

Water Quality Report – 2010

City of Franklin

What is the source of my drinking water?

Franklin obtains its water from three different groundwater well fields. Each of these well fields consists of gravel-packed wells and a pumping station, which in turn pumps water to a total of five water storage tanks throughout the City. The system serves approximately 2,292 customers and supplies water to 297 fire hydrants.

How can I get involved?

If you have questions about your water system or would like to know about dates and times of public meetings pertaining to such, you may contact Brian Sullivan, Director of Franklin Municipal Services Department at (603) 934-4103, Monday through Friday (except holidays), 7:30 a.m. to 4:30 p.m.

Why are contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of 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 US Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Other information:

With this study, we are pleased to report that Franklin's drinking water meets federal and state requirements. The Franklin Water Department, like all other public drinking water systems in the state, submits to an *ongoing*, rigorous testing program. All sampling is reviewed monthly by the State of New Hampshire Department of Environmental Services (NHDES) Laboratory.

The NHDES has recently performed a Sanitary Survey of the Franklin Water System. A copy can be obtained by calling the Municipal Services Department at (603) 934-4103, Monday through Friday (8:00 a.m. to 4:00 p.m.).

How can we protect our drinking water supply? It is every person's responsibility to dispose of chemicals and other contaminants properly. The City sponsors an annual Household Hazardous Waste Day on the last Saturday of every July. Small amounts of petroleum, pesticides, cleaning chemicals and the like can cause long-term damage to a water supply and result in costly cleanup. Never dump contaminants onto the ground or into storm drains or any body of water. To obtain more information about the water system or to report suspicious or potentially illegal activity, contact the Franklin Municipal Services Department at (603) 934-4103.

Why is my water sometimes brown or rust colored? Iron and Manganese, which are secondary contaminants, are characteristic to the aquifers in much of the Northeast. Unlike primary contaminants, which pose a health risk, secondary contaminants mostly affect the aesthetic quality of water. Therefore, the City continues to treat the water with hexametaphosphate in an effort to reduce the staining these contaminants leave on plumbing fixtures and clothing. The City also makes available, at no cost, a product that will remove most stains from fixtures and clothing. This product is available for pick up at the Municipal Services Department Office at 43 West Bow Street.

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 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/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 (1-800-426-4791).

Definitions:

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

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

MRDLG: Maximum residual disinfectant level goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants (for water systems that use chlorine).

MRDL: Maximum Residual Disinfectant Level, or the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants (for water systems that use chlorine).

Abbreviations:

ppm: parts per million **ppb:** parts per billion **ppt:** parts per trillion **ppq:** parts per quadrillion **pCi/L:** pico curies per liter
NTU: Nephelometric Turbidity Unit **NA –** Not applicable **nd:** not detectable at testing limits **AL:** Action Level
TT: Treatment Technique

Sample Dates: The results for detected contaminants listed below are from the most recent monitoring done in compliance with regulations ending with the year 2009. Results prior to 2009 will include the date the sample was taken. The State of New Hampshire allows water systems to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Thus, some of the data present, though representative, may be more than one year old.

Turbidity: is a measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus, helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

DETECTED WATER QUALITY RESULTS

Contaminant (Units)	Level Detected	MCL	MCLG	Violation YES/NO	Likely Source of Contamination / Health Effects of Contamination
Radioactive Contaminants					
Combined Radium pCi/L 226 & 228	.10 - .70 pCi/L	5	0	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.
Inorganic Contaminants					
Arsenic (ppb)	.001	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. / (5 ppb through 10 ppb) While your drinking water meets EPA’s standard for arsenic, it does contain low levels of arsenic. EPA’s standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects, such as skin damage and circulatory problems. (Above 10 ppm) Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Barium (ppm)	.005	2	2	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.
Copper (ppm)	.05 - .63 ppm	AL = 1.3	1.3	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 (ppb)	1 – 9 ppb	AL = 15	0	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.
Nitrate (as Nitrogen) (ppm)	.08 - 1.1 ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. / (5 ppm through 10 ppm) Nitrate in drinking water at levels above 10 ppm 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. (Above 10 ppm) Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

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 United States 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 can not 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://www.epa.gov/safewater/lead>.

Source Water Assessment Summary:

The NH Department of Environmental Services has prepared a Source Water Assessment Report for the source(s) serving this community's water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on June 4, 1999, are as follows:

GPW # 1 received 1 high, 2 medium and 9 low susceptibility ratings.

GPW # 2 received 2 high, 2 medium and 8 low susceptibility ratings.

GPW # 3 received 2 high, 3 medium and 7 low susceptibility ratings.

GPW # 4 received 4 high, 2 medium and 6 low susceptibility ratings.

The complete Assessment Report is available for review at the Municipal Services Department office at 43 West Bow Street, Franklin, NH. For more information, call (603) 934-4103, or visit NH Department of Environmental Services Drinking Water & Groundwater Bureau web site at www.des.nh.gov/dwgb.

Accomplishments

Water Treatment Facility – Over the past year, the Staff of your Franklin Water Department has been working with our Consulting Engineer, United States Department of Agriculture and the New Hampshire Department of Environmental Services towards construction of our new Water Treatment Plant and associated work on pipeline replacement.

The City received authorization to bid the projects from USDA in May 2010, with work expected to begin in July. Because the projects are valued at 7.2 million dollars and are 50% grant funded by USDA, the City must meet all the necessary requirements associated with the grant / loan program.

This is a very exciting time for the Department as we finally get to resolve the long-standing issue of the effect of iron and manganese on the City's drinking water. The project is due to be complete with the new Treatment Plant fully operational by the summer of 2011.

You will be able to follow the progress of this project, as well as learn more about its benefits to our customers, by visiting the City of Franklin Website at www.Franklinnh.org. A special Website is being set up to enable you to click on "Water" to get to this site.

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