

***Annual Water Quality Report for 2023***  
***Town Of Scio Water Department***  
***P.O. Box 105 Scio NY 14880***  
***Public Water Supply NY0200325***

## **INTRODUCTION**

To comply with State regulations, [The Town Of Scio Water Department](#) 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. [In 2023, your tap water met all 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.](#) 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.

If you have any questions about this report or concerning your drinking water, please contact [Nate Jenison, Water Superintendent, 585-593-5777](#). We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings held the second Wednesday of each month at 6:00pm at the Scio town hall.

## **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 950 people and has 430 service connections](#). Our water source comes from 3 springs and one 33' groundwater well, which is located [north of the village by Dry Brook Rd](#), Scio, NY 14880. The water is then pumped to the treatment plant on Davis Hill Rd, Scio, NY 14880. The water is filtered through a bag filter system then treated with sodium hypochlorite and fluoride prior to distribution.

The New York State Department of Health has completed a Source Water Assessment for this water system, based on available information. Possible and actual threats to the source of drinking water for this system were evaluated. The Source Water Assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is or will become contaminated. Please refer to the section in this Annual Water Quality Report (AWQR) entitled "ARE THERE CONTAMINANTS IN OUR DRINKING WATER?" for a list of the contaminants for which the water has been tested and the test results. The source water assessments provide managers with additional information for protecting source waters into the future. The Source Water Assessment has rated the well as having high susceptibility to contamination from nitrates, organic industrial chemicals, and petroleum products. These ratings are due primarily to the close proximity of the well to a U.S. Environmental Protection Agency (EPA) regulated discharge facility, an EPA regulated pipeline, three (3) New York State Department of Environmental Conservation (DEC) permitted discharge facilities that discharge wastewater into the environment below the surface of the ground, and to one oil/gas well. Also, past sampling has detected nitrates at levels which indicate the well has a high chemical sensitivity, and the well

draws water from an unconfined aquifer of unknown hydraulic conductivity. Both of these factors contribute to the high susceptibility ratings. A copy of the Source Water Assessment, including a map of the assessment area, can be obtained by calling the Scio water department

## 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](#), [total organic carbon](#), [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. 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 [Allegany County Health Department](#) at [585-268-9250](#).

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. None of the compounds we analyzed for were detected in your drinking water.

| Table of Detected Contaminants      |                  |                |                                  |                    |      |                                  |                                                                                              |
|-------------------------------------|------------------|----------------|----------------------------------|--------------------|------|----------------------------------|----------------------------------------------------------------------------------------------|
| Contaminant                         | Violation Yes/No | Date of Sample | Level Detected (Avg/Max) (Range) | Unit Measure -ment | MCLG | Regulatory Limit (MCL, TT or AL) | Likely Source of Contamination                                                               |
| <b>Disinfection</b>                 |                  |                |                                  |                    |      |                                  |                                                                                              |
| Chlorine                            | No               | Jan-Dec        | 0.85mg/l-1.55mg/l                | mg/L               | 4.0  | 4.0                              | Used as a disinfectant for community water systems                                           |
| <b>Disinfection By-products</b>     |                  |                |                                  |                    |      |                                  |                                                                                              |
| Total Haloacetic acid concentration | No               | 8-14-23        | 3.0ug/l                          | ug/l               | N/A  | 60                               | By-product of drinking water chlorination                                                    |
| Total trihalomethane concentration  | No               | 8-14-23        | 14ug/l                           | ug/l               | N/A  | 80                               | By-product of drinking water chlorination                                                    |
| <b>Inorganic Contaminants</b>       |                  |                |                                  |                    |      |                                  |                                                                                              |
| Lead (See 1. Below on Page 2)       | No               | 9-12-23        | 0.0017mg/l                       | mg/l               | 0    | AL=0.015                         | Corrosion of household plumbing or corrosion of natural deposits                             |
| Copper (See 1. Below on Page 2)     | No               | 9-12-23        | 0.11mg/l                         | mg/l               | 1.3  | AL=1.3                           | Corrosion of household plumbing, erosion of natural deposits, leaching of wood preservatives |
| Nitrate                             | No               | 8-15-23        | 0.24mg/l                         | mg/l               | 10   | 10                               | Fertilizer use, leach from septic systems,                                                   |

