Annual Water Quality Report for 2018
Town of Dewitt
5400 Butternut Drive
East Syracuse, NY 13057
Prepared by Mathew Reynolds, Water Superintendent

INTRODUCTION

To comply with State and Federal regulations, the Town of DeWitt Water Department is providing our customers our annual Consumer Confidence Report. The purpose of this report is to provide our customers with information about the Town of DeWitt's water system, and the water we receive from our suppliers. We hope to raise your understanding of drinking water and awareness of the need to protect and conserve our drinking water sources. This report provides an overview of last year's water quality, details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions concerning this report or your drinking water, please contact Mathew Reynolds, Town of DeWitt Water Superintendent, at (315) 446-3734x158. We want you to be informed about your drinking water and also ways to conserve this precious resource. If you would like to learn more, please stop by our office at 5400 Butternut Drive. Information about the Town of DeWitt can also be found on our web site, **www.townofdewitt.com**. In the web site you can find information about the Town of DeWitt and links to the suppliers of our water. The Town of DeWitt is a purchase distribution type system - **Dewitt North Federal ID # NY3316112 and Dewitt South Federal ID # NY3304343.**

Water Quality - How do you know your water is safe?

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.

Under the Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (EPA) 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 EPA establishes treatment technique requirements instead of an MCL: if it cannot be determined that a contaminant is not there, systems operate as if it is and provide the treatment necessary to produce safe drinking water. The EPA regulations also specify testing and reporting requirements for each contaminant. Something every regulation has 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. The EPA also requires water suppliers to monitor for unregulated contaminants to provide occurrence data for future regulations.

Currently the EPA has established regulations for 142 individual contaminants. This includes six microbiological contaminants, 4 radionuclides, 26 inorganic chemicals, and 106 organic chemicals. The SDWA requires the EPA to review and revise each regulation on a regular basis. For example, the MCL for trihalomethanes was lowered from 100 to 80ug/L (parts per billion) as part of a review completed in 1997. The 1996 reauthorization of the SDWA also requires the EPA to consider at least 5 new contaminants for regulation every 5 years.

In New York, the State Health Department is responsible for enforcing EPA's regulations. The State has the option to implement alternative regulations when the alternative is equivalent to or more stringent than the EPA'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. They also review all our operating and monitoring data for compliance on a monthly basis. The Onondaga County Water Authority (OCWA) takes a similar, cooperative approach with the Health Departments in Oswego, Oneida, Madison and Cayuga Counties.

The Authority's New York State certified water quality laboratory collects over 4,000-distribution system and 2,000- treatment plant samples each year and performs over 12,000 analyses. We also have about 600 specialized analyses performed by independent laboratories. As part of their surveillance program, the Onondaga County Health Department independently runs additional monthly surveillance monitoring on samples from our distribution system. In 2018, for water delivered to Authority customers, there was one Treatment Technique violation to report. The violation was for water purchased from the City of Syracuse. On December 28, 2018 sustained southerly winds caused Skaneateles Lake water entering the City’s intake to exceed 5 NTU. The turbidity of Skaneateles Lake reached 5.94NTU during this event. Other than this exception, OCWA and the City of Syracuse water supply met all New York State Health Department and EPA drinking water standards. In 2018 there were no Maximum Contamination Level violations for any chemical or bacteriological contaminants.

OCWA's raw water monitoring programs are specifically designed to address concerns about Otisco Lake and Lake Ontario as main sources of supply. In both instances raw water intakes extend from a mile to a mile and a half out into their respective lakes. This was done by design 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 MCL. General raw 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.

A water quality summary is provided for each of the three supplies in the tables included in the appendix found at the end of this report. More detailed information can be obtained by calling OCWA's Water Quality Department at 315-455-7061 ext. 3157.

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

FACTS AND FIGURES:

The population in the Town of DeWitt is approximately 25,000 people. There are 8,215 accounts served by the Town of DeWitt. Of these, 7040 are residential, 878 commercial, 7 industrial, 19 municipal, 3 fire departments and an additional 268 fire sprinkler systems. The Town of DeWitt does not supply water to all areas within the Towns boundary line. The Southwood portion of the Town is served by the Onondaga County Water Authority, as well as part of Jamesville and a small area West of Thompson Road off Molloy Road.

The Town's water system purchased 1,137,990,000 gallons of water from Onondaga County Water Authority and 241,343,250 gallons of water from the City of Syracuse. The total cost of water purchased was $2,983,011.43.

The Town of DeWitt has three Fire Departments within the Town limits. The Fire Stations are metered but not charged for the water used. The Town has continued to work with the Fire Departments, to have them conserve water in order to keep this at no charge. The three Departments together used 656,000 gallons of water; the cost for that water would have been $2,663.06. A total of 86% of the water purchased was sold through metered sales. Some of our loss is due to leakage, fire fighting, and street sweeping and municipal use.

IMPROVEMENTS:

Last year the Town of DeWitt made improvements to and painted the 200,000 gallon water standpipe on Route 173 in Jamesville. There were 53 service and main repairs along with replacement of 10 fire hydrants. We have also continued to phase out the touch read meters, with radio read interpreters in residential and commercial accounts. We had 699 scheduled appointments with our residential customers last year. With those appointments we installed or repaired 371 radio read interpreters.

WATER CHARGES:

The water rates in 2018 saw a10% increase starting with bills are customers received on June 1, 2018. The minimum bill for are residential customers is now $52.50 for 12,000 gallons or less used during the previous six months.

The following may answer questions about water charges you saw on your 2018 and 2019 Tax Bill. Depending on where you live you may have seen up to three different taxes for water.

1. A consolidated Water District Charge WR550 on your Tax Bill.

   The consolidated district was established in 1997. New water facilities constructed after that time by the Town as well as operation and maintenance of the Town's infrastructure will be paid for through the Consolidated Water District Charge.

