Annual Drinking Water Quality Report for 2021 Northwood Water Company, Incorporated 100 Madison Drive Suite 2, Ballston Spa, NY 12020 Public Water Supply ID#4521804 (Laural Acres)

INTRODUCTION

To comply with New York State Health Department regulations, Northwood Water Company 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. A copy of this Annual Report is also available on our web page at www.northwoodwater.com

If you have any questions about this report or concerning your drinking water, please contact Bill Barile, Water Treatment Plant Operator, at (518) 371-7942 during regular business hours. You may also leave a message at the business office phone (518) 885-2960. In the event of a water emergency, please call (518) 889-9111.

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 Departments 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 approximately 1300 people through 407 service connections. Our service territory includes several residential subdivisions and several residences between them along Van Aernem Road, Brownell Road and East High Street. The subdivisions served are: Pine North, Scott Acres, Phillip Ridge, Laural Acres, Brownell Farms, Edgewood Estates, Meadowview Estates, and Century Farms.

Our water sources are groundwater wells: groundwater drawn from three drilled wells and one gravel-packed well. The wells are relatively shallow at about 40 feet deep and are located in the Laural Acres Subdivision. The water is disinfected with sodium hypochlorite prior to entering two storage tanks that hold a total of 141,300-gallons. Water from the storage tanks is pumped directly to the distribution system.

The New York State Department of Health completed a source water assessment for this supply based on available information. The 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. For ground water sources, the assessment evaluated risk of contamination in two zones: an inner zone, of smaller radius around the well is considered more sensitive; and an outer zone, extending either 1 mile from the well, or as limited by a hydrogeologic barrier (such as a change in soil or rock layer or the presence of a water body). The higher of these ratings was used as the overall rating for the source. The susceptibility rating is an estimate of the potential for contaminated. See the 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 water source as having an elevated susceptibility to microbial contamination. This rating is due primarily to close proximity of the wells to a septic system. While the source water assessment rates our wells as being susceptible to microbials, 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 microbial contamination. Public notification is required if regulated contaminants are found in our water, and increased monitoring may result.

The State Health Department will use this information to direct future source water protection activities. These may include water quality monitoring, resource management, planning, and educational programs. A copy of the assessment can be obtained by contacting us as noted in the, "Introduction" section of this document.

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, disinfection by-products, radiological 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, 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 New York State Department of Health, Glens Falls District Office at (518) 793-3893.

Table of Detected Contaminants												
Contaminant	Violation Yes/No	Date of Sample	Level Detected Avg/Max (Range)	Unit Measure- ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination					
Total Coliform	No	2 samples Monthly	24 samples All Negative	NA	NA	NONE	Naturally Present in the environment					
Inorganic Contaminants:												
Barium	No	11/2/20	0.0220	mg/l	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.					
Copper	No	9/16- 18/20	0.0837^{1} (0.0246- 0.130) ²	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.					
Lead	No	9/16- 18/20	$(ND-0.0022)^2$	mg/l	0	AL=0.015	Corrosion of household plumbing systems; erosion of natural deposits.					
Fluoride	No	11/2/20	0.0304	mg/L	N/A	MCL = 2.2	Erosion of natural deposits; Discharge from fertilizer and aluminum factories					
Barium	No	11/2/20	0.00260	mg/L	2	MCL = 2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.					
Sodium	No	11/10/21	120	Mg/l	N/A	See Note 3	Naturally occurring; road salt; water softeners; animal waste					
Chloride	No	11/10/21	200	Mg/l	N/A	MCL =250	Naturally occurring. Indicative of road salt contamination; disinfection by product					
Sulfate	No	11/10/21	16	Mg/l	N/A	MCL =250	Erosion of natural deposits					
Nitrate (as Nitrogen)	No	Monthly	Avg. 7.1 (4.10-8.23) ²	mg/L	N/A	MCL=10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.					
Disinfection By- products:												
Total Trihalomethanes (TTHMs)	No	8/27/21	24.0	Ug/L	N/A	80 = MCL	By-product of drinking (TTHM's) TTHM's are formed when source water contains large amounts of organic matter.					
Total Haloacetic Acids (HAA5s)	No	8/27/21	6.9	Ug/l	N/A	60 = MCL	By-product of drinking water disinfection needed to kill harmful organisms.					

