

***Annual Drinking Water Quality Report for 2024***  
***CLAY UNIFORM WATER DISTRICTS***  
***4401 STATE ROUTE 31***  
***CLAY, NEW YORK 13041***  
***Public Water Supply ID# NY3304344***

**INTRODUCTION**

To comply with State regulations, Clay Uniform Water Districts will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Frank Mazzye, Water Superintendent at 315-652-3800 Ext. 146. We want you to be informed about your drinking water. If you want to learn more, please attend the first Town Board Meeting of November 2025, we of course will be glad to discuss any drinking water issues you may have.

**WHERE DOES OUR WATER COME FROM?**

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Clay Uniform Water is a special district of the Town of Clay and supplies water to the southwestern portion of the Town of Clay. Clay is a distribution system that buys all of its water from the ONONDAGA COUNTY WATER AUTHORITY (OCWA). 90% comes from Lake Ontario and 10% comes from Otisco Lake. Our water source is the ONONDAGA COUNTY WATER AUTHORITY, which is located at Northern Concourse, North Syracuse, New York. During 2024 our system did not experience any restriction of our water source.

The NYS DOH has evaluated OCWA's susceptibility to contamination under the Source Water Assessment Program (SWAP), their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for OCWA. OCWA provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

This assessment found a moderate susceptibility to contamination for OCWA's Otisco Lake source of drinking water. The amount of row crops in the assessment area results in a medium susceptibility to pesticides. No permitted discharges were found in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources. These facility types include: mines, while lakes are not generally considered to have a high natural sensitivity to phosphorus in SWAP, this lake already shows algae problems. Therefore, additional phosphorus contribution would likely result in further water quality degradation.

Lake Ontario Source (water purchased from Metropolitan Water Board): The Great Lakes' watershed is exceptionally large and too big for a detailed evaluation in the SWAP. General drinking water concerns for public water supplies which use these sources include: storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g. zebra mussels- intake clogging and taste and odor problems). The summary below is

based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at this PWS intake.

## **FACTS AND FIGURES**

Our water system serves 16,000 people through 5,875 service connections. The total water purchased in 2024 was 706,564,000 gallons. The amount of water sold in 2024 to customers was 571,742,000 gallons. The total amount of water lost in 2024 was 134,822,000 gallons; this water was used to flush water mains, fight fires and leaks in the system. In 2024, water customers were charged an average of \$4.23 per 1,000 gallons of water.

## **WATER SOURCES AND TREATMENT**

Customers of the Clay WDs receive water from the Onondaga County Water Authority (OCWA) that originates from Otisco Lake or Lake Ontario. Customers located in certain areas may get a mixture of these waters or their source water may vary with changes in seasonal demand. In 2024, OCWA supplied on average 36.31 million gallons per day to approximately 98,001 residential accounts located in suburban Onondaga County, and parts of Madison, Oneida, Oswego, and Cayuga counties. OCWA also supply water daily to 49 industrial customers and five municipal wholesale water accounts. In addition, OCWA supplied water on an intermittent or emergency basis to seven additional municipal water systems.

In 2024, on average 17.14 million gallons per day, or 47.2% of OCWA's water supply, came from Otisco Lake, the easternmost and smallest Finger Lake. The customers receiving water originating from Otisco Lake are mostly located in the southern and western half of Onondaga County.

OCWA's Otisco WTP has two intake pipes located in Otisco Lake. The water entering these pipes is immediately disinfected with either sodium hypochlorite or chlorine dioxide to discourage the growth of zebra mussels. The water then travels, by gravity, approximately five miles to OCWA's Otisco WTP located in Marcellus, NY. Water first enters the rapid mix tank where a coagulant (polyaluminum chloride) is added. After 30 seconds of mixing, the water enters contact basins where the calm conditions allow the coagulant to make the small particles adhere together, forming larger particles. Some of these particles settle and are cleaned out later. The contact time in these basins also allows powdered activated carbon (used only when needed) to adsorb organic taste and odor. After about one hour of contact time, the water next enters the filters. Particles are removed as the water passes through one of six multimedia filters. These filters consist of granular activated carbon, silica-sand, and hi-density sand. The filters are washed when needed and the water used to do this is collected in lagoons and allowed to settle. It is then recycled back to the start of the treatment plant to be treated again. After filtration, the water is again disinfected with sodium hypochlorite and fluoride is added. The water is stored in large tanks located at the treatment plant to provide adequate contact time for the chlorine to disinfect any microbial contaminants. Once the water leaves the tanks, orthophosphate is added for corrosion control, or to prevent the leaching of lead and copper from pipes into your water.

OCWA also treats and delivers water from Lake Ontario via the Ontario WTP. In 2024, on average 17.98 million gallons per day, or 49.5% of our water supply, came from Lake Ontario. Customers receiving water originating from Lake Ontario are mostly located in the northern and eastern half of Onondaga County. Customers in Oswego, Madison, Oneida, and Cayuga counties receive all their water from Lake Ontario.

