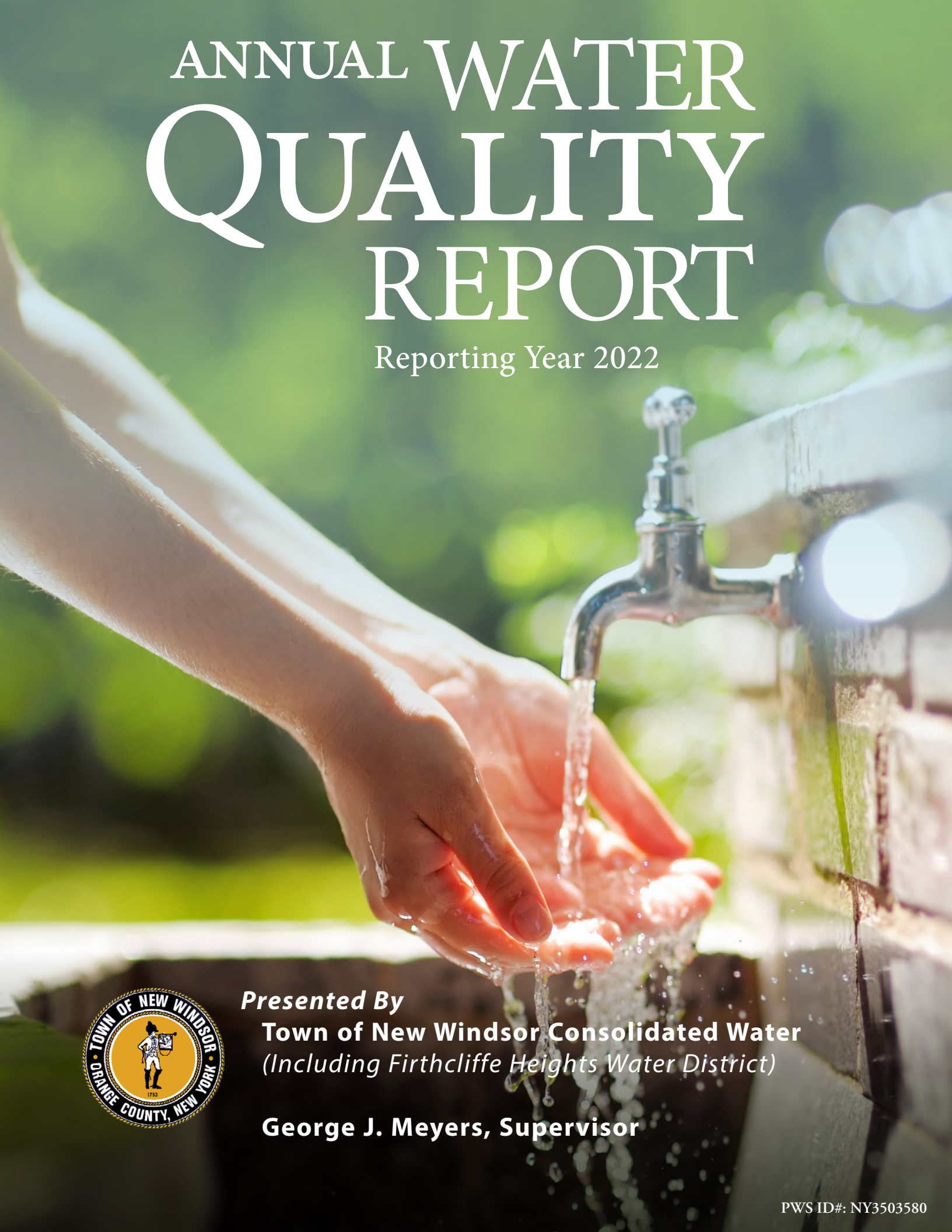
ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By

Town of New Windsor Consolidated Water

(Including Firthcliffe Heights Water District)

George J. Meyers, Supervisor

PWS ID#: NY3503580

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Source Water Assessment

The NYS DOH has 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. 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 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.

> "Thousands have lived without love, not one without water."
>
> —*W.H. Auden*

Where Does My Water Come From?

During 2022 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. The Kroll Well was also used; water from this well is chlorinated at the well site, then blended with water in the system to supply water to the town. The Butterhill Treatment Plant is supplied by three large production wells located on a protected site on the eastern portion of the town. These wells can be operated independently or in conjunction 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 conditions. To learn more about our watershed, visit the New York City Department of Environmental Protection website, www.nyc.gov/html/dep/html/drinking_water/index.shtml.

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/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 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.

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 (NYS) Department of Health (DOH) at (800) 458-1158, or go online to the U.S. EPA drinking water website, www.epa.gov/your-drinking-water, which can provide you with additional information regarding your 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. For more information on water conservation, visit https://www3.epa.gov/region1/eco/drinkwater/water_conservation_residents.html.

