North Castle Water District No.1
Annual Water Supply Report for 2023
Public Water Supply Id # 5903445

Introduction
To comply with State and Federal regulations, the Town of North Castle Water District No.1 is issuing an annual report describing the quality of your drinking water. The purpose of the 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. 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 of 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 see the contact information provided at the end of this report. Additional information is also provided on the Town web site here: https://www.northcastleny.com/water-sewer

Where does my water come from?
The source of drinking water for North Castle Water District No.1 comes from a well on South Kensico Avenue in Valhalla, which is softened and disinfected, and delivers Fifty percent (50%) of your drinking water. The remaining portion is purchased from The New York City Water Board. The water purchased is pre-treated for ph and corrosion control and disinfected by Westchester County Water District No. 1 after being drawn from the Kensico Reservoir, which is an unfiltered surface water source. NCWD#1 further treats the water with ultraviolet light disinfection. Kensico delivers high quality water. Water District No. 1 serves approximately 2500 people through 653 service connections.

The NYS DOH has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source 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 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. See section "Are there contaminants in our drinking water?" for a list of the contaminants that have been detected, if any. The source water assessments provide resource managers with additional information for protecting source waters into the future.

As mentioned before, our water is derived from 1 drilled well and is also purchased from Westchester County Water District #1 (WCWD #1). The source water assessment for the ground water source has rated this well as having a very high susceptibility to microbial contamination and nitrates, and a high susceptibility to pesticides, industrial solvents, and other industrial contaminants. These ratings are due primarily to the close proximity of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the well, two chemical bulk storage facilities within the assessment area of the well and low intensity residential activities in the assessment area, such as fertilizing lawns. In addition, the well draws greater than 100 gallons per minute from an unconfined aquifer. While the source water assessment rates our well as being susceptible to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The NYS DOH has evaluated the susceptibility of water supplies statewide to potential contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraphs below. It is important to stress that these assessments were created using available information and only estimate the potential for source water contamination. Elevated susceptibility ratings do not mean that source water contamination has or will occur for this PWS. This PWS provides treatment and regular monitoring to ensure the water delivered to consumers meets all applicable standards.

This PWS obtains water from the New York City water supply system. Water either come from the Catskill/Delaware watersheds east of the Hudson River and/or from the Croton watershed in Putnam and Westchester counties. The New York City Department of Environmental Protection (DEP) implements a series of programs to evaluate and protect source water quality within these watersheds. Their efforts focus on three important program areas:

The enforcement of strengthened Watershed Rules and Regulations; the acquisition and protection of watershed lands; and implementation partnership programs that target specific sources of pollution in the watersheds. Due to these intensive efforts, the SWAP methodologies applied to the rest of the state were not applied for this PWS. Additional information on the water quality and protection efforts in these New York City watersheds can be found at DEP's web site http://www.nyc.gov/html/dep/html/watershed_protection/index.shtml

Specifically, this PWS obtains its water from the Catskill/Delaware watersheds east of the Hudson. The reservoirs in this mountainous rural area are relatively deep with little development along their shorelines. The main water quality concerns associated with land cover is agriculture, which can contribute microbial contaminants, pesticides, and algae producing nutrients. There are also some potential contamination concerns associated with residential lands and associated wastewater discharges. However, advanced treatments which reduce contaminants are in place for most of these discharges. There are also a number of other discrete facilities, such as landfills, chemical bulkstorages, etc. that have the potential to impact local water quality, but large significant water quality problems associated with these facilities are unlikely due to the size of the watershed and surveillance and management practices.

EDUCATIONAL INFORMATION

The safe drinking water act requires that the following information be included in this notice.

Are there contaminants in my drinking water?

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. 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Water Quality Data Table

North Castle Water District No.1 is required by the State Sanitary Code, Subpart 5-1, to monitor raw water and treated water quality by collecting and analyzing samples for various contaminants. Raw water samples are collected annually for organic and inorganic contaminants. Treated water is also sampled annually for inorganic contaminants.

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently

Table of Detected Contaminants							
Contaminant	**Violation Yes\No**	**Date of Sample**	**Level Detected (Max. Range)**	**Unit Measure.**	**MCLG**	**Regulatory Limit (MCL, TT, or AL)**	**Likely Source of Contamination**
Disinfection Byproducts Stage 2 ISDE							
Total Trihalomethanes [3] (TTHMs chloroform bromodichloromethane dibromodichloromethane & bromoform)	No	**Qtrly** 2023	35.96[4] (30.94 – 42)	µg/l	N/a	MCL=80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter.
Haloacetic Acids [3] (mono-,di-,& trichloroacetic acid,& mono-&di-bromoacetic acid)	No	**Qtrly** 2023	45.53 [4] (32.05 – 55.78)	µg/l	N/a	MCL = 60	By-product of drinking water chlorination needed to kill harmful organisms
Radiological Contaminants							
Gross alpha activity	No	7/14/2016	0.41	pCi/L	0	MCL=15	Erosion of natural deposits
Combined radium -226 and 228	No	7/14/2016	1.7	pCi/L	0	MCL=5	Erosion of natural deposit
Gross Beta Activity	No	7/14/2016	4.21	pCi/L	0	MCL=50*	Decay of Natural deposits
Uranium	No	7/14/2016	1.1	µg/l	0	MCL=30	Erosion of natural deposits
Organic Contaminants							

Inorganic Contaminants							
Barium	No	7/10/2023[(B)]	0.0154	Mg/l	2	MCL=2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits
Chloride	No	7/10/2023[(B)]	13.8	Mg/l	N/a	MCL=250	Naturally occurring or indicative of road salt contamination.

