

# Annual Drinking Water Quality Report for 2011

## Village of Clinton

P.O. Box 242, Clinton, NY 13323  
(Public Water Supply ID# NY3202386)

### INTRODUCTION

To comply with State regulations, Village of Clinton 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 last year. 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 Dale Jewell, Chief Operator at (315) 853-2240. 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 first Monday of each month at 7:00 pm at the Village Offices located at Lombard Hall.

### 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 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.

Our water source is a groundwater source that is pumped from two separate well fields, four wells located near Sanford Avenue, and two wells near Old Boorne Road. Groundwater is drawn from six wells, ranging from 50-55 feet deep. Last year, our system did not experience any restriction of our water sources. The water is disinfected with sodium hypochlorite prior to distribution. In addition, hydrofluosilicic acid (fluoride) is added to the water prior to distribution. Any water not used by our customers is stored in two steel storage tanks, a 300,000 gallon tank on Kellogg Street and a 540,000 gallon tank located on South Street.

### FACTS AND FIGURES

Water System serves a population of 3000 through 1148 metered connections. The total water produced in 2011 was 158,295,557 gallons. The average amount of water pumped daily was 425,525 gallons. The amount of water delivered to the customers was 110,250,688. This leaves an unaccounted for total of around 48,044,869 gallons. This water (approximately 30% of the total amount of water produced) was used to flush mains, fire fighting, street cleaning, sanitary sewer cleaning, and small leaks. Water customers inside the village limits are charged \$17.00 per 1,000 cubic feet of water and outside rate was \$34.00 per 1,000 cubic feet of water.

### SOURCE WATER ASSESSMENT INFORMATION

A source water assessment is a process by which possible and actual threats to drinking water source(s) are determined. A source water assessment was completed for the Village Of Clinton water system. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily the contaminants can move through the subsurface to the source(s). The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to the consumers is, or will become contaminated. The source water assessment program (SWAP) is designed to compile, organize and evaluate information to make better decisions regarding protecting sources of public drinking water. A copy of the assessment, including a map of the assessment area can be obtained by contacting us as noted above.

The land uses around the Village of Clinton water system sources were rated for their potential to cause contamination to the sources. The sources were rated at a medium risk for nitrates, protozoa, enteric bacteria, and enteric viruses. Discrete potential source of contamination around the sources include a pest control site, several gas stations, and auto service stations, and a dry cleaning business. When the potential land use contaminants are combined with the medium risk factors presented by the discrete potential sources and the high natural sensitivity of the sources, the public drinking water source is at a high to medium high susceptibility for contamination. The high natural sensitivity is based on contaminant history, soils, surficial geology, and aquifer information and bedrock geology. See section "Are there contaminants in our drinking water?" for a list of contaminants that have been detected. The source water assessments provide resource managers with additional information for protecting source waters into the future.

Based upon the SWAP report determinations, good judgment should be used and caution should be exercised when determining placement of certain materials, actions and facilities, including septic systems high-rise business or chemical storage near the source(s). We work hard to ensure that the source of water for our system is protected from contamination.

## 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, inorganic compounds, nitrate, 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. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might 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 Oneida County Health Department at (315) 798-5064

**Table of Detected Contaminants**

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG / MRDLG	Regulatory Limit (MCL, MRDL, TT or AL)	Likely Source of Contamination
<b>Radioactive Contaminants</b>							
Gross alpha activity (including radium - 226 but excluding radon and uranium)	No	2008	0.45 (Sanford Ave Wells)	pCi/l	0	MCL = 15	Erosion of natural deposits.
Radium - 226	No	2008	0.283 (Sanford Ave Wells)	pCi/l	0	MCL = 5	Erosion of natural deposits.
			0.131 (Old Boorne Wells)				
Radium - 228	No	2008	0.136 (Sanford Ave Wells)	pCi/l	0	MCL = 5	Erosion of natural deposits.
			0.0536 (Old Boorne Wells)				
<b>Inorganic Contaminants</b>							
Barium	No	1/09	0.1 (Sanford Ave Wells)	mg/l	2	MCL = 2	Erosion of natural deposits.
			0.093 (Old Boorne Rd Wells)				
Copper	No	8/09	0.22 <sup>(1)</sup> (range = 0.050 - 0.35)	mg/l	1.3	AL = 1.3	Corrosion of household plumbing systems.
Fluoride (Distribution System)	No	Daily / Monthly	0.9 <sup>(2)</sup> (range = 0.5 - 1.1)	mg/l	N/A	MCL = 2.2	Erosion of natural deposits; Water additive that promotes strong teeth ( <i>The Village of Clinton adds Fluoride to the water</i> ).
Lead	No	8/09	2.9 <sup>(3)</sup> (range = ND - 3.7)	ug/l	0	AL = 15	Corrosion of household plumbing systems; Erosion of natural deposits.
<b>Inorganics - Nitrate and Nitrite</b>							
Nitrate	No	10/11	1.9 (Sanford Ave Wells)	mg/l	10	MCL = 10	Runoff from fertilizer use; Erosion of natural deposits.
			2.6 (Old Boorne Rd Wells)				
<b>Disinfection Byproducts</b>							
Chlorine Residual	No	Daily / Monthly	0.4 <sup>(4)</sup> (range = 0.2 - 0.7)	mg/l	N/A	MRDL = 4 <sup>(6)</sup>	Water additive used to control microbes.
<b>Disinfectants</b>							
Haloacetic Acids (mono-, di-, and trichloroacetic acid, and mono- and dibromoacetic acid)	No	8/09	5.2	ug/l	N/A	MCL = 60	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes (TTHMs - chloroform, bromodichloromethane, dibromochloromethane and bromoform)	No	8/09	15.8	ug/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.