2. Onondaga County Water District Charge (CWR40 on your Tax Bill)

3. Unpaid water. This charge is any unpaid water bill that is at least 30 days past due. In the third week of October we start the write off process for all accounts with a balance due that is over 30 days. In 2018 we applied a total of $430,456.69 in unpaid water bills to the County Taxes.

   All Town residents are charged for the facilities in the Onondaga County Water District. These facilities were constructed to bring water into the County from Lake Ontario. The Town has no control over these charges.

Water Sources and Treatment:

Customers of the Town of DeWitt receive water that originates from Otisco Lake, Lake Ontario, or Skaneateles Lake. Customers located in certain areas may get a mixture of these waters or their source water may vary with changes in seasonal demand. In 2018 OCWA supplied approximately 37.59 million gallons per day to its 340,000 residential customers located in suburban Onondaga County, and parts of Madison, Oneida, Oswego, and Cayuga counties. OCWA also supplies water daily to thirty-four large industrial customers and two municipal wholesale water customers. OCWA can also supply water on an intermittent or emergency basis to seven additional municipal water systems.

OCWA treats and delivers water from Otisco Lake; the easternmost and smallest finger lake. In 2018, approximately 17.4 million gallons per day or 46.3 % of OCWA's water came from Otisco Lake. The customers receiving water originating from Otisco Lake are mostly located in the southern and western half of Onondaga County.

OCWA also treats and delivers water from Lake Ontario. The Ontario Water Treatment Plant treats water originating from Lake Ontario. In 2018, approximately 19 million gallons per day or 50.5 % of OCWA's water came from Lake Ontario. The customers receiving water originating from Lake Ontario are mostly located in the northern and eastern half of Onondaga County. OCWA customers in Madison, Oneida, Oswego, and Cayuga counties receive all their water from Lake Ontario.

The City of Syracuse Water Department has the responsibility of treating and delivering water originating from Skaneateles Lake. In 2018, approximately 1.2 million gallons per day or 3.2 % of OCWA's water came from Skaneateles Lake water purchased from the City of Syracuse Water

Department through various supply connections. OCWA uses this water to supplement areas close to the city boundary when needed. OCWA customers living in Nedrow, Southwood, and the Jamesville area, get water from Skaneateles Lake exclusively.

The first step in water treatment is to protect the source. OCWA and the City of Syracuse have been conducting ongoing watershed inspection, monitoring, and educational programs for a number of years. These programs are in conjunction with the State and Onondaga County Departments of Health. OCWA and the City of Syracuse all monitor lake conditions on regular intervals prior to treatment.

The New York State Department of Health has completed a Source Water Assessment Program in order to better recognize potential sources of contaminants in every water source used throughout the State. This assessment can be found in this report under the heading **SWAP Summary for OCWA.**

OCWA has 2 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 5 miles to OCWA's Otisco Water Treatment Plant located in Marcellus, NY. Water first enters the Rapid Mix tank where a coagulant (polyaluminum chloride) and a taste and odor control chemical (powdered activated carbon) is added. After 30 seconds of mixing, the water enters the 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 the powdered activated carbon (used only when needed) to adsorb organic taste and odor causing chemicals. After about 1 hours of contact time, the water enters into the filters. These filters consist of granular activated carbon, silica-sand, and hi-density sand. The filters are washed periodically 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 work. Once the water leaves the tanks orthophosphate is added to provide a coating for the pipes in the distribution system and in your home. This is done in order to prevent the leaching of and copper from your pipes and into your water.

OCWA's Ontario Water Treatment Plant pumps water from Lake Ontario through an 8-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 raw water for taste and odor control and to discourage the growth of zebra mussels. The water is pumped approximately 2 miles to OCWA's Ontario Water Treatment Plant. Water entering the plant is treated with hypochlorite (disinfectant) and polyaluminum chloride (coagulant) and is flash mixed. The water then enters three contact basins where slow mixing allows small particles to accumulate and form larger, more readily filtered particles. After about 2 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 City of Syracuse does not filter the water that enters their intakes located in Skaneateles Lake. The city has been granted a waiver to provide its customers with unfiltered water subject to strict conditions set by the New York State Department of Health. These conditions include water quality monitoring, backup disinfection, and watershed protection. The City of Syracuse Water Plant is located in the Village of Skaneateles. There they provide disinfection by the addition of chlorine, and fluoridation. Water then flows by gravity into the City's storage reservoirs. Orthophosphate is added to the water (for lead and copper control) as it leaves these reservoirs and

it is disinfected again by the addition of sodium hypochlorite. In 2013 an Ultraviolet Light Treatment Facility was put into operation at Westcott Reservoir. A UV Light Treatment Facility at Woodland Reservoir was completed in April 2014. Ultraviolet disinfection allows the City to strengthen protection against microbial contaminants, especially targeting cryptosporidium.

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.

Water Pressure:

Water Pressure: The New York State Department of Health standard indicates that normal water pressure in the distribution system should be approximately 60 to 80 psi and not less than 35 psi while maintaining a minimum pressure of 20 psi under all conditions of flow. The Town of DeWitt attempts to operate and maintain the system within these parameters as much as possible; however, due to the significantly varying topography in Central New York it is not possible to do so in all areas of the system. In areas that the pressures exceed 80 psi, the New York State Uniform Building Code requires that homes have pressure reducing valves (PRVs). Customers are responsible for installing the PRVs, and to periodically check/maintain this device; failure to do so may result in water damage and/or damaged water fixtures. When required for meter installation, the PRVs are to be installed either in a meter pit or within the house just before the meter. Customers should check the requirements within their municipality, but some require that a licensed plumber complete the installation.

Facts about Leaks:

Water running from a continuous leak is costly.

The table below illustrates how many gallons of water would be lost if allowed to run steady for a 3 month period at 60psi. To explain this table, visualize a steady stream that would fill the diameter hole shown below then notice the lost water and the cost.

