

Annual Drinking Water Quality Report for 2018
North Granville Water District
42 Main Street, Granville, NY 12832
Public Water Supply Identification Number NY5700121

INTRODUCTION

To comply with State regulations, the North Granville 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. We are very pleased to provide you with this year's Annual Water Quality Report. Last year, your drinking water met all State drinking water health standards. This report is 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 New York State standards. Our constant goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. If you have any questions concerning this report or concerning your drinking water please contact: *Mr. Marc Kretzer Water Superintendent, North Granville Water District, PO Box 177, Granville, NY 12832; Telephone (518) 642-2560.* We want our valued customers to be informed about their water service. If you want to learn more, please attend any of our regularly scheduled Town Board meetings. They are held on the 2nd Thursday of each month, 7:00 PM at the Town Hall, 42 Main Street, Granville, NY 12832; *Telephone (518) 642-2560.* If you want to learn more, please call us.

WHERE DOES OUR WATER COME FROM?

The North Granville Water District draws its water from several sources. The largest producing source is an underground spring collection system, which was installed in the 1940's. In the spring it yields about 60,000-70,000 gallons per day (gpd); in the winter it yields about 40,000 gpd. The springs were deemed Ground Water Under the Direct Influence of Surface Water (GUIDI) and we complied with the Surface Water Treatment Rule (SWTR) in 2007 when we installed a filtration system. A second source of water is Well #3, located to the left of the pumphouse. Well #3 is a 6-inch diameter drilled well, 365 feet deep, yielding about 25,000 gpd. Water from the drilled well #3 is treated in an aeration system to remove sulfur odor from the water. Additionally, a creek near the pumphouse is also utilized as a third source of water but is not currently use. The combined water sources flow into a collection basin. Water from the collection basin is pumped through a 100 micron strainer filter, 20, 5, 1 and 1 micron absolute cartridge filters in series for particulate removal and then through six 17.8 gallon per minute Trojan Ultraviolet (UV) units installed in parallel for disinfection. It is chlorinated prior to entering the chlorine contact tank. Soda ash is added for corrosion control as the water leaves the chlorine contact tank. The water then flows to a 300,000-gallon on-grade storage tank located on a hill off Route 22, east of the intersection with County Route 17. The water flows by gravity from the tank to the distribution system.

The source water assessment performed by the New York State Health Department has rated our source water as having an elevated susceptibility to microbial contamination. It should be noted that the SWAP looks at the untreated water only. Our water is treated to minimize the potential sources of contamination. The SWAP summary for our water supply is attached to this report.

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; trihalomethanes, haloacetic acids and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and 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 AND FIGURES

The North Granville Water District provides water through 224 service connections to a population of approximately 800 people. Our average daily demand is 37,700 gallons. Our single highest day was 65,000 gallons. The total water produced in 2018 was 13,842,000 gallons.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

In accordance with State regulations, the North Granville Water District routinely monitors your drinking water for numerous contaminants. We test your drinking water for inorganic contaminants, radiological contaminants, lead and copper, nitrate, volatile organic contaminants, and synthetic organic contaminants. In addition, we test 1 sample for coliform bacteria each month. The table presented below depicts which contaminants were detected in your drinking water. The state allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is 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 pose 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 New York State Department of Health Glens Falls District Office at (518) 793-3893.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table on page 5, our system had no violations. We have learned through our monitoring and testing that some constituents have been detected; however, these compounds were detected below New York State requirements. MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2018, we did not test for lead and copper during the second half of the year. Due to the copper action level exceedance that occurred in 2017 we were required to increase our monitoring frequency to every six month during 2018. We collected the required samples for the January – June 2018 monitoring period and the results showed compliance with the action levels. We did not collect samples for the July – December 2018 monitoring period, and are therefore, required to notify our customers. We will be collecting another round of samples for January – June 2019.

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 microbiological pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON LEAD

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. The North Granville 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 or at <http://www.epa.gov/safewater/lead>

CAPITAL IMPROVEMENTS

During 2018 the following improvements have been made to the water system.

- ◆ A new well is has been installed and are in the process of drilling another well.
- ◆ Installed Variable Frequency drives on 2 well motors for optimal pump yield and energy savings
- ◆ Looking into 2 small flushing hydrants

WATER CONSERVATION TIPS

The North Granville Water District encourages water conservation. There are a lot of things you can do to conserve water in your own home. Conservation tips include:

- ◆ Only run the dishwasher and clothes washer when there is a full load
- ◆ Use water saving showerheads
- ◆ Install faucet aerators in the kitchen and the bathroom to reduce the flow from 4 to 2.5 gallons per minute
- ◆ Water garden and lawn for only a couple of hours after sunset
- ◆ Check faucets, pipes and toilets for leaks and repair all leaks promptly
- ◆ Take shorter showers

CLOSING

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit our customers. 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.

