

## **Quality First**

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. 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 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.

See the data tables 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.

# **Community Participation**

You are invited to participate in our public forum and voice your concerns about your drinking water. The Village Board of Trustees meets on the first and third Mondays of each month beginning at 8:00 p.m. at the Stanley H. Kellerhouse Municipal Building, One Van Wyck Street, Croton-on-Hudson, NY 10520. Due to public safety and health concerns, these meetings may not meet in person. Please check our Web site at www. crotononhudson-ny.gov for online meeting dates and times.

# **Facts and Figures**

he water system supplies approximately 8,060 people, primarily in residences but also in businesses and industries, through approximately 2,500 service connections. During 2020, the total amount of water withdrawn from the aquifer was approximately 296 million gallons. The daily average volume of water treated and pumped into the distribution system was approximately 808,750 gallons per day. 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 2020 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 per year to 748,000 gallons per year at \$11.61 per 1,000 gallons. Tier 3 is 748,001 gallons per year to 3,740,000 gallons per year at \$12.77 per 1,000 gallons. Tier 4 is 3,740,001 gallons per year to 7,480,000 gallons per year at \$13.13 per 1,000 gallons. Tier 5 is greater than 7,480,001 gallons per year at \$14.08 per 1,000 gallons.

# **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

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.

For more information about this report, or for any questions relating to your drinking water, please call John Spatta, Water Foreman, at (914) 271-3775 or visit Westchester County Department of Health at (914) 864-7332 or www.health.westchestergov.com.

#### **Nondetected Substances**

As required by state regulations, we routinely test our drinking water for numerous contaminants. In 2020 and in previous years, the following substances were tested for and were not detected:

1,1-Dichloropropane, 1,2-Dichloropropane, 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2-Tetrachloroethane, 1,2,3-Trichloropropane, 1,2,4-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dichlorobenzene, 1,2-Dichlorobenzene, 1,3-Dichlorobenzene, 1,3-Dichloropropane, 1,4-Dichlorobenzene, 1,4-Dioxane, 2,2-Dichloropropane; 2,4,5-Tp (Silvex), 2,4-D, 2-Chlorotoluene, 3-Hydroxycarbofuran, 4-Chlorotoluene, 4-Isopropyltoluene, Alachlor, Aldicarb, Aldicarb Sulfone, Aldicarb Sulfone, Aldrin, Antimony, Arsenic, Atrazine, Benzene,

Benzo(A)Pyrene, Beryllium, Bromobenzene, Bromochloromethane, Bromodichloromethane, Bromoform, Bromomethane, Butachlor, Cadmium, Carbaryl, Carbofuran, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroethane, Chloroform, Chloromethane, Chromium, Cis-1,2-Dichloropropene, Cis-1,3-Dichloroethane, Cyanide, TOTAL, Dalapon, Di(2-Ethylhexyl)Adipate, Di-(2-Ethylhexyl) Phthalate, Dibromoacetic Acid, Dibromochloropropane, Dibromomethane, Dicamba, Dichlorodifluoromethane, Dieldrin, Dinoseb, Dioxin, Diquat, Endothall, Endrin, Ethylbenzene, Ethylene Dibromide, Fluoride, Gamma-Chlordane, Glyphosate, Gross Beta Particles (pCi/L), Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Iron (Fe), Isopropylbenzene, Lindane, Manganese, MEK, Mercury, Methomyl, Methoxychlor, Methylene Chloride, Metolachlor, Metribuzin, Microextractables, Monobromoacetic Acid, Monochloroacetic Acid, MTBE (Methy Tert-Butyl Ether), Napthalene, N-Butylbenzene, Nitrates, N-Propylbenzene, Odor, Organohalide, Oxamyl (Vydate), p-isoproptoluene, PCBs, Pentachlorophenol, Perfluorooctanoic Acid, Picloram, Propachlor, Sec-Butylbenzene, Selenium, Silver, Simazine, Styrene, Sulfate (SO4), Tert-Butylben, Tetrachloroethene, Thallium, Toluene, Total Trihalo, 1,3-DIC, Total Xylenes, Toxaphene, Trans-1 2-Dichloroethene, Trans-1 3-Dichloropropene, Trichlorethylene, Trichlorofluoromethane, Vinyl Chloride, m p-Xylene, o-Xylene, Cumene, 1,2 Dichlorobenzene, Chlorodiflour, Color, Nitrite.

# **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 by looking for ways to use less whenever you can. It is not hard to conserve water. Here are few tips:

- 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 an invisible toilet leak. 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.

# Is Our Water System Meeting Other Rules That Govern Operations?

uring 2020 our system was in compliance with applicable State drinking water operating, monitoring, and reporting requirements.

