

*Annual Drinking Water Quality Report for 2024*  
*Ripley Water District*  
*10168 West Lake Road*  
*Ripley, NY 14775*  
*Public Water Supply ID# NY0600372*

## **INTRODUCTION**

To comply with State regulations, Ripley Water District annually issues 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 most State drinking water health standards. We detected elevated levels of Disinfection Byproducts (DBP's) during routine monitoring in 2024, including two instances when the maximum contaminant level for Total Trihalomethane was exceeded. More information on DBP's can be found in the Table of Detected Contaminants and in the 'What Does This Information Mean?' section of this report.

On November 11, the distribution system lost pressure due to an emergency water main repair, resulting in the Chautauqua County Health Department issuing a boil water advisory. Once the repairs were made and water lines were disinfected, required bacteriological testing was completed and all water quality standards were met which led to the cancelling of the boil water advisory on November 14.

This report includes details about where your water comes from, what it contains, and how it compares to State standards. If you have any questions about this report or concerning your drinking water, please contact Andrew Strine, Water Facility Superintendent, at 716-413-8010 option 4. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held on the second Thursday of every month at 6:30 PM in the Community Building located at 14 North State Street.

## **WHERE DOES OUR WATER COME FROM?**

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 1600 people and several small businesses through 548 service connections. Our water source is surface water, which is treated by the Martin D. Cary filtration plant. The Martin D. Cary filtration plant is designed to produce 350,000-gallons per day using the slow sand filtration process with a final stage of chlorine disinfection prior to distribution.

The NYSDOH has evaluated this public water supply's susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph 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 this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

This assessment found an elevated 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 oil and gas wells are found in high densities.

While the source water assessment rates our reservoir as being susceptible to microbial, please note that our water is filtered and disinfected to ensure that that the finished water delivered into your home meets New York State’s drinking water standards for microbial contamination. A copy of the assessment, including a map of the assessment area, can be obtained by contacting us, as noted above.

### 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, and synthetic organic compounds. 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 Chautauqua County Health Department at 716-753-4481.

**TABLE OF DETECTED CONTAMINANTS**

Contaminant	Violation	Date of Sample	Level Detected	Unit Measurement	Regulatory Limit (MCL/ AL)	MCLG	Likely Source of Contamination
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#### MICROBIOLOGICAL CONTAMINANTS

Turbidity <sup>1</sup>	No	3/2/24	0.08	NTU	TT=<1.0 NTU	N/A	Soil Run-off
Turbidity <sup>1</sup>	No	March 2024	100% <0.3	NTU	TT=95% of samples <0.3NTU	N/A	Soil Runoff
Distribution Turbidity <sup>2</sup>	No	July 2024	0.342	NTU	MCL>5 NTU	N/A	Soil Run-off

#### INORGANIC CONTAMINANTS

Copper <sup>3</sup>	No	7/30/24 – 7/31/24	0.991; Range= 0.089 – 0.996	mg/l	1.3 (AL)	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives.
Lead <sup>4</sup>	No	7/30/24 – 7/31/24	7.1; Range= ND – 41.4	ug/l	15 (AL)	0	Corrosion of household plumbing systems: Erosion of natural deposits.
Barium	No	3/27/24	0.032	mg/l	2 (MCL)	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Phosphate	No	Daily 2024	Avg.=0.17 Range= 0.01 – 2.45	mg/l	N/A	N/A	Used for water treatment

#### RADIOLOGICAL

Gross Beta <sup>5</sup>	No	5/2/22	1.7	pCi/l	50 (MCL)	0	Decay of natural deposits and man-made emissions.
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#### STAGE 2 DISINFECTION BYPRODUCTS (W LAKE ROAD)

Total Trihalomethanes	Yes	Quarterly (2024)	Avg.= 92.7 Range= 58.97 – 119.54	ug/l	80 (MCL)	N/A	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	No	Quarterly (2024)	Avg.= 40.3 Range= 6.5 – 56.5	ug/l	60 (MCL)	N/A	By-product of drinking water chlorination needed to kill harmful organisms

#### STAGE 2 DISINFECTION BYPRODUCTS (E LAKE ROAD)

Total Trihalomethanes	No	Quarterly (2024)	Avg.= 75.6 Range= 28.7 – 98.5	ug/l	80 (MCL)	N/A	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Total Haloacetic Acids	No	Quarterly (2024)	Avg.=43.1 Range= 30.9 – 40.0	ug/l	60 (MCL)	N/A	By-product of drinking water chlorination needed to kill harmful organisms

## DISINFECTANTS

Chlorine Residual	No	Daily (2024)	Avg.=1.18 Range= 0.4 – 2.5	mg/l	4 (MCL)	N/A	Water additive used to control microbes
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### 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. Our highest single turbidity measurement for the year occurred on 3/2/24 (0.08 NTU). State regulations require that turbidity must always be less than or equal to 1.0 NTU. The regulations require that 95% of the turbidity samples collected have measurements below 0.3 NTU. Although in the month of March 2024, we recorded our highest turbidity readings, at no time within the calendar year did we exceed the 0.3 NTU turbidity limit, all recorded were in acceptable range allowed and did not constitute a treatment technique violation.