North Granville Water District # 1
PWSID# NY5700121
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. The source water assessments provide resource managers with additional information for protecting source waters into the future.

The source water assessment has rated our source water as having an elevated susceptibility to microbial contamination. These ratings are due primarily to the close proximity of the wells to permitted discharge facilities (industrial/commercial facilities that discharge wastewater into the environment and are regulated by the state and/or federal government) and the associated industrial activity in the assessment area. In addition, the wells draw from an unconfined aquifer (a shallow aquifer that occurs immediately below the ground surface and has no overlying protective layer for protection from potential sources of contamination) of unknown hydraulic conductivity. While the source water assessment rates our wells as being susceptible to microbials, please note that our water is disinfected to ensure that that the finished water delivered into your home meets New York State's drinking water standards for microbial contamination.

The 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 full Source Water Assessment, including a map of the assessment area, is available for review by contacting us at the number provided in this report.

Table of Detected Contaminants NORTH GRANVILLE WATER DISTRICT PWS ID#NY5700121							
Contaminant	Violation Yes/No	Date of Sample	Level Detected	Unit Measurement	MCLG	Regulatory Limit (MCL, TT or AL)	Likely source of Contamination
Microbiological Contaminants							
Turbidity (Highest value from 4/4/18)	N	Daily	0.13 ¹	NTU	N/A	TT=5.0	Soil Run-off
March 2018			100%			TT=95% of samples <1.0 NTU	
Inorganic Contaminants							
Arsenic	N	8/20/18	2.5	ppb	N/A	10	Erosion of natural deposits.
Barium	N	8/20/18	78.9	ppb	2000	2000	Erosion of natural deposits
Chloride	N	8/3/17	38	ppm	N/A	250	Geology ;naturally occurring
Color	N	8/3/17	5	units	N/A	15	Suspended and dissolved materials; naturally occurring organic compounds such as tannins
Copper Range of values	N	6/13/18-6/14/18	0.89 ² 0.10-1.03	ppb	1.3	AL=1.3	Corrosion of household plumbing systems
Iron	N	8/3/17	24.0	ppb	N/A	300	Naturally occurring
Lead Range of values	N	6/13/18-6/14/18	3 ³ ND-3	ppb	0	AL=15	Corrosion of household plumbing systems
Manganese	N	8/3/17	86.5	ppb	N/A	300	Naturally occurring
Nickel	N	8/20/18	0.75	ppb	N/A	N/A	Naturally occurring
Nitrate	N	8/20/18	0.279	ppm	10	10	
Sodium	N	8/3/17	49.4	ppm	N/A	N/A ⁴	Road salt; geology
Sulfate	N	8/3/17	25.5	ppm	N/A	250	Naturally occurring
Zinc	N	8/3/17	29.5	ppb	N/A	500	Galvanized pipe
Disinfection Byproducts							
Stage 2 Haloacetic Acids	N	8/20/18	79.0	ppb	N/A	60	By-product of drinking water chlorination
		12/6/18	40.0				
Stage 2 Trihalomethanes	N	8/20/18	66.3	ppb	0	80	By-product of drinking water chlorination
		12/6/18	55.0				
Chlorine Residual (average) range	N	Daily	0.9 0.5-1.70	ppm	MRDLG	MRDL	Used in the treatment and disinfection of drinking water
					N/A	4	
<p>Notes: 1–Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Level detected represents the highest level detected. The regulations also require that 95% of the turbidity samples collected have measurements below 1.0 NTU. 2 – The level presented represents the 90th percentile of 20 test sites. 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, 20 samples were collected at your water system and the 90th percentile value was the 18th sample with the second highest value. The action level for copper was not exceeded at any of the sites tested. 3 – The level presented represents the 90th percentile of the 20 samples collected. The action level for lead was not exceeded at any of the sites tested. 4 – Water containing more than 20 ppm should not be consumed by persons on severely restricted sodium diets.</p> <p>Glossary <i>Non-Detects (ND)</i> - laboratory analysis indicates that the constituent is not present. <i>Action Level</i> - the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow. <i>90th Percentile Value</i>- The values reported for lead and copper represent the 90th percentile. 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 and copper values detected at your water system <i>Parts per million (ppm) or Milligrams per liter (mg/l)</i> - one part per million corresponds to one minute in two years or a single penny in \$10,000. <i>Parts per billion (ppb) or Micrograms per liter</i> - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000. <i>Maximum Contaminant Level</i> - The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. <i>Maximum Contaminant Level Goal</i> The "Goal" (MCLG) is 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. <i>Maximum Residual Disinfectant Level (MRDL)</i>: 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. <i>Maximum Residual Disinfectant Level Goal (MRDLG)</i>: 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. <i>Locational Running Annual Average (LRAA)</i> - The LRAA is calculated by taking the average of the four most recent samples collected at each N/A-Not applicable</p>							