance with federal and state standards and regulations. During the period of January 1st to December 31st 2023, covered by this Consumer Confidence Report, highly trained scientists and technicians performed analyses on samples taken throughout your water system. The results of these analyses showed that the substances for which Toho is required to test, most were found to be at levels in the water substantially lower than the minimum acceptable levels. This brochure is a summary of the water quality provided to our customers. It is a record reflecting the hard work of our employees to bring you high quality water.



STATE REGULATIONS

SWAPP stands for the Source Water Assessment and Protection Program. This program is meant to ensure that your drinking water is safe, not just at the tap, but at its source. The Florida Department of Environmental Protection (FDEP) initiated SWAPP as part of the federal Safe Drinking Water Act. Lakes, rivers, streams, and aquifers make up the drinking water sources in Florida. These source waters can be threatened by potential contaminants such as hazardous chemicals, stormwater runoff, waste disposal sites, and underground storage tanks. It is a national priority to protect these sources and ensure safe drinking water for citizens. SWAPP was created to protect these vital resources.



HEALTHY 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).



SOME PEOPLE may be more vulnerable to contaminants in drinking water than is 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).





REQUIRED ADDITIONAL HEALTH INFORMATION

If present, elevated levels of 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.

Toho is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

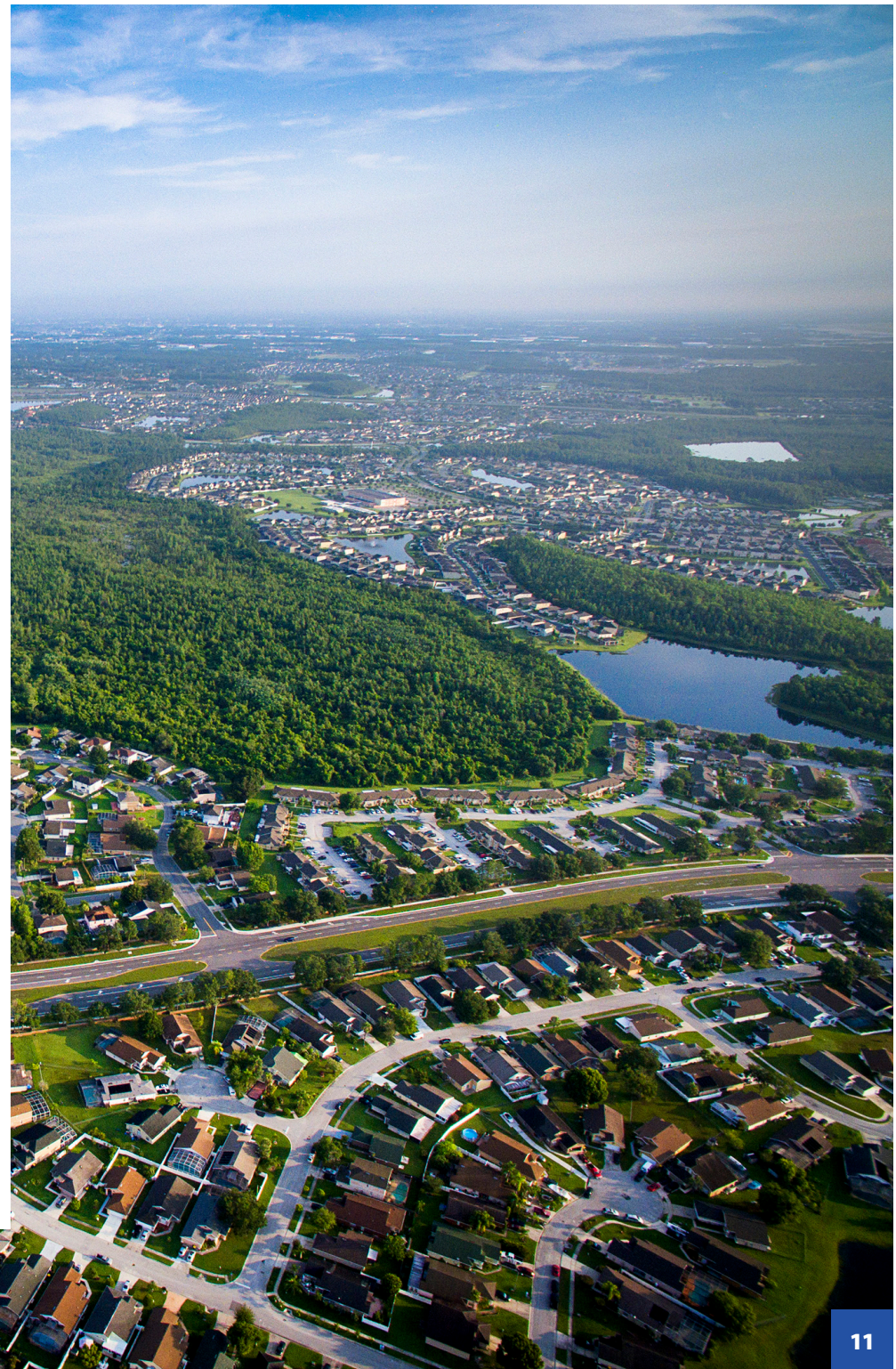
When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

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, 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, stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.



