

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By



**Town of New Windsor
Consolidated Water**

(Including Firthcliffe Heights Water District)

George J. Meyers, Supervisor



Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Source Water Assessment

The New York State (NYS) Department of Health (DOH) has evaluated our surface water system's susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the next paragraph. These assessments were created using available information. They 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 that 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 NYS 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.

Where Does My Water Come From?

During the calendar year 2020, the Town of New Windsor residents have 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. Also, in 2020 the Town utilized the Kroll Well. The water from this well is chlorinated at the well site, and then blends with water in the system and helps supply water to the Town when needed. The water source to the Butterhill Treatment Plant is supplied by three large production wells, located on a protected site on

the eastern portion of the Town of New Windsor. Each well can be operated independently or in conjunction with each other 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 the Town of Newburgh in an emergency or drought condition. To learn more about our watershed on the Internet, go to the New York City Dept. of Environmental Protection Web site at www.nyc.gov/html/dep/html/drinking_water/index.shtml.

For more information on water from the Catskill Aqueduct, you can view the water quality report here: nyc.gov/waterqualityreport.

“ We remain vigilant in delivering the best-quality drinking water ”

Facts and Figures

Our water system serves approximately 27,805 customers through approximately 5,526 service connections. The total amount of water produced in 2020 was approximately 1 billion gallons. The daily average of water treated and pumped into the distribution system was 3 million gallons per day. The 2020 billing rate was \$8.69 per 1000 gallons. The minimum quarterly bill was \$39.00.

Water Conservation

You can play a role in conserving water and saving yourself money in the process 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.



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 State Department of Health at (800) 458-1158. The U.S. EPA drinking water Web site (www.epa.gov/your-drinking-water) can also 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 that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the U.S. FDA's regulations establish limits for contaminants in bottled water that must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

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, Kelly Allegra, at New Windsor Town Hall, (845) 563-4611, or online at newwindsor-ny.gov.

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 those with cancer undergoing chemotherapy, those 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 providers 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 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 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

Nondetected Contaminants

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; 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; 1,4 Dioxane; Ethylbenzene; gamma-BHC (Lindane); Heptachlor; Heptachlor Epoxide; Hexachlorobenzene; Hexachlorocyclopentadiene; Hexachlorobutadiene; Isopropylbenzene; 4-Isopropyltoluene; Methoxychlor; Methomyl; Metalochlor; Methylene Chloride; Metribuzin; Oxamyl; PCB, total; PFOS; PFAS; Propachlor; n-Propylbenzene; Styrene; Simazine; 1,1,1,2-Tetrachloroethane; 1,1,2,2-Tetrachloroethane; Tetrachloroethene; 1,2,4-Trichlorobenzene; 1,1,1-Trichloroethane; 1,1,2-Trichloroethane; Trichloroethane; Trichlorofluoromethane; 1,2,3-Trichloropropane; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene; o-Xylene; m-Xylene; p-Xylene; MTBE; Vinyl Chloride

Organic Chemicals:

Group 1: Chlordane; Endrin, 2,4,5-TP (Silvex); 2,4-D Pentachlorophenol

Group 2: Dieldrin; Dicamba; Dinoseb; Picloram; Toxaphene

SOCs:

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



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only 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 often 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.

Complete PFAS results for 2020 can be found on the Town's Web site: <https://newwindsor-ny.gov/Officials-Departments/Water/New-Water-System>

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES										
SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	Town of New Windsor			Riley Road			VIOLATION	TYPICAL SOURCE
			DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH		
Antimony (ppb)	6	6	NA	NA	NA	4/14/2020	0.4	NA	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	2	2	NA	NA	NA	04/14/2020	0.0078	NA	No	Erosion of natural deposits
Chloride (ppm)	250	NA	NA	NA	NA	NA	NA	NA	No	Road salt contamination
Haloacetic Acids [mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid] (ppb)	60	NA	Quarterly 2020	34.6	ND-60.8	NA	NA	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Nitrate (ppm)	10	10	NA	NA	NA	04/14/2020	0.0608	NA	No	Erosion of natural deposits
Sodium¹ (ppm)	*see footnote ¹	NA	NA	NA	NA	04/14/2020	5.69	NA	No	Naturally occurring; Road salt
Sulfate (ppm)	250	NA	NA	NA	NA	NA	NA	NA	No	Naturally occurring
Total Coliform Bacteria² (Positive samples)	TT=2 or more positive samples	0	5/12/2020	1	NA	NA	NA	NA	No	Naturally present in the environment
Total Trihalomethanes [TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform] (ppb)	80	NA	Quarterly 2020	34.4	ND-71.0	NA	NA	NA	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Turbidity (NTU)	TT	NA	NA	NA	NA	03/08/2020	0.13 ³	0.04-0.13	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	TT = 95% of samples meet the limit	NA	NA	NA	NA	03/08/2020	100	NA	No	Soil runoff
Zinc (ppm)	5	NA	NA	NA	NA	NA	NA	NA	No	Naturally occurring