OCWA's Ontario WTP pumps water from Lake Ontario through a seven-foot diameter intake it shares with the City of Oswego. Upon entering the raw water pumping station, lake water is treated with carbon dioxide to suppress pH thereby increasing the effectiveness of chemical coagulation. Potassium permanganate is applied seasonally to the water for taste and odor control and for pre-oxidation. The water is then pumped approximately two miles to our Ontario WTP. Water entering the plant is treated with sodium hypochlorite (disinfectant) and polyaluminum chloride (coagulant) and then flash mixed. The water next enters three contact basins where slow mixing allows small particles to accumulate and form larger, more readily filtered particles. After about two hours of contact time, the water flows into dual media filters consisting of granular activated carbon and filter sand whereby particulate contaminants are removed. After filtration, three treatments are applied: fluoride to reduce tooth decay, sodium hypochlorite to disinfect, and sodium hydroxide for corrosion control.

The first step in any water treatment process is to protect the source. At OCWA, they have ongoing watershed protection programs in place. These programs are carried out in cooperation with the State and Onondaga County Departments of Health. In addition, OCWA monitors lake conditions at regular intervals prior to treatment. The NYSDOH completes Source Water Assessments to better recognize potential sources of contaminants for every water source used throughout the State. 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 activities. Contaminants that may be present in source waters are microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. To ensure that water is safe to drink, NYSDOH and USEPA prescribe regulations which limit the level of certain contaminants in water provided by public water systems. The State Health Department and the US Food and Drug Administration's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **Source Water Assessment Program ("SWAP") Summary**

NYSDOH has evaluated our susceptibility to contamination under the Source Water Assessment Program ("SWAP"), and the agency's findings are summarized in the paragraphs below. It is important to stress that these assessments were created using the information available and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur. OCWA provides treatment and regular monitoring to ensure that the drinking water we deliver to consumers meets all applicable standards.

### **Otisco Lake Source:**

This assessment found a moderate susceptibility to contamination of our Otisco Lake source of drinking water. The amount of row crops in the assessment area results in a medium susceptibility to pesticides. Importantly, no permitted discharges are found in the assessment area.

There is also susceptibility of contamination to phosphorus associated with one discrete contaminant source, mines. While lakes are not generally considered to have a high natural sensitivity to phosphorus in SWAP, Otisco Lake can have problems with algae. Therefore, additional phosphorus contribution would likely result in further water quality degradation.

**Lake Ontario Source:** The Great Lakes' watershed is exceptionally large and too big for a detailed SWAP evaluation. General drinking water concerns for public water supplies from a large source can include storm generated turbidity, wastewater, toxic sediments, shipping related spills, and problems associated with exotic species (e.g., zebra mussels). The summary below is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact drinking water quality at OCWA's public water system intake.

According to the assessment, there is a moderate susceptibility to contamination in this source of drinking water.

The number of agricultural lands in the assessment area results in elevated potential for pesticides contamination. Non-sanitary wastes may also increase contamination potential. Furthermore, there is a noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include mines.

## **Quality - How do you know your water is safe?**

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Under the Safe Drinking Water Act ("SDWA"), the United States Environmental Protection Agency ("USEPA") sets national limits on contaminant levels to ensure the safety of your drinking water. These limits are known as Maximum Contaminant Levels ("MCLs"). For some contaminants, the monitoring techniques may be unreliable, too expensive, or too difficult to perform. In these cases, the USEPA establishes treatment technique requirements instead of a MCL. If it cannot be determined that a contaminant is absent, systems operate as if it is present and provide the treatment necessary to produce safe drinking water. USEPA regulations also specify testing and reporting requirements for each contaminant. Something many drinking water regulations have in common is a requirement to notify the public if there is a regulation violation. If a regulation is violated the supplier is required to inform the consumers being served by the system. USEPA also requires water suppliers to monitor unregulated contaminants to provide occurrence data for future regulations.

USEPA has established regulations for 88 individual contaminants. These include: 8 microbiological contaminants, 4 radionuclides, 16 inorganic chemicals, 53 organic chemicals, 3 disinfectants, and 4 disinfection byproducts. The SDWA requires USEPA to review and revise each regulation on a regular basis. For example, the MCL for trihalomethanes was lowered from 100 to 80 ug/L (parts per billion) as part of a review completed in 1997. USEPA is also required to consider at least five new contaminants for regulation every five years.

In New York, the New York State Department of Health ("NYSDOH") is responsible for enforcing USEPA regulations. New York State has the option to implement alternative regulations when the alternative is equivalent to or more stringent than USEPA's regulation. In Onondaga County, due to the strength of the local unit, the State Health Department has delegated its primary enforcement and surveillance activities to the Onondaga County Health Department. The County Health Department reviews and approves all treatment plant and distribution system modifications, as well as new construction. It also reviews all our operating and monitoring data for compliance each month. OCWA takes a similar, cooperative approach with the Health Departments in Oswego, Oneida, Madison, and Cayuga counties.

