

# *Annual Drinking Water Quality Report for 2016*

## *Town of Richland*

*P.O. Box 29, 1 Bridge Street, Pulaski, NY 13142  
(Public Water Supply ID# 3730165)*

### **INTRODUCTION**

To comply with State regulations, the Town of Richland 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 Daniel Krupe, Town Supervisor at (315) 298-5174. We want you to be informed about your drinking water.

### **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.

### **FACTS & FIGURES**

Our water system serves **approximately 3,000 people via 500 service connections**. The Town's water source consists of four drilled wells located at the Fernwood and Richland well fields. Two wells are located at the Fernwood site approximately 4 miles southeast of the village of Pulaski and the remaining two wells are located at the Richland site approximately 3 miles east of the village. Water from the wells is pumped into one 150,000-gallon elevated water storage tank located at the Fernwood site, one 150,000-gallon elevated water storage tank located on County Route 5, and into an additional 300,000-gallon storage tank located at the Richland well field site. The Town has an average daily production of 120,000 gallons per day. Additional production is also provided to seasonal customers between the months of May and September. The water is disinfected with liquid sodium hypochlorite (Chlorine) using an injection pump at the Fernwood well field site and is disinfected with chlorine generated on-site at the Richland well field site.

### **SOURCE WATER ASSESSMENT**

A source water assessment has not been completed by the NYSDOH for our system. We will provide this information to our customers as soon as it becomes available.

## 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, and synthetic organic compounds. Our system sampled for total coliform, nitrate, lead and copper, organic compounds and disinfection byproducts in 2015. 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, 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 Oswego County Health Department at (315) 349-3557.

TABLE OF DETECTED COMPOUNDS

Contaminant	Violation Y/N	Date of Sample	Level Detected (Maximum)	Unit Measurement	MCLG	Regulatory Limit (MCL, AL)	Likely Source of Contamination
<b>Inorganic Contaminants</b>							
<b>Nitrate</b> (as Nitrogen) Fernwood and Schoeller well Sites	No	11/18/16	1.20 mg/l .41 – 2.0 mg/l	ppm	10.0 ppm	10,000 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Copper</b> 90 <sup>th</sup> percentile*	No	09/18/15	70.1 ug/l Range 4.2 – 99.4	ppb	1,300 ug/l	AL=1300 ug/l	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead</b> 90 <sup>th</sup> percentile*	No	09/18/15	2.1 ug/l Range 0.5 – 2.8	ppb	N/A	AL=15.0 ug/l	Corrosion of household plumbing systems, erosion of natural deposits
<b>Barium</b> (2 locations)	No	08/12/14	9.7 ug/l Range 9.5 – 9.9 ug/l	ppm	2,000 ug/l	2,000 ug/l	Discharge of drilling waste, Discharge from metal refineries, Erosion of natural deposits
<b>Beryllium</b> (2 locations)	No	8/12/14	0.3 ug/l	ppb	4 ug/l	4 ug/l	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
<b>Zinc</b> (2 locations)	No	8/12/14	76 ug/l Range ND – 151 ug/l	ppb	N/A	5,000 ug/l	Naturally occurring; Mining waste
<b>Chloride</b> (2 locations)	No	08/12/14	6.2 mg/l Range 4.9 – 7.4 mg/l	ppm	N/A	250 mg/l	Naturally occurring or indicative of road salt contamination.



<b>Sulfate (2 locations)</b>	No	08/12/14	7.4 mg/l Range 5.1 – 9.7 mg/l	ppm	N/A	250 mg/l	Naturally occurring.
<b>Sodium** (2 locations)</b>	No	8/12/14	3.6 mg/l Range 3.0 – 4.2 mg/l	ppm	N/A	N/A	Naturally occurring
<b>Radiological Contaminants</b>							
Radium 226 & 228	No	11/6/13	0.168 pCi/l	N/A	0 pCi/l	5 pCi/l	Naturally occurring
Gross Beta	No	11/6/13	0.364 pCi/l	N/A	0 pCi/l	50 pCi/l	Erosion of Natural Deposits.
<b>Disinfection By-Products</b>							
<b>TTHMs</b> Total Trihalomethanes (Schoeller and Fernwood Well Sites)	No	8/19/16	1.9 ug/l (average)	ppb	N/A	80 ug/l	By-product of drinking water chlorination
<b>HAA5</b> Haloacetic Acids (Schoeller and Fernwood Well Sites)	No	8/21/15	2.0 ug/l (average)	ppb	N/A	60 ug/l	By-product of drinking water chlorination

**Notes:**

\* The levels presented for copper and lead represents the 90<sup>th</sup> percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of the distribution that is equal to or below it. The 90<sup>th</sup> percentile value is equal to or greater than 90% of the values detected in your water system. In this case 10 samples were collected and the 90<sup>th</sup> percentile value was the second highest value.

\*\* No State standards exist for levels of sodium in public drinking water. However, the State recommends that water containing more than 20,000 ppb of sodium not be used for drinking by people on severely restricted sodium diets. Water containing more than 270,000 ppb of sodium should not be used for drinking by people on moderately restricted sodium diets.

**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.

**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.

**Milligrams per year (memo/yr):** A measure of radiation absorbed by the body.



## **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.

## **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. Immune-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 informado continece information may important sober us ague beer. 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 several 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 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 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.

## **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.