

ANNUAL WATER QUALITY REPORT

Reporting Year 2023



Presented By
**Town of New Windsor
Consolidated Water**

(Including Firthcliffe Heights Water District)

Stephen A. Bedetti, Supervisor

PWS ID#: NY3503580





Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with 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 protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Unregulated Contaminant Monitoring

In 2023 we were required to collect and analyze drinking water samples for unregulated contaminants. In addition to perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), neither of which were detected, the lab ran analyses for the entire U.S. EPA Method 533, which includes 25 additional perfluorinated chemicals, on September 20, 2023. One of these additional chemicals, perfluoropentanoic acid (PFPeA), was detected at 0.541 part per trillion (ppt). In addition, 17 samples were tested for 1,4-dioxane, EPA Method 522; all were below the detection limit. These chemicals are unregulated and do not have a maximum contaminant level (MCL). You may obtain the monitoring results by calling John P. Egitto, operations engineer, at (845) 561-2550.

Important Health Information

Some people may be more vulnerable to disease-causing microorganisms or pathogens in drinking water than the general population. Immunocompromised 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. U.S. EPA/Centers for Disease Control and Prevention (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 at (800) 426-4791.

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. We are responsible for providing high-quality drinking water, but we 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 two 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 (800) 426-4791 or www.epa.gov/safewater/lead.



Where Does My Water Come From?

In 2023 the Town of New Windsor residents received water from a variety of pristine sources. The Ashokan Reservoir feeds the Catskill Aqueduct, which delivers water to the New York City water supply system. As the aqueduct passes through the town, a tap on the large pipeline delivers water to the Riley Road filtration plant. In 2023 the town also utilized the Kroll Well. The water from this well is chlorinated at the well site and blended with water in the system to supply the town.

The Butterhill treatment plant is supplied by three large production wells located on a protected site in the eastern portion of the Town of New Windsor. Each well can be operated independently or in conjunction with the others to meet the total water demands of the town. The Town of New Windsor also has the capability to obtain water from the City and Town of Newburgh in an emergency or drought condition. To learn more about our watershed online, visit nyc.gov/site/dep/environment/about-the-watershed.page.



QUESTIONS?

For more information about this report, or for questions relating to your drinking water, please call John P. Egitto, operations engineer, at (845) 561-2550, or the Orange County Health Department at (845) 291-2331. You may also contact the New York Department of Health (DOH) at (800) 458-1158. The U.S. Environmental Protection Agency (U.S. EPA) drinking water web page (epa.gov/ground-water-and-drinking-water) can provide you with additional information regarding your drinking water.

Substances That Could Be in Water

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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, the state and the U.S. EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. New York DOH and U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



Source Water Assessment

DOH evaluated our surface water system's susceptibility to contamination under the Source Water Assessment Program (SWAP), and its findings are summarized below. These assessments were created using available information and estimate only the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur in our water system. We provide treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

The assessment area for this drinking water source contains some medium-rated threats to water quality. First, the watershed contains a large amount of high-density residential land cover, which results in a medium susceptibility for protozoa. Also, there are a number of potential contaminant sources listed in the SWAP database. Of these sources, the most significant threats to drinking water quality are related to a main roadway and its associated businesses. A copy of the assessment, including a map of the assessment area, can be obtained by contacting John P. Egitto, Operations Engineer, at (845) 561-2550.

Facts and Figures

Our water system serves approximately 25,677 customers through approximately 5,604 service connections. The total amount of water produced in 2023 was approximately one billion gallons. The daily average of water treated and pumped into the distribution system was three million gallons. The 2023 billing rate was \$9.16 per thousand gallons. The minimum quarterly bill was \$54.96.

Contaminants below the Detection Limit

Following is a list of contaminants that we tested for but did not detect in our water supply.

Inorganics:

Antimony, arsenic, beryllium, cadmium, chromium, cyanide, fluoride, mercury, selenium, thallium

Volatile organics:

Alachlor, aldicarb, aldicarb sulfone, aldicarb sulfoxide, aldrin, atrazine, benzene, benzo(a)pyrene, bis(2-ethylhexyl) adipate, bis(2-ethylhexyl)phthalate, bromobenzene, bromochloromethane, bromomethane, butachlor, n-butylbenzene, sec-butylbenzene, tert-butylbenzene, carbon tetrachloride, chlorobenzene, chloromethane, carbaryl, carbofuran, chloroethane, 2-chlorotoluene, 4-chlorotoluene, Dalapon, dibromomethane, 1,2-dibromo-3-chloropropane (DBCP), 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, dichlorodifluoromethane, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,2-dichloropropane, 1,3-dichloropropane, 2,2-dichloropropane, 1,1-dichloropropene, cis-1,3-dichloropropene, trans-1,3-dichloropropene, ethylbenzene, gamma-BHC (Lindane), heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorocyclopentadiene, hexachlorobutadiene, 3-hydroxycarbofuran, isopropylbenzene, 4-isopropyltoluene, methoxychlor, methomyl, metalochlor, methyl tert-butyl ether (MTBE), metribuzin, oxamyl, total PCB, PFOS, PFOA, propachlor, n-propylbenzene, simazine, styrene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, tetrachloroethene, toluene, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethane, trichlorofluoromethane, 1,2,3-trichloropropane, 1,2,3-trichlorobenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m-xylene, o-xylene, p-xylene, vinyl chloride

Organic chemicals:

Group 1: chlordane, endrin, 2,4,5-TP (Silvex), pentachlorophenol

Group 2: dieldrin, dicamba, dinoseb, picloram, toxaphene

Synthetic organic chemicals:

Aroclor 1016, 1221, 1232, 1242, 1248, 1254, and 1260; 1,2-dibromoethane (EDB)

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.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. The time and place of regularly scheduled town board meetings may be obtained from the town clerk, Patricia Clarino, at New Windsor Town Hall at (845) 563-4611 or newwindsor-ny.gov.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES																
	Town of New Windsor					Riley Road			Butterhill Wells			Kroll Well				
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
2,4-Dichlorophenoxyacetic [2,4-D] (ppb)	50	NA	NA	NA	NA	02/06/2023	0.104	NA	NA	NA	NA	NA	NA	NA	No	Pesticide used in agriculture and along roadsides, railways, and utility rights-of-way
Barium (ppm)	2	2	NA	NA	NA	01/26/2023	0.0074	NA	01/31/2023	0.0332	NA	01/31/2023	0.0193	NA	No	Discharge of drilling wastes
Chloride (ppm)	250	NA	NA	NA	NA	NA	NA	NA	01/08/2019	70.1	NA	NA	NA	NA	No	Road salt contamination
Dichloromethane (ppb)	5	0	NA	NA	NA	NA	NA	NA	2022	NA	ND-1.33	NA	NA	NA	No	Discharge from pharmaceutical and chemical factories
Haloacetic Acids [mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid]-Stage 2 (ppb)	60	NA	NA	17.43	1.0-77.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Nitrate (ppm)	10	10	NA	NA	NA	01/31/2023	0.166	NA	2022	0.136	ND-0.136	02/01/2023	4.62	NA	No	Erosion of natural deposits
Sodium (ppm)	NS ¹	NA	NA	NA	NA	01/31/2023	13.7	NA	01/31/2023	58.2	NA	02/01/2023	59.5	NA	No	Naturally occurring; Road salt
Sulfate (ppm)	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11/12/2019	19.7	NA	No	Naturally occurring
Total Organic Carbon [TOC] (ppm)	TT ²	NA	NA	NA	NA	2023	1.52	ND-1.52	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Total Trihalomethanes [TTHMs; chloroform, bromodichloromethane, dibromochloromethane, and bromoform]-Stage 2 (ppb)	80 ³	NA	NA	30.16	ND-86.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water chlorination needed to kill harmful organisms
Turbidity ⁴ (NTU)	TT	NA	NA	NA	NA	11/15/2023	0.40	NA	NA	NA	NA	NA	NA	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	TT	TT = 95% of samples meet the limit	NA	NA	NA	11/15/2023	99	NA	NA	NA	NA	NA	NA	NA	No	Soil runoff
Tap water samples were collected for lead and copper analyses from sample sites throughout the community																
SUBSTANCE (UNIT OF MEASURE)	AL	MCLG	DATE SAMPLED	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE								
Copper (ppm)	1.3	1.3	2023	0.178	0.0346-0.334	0/68	No	Corrosion of household plumbing systems								
Lead (ppb)	15	0	2023	0.001	ND-0.003	0/68	No	Corrosion of household plumbing systems								

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	Town of New Windsor			Riley Road			Butterhill Wells			Kroll Well			TYPICAL SOURCE
	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	
Nickel (ppb)	NA	NA	NA	NA	NA	NA	01/31/2023	0.6	NA	02/01/2023	1.1	NA	Naturally occurring

¹ Water containing more than 20 ppm of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 ppm of sodium should not be used for drinking by people on moderately restricted sodium diets.

² The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed and percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

³ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

⁴ Turbidity is a measure of the cloudiness of the water. It is tested because it is a good indicator of the effectiveness of the filtration system. Our highest single turbidity measurement for the year appears in the table. State regulations require that turbidity must always be below 1 NTU and 95% of the turbidity samples collected must have measurements below 0.3 NTU. (Note that TT is dependent upon filtration method: conventional, 0.3 NTU; slow sand, 1.0 NTU; or diatomaceous earth filtration, 1.0 NTU.) Although we had the fewest measurements meeting the treatment technique for turbidity in the month indicated, the levels recorded were within the acceptable range and did not constitute a treatment technique violation.

How Is My Water Treated and Purified?

The Catskill Aqueduct water treatment process consists of a series of steps. First, raw water is drawn from the Ashokan Reservoir via the Catskill Aqueduct. The raw water enters the filtration plant located at Riley Road, where chemicals are added for coagulation and pH adjustment. The addition of these substances causes small particles (called floc) to adhere to one another, making them large enough to be captured in sand filters. At this point, the water is filtered through layers of fine coal and silicate sand. Chlorine is then added as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the smallest quantity necessary to protect the safety of your water without compromising taste.) Finally, caustic soda (to adjust the final pH and alkalinity) is added before the water is pumped to sanitized aboveground storage towers or surface reservoirs and your home or business.

The water from the Kroll Well is disinfected with chlorine at the well site before passing through a granular activated carbon (GAC) system. It is blended with water in the system coming from the Riley Road filtration plant.

At the Butterhill treatment plant, groundwater from one of the three production wells is chlorinated with sodium hypochlorite to oxidize iron, manganese, and any organics that may be present. The pretreated water is then filtered through treatment vessels to remove any of the oxidized material, particularly iron and manganese. The water then goes through the GAC system to remove per- and polyfluoroalkyl substances (PFAS) and other adsorptive contaminants. Final disinfectant is added, if necessary, at this point. In addition, a corrosion inhibitor/sequestering agent is added to the water prior to distribution. This reduces the potential for lead and copper leaching as well as sequestering the hardness in the water to reduce the potential for scaling in water mains and customers' plumbing.



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of 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 lead and copper values detected at your water system.

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

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as possible.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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 contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. For tips, visit epa.gov/watersense/start-saving.