



Tilton & Northfield Aqueduct Co., Inc.

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2019 Water Quality Report

Since 1999 all Public Water Systems have been required to provide an annual water quality report to their customers. This report must detail the quality of your drinking water, where it comes from, and where you can get more information. It must list all regulated drinking water contaminants found in your water and compare them to standard limits.

Your drinking water meets or exceeds all state and federal standards for drinking water. The information enclosed is based on the testing conducted in 2018. Testing occurs every month, every year, based on a schedule determined by the NHDES.

Our focus is on replacing, upgrading and safeguarding our water lines and services. We are committed to your water quality and to you, our District users.



How Can I Get Involved

For information about your drinking water, please call the Tilton & Northfield Aqueduct Co., Inc. at 286-4213. Although we do not have specific dates for public participation events or meetings, please feel free to contact us with any questions you may have. Commissioner's meetings are usually the 2nd Monday of the month at 7 pm at the office at 14 Academy Street. Meeting agendas are posted in Tilton and Northfield. The annual meeting is held the second Tuesday in April, at 7:00 pm and is posted in the Towns and published in the paper.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants 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 about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Why are contaminants in my water?

Drinking water, including bottled water, may reasonably be 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 Environment Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Source Water Assessment Summary

New Hampshire Department of Environmental Services (NHDES) prepared drinking water source assessment reports for all public water systems between 2000 and 2003 in an effort to assess the vulnerability of each of the State's public water supply sources. Included in the report is a map of each source water protection area, a list of potential and known contamination sources and a summary of available protection options.

The Tilton-Northfield Water District has two (2) gravel packed wells located in Northfield, and had a Source Water Assessment conducted by the New Hampshire Department of Environmental Services 01/16/2001 and the results of the assessment prepared on 01/16/2001 are noted below. The complete Assessment Report is available for review at 14 Academy Street, Tilton. For more information call the Tilton-Northfield Water District at 286-4213 or visit the DES Drinking Water Source Assessment website at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap.htm> – choose Northfield from the dropdown menu under Viewing an Assessment Table by Town.

The Source Water Assessment summary shows source 2351010-003 GPW had 2 HIGHS: (1) the source is within 1,000 ft. of highway and (2) the agricultural land cover over the aquifer is over 10%. On source 2351010-004 GPW there were 3 HIGHS: (1) the source is within 1,000 feet of highway and (2) the agricultural land cover over the aquifer is over 10% and (3) there are 10 or more septic systems and/or any sewer lines within 500 ft. of the well head protection area (WHPA) or there is a high density of septic systems (more than 30) in the WHPA. We also had one moderate ranking for each well that indicates there is at least 1 registered pesticide applicator in the WHPA but not within 500 Ft. of wellheads. All other assessments were considered LOW.

Source Water Assessment Summary Continued

Note: This information is 16 years old and includes information that was current at the time the report was completed. Therefore, some of the ratings might be different if updated to reflect current information. At the present time, DES has no plans to update this data.

Description of drinking water contaminants:

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 activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Radon: Radon is a radioactive gas that you can't see, taste or smell. It can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. It is a known human carcinogen. Breathing radon can lead to lung cancer. Drinking water containing radon may cause an increased risk of stomach cancer. Presently the EPA is reviewing a standard for radon in water.

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. This water system is responsible for high quality drinking water, but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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://water.epa.gov/drink/info/lead/index.cfm>.

Important Drinking Water Definitions	
Term	Definition
AGQS	AGQS Ambient Groundwater Quality Standard. The maximum concentration levels for contaminants in groundwater that are established under RSA 485-C, the Groundwater Protection Act.
AL	AL Action Level. The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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 contaminants.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

Unit Descriptions	
Term	Definition
BDL	Below Detection Limit
ppm or mg/L or ug/L	ppm: parts per million, or milligrams per liter (mg/L), or micrograms per liter (ug/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.
RAA	Running Annual Average
UCMR	Unregulated Contaminant Monitoring Rule

Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

<u>Contaminants</u>	<u>MCLG or MRDLG</u>	<u>MCL, TT, or MRDL</u>	<u>Your Water Well #1-Well #2</u>		<u>Sample Date</u>	<u>Violation</u>	<u>Typical Source</u>
Microbiological Contaminants							
Total Coliform Bacteria (negative)			No Positive Samples for 2018			No	Naturally present in the environment.
Inorganic Contaminants							
			Well #1	Well #2			
Barium (ppm)	2	2	.0106	.0013	2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Hardness			52.7	35.9	2018	No	Erosion of naturally deposited minerals. Water from both wells would fall into the soft water classification.
Iron		0.3	.384	.271	2018	No	Erosion of naturally deposited minerals.
Manganese		0.05	.1931	.3086	2018	No	Erosion of naturally deposited minerals.
Total Trihalomethanes			Site 321	Site 322			
		80	11.0 ug/L	3.6 ug/L	2016	No	Byproduct of drinking water disinfection with chlorine.
Inorganic Contaminants							
			Well #1	Well #2			
Nitrate [measured as Nitrogen] (ppm)	10	10	0.70	.24	2018	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium (optional) (ppm)		250	42.3	40.5	2018	No	Erosion of natural deposits; Leaching.
Radioactive Contaminants							
Radium (combined 226/228) (pCi/L)	0	5	.01	.03	2015	No	Erosion of naturally deposited minerals.
Inorganic Contaminants							
<u>Contaminants</u>	<u>MCLG</u>	<u>AL</u>	<u>90th Percentile</u>	<u>Sam Date</u>	<u># Samples Exceeding AL</u>	<u>Violation</u>	<u>Typical Source</u>
Copper-action level at consumer taps (ppm)	1.3	1.3	0.133	2018	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead - action level at consumer taps (ppb)	0	15	1	2018	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Violations							
<u>Violation Description</u>	<u>Contaminant or Rule</u>		<u>Begin Date</u>	<u>Return to Compliance</u>	<u>Explanation</u>		
DBP M/R	Total Haloacetic Acids		7/1/2018	1/10/2019	Monitoring taken in timely manner but lab late in reporting.		
DBP M/R	Total Trihalomethanes		7/1/2018	1/10/2019	Monitoring taken in timely manner but lab late in reporting.		
DBP M/R	Chlorine		7/1/2018	1/10/2019	Late in submitting.		

DBP M/R = Disinfection By Products/Monitoring & Reporting

Regarding Tilton-Northfield Water District all testing results are well within the parameters for safe/quality drinking water in the State of New Hampshire as reflected in the updated tables above.

The District started off January 2018 with a failed well pump. Thankfully Maher Service came right in, replaced the pump and it was covered under warranty. In the spring Maher Service was back to do a semiannual cleaning of both wells. A safe and effective cleaning process is used, Pantomite an NSF Certified Cleaning Agent. We also installed a new peristaltic chemical feed pump.

We continue to do water meter replacements throughout the District. This ensures proper tracking of the water being used and assures the condition of the backflow should it need repair or installation. This is done at the same time as the meter replacement. Both water meters and backflow devices are required at all service connections.

Along with continued maintenance of all the facilities there were water breaks and service lines that needed repair. Deer Street, Winter Street, Cofran Ave., and Cedar Street had water breaks.

1,500 ft. of new water main was added on Cofran Ave. in Northfield replacing aging 2" galvanized pipe with an increase in size to 6" PVC. Another hydrant was added to provide much improved fire protection as well as water quality.

Two new services were added to the system: Sealite in Tilton and Granite State Credit Union on Route #140 in Tilton.

Late in the fall 3 new hydrants were added on to the system on West Main Street in Tilton going from Tilton Public Works to the intersection of Clark Road and Route #3. This helped to clean up this section of water main during hydrant flushing and give increased fire protection in that area.

We would like to welcome Charlene Smith to our office staff this year. Sandie Santamaria has retired, and Cathy Deegan is back part time. Roland Seymour has retired as Commissioner. He has been with us since the inception of the District and his many years of service are appreciated. Scott Davis has graciously stepped in to fill his position to the end of his term.

The Tilton-Northfield Water District works diligently to improve, maintain and keep the water system safe for all our customers, now and for the future. The Water District would like to thank you for your support.

John P. Chase, Superintendent

Commissioners:

Sean T. Chandler, Chairman

Arthur N. Demass

Scott W. Davis

For more information regarding your Water District, please note that the public meetings are regularly scheduled monthly at the TNAC office. All meeting times and dates are posted at least 72 hours before the meeting at Tilton Town Hall, Northfield Town Hall and in the front window of the TNAC office (14 Academy St.). Please feel free to call the office 286-4213 if you would like to be informed of the next meeting.

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**Superintendent: John Chase
Water Works Operator - Treatment Grade I
Water Works Operator - Distribution Grade II**

**Field Foreman/Water Operator: Doug McPhail II
Water Works Operator - Treatment Grade I
Water Works Operator - Distribution Grade II**

For after-hours emergencies please call the office phone and select 2 for an emergency, an employee will be sent out to assist you. For after-hours payments please use the mail slot at 14 Academy Street.