

Annual Drinking Water Quality Report for 2023
East Greenbush General Water District
225 Columbia Turnpike, East Greenbush, NY 12061
Public Water Supply Identification Number NY4100051

INTRODUCTION

To comply with State regulations, East Greenbush General Water District 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. We are very pleased to provide you with this year's Annual Water Quality Report. Last year, your drinking water met all State drinking water health standards. This report is a snapshot 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. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources.: *Mr. Chris Ochs, Licensed Operator; Nick Marino, General Foreman, Town of East Greenbush, East Greenbush General Water District, 69 Gilligan Road, East Greenbush, NY 12061; Telephone (518) 477-6103.* We want our valued customers to be informed about their water service. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held on the 2nd and 3rd Wednesday of each month, 7:00 PM at the *Town Hall, 225 Columbia Turnpike, East Greenbush, NY 12061; Telephone (518) 477-4775.*

WHERE DOES OUR WATER COME FROM?

The East Greenbush General Water District purchases its water from the City of Troy. The City of Troy draws its water from a "surface water" supply, the spring fed Tomhannock Reservoir. It is located to the northeast of the City of Troy. Water flows from the Tomhannock Reservoir to the Troy Water Treatment Plant (TWTP), a complete treatment facility. In an effort to lower the formation of disinfection byproducts (DBPs), TWTP adds potassium permanganate at the Tomhannock Reservoir. Potassium permanganate is a strong oxidant that is used to oxidize iron and manganese, but does not produce the DBPs that chlorine does. Potassium permanganate is being fed seasonally from mid-June to about September or October depending on the iron and manganese levels in the raw water. Additionally, chlorine dioxide is added at Melrose Station to oxidize the organic material that leads to the formation of DBPs when it reacts with chlorine but unlike chlorine, chlorine dioxide does not form DBPs. Chlorine dioxide is fed year-round. The treatment process at Troy consists of; coagulation using aluminum sulfate (alum) to cause small particles to stick together when the water is mixed, making larger heavier particles; sedimentation allows the newly formed larger particles to settle out naturally; filtration removes smaller particles by trapping them in sand filters; pH adjustment for corrosion control; and final post chlorination to maintain a chlorine residual in the distribution system to prevent bacterial contamination and fluoridation at low levels to protect teeth. The water purchased by East Greenbush is pumped through the Cross-Street Pump Station. A 36-inch water main along route 4 through North Greenbush carries water to our two 5 million storage tanks at the top of Grandview Drive. This tank distributes water throughout the General Water District. The supply system is jointly owned with the City of Rensselaer.

The NYS DOH has completed a Source Water Assessment for the Tomhannock Reservoir. The assessment is summarized below. The assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how likely contaminants could enter the reservoir(s). The susceptibility rating is an estimate of the potential for contamination. It does not mean that the water delivered to your home is or will become unsafe to drink. See section "Are there contaminants in our drinking water?" of this report, for information concerning low levels of contaminants in your water.

The assessment found the amount of pasture in the assessment area results in a potential for protozoa contamination. There is also possible contamination susceptibility associated with landfills in the assessment area. It should be noted that hydrologic characteristics (e.g. basin shape and flushing rates) generally make reservoirs sensitive to existing and new sources of phosphorus and microbial contamination.

A copy of the full Source Water Assessment, including a map of the assessment area is available for review by contacting the Rensselaer County Health Department at the number provided in this report.

FACTS AND FIGURES

The East Greenbush General Water District provides water through 5,309 service connections to a population of approximately 12,640 residential and commercial customers. Our average daily demand is 2,000,000 gallons. Our single highest day was 3,600,000 gallons. The total water purchased from Troy in 2023 was 1,177,325,000 gallons. The amount of water delivered (billed) between November 1, 2022 and October 31 2023 was 669,377,958 gallons. The average annual charge for water in 2023 was \$5.00 per 1000 gallons. The unaccounted water was 62,690,057 gallons resulting in a loss (6.0%) between the volume billed and the total volume purchased is water used firefighting, flushing of the water distribution system, errors in water meters and water lost to leaks.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. In addition, we test 2 samples for coliform bacteria monthly. The table presented below 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.

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 Rensselaer County Health department at (518) 270-2711.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the tables on page 4, our system had no violations

New York State has adopted the first in the nation drinking water standard for 1,4-Dioxane along with one of the lowest maximum contaminant levels for PFOA and PFOS. Public Water Supplies in NYS are required to test for PFOA, PFOS and 1,4-Dioxane. PFOA and PFOS have Maximum Contaminant Levels (MCL) of 10 parts per trillion each while 1,4-Dioxane has an MCL of 1.0 parts per billion. There were no detects for PFOA, PFOS & 1,4-Dioxane.