|                         |    |          |                                              |                  |                        |                       |                                                                                                                          |
|-------------------------|----|----------|----------------------------------------------|------------------|------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------|
|                         |    |          |                                              |                  |                        |                       | erosion from natural deposits.                                                                                           |
| Fluride                 | No | 8-16-23  | 0.78 mg/l                                    | mg/l             | 2.2                    | 2.2                   | Erosion of natural deposits; Water additive that promotes Strong teeth; Discharge from Fertilizer and Aluminum factories |
| Turbidity               | No | 10-11-23 | 0.21 NTU                                     | NTU              | N/A                    | 1.0                   | Soil Run Off                                                                                                             |
| Barium                  | No | 8-14-23  | 0.050                                        | mg/l             | 2000                   | 2000                  | Discharge of drilling wastes; Discharge from metal refineries, Erosion of natural deposits                               |
| 1,4-Dioxane, PFOA, PFOS | No | 03/16/21 | <0.020 ug/l, <1.8 ng/l, <1.8 ng/l            | ug/l, ng/l, ng/l | 1 ug/l, 10ng/l, 10ng/l | 1ug/l, 10ng/l, 10ng/l |                                                                                                                          |
| 1,4-Dioxane, PFOA, PFOS | No | 09/20/21 | <0.020ug/l, sample rejected, sample rejected | ug/l, ng/l, ng/l | 1ug/l, 10ng/l, 10ng/l  | 1ug/l, 10ng/l, 10ng/l |                                                                                                                          |
| 1,4-Dioxane, PFOA, PFOS | No | 09/30/21 | Sample rejected, <0.85ng/l, <1.2ng/l         | ug/l, ng/l, ng/l | 1ug/l, 10ng/l, 10ng/l  | 1ug/l, 10ng/l, 10ng/l |                                                                                                                          |

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 (give date) (0.9 NTU). 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. Although (give date) was the month when we had the fewest measurements meeting the treatment technique for turbidity, the levels recorded were within the acceptable range allowed and did not constitute a treatment technique violation.

2 – The level presented represents the 90th percentile of the 10 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 copper values detected at your water system. In this case, (include number of samples, e.g. ten samples) samples were collected at your water system and the 90th percentile value was the (include what sample had the highest value, e.g. second highest) value (include level detected, e.g. 1.1 mg/l). The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the (include number of samples, e.g. ten samples) samples collected. The action level for lead was exceeded at two of the 10 sites tested.

4 – This level represents the highest locational running annual average calculated from data collected.

**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 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.

**Level 1 Assessment:** A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**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).

**Nanograms per liter (ng/l):** Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).

**Picograms per liter (pg/l):** Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).

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

**Millirems per year (mrem/yr):** A measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** A measure of the presence of asbestos fibers that are longer than 10 micrometers.

## **WHAT DOES THIS INFORMATION MEAN?**

As you can see by the table, our system had no MCL violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements.

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. It should be noted that the action level for lead was. We are required to present the following information on lead in drinking water:

|                                                                                                                                                                                                                                                                                                                                                                                             |
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| 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. <i>The Town of Scio Water Department</i> is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in |
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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 the Town of Scio Water Department at 585-593-5777. 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>.

As you can see by the table, our system had no violations, but we have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. Although nitrate was detected below the MCL, it was detected at **0.24 mg/l**, which isn't greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water: "Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

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 current federal drinking water requirements. Although arsenic was detected below the MCL, it was detected at **0.0010 mg/l** which isn't greater than one-half of the MCL. Therefore, we are required to present the following information on arsenic in drinking water: "NYS and EPA have promulgated a drinking water arsenic standard of 10 parts per billion. While your drinking water meets the standard for arsenic, it does contain low levels of arsenic. The standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

Fluoride is commonly added to drinking water at low levels to provide consumer dental health. But fluoride found at high enough levels can create a health risk if consumed over a long period and there is a MCL for fluoride to address this risk. Our testing detected an elevated level of fluoride. Although fluoride was not detected above the MCL. We were in compliance with regulations for the year 2023. "Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth."

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

During 2023, our system met or exceeded all criteria for operation of Public Water Supplies. 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 Allegany County Health Department at 585-268-9250.

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

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). Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population.

### **INFORMATION ON FLUORIDE ADDITION**

The Scio Water Department is one of many drinking water systems in New York State that provides a controlled 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 an optimal range. On April 27, 2015 The U.S. Dept. of Health and Human Services released the final Public Health Service recommendation for the optimal fluoride level in drinking water from 1.0 parts per million to 0.7 ppm. To ensure that the fluoride supplement in your water provides optimal dental protection, the State Department of Health requires that we monitor fluoride levels on a daily basis. For the year 2023, the fluoride levels in your water were in the optimal range 100% of the time

### **CLOSING**

Remember that water meters, although property of the Water Dept., are the responsibility of the home owner. Costs for frozen or damaged meters or radio units will be charged to the customer. Make sure you have a working shut off valve on the main line entering your home and access to it in case of emergency. We all hear about conserving our fresh water resources. Consumers can do their part through leak prevention, detection and repair within the home. Use water saving devices such as pressure reducing valves, water saving toilets, low flow showerheads and faucet aerators. Protect your water lines from freeze-ups by dripping faucets and insulating vulnerable above ground water lines. In 2022 the water rates were increased from a base rate of \$26.00 each billing to \$46.00 each, billing from \$2.60 per 100 cu.ft. unit (750 Gal) to \$3.62 per 100 cu.ft. If you currently have a meter that reads in 1000 gallons, the cost is \$4.82 per unit. The Scio Water Dept. bills 6 times a year. The water operator can be reached at (585) 648-2192 for after hours emergencies.