OCWA uses a combination of internal and external laboratories to conduct over 20,500 tests during a typical year. OCWA operates three state certified testing laboratories: one at our Otisco Water Treatment Plant ("Otisco WTP"), one at OCWA's Ontario Water Treatment Plant ("Ontario WTP"), and one at OCWA's headquarters building in North Syracuse. OCWA also utilizes several outside certified testing laboratories, including PACE Analytical, Eurofins Eaton Analytical, Analytical Services Inc., and Upstate Freshwater Institute.

OCWA's raw water monitoring programs are specifically designed to address concerns about Otisco Lake and Lake Ontario as they serve as our main sources of supply. In both lakes, raw water intakes extend from a mile to a mile and a half out into the lakes to minimize the effects of near shore currents and run-off. Lab results consistently confirm that levels of organic compounds and heavy metals do not exceed the applicable MCLs. General unfiltered water quality remains high for both Otisco Lake and Lake Ontario. Both sources are monitored more frequently, and for a wider range of compounds, than required by state and federal law.

Importantly, the same degree of caution applied to your tap water source should be used in selecting a bottled water supplier. To that end, a list of certified bottled waters for sale in New York (along with their sources) can be obtained from NYSDOH by calling 1-800-458-1158.

**Additional information on contaminants and potential health effects can be obtained by calling USEPA's "Safe Drinking Water Information Helpline" at 1-800-426-4791.**

### **Cryptosporidium and Giardia:**

New York State law requires water suppliers to notify their customers about the risks of cryptosporidium and giardia, which are intestinal illnesses caused by these microscopic parasites. These pathogens are of concern because they are found in surface water and ground water under the influence of surface water throughout the United States. Filtration and disinfection are the best methods to use against these pathogens, but 100% removal or inactivation cannot be guaranteed. Symptoms of infection from cryptosporidium and giardia include nausea, diarrhea, and cramps. Most healthy people can overcome the disease within a few weeks.

USEPA's Surface Water Treatment Rule ("SWTR") established water treatment standards specifically designed to ensure the removal or deactivation of cryptosporidium, giardia, and other microbial contaminants. USEPA is currently working on enhancing these standards to further ensure protection against exposure to cryptosporidium from drinking water. OCWA's Otisco and Ontario WTPs are in full compliance with all current operational, monitoring, and reporting requirements.

In addition, OCWA's internal performance standards are more stringent than the law currently requires. For example, the SWTR requires a treatment plant's combined filter effluent water turbidity (a measure of clarity used to check filtration particulate removal) to be less than 0.30 NTUs 95% of the time. In 2024, OCWA's Otisco

WTP's combined filter effluent turbidity was less than 0.06 NTUs 95% of the time based on continuous four-hour sampling intervals. OCWA's Ontario WTP's combined filter effluent turbidity in 2024 averaged less than 0.07 NTUs 95% of the time, again based on four-hour sampling intervals. Cryptosporidium regulations contain improved filtration performance requirements to ensure removal of any protozoans that may be present. Part of the enhanced filtration requirements involve lowering the turbidity criteria from 0.50 NTU to the 0.30 NTU range. Both of OCWA's treatment plants are achieving turbidity results much lower than the regulated levels.

**Some people may be more vulnerable to disease causing microorganisms or pathogens 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 people, and infants can be particularly at risk from infections. These individuals should seek advice from their health care provider about their drinking water. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium, giardia, and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).**

Individuals who think they may have cryptosporidiosis or giardiasis should contact their health care provider immediately. For additional information on cryptosporidiosis or giardiasis you may contact the Onondaga County Health Department at 421 Montgomery St., 12th Floor, Syracuse, NY 13202 or by calling 315-435- 6600.

### **ARE THERE CONTAMINANTS IN OUR DRINKING WATER?**

As the State regulations require, OCWA tests your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper volatile organic compounds, total trihalomethanes, and synthetic organic compounds. Additionally, we test our water for Total coliform bacteria, lead and copper. The tables below depict which contaminants were detected in your drinking water. A copy of all non-detected contaminants is on file with the Town of Clay Uniform Water District Office as well as the Town Clerk's Office for public review.

The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, may be reasonably 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) or the Onondaga County Health Department at 315-435-6600.

### **TABLE OF DETECTED CONTAMINANTS** **(Found in the Clay WDs Distribution System)**

Contaminant	Sample Source	Violation Yes / No	Date(s) of Sampling	Average Level found (Range)	Units Measured	MCLG	Regulatory Limit MCL	Likely Source of Contamination
Chlorine Residual	Clay Distribution System	No	24/month	0.88 (0.2-1.8)	mg/L	(MRDLG) N/A	(MRDL) 4	Water additive used to control microbes.
Total Trihalomethanes*	Clay Distribution System	No	Mar-24 Jun-24 Sep-24 Dec-24	42.51 (25-61.7)	ug/L	n/a	80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter.