Diameter Of holes	Gallons Lost	Cubic Feet Lost	Cost $
1/4”	1,181,500	158,000	$ 4399.00
1/8”	296,000	39,400	$1168.75
1/16”	74,000	9,850	$336.35

WATER SAVING TIPS

- Check sink, showers and toilets for leaks. A drop a minute can amount to 2,400 gallons over the course of a year.
- Install low flow aerator in faucets and showers.
- Take showers instead of baths. A bath usually requires 36 gallons as compared to 25 gallons for a shower.
- Let grass grow longer in hot, dry months. Set your mower higher to avoid brown grass and avoid using tap water on lawns. (see rain barrels)
- Keep a pitcher of water in your refrigerator. Running water until it cools down wastes a gallon of water.

- Turn off water while brushing your teeth, shaving or scraping dishes.
- Use a stopper or dishpan while washing dishes.
- Completely fill your dishwasher and clothes washer before operating.
- Older toilets hold 3 to 5 gallons of water and can be replaced with toilets that use 1.6 gallons per flush.
- Flushometer toilets should be set at 3 ½ gallons, instead of 5 to 8.
- Placing a gallon jug filled with water in the tank would displace the water needed to re-fill the tank on your toilet thus saving a gallon of water per flush.
- Replace old appliances with water-savers, such as front loading washing machines and tankless hot water heaters.
- Wash your car on the lawn so water and detergents feed your lawn and do not runoff.

Rain Barrels - Install rain barrels at your gutter spout and reduce runoff and basement flooding. Water your lawn and garden during dry periods with rain water stored in the rain barrel; it's better for your yard because rainwater does not contain chlorine and saves you money. Modern rain barrels do not harbor mosquitoes. For more information regarding rain barrels visit our web site at www.townofdewitt.com and go to sustainability.

Odd/Even System - We encourage you not to water your lawn with tap water. If you feel you must and your home address ends with an even number, you can water on even number days. Odd numbered residences can water on odd numbered days. Last summer we did not have to impose any mandatory water conservation measures. However, in the event we have a dry, hot summer we would appreciate your compliance with the odd/even system so we will be able to avoid ordering a mandatory no watering of lawns or washing of cars.

SWAP Summary from OCWA:

The NYS DOH has evaluated OCWA's susceptibility to contamination under the Source Water Assessment Program (SWAP), and 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.

Otisco Lake Source:

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 are found in the assessment area. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and 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:

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.

This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of agricultural lands in the assessment area results in elevated potential for pesticides contamination. Non-sanitary wastes may increase contamination potential. There is also noteworthy contamination susceptibility associated with other discrete contaminant sources, and these facility types include: mines.

Skaneateles Lake Source (water purchased from the City of Syracuse)

This assessment found a moderate susceptibility to contamination for this source of drinking water. The amount of pasture in the assessment area results in a high potential for protozoa contamination. No permitted discharges are found in the assessment area. There are no likely contamination threats associated with other discrete contaminant sources, even though some facilities were found in low densities.

Frequently Asked Questions

Does my water contain Fluoride?

Yes the water the Town of DeWitt receives from OCWA is fluoridated to a concentration of about 0.7 mg/1. OCWA is required to fluoridate by the New York State Department of Health.

What is the pH of my water?

The water the Town of DeWitt receives from OCWA and the City of Syracuse has a pH range of 7.1 to 8.5, slightly basic. Alkalinity varies by source ranging from 95 mg/I to140 mg/I (CaC03)

Is my water Hard or Soft?

The hardness of the water the Town of DeWitt receives 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. Town of Dewitt Water Department 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 the **COLD** water 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.

Pharmaceuticals and Personal Care Products in Drinking Water

In 2008 the Associated Press released a three-piece story on pharmaceuticals and personal care products in drinking water sources. While the Onondaga County Water Authority was not one of the systems covered by the story, the article did stir interest of the Boards and Management of OCWA. Accordingly, starting in 2008 the Authority implemented an annual testing program to learn more about potential pharmaceutical and personal care product contaminants that might be found in the Otisco Lake and Lake Ontario water supplies.

While none of us want to find any contaminants in our drinking water, as zero is the desirable level, it is important to begin the process of gathering occurrence data to allow for researchers to target the most commonly found contaminants. As such the Authority intends to continue to collect data related to pharmaceuticals and personal care products in water and will also continue its process of sharing the data with both the researchers and OCWA's consumers.

The 2008 round of samples involved testing for 34 potential contaminants, and with the exception of two items, the results were found to be non-detectable. From 2009 on, based on the recommendation of researchers studying the occurrence of pharmaceuticals and personal care products, the testing list has been expanded. Presently 98 potential contaminants are tested for. From 2009 and 2017 between 8 and 17 of the contaminants were detected. In 2018 there were 5 potential contaminants found.

To learn more about the test results and related information for 2018 you are encouraged to visit the OCWA web site (www.ocwa.org). Anyone that has questions about results, or any of the other water quality reports posted on the Authority web site are encouraged to contact OCWA's Northern Concourse Lab. The lab can be reached at 315-455-7061, extension 3157.

General Information related to Pharmaceuticals and Other Emerging Contaminants

Pharmaceuticals and personal care products, known in the water industry as PPCPs, are a group of compounds consisting of human and veterinary drugs (prescription or over-the-counter) and consumer products, such as fragrances, lotions, sunscreens and housecleaning products.

These compounds have been detected in trace amounts in surface water, drinking water and wastewater effluent sampling because water professionals have the technology today to detect more substances, at lower levels, than ever before.

Many PPCP compounds are being found at extremely low levels, typically single digit parts per trillion (ppt). Drinking-water standards are typically set in the parts per-billion range, which is 1,000 times higher. The fact that the substance is detectable in drinking water does not mean the substance is harmful to humans. To date, research throughout the world has not demonstrated an impact on human health from trace amounts of PPCPs found in drinking water.

