

Annual Drinking Water Quality Report for 2020 City of Oswego

30 Sheldon Ave Oswego, NY 13126

System ID # 37-04631

To comply with State regulations, the City of Oswego 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 New York 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. Last year, we conducted tests for over 180 contaminants. No contaminants were found at a level higher than the state allows. 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 New York State standards.

If you have any questions about this report or concerning your drinking water, please contact Tom Kells, Commissioner of Public Works, at 315-343-5055. We want you to be informed about your drinking water. Please do not hesitate to call with your questions.

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, New York State and the EPA prescribe regulations which limit the number of certain contaminants in water provided by public water systems. The State Health Departments and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is Lake Ontario which is considered to be one of the finest water sources available. During 2020, our system did not experience any restriction of our water source. Our water enters the Oswego Pumping Station through an intake tunnel where it is filtered in the water treatment plant, disinfected with chlorine and treated with fluoride prior to distribution. Our plant is equipped to treat up to 26 million gallons per day to provide uninterrupted quality service to our community. The following water storage tank capacity is available for fire flow: Munn Street with 150,000 gallons, Ellen Street with 100,000 gallons, Gardenier Street with 100,000 gallons and a ground level tank on Bunner Street with a 10,000,000-gallon capacity.

FACTS AND FIGURES

Our water system serves 17,599 people through 5,990 service connections. We also provide bulk water to the towns of Scriba, New Haven and Volney. The daily average of water treated and pumped last year into was 11.336 million gallons per day. Our highest single day of production in 2020 was 14,917,000 gallons. In 2020, non-metered customers were charged \$225 dollars per quarter. Those customers on meters were charged a minimum usage fee of \$205 per 10,000 gallons and .15 cents per gal over 10,000 gallons thereafter.

SOURCEWATER ASSESSMENT

The New York State Department of Health has evaluated the Great Lakes' watershed to susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the following paragraphs. 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 the City of Oswego.

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). This summary is based on the analysis of the contaminant inventory compiled for the drainage area deemed most likely to impact water quality at the city's raw water intake.

The 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 pesticide contamination. Non-sanitary wastes and other discrete sources may also increase contamination potential. The City of Oswego provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes (TTHMs), haloacetic acids (HAAs), radiological contaminants and synthetic organic compounds. The table presented below page depicts which compounds were detected in your drinking water. 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. In 2020 we sampled for turbidity, fluoride, volatile organic compounds, inorganic compounds, nitrate, TTHMs, HAAs, synthetic organic compounds, and coliform bacteria. There were no violations and the results are included in the accompanying chart.

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 Oswego County Health Department at (315-349-3557).

2020 City of Oswego PWS - Table 1

Contaminant (Units)	Violation (Yes/No)	Date Tested	Level Detected (Maximum) (Range)	MCLG	MCL	Likely Source of Contaminants
Inorganic Compounds						
Copper - 90th Percentile (ppb)	No	8/1/19 - 8/5/19	42.8 ug/L Range 1.5 - 88.0	1300 ug/L	1300 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - 90th Percentile (ppb)	No	8/1/19 - 8/5/19	4.1 ug/L Range <1 - 10.0	0	15 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits
Fluoride (ppm)	No	11/4/2020	0.74 mg/l	n/a	2.2 mg/L	Erosion of natural deposits; Additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Chloride (ppm)	No	11/4/2020	27 mg/l	n/a	250 mg/L	Naturally occurring or indicative of road salt contamination
Chromium (ppb)	No	11/4/2020	2.2 ug/l	100 ug/L	100 ug/L	Discharge from steel and pulp mills; Erosion of natural deposits
Barium (ppb)	No	11/4/2020	25 ug/L	2000 ug/L	2000 ug/L	Discharge of drilling wastes
Nickel (ppb)	No	11/4/2019	1.6 ug/L	n/a	n/a	Naturally occurring; mining operations
Selenium (ppb)	No	11/4/2020	1.0 ug/L	50 ug/l	50 ug/l	Discharge from petroleum
Sodium (ppm)	No	11/4/2020	14 mg/L	n/a	n/a	Naturally occurring; Road salt; Water softeners; Animal waste
Sulfate (ppm)	No	11/4/2020	24 mg/L	n/a	250 mg/L	Naturally occurring
Nitrate (ppm)	No	11/4/2020	0.31mg/L	10 mg/L	10 mg/L	Runoff from fertilizer; Leaching from septic tanks. Sewage; Erosion of natural deposits
Synthetic Organic Compounds						
PFOA	No	10/14/2020	1.8 ng/L	n/a	10 ng/L	Released into the environment from widespread use in commercial and industrial applications
PFOS	No	10/14/2020	3.1 ng/L	n/a	10 ng/L	Released into the environment from widespread use in commercial and industrial applications
UCMR's						
Dichloroacetic acid [2C]	No	11/10/2018	3.34 ug/L	n/a	n/a	By-products of drinking water disinfection.
Trichloroacetic acid	No	11/10/2018	4.99 ug/L	n/a	n/a	By-products of drinking water disinfection.
Bromochloroacetic acid	No	11/10/2018	2.10 ug/L	n/a	n/a	By-products of drinking water disinfection.
Dibromoacetic acid [2C]	No	11/10/2018	1.01 ug/L	n/a	n/a	By-products of drinking water disinfection.
Bromochloroacetic acid [2C]	No	11/10/2018	3.76 ug/L	n/a	n/a	By-products of drinking water disinfection.
Chlorodibromoacetic acid	No	11/10/2018	1.51 ug/L	n/a	n/a	By-products of drinking water disinfection.
Disinfection Byproducts						
TTHMs (Total Trihalomethanes) (ug/L)	No	2020	Avg 36.45 ug/L Range 15.9 - 57	n/a	80 ug/L	By-products of drinking water disinfection.
HAAs (Haloacetic Acids) (ug/L)	No	2020	Avg 13.29 ug/L Range 0.0 - 27	n/a	60 ug/L	By-products of drinking water disinfection.
Microbiological Contaminants						
Turbidity (NTU)	No	2020	AVG 0.28 NTU Range 0.14 - 0.87	n/a	1.0 NTU	Soil Runoff
Total Coliform	No	2020	0	n/a	0	Naturally present in the environment

