



# *Jaffrey Water Department*

## *Water Quality Report – 2010*

*PWS EPA 1221010*

The Jaffrey Water Department is pleased to present our Water Quality – Consumer Confidence Report for the calendar year 2010. This report summarizes the water quality results for the Town's drinking water system for the year **2010**. This report, required for all community water systems by the United States 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 last year, in 2009, the Town of Jaffrey contracted with CODE RED, an emergency communication system, which provides timely information in the event of an emergency 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](http://www.townofjaffrey.com)).

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

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### **About the Water Quality Report**

This report is required for all community water systems by the United States 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 health. 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 <http://www.townofjaffrey.com> 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. 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 2010, an average of 407,811 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; potassium 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.

### System Improvements

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

In 2010, Park Construction upgraded the existing water transmission line from Bullet Tank and existing water mains on Cathedral and Prescott Roads. This project was funded in part through a 50% grant from the American Recovery and Reinvestment Act (ARRA) also known as stimulus funds that supplemented local funding previously authorized. There remains some additional water main work in the immediate area of the Squantum Village Dam. This section will have to be completed in the future when the State of New Hampshire removes the spillway and control structure at the orphan dam. Unfortunately, this water main work will have to be completed at additional cost to the rate payers due to loss of grant funding.

Engineering design and specifications for extending water to Old Sharon Road (Stone Bridge TIFD) were completed and the town is actively pursuing project funding from various sources. The

commitment remains to not have the water customers incur the costs for this extension.

In 2010, the town received a final permit for large groundwater withdrawal at the new Squantum Well from the New Hampshire Department of Environmental Services (NHDES) allowing groundwater withdrawal up to 250 gallons per minute. Engineering design and specifications were completed and approved by NHDES for construction of a well house and treatment consisting of disinfection, pH adjustment and corrosion control. The project was advertised in January 2011 and a contract awarded to Weston & Sampson CMR with construction to begin by this summer. The project received a favorable priority ranking from the NHDES DWSRF program and has qualified for a 40% grant supplementing local funding previously authorized.

Finally in 2010, the Town contracted with Wachs, Inc. and completed a leak detection survey of the entire water distribution system. Findings will allow the town to locate possible system water leaks and fine-tune the water conservation program.

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 - 2010						
Contaminant	Violation (Y/N)	Level Detected/ Range of Detection	Units of measure	MCLG	MCL	Likely Source of Contamination
Microbial Contaminants						
Total Coliform Bacteria	N	Absent	Present/Absent	0	2 or greater per month	Naturally present in environment
Inorganic Contaminants						
Barium	N	0.017 – 0.021	ppm	2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Volatile Organic Contaminants						
Total HAAs [Haloacetic Acids]	N	1.0 – 1.1	ppb	60	N/A	By-product of Drinking Water chlorination
MTBE [Methyl tertiary-butyl ether]	N	0.70 – 0.78	ppb	13	13	A gasoline additive
TTHMs [Trihalomethanes]	N	6.4 – 7.5	ppb	100/80	N/A	By-product of Drinking Water chlorination

## Explanation of Test Results

**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.

**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.

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

**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, urban storm water runoff, and septic systems.

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

**Barium** – Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

#### Volatile Organic Contaminants

**MTBE** – The New Hampshire Bureau of Health Risk Assessment considers MTBE a possible carcinogen.

**TTHMs** - 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.

**Total HAAs** - Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

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## 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 [www.des.nh.gov/dwgb](http://www.des.nh.gov/dwgb)

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### **Water Conservation Facts**



- ➔ 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 [www.epa.gov/watersense](http://www.epa.gov/watersense) for additional information and additional water conservation suggestions.



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## 2010 Water Quality Report

### ***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
- ➔ WaterSense 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 [www.epa.gov/watersense](http://www.epa.gov/watersense) for additional information and additional water conservation suggestions.

