

Annual Drinking Water Quality Report for 2021

Village of Wellsburg Water Department

3663 Sixth Street Wellsburg NY 14894

Public Water Supply ID# NY0701010

To comply with State regulations, the Village of Wellsburg 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 State drinking water health standards. 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 our licensed water system operator, Mike Steck, at (607) 565-2594. If you wish to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held at 7:00 p.m. the second Monday of each month at the Ashland 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 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.

We purchase our water from the Elmira Water Board. The water is a blend of river and well water that is treated and filtered. Elmira 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. Fluoride is added to your water by the Elmira Water Board 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 State Department of Health requires that the Elmira Water Board monitor fluoride levels on a daily basis. Results are reported in the table below.

Elmira also adds phosphate and controls the alkalinity (pH) in the finished water to prevent corrosion of household plumbing. The goal is to limit the amount of lead that can be leached from residential piping that contains soldered or brass fittings.

Our water system serves about 630 people through 250 service connections. During 2021, we did not experience any shortage of our source water.

Are there contaminants in our drinking water?

As the State regulations require, we routinely test your drinking water for contaminants that can sometimes get into the water after we buy it from Elmira. These contaminants include: total coliform, asbestos, lead and copper, and disinfection byproducts called Total Trihalomethanes and Haloacetic Acids. Elmira tests the water for additional contaminants at their treatment plant, including turbidity, inorganic compounds, nitrate, nitrite, volatile organic compounds, synthetic organic compounds and naturally occurring radioactive contaminants. The table below shows the most recent test results for compounds detected in your drinking water.

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 Chemung County Health Department at 737-2019.

Lead Educational Statement

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. Wellsburg is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Do I need to take special precautions?

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).

Is our water system meeting other rules that govern operations?

During 2021, we were cited by the Health Department because we forgot to take our routine coliform bacteria sample for the month of July. The violation was closed when we collected our routine sample in August.

Contaminants Detected during 2021 (or most recent test)

New York State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. For this reason, some of our data, though representative, is more than a year old.

Definitions used in the table:

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. (MRDL, the Maximum Residual Disinfectant Level, applies to chlorine residual)	Milligrams per liter (mg/L): Corresponds to one part of liquid in one million parts of liquid.
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. (MRDLG means Maximum Residual Disinfectant Level Goal)	Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid.
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 that, if exceeded, triggers treatment or other requirements that a water system must follow.	Nephelometric Turbidity Units (NTU): A measure of water cloudiness.
Picocuries per liter (pCi/L): A measure of radioactivity in water.	Not Applicable (N/A)
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.	Not Detected (ND): The contaminant was not found by the laboratory sample.

Contaminants detected by Elmira Water Board	Violation Yes/No	Date of Sample	Level Detected	Units of Measure	MCLG	Regulatory Limit (MCL)	Likely Source of Contamination	
Barium	no	4/21/2021	0.08	ppm	2	2	Erosion of natural deposits	
Nickel	no	4/21/2021	1	ppb	N/A	N/A	Naturally occurring	
Fluoride	no	In 2021: daily	High 0.8 Low 0.51 Average 0.67	ppm	n/a	2.2	Water additive which promotes strong teeth	
Gross beta activity	no	5/20/2019	1.6	pCi/L	n/a	NY State considers 50 pCi/L to be the level of concern	Decay of natural radioactive deposits	
Nitrates	no	4/21/2021	1.0	ppm	10	10	Runoff from fertilizer use	
*Sodium	no	4/21/2021	30	ppm	n/a	no MCL	Naturally occurring; use of road salt	
*Sodium: Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately restricted sodium diets. Sodium can make high blood pressure worse.								
Total Organic Carbon (TOC) Source	no	In 2021: monthly	High 5.0 Low 1.7 Average 3.3	ppm	n/a	n/a	Naturally occurring organic materials from decaying leaves & plants	
Total Organic Carbon (TOC) Treated	no	In 2021: monthly	High 4.0 Low 1.3 Average 2.7	ppm	TT	TT	Source same as above, treated samples measure the effectiveness of the water treatment process	
*Turbidity after purification plant	no	In 2021: every 4 hours	100% of 2,190 results < 0.3	ntu	n/a	TT=0.3	Soil runoff	
*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.								
Detected contaminants in Village of Wellsburg testing								
Total Trihalomethanes (TTHM)	no	In 2021: 2/23 5/21, 8/12, 11/19	Quarterly Samples Range 37 - 83	Highest *LRAA 58	ug/L	n/a	*LRAA Quarterly Average 80	By-product of drinking water chlorination needed to kill harmful organisms; formed when source water contains organic matter
Haloacetic Acids (HAA)	no	In 2021: 2/23, 5/21, 8/12, 11/19	Quarterly Samples Range 2-12	Highest *LRAA 7	ug/L	n/a	*LRAA Quarterly Average 60	

*LRAA (Locational Running Annual Average): average of last 4 quarters								
Chlorine	no	In 2021: monthly	High 0.45 Low 0.30	Average 0.40	mg/L	MRDLG 4.0	MRDL 4.0	Level of disinfectant necessary for control of microbial contaminants
Copper at customer taps 10 samples	no	8/13/2019	*90th % 0.3	High 0.3 Low .03	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems
Lead at customer taps 10 samples	no	8/13/2019	*90th % 1.6	High 2 Low ND	ug/L	0	AL=15	

*90th Percentile: Out of 10 samples from homes in the Village of Wellsburg, 90% were less than or equal to the value shown. No samples exceeded the action level (AL) for lead or copper.

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 at levels below those the State allows.

Source Water Assessment:

The NYS DOH has completed a source water assessment for the Elmira Water Board, based on available information. Possible and actual threats to multiple drinking water sources were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily those contaminants can move about. 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. Contaminants that have been detected are report below. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The assessment found an elevated susceptibility to contamination for the surface water sources, the Chemung River and Hoffman Reservoir. The amount of agricultural lands in the assessment area results in elevated potential for protozoa and pesticides contamination. While there are some facilities present, permitted discharges do not likely represent an important threat to source water quality based on their density in the assessment area. However, it appears that the total amount of wastewater discharged to surface water in this assessment area is high enough to further raise the potential for contamination (particularly for protozoa). There are no noteworthy contamination threats associated with other discrete contaminant sources. Finally, it should be noted that relatively high flow velocities make river and reservoir drinking water supplies highly sensitive to existing and new sources of microbial contamination. The assessment of the five active wells found them to have a medium-high to high susceptibility to microbials, nitrates, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of industrial/commercial facilities that discharge wastewater into the environment and low intensity residential activities in the assessment area. Please note that water from all the sources is blended and treated at the filtration plant to provide disinfection and to remove contaminants. There are also wellhead protection rules in place for the wells, and watershed protection rules for the Hoffman Reservoir. These rules give legal authority to forbid activities and discharges that could cause gross contamination in these sources. A copy of this assessment, including a map of the assessment area, can be obtained by contacting the Chemung County Health Department.