Annual Drinking Water Quality Report for 2022
Village of Croton-on-Hudson Water System
1 Van Wyck Street
Croton-on-Hudson, NY 10520
(Public Water Supply ID# 5903425)

INTRODUCTION

To comply with State regulations, the Village of Croton-on-Hudson Water System, 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. 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 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 John Spatta, Water Foreman, at (914)-271-3775 or Westchester County Department of Health at (914) 864-7332. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Village Board meetings. The meetings are held on the second and fourth Mondays of each month beginning at 7:00pm at the Stanley H. Kellerhouse Municipal Building, One Van Wyck Street, Croton-on-Hudson, NY 10520.

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, 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. 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.

The Village of Croton-on-Hudson's main water source is a well system located in the Croton River Valley downstream from the New Croton Dam. Treated water is pumped directly from the well field into the distribution system, which consists of a network of water mains, four storage tanks (reservoirs), control valves, booster pump stations, hydrants, and other water-related infrastructure. The Village's total distribution system storage capacity is 2.3 million gallons. Most residents receive water from the municipal water system; the remainder use private wells, which are not covered by this report. During 2022, our system did not experience any restriction of our water source.

SOURCE WATER ASSESSMENT

The New York State Department of Health (NYS DOH) has completed a source water assessment for this system. based on available information, potential 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 the section testing results for a list of the contaminants that have been detected. the source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our three wells as having a medium-to-high susceptibility to microbials. this rating is due primarily to the fact that these are high-yield wells drawing from an unconfined aquifer, and the hydraulic conductivity is unknown. In addition, the wells draw from fractured bedrock and the overlying soils are not known to provide adequate protection from potential contamination. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered to your home meets New York State's drinking water standards for microbial contamination. A copy of the source water assessment can be obtained for a fee by contacting the Village Engineering Department at (914) 271-4783.

FACTS AND FIGURES

Our water system serves approximately 8,210 people, primarily in residences but also in businesses and industries, through approximately 2,500 service connections. The total amount of water withdrawn from the aquifer in 2022 was approximately 311 million gallons. The daily average of water treated and pumped into the distribution system was 850,920 gallons per day. Our highest single day was 1,405,944 gallons. Approximately 93% of the total water produced was billed directly to consumers. The balance, or unaccounted-for water, was used for firefighting, hydrant use, distribution systems leaks, and unauthorized use. The 2022 billing charge has five tiers. Tier 1, which is base service with zero usage or no reads, is a base rate of $20.00 per billing cycle (quarterly billing). Tier 2 is one gallon to 187,747 gallons per quarter at $13.41 per 1000 gallons. Tier 3 is 187,748 gallons to 935,747 gallons per quarter at $14.75 per 1,000 gallons. Tier 4 is 935,748 gallons to 1,870,747 gallons per quarter at $15.16 per 1,000 gallons. Tier 5 is greater than 1,870,748 gallons per quarter at $16.26 per 1,000 gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

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 and copper, volatile organic compounds, total trihalomethanes, halo acetic acids, radiological and synthetic organic compounds, and disinfection byproducts. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of our data, though representative of the water quality, are more than one year old.

We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791) and https://www.epa.gov/sdwa or the Westchester County Health Department at (914) 813-5000 and http://health.westchestergov.com.

TEST RESULTS

Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT, AL, MRDL)	Likely Source of Contamination
Inorganic							
Alkalinity	NA	Biweekly	120 (96-120)	mg/L	NA	NA	Naturally occurring
Hardness	NA	Biweekly	146 (80-146)	mg/L	NA	NA	Naturally occurring
Barium	No	7/5/2022	35 (35)	ug/l	2000	MCL=2000	Discharge of drilling wastes; Discharge from metal refineries. Erosion of natural deposits
Chloride	No	7/5/2022	80 (80)	mg/L	NA	MCL=250	Naturally occurring or road salt contamination
Chromium	No	7/5/2022	2 (2)	ug/l	100	MCL=100	Discharge from steel and pulp mills; Erosion of natural deposits
Nickel	NA	7/5/2022	1.8 (1.8)	ug/L	NA	NA	Naturally occurring
Nitrate	No	06/8/2022	0.33 (0.33)	mg/L	10	MCL=10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
pH	No	Biweekly	7.24-7.79	Units	NA	6.5-8.5	Naturally occurring
Sodium[1]	No	Biweekly	49.4 (27.2-49.4)	mg/L	NA	NA	Naturally occurring; Road Salt; Water softeners; Animal Waste
Sulfate	NA	7/5/2022	9.8 (9.8)	mg/L	NA	MCL=250	Naturally occurring
Lead and Copper							
Copper [2]	No	June to Sept 2022	0.51[2] (0.08-0.57)	mg/L	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead [2, 7]	No	June to Sept 2022	1.7[2, 7] (<1.0-1.7)	ug/L	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits

Synthetic Organic Contaminants							
WELL 1 Perfluorooctanoic Acid (PFOA)	No	Jan-Dec 2022 (quarterly)	2.57 (ND-2.57)	ng/L	NA	MCL = 10 ng/L	Released into the environment from widespread use in commercial and industrial applications
WELL 1 Perfluorooctanesulfonic Acid (PFOS)	No	Jan-Dec 2022 (quarterly)	5.63 (ND-5.63)	ng/L	NA	MCL = 10 ng/L	Released into the environment from widespread use in commercial and industrial applications
WELL 1 Perfluorobutanesulfonic Acid (PFBS)	No	Jan-Dec 2022 (quarterly)	3.41 (ND-3.41)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
WELL 1 Perfluorohexanesulfonic Acid (PFHxS)	No	Jan-Dec 2022 (quarterly)	1.88 (ND-1.88)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
WELL 3 Perfluorooctanoic Acid (PFOA)	No	Jan-Dec 2022 (quarterly)	3.14 (ND-3.14)	ng/L	NA	MCL = 10 ng/L	Released into the environment from widespread use in commercial and industrial applications
WELL 3 Perfluorooctanesulfonic Acid (PFOS)	No	Jan-Dec 2022 (quarterly)	5.84 (1.43-5.84)	ng/L	NA	MCL = 10 ng/L	Released into the environment from widespread use in commercial and industrial applications
WELL 3 Perfluorobutanesulfonic Acid (PFBS)	No	Jan-Dec 2022 (quarterly)	10.1 (ND-10.1)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
WELL 3 Perfluorohexanesulfonic Acid (PFHxS)	No	Jan-Dec 2022 (quarterly)	2.08 (ND-2.08)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
WELL 4 Perfluorooctanesulfonic Acid (PFOS)	No	Jan-Dec 2022 (quarterly)	4.79 (3.61-4.79)	ng/L	NA	MCL = 10 ng/L	Released into the environment from widespread use in commercial and industrial applications
WELL 4 Perfluorobutanesulfonic Acid (PFBS)	No	Jan-Dec 2022 (quarterly)	2.60 (1.82-2.60)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
WELL 4 Perfluorohexanesulfonic Acid (PFHxS)	No	Jan-Dec 2022 (quarterly)	2.08 (1.61-1.82)	ng/L	NA	NA	Released into the environment from widespread use in commercial and industrial applications
Disinfection Byproducts							
Haloacetic Acids (HAA5)[3]	No	8/3/2022	12.6 (3.0-12.6)	ug/L	NA	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes[4]	No	8/3/2022	36.90 (4.82-36.90)	ug/L	NA	MCL = 80	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains organic matter
Microbiological Contaminants							
Total Coliform Bacteria	No	4/18/2023	Present (1 sample positive)	NA	0	TT = 2 or more positive samples	Naturally present in the environment
Other Regulated Substances							
Fluoridone	No	6/6/2022-11/1/2022	0.84 (ND-0.84)	ug/L	NA	MCL=50	An aquatic herbicide used to control invasive plants
Orthophosphate[5]	No	Daily	1.64[5] (1.11-1.64)	mg/L	NA	NA	Additive to prevent corrosion
Chlorine Residual, Free (Entry Point)[6]	No	Daily	1.81 (0.86-1.81)	mg/L	NA	TT=0.75 minimum MRDL= 4 maximum	Water additive used to control microbes
Chlorine Residual, Free (Distribution System)[6]	No	Daily	1.54 (0.23-1.54)	mg/L	NA	TT = 0.1 minimum MRDL= 4 maximum	Water additive used to control microbes

Table Footnotes:

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 diets.

2 – The level presented represents the 90th percentile of the 20 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 values detected at your water system. In this case, 20 samples were collected at your water system from June to September 2022 and the 90th percentile values were <1.0 ppb for lead and 0.51 mg/L for copper, which were below the action levels. None of the twenty samples exceeded the action level for lead.