COPY OF NEW COLUMN G INFO:

Dichloroacetic acid [2C] - By-products of drinking water disinfection.

Trichloroacetic acid - By-products of drinking water disinfection.

Bromochloroacetic acid - By-products of drinking water disinfection.

Dibromoacetic acid [2C] - By-products of drinking water disinfection.

Bromoacetic acid [2C] - By-products of drinking water disinfection.

Chlorodibromoacetic acid - By-products of drinking water disinfection.

Notes -

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system. State regulations require that turbidity must always be below 1 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU.

2 – The level for lead and copper sampling presented represents the 90th percentile of the twenty (20) sample sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system. The action levels for lead (15 ug/l) and copper (1300 ug/l) were not exceeded for any of the 20 sites tested.

3 - Unregulated Contaminant Monitoring Rule (UCMR) samples are collected periodically by the city as required by the Environmental Protection Agency (EPA) for contaminants that are suspected to be in drinking water that do not have health-based standards set under the Safe Drinking Water Act (SDWA).

4 -* Denotes average values for 2019 sampling period.

DEFINITIONS:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

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.

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

Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).

Micrograms per liter (ug/L): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

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 New York State requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met state and federal regulations, 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 UNREGULATED CONTAMINANTS

In 2019, we were required to collect and analyze drinking water samples for unregulated contaminants, UCMR4. UCMR 4 requires monitoring for 30 contaminants between 2018 and 2020. The contaminants include 2 metals, 9 pesticides, 3 alcohols, 3 semi-volatiles, 3 brominated halo acetic-acid groups, 2 disinfection by-product indicators, and, for surface water systems, 10 cyanotoxins. Results for unregulated contaminants are included above in Table 1. If you have any questions concerning the unregulated contaminant sampling, please contact Tom Kells, Commissioner of Public Works, at 315-343-5055.

INFORMATION ON FLUORIDE ADDITION

Our system is one of the many drinking water systems in New York State that provides 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 a properly controlled level. To ensure that the fluoride supplement in your water provides optimal dental protection, the City of Oswego monitors fluoride levels daily to make sure fluoride is maintained at a target level of 0.7 mg/L. During 2020 monitoring showed that fluoride levels in your water were within 0.2 mg/L of the target level. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/L MCLG for fluoride.

INFORMATION FOR NON-ENGLISH-SPEAKING RESIDENTS

Spanish

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

French

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

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 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.

SYSTEM IMPROVEMENTS

In 2020, the city Oswego hired 1 new water operator trainee, 1 new water operator and purchased new flow meter equipment to help increase the efficiency of our filtration process. The city also rebuilt raw water pump #8 and high service pump #1. We ask that all our community members help us to continue to protect our water sources so we can responsibly provide water for years to come.