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	MCLG [MRDLG]	Butterhill Wells			Kroll Well			VIOLATION	TYPICAL SOURCE
			DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH		
Antimony (ppb)	6	6	NA	NA	NA	NA	NA	NA	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium (ppm)	2	2	2019	NA	0.0377–0.085	11/12/2019	0.0198	NA	No	Erosion of natural deposits
Chloride (ppm)	250	NA	01/08/2019	70.1	NA	11/12/2019	116	NA	No	Road salt contamination
Haloacetic Acids [mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid] (ppb)	60	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection needed to kill harmful organisms
Nitrate (ppm)	10	10	04/21/2020	0.0585	NA	04/14- 6/22/20	NA	3.34–3.36	No	Erosion of natural deposits
Sodium¹ (ppm)	*see footnote ¹	NA	2020	NA	ND–43.7	04/14/2020	62.7	NA	No	Naturally occurring; Road salt
Sulfate (ppm)	250	NA	01/08/2019	7.33	NA	11/12/2019	19.7	NA	No	Naturally occurring
Total Coliform Bacteria² (Positive samples)	TT=2 or more positive samples	0	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Total Trihalomethanes [TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform] (ppb)	80	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter
Turbidity (NTU)	TT	NA	03/15/2020	0.72 ⁴	0.016–0.72	NA	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	TT = 95% of samples meet the limit	NA	03/15/2020	100	NA	NA	NA	NA	No	Soil runoff
Zinc (ppm)	5	NA	01/08/2019	0.0081	NA	11/12/2019	0.0175	NA	No	Naturally occurring

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
			2nd Half 2020	0.225	ND–0.271	0/60		
Lead (ppb)	15	0	1st Half 2020	1.49	ND–5.68	0/60	No	Corrosion of household plumbing systems
			2nd Half 2020	2.0	ND–5.2	0/60		

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	Butterhill Wells			Kroll Well			TYPICAL SOURCE
	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	
Nickel (ppb)	01/08/2019	08	NA	11/12/2019	1.1	NA	Natural element of the earth's crust so small amounts are found in food, water, soil, and air

OTHER UNREGULATED SUBSTANCES (TOWN OF NEW WINDSOR)

SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
Bromide (ppb)	08/18/2020	3,530	ND–3,530
Bromochloroacetic Acid (ppb)	09/29/2020	2.8	1.1–2.8
Bromodichloroacetic Acid (ppb)	09/29/2020	1.8	ND–1.8
Chlorodibromoacetic Acid (ppb)	09/29/2020	1.3	ND–1.3
Dibromoacetic Acid (ppb)	09/29/2020	1.8	ND–1.8
Dichloroacetic Acid (ppb)	09/29/2020	21.0	1.7–21.0
Manganese (ppb)	02/19/2020	11.5	ND–11.5
Monobromoacetic Acid (ppb)	09/29/2020	0.59	ND–0.59
Total Organic Carbon [TOC] (ppb)	08/18/2020	1,560	ND–1,560
Trichloroacetic Acid (ppb)	09/29/2020	17.0	1.5–17.0

Is Our Water System Meeting Other Rules That Govern Operations?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the second quarter of 2020, we did not monitor for Disinfection By-Products (DBPs), and therefore cannot be sure of the quality of your drinking water during that time. We did monitor in both the 3rd and 4th quarters, and results showed that our water met NYSDOH drinking water standards for DBPs during those subsequent sampling events.

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 that, if exceeded, triggers treatment or other requirements that 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.

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 All repeat samples were collected as required, and the positive sample collected on 5/12/20 was never confirmed.

³ 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 occurred as indicated in the table. 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. (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 the month as indicated in the Date column above 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.

⁴ Although not required, we monitor our Butterhill Wells for turbidity, which is an indicator of the effectiveness of our iron and manganese filters. Our finished water iron and manganese levels have been below the MCL and our distribution turbidities have been less than 5 NTU as required.