The water community is committed to protecting the public health. Water professional are examining the occurrence of PPCPs in drinking-water supplies and the effectiveness of current treatment techniques on removal, and are paying close attention to health-effects research in this area, including research being conducted by the Water Research Foundation.

In addition, the U.S. Environmental Protection Agency (EPA) maintains an active program called the Contaminant Candidate List to identify contaminants in public drinking water that warrant detailed study. While the 2009 list does not currently include any PPCPs, EPA is considering testing for PPCP compounds in the very near future.

Safer medication disposal:

To help safeguard water quality, discard your unwanted or expired medications in the trash, rather than dumping them down the sink or toilet. Keep prescriptions in their original container, remove or black out personal information on labels, then hide them in an empty, sealable container before placing in your garbage bag. For additional information on disposal and to find Pharmaceutical drop-off locations visit https://www.citizenscampaign.org. Once there, scroll down to Onondaga County, NY residents and click on the blue location icons for specific details.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, your drinking water is routinely tested for numerous contaminants. The Town of DeWitt tests include: total coliform, lead and copper, and total trihalomethanes. Other tests performed by our suppliers include turbidity, inorganic compounds, nitrate, volatile organic compounds, total trihalamethanes, and synthetic organic compounds. A complete list of all contaminants can be found later in this report. These lists include the results from the Town of DeWitt testing and the results that are supplied to us from the City of Syracuse and the Onondaga County Water Authority (OCWA) the providers of our water supply. The State allows testing for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Disinfectant & Disinfection By-products Found in the Distribution System

Table of Detected Contaminants- Town of Dewitt							
Contaminant	**Violation Yes/No**	**Date of Sample**	**Level Detected (Avg/Max) (Range)**	**Unit Measurement**	**MCLG**	**Regulatory Limit**	**Likely Source of Contaminant**
Chlorine Residual	No	Bi-Weekly	0.35 (0.07-0.83)	mg/L	N/A	4 (MRDL)	By-product of drinking water chlorination.
Total Trihalomethanes (Dewitt North)	No	Feb, May, Aug, Nov 2018	48.8 (28-52)	ug/L	N/A	80	By-product of drinking water chlorination. TTHMs form when source water contains large amounts of organic matter.
Haloacetic Acids (Dewitt North)	No	Feb, May, Aug, Nov 2018	18.3 (8.5-24.3)	ug/L	N/A	60	By-product of drinking water chlorination.
Total Trihalomethanes (Dewitt South)	No	Feb, May, Aug, Nov 2018	49.5 (32-55)	ug/L	N/A	80	By-product of drinking water chlorination. TTHMs form when source water contains large amounts of organic matter.
Haloacetic Acids (Dewitt South)	No	Feb, May, Aug, Nov 2018	17.2 (3.3-31)	ug/L	N/A	60	By-product of drinking water chlorination.

Disinfection by-products; during disinfection, certain by-products form as a result of chlorine reacting with naturally disinfection by-products are kept low. Trihalomethanes (THM's) and Haloacetic Acids (HAA's) are classes of chemicals that the Town of DeWitt is required to monitor for in its distribution system.

Lead in Drinking Water

"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. The Town of DeWitt 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 your drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at https://www.epa.gov/safewater/lead."

Lead & Copper in the DeWitt Distribution System:

Contaminant	Violation Yes / No	Date(s) of Sampling	Average Level found (Range)	90th Percentile Value	Units Measured	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Copper	No	Jun-Sept 16	0.086 (0.0016 -0.68)	0.23	mg/l	0	AL = 1.3*	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from Wood preservatives.
Lead	No	Jun-Sept 16	1.47 (ND – 20)	5.1	ug/l	0	AL = 15*	Corrosion of household plumbing systems; Erosion of natural deposits;

*AL (Action Level) Only 10% of samples can exceed this limit.

About Lead and Copper:

In order to deter the leaching of lead and/ or copper from our customers' pipes, The Town of DeWitt has sampled with OCWA who has been mandated to implement corrosion control. Lead & Copper Sampling is required every 3 years. Dewitt sampled with OCWA in June of 2016.

The method of corrosion control used on waters originating from Otisco and Skaneateles lake is the addition of orthophosphate. The adjustment of pH is the method used for Ontario water. DeWitt's latest sampling period was in June of 2016 when OCWA sampled and tested customer's taps to make sure the corrosion controls were effective.

90th Percentile Values for LEAD & COPPER:

The values reported for lead and copper represent the 90TH percentile. The 90TH percentile value is the concentration that 90% of the taps sampled were at, or below. Since the Action Level for Lead is 15ug/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 5.1 ug/l in June - September of 2016. The Action Level for Copper is 1.3 mg/l. The observed 90th percentile for Copper was 0.23 mg/l. Of the 107 samples that OCWA tested in June - September of 2016, Only two samples exceeded the action level for lead. No samples exceeded the action level for copper.

The testing showed that OCWA's methods of corrosion control are working

You can't see, smell or taste lead in your water.

Testing at the tap is the only way to measure the lead levels in your home or workplace. If you choose to have your tap water tested, be sure to use a properly certified laboratory. Testing usually costs between $20 and $100.

Additional Facts on Lead

Lead is a naturally-occurring metal that for most of the 20th century was used regularly as a component of paint, piping (including water service lines), solder, brass, and until the 1980s, as a gasoline additive. We no longer use lead in many of these products, but older products – such as paints and plumbing fixtures in older houses – that contain lead remain. EPA and the U.S. Centers for Disease Control (CDC) report that lead paint (and the contaminated dust and soil it generates) is the leading source of lead exposure in older housing.

While lead is rarely present in water coming from a treatment plant, it can enter tap water through corrosion of some plumbing materials. A number of aggressive and successful steps have been taken in recent years to reduce the occurrence of lead in drinking water.