Haloacetic acids**	Clay Distribution System	No	Mar-24 Jun-24 Sep-24 Dec-24	13.42 (<1-22)	ug/L	n/a	60	By-product of drinking water disinfection needed to kill harmful organisms.
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**Disinfection By-products;** During disinfection, certain by-products form as a result of chlorine reacting with naturally occurring organic matter. The disinfection process is carefully monitored so that disinfection is effective, while levels of disinfection by-products are kept low. Trihalomethanes (THM's) and Haloacetic acids (HAA's) are classes of chemicals that OCWA is required to monitor for in its distribution system.

\* See 'Terms & Abbreviations' for the listing of Trihalomethanes contaminants.

\*\* See 'Terms & Abbreviations' for the list of Haloacetic acids contaminants.

### Table of Detected Contaminants (Lead and Copper in the Clay WDs Distribution System)

Contaminant	Violation Yes/No	Dates of Sampling	Average Level Found Range	90 <sup>th</sup> Percentile Value	Units Measured	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Copper	No	July-Sept 2022	0.050 (0.020-0.130)	0.100	mg/L	0	AL = 1.3*	Corrosion of household plumbing systems; Erosion of natural Deposits; Leaching from wood preservatives.
Lead	No	July-Sept 2022	0.91 (ND-2.6)	2.5	ug/L	0	AL = 15*	Corrosion of household plumbing systems and service lines connecting building to water mains, erosion of natural deposits

\*AL (Action Level) – Only 10% of samples can exceed this level.

### About Lead and Copper:

In order to deter the leaching of lead and/or copper from our customers pipes, OCWA has been mandated to implement corrosion control. The method of corrosion control used on waters originating from Otisco Lake is the addition of orthophosphate. The adjustment of pH is the method used for Ontario water. The latest sampling period was in July-Sept. 2022 when the water was sampled and tested customers' tap to make sure the corrosion controls were effective.

**90<sup>th</sup> Percentile Values for Lead & Copper:** The values reported for Lead and Copper represent the 90<sup>th</sup> percentile. The 90<sup>th</sup> percentile value is the concentration that 90% of the taps sampled were at or below. Since the Action Level for Lead is 15 ug/l, 90% of the taps tested had to be at or below this value. As you can see from the above chart, 90% of the taps tested were at or below 2.5 ug/L in July-Sept. The Action Level for Copper is 1.3 mg/L. The observed 90<sup>th</sup> percentile for Copper was 0.100 mg/L. Of the 30 samples that were tested in July-Sept 2022, no samples exceeded the action level for lead and no samples exceeded the action level for Copper. The testing showed that our methods of corrosion control are working.

### EDUCATIONAL INFORMATION ABOUT LEAD:

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. Clay WDs is responsible for providing high quality drinking water, 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 other 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 Clay WDs at 315-652-3800. 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>.

## Table of Detected Contaminants Turbidity at Entry Point

Contaminant	Water Source	Violation Yes/No	Sampling frequency (highest reading)	Average Level found (Range)	Units Measured	MCLG	Regulatory Limit (TT)	Lowest % of Monthly tests Meeting limit	Likely Source of Contamination
Turbidity	Otisco	No	Every 4 hrs (9/21/24)	0.05 (0.02-0.09)	NTU	N/A	TT=0.3 NTU For systems that filter	100%	Soil run off
	Ontario	No	Every 4 hrs (1/31/24)	0.05 (0.026-0.098)	NTU	N/A	TT=0.3 NTU For systems that filter	100%	

### About Turbidity:

Turbidity is a measure of the cloudiness of water. Turbidity is monitored because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Treatment plants that filter also measure it because it is a good indicator of filter efficiency. Otisco Lake and Lake Ontario waters are filtered. As explained above.

Clay WDs purchases water from the Onondaga County Water Authority (OCWA). Water may originate from Otisco Lake, which is treated by OCWA itself, or Lake Ontario, which is treated by the Metropolitan Water Board (MWB) and sold to OCWA. Customers may also get a mixture of these waters.

OCWA's highest single turbidity measurement during 2024 at the Otisco WTP occurred on 9/21/24 (0.09 Nephelometric Turbidity Unit (NTU)). Our highest single turbidity measurement for the year at the Ontario WTP occurred on 1/31/24 (0.089 NTU). State regulations require that turbidity must always be less than or equal to 1.0 NTU and that 95% of the turbidity samples collected must be below 0.3 NTU. The levels recorded at both treatment plants were all below these regulatory standards.

### Health Effects of Turbidity:

Turbidity has no known health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may also indicate the presence of disease-causing organisms. These organisms can include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. See page 4 for more information about cryptosporidium and giardia.