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

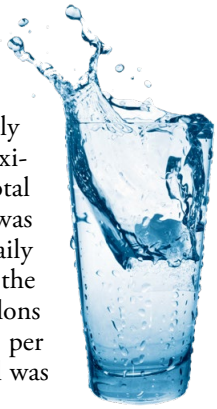
Volatile Organics:
Alachlor; Aldicarb; Aldicarb sulfone; Aldicarb sulfoxide; Aldrin; Atrazine; Benzene; Benzo(a)pyrene; bis(2-Ethylhexyl) adipate: bis(2-Ethylhexyl)phthalate; Bromobenzene; Bromochloromethane; Bromomethane: Butachlor: n-Butylbenzene; sec-Butylbenzene; tert-Butylbenzene; Carbon Tetrachloride; Chlorobenzene; 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-Hydroxycarbofura; Isopropylbenzene; 4-Isopropyltoluene; Methoxychlor; Methomyl; Metalochlor; Methyl tert-butyl ether; Metribuzin; Oxamyl; PCB, total; PFOS; PFOA; Propachlor; n-Propylbenzene; Styrene; Simazine; 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-Trichlorpropane; 1,2,3-Trichlorobenzene; 1,2,4-Trimethylbenzene; 1,3,5-Trimethylbenzene; o-Xylene; m-Xylene; p-Xylene; MTBE; Vinyl Chloride

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

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

Synthetic Organic Chemicals: Aroclor 1016; Aroclor 1221; Aroclor 1232; Aroclor 1242; Aroclor 1248; Aroclor 1254; Aroclor 1260; 1,2-Dibromoetheane (EDB)

Facts and Figures



Our water system serves approximately 25,677 customers through approximately 5,604 service connections. The total amount of water produced in 2022 was approximately 1.1 billion gallons. The daily average of water treated and pumped into the distribution system was three million gallons per day. The 2022 billing rate was $8.96 per 1,000 gallons. The minimum quarterly bill was $53.76.

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 New York Health Department and the U.S. FDA 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.

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 www.newwindsor-ny.gov.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and 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.

Complete PFAS results for 2022 can be found at http://www.newwindsor-ny.gov/Officials-Departments/Water/New-Water-System/butterhill-wells-june-2022-test-results.

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
Barium (ppm)	2	2	NA	NA	NA	01/26/2022	0.0059	NA	2022	NA	0.0366–0.0418	01/26/2022	0.0161	NA	No	Discharge of drilling wastes
Chloride (ppm)	250	NA	NA	NA	NA	NA	NA	NA	01/08/2019	70.1	NA	11/12/2019	116	NA	No	Road salt contamination
Chlorite (ppm)	1	0.8	NA	NA	NA	09/01/2021	0.12	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection at treatment plants using chlorine dioxide
Dichloromethane (ppb)	5	0	NA	NA	NA	01/26/2022	1.72	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	Quarterly 2022	19.13	3.0–43.0	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	04/04/2022	0.202	NA	2022	NA	ND–0.136	04/04/2022	4.71	NA	No	Erosion of natural deposits
Sodium (ppm)	NA[1]	NA	NA	NA	NA	01/26/2022	12.4	NA	2022	NA	ND–51.1	01/26/2022	61.2	NA	No	Naturally occurring; road salt
Sulfate (ppm)	250	NA	NA	NA	NA	NA	NA	NA	01/08/2019	7.33	NA	11/12/2019	19.7	NA	No	Naturally occurring
Total Organic Carbon [TOC] (removal ratio)	TT[2]	NA	NA	NA	NA	2022	1.3	0.9–1.93	NA	NA	NA	NA	NA	NA	No	Naturally present in the environment
Total Trihalomethanes [TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform]–Stage 2 (ppb)	80	NA	Quarterly 2022	31.24	8.0–57.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	By-product of drinking water chlorination needed to kill harmful organisms
Turbidity[3] (NTU)	TT	NA	NA	NA	NA	12/06/2022	0.54[4]	0.03–0.54[4]	10/06/2022	0.405	0.019–0.405	NA	NA	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	TT = 95% of samples meet the limit	NA	NA	NA	NA	2022	99[4]	NA	2022	99	NA	NA	NA	NA	No	Soil runoff
Zinc (ppm)	5	NA	NA	NA	NA	NA	NA	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

			Town of New Windsor				Riley Road				Butterhill Wells				Kroll Well					
SUBSTANCE (UNIT OF MEASURE)	AL	MCLG	DATE SAMPLED	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	DATE SAMPLED	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	DATE SAMPLED	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	DATE SAMPLED	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	1.3	1.3	2022	0.229	ND–0.315	0/65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems
Lead (ppb)	15	0	2022	0.00173	ND–0.00501	0/65	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Corrosion of household plumbing systems

UNREGULATED SUBSTANCES

	Town of New Windsor			Riley Road			Butterhill Wells			Kroll Well			
SUBSTANCE (UNIT OF MEASURE)	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	TYPICAL SOURCE
Bromide (ppb)	08/18/2020	3,530	ND–3,530	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromochloroacetic Acid (ppb)	09/29/2020	2.8	1.1–2.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloroacetic Acid (ppb)	09/29/2020	1.8	ND–1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorodibromoacetic Acid (ppb)	09/29/2020	1.3	ND–1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromoacetic Acid (ppb)	09/29/2020	1.8	ND–1.8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichloroacetic Acid (ppb)	09/29/2020	21.0	1.7–21.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (ppb)	02/19/2020	11.5	ND–11.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Monobromoacetic Acid (ppb)	09/29/2020	0.59	ND–0.59	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (ppb)	NA	NA	NA	NA	NA	NA	2022	NA	0.6–0.7	01/26/2022	1.0	NA	Naturally occurring
Total Organic Carbon [TOC] (ppb)	08/18/2020	1,560	ND–1,560	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroacetic Acid (ppb)	09/29/2020	17.0	1.5–17.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

[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 of percentage of TOC actually removed to 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] 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 is 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 indicated in the Date column 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 iron and manganese levels in finished water have been below the MCL, and our distribution turbidities have been less than 5 NTU, as required.

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.