3 – The haloacetic acids (HAA5) include the following: monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid. The haloacetic acids detected were: dichloroacetic acid and trichloroacetic acid. Bromochloroacetic acid was also detected.

4 – The trihalomethanes (THMs) include the following: chloroform, bromodichloromethane, dibromochloromethane, and bromoform. The following THMs were detected: bromodichloromethane, chloroform, and dibromochloromethane.

5 – In an EPA report, an orthophosphate range of 1.0 - 3.0 mg/L (as PO4) is noted as a typical range for controlling lead and copper at the tap.

6 – As per the Completed Works Approval issued by WCHD the minimum free chlorine residual at the entry point must be 0.75 mg/l. A free chlorine residual must be maintained in the distribution system.

7 - If present, lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Croton-on-Hudson is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and 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.

DEFINITIONS:

Entry Point: A compliance sampling point anywhere on a finished water line that is representative of a water source and located after the water treatment plant, but prior to where the water is discharged into the distribution system and prior to the first service connection.

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.

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.

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 which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Level 1 Assessment: A Level 1 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment: A Level 2 assessment is an evaluation of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).
Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).
Picocuries per liter (pCi/L): A measure of the radioactivity in water.
Millirems per year (mrem/yr): A measure of radiation absorbed by the body.
Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

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 New York State requirements. We are required to present the following information on lead in drinking water:

If present, lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Village of Croton-on-Hudson is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and 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*.

NONDETECTED SUBSTANCES

As required by state regulations, we routinely test our drinking water for numerous contaminants. In 2022 and in previous years, the following substances were tested for and were not detected:

1,1-Dichloropropane, 1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane 1,2,3-Trichloropropane, Cis-1,2-Dichloropropene, Trans-1 3-Dichloropropene 1,1-Dichloroethane, 1,2-Dichloroethane, Cis-1,3-Dichloroethane, 1,1,1-Trichloroethane, 1,1,2-Trichloethane 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethene, Tetrachloroethene, Trans-1 2-Dichloroethene 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,3-Trichlorobenzene, 1,2,4Trichlorobenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,2-Dibromo-3, 1,4-Dioxane, 2,4,5 T, 2,4,5-Tp (Silvex), 2,4-D, 2-Chlorotoluene, 3-Hydroxycarbofuran, 4-Chlorotoluene, Alachlor, Aldicarb, Page | 6 Aldicarb Sulfone, Aldicarb Sulfoxide, Aldrin, Antimony, Arsenic, Atrazine, Benzene, Benzo(A)Pyrene, Beryllium, Bromobenzene, Bromochloromethane, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbofuran, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroethane, Chloromethane, Chromium, Cyanide, Dalapon, Di(2-Ethylhexyl)Adipate, Di-(2-Ethylhexyl) Phthalate, Dibromoacetic Acid, Dibromochloropropane, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dichloroprop, Dieldrin, Dinoseb, Endrin, Ethylbenzene, Ethylene Dibromide, Fluoride, Chlordane, Gross Beta Particles (pCi/L), Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Iron (Fe), Isopropylbenzene, Lindane, Manganese, Mercury, Methomyl, Methoxychlor, Methylene Chloride, Metolachlor, Metribuzin, Monobromoacetic Acid, Monochloroacetic Acid, MTBE (Methy Tert-Butyl Ether), Napthalene, N-Butylbenzene, N-Propylbenzene, Odor, Oxamyl (Vydate), p-isopropyltoluene, PCBs, Pentachlorophenol, Perfluorooctanoic Acid, Picloram, Propachlor, Sec-Butylbenzene, Selenium, Silver, Simazine, Styrene, Tert-Butylben, , Thallium, Toluene, Total Trihalo, TOTAL 1,3-DIC, Total Xylenes, Toxaphene, , Trichlorethylene, Trichlorofluoromethane, Vinyl Chloride, m&p-Xylene, oXylene, Color, Nitrite, Zinc.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2022, our system was in compliance with applicable State drinking water operating, monitoring and reporting 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).

INFORMATION FOR NON-ENGLISH-SPEAKING RESIDENTS

Spanish

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

French
Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water 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. 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.
- 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.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, then check the meter after 15 minutes. If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2022, no major improvements were made to the water system.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our residents help us protect our water sources, which are the heart of our community. Please call our office if you have questions.