



Gorham Water & Sewer Department 2015 Water Quality Report for Our Customers

We Want You to Know About Your Drinking Water

If you have any questions about this report please call us at 466-3302

Your Water is Safe to Drink

The Gorham Water & Sewer Department is proud of the fine drinking water it provides 24 hours a day, 365 days a year. We are pleased to be reporting the results of our 2015 annual water testing directly to our customers so that you will know about your drinking water first hand. We are happy to show you how we have surpassed water quality standards. The Gorham Water & Sewer Department will notify you immediately if there is reason for concern about your water.

We encourage public interest and participation in our community's decisions affecting drinking water. **Regular meetings of the Water and Sewer Commission occur on Monday**, at the Water & Sewer Department office, 8 Main St., at 4:00 PM unless otherwise posted. The Public is welcome. The Commissioners are Lee F. Carroll, Roger G. Goulet, and Theodore A. Miller.

In addition to water quality test results, this report will provide information about the water system such as:

- Where your water comes from
- How it is treated
- Improvements being made to the water system
- Other issues that affect the water you drink

Your Drinking Water Source

What is the source of your water? Surface water from the 4,000-acre town owned watershed flows into the Ice Gulch and Perkins Brook dams. From there it flows by gravity to the Jimtown Water Filtration Plant where the sources are then blended and filtered by the slow sand treatment process. The water is then disinfected with Sodium Hypochlorite and the pH is raised with Sodium Hydroxide. Sodium Bicarbonate (baking soda) is also added as a corrosion inhibitor to minimize the pick-up of lead and copper from household plumbing into the tap water. Chlorine residual and pH are continuously monitored to assure optimum conditions. From there it flows by gravity to the distribution system. On

occasion, primarily during drought conditions, ground water is pumped from Well #2 and blended with our surface water supply. Well #1 will be used primarily as an emergency source.

What You Should Know About Your Drinking Water

The sources of drinking water (both tap and bottled water) include lakes, rivers, streams, springs, and wells. Water by its very nature tends to dissolve and erode the materials in its path as it travels over land or through the ground. As a result, naturally occurring substances as well as contaminants resulting from human activity may be present in our source water waters. These contaminants may include:

- Microbes, such as bacteria, protozoa, and viruses, which may come from septic systems, sewerage treatment plants, livestock, and wildlife. (examples: E.coli, Giardia, Cryptosporidium, Hepatitis A).
- Inorganic chemicals, such as salts and metals, which can be naturally occurring or may result from storm water runoff, industrial or domestic wastewater, and farming (examples: arsenic, phosphates).
- Volatile Organic Compounds and Synthetic Organic Compounds, which originate from industrial discharges, agriculture, gas stations, storm water runoff, residential uses, and septic systems (examples: MtBE, pesticides, herbicides).
- Radioactive contaminants, which can be naturally occurring or may be the result of oil or gas production and mining activities (example: radon).

Bottled Water Quality Is Also Regulated

While the EPA regulates the quality of drinking water provided by Public Water Systems, the United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. These regulations must provide the same protection for the public.

Lead And Copper Monitoring Results

The Town of Gorham conducted its Lead and Copper testing in July of 2015. Ten Gorham residents assisted us by collecting water samples from their homes. Shown in the contaminants table, all results were below the action limit set by the EPA. We are happy to tell you that Gorham remains in compliance with the Safe Drinking Water Act regulations for metals.

We would like all water consumers to know this: 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. The Town of Gorham 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. 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>.

National Drinking Water Standards

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. 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 table above indicates those regulated contaminants that were found in Gorham's water. The table includes the most recent results. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

EPA Reminds Us

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 out advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and with other microbial contaminants are available from the safe drinking water hotline (800-426-4791).

Source Water Protection Plan

The Source Water Protection Plan adopted by the Source Water Protection Committee in 2004 is available for review at the Water & Sewer Department or Town Hall.

Water Quality Summary

The table below shows the results of our water-quality analysis for 2003 thru 2015. Every regulated contaminant that was detected in the water, even in the most minute traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health, the amount detected, the usual sources of such contamination, footnotes explaining our findings and a key to units of measurement. Definitions of MCL and MCLG are important.

SLOW SAND FILTRATION FACILITY AND WELL # 2

Maximum Contaminant Level or MCL: The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal or MCLG: The level of contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety.

