Annual Drinking Water Quality Report for 2019
Hillcrest Water District # 1
Hillcrest, New York
Public Water Supply ID# NY0301667

INTRODUCTION
To comply with State regulations, this annual report is issued by the Hillcrest Water District #1, 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 has not violated a maximum contaminant level or any other water quality standard during this reporting period. 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 the **Town Engineer, at (607) 648 4800 ext. 6.** We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. The meetings are held on the first Wednesday of the month at 7:00 PM at the Fenton Town Hall, 44 Park Street in Port Crane.

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 Department of Health (DOH) and the Federal Environmental Protection Agency (EPA) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State DOH and the Federal Food and Drug Administration's (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves approximately 2,800 people through 856 active service connections. We also provide water to The Village of Port Dickinson. Our water source is from deep wells. The well field contains three wells, ranging in depth from 210 feet to 219 feet that draw water from a lower aquifer in the Chenango River basin. The water is pumped from the wells into two covered storage tanks with a combined capacity of 1,250,000 gallons. The total water produced in 2019 was 138,700,000 gallons (47,788,800 gallons to Port Dickinson). The daily average of water treated and pumped to our storage tanks was 380,000 gallons. A 2015 water audit shows that about 22% of the production was lost to hydrant flushing, fire department and other unmetered uses and system leaks.

The water is disinfected with sodium hypochlorite as it leaves the well field. We also add a polyphosphate sequestrant to keep dissolved iron and manganese found in our water in solution.

The current rates for users are $51.00 for 1000 cubic feet with additional use billed at $2.00 per 100 cubic feet, thereafter.

A private consultant sponsored by the NYS DOH has completed a source water assessment in 2003. The complete report is available for your review at the Town Engineer's office. A summary report prepared by the Broome County Health Department is attached.

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, and synthetic organic compounds. 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. None of the compounds we tested for were detected in your drinking water above the regulatory limit.

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 Broome County Health Department at (607) 778-2887.

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TABLE OF DETECTED CONTAMINANTS – HILLCREST 2019

Contaminant	Violation Yes/No	Well No./ Location	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL or AL)	Likely Source of Contamination
Inorganics								
Barium	No	Treatment Plant	8/21/17	0.209	mg/l	N/A	2.0	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Sodium [1]	No	#3	8/5/19	52.2	mg/l	See Health Effects	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Copper [2]	No	Distribution	6/11/19	0.196 (0.0239-0.694)	mg/l	0	AL = 1.3	Corrosion of household plumbing systems, erosion of natural deposits.
Lead [2]	No	Distribution	6/11/19	1.3 (ND – 2.3)	ug/l	0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits.
Nitrate	No	#3	8/5/19	1.38	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Disinfection Byproducts								
Total Trihalo-Methanes [3]	No	Distribution	8/5/19	2.32	ug/l	N/A	80	By-products of drinking water chlorination.
Total Haloacetic Acids [4]	No	Distribution	8/5/19	1.01	ug/l	N/A	60	By-products of drinking water chlorination.
Radiological Contaminants								
Gross Alpha	No	Entry Point	12/13/16	2.13	pCi/l	0	15	Erosion of natural deposits
Radium 226	No	Entry Point	12/13/16	0.235	pCi/l	0	5	Erosion of natural deposits
Radium 228	No	Entry Point	12/13/16	1.08	pCi/l	0	5	Erosion of natural deposits

Notes:

1 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

2 - 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. In this case, ten samples were collected at your water system and the 90th percentile value was the ninth highest value. The action level for lead or copper was not exceeded at any of the sites tested.

3 – This level represents the total levels of the following contaminants: chloroform, bromodichloromethane, dibromochloromethane, and bromoform.

4 - This level represents the total levels of the following contaminants: monochloroacetic acid, monobromoacetic acid, dichloroacetic acid, trichloroacetic acid, dibromoacetic acid.

Definitions:

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 that, if exceeded, triggers treatment or other requirements that a water system must follow.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

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).

Picocuries per liter (pCi/l): A measure of the radioactivity in water.

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.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2019, 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).

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 of these 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 fire fighting 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 check for leaks. Simply turn off all taps and water using appliances. Then check the water meter reading and then again after 15 minutes.*

A Word about Water System Security

The water district has an Emergency Response Plan & Vulnerability Analysis and is continuing to implement improvements in the physical plant that will provide additional security for the system. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. **Any suspicious activity occurring at any of our water district facilities should be immediately reported to 911, Emergency Management Services, for immediate investigation.**

Water Meter Replacement Project

As of this writing approximately 840 water meter heads have been replaced with radio frequency meter heads. This replacement project is approximately 99% complete. Customers will be notified when they can schedule a visit from the Water District Operator to replace the existing meter head with the new head. Upon replacement, all future readings will be automatically recorded.

Closing

Thank you for allowing us to continue to provide your family with quality drinking water this past year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements as well as rising operating costs. Please call our office if you have questions.

Town of Fenton
44 Park Street
Port Crane, NY 13833

Hillcrest Water District #1
NY0301667
AWQR Source Water Assessment Summary

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. While nitrate and other inorganic contaminants were detected in our water, 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 from natural sources. The presence of contaminants does not necessarily indicate that the water poses a health risk.

As mentioned before, our water is derived from three drilled wells. The source water assessment has rated these wells as having a medium-high susceptibility to halogenated solvents, nitrate and microbials, specifically enteric bacteria and enteric viruses. The wells have a medium susceptibility to other contaminants as noted in the table below. These ratings are due primarily to the proximity to the wells of permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and residential areas using individual septic systems. The ratings are also driven by the presence of hazardous waste sites and Toxic Release Inventory sites in the vicinity of the wells. Based on the source water review, the wells draw from a confined aquifer that can provide a measure of protection from potential contamination. While the source water assessment rates our wells as being moderately susceptible to microbials, please note that our water is disinfected to ensure that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

SUSCEPTIBILITY TABLE			
CONTAMINANT	WELL #1	WELL #2	WELL #3
Enteric Bacteria	Medium-High	Medium-High	Medium-High
Enteric Viruses	Medium-High	Medium-High	Medium-High
Halogenated Solvents	Medium-High	Medium-High	Medium-High
Herbicides/Pesticides	Medium	Medium	Medium
Metals	Medium	Medium	Medium
Nitrate	Medium-High	Medium-High	Medium-High
Other Industrial Organics	Medium	Medium	Medium
Petroleum Products	Medium	Medium	Medium
Protozoa	Medium	Medium	Medium

County and state health departments will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and education programs. A copy of the assessment, including a map of the assessment area, can be obtained by contacting the water supplier.