

## *Annual Drinking Water Quality Report for 2010*

*Northwood Water Company, Incorporated  
100 Madison Drive Suite 2, Ballston Spa, NY 12020  
Public Water Supply ID#4521804 (Laural Acres)*

### **INTRODUCTION**

To comply with State 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.

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 an 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 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 approximately 1280 people through 399 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, Schuyler 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 pumped from the wells into two storage tanks that hold a total of 141,300-gallons. The water is disinfected with sodium hypochlorite as it is transferred to the storage tank. The water is then drawn from the concrete tanks by pumps that transfer it into the distribution system under pressure.

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 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 contamination of the source water, it does not mean that the water delivered to customers is, or will become 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, 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, 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.

<b>Table of Detected Contaminants</b>							
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
<b>Microbiological Contaminants:</b>							
Total Coliform – Finished Water	No	Monthly	0	100 ml	0	MCL=any positive sample	Naturally present in the environment.
<b>Inorganic Contaminants:</b>							
Barium	No	5/17/05	0.028 @ LA	mg/l	2	MCL=2	Discharge of drilling wastes; Discharge from metal refineries; erosion of natural deposits.
Chloride	No	8/3/05	209 @ LA <sup>2</sup>	mg/l	n/a	MCL=250	Naturally occurring; Indicative of road salt contamination; disinfection by-product.
Copper	No	9/22/08	0.156 (0.02 to 0.209)	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride	No	8/3/05 5/17/05	0.64 @ LA <sup>2</sup> ND @ LA <sup>3</sup>	mg/l	n/a	MCL=2.2	Erosion of natural deposits.
Lead	No	9/22/08	0.0013 (0.001 to 0.027)	mg/l	0.015	AL=0.015	Corrosion of household plumbing systems; erosion of natural deposits.
Nitrate (as Nitrogen)	No	Monthly @ LA	Avg.: 5.12 (3.89 to 8.34)	mg/l	n/a	MCL=10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.

**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
Sodium	No	8/3/05	75.8 @ LA <sup>2</sup>	mg/l	n/a	None	Naturally occurring; road salt; water softeners; animal waste.
Sulfate	No	8/3/05	20 @ LA <sup>2</sup>	mg/l	n/a	MCL=250	Erosion of natural deposits.
Zinc	No	8/3/05	0.014 @ LA <sup>2</sup>	mg/l	n/a	MCL=5	Erosion of natural deposits; Mining wastes.
<b>Physical Characteristics:</b>							
Alkalinity, Total (as CaCO <sub>3</sub> )	No	8/3/05	225 @ LA <sup>2</sup>	mg/l	n/a	n/a	Erosion of natural deposits.
Total Dissolved Solids (TDS)	No	8/3/05	682 @ LA <sup>2</sup>	mg/l	n/a	n/a	Erosion of natural deposits.
<b>Disinfection By-products:</b>							
Chlorine Residual	No	Daily @ LA	Avg.: 0.8	mg/l	n/a	4	By-product of drinking water disinfection at treatment plants using hypochlorite solutions.
Total Haloacetic Acids Dibromoacetic Acid Dichloroacetic Acid	No	8/4/09	8.3 @ 2 Timber Tr. 2.4 5.9	ug/l	n/a	60 (MCL)	By-product of drinking water disinfection needed to kill harmful organisms.
Total Trihalomethanes TTHMs bromo - dichloromethane bromoform chloroform dibromo- chloromethane	No	8/4/09	20.0 @ 2 Timber Tr. 7.3 1.1 5.9 5.7	ug/l	n/a	80 (MCL)	By-product of drinking water disinfection needed to kill harmful organisms. TTHM's are formed when source water contains large amounts of organic matter.
<b>Radiological Contaminants:</b>							
Gross Alpha	No	3/9/10	± 1.25 @ LA <sup>2</sup>	pCi/l	0	MCL=15	Erosion of natural deposits.
Radium 226	No	2/22/08	0.02 @ LA <sup>2</sup>	pCi/l	0	MCL=5	Erosion of natural deposits.
Radium 228	No	2008	1.4 @ LA <sup>2</sup>	pCi/l	0	MCL=5	Erosion of natural deposits.

**Notes:**

1 – The level presented 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 a distribution that is equal to or below it. The 90<sup>th</sup> percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, 10 samples were collected at your water system and the 90<sup>th</sup> percentile value was the second highest value of 0.156 at 101 Drummond Drive (the highest value was 0.209 mg/l at 7 Century Drive). The action level for copper was not exceeded at any of the sites tested.

2-Test results are for the gravel-packed well in the same well field and aquifer as the other three Laural Acres Production wells.

3-Sampling by NYSDOH personnel on 10/24/08 and subsequent laboratory analysis by the NYSDOH laboratory did not detect the presence of Fluoride.

**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.

**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.

**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 or mc/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.

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

As you can see by the table, our system had no MCL 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.

Nitrate was detected below the MCL of 10 mg/l; however, it was detected at an average level of 5.12 mg/l for the Loral Acres source which is greater than one-half of the MCL. Therefore, we are required to present the following information on nitrate in drinking water:

*“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.”*

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

During 2010, our system was in compliance with applicable 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 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 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.

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