DISINFECTION BY-PRODUCTS

| Quarter | Date Tested | Haloacetic Acids (MCL 60) | Trihalomethanes (MCL 80) | |
|---------|-------------|------------------------------|-----------------------------|---|
| 1 | 01-08-15 | 26 | 56 | By-product of drinking water chlorination |
| 2 | 04-06-15 | 19 | 28 | |
| 3 | 07-06-15 | 33 | 69 | |
| 4 | 10-06-15 | 17 | 36 | |

Although we ran many tests, only the listed substances were found.

Turbidity

Turbidity is a measure of cloudiness in the water. Water systems using surface water measure turbidity before and after treatment as an indicator of treatment effectiveness. High turbidity is undesirable because it may interfere with disinfection.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States and can move up through the ground and into the 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 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. Testing is inexpensive and easy. There are simple ways to fix a radon problem that are not too costly. For information on radon, you may visit the EPA website at www.epa.gov/radon/ or contact EPA Region 1 at (888)-372-7341.

Arsenic

At this time arsenic levels in our drinking water remain well below compliance levels, which eliminate the need to construct modifications to comply.

Drinking Water Source Assessment Report

In 2002, the New Hampshire Department of Environmental Services completed the Drinking Water Source Assessment Report for the Gorham Water & Sewer Department water sources. This is part of an effort in which the NHDES is assessing the vulnerability to contamination of each of the State's 3,000 public water sources. The assessment takes into account all readily identifiable land uses within the area that contributes water to sources and is intended to serve as a starting point for source protection.

The results of the assessment are as follows:

- For Ice Gulch, 0 of susceptibility factors were rated high, 0 were rated medium, and 11 were rated low.
- For Perkins Brook, 0 of susceptibility factors were rated high, 0 were rated Medium, and 11 were rated low.
- For Well #2, 0 of susceptibility factors were rated high, 2 were rated medium, and 10 were rated low.

The complete assessment report is available for inspection at the Gorham Water & Sewer Department.

| Contaminant | Date Tested | Unit | MCL | MCLG | Detected Level | Range | Major Sources |
|--|-------------|-------|----------|----------|----------------|----------------|--|
| INORGANIC CONTAMINANTS – Water Treatment Plant and Well #2 | | | | | | | |
| Barium | 10/07/15 | ppm | 2 | 0 | .0060 | | Erosion of Natural Deposits |
| Fluoride | 10/07/15 | ppm | 4 | | 0.34 | | |
| Sodium | 10/07/15 | ppm | 250 | | 10.5 | | By-Product of Drinking Water Treatment Process |
| Sulfate | 10/07/15 | ppm | 250 | | 4.3 | | |
| Nitrate | 10/07/15 | ppm | 10 | 0 | 0.12 | | Run off from Fertilizer use |
| Nitrite | 10/07/15 | ppm | 1 | 0 | ND | | |
| Lead | 07/01/15 | ppm | 0.15 | | .0137 | ND to .0137 | Corrosion of Household Plumbing |
| Copper | 07/01/15 | ppm | 1.3 | | .2515 | .0528 to .2515 | |
| WTP Copper | 10/07/15 | ppm | 1.3 | | 0.0103 | | |
| VOLATILE ORGANIC COMPOUNDS – Water Treatment Plant | | | | | | | |
| Chloroform | 10/07/13 | ppb | none set | | 33 | | By-Product of Drinking Water Chlorination |
| Xylene | 10/07/13 | ppb | 10 | 0 | ND | | |
| SYNTHETIC ORGANIC COMPOUNDS | | | | | | | |
| Bis(2-ethyl-Xyl) phthalate | 10/20/10 | ppb | 6 | | ND | | Agricultural Run Off |
| RADIOLOGICALS – Well #2 | | | | | | | |
| Radon | 10/09/03 | pCi/L | none set | none set | 3600 | | Erosion of Natural Deposits |
| Uranium | 10/16/15 | pCi/L | 20 | | 1 | | |
| Turbidity | 04/21/15 | NTU | 5 | | .041 | .022 to .042 | Soil runoff |
| Key to Table MCL = Maximum Contaminant Level MCLG = Maximum Contaminant Level Goal pCi/l = picocuries per liter (a measure of radioactivity) ppm = parts per million ppb = parts per billion | | | | | | | |