In 1986, Congress amended the national Safe Drinking Water Act to prohibit the use of pipe, solder or flux containing high lead levels. The Lead Contamination Control Act of 1988 led schools and day-care centers to repair or remove water coolers with lead-lined tanks. EPA provided guidance to inform and facilitate their action.

Since the implementation of the Lead and Copper Rule (1991), many community drinking water systems are required to actively manage the corrosivity of water distributed to customers. In addition, community water systems conduct routine monitoring at selected houses where lead service lines and lead solder. If more than 10 percent of the homes tested have elevated lead levels (defined as more than 15 parts per billion), water providers must notify their consumers via several means. They must also take steps to reduce the problem, including improving corrosion control and possibly replacing lead service lines that contribute to lead contamination.

Cryptosporidium and Giardia:

New York State law requires water suppliers to notify their customers about the risks of Cryptosporidium and Giardia. 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 for use against them, but 100% removal or inactivation cannot be guaranteed. Cryptosporidiosis and Giardiasis are intestinal illnesses caused by these microscopic parasites. Symptoms of infection include nausea, diarrhea, and cramps. Most healthy people can overcome the disease within a few weeks.

In 2018, the presence of Cryptosporidium and Giardia was tested for in Otisco, Ontario, and Skaneateles lakes as part of the routine plans of OCWA and the City of Syracuse Water Department. Both the raw lake waters and the treated waters were tested. Additionally, OCWA's Otisco Lake Treatment Plant tested its recycled wash water, which is water that is reclaimed after filter backwashing and returned to the treatment plant influent stream for retreatment.

OCWA took a total of 36 Cryptosporidium and Giardia samples in 2018 representing water originating from Otisco Lake. Monthly samples were taken from the raw (untreated) water and the Finished (treated) water. The Recycled water was also sampled monthly. Cryptosporidium was detected in the raw water and recycled water samples taken in January. Giardia was also detected in the Recycled water sample taken in January and December. Giardia was also detected in the Recycled water samples taken in February and April. Neither Cryptosporidium nor Giardia were detected in the Finish water samples from Otisco Lake.

OCWA took a total of 24 Cryptosporidium and Giardia samples in 2018 representing water originating from Lake Ontario. Monthly samples were taken from the raw water and Finished Water. Neither Cryptosporidium nor Giardia were detected in any of the samples from Lake Ontario.

The City of Syracuse Water Dept. took a total of 24 Cryptosporidium and Giardia samples in 2018, representing water originating from Skaneateles Lake. Two Raw water samples (one from each intake) were sampled monthly. Neither Cryptosporidium nor Giardia were detected in any of the City of Syracuse's raw water samples.

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).

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, in writing at 421 Montgomery St., 12th Floor, Syracuse, NY 13202 or by calling (315) 435-6600.

Bottled water may be a viable alternative, however the same degree of caution applied to your tap water 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 the New York State Department of Health by calling 1-800-458-1158.

The EPA's Surface Water Treatment Rule (SWTR) established water treatment standards specifically designed to ensure the removal or deactivation of Giardia and other microbial contaminants. The EPA is currently working on enhancing these standards to further ensure protection against exposure to Cryptosporidium from drinking water. The OCWA and MWB treatment plants are in full compliance with all current operational, monitoring, and reporting requirements. OCWA's internal performance standards are actually tougher than the law currently requires.

For example, the SWTR requires a treatment plant's finished water turbidity (a measure of clarity used to check filtration particulate removal) to be less than 0.30 NTUs 95% of the time. For 2018 the Otisco Filtration Plant finished water turbidity was less than 0.08 NTUs 95% of the time based on continuous four-hour sampling intervals. The Ontario Filtration Plant finished water turbidity, for 2018, averaged less than 0.06 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 involved lowering the turbidity criteria from the 0.50 to the 0.30 NTU range. Both of the OCWA treatment plants are doing better than the regulated levels.

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 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 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 also are associated with long-term human exposures to oral doses of chromium (VI). In laboratory animals, repeated exposures to high oral doses of chromium (VI) has 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.

About Turbidity:

Customers of the Onondaga County Water Authority (OCWA) get their water from one of three sources. Water may originate from Otisco Lake or Lake Ontario which is treated by OCWA itself, or Skaneateles Lake which is treated by the Syracuse Water Department and sold to OCWA. Customers may also get a mixture of these waters.

Water purveyors are required to measure turbidity as water leaves their plants. 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. Skaneateles Lake water is not treated.

Health Effects of Turbidity: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Please pay special attention to the additional statements in this document regarding Cryptosporidium.

Table of Detected Contaminants

Turbidity at Entry Point

Contaminant	Water Source	Violation Yes / No	Sampling frequency (highest reading)	Average Level found (Range)	Units Measure	MCLG	Regulatory Limit (MCL, TT, or AL)	Lowest % of Monthly tests	Likely Source of Contamination
Turbidity	Otisco	No	Every 4 hrs (7/21/18)	0.055 (0.03-0.011)	NTU	N/A	TT = 0.3 NTU For systems that filter	100%	Soil run off
	Ontario	No	Every 4 hrs (7/13/18)	0.037 (0.02-0.09)	NTU	N/A	TT = 0.3 NTU For systems that filter	100%	
	Skaneateles	yes	Every 4 hrs (12/28/18)	0.56 (0.09- 5.94)	NTU	N/A	MCL = 5.0 NTU for systems that don't filter	N/A	

***Treatment Technique Violation for Turbidity;** On December 28, 2018, because of sustained southerly winds, the turbidity levels entering the City of Syracuse's intake exceeded the maximum allowable standard of 5 Nephelometric Turbidity Units (NTU). Turbidity levels reached 5.94 NTU's on this date. Notification of this event was made to the public and to the Onondaga County Health Department.