### Notes:

- 1 - The level presented represents the 90<sup>th</sup> percentile of the ten (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 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten (10) samples were collected at your water system and the 90<sup>th</sup> percentile value was the ninth highest value. The action level for copper was not exceeded at any of the sites tested.
- 2 - This level represents the annual average and range of results calculated from monthly sample submissions.
- 3 - The level presented represents the 90<sup>th</sup> percentile of the ten (10) sites tested. The action level for lead was not exceeded at any of the sites tested.
- 4 - This level represents the annual average and range of results calculated from sample submissions.
- 5 - Value presented represents the Maximum Residual Disinfectant Level (MRDL) which is a level of disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects. MRDLs are currently not regulated but in the future they will be enforceable in the same manner as MCLs.

### Definitions:

<b>ACTION LEVEL</b>	<b>AL</b>	The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
<b>MAXIMUM CONTAMINANT LEVEL</b>	<b>MCL</b>	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
<b>MAXIMUM CONTAMINANT LEVEL GOAL</b>	<b>MCLG</b>	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.

<b>Definitions:</b>		
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.
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).
NON-DETECTED	ND	Laboratory analysis indicates that the constituent is not present.
PICOCURIES PER LITER	pCi/l	A measure of the radioactivity in water.
TREATMENT TECHNIQUE	TT	A required process intended to reduce the level of a contaminant in drinking.

### **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.

### **FLUORIDE INFORMATION**

Our water system is one of the many drinking water systems in New York State that adds a low level of fluoride to drinking water in order to provide consumer dental health protection. According to the United States Centers for Disease Control, fluoride is very effective in preventing cavities when present in drinking water at levels that range from 0.8 to 1.2 mg/l (parts per million). Our fluoride addition facility is designed and operated to meet this optimal range. Additional reliable information regarding fluoridation in public water systems can be found online at: <http://www.cdc.gov/FLUORIDATION/> and <http://www.health.state.ny.us/prevention/dental/fluoridation/>. In recent years, new scientific information has indicated lower levels of Fluoride may be effective at preventing cavities. Therefore, with the approval of the Oneida County Health Department, we have been maintaining residuals lower than 1.0 mg/l.

### **LEAD INFORMATION**

The Federal Lead and Copper Rule requires us to include the following information about Lead in drinking water with our Annual Water Quality Report. "If present, elevated levels of 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. Our water system 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 or at <http://www.epa.gov/safewater/lead>.

### **IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?**

Last year, our system was in general compliance with applicable State drinking water operating, monitoring and reporting requirements. We test for free chlorine residuals on a daily basis. Each month we submit to the Health Department a report with these measurements. Unfortunately, we inadvertently failed to submit the September report by the 10th of October as required. Once we were made aware of this situation, we immediately forwarded the report. This reporting violation does not pose a threat to the quality of our water supply and does not affect the quality of the water we serve you.

### **SYSTEM IMPROVEMENTS**

During the past year, we replaced two old fire hydrants and added one fire hydrant along with a short extension of water main on South Street. The Kellogg Street Tank was completely repainted and all repairs needed were finished, such as a new overflow pipe added, new rail system, a new access door and all rust spots were removed and re-welded. We repaired five old water valves and installed a new valve in the system. These repairs and replacements as well as the necessary routine maintenance work are done to ensure continued service of high quality water and continued operation of our water system in compliance with all applicable regulations.

### **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 up 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.

### CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. We ask that all our customers help us protect our water sources, which are the heart of our community. 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. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions (315) 853-5231.