**Table of Detected Contaminants**  
**Inorganic Contaminants Found at Entry Point**

Contaminant	Water Source	Violation Yes/No	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Aluminum	Otisco	No	24-Sep	0.086	mg/l	N/A	N/A	Erosion of natural deposits; Industrial sources
	Ontario	No	24-Sep	0.127	mg/l	N/A	N/A	
Barium	Otisco	No	24-Sep	0.032	mg/l	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
	Ontario	No	24-Sep	0.021	mg/l	2	2	
Calcium	Otisco	No	24-Sep	31.7	mg/l	N/A	N/A	Naturally occurring
	Ontario	No	24-Sep	33.7	mg/l	N/A	N/A	
Chloride	Otisco	No	24-Sep	44.6	mg/l	N/A	250	Naturally occurring; Road salts
	Ontario	No	24-Sep	25.1	mg/l	N/A	250	
Chlorite	Otisco	No	Daily*	0.23 (0.7-0.41)	mg/l	N/A	1	By-product of drinking water disinfection at plants using Chlorine Dioxide
Chlorine Dioxide Residual (1)	Otisco	No	Daily*	0.03 (<10-100)	ug/L	N/A	800 (MRDL)	Water additive used to control microbes.
Copper	Otisco	No	24-Sep	0.0049	mg/l	N/A	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
	Ontario	No	24-Sep	0.0041	mg/l	N/A	AL=1.3	
Fluoride (2)	Otisco	No	Daily	0.70 (0.59-0.81)	mg/l	N/A	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
	Ontario	No	Daily	0.69 (0.26-0.76)	mg/l	N/A	2.2	
Free Chlorine Residual	Otisco	No	Every 4 hrs	0.99 (0.73-1.32)	mg/l	N/A	4 (MDRL)	Added to water to kill harmful bacteria and to prevent the regrowth of bacteria
	Ontario	No	Every 4 hrs	0.89 (0.65-1.17)	mg/l	N/A	4 (MDRL)	
Magnesium	Otisco	No	24-Sep	11.2	mg/l	N/A	N/A	Naturally occurring
	Ontario	No	24-Sep	8.91	mg/l	N/A	N/A	

(1) Chlorite and Chlorine Dioxide were tested daily for 211 days in 2024. At the same time, OCWA added chlorine dioxide at Otisco's intake as a preoxidant in order to control zebra mussels, provide adequate disinfection, and limit the formation of undesirable disinfection by-products such as trihalomethanes and haloacetic acids. OCWA intends to add chlorine dioxide again during warm water conditions in 2025.

(2) Information on Fluoride Addition: OCWA is one of many drinking water systems that provide drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal dose of 0.7 mg/l. To ensure that the fluoride supplement in your water provides optimal dental protection, the NYS Health Department requires that we monitor fluoride levels on a daily basis. 2024 monitoring showed fluoride levels in your water were within 0.1mg/l of the optimal dose 99% of the time for Otisco Lake water and 100% of the time for Lake Ontario water.

**Table of Detected Contaminants**  
**Inorganic Contaminants Found at Entry Point**

Contaminant	Water Source	Violation Yes/No	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nickel	Otisco	No	24-Sep	0.0006	mg/l	N/A	N/A	Erosion of natural deposits
Manganese	Ontario	No	24-Sep	0.0044	mg/l	N/A	0.3	Naturally occurring; Indicative of landfill contamination
Nitrate	Otisco	No	24-Sep	0.12	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
	Ontario	No	24-Sep	0.16	mg/l	10	10	
Sodium (3)	Otisco	No	24-Sep	27.5	mg/l	N/A	See Health Effects	Naturally occurring or indicative of road salt contamination
	Ontario	No	24-Sep	17.9	mg/l	N/A	See Health Effects	
Sulfate	Otisco	No	24-Sep	11.4	mg/l	N/A	250	Naturally occurring
	Ontario	No	24-Sep	21.8	mg/l	N/A	250	
Odor	Otisco	No	24-Sep	1	Unit	N/A	3	Organic or inorganic pollutants from municipal or industrial waste, natural sources

(3) Health Effects of Sodium: There is no maximum contaminant level (MCL) for sodium. However, water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted diets.

**Table of Detected Contaminants**  
**Radionuclides Found at Entry Point**

Contaminant	Water Source	Violation Yes/No	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Alpha Emitters	Otisco	No	Feb, May, Aug, Nov. 2017	0.62	pCi/l	0	15	Erosion of natural deposits
	Ontario	No	Feb, May, Aug, Nov. 2024	0.336	pCi/l	0	15	
Beta Emitters	Otisco	No	Feb, May, Aug, Nov. 2017	0.85	pCi/l	0	50	Decay of natural deposits and man made emissions
	Ontario	No	Feb, May, Aug, Nov. 2024	1.11	pCi/l	0	50	
Radium- 226	Otisco	No	Feb, May, Aug, Nov. 2017	0.47	pCi/l	0	5	Erosion of natural deposits
	Ontario	No	Feb, May, Aug, Nov. 2024	0.0571	pCi/l	0	5	