Table of Detected Contaminants

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 2018	2.1 (1.4 -2.3)	mg/l	N/A	N/A	Naturally occurring.
	Ontario	No	Monthly 2018	2.2 (1.9 -2.4)	mg/l	N/A	N/A	
Total Organic Carbon	Otisco	No	Monthly 2018	2.3 (1.6 – 3.7	mg/l	N/A	N/A	Naturally occurring.
	Ontario	No	Monthly 2018	2.3 (2.2 -3.6)	mg/l	N/A	N/A	
Total Trihalo Methanes	Ontario	No	Monthly 2014	12.6 (8.5 - 18)	ug/l	N/A	80	By-product of drinking water chlorination. TTHM's form when source water contains large amounts of organic matter.
Toluene	Skaneateles	No	Feb, May Aug, Nov, 2018	0.32 (ND - 5.3)	ug/l	N/A	5	Toluene is an additive to gasoline, used to produce benzene, and used as a solvent.

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	Mar-18 Sep-18	0.066. 0.027 - 0.105	mg/l	N/A	N/A	Erosion of natural deposits; Residual Aluminum may be from a chemical used in the treatment process.
	Ontario	No	Mar-18 Sep-18	0.084 0.53-0.116	mg/l	N/A	N/A	
Barium	Otisco	No	Mar-18 Sep-18	0.033 0.032 - 0.034	mg/l	2	2	Erosion of natural deposits.
	Ontario	No	Mar-18 Sep-18	0.019 0.018-0.020	mg/l	2	2	
	Skaneateles	No	May-18	0.025	mg/l	2	2	
Calcium	Otisco	No	Mar-18 Sep-18	36.7 31.9-41.6	mg/l	N/A	N/A	Naturally occurring.
	Ontario	No	Mar-18 Sep-18	33.2 32.7 - 33.7	mg/l	N/A	N/A	
Chloride	Otisco	No	Mar-18 Sep-18	41.2 38.5 – 43.9	mg/l	N/A	250	Naturally occurring; Road salts.
	Ontario	No	Mar-18 Sep-18	27.9 26.0- 29.9	mg/l	N/A	250	
	Skaneateles	No	May-18	22	mg/l	N/A	250	
Chlorite	Otisco	No	Daily	0.17 ND - 0.28	mg/l	N/A	1	By-product of drinking water disinfection at plants using Chlorine Dioxide
Chlorine Dioxide Residual (1)	Otisco	No	Daily	160 (ND – 5.20)	ug/l	N/A	800 (MRDL)	By-product of drinking water disinfection at plants using Chlorine Dioxide
Chlorine Residual (Free)	Otisco	No	Every 4 hrs.	1.13 0.81 – 1.43	mg/l	N/A	4 (MRDL)	Added to water to kill harmful bacteria and to prevent the re-growth of bacteria.
	Ontario	No	Every 4 hrs.	0.89 0.56 - 1.13	mg/l	N/A	4 (MRDL)	
	Skaneateles	No	Every 4 hrs.	0.96 0.47 - 1.55	mg/l	N/A	4 (MRDL)	

(1) **Chlorine Dioxide and Chlorite were** tested for daily for 213 days in 2018. For 212 days in 2018 OCWA was adding Chlorine Dioxide as a preoxidant in order to control Zebra Mussels at the intake, provide adequate disinfection, and control 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 2018.

Table of Detected Contaminants

Ignoramics 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
Chromium 6 (2)	Otisco	No	October 2018	0.065	ug/l	100	100	Erosion of natural deposits. Industrial sources.
	Ontario	No	October 2018	0.070	ug/l	100	100	
	Skaneateles	No	October 2018	0.031	ug/l	100	100	
Copper	Otisco	No	Mar, Sep 2018	0.0045 (0.0021-0.0069)	mg/l	N/A	AL = 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
	Ontario	No	Mar, Sep 2018	0.004 (0.0031-0.0049)	mg/l	N/A	AL = 1.3	
Fluoride (3)	Otisco	No	Daily	0.64 (0.06 - 0.79)	mg/l	N/A	2.2	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer.
	Ontario	No	Daily	0.70 (0.65-0.85)	mg/l	N/A	2.2	
	Skaneateles	No	Daily	0.73 (0.20-2.0)	mg/l	N/A	2.2	
Magnesium	Otisco	No	Mar-Sep 2018	10.6 (10.3 – 10.9)	mg/l	N/A	N/A	Naturally Occurring.
	Ontario	No	Mar-Sep 2018	8.92 (8.88-8.96)	mg/l	N/A	N/A	Naturally Occurring

(2) Chromium 6;

Although it is not regulated, OCWA took samples from the entrance point of the distribution representing water treated from Otisco, Ontario and Skaneateles Lakes and had them tested for Chromium 6 at low detection levels. The results are shown in the table above. Also in 2015, OCWA Took samples representative of all 3 of the source waters and had them tested for Chromium 6. This was done as part of the Unregulated Contaminant Rule.

(3) 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. During 2018 monitoring showed fluoride levels in your water were within 0.1mg/l of the optimal dose; 88% of the time for Otisco Lake water, 99% of the time for Lake Ontario water, and 80% for Skaneateles water.