Table of Detected Contaminants											
	Violation	Date of	Level Detected Avg/Max	Unit Measure-		Regulatory Limit	Likely Source of				
Contaminant	Yes/No	Sample	(Range)	ment	MCLG	(MCL, TT or AL)	Contamination				
(PFOA) Perfluorooctanoic acid	No	Quarter ly	1Q 9.25 2Q 8.6 3Q 7.6 4Q 8.6 Avg. 8.51	Ng/l	N/A	10 ng/l(NYS) 70ng/l(EPA)	released into the environment from widespread use in commercial and industrial applications				
(PFOS) Perfluorooctane- sulfonic acid	No	Quarter ly	1Q ND 2Q 0.58 3Q ND 4Q ND Avg. 0.0145	Ng/l	N/A	10 ng/l(NYS) 70ng/l(EPA)	Released into the environment from widespread use in commercial and industrial applications.				
(PFBA) Perfluorobutanoic Acid	No	Quarte rly	5.1	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				
(PFBS) Perfluorobutane- Sulfonic Acid	No	Quarte rly	7.6	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				
(PFPeA) Perfluoropent- Anoic Acid	No	Quarte rly	9.0	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				
(PFHxA) Perfluorohex- Anoic Acid	No	Quarte rly	9.5	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				
(PFHxS) Perfluorohexane- sulfonic Acid	No	Quarte rly	1.8	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				
(PFHpA) Perfluorohept- Anoic Acid	No	Quarte rly	3.3	Ng/l	N/A	50 ug/l	Released into the environment from widespread use in commercial and industrial applications.				

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 values detected at your water system. In this case, 10 samples were collected at your water system and the 90th percentile copper value was the second highest value of 0.0837 mg/l. The action level for copper and for lead was not exceeded at any of the sites tested

2 – Range of results

3 - Water containing more than 20 mg/l of sodium should not be used for drinking by people on severely restricted sodium diets. Water containing more than 270 mg/l of sodium should not be used for drinking by people on moderately restricted sodium diets.

Definitions:

LA: Laural Acres water source, production well No.'s 1, 2, 3, & 4

WTP: Water treatment plant.

NYSDOH: New York State Department of Health.

<u>Maximum Contaminant Level (MCL)</u>: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.

<u>Maximum Contaminant Level Goal (MCLG)</u>: 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

<u>Action Level (AL)</u>: The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

<u>Milligrams per liter (mg/l)</u>: Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm). <u>Micrograms per liter (ug/l or mc/l)</u>: Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb). <u>Nanograms per liter (ng/l)</u> Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion-ppt) <u>Non-Detects (ND)</u>: Laboratory analysis indicates that the constituent is not present. <u>Not-Available (N/A)</u>: Not available or Non required <u>Picocuries per liter (pCi/L)</u>: A measure of the radioactivity in water.

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no MCL violations for 2021. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below the level allowed by the State.

INFORMATION ON PERFLUORONATED CONTAMINANTS INCLUDING PFOA & PFOS

In 2021 a new sampling requirement for PFOA's, PFOS's and 1.4 Dioxane was put into effect for NYSDOH. Northwood water followed all testing guidelines provided by NYSDOH. Those results are provided in the prior chart. These tests have shown that PFOA have been detected in our systems water. However, the levels are below the NYSDOH MCL. PFOA and PFOS are released into environment by a wide spread of chemical and commercial uses, as well as products used in our homes.

PFOA's and PFOS's in drinking water caused a range of health effects when studied in animals at high exposure levels. The most consistent findings were effects on the liver and immune system and impaired fetal growth and development. Studies of high-level exposures to PFOA in people provide evidence that some of the health effects seen in animals may also occur in humans. The United States Environmental Protection Agency considers PFOA as having suggestive evidence for causing cancer based on studies of lifetime exposure to high levels of PFOA in animals.

In May of 2016 the EPA issued a combined lifetime health advisory level at 70 parts per trillion (ng/l) for both PFOA and PFOS. The EPA advisory level provides a margin of protection against adverse health effects from a lifetime of exposure to PFOS and PFOA from drinking water. The difference between the advisory level and the level that might cause health effects is called the "margin of protection." The margin of protection includes the most sensitive populations: fetuses during pregnancy and breastfed infants. Heath advisory levels are set at much lower levels than those that might cause health effects in individuals.

In July of 2019 New York State set the limit for PFOA and PFOS at 10 ng/l. This limit of 10 ng/l is well below the EPA limit of 70 ng/l for PFOA and PFOS, making it the most stringent limit for PFOA and PFOS in the United States. The MCL for other perfluorinated contaminants, which our system had some detections, is set at 50 parts per billion (ug/l).

INFORMATION ON NITRATE

Our Nitrate blend was below the MCL of 10 mg/l for all of 2021. The "Blended Water" is the water that is being sent out to the public. Nitrate has historically been elevated; therefore, we are required to present the following information on nitrate in drinking water: The Nitrate blend for 2021 averaged a level of 7.10 mg/l for the Laural Acres source blend. We blend our sources to reduce nitrate levels. A nitrate level of 16.0 mg/l was detected in one of our sources during the month of June and the blended sample collected on that same date was 4.10 mg/l, which was below the MCL.

"Nitrate in drinking water at levels above 10 mg/l is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider."

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. Northwood Water Company 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*

INFORMATION ON SODIUM

Water containing more than 20 mg/L of Sodium should not be used by people on severely restricted sodium diets. Water containing more than 270 mg/L of Sodium should not be used by people on moderately restricted sodium diets.

(NYS Part 5 subpart 5.1)

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2021, Northwood Water was in compliance with all applicable New York State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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 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. 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.

Northwood Water Company 100 Madison Drive, Suite 2 Ballston Spa, New York 12020