

Annual Drinking Water Quality Report for 2023
Town of Hannibal
C/O 824 County Route 34 - Drawer B - Hannibal NY 13074
Public Water Supply ID # 3730101

INTRODUCTION

To comply with State and Federal regulations, the operators of the Town of Hannibal Water public water system will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your awareness and understanding of drinking water, and the need to protect our drinking water sources. 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.

Last year was the seventeenth year of operation for the water district. During this period, we purchased water from the Onondaga County Water Authority (OCWA). We are proud to report that our system did not violate a maximum contaminant level or any other water quality standards.

If you have any questions about this report or concerning your drinking water, please contact Duane Shepard at (315) 564-6037. We want you to be informed about your drinking water. You are welcome to attend any monthly Town Board meetings which are held on the third Wednesday of each month at 7:00 PM at the Town Hall at 824 County Route 34.

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 New York State Department of Health (NYS DOH) and the Environmental Protection Agency (EPA) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The NYS DOH and the Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

FACTS AND FIGURES:

Our water system is planned to serve approximately 2,190 people via approximately 730 service connections. The source of the water is Lake Ontario. The water is pumped to one (1) 300,000-gallon storage tank. The water is disinfected with liquid sodium hypochlorite (chlorine) at our connection to OCWA at the town line and at our water storage tank.

SOURCE WATER 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 OCWA.

The Great Lakes' watershed is exceptionally large & 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 OCWA 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 pesticide contamination. Non-sanitary wastes & other discrete sources may also increase contamination potential. OCWA 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, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. We have also attached the AWQR report from OCWA, which represents compounds detected in the source 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.

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.

Table Of Detected Compounds

Contaminant	Violation (Yes/No)	Date of Sample	Lv. Detected (Avg/Max Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, or AL)	Likely Source of Contamination
Inorganic Contaminates							
Copper* 10 Locations within WD 90%	No	July 2023	96 ug/L (21-460)	ppb	1300 ug/L	AL = 1300 ug/L	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead* 10 Locations within WD 90%	No	July 2023	0 ug/L (0-2)	ppb	N/A	AL = 15 ug/L	Corrosion of household plumbing systems
Aluminum**	No	September 2023	0.133 mg/L	ppm	N/A	N/A	Erosion of natural deposits; Residual aluminum may be from a chemical used in the treatment process.
Barium **	No	September 2023	0.0203 mg/L	ppm	2 mg/L	2 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Calcium **	No	September 2023	30.0 mg/L	ppm	N/A	N/A	Naturally Occuring
Chloride**	No	September 2023	26.3 mg/L	ppm	N/A	250 mg/L	Naturally occurring or indicative of road salt.
Chromium 6**	No	November 2021	.069 ug/L	ppb	100 ug/L	100 ug/L	Erosion of natural deposits.
Copper**	No	September 2023	0.0049 mg/L	ppm	N/A	AL = 1.3	Erosion of natural deposits; leaching from wood preservatives.
Fluoride ** (Sampled Daily in finished water by OCWA)	No	2023	.70 mg/L (.62-0.91)	ppm	N/A	2.2 mg/L	Erosion of natural deposits; Water additive that promotes strong teeth; Discharges from fertilizer and aluminum factories.
Magnesium**	No	September 2023	8.15 mg/L	ppm	N/A	N/A	Naturally Occurring
Nickel**	No	September 2022	0.64 ug/L	ppb	N/A	N/A	Erosion of natural deposits

Table Of Detected Compounds (Cont.)