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. Systems that purchase fluoridated water may want to add: Fluoride is added to your water by City of Troy Water Department before it is delivered to us. 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 Troy Water Department monitors fluoride levels on a daily basis to make sure fluoride is maintained at a target level of 1.0 mg/l. During 2023 monitoring showed that fluoride levels in your water were within 0.2 mg/l of the target level 100% of the time. None of the monitoring results showed fluoride at levels that approach the 2.2 mg/l MCL for fluoride.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2023, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

Unregulated Contaminant Monitoring 5 was conducted during 2023. This is a requirement of the 1996 Safe Drinking Water Act amendments. This monitoring provides a basis for future regulatory action to protect the public health. The number in parentheses refers to the number of measured for a total of 30 analytes. The breakdown of analytes is as follows: semi volatile organic chemicals (3), pesticides and pesticide manufacturing byproduct (9), metals (2), alcohols (3), cyanotoxin chemical contaminants (10), brominated haloacetic acid groups (3). There are no associated MCL's for these compounds at this time with the exception of Manganese. We have listed those compounds that were detected in the table of Detected Contaminants for East Greenbush.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium*, *Giardia* and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791) or at <http://www.epa.gov/safewater>.

INFORMATION ON LEAD

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The East Greenbush Water Department is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American

National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Nick Marino, at the East Greenbush Water Department (518) 477-6103. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

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.

CAPITAL IMPROVEMENTS

There were no major modifications made to the water system in 2023.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

Glossary of Terms

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

90th Percentile Value- The values reported for lead and copper represent the 90th percentile. 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

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

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

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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination. *Nephelometric Turbidity Unit (NTU)*- A measure of the clarity of Water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Locational Running Annual Average (LRAA): The LRA is calculated by taking the average of the four most recent samples collected at each individual site.

N/A-Not applicable

TABLE OF DETECTED CONTAMINANTS EAST GREENBUSH GENERAL WATER DISTRICT PWS ID# NY4100051 Water Purchased from City of Troy NY4100050							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of Contamination
Microbiological Contaminants							
Barium	N	7/10/23	25.2	µg/l	2000	MCL=2000	Naturally occurring
Chloride	N	7/10/23	22.4	mg/l	N/A	MCL=250	Naturally occurring, road salt
Copper (EG General WD) Range	N	6/16/21-7/29/21	0.121 0.008-1.19	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Color (avg) range	N	Daily	3 ND-6	units	N/A	MCL=15	Naturally occurring
Fluoride (avg) range	N	Daily	0.84 0.33-1.15	mg/l	N/A	MCL=2.2	Water additive which promotes strong teeth
Iron (avg) range	N	Weekdays	30 20-30	µg/l	N/A	MCL=300	Geology; Naturally occurring
Lead (EG General WD)	N	6/16/21-7/29/21	3.2 ³ ND-235	µg/l	0	AL=15	Corrosion of household plumbing systems,
Manganese (avg) range	N	Weekdays	30 10-20	µg/l	N/A	MCL300	Geology; Naturally occurring
Nitrate (EG) Nitrate (Troy)	N	2/22/23	0.257 0.068	mg/l	10	MCL=10	Runoff from fertilizer
pH (avg) range	N	Daily	8.48 6.36-9.09	units		6.5-8.5	
Sodium ⁴	N	7/6/22	10.3	mg/l	N/A	N/A	Naturally occurring
Sulfate	N	7/6/22	19.9	mg/l	N/A	MCL=250	Naturally occurring
Turbidity	N	Daily	074 0.06-5.30	NTU	N/A	5	Soil runoff
Radiological Contaminants							
Gross Alpha Particles	N	10/17/22	0.088	pCi/l	0	MCL=15	Naturally occurring
Gross Beta Particles	N	10/17/22	0.819	pCi/l	0	MCL=4.0	Naturally occurring
Radium 226	N	10/17/22	0.082	pCi/l	0	MCL=5.0	Naturally occurring
Radium 228	N	10/17/22	0.450	pCi/l	0	MCL=5.0	Naturally occurring
Synthetic Organic Chemicals							
2,4-D	N	8/1/23	0.13	µg/l		MCL=70	Release to the environment by its application as a pesticide used to control broad leaf weeds in agriculture and for control of woody plants along roadsides, railways, and utility rights-of-way.
Dalapon	N	8/1/23	1.0	µg/l		MCL=200	Runoff from herbicide used on rights of way
Disinfection Byproducts							
Chlorine Dioxide Residual (avg) range	N	Daily	0.0.004 ND-0.11	mg/l	0.8	MCL=0.8	Used in the treatment and disinfection of drinking water
Chlorate (avg) range	N	Monthly	0.16 0.10-0.22	mg/l	N/A	N/A	Byproduct of chlorine dioxide used in disinfection
Chlorite (avg) range	N	Monthly	0.74 0.60-0.95	mg/l	N/A	MCL=1.0	Byproduct of chlorine dioxide used in disinfection
Chlorine avg.	N	Daily	0.56	mg/l	N/A	MCL=4	Used in the treatment and disinfection of drinking water
Stage 2 Haloacetic Acids (HAA5)(Average) Range of values for HAA5 EG General WD	N	2/7/23 4/26/23 8/15/23 11/17/23	LRAA1 31.9 22.9-48 LRAA2 31.2 ⁵ (22.9-43) LRAA3 21.7 (13.6-31)	µg/l	N/A	MCL=60	Byproduct of drinking water chlorination