Contaminant	Water Source	Violation Yes/No	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Radium- 228	Otisco	No	Feb,May, Aug, Nov. 2017	0.8	pCi/l	0	5	Erosion of natural deposits
	Ontario	No	Feb,May, Aug, Nov. 2024	0.857	pCi/l	0	5	
Total Uranium	Otisco	No	Feb,May, Aug, Nov. 2017	0.30	pCi/l	0	5	Erosion of natural deposits
	Ontario	No	Feb,May, Aug, Nov. 2024	0.338	pCi/l	0	5	

### Organic Contaminants Found at Entry Point

Contaminant	Water Source	Violation Yes/No	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Dissolved Organic Carbon	Otisco	No	Monthly 2024	2.0 (1.4-2.9)	mg/l	N/A	N/A	Naturally occurring
	Ontario	No	Monthly 2024	1.8 (1.0-2.4)	mg/l	N/A	N/A	
Total Organic Carbon	Otisco	No	Monthly 2024	1.9 (1.4-2.4)	mg/l	N/A	N/A	Naturally occurring
	Ontario	No	Monthly 2024	1.7 (1.0-2.3)	mg/l	N/A	N/A	

### Table of Detected Contaminants Organic Contaminants Found at Entry Point

Contaminant	Water Source	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
1,4 dioxane	Ontario Entry Point	Oct-24	0.021	ug/l	N/A	1	Personal care products, detergents, cleaners, cosmetics

### Clay WDs Unregulated Contaminant Monitoring Rule 4 (UCMR4) Sampling

In 2019 and 2020, Clay WDs was required to participate in UCMR4. These samples were then analyzed for unregulated contaminants including: ten Cyanotoxin Chemicals, two Metals, eight Pesticides and one Pesticide Manufacturing ByProduct, three Brominated Haloacetic Acid Groups, three Alcohols, three Semivolatile Chemicals, and two Indicator Parameters from source waters.

Below is a table showing the unregulated contaminants found. A list of UCMR4 contaminants tested for but not found can be found at the end of this table. For more information, please contact Frank Mazzye, 652-3800, Ext. 146.

Contaminate	Water Source	Date(s) of Sampling	Average Level Found (Range)	Units Measured	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Maganese	Entry Point	Sep-19 Dec-19 Mar-20 June-20	1.65 (ND-3.2)	ug/L	N/A	N/A	Naturally occurring element. Commercially available in combination with other elements and minerals. Used in steel production, fertilizer, batteries, and fire works
HAA5	Clay WDs Distribution System	Sep-19 Dec-19 Mar-20 June-20	1.39 (1.3-25.9)	ug/L	N/A	N/A	By-Product of drinking water chlorination
HAA6Br	Clay WDs Distribution System	Sep-19 Dec-19 Mar-20 June-20	6.1 (0.4-9.4)	ug/L	N/A	N/A	By-Product of drinking water chlorination
HAA9	Clay WDs Distribution System	Sep-19 Dec-19 Mar-20 June-20	19.3 (1.7-19.3)	ug/L	N/A	N/A	By-Product of drinking water chlorination

## Unregulated Contaminants Not Detected During Testing

In 2019 and 2020, the following contaminants were tested for as part of UCMR4 but not detected: germanium (metal); 1- butanol, 2-mehtoxyethanol, 2- Propen-1-ol (alcohols); butylated hydroxyanisole, o-toluidine, quinoline (semivolatiles); and alpha-hexachlorocyclohexane, chlorpyrifos, dimethipin, ethoprop, oxyfluorfen, profenofos,tebuconazole, total permethrin [cis- & trans-], tribufos (pesticides); total microcystins, microcystinLA, microcystin-LF, microcystin-LY, microcystin-RR, microcystin-YR, nodularian, anatoxin-a, clyndropermopsin (cyanotoxins).

## Unregulated Contaminant Monitoring Rule 5 (UCMR5) Sampling

In 2023 and 2024 Clay WD's participated in the UCMR5 testing. Water samples were collected at the Entry point of the Distribution System, then analyzed for 30 unregulated contaminates including: 29 per- and polyfluoroalkyl substances (PFAS) and one metal/pharmaceutical analyte. All sample results were non detected for all contaminants tested for as part of the UCMR5.

