

2016 Consumer Confidence Report



Jaffrey Water Department

PWS EPA ID #1221010

www.townofjaffrey.com

Introduction

Like any responsible public water system, our mission is to deliver the best-quality drinking water and reliable service at the lowest, appropriate cost.)

Aging infrastructure presents challenges to drinking water safety, and continuous improvement is needed to maintain the quality of life we desire for today and for the future.

As reported last year, the Department completed an asset management and planning study funded in part through a grant from the New Hampshire Department of Environmental Services (NHDES) which encompassed expanding the water system inventory; organizing and incorporating the water system geographic system (GIS) data and the Town's existing GIS data into a web-based GIS; updating the water distribution model; and, prioritizing water main improvement projects and a capital spending plan. This year the Department is beginning the first major project by replacing almost 3 miles of aging water main on Main Street and Mountain Road.

While the asset management and planning study will be critical in helping to achieve water conservation goals, other efforts include the Cross Connection and Backflow Testing Program which tested all 107 backflow prevention devices twice per year at 54 local businesses, schools and municipal buildings in 2015.

Through a grant from NHDES, the Department completed another town-wide acoustic leak detection survey of the water distribution system in 2015. This tool assists in our conservation efforts by identifying leaks. The Department has continued to make progress in identifying unaccounted water in the distribution system which has averaged 16.5% over the past 4 years.

More information regarding water conservation can be found at www.epa.gov/watersense where tips are provided on saving water and protecting the environment by choosing Water Sense labeled products at home and business and by taking steps to save water every day

These investments along with on-going operation and maintenance costs are supported by water users in Jaffrey and Rindge. When considering the high value we place on water, it is truly a bargain to have water service that protects public health, fights fires, supports businesses and the economy, and provides us with the high-quality of life we enjoy.

In the national news over the past few months, there has been much information concerning lead in drinking water. The Town follows regulatory guidance from the New Hampshire Department of Environmental Services (DES) in implementing **a Lead and Copper Program**. Jaffrey has consistently passed all lead and copper testing over the years and DES now requires Jaffrey to sample for lead and copper once every three (3) years. When sampling for lead and copper, Jaffrey collects samples from twenty-four (24) buildings throughout Jaffrey and Rindge. Lead and copper samples are taken at the customer's taps and not at the water system's source. **Lead and copper are typically not found in the drinking water source but may leach out of the pipes in homes and businesses.** For more information you can refer to the Town's website or the DES website.

What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

NOW IT COMES WITH A
LIST OF INGREDIENTS.



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.

What is the source of my drinking water?

The Jaffrey water system consists of over 38 miles of piping with over 1,500 service connections in Jaffrey and a portion of Rindge. In 2015, an average of 318,390 gallons of water was pumped daily from the four wells (two at Turnpike, one at Contoocook and one at Squantum) and stored in two storage tanks (Bullet and Poole). Water pumped from the

groundwater supply receives three treatment applications: chlorine is added as a precautionary disinfectant, though it is not yet required by the State for our system; sodium hydroxide is added to adjust the pH of the naturally acidic groundwater to minimize the corrosion of metals from piping; and polyphosphate additive is used to minimize the staining effects of naturally occurring manganese in the groundwater. Manganese is naturally found in our water and its effects are aesthetic only.

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. 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/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.

Source Water Assessment Summary:

DES 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 results of the assessment, prepared on December 11, 2000 are noted below.

• **Turnpike Road Well**, four (4) susceptibility factors were rated high, two (2) were rated medium, and (6) were rated low.

• **Contoocook Lake Well**, three (3) susceptibility factors were rated high, three (3) were rated medium, and six (6) were rated low.

Note: This information is over fourteen 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.

The complete Assessment Report is available for review at the Jaffrey Department of Public Works. For more information, call the Department of Public Works at 603-532-6521 or visit the DES Drinking Water Source Assessment website at <http://www.des.nh.gov/organization/divisions/water/dwgb/dwspp/dwsap>

How can I get involved?

For additional information regarding Jaffrey's water system, contact the Department of Public Works, Randall Heglin, Public Works Director at 603-532-6521. Although we do not schedule meetings on a regular basis, the schedule for any public hearing for specific projects may be obtained by calling the Jaffrey DPW at 603-532-6521. There are often updates on water projects presented to the Board of Selectmen at their regular meetings and also on the town's website at <http://www.townofjaffrey.com>

Violations and other information: There were no violations during 2015.

Contaminants Detected:

Sodium: 3.43 – 45.5 ppm (AL 100-250 ppm)

Barium: 0.026 ppm (MCL =2, MCLG =2 ppm)

Nitrate: 1.5 ppm (MCL =10, MCLG =10 ppm)

TTHM: 6.3 – 10.3 ppb (MCL =100/80 ppb)

Combined Radon 226+228: 0.178 – 0.39 pCi/L (MCL =5 pCi/L, MCLG = 0)

Definitions:

Action Level or AL: Ambient groundwater standard

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or MCLG: 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.

Abbreviations:

BDL: Below Detection Limit

mg/L: milligrams per Liter (equivalent to ppm)

ND: Not Detectable at testing limits

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

ug/L: micrograms per Liter (equivalent to ppb)

Drinking Water Contaminants:

Barium: 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.

Nitrate: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits. (5 ppm through 10ppm) 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.

TTHM: By-product of drinking water chlorination. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Combined Radium 226 + 228: 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.