Contaminant	Violation (Yes/No)	Date of Sample	Lv. Detected (Avg/Max Range)	Unit Measurement	MCLG	Limit (MCL, TT, Or AL)	Likely Source of Contamination
Nitrate ** (As Nitrogen)	No	September 2023	0.16 mg/L	ppm	10 mg/L	10 mg/L	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium***	No	September 2023	16.0 mg/L	ppm	N/A	N/A	Naturally occurring, road salt, water softener treatment, animal waste
Sulfate**	No	September 2023	23.4 mg/L	ppm	N/A	2200 mg/L	Naturally occurring

Disinfection By-Products

Total Trihalo-methanes (TTHM)	No	2023	38.93 ug/L (26 - 46)	ppb	N/A	80 ug/L	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids (HAA5)	No	2023	13.55 ug/L (5.4 - 25)	ppb	N/A	60 ug/L	By-product of drinking water disinfection

Radioactive Contaminants

Beta Emitters	No	Feb, May, Aug, Nov 2023	0.494 pCi/L	pCi/L	0	50	Decay of natural deposits and man-made emissions
Radium-226	No	Feb, May, Aug, Nov 2023	0.0695 pCi/L	pCi/L	0	5	Erosion of natural deposits
Radium-228	No	Feb, May, Aug, Nov 2023	0.748 pCi/L	pCi/L	0	5	Erosion of natural deposits
Total Uranium	No	Feb, May, Aug, Nov 2023	0.293 pCi/L	pCi/L	N/A	30	Erosion of natural deposits

UCMRs****

Manganese	No	Feb, May, Aug, Nov 2019	1.08 (ND-2.7)	ppm	N/A	N/A	Naturally occurring element. Commercially available in combination with other elements and minerals. Used in steel production, fertilizer, batteries, and fireworks.
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HAA ₆ Br	No	Feb, May, Aug, Nov 2019	7.71 (3.23-12.22)	ppm	N/A	N/A	By-product of drinking water chlorination.
HAA ₉	No	Feb, May, Aug, Nov 2019	27.06 (8.23-51.03)	ppb	N/A	N/A	By-product of drinking water chlorination.

Per- and Poly-fluoroalkyl Substances (PFOA & PFOS) found at Entry Point**

Perfluorooctanoic acid (PFOA)	No	May- December 2023	1.2 (ND-2.0)	ppt	N/A	10	Non-stick coatings, stain repellants, and firefighting foam
Perfluorooctane sulfonate (PFOS)	No	May- December 2023	1.6 (ND-2.8)	ppt	N/A	10	Non-stick coatings, stain repellants, and firefighting foam

Notes:

* The levels presented for copper and lead represents the 90th percentile of the 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 value is equal to or greater than 90% of the values detected in your water system. In this case as either 3 or 4 samples were collected and the 90th percentile value was the second highest value. The action levels for copper and lead were not exceeded at any of the sites tested. Therefore, our system meets corrosion control treatment, source water treatment and lead service line requirements.

**The levels for these compounds were provided by OCWA as the water supplier for the Town of Hannibal.

*** Water containing more than 20 mg/l of sodium should not be used for drinking by persons on severely restricted sodium diets. Sample was collected by OCWA.

****Unregulated Contaminant Monitoring Rule (UCMR) samples are collected periodically by OCWA 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).

DEFINITIONS:

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

Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment

technology.

Maximum Contaminant Level Goal – The “Goal” (MCLG) is 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.

Non-Detects (ND or <number value) – Laboratory analysis indicates that the tested compound is not present in the sample.

Parts per million (ppm) or Milligrams per liter (mg/L) – Corresponds to one part of liquid in one million parts of liquid (parts per million – ppm). Or one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/L) – Corresponds to one part of liquid in one billion parts of liquid (parts per billion – ppb). Or one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) – A measure of radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations during 2023. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State. We will continue to collect samples from the distribution system as required by New York State regulations.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During 2023, our system did not have any violations related to operation of the water system

DO I NEED TO TAKE PRECAUTIONS? IS OUR WATER SAFE FOR EVERYONE?

Although our drinking water met or exceeded 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). Please note that testing of the water at this system has shown that this water is suitable for drinking water purposes, and contains very low amounts of contaminants and should not pose any health risks.

INFORMATION FOR NON-ENGLISH-SPEAKING RESIDENTS

Spanish:

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó 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 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.

CLOSING

Thank you for allowing us to continue providing your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary to address improvements.