Table of Detected Contaminants

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	Mar, Sep 2018	0.72 0.67-0.78	Ug/l	N/A	N/A	Erosion of natural deposits.
	Ontario	No	Mar, Sep 2018	0.68 0.68-0.68	ug/l	N/A	N/A	
	Skaneateles	No	May 2018	0.76	ug/l	N/A	N/A	
Nitrate	Otisco	No	Mar, Sep 2018	0.38 (0.18-0.59)	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; Erosion of natural deposits.
	Ontario	No	Mar, Sep 2018	0.26 (0.24-0.28)	mg/l	10	10	
	Skaneateles	No	May 2018	0.48	mg/l	10	10	
Sodium (4)	Otisco	No	Mar, Sep 2018	24.2 (23.2 – 25.3)	mg/l	N/A	See Health Effects*	Naturally occurring; Road salts; water softeners; animal wastes.
	Ontario	No	Mar, Sep 2018	17.5 (16.8-18.3)	mg/l	N/A	See Health Effects*	

	Skaneateles	No	May 2018	13	mg/l	N/A	See Health Effects*	
Sulfate	Otisco	No	Mar, Sep 2018	11.7 (11.3-12.1)	mg/l	N/A	250	Naturally occurring.
	Ontario	No	Mar, Sep 2018	24.1 (23.0-25.2)	mg/l	N/A	250	
	Skaneateles	No	May 2018	12	mg/l	N/A	250	
Zinc	Otisco	No	Mar, Sep 2017	0.010 (ND - 0.008)	mg/l	N/A	5	Naturally occurring; Mining waste.
	Ontario	No	Mar, Sep 2017	0.010 (ND-0.008)	mg/l	N/A	5	

(4) Health Effects of Sodium;

There is no 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

Bacteria Found in the DeWitt Distribution System

Contaminant	Sample Source	Violation Yes / No	Date(s) of Sampling in 2018	Month with Highest % positive samples	Units Measured	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Total Coliform Bacteria*	Dewitt Distribution System	No	33 per month	N/A	N/A	0	> 5 % Positive samples in any month	Naturally present in the environment

***** Whenever a positive sample for Total Coliform is found, the sample is further tested for the presence of E.coli. Plus 4 additional check samples are taken. No Samples were found to be E.coli positive in 2018.

The Town of DeWitt regularly samples 33 sites per month located throughout our distribution system. We test these sites for both bacteria and disinfectant residual to make sure that our water is of a safe and sanitary quality

Radionuclides Found at Entry Point

Contaminant	Water Source	Violation Yes/ No	Composite of quarterly sampling	Level found	Units Measured	MCL G	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. 2018	0.335	pCi/l	0	15	
Beta Emitters	Otisco	No	Feb ,May, Aug, Nov. 2017	0.85	pCi/l	0	50	Decay of natural deposits and manmade emissions
	Ontario	No	Feb, May, Aug, Nov. 2018	1.63	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. 2018	0.404	pCi/l	0	5	
Radium- 228	Otisco	No	Feb, May, Aug, Nov. 2017	0.08	pCi/l	0	5	Erosion of natural deposits.
Total Uranium	Otisco	No	Feb, May, Aug, Nov. 2017	0.30	ug/l		30	Erosion of natural deposits.
	Ontario	No	Feb, May, Aug, Nov. 2018	0.356	ug/l	N/A	30	

Unregulated Contaminants Detected During Testing

Contaminant	Water Source	Date of Sampling	Level found	Units Measured	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Chlorate	Otisco entry point	Jan, Apr, Jul, 2015	102 (43-210)	ug/l	N/A	N/A	Agricultural defoliant or desiccant; disinfection byproduct; and used in production of chlorine dioxide
	Ontario entry point	Jan, Apr, Apr 2015	183 (133-194)	ug/l	N/A	N/A	
	Skaneateles entry point	Jan, Apr, Jul, 2015	78 (60-99)	ug/l	N/A	N/A	
	Otisco Max. Res.	Jan, Apr, Jul, 2015	133 (39-300)	ug/l	N/A	N/A	
	Ontario Max. Res.	Jan, Apr, Jul, 2015	57 (53-58)	ug/l	N/A	N/A	
	Skaneateles Max. Res.	Jan, Apr, Jul, 2015	72 (53-95)	ug/l	N/A	N/A	
Chromium	Ontario entry point	Jan, Apr, Jul, 2015	0.03 (nd-0.03)	ug/l	N/A	N/A	The amount measured when analyzing for "total chromium" is the sum of chromium in all of its valence states. The MCL for EPA's current total chromium regulation was determined based upon the health effects of chromium-6
	Ontario Max. Res.	Jan, Apr, Jul, 2015	0.09 (0.08-0.12)	ug/l	N/A	N/A	
Chromium-6	Ontario entry point	Jan, Apr, Jul, 2015	0.09 (0.08-.11)	ug/l	N/A	N/A	Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation
	Skaneateles entry point	Jan, Apr, Jul, 2015	0.04 (0.03-0.05)	ug/l	N/A	N/A	
	Otisco Max. Res.	Jan, Apr, Jul 2015	0.06 (nd-0.07)	ug/l	N/A	N/A	
	Ontario Max. Res.	Jan, Apr, Jul, 2015	0.10 (0.09-0.05)	ug/l	N/A	N/A	
	Skaneateles Max. Res.	Jan, Apr, Jul 2015	0.04 (0.04-0.05)	ug/l	N/A	N/A	

OCWA's Unregulated Contaminant Monitoring Rule 3 (UCMR3) Sampling

Unregulated Contaminants Detected During Testing

Contaminant	Water Source	Date of Sampling	Level found	Units Measured	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Molybdenum	Ontario entry point	Jan ,Apr, Jul 2015	1.1 (1.1-1.2)	ug/l	N/A	N/A	Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent
	Ontario Max. Res.	Jan, Apr, Jul 2015	1.2 (1.1-1.2)	ug/l	N/A	N/A	
Strontium	Otisco entry point	Jan, Apr, Jul 2015	123 (120-130)	ug/l	N/A	N/A	Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions
	Ontario entry point	Jan, Apr, Jul 2015	167 (160-170)	ug/l	N/A	N/A	
	Skaneateles entry point	Jan, Apr, Jul 2015	82 (79-85)	ug/l	N/A	N/A	
	Otisco Max. Res.	Jan, Apr, Jul 2015	127 (120-130)	ug/l	N/A	N/A	
	Ontario Max. Res.	Jan, Apr, Jul 2015	183 (180-190)	ug/l	N/A	N/A	
	Skaneateles Max. Res.	Jan, Apr, Jul 2015	85 (81-88)	ug/l	N/A	N/A	
Vanadium	Otisco Max. Res.	Jan, Apr, Jul 2015	0.2 (nd-0.3)	ug/l	N/A	N/A	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst
	Ontario Max. Res.	Jan, Apr, Jul 2015	0.2 (nd-0.3)	ug/l	N/A	N/A	

.