## Unregulated Contaminants Not Detected During UCMR5 Testing

The following contaminants were tested for as part of UCMR5 but not detected: Hexafluoropropylene oxide dimer acid (HFPO-DA or GenX chemicals) Perfluorobutanesulfonic acid (PFBS) Perfluorooctanesulfonic acid (PFOS)\* Perfluorooctanoic acid (PFOA)\* Perfluorohexanesulfonic acid (PFHxS) Perfluorononanoic acid (PFNA) Perfluorobutanoic acid (PFBA) Perfluorohexanoic acid (PFHxA) Perfluorodecanoic acid (PFDA) 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) 1H, 1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS) 1H, 1H, 2H, 2H-perfluorohexane sulfonic acid (4:2 FTS) 1H, 1H, 2H, 2H-perfluorooctane sulfonic acid (6:2 FTS) 4,8-dioxa-3H-perfluorononanoic acid (ADONA) 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS) Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA) Perfluoro-3-methoxypropanoic acid (PFMPA) Perfluoro-4-methoxybutanoic acid (PFMBA) Perfluorododecanoic acid (PFDoA) Perfluoroheptanesulfonic acid (PFHpS) Perfluoroheptanoic acid (PFHpA) Perfluoropentanesulfonic acid (PFPeS) Perfluoropentanoic acid (PFPeA) Perfluoroundecanoic acid (PFUnA) N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) Perfluorotetradecanoic acid (PFTA) Perfluorotridecanoic acid (PFTrDA) Lithium

## **Chromium 6 Health Information**

Chromium is a common element in rocks, soil, water, plants, and animals. It gets into surface or groundwater after dissolving from rocks and soil. Chromium is used to manufacture steel, to electroplate metal, and in the textile, tanning, and leather industries. Contamination of drinking water may occur if chromium gets into surface or groundwater after improper waste disposal in landfills or by industrial or manufacturing facilities using chromium.

Chromium is found in the environment in two principal forms: chromium (III) and chromium (VI). Chromium (III) compounds are the most common chromium compounds in the environment. Chromium (VI) compounds are less common in the environment and are typically associated with an industrial source. Depending on the conditions, each form of chromium can be converted into the other form in the environment.

Chromium (VI) is the more toxic form of chromium. There is strong evidence from human studies in many countries that occupational exposures to chromium (VI) in the air can cause lung cancer. There is weaker evidence from studies in China that long-term exposure to chromium (VI) in drinking water can cause stomach cancer. Chromium (VI) causes cancer in laboratory animals exposed almost daily to high levels in the air (lung cancer) or drinking water (mouth and intestinal cancers) over their lifetimes. Adverse gastrointestinal-tract effects (oral ulcers, stomach or abdominal pain, diarrhea) other than cancer are also associated with long-term human exposures to oral doses of chromium (VI). In laboratory animals, repeated exposures to high oral doses of chromium (VI) have caused blood, liver, and kidney damage in adult animals, and can adversely affect the developing fetus and the male and female reproductive organs. Chemicals that cause cancer or other adverse health effects in people or laboratory animals exposed to high levels also may increase the risk of such effects in people exposed to lower levels over long periods.

**Prepared by New York State Department of Health – Bureau of Toxic Substance Assessment, March 14, 2011.**

OCWA was required to monitor for Chromium (VI) in the Unregulated Contaminant Monitoring Rule 3 conducted in 2014-2015. They continued to monitor for it in the source waters and entry points at both treatment plants annually through 2021. Although OCWA is not currently required to monitor for Chromium (VI), they continue to monitor for it in our source waters annually.

### **Frequently Asked Questions**

#### **Does my water contain Fluoride?**

Yes, OCWA water is fluoridated to a concentration of about 0.7 mg/l. OCWA is required to fluoridate by the New York State Department of Health.

#### **What is the pH of my water?**

OCWA's pH is 7.1 to 8.7, slightly basic. Alkalinity varies by source ranging from 95 mg/l to 140 mg/l (CaCO<sub>3</sub>)

#### **Is my water Hard or Soft?**

The hardness of OCWA's water ranges from 115 to 190 ppm. That is equal to about 6 to 11 grains per gallon. It is considered moderately hard. Hardness is a measurement of calcium carbonate in the water and is not a health concern.

#### **Will having a water softener installed improve the water quality in my home?**

No, softening does not improve the sanitary quality of water. Softeners mostly remove calcium carbonate. They will stop 'spotting' or 'scaling' which may occur on certain surfaces, and under certain conditions, when water puddles or droplets are allowed to evaporate. Water softeners may increase water usage because it takes more soft water to rinse away soap. It is ultimately a matter of personal preference.

### **What can I do about dirty or rusty water?**

Water that is dirty or rusty can be caused by changes in flow inside the pipes. Usually, this is due to a sudden increase in flow, but sometimes, also by a change of direction. Leaks, hydrant usage or, changes in valve positioning can rile things up and cause these problems. If the problem doesn't clear up in a short period of time call us and we will try to help. OCWA will investigate and correct the cause of the problem and flush it's piping if necessary. You may then be instructed to flush the piping in your own home. The water should clear up after running it a bit.

### **What about Taste or Odor Problems?**

Algae most commonly cause tastes and odors, which are; earthy, musty, grassy, or fishy. At the Otisco Lake and Lake Ontario plants water is filtered through granular activated carbon. At times, powdered activated carbon can also be added to adsorb the offensive tastes and odors and then the carbon and the algae both are filtered out. Algae blooms are common in the warm and sunny months and the carbon dosage is always being monitored and adjusted. Occasionally, some tastes and odors do get through. Customer complaints about taste and odor are taken very serious. Tastes and odors originating with algae have no adverse health effects.