## Where Does My 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.

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We remain vigilant in delivering the best-quality drinking water

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## **Are There Contaminants In Our Drinking Water?**

ur 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.

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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Westchester County Health Department of Health at (914) 864-7332 or www.health.westchestergov.com

INORGANIC CONTAMINANTS									
SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE		
Barium (ppm)	11/21/2019	2	2	0.035	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits		
Chloride (ppm)	11/21/2019	250	NA	71	NA	No	Naturally occurring; Road salt contamination		
Sodium¹ (ppm)	January to December 2020	see footnote 1	NA	44.2	33.1–44.2	No	Naturally occurring; Road salt; Water softeners; Animal waste		
Zinc (ppm)	11/21/2019	5	NA	0.006	NA	No	Naturally occurring; Mining waste		

DISINFECTION BYPRODUCTS							
SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Haloacetic Acids [mono-, di-, and trichloroacetic acid, and mono-and dibromoacetic acid] <sup>2</sup> (ppb)	08/06/2020	60	NA	6	2–6	No	By-product of drinking water disinfection needed to kill harmful organisms
Total Trihalomethanes [TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform] (ppb)	8/06/2020	80	NA	28	4–28	No	By-product of drinking water chlorination needed to kill harmful organisms. TTHMs are formed when source water contains large amounts of organic matter

SYNTETHIC ORGANIC CONTAMINANTS										
SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE			
Perfluorooctanesulfonate Acid [PFOS] (ppt)	11/04/2020	10	NA	2.2	ND-2.2	No	Released into the environment from widespread use in commercial and industrial applications.			

#### **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.

**pCi/L** (**picocuries per liter**): A measure of radioactivity.

**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).

**ppt** (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

#### Tap water samples were collected for lead and copper analyses from sample sites throughout the community. SITES ABOVE **DETECTED** AL/TOTAL SUBSTANCE DATE (UNIT OF MEASURE) SAMPLED MCLG (90TH %ILE) SITES VIOLATION TYPICAL SOURCE RANGE LOW-HIGH 1.3 1.3 0.57 0.06 - 0.890/40 Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from Copper (ppm) January to June No 2020 wood preservatives 15 0 $1/40^{3}$ Corrosion of household plumbing systems; Erosion of natural deposits Lead (ppb) January to June 3.8 ND-76 No 2020 Copper (ppm) July to December 1.3 0.51 0/40 Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from 1.3 ND-0.59 No 2020 wood preservatives

No

OTHER REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	DATE SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Chlorine (ppm)	2020	[4]	[4]	1.82	1.04-1.82	No	Water additive used to control microbes	
Fluridone (ppb)	January to October 2020	50	NA	0.47	ND-0.47	No	An aquatic herbicide used to control invasive plants	
Nickel (ppm)	11/21/2019	NA	NA	0.0015	0.0015-0.0017	No	Naturally occurring	
Orthophosphate <sup>4</sup> (ppm)	2020	NA	NA	1.40	0.71-1.40	No	Water additive used to control corrosion	

 $1/40^{3}$ 

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0

1.8

ND-206

#### What Does This Information Mean?

July to December

2020

Lead (ppb)

As you can see by the table, our system had no violations. We have learned through our test that some contaminants have been detected; however, these contaminants were detected below New York State requirements. The action level for lead was exceeded at one location Jan-June and at one location Jul-Dec. We are required to present the following information on lead in drinking water:

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. The Village of Croton-on-Hudson 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 (800) 426-4791 or at www.epa.gov/safewater/lead.

#### **Facility Modifiation/System Improvements**

Corrosion of household plumbing systems; Erosion of natural deposits

Improvements were made to the distribution system consisting of cement lining water mains and installation of new valves and hydrants on portions of Cleveland Drive, Radnor Avenue and Old Post Road North. In addition, the backup power supply for Well 4 was replaced with a new transfer switch, generator connection, and new portable generator.

#### **Substances That Could Be in Water**

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.

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.

<sup>&</sup>lt;sup>2</sup>The haloacetic acids detected were dichloroacetic acid, bromochloroacetic acid, and trichloroacetic acid.

<sup>&</sup>lt;sup>3</sup>The level presented represents the 90th percentile of the 40 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 values detected at your water system. In this case, 40 samples were collected at your water system Jan-June and July-Dec 2020 and the 90th percentile values were 3.8 ppb and 1.8 ppb for lead and 0.57 MG/L and 0.51 MG/L for copper, which were below the action level. The action level for lead was exceeded at one location Janu-June and one location July-Dec.

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.