			LRAA4 36.8 ⁵ (27.1-47.2)				
Stage 2 Haloacetic Acids (HAA5) Range of values for HAA5 site 5 Range of values for HAA5 site 6	N	2/7/23 4/26/23 8/15/23 11/17/23	28.8 (13.6-24.4) 30.8 16-29.4	µg/l			
Stage 2 TTHM[Total Trihalomethanes](Average) Range of values for TTHM EG General WD Stage 2 TTHM[Total Trihalomethanes](Average) Range of values for TTHM EG General WD	N	2/7/23 4/26/23 8/15/23 11/17/23	LRAA1 63.2 ⁵ (37.9-88.1) LRAA2 57 ⁵ (36-80.2) LRAA3 69.5 ⁵ (54.9-88.3) LRAA4 56.8 ⁵ (41-83.7)	µg/l	N/A	MCL=80	Byproduct of drinking water chlorination
Stage 2 TTHM [Total Trihalomethanes] Range of values for TTHM5 site 5 Range of values for TTHM site 6	N N	2/7/23 4/26/23 8/15/23 11/17/23	68.25 ⁵ (53.5-88.3) 63.5 ⁵ (43.1-92.6)	µg/l			
Chlorine	N	Daily testing	0.91 0.45-1.55	mg/l	N/A	MCL=4	
Total Organic Carbon (TOC) samples from 2023							
TOC (filter effluent) range	N	Monthly samples	1.3	N/A	>= 1.0	TT	Naturally present in the environment
Monthly Compliance Ratio avg							
Unregulated Contaminant Monitoring Rule 5, Detected Contaminants							
PFBA	N	4/26/23	1.4	ng/l	N/A	There are no Federal MCL's at the present time for the compounds tested	Released into the environment from widespread use in commercial and industrial applications.
PFOA	N	7/10/23	1.1				
PFBA	N	7/10/23	2.3				
PFOA	N	11/20/23	1.2				
PFBA	N	11/20/23	1.1				
Notes:							
1. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected.							
2. The level presented represents the 90th percentile of the 30 samples collected. The action level for copper was not exceeded at any of the 30 sites tested.							
3. The level presented represents the 90th percentile of the 30 samples collected. The action level for lead was exceeded 1 of the 30 sites tested.							
4. Water containing more than 20 ppm should not be used for drinking by persons on severely restricted sodium diets.							
5. The average is based on a Locational Running Annual Average (LRAA). The average shown is the highest LRAAs for 2023. The highest LRAA for the the TTHMs was in the 1 st , 2 nd or 3 rd quarter depending on the site. and the HAA5s was in the 1 st quarter of 2023.							

As illustrated in the table above, Troy's monitoring and testing detected some contaminants; all other contaminants were below the maximum levels permitted by the State, known as the maximum contaminant levels (MCL). Many of the test results were **NON-DETECTABLE**. The type/group (number of contaminants in each group) tested for were as follows: volatile organic compounds (52) +MTBE, synthetic organic compounds (41), PFOSs, PFOA/PFAS, 1,4 Dioxane and asbestos. The inorganic contaminants tested for and non-detectable were, arsenic, cadmium, chromium, iron, manganese, mercury, nickel silver, selenium, antimony, beryllium, thallium, zinc, nitrite, and cyanide.