### **What about chlorine taste and odor?**

Chlorine dissipates as it travels through a pipeline. In order to ensure that customers living far from the treatment plant get water that is adequately disinfected, the dosage of chlorine received by customers living close to the plant is higher. OCWA tries to accommodate everyone, but in the case of a person very sensitive to chlorine living very close to the plant, this may not be possible. Chlorine can be removed simply by letting a pitcher of water stand overnight in the refrigerator or by running water through an activated carbon filter. Activated carbon filters, if used, need to be replaced regularly as old filters may promote bacterial growth.

### **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

During 2024, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

### **DO I NEED TO TAKE SPECIAL PRECAUTIONS?**

Some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

### **INFORMATION ON LEAD SERVICE LINE INVENTORY**

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by requesting a copy from the Clay WDs and/or visiting the "New York State Lead Service Line Inventory – Map" website at: <https://health.data.ny.gov/Health/New-York-State-Lead-Service-Line-Inventory-Map/fkii-zkcq>

## **INFORMATION ON FLUORIDE ADDITION**

OCWA is one of many drinking water systems that provide drinking water with a controlled, low level of fluoride for consumer dental health protection. According to the United States Center for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at an optimal dose of 0.7 mg/l. To ensure that the fluoride supplement in your water provides optimal dental protection, the NYS Health Department requires that we monitor fluoride levels on a daily basis. 2024 monitoring showed fluoride levels in your water were within 0.1mg/l of the optimal dose; 99% of the time for Otisco Lake water and 99% of the time for Lake Ontario water.

### **WHY SAVE WATER AND HOW TO AVOID WASTING IT?**

Unlike many areas in the country, OCWA has access to more than enough water to meet its current and future needs. Otisco Lake can safely yield 25 million gallons of water per day. Lake Ontario is a direct connection to the Great Lakes. The Great Lakes contain 25% of the world's fresh water. However, even with this abundance, water must be used wisely. It takes energy and resources to treat and deliver the water to the consumer.

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- ♦ Saving water saves energy and some of the costs associated with both of these necessities of life;
- ♦ Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- ♦ Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- ♦ Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- ♦ Turn off the tap when brushing your teeth.
- ♦ Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up and you can save almost 6,000 gallons per year.
- ♦ Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- ♦ Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes, if it moved, you have a leak.

If you are interested in additional water saving tips, call our CUSTOMER SERVICE DEPT. at 652-3800 Ext. 146.

### **CLOSING.**

The Clay Uniform Water District's is pleased to provide this information in accordance with the State's Public Health Law requiring water suppliers to provide an annual water quality report. The statement includes information on water quality; quantity, treatment, conservation and State Health Dept. supplied public education information. This information formerly available on request will now be mailed directly to consumers on an annual basis. Meeting for the Water Budget is held at the first Town Board meeting in November 2025.

## **Terms & Abbreviations**

**Action Level (AL)** – the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

**Chlorine Residual** – the amount of chlorine in water available for disinfection.

**Disinfection By-product (DBP)** – chemical compounds that result from the addition of chlorine to water containing organic substances.

**HAA (Haloacetic acids)** – the combined concentration of the following five contaminants; Dibromo-, Dichloro-, Monobromo-, Monochloro-, and Trichloro -, acetic acids.

**Inorganic Contaminant** – chemical substances of mineral origin, such as iron or manganese.

**Level 1 Assessment-** A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

**Level 2 Assessment-** A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an E-coli MCL violation has occurred and / or why total coliform bacteria have been found in our water system on multiple occasions.

**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 possible.

**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 disinfectant in drinking water 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.

**mg/l** – (milligrams per liter) corresponds to one part of liquid in one million parts of liquid (parts per million or ppm).

**Microbiological Contaminant** – very small organisms, such as bacteria.

**Millirems per year (mrem/yr)-** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)-** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

**N/A** – not applicable.

**Nanograms per liter (ng/l)** – corresponds to one part of liquid in one trillion parts of liquid (parts per trillion or ppt).

**Nephelometric Turbidity Unit (NTU)**- A measure of clarity, Turbidity in excess of 5 NTU is just noticeable to the average person.

**Non-Detects (ND)** – Laboratory analysis indicates that the constituent is not present.

**Organics** – substances containing the element carbon; These can be naturally occurring or man-made, and can include pesticides, solvents, and by-products of disinfection.

**Picocuries per liter (pCi/L)** – pico curies per liter; units of concentration of radioactive substances.

**Picograms per Liter (pg/l)**- Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion-ppq).

**Radionuclides**– contaminants giving off ionizing radiation.

**TTHM** – (Total Trihalomethanes) – the combined concentration of the following four contaminants; Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane.

**TON (Threshold Odor Number)** – the greatest number dilutions of a sample with “odor-free” water yielding a perceptible odor.

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

**ug/l** – (micrograms per liter) corresponds to one part of liquid in one billion parts of liquid (parts per billion or ppb).