Iron	No	7/10/2023	51.8	µg/l	N/a	MCL=300	Naturally occurring
Sodium	No	7/10/2023(B)	11.5	Mg/l	N/a	Water containing more than 20mg/l should not be used by people with severely restricted sodium diets. Water containing more than 270mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.	Naturally occurring; Road Salt; Water softeners; Animal waste
Sulfate	No	7/10/2023(B)	3.78	Mg/l	N/a	MCL=250	Naturally occurring
Turbidity	No	1/23 – 12/23	0.02 – 1.5	NTU	N/a	MCL=5	Soil Runoff
Manganese	No	7/10/2023(B)	15.1	µg/l	N/a	MCL=300U g/l	Naturally occurring
Nickel	No	7/10/2023(B)	3.4	µg/l	N/a	N/a	Discharge from metal refining and chemical production
Nitrate	No	7/10/2023(B)	0.161	Mg/l	10	MCL=10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Zinc	No	7/10/2023(B)	0.0141	Mg/l	N/a	MCL=5	Naturally occurring; mining waste
LEAD & COPPER							
Copper 10 samples -0 above AL	No	6-21--9-21	0.158[1] (.0044-.0.233)	Mg/l	1.3	AL=1.3	Corrosion of Galvanized pipes; erosion of natural deposits
Lead 10 samples -0 above AL	No	6-21--9-21	1.5 [2] (<MRL-2.3)	µg/l	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits

KEY: **ppb**: = parts per billion, or micrograms per liter (µg/l) **NA**: =Not applicable **ND**: =Not detected **NR**:= Not reported **MNR**:= Monitoring not required, but recommended. **ppm**: =parts per million, or milligrams per liter (mg/l) **# of monthly positive samples**: = Number of samples taken monthly that were found to be positive **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. **MRL**; =Method Reporting level-Lowest level of a particular contaminant that the lab can report for a specific analysis.**MCL**: = Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. **pCi/L;=**picocuries per liter-A measure of the radioactivity in water**AL**: =Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.**NTU="*Nephelometric Turbidity Unit (NTU)***: A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person **MRDL** =Maximum Residual Disinfectant Level: The highest level of a disinfectant in drinking water. There is convincing evidence that the addition of a disinfectant is necessary foe 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 contamination.

."1-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.2-The level presented represents the 90th percentile of the 10 sites tested. The action level for lead was not exceeded in the 10 sites tested. 3- Distribution system sample 4. Two required Sample sites analyzed (A)= **Valhalla Well Supply** (B)= **North Broadway / Kensico Supply*** The State considers 50 pCi/L a level of concern for beta particles

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 below the level allowed by the State. 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 & copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. Although the samples illustrated are only a few of the many constituents we have sampled for, some of which have had detects. The EPA has determined that your drinking water is safe at these levels.

INFORMATION ON CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water and groundwater under the influence of surface water. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. During 2020, as part of a sampling program New

York City Department of Environmental Protection (N.Y.C.D.E.P.) routinely collected samples and analyzed for Cryptosporidium cysts. Some samples had detects, however, current test methods used do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, a gastrointestinal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

INFORMATION ON GIARDIA

Giardia is a microbial pathogen present in varying concentrations in many surface waters and groundwater under the influence of surface water. Giardia is removed/inactivated through a combination of filtration and disinfection or by disinfection. During 2020, as part of a sampling program New York City Department of Environmental Protection (N.Y.C.D.E.P.) routinely collected samples and analyzed for Giardia cysts. Some samples had detects, however, current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Giardia may cause giardiasis, an intestinal illness. People exposed to Giardia may experience mild or severe diarrhea, or in some instances no symptoms at all. Fever is rarely present. Occasionally, some individuals will have chronic diarrhea over several weeks or a month, with significant weight loss. Giardiasis can be treated with anti-parasitic medication. Individuals with weakened immune systems should consult with their health care providers about what steps would best reduce their risks of becoming infected with Giardiasis. Individuals who think that they may have been exposed to Giardiasis should contact their health care providers immediately. The Giardia parasite is passed in the feces of an infected person or animal and may contaminate water or food. Person to person transmission may also occur in day care centers or other settings where hand washing practices are poor.

Further information regarding NYCDEP Cryptosporidium or Giardia is available at -http://www.nyc.gov/html/dep/html/pathogencat.html

Lead

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. *North Castle* WD1 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*. "Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure." Sampling for lead was last performed during 2021. Due to previous sample results being below the action level, we are on a reduced monitoring program set by the state (every three years). We will sample again for lead during 2024.

Is our water system meeting other rules that govern operations?

During 2023, our system was in compliance with applicable State drinking water operating requirements.

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).

Fluoridation The water supplied in Water District No.1 is not Fluoridated!

IMPORTANT WATER CONSERVATION NOTICE

The need to conserve water during times of drought is obvious to all. It is just as important to use water wisely when the supply is plentiful. However, with the ever-increasing installation of automatic irrigation systems, it is mandatory that we

begin a water conservation program relative to irrigation. Most systems have automatic programmable timers, in addition to which we will require that rain sensors be installed, so as to avoid needless watering. The following irrigation practices will be enforced for all irrigation. Homes with even numbered addresses will water even numbered days, and homes with odd numbered addresses will water on odd numbered days. These restrictions shall apply all year, even during non-drought periods. Your cooperation in this matter will be appreciated!

You can play a role in conserving water by being conscious of the amount of water your household is using, and by looking for ways to use less whenever possible. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Closely monitor your automatic irrigation system, for leaks and overwatering
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

For more information contact:

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