

# Jaffrey Water Department Water Quality Report – 2011 PWS EPA 1221010

The Jaffrey Water Department is pleased to present our Water Quality – Consumer Confidence Report for the calendar year 2011. This report summarizes the water quality results for the Town's drinking water system for the year **2011**. This report, required for all community water systems by the United Sates Environmental Protection Agency (USEPA) and the New Hampshire Department of Environmental Services (NHDES), is to provide consumers of publicly supplied water with a summary of the yearly testing results. To insure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. This report is developed and compiled by the Water Division of the Department of Public Works. The goal of this report is to provide our water customers a better understanding of their water system, provide test results and to allow customers to make more informed decisions regarding water use.

The following report includes results of those parameters that were detected in laboratory analysis. Results of all other tests were negative (nothing detected). Copies of full results may be obtained from the DPW upon request.

As reported during the last couple of years, the Town of Jaffrey contracted with CODE RED, an emergency communication system, which provides timely information in the event of an emergency (including water emergencies) to your home and/or cell phone. We encourage all customers to sign up for this service by visiting the Town website (www.townofjaffrey.com).

As always, our goal is to provide you, our valued customers, with quality water as cost-effectively as possible.

#### About Quality the Water Report

This report is required for all community water systems by the United Sates Environmental Protection Agency (USEPA) in conjunction with the New Hampshire Department of Environmental Services (NHDES) and is to provide consumers of publicly supplied water with a summary of the yearly testing results. To insure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public heath. This report is developed and compiled by the Water Division of the Department of Public Works (DPW). The goal of this report is to provide our water customers a better understanding of their water system, provide test results and to allow customers to make more informed decisions regarding water use.

This report includes results of those parameters that were detected in laboratory analysis. Results of all other tests were negative (nothing detected). Copies of full results may be obtained from the DPW upon request.

If water is consumed at your location by different parties, such as rental buildings, community facilities, apartment buildings or industrial establishments, please make available this report and the attachments to those parties or post it in a highly visible location. Copies of this report may also be viewed at the town's website <u>http://www.townofjaffrey.com</u> and are available upon request.

## What is the water quality of my drinking water?

The Town of Jaffrey's water currently meets all State and Federal water quality regulations.

#### 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

## How can I get involved?

For additional information regarding Jaffrey's water system, contact 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 or checking the Town's website. There are often updates on water projects presented to the Board of Selectmen at their regular meetings.

#### Overview of Jaffrey's water system

The Jaffrey water system consists of over 36 miles of piping with over 1,500 service connections in Jaffrey and a portion of Rindge. In 2011, an average of 316,521 gallons of water was pumped daily from the three wells (two at Turnpike and one at Contoocook) 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 iron & manganese in the groundwater. Manganese is naturally found in our water and its effects are aesthetic only.

#### System Improvements

The Department continues to make water supply and distribution system improvements.

Jaffrey received favorable funding news from the Economic Development Administration (EDA) who will fund 50% of a project to extend municipal water to Old Sharon Road (Stone Bridge TIFD). Engineering design, plans and specifications have been completed and we plan to competitively bid the project this summer and begin construction by the fall.

Construction is substantially complete at the new Squantum Well and this well is expected to come online this year. The permit issued by the New Hampshire Department of Environmental Services (NHDES) will allow groundwater withdrawal up to 250 gallons per minute which supplements production from the Turnpike and Contoocook wells. Treatment will consist of disinfection, pH adjustment and corrosion control prior to entering the water distribution system. This project is being financially supported by a 40% grant from the NHDES DWSRF Program supplementing local funding previously authorized.

Jaffrey is committed to water conservation and has continued with a program to perform leak detection of the entire water distribution system. Findings allow the Water Department to locate and repair distribution system water leaks and fine-tune the water conservation program. Average daily water production was reduced significantly over the past year.

As always, our goal is to provide you, our valued customers, with adequate quality water as cost-effectively as possible.

## 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).

TEST RESULTS - 2011						
Contaminant	Violation (Y/N)	Level Detected/ Range of Detection	Units of measure	MCLG	MCL	Likely Source of Contamination
Microbial Contaminants						
Total Coliform Bacteria	Ν	Absent	Present/Absent	0	2 or greater per month	Naturally present in environment
Inorganic Contaminants						
Copper	N	0.014 – 0.122 < 0.005	ppm	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives Corrosion of household
Lead	N	< 0.005	ppm	15	0	plumbing systems, erosion of natural deposits
Volatile Organic Contaminants						
Total HAAs [Haloacetic Acids]	Ν	< 1.0	ppb	60	N/A	By-product of Drinking Water chlorination
MTBE [Methyl tertiary-butyl ether]	Ν	< 1.0 - 1.4	ppb	13	13	A gasoline additive
TTHMs [Trihalomethanes]	Ν	6.3 - 7.8	ppb	100/80	N/A	By-product of Drinking Water chlorination

## **Explanation of Test Results**

**Definitions**: <u>MCLG</u>: 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. • <u>MCL</u>: 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.