The frequency that various contaminants are tested for is regulated by the State and can vary from source to source. The State allows for some contaminants to be tested for less than once a year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, is more than one year old. Some contaminants are monitored at the various sources more often than required

Contaminants Tested for but Not Detected

(Non-Detects Arranged By Source)

Synthetic Organic Contaminants (Otisco, Ontario, Skaneateles)	Principal Organic Contaminants (Otisco, Ontario, Skaneateles)	Inorganic Contaminants (Otisco, Ontario, Skaneateles)
Alachlor	Benzene Bromobenzene	Antimony Arsenic
Aldicarb	Bromochloromethane Bromomethane	Beryllium Cadmium
Aldicarb sulfone	N-Butylbenzene sec-Butylbenzene tert-	Cyanide Iron
Aldicarb sulfoxide	Butylbenzene	Manganese Mercury
Aldrin	Carbon Tetrachloride Chlorobenzene	Nitrite Selenium Silver
Atrazine	Chloroethane Chloromethane	Thallium Zinc
Benzo(a)pyrene	2-Chlorotoluene	
Butachlor	4-Chlorotoluene	
Carbaryl	Dibromomethane	
Carbofuran	1,2-Dichlorobenzene	
Chlorodane	1,3-Dichlorobenzene	
Dalapon	1,4-Dichlorobenzene	
Di(2-ethylhexyl)adipate	Dichlorofluoromethane	
Dibromochloropropane	1,1-Dichloroethane	
Dicamba	1,2-Dichloroethane	
Dieldrin	1,1-Dichloroethene	
Dinoseb	cis-1,2-Dichloroethene trans-1,2-Dichloroethene	
Endrin	1,2-Dichloropropane	
Ethylene Dibromide	1,3-Dichloropropane	
Glyphosate	2,2-Dichloropropane	
Heptachlor	1,1-Dichloropropene	
Heptachlor epoxide	cis-1,3-Dichloropropene trans-1,3-	
Hexachlorobenzene	Dichloropropene Ethylbenzene	
Hexachlorocyclopentadiene	Hexachlorobutadiene Isopropylbenzene	
Lindane	p-Isopropyltoluene	
Methomyl	Methylene Chloride	
Methoxychlor	MTBE	
Metolachlor	n-Propylbenzene	
Metribuzan	Styrene	
	1,1,1,2-Tetrachloroethane	

Inorganic Contaminants (Otisco)
Chromium VI Lead

Physical Characteristics (Otisco, Ontario, Skaneateles)
Color
Odor

Oxamyl vydate
Pentachlorophenol
Pichloram
Polychlorinatedbiphenyls
Propachlor
Simazine
Toxaphene
2,4 -D
2,4,5-TP (Silvex)
3-Hydroxycarbofuran

Synthetic Organic Contaminants
(Otisco, Ontario)

Di(2-ethylhexyl)phthalate
Diquat
Endopthall
2,3,7,8-TCDD (Dioxin)

1,1,2,2,-Tetrachloroethane
Tetrachloroethene
1,2,3-Trichlorobenzene
1,2,4-Trichlorobenzene
1,1,1,-Trichloroethane
1,1,2,-Trichloroethane Trichloroethene
Trichlorofluoromethane
1,2,3,-Trichloropropane
1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene
Vinyl Chloride o-Xylene
m-Xylene p-Xylene

Radiological Contaminants
(Ontario)

Gross Alpha Gross Beta
Cesium-137
Radium 226
Radium 228
Total Uranium

The frequency that various contaminants are tested for is regulated by the State and can vary from source to source. The State allows for some contaminants to be tested for less than once a year because the concentrations of these contaminants do not change frequently.

Some of our data, though representative, is more than one year old. Some contaminants are monitored at the various sources more often than required.

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**.**

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.

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

Microbiological Contaminant – Very small organisms, such as bacteria.

N/A – not applicable.

ND – not detected at testing limits.

NTU – Nephelometric Turbidity Unit - a measurement of particles in water.

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

pCi/L – picocuries per liter; units of concentration of radioactive substances.

ppb – parts per billion; a concentration equal to 1 microgram of a substance in one liter of water, **ug/l**.

ppm – parts per million; a concentration equal to 1 milligram of a substance in one liter of water, **mg/l**.

Radionuclides– Contaminants giving off ioning radiation**.**

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

Terms & Abbreviations continued

TON (Threshold Odor Number) – The greatest number dilutions of a sample with "odor-free" water yielding a definitely 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 – **ppb**).

W (waiver) – variances and exemptions – state permission not to meet an MCL, treatment technique, or monitoring requirement under certain conditions.

IS OUR WATER MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to provide a Water Systems Operation Report each month to the Onondaga County Health Department. They are due on the 10th of the following month. The Onondaga County Health Department received the report for October 2018 late on November 16, 2018. This does not pose a threat to the quality of our water.

CLOSING

Thank you for allowing us to continue to provide your family/business with quality drinking water this year. In Central New York, we are fortunate to have an abundant supply of good quality drinking water. We ask that all our customers help protect and conserve our valuable water resources, which are the heart of our community and our way of life. The Onondaga County Water Authority supplied all water quality monitoring data and tables for 2018. If you have any questions, or concerns please call our office at 446-3734 x 4, or visit the Town's web site, as you reach us by E-mail. The website can be found at **www.townofdewitt.com**.