GLOSSARY AND ABBREVIATIONS

MAXIMUM CONTAMINANT LEVEL (MCL): 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. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 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.

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 allow for a margin of safety.

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.

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.

RUNNING ANNUAL AVERAGE (RAA): The average of the monitoring period average for a year.

LOCATIONAL RUNNING ANNUAL AVERAGE (LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

PARTS PER MILLION (PPM) OR MILLIGRAMS PER LITER (MG/L): One part per million corresponds to one minute in two years or a single penny in \$10,000.

PARTS PER BILLION (PPB) OR MICROGRAMS PER LITER (UG/L): One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

PICOCURIES PER LITER (PCI/L): Picocuries per liter is a measure of the radioactivity in water.

ACTION LEVEL (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

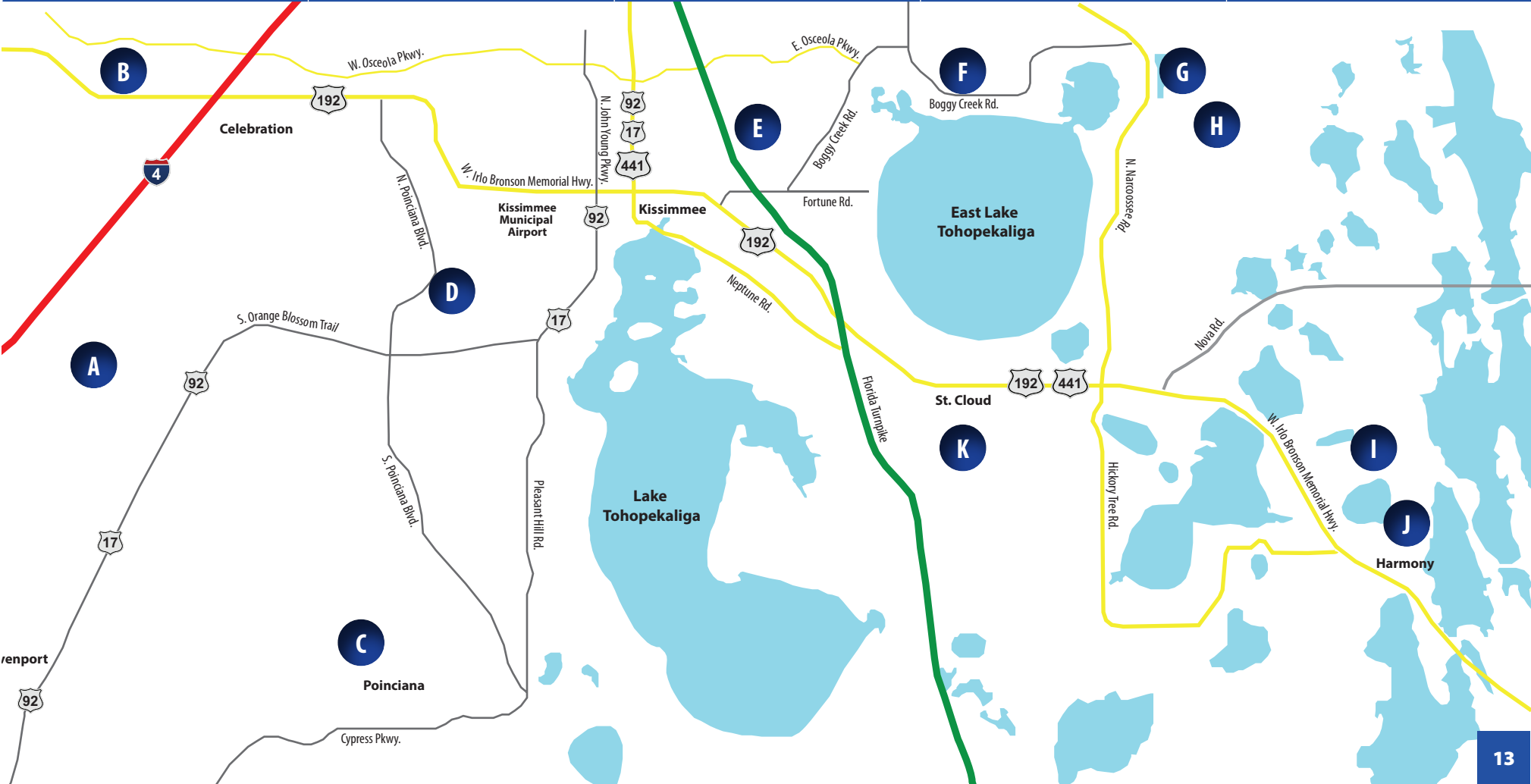
ND: Means not detected and indicates that the substance was not found by laboratory analysis.