2 - Distribution Turbidity is a measure of the cloudiness of the water found in the distribution system. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Our highest average monthly distribution turbidity measurement detected during the year (0.342 NTU) occurred during January. This value is below the State's maximum contaminant level of 5 NTU.

3 – The level presented represents the 90<sup>th</sup> percentile of the ten homes tested. A percentile is a value on a scale of 100 that indicates the percent of samples equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value was calculated to equal the 2<sup>nd</sup> highest result which was 0.991 mg/l. The action level for copper was not exceeded at any of the sites tested.

4 – The level presented represents the 90<sup>th</sup> percentile of the ten homes tested. In this case, ten samples were collected at your water system and the 90<sup>th</sup> percentile value for lead was 7.1 ug/l. The action level for lead was exceeded at one of the ten sites tested.

### 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.

**Maximum Residual Disinfectant Level (MRDL)**: The highest level of a disinfectant that is 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.

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

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

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

**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).

**Picocuries per liter (pCi/L)**: A measure of the radioactivity in water.

### WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had violations for Disinfection Byproducts in 2024. Water samples collected and analyzed for DBP's during the 3<sup>rd</sup> and 4<sup>th</sup> quarter monitoring periods indicated that our water contained levels of Total Trihalomethane above the maximum contaminant level.

Trihalomethanes are a group of chemicals that includes chloroform, bromoform, bromo-dichloromethane, and chloro-dibromomethane. Trihalomethanes are formed in drinking water during treatment by chlorine, which is the most commonly used disinfectant in New York State. Chlorine reacts with certain acids that are in naturally-occurring organic material (e.g., decomposing vegetation such as tree leaves, algae or other aquatic

plants) in surface water sources such as rivers and lakes. The amount of trihalomethanes formed in drinking water during disinfection can change from day to day, depending on the temperature, the amount of organic material in the water, the amount of chlorine added, and a variety of other factors. Drinking water is disinfected by public water suppliers to kill bacteria and viruses that could cause serious illnesses. For this reason, disinfection of drinking water by chlorination is beneficial to public health.

Some studies suggest that people who drink chlorinated water (which contains trihalomethanes) or water containing elevated levels of trihalomethanes for long periods of time may have an increased risk for certain health effects. For example, some studies of people who drank chlorinated drinking water for 20 to 30 years show that long term exposure to disinfection by-products (including trihalomethanes) is associated with an increased risk for certain types of cancer. A few studies of women who drank water containing trihalomethanes during pregnancy show an association between exposure to elevated levels of trihalomethanes and small increased risks for low birth weights, miscarriages and birth defects. However, in each of the studies, how long and how frequently people actually drank the water, as well as how much trihalomethanes the water contained is not known for certain. Therefore, we do not know for sure if the observed increases in risk for cancer and other health effects are due to trihalomethanes or some other factor. The individual trihalomethanes chloroform, bromodichloromethane and dibromochloromethane cause cancer in laboratory animals exposed to high levels over their lifetimes. Chloroform, bromodichloromethane and dibromochloromethane are also known to cause effects in laboratory animals after high levels of exposure, primarily on the liver, kidney, nervous system and on their ability to bear healthy offspring. Chemicals that cause adverse health effects in laboratory animals after high levels of exposure may pose a risk for adverse health effects in humans exposed to lower levels over long periods of time.

We are working closely with our engineer and the Chautauqua County Health Department to determine how to decrease the levels of Disinfection Byproducts in our system. We will continue to monitor for these contaminants in 2025 and will notify our customers immediately if there are any issues.

We have learned through our testing that some contaminants have been detected; however, except for Total Trihalomethanes discussed above, these contaminants were detected below the level allowed by the State. Lead and copper were detected within the system and of the eleven samples collected none were found exceeding the action levels. We are required to present the following information on lead in drinking water:

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. The Ripley Water District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact The Ripley Water District at 716-413-8010 option 4. 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>.

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

During 2024, our system was in compliance with applicable State drinking water operating requirements, but not monitoring and reporting requirements. During 2024, we did not monitor or test for microbiological contaminants during the month of February, and therefore cannot be sure of the quality of your water regarding coliform bacteria during that time.

This past year we monitored for chlorine residual on a daily basis but failed to provide the chlorine monitoring report for the month of December to the Chautauqua County Health Department on time. This does not pose a threat to the quality of our water supply.

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

A Lead Service Line (LSL) is defined as any portion of pipe that is made of lead which connects the water main to the building inlet. An LSL may be owned by the water system, owned by the property owner, or both. The inventory includes both potable and non-potable SLs within a system. In accordance with the federal Lead and Copper Rule Revisions (LCRR) our system has prepared a lead service line inventory and have made it publicly accessible by contacting the department at 716-416-8010 option 4 and/or visiting our website at: <https://health.data.ny.gov/Health/New-York-State-Lead-Service-Line-Inventory-Map/fkii-zkcq>

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

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

## **INFORMATION 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 firefighting 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 to provide 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. Water District 4, the continuation of our water main on Route 5 east bound, has been completed. We are working with our engineers to locate funding for necessary water plant upgrades that will help support growing businesses within our community without decreasing the quality of water and services to our residences. We ask that all our customers help us protect our water sources, which is the heart of our community. Please call our office at 716-413-8010 option 4 if you have questions or email us at [ripleywater@outlook.com](mailto:ripleywater@outlook.com).