

14 Academy Street

Tilton, New Hampshire 03276

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# 2018 Water Quality Report

We would like to take this opportunity to assure our customers that we are doing our best to maintain the highest quality drinking water for our users. We feel that safe drinking water is an invaluable asset to our communities. We were fortunate that we were not affected by the drought conditions in 2016 and will be closely monitoring our water supply as we approach another summer of higher than usual temperatures in 2017. We want you to be confident that we are working to preserve and maintaining the quality of your drinking water.

We are focusing on replacing, upgrading and safeguarding our water lines and services without raising the cost of the water service. This Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from and where you can get more information.



#### **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 2<sup>nd</sup> 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 contaminates 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						
<u>Term</u>	<u>Definition</u>					
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					
<u>Term</u>	<u>Definition</u>				
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.

Contaminants	MCLG or MRDLO	TT, or	· W	our ater I-Well #2	Sample Date	Violation	Typical Source		
Microbiological Contam									
Total Coliform Bacteria	(negative)	1	No Positive Sa	imples for 20	16	No	Naturally present in the environment.		
Inorganic Contaminants		1	Well #1	Well #2	10				
Arsenic	0	0.01	ND	ND	2015	No	Erosion of natural deposits; run off from orchards; runoff from glass and electric production wastes.		
Barium (ppm)	2	2	.0081	.0073	2015	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits		
Copper	1.3	1.3	0.0104	.0133	2015	No	Erosion of natural deposits; Leaching from wood preservatives		
Hardness			43.7	36.8	2015	No	Erosion of naturally deposited minerals. Water from both wells would fall into the soft water classification.		
Iron		0.3	.296	.155	2015	No	Erosion of naturally deposited minerals.		
Manganese		0.05	.2090	.3091	2015	No	Erosion of naturally deposited minerals.		
<b>Total Trihalomethanes</b>			<b>Site 321</b>	<b>Site 322</b>					
		80	9.3 ug/L	5.9 ug/L	2016	No	Byproduct of drinking water disinfection with chlorine.		
<b>Inorganic Contaminants</b>			Well #1	Well #2					
Nitrate [measured as Nitrogen] (ppm)	10	10	0.55	.12	2017	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits		
Sodium (optional) (ppm)		250	37.3	37.7	2015	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.		
Contaminants  Incurrent Contaminant	MCLG		Your Sam <u>Vater</u> <u>Da</u>	te Exce	mples eeding <u>AL</u>	Exceeds AL	Typical Source		
Inorganic Contaminant Copper-action level at consumer taps (ppm)	1.3	1.3 0	0.232 203	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead - action level at consumer taps (ppb)	0	15	0 20	15	4	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Perfluorinated Compounds/EPA 537			rell #1 Well ND NI		016		By products of manufacturing.		

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 2017 year was a very busy year for the Water District. We began in March this year with the construction of 5 Guys Burgers and Starbucks located off Laconia Road in Tilton adding two new service lines. Then we added new service lines at the Winners Circle Auto and Liberty Utilities Gas Company also located in Tilton this past spring. The Water District welcomes them onto the system.

The Water District then began the replacement of 4,000 feet of water main. Starting on Howard Avenue in Northfield with 850 feet of new eight inch water main then reducing to six inch and going for 650 feet to the end of Luneau Court, adding two new hydrants along the way. Then replacing 500 feet of new two inch water main on Cofran Avenue extension in Northfield. Once these projects were completed the Water District moved on to Tilton to replace 2,000 feet of new eight inch water main on Winter Street. The replacements will greatly improve water quality as well as increase the fire flow capabilities to these areas.

As always there are many other maintenance activities that are done throughout the year like Hydrant Flushing to help maintain a clean water system and to make sure the hydrants are working properly. We also replace old hydrants as needed to bring them up to today's standards.

After being with the Tilton & Northfield Aqueduct Co., Inc. for twenty years I have seen many changes and much growth within the water system. This is a very rewarding job knowing the District strives to make continued improvement to better the Water Districts commitment to its customers for reliable and quality drinking water. The Water District also would like to Congratulate Doug McPhail, one of our field operators, for receiving his Distribution II Water license in May of 2017.

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:

Roland C. Seymour, Chairman

Sean T. Chandler

Arthur N. Demass

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.

Tilton-Northfield Water District Tilton & Northfield Aqueduct Co., Inc.

14 Academy Street Tilton, NH 03276 Phone: 286-4213 Fax: 286-2114

Answering Service: 524-6026

**Superintendent: John Chase** 

Water Works Operator - Treatment Grade I Water Works Operator - Distribution Grade II

Water Operator: Joe Brown

Water Works Operator - Distribution Grade I

Water Operator: Doug McPhail II

Water Works Operator - Treatment Grade I Water Works Operator - Distribution Grade II

For after-hours emergencies please call the answering service and an employee will be sent out to assist you. For after-hours payments please use the mail slot at 14 Academy Street.