

Annual
WATER
QUALITY
REPORT

Reporting Year 2017



Presented By
North Conway Water Precinct

PWS ID#: 0511030

There When You Need Us

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.



Where Does My Water Come From?

The North Conway Water Precinct derives its water from four overburden water supply wells (ground water). Two of these wells are located 1,000 feet West of the 1785 Inn in Intervale (Wells #4 and #5). The other two wells (#3 and 6) are located on the West side of the Saco River, just South of River Road and First Bridge. These wells range in depth from 77 feet to 115 feet, with yields ranging from 800 to 1,300 gallons per minute. These wells are not only the highest capacity wells in New Hampshire, but they are also considered the most pristine and offer exceptional water quality. Last year, we pumped a combined total of 320,486,409 gallons from these four water-supply wells.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 www.epa.gov/safewater/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 pCi/L or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call the U.S. EPA's Radon Hotline at (800) SOS-RADON.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Jason Gagnon, Water Precinct Superintendent, at (603) 356-5382.

Water Treatment Process

The only treatment that is performed on all of our water sources is pH control. An alkaline-based chemical is used to treat the water from an acidic level to slightly basic level of pH, currently 7.4 to 7.6. We do this to control the leaching of metals from piping systems both in the distribution system as well as in household plumbing materials such as lead and copper. No other treatment is done to our water. We do not add any chlorine to our water-supply wells, but we do maintain a chemical feed system in the event that we may need disinfection during an emergency or in the event of contamination.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems.

U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and may also come from gas stations, urban stormwater runoff, and septic systems;

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

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

The NH Department of Environmental Services has prepared a Source Water Assessment Report for our source water, assessing the source's vulnerability to contamination. The result of the assessment, prepared on April 20th and 24th of 2000, is as follows:

- Well #3: Located off River Road, received 1 high-susceptibility rating, 3 medium ratings, and 8 low-susceptibility ratings.
- Well #6 was placed on line in 2011 and has not been rated for the purposes of this report but it would be prudent to say that it is the same as Well #3.
- Wells #4 and 5 Located 1,000 feet West of the 1785 Inn, received 1 high-susceptibility rating, 2 medium ratings, and 9 low-susceptibility ratings.

The complete Assessment Report is available for review at 104 Saw Mill Lane. For more information, call Jason Gagnon at (603) 356-5382 or visit the NH Department of Environmental Services Drinking Water Source Water Assessment Program Web site at www.des.state.nh.us/dwspp.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet every other Wednesday at 10 a.m. at the Precinct office located at 104 Saw Mill Lane, North Conway. In addition, for customer convenience, we hold quarterly night meetings at 7 p.m. For specific information, visit our Web site at www.ncwphn.org.

Please note that we are now hosting our annual water quality reports on line, in lieu of general mailing. For those of you who do not have computer access or for those who would like to receive a printed copy, call us at (603) 356-5382, and we will be happy to mail you a copy.

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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone 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/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The tables on the following pages show only those contaminants that were detected in the water; our goal is to keep all parameters below their respective maximum allowed levels. The State requires us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Definitions

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

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. Secondary MCLs (SMCLs)

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.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

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.

MRDLG (Maximum Residual Disinfectant 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water, such as appearance, taste, and odor.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	SAMPLE YEAR	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW – HIGH	VIOLATION	TYPICAL SOURCE	HEALTH EFFECTS OF CONTAMINANT
Compliance Gross Alpha (pCi / L)	2012	15	0	0.7	ND – 0.7	NO	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation know as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Asbestos (MFL)	2013	7	7	0.19	ND – 0.19	NO	Decay of asbestos cement water mains; erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	2017	2	2	0.0037	0.0025 – 0.0037	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Combined Radium 226 + 228 (pCi / L)	2017	5	0	ND	N/A	NO	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Fluoride ¹ (ppm)	2017	4	4	0.85	0.62 – 0.85	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children’s teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Nitrate (ppm)	2017	10	10	0.53	0.25 – 0.53	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill, and if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Radon (pCi / L)	2009	N/A	0	3,400	2,900 – 3,400	NO	Erosion of natural deposits	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.

REGULATED SUBSTANCES - CONTINUED

SUBSTANCE (UNIT OF MEASURE)	SAMPLE YEAR	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW – HIGH	VIOLATION	TYPICAL SOURCE	HEALTH EFFECTS OF CONTAMINANT
Uranium (ppb)	2012	30	0	0.5	N/A	NO	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.

Tap water samples collected for lead and copper analyses from sample sites throughout the community:

SUBSTANCE (UNIT OF MEASURE)	SAMPLE YEAR	ACTION LEVEL	MCLG [MRDLG]	AMOUNT DETECTED (90 TH PERCENTILE)	SITES ABOVE ACTION LEVEL / TOTAL SITES	VIOLATION	TYPICAL SOURCE	HEALTH EFFECTS OF CONTAMINANT
Copper (ppm)	2016	1.3	1.3	0.111	0 / 20	NO	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.
Lead (ppm)	2017	15	0	4.2	0 / 20	NO	Corrosion of household plumbing systems, erosion of natural deposits	(15 ppb in more than 5%) Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home’s plumbing. If you are concerned about elevated lead levels in your home’s water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791). (above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

ADDITIONAL TESTS, SECONDARY MCLs, & UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	SAMPLE YEAR	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW – HIGH	VIOLATION	TYPICAL SOURCE	SPECIFIC CRITERIA AND REASON FOR MONITORING
Aluminum (ppb)	2012	200	N/A	60	0 – 60	NO	Erosion of natural deposits; Residual from some surface water treatment processes	May impart some color to water. May pose a risk for those on dialysis.
Chloride (ppm)	2017	250	N/A	17	13 - 17	NO	Runoff from winter storm de-icing salt; Erosion of natural deposits	May impart a salty taste to water.
Copper (ppm)	2017	1.0	N/A	0.72	0.002 – 0.72	NO	Corrosion of household plumbing systems; Erosion of natural deposits	May cause blue-green staining of plumbing fixtures. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.
Manganese (ppb)	2017	50	N/A	3.2	1.6 – 3.2	NO	Leaching/Erosion from natural deposits	May cause black staining of plumbing fixtures or impart a bitter metallic taste to water. Manganese is an essential nutrient, but some people water containing manganese in excess of the action level could suffer neurological problems, including affecting learning and behavior in infants.
pH (Units)	2017	6.5 – 8.5	N/A	7.02	6.55 – 7.42	NO	Naturally occurring	Low pH may cause a bitter metallic taste and corrosion of metal pipes/fixtures. High pH may cause water to have a slippery feel, soda taste, and leave mineral deposits.
Sulfate (ppm)	2017	250	N/A	4.0	0.4 – 4.0	NO	Runoff / leaching from natural deposits; Industrial wastes	May impart a salty taste to water. May have a laxative effect on people unaccustomed to drinking water with sulfate present in high levels.
Zinc (ppm)	2017	5	N/A	0.398	0.012 – 0.398	NO	Runoff / leaching from natural deposits; Industrial wastes	May impart a metallic taste to the water.
Nickel (ppm)	2017	N/A	N/A	0.0056	ND - 0.0056	NO	Naturally occurring	Long-term exposure has been linked to decreased body weight, heart & liver damage, and dermatitis.
Sodium (ppm)	2017	N/A	N/A	24.3	14.0 – 24.3	NO	Runoff from winter storm de-icing salt; Erosion of natural deposits	May impart a salty taste to water.