N/A: Means not applicable.



TOHO WATER AUTHORITY SERVICE AREAS

<p>WESTERN A - Hidden Glen B - Western</p>	<p>SOUTHERN C - Poinciana</p>	<p>CENTRAL D - Eastern E - Buenaventura Lakes</p>	<p>EASTERN F - Springlake Village G - Lake Ajay Estates H - Sunbridge & Tavistock East I - Bay Lake Estates J - Harmony & Pine Glen</p>	<p>ST. CLOUD K - City of St. Cloud</p>
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AN EXPLANATION OF THE WATER-QUALITY DATA TABLE

The following tables show the results of our water-quality analyses. Every regulated contaminant that we detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings, and a key to units of measurement.

As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

National Primary Drinking Water Regulation Compliance

Water Quality Data for community water systems throughout the United States is available at www.epa.gov/safewater.



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)	3/23	N	0.017	0.011 - 0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	3/23	N	0.54	0.073 - 0.54	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Sodium (ppm)	3/23	N	9.9	5.8 - 9.9	N/A	160	Salt water intrusion, leaching from soil

STAGE 2 DISINFECTANTS AND DISINFECTION BY-PRODUCTS

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
Chlorine (ppm)	1/23- 12/23	N	1.80 (RAA)	0.4 - 2.8	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	1/23 - 12/23	N	23.57 (LRAA)	4.2 - 38.5	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	1/23 - 12/23	N	43.23 (LRAA)	13.5 - 67.5	N/A	MCL = 80	By-product of drinking water disinfection

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	01/23 - 03/23	N	0.206	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	01/23 - 03/23	N	0.6	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

UNREGULATED CONTAMINANTS (UCMR5)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	Level Detected (average)	Range	Likely Source of Contamination
PFBA (ug/L)	7/23, 03/24	0.0026	ND - 0.0026	Discharge of fire training/fire response sites, industrial sites, landfills, and wastewater treatment plants/biosolids

In 2023, the Eastern water system has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA’s Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791. To learn more or for the complete report, contact Toho’s Environmental Programs Manager at 407-483-3807.

SOURCE WATER ASSESSMENT INFORMATION

In 2023 the 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 were 9 potential sources of contamination identified for this system with low susceptibility levels. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at prodapps.dep.state.fl.us/swapp or by calling (407) 824-4841.

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)	3/23	N	0.012	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	3/23	N	0.17	N/A	4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	3/23	N	18.4	N/A	N/A	160	Salt water intrusion, leaching from soil

MICROBIOLOGICAL CONTAMINANTS

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Result	MCLG	TT	Likely Source of Contamination
Total Coliform Bacteria	9/23	Y	Positive	N/A	Level 1	Naturally present in the environment

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

During the past year we were required to conduct 1 Level 1 assessment. 1 Level 1 Assessment were completed. In addition, we were required to take 0 corrective actions and we completed 0 of these actions. A Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why coliform bacteria have been found in our water system.

Total Coliform Bacteria - Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

LEAD AND COPPER (TAP WATER)

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
Copper (tap water) (ppm)	8/23	N	0.15	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	8/23	N	1.5	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

STAGE 2 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
Chlorine (ppm)	1/23 - 12/23	N	1.55 (LRAA)	0.6 - 2.6	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
Haloacetic Acids (five) [HAA5] (ppb)	5/23, 8/23	N	34.8	28.4 - 34.8	N/A	MCL = 60	By-product of drinking water disinfection
Total Trihalomethanes [TTHM] (ppb)	5/23, 8/23	N	58.5	56.0 - 58.5	N/A	MCL = 80	By-product of drinking water disinfection