Abbreviations: ppb: parts per billion • ppm: parts per million • n/a: not applicable

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.

In order to ensure that tap water is safe to drink, USEPA 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.

#### Health Effects Information: (No chemicals exceeded the MCL)

#### Microbial Contaminants

**Total Coliform** – Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.

## Inorganic Contaminants

**Copper** – 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 - 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).

Contaminants that may be present in source water include:

may come from sewage treatment plants, septic systems,

naturally occurring or result from urban storm water runoff,

industrial or domestic wastewater discharges, oil and gas

agricultural livestock operations, and wildlife.

urban storm water runoff, and septic systems.

production, mining or farming

Microbial contaminants, such as viruses and bacteria, which

Inorganic contaminants, such as salts and metals, which can be

Organic Contaminants, including synthetic and volatile organic

chemicals, which are by-products of industrial processes and

petroleum production, and can also come from gas stations,

#### Volatile Organic Contaminants

MTBE – The New Hampshire Bureau of Health Risk Assessmentconsiders MTBE a possible carcinogen.TTHMs - Some people who drink water containingtrihalometyhanes in excess of the MCL over many years mayexperience problems with their liver, kidneys, or central nervoussystems, and may have an increased risk of getting cancer.Total HAAs - Some people who drink water containinghaloacetic acids in excess of the MCL over many years may havean increased risk of getting cancer.

#### Source Water Assessment Summary

The NH Department of Environmental Services has prepared a Source Water Assessment Report for the sources serving this community water system, assessing the sources' vulnerability to contamination. The results of the assessment, prepared on 4/20/2000 are as follows: The Turnpike Well received 4 high susceptibility ratings, 3 medium susceptibility ratings, and 5 low susceptibility ratings. The Contoocook Well received 0 high susceptibility ratings, 4 medium susceptibility ratings, and 8 low susceptibility ratings.

The complete Assessment Report is available for review at the Jaffrey Department of Public Works or Water Department. For more information call Public Works Director Randall Heglin at 532-6521 or visit NH Department of Environmental Services Drinking Water & Groundwater Bureau web site at <a href="http://www.des.nh.gov/dwgb">www.des.nh.gov/dwgb</a>

#### Water Conservation Facts (Source: EPA)

- → Turning off the tap while brushing your teeth can save as much as 3000 gallons per year!
- ➔ Faucets account for 15% of indoor household water use more than 1 trillion gallons of water across the US each year!
- → Federal Law requires that new faucets not exceed 2.2 gallons per minute while older faucets can flow at rates as high as 3 to 7 gallons per minute!
- ➔ High Efficiency bathroom sink faucets and accessories such as faucet aerators can reduce standard flow by more than 30% without sacrificing performance.
- → Faucets labeled as WaterSense use no more than 1.5 gallons per minute and were certified by an independent laboratory to ensure product meets criteria for both performance and efficiency. All WaterSense labeled faucets and accessories have demonstrated both water efficiency and the ability to provide adequate flow, even in homes with lower water pressures
- ➔ Visit WaterSense at <u>www.epa.gov/watersense</u> for additional information and additional water conservation suggestions.





Jaffrey Water Department 23 Knight Street Jaffrey, NH 03452 www.townofjaffrey.com Presorted Standard US Postage Paid Permit #9 Jaffrey NH 03452

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## Water Conservation Facts

- ➔ Toilets by far are the main source of water use in the home, accounting for approximately 30% of residential indoor water consumption
- → Toilets are a major source of wasted water due to leaks and/or inefficiency
- → Federal Law requires that new toilets not exceed 1.6 gallons per flush. High Efficiency Toilets go beyond that standard and use less than 1.3 gallons per flush
- ➔ Over the course of your lifetime, you will likely flush the toilet nearly 140,000 times. If you install a WaterSense labeled toilet, you can save 4,000 gallons per year and your children can save as much as 300,000 gallons during their lifetime
- ➔ WasteSense labeled toilets combine high efficiency with high performance. Design advances enable WaterSense labeled toilets to save water with no trade-off in flushing power.
- ➔ Visit WaterSense at <u>www.epa.gov/watersense</u> for additional information and additional water conservation suggestions.

