

*Annual Drinking Water Quality Report for 2017*  
*Holland Water District #1*  
*47 Pearl St. Holland N.Y. 14080*  
*(Public Water Supply ID#1410126)*

## **INTRODUCTION**

To comply with State regulations Holland Water District 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 Jason Simmons Holland Water Department @ 716-537-9443. 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, held in the Town Hall on the second Wednesday of each month at 8:00 pm.

## **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.

Our water system serves 1580 customers through 380 service taps. Our water source is a well that produces 135 gallons a minute, located in the Hamlet. Our source is a deep bedrock well, with 50 feet of clay cap, protected by a masonry building. The water is aerated in a cascade tower to remove sulfur gas, ortho-phosphate is added, and it is disinfected with the injection of chlorine before it is pumped into the distribution system. The average water rate is \$4.38 per thousand gallons, with a quarterly capital improvement charge of \$24.30.

The New York State Department of Health (NYSDOH) has completed a source water assessment for the Town of Holland water 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.

Our water is derived from two drilled wells. The source water assessment has rated these wells as having a medium high susceptibility to enteric bacteria, enteric viruses, cations/anions, halogenated solvents, petroleum products, herbicides/pesticides, other industrial organics, nitrates, and protozoa. These ratings are due primarily to the close proximity of pastures and permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) to the wells. Also, the ratings are based on the assumption that the wells draw greater than 100 gallons per minute from the unconfined aquifer.

While the source water assessment rates our well as being susceptible to microbial contamination, 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 microbiological contamination. A copy of the assessment, including a map of the assessment area, can be obtained at the Town office.

In 2017 Holland Water Department pumped 41,900,000 gallons at our Water Street pumping station. Some of this water is used for flushing water mains, fighting fires, training firefighters, plant processes, equipment and hydrant testing and some of this water was lost due to leaks. 28,207,300 gallons of water were sold to customers. Our water loss was significantly higher in 2017 than 2016 due to meter pit water leaks that were not detected immediately.

### 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, total trihalomethanes, haloacetic acids, radiological 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 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 Erie County Health Department at 716-961-6800 fax 716-961-6880.

Table of Detected Contaminants							
Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit of Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
<i>Inorganics</i>							
Lead	No	9/20/16	ND-31.7 1.8 Note 1	ug/l	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	No	9/20/16	0.043-0.400 0.260 Note 2	mg/l	1.3	AL=1.3	Corrosion of household plumbing, erosion of natural deposits, leaching from wood preservatives

**Table of Detected Contaminants (continued)**

Contaminant	Violation	Sample Date	Level Detected (Ave/Max)	Unit of Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source
Iron	No	6/06/17	240	ug/l	NA	300	Naturally occurring.
Manganese	No	6/06/17	71	ug/l	NA	300	Naturally occurring; Indicative of landfill contamination.
Nitrate	No	5/3/17	.06	Mg/l	10	10	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Barium	No	6/29/16	1680	ug/l	2000	2000	Discharge of drilling waste or metal refineries. erosion of natural deposits
<b>Disinfectant</b>							
Chlorine residual	No	various	(0.46 / 1.0)	mg/l	N/A	MRDL=4	Water additive used to control microbes
<b>Radioactive Contaminants</b>							
Gross Alpha (including Radon and Uranium)	No	6/1/16	3.6	pCi/L	0	15	Erosion of natural deposits
Combined Radium-226 & 228	No	6/1/16	1.08	pCi/L	0	5	Erosion of natural deposits
<b>Disinfection Byproducts</b>							
Total Trihalomethanes (TTHMs – chloroform, bromodichloromethane, dibromochloromethane, and bromoform)	No	8/8/17	3.84	ug/L	80	N/A	Byproduct of drinking water disinfection needed to kill harmful organisms
HALOACETIC ACID (mono-, di- and trichloroacetic acid, and mono- and dibromoacetic acid)	NO	8/8/17	.72	ug/l	60	N/A	By product of drinking water disinfection needed to kill harmful organisms

**Notes:**

1 – 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 lead values detected at your water system. In this case 10 samples were collected from your water system and the 90<sup>th</sup> percentile was 1.8 ug/l. All samples were between ND and 31.7 ug/l, as noted in the table. The action level for lead was exceeded at one of the sites tested.

2 – The level presented represent the 90th percentile of the 10 sites tested. A percentile is value on a scale of 100 that indicated the percent of a distribution that is equal to or greater than 90% of the copper values detected at our water system. In this case 10 samples were collected from our water system and the 90<sup>th</sup> percentile was 0.260 mg/l. All samples were between 0.043and 0.400 mg/l as noted in the table. The action level of copper was not exceeded at any of the sites tested.

**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).

## WHAT DOES THIS INFORMATION MEAN?

As you can see by the table our system had no violations. We have learned through our operating and monitoring requirements that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

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. Holland Water District 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

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

We did not have any reporting violations in 2017. We have met all reporting requirements set by the DOH.

The Town of Holland is applying for a source water permit for the Legion Drive well site, with the intent of this well going online in the future. This current site has been approved by the ECDH department and the NYSDOH. This well will be online in 2018 to insure ample water for the district.

This ANNUAL WATER QUALITY REPORT is displayed @ [www.townofhollandny.com](http://www.townofhollandny.com)

## **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.

## **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 @ 716-537-9443 if you have any questions.