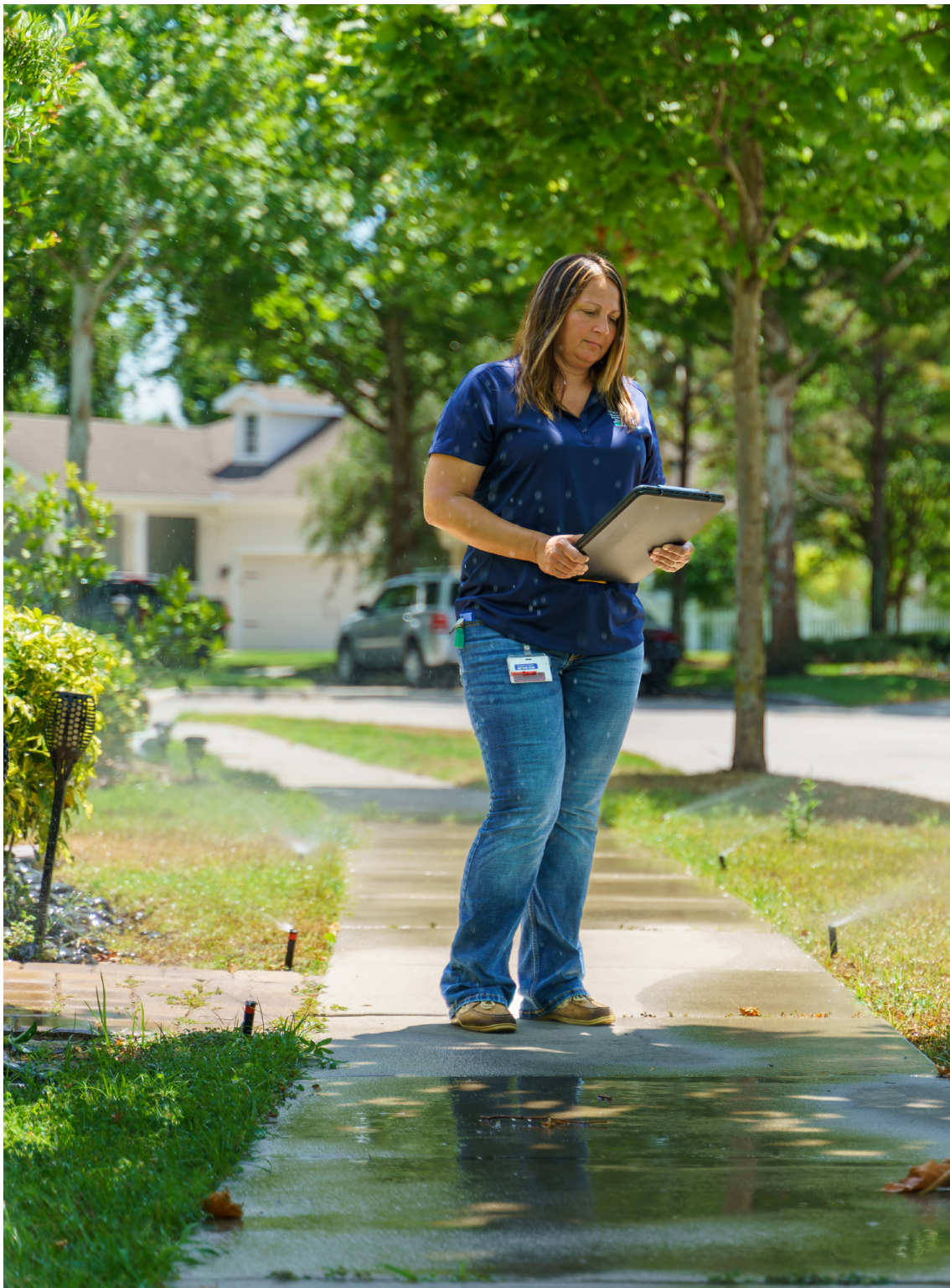
SOURCE WATER ASSESSMENT INFORMATION

In 2023 the 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 were 2 potential source of contamination identified for this system with low susceptibility level, which are petroleum storage tanks. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at prodapps.dep.state.fl.us/swapp or by calling (407) 824-4841.



YOU COULD BE SELECTED

Toho collects and tests drinking water throughout its service area daily. Part of our water quality program requires us to collect water samples from residential homes. The addresses are selected at random and approved by the Department of Environmental Protection (DEP). The approved program may require sample collection on a quarterly basis or once every three years. The purpose is to provide an accurate overview of our water quality. Your home may be selected as part of the program. For more information, please visit our Water Quality Program page on tohowater.com.



PROPER IRRIGATION

Your irrigation schedule helps everyone. Watering on your days and times:

- Creates a healthy lawn
- May reduce your bill
- Makes you a good neighbor

Your irrigation timer should be set for only 2 days per week. Scan the QR code below for your irrigation schedule or visit our Watering Days and Times section on tohowater.com.

Need Help?

We'll set your irrigation timer at no cost to you. For an appointment or for more information, please email us at waterconservation@tohowater.com or call us at 407-944-5124.





INVESTING IN THE FUTURE

Most of Florida's drinking water comes from the aquifer. To help conserve this potable water resource, Toho is investing in alternative water supplies. In 2021 Toho finished construction of a 400-million-gallon reservoir. A water treatment facility is expected to be built in 2024 off US 192 to treat water from the reservoir. This treatment facility will allow Toho to provide a sustainable alternative water supply option for irrigation services and also includes the ability to add processes to treat surface water to potable standards if needed in the future. Up to 6 million gallons of water will be treated daily once the facility is operational.

**Toho
Water
Authority**

