

**Annual Drinking Water Quality Report for 2012**  
**P.O. Box 391**  
**Croghan, New York 13327**  
**Public Water Supply ID # 2402362**

## **INTRODUCTION**

To comply with State regulations, the Village of Croghan annually issues 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. EMERGENCY SITUATION PUBLIC NOTIFICATION IS BY RADIO, TELEVISION, ETC. Monitoring and sampling of the Croghan Water System is an ongoing process to assure safe potable water. 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 Water Superintendent Jim Zehr at 346-1979 for more information. 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 Village Board meets the second Wednesday of each month at 6:00 p.m. in the office of the Village Garage.

## **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. State Health Department and FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Our water source is from two wells. Groundwater is drawn from a 34-foot deep and a 57-foot deep well. The water is disinfected with sodium hypochlorite as it is transferred to a 75,000-gallon storage tank. It then travels by gravity to you. The Village of Croghan owns the land around the wells and restricts activities therein. There are 346 metered water users receiving their water bills from the Village of Croghan. The Village of Croghan contracts to supply water to Beaver Falls via the Beaver Falls Water District. There are an additional 226 water users receiving their water bills through the Beaver Falls Water District.

## **AWQR SWAP Summary**

The NYS DOH has evaluated this Public Water System's (PWS's) susceptibility to contamination under the Source Water Assessment Program (SWAP), and their findings are summarized in the paragraph 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.

The source water assessment has rated these wells as having an elevated susceptibility to microbials, nitrates, industrial solvents, petroleum products, metals, and herbicides/pesticides. **This susceptibility is based on well yields or pumps drawing greater than 100 gpm from an unconfined aquifer and is unsupported by historical sampling information.** However, the New York State Department of Health will use this information to direct future source water protection activities.

A copy of the assessment can be obtained by contacting the supplier of water.

## **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, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, 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, is 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 NYS Department of Health at the Watertown District Office (785-2277).

### **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, 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.

**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.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Microbiological Contaminant -Total Coliform	No	Monthly	0	N/A	0	MCL=2 or more positive samples	Naturally present in the environment
Inorganic Contaminants -Fluoride	No	2/12	.2	ppm	N/A	MCL=2.2	Erosion of natural deposits; water additive that promotes strong teeth
-Nitrite	No	6/03	.17	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate	No	11/12	.29	ppm	0	AL=10	Same as Nitrite
Copper (90 <sup>th</sup> %)	No	8/11	.957	ppb	1.3	AL=1.3	Corrosion of household plumbing; erosion of natural deposits.
Lead (90 <sup>th</sup> %)	No	8/11	2.8	ppb	15	AL=15	Same as Copper
Disinfection Byproducts Total Trihalomethanes	No	8/11	5.7 ug/l	ppb	N/A	MCL=40	Byproduct of drinking water Chlorination
Total Haloacetic Acids	No	8/11	1.7 ug/l	ppb	N/A	MCL=30	Same as above
Radioactive Contaminants							
Beta	No	6/08	5.1	pci/l	0	50	Decay of natural deposits; Manmade emissions
Alpha	No	6/08	<2	pci/l	0	15	Erosion of natural deposits

Lead and Copper: 90<sup>th</sup> percentile chart testing done August 2011\* - Lead 2.8, Copper .957

	Site 1	Site 2	Site 3	Site 4	Site 5
Lead - ppb	2.2	1.3	<b>3.9*</b>	2.3	2.2
Copper - ppb	.558	<b>1.27*</b>	.208	.644	.102

**\*Notes:** – The level presented represents the 90<sup>th</sup> percentile of the 5 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 Lead and Copper values detected at your water system.

### **WHAT DOES THIS INFORMATION MEAN?**

The testing procedures for Lead and Copper sampling require that **first draw samples** be pulled and tested. Some of the factors that may distort or elevate test results are: previous days usage, amount of time since last draw, condition of household plumbing, etc. A rule of thumb is to let the drinking water faucet run a bit to flush out the potentially higher laden water. A lot can be said about keeping household plumbing updated.

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

During 2012, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. We constantly test for various contaminants in the water supply to comply with regulatory 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/year.

### **Closing**

Thank you for allowing us to continue to provide your family with quality drinking water this 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. 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.

The Croghan Village Board