



Rowley Water Department
P.O. Box 29
Rowley, Mass. 01969
978-948-2640

This report is issued annually by the
Rowley Water Department

Water Superintendent
John F. Rezza

Water Commissioners
Scott Martin: Chairman
Timothy Toomey, Clerk
Roy Ricker, Member

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Rowley Water Department

Consumer Confidence Report

Water Quality Report 2008

PWSID # 3254000

Statistics 2008

Department:

- Three Elected Water Commissioners operating under an Enterprise Fund
- Number of Employees - Six full-time
- Water Office- 401 Central Street, Rowley, MA Open Mon -Friday 7:00 A.M. -3:00 P.M.
- Phone 978-948-2640
- Fax 978-948-8200

Pumping Station

- Boxford Rd. Well # 3
- Haverhill St. Well # 2
- Pingree Farm Rd. Well # 5
- * Total water pumped - 191,000,000
- * Max. day - 1,078,000
- * Average daily - 520,000

Treatment Facilities

- Boxford Rd Well # 3
- Haverhill St. Well # 2
- Pingree Farm Rd Well # 5

Water Storage Tanks

- One Concrete Tank - Haverhill St. Prospect Hill, capacity of 1.27 million gallons

Other Statistics

- Miles of Water Main—43
- Hydrants - 350
- Active Services - 1728

Dear Customer: We are pleased to present a summary of the quality of the water provided to you during the past year. The Safe Drinking Water Act (SDWA) requires that all utilities issue an annual "Consumer Confidence Report" to customers in addition to other notices that may be required by law.

Our Rowley water source, being well water, tends to be high in minerals. Iron, manganese and hardness are the most troublesome. Some staining can occur in dishwashers and washing machines. Chlorine products should not be used in washing. Vitamin C (Tang, Glisten), Iron-Out, Rover, and Rust-Be-Gone; products containing sodium hydrosulfite and/or sodium bisulfate, are helpful to remove stains.

Our system is in compliance with EPA's Lead & Copper Rule. Lead and copper are below action levels. If the water in your home has been dormant for more than six hours, EPA recommends flush (running) the faucet for two to three minutes. This will remove copper and lead levels above recommended limits. **Fluoride is not added to our water supply.**

All residents have on site sewage disposal utilizing leaching systems. Care of this system should be practiced. This is extremely important within our aquifer area where chemicals could affect the water quality. Do not use tank treatments or dispose of toxic chemicals down the drain. Pump your system regularly. Be careful with crankcase oil and anti-freeze flushing. One gallon of petroleum- base products can contaminate approximately 750,000 gallons of water disposal..

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 transplant, people with HIV/AIDS or other immune systems disorders, some elderly, and infants can be particularly at risk from infections. These people shall 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 WATER HOTLINE at 1-800-426-4791.

Your water comes from three municipal wells sunk about 50 feet into an underground source of water off the Parker River Basin. These wells are located west of town off Boxford Rd., Haverhill St., and Pingree Farm Rd. The town owns the land around these wells and restricts any activity that could contaminate them.

After the water comes out of the wells, we treat it to remove corrosive properties and add disinfectant to protect you against microbial contaminants. Source water assessments and yearly testing reports are available at the Water Department Office.

- Our Water Board meets once a month at 401 Central St. Feel free to come. All meetings are posted at the Rowley Town Hall, 139 Main St., outside the Town Clerk's office for your convenience or call 978-948-2640.
- 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 the water poses a health risk. Call EPA's Safe Drinking Water Hotline at 1-800-426-4791 for more information about contaminants and potential health effects.
- 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 radio-active materials that can pick up substances resulting from the presence of animals or human activity.
- Contaminants that may be present in source water before treatment include: *microbial contaminants*, such as viruses and bacteria. They may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- *Inorganic contaminants* such as salts and metals 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* may come from a variety of sources such as agriculture and residential uses.
- *Radioactive contaminants* are naturally occurring. Organic chemical contaminants including synthetic and volatile organic chemicals are by products of industrial processes and petroleum productions and can come from gas stations, urban storm water runoff and septic systems.
- In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administrative regulations establish limits for contaminants in bottled water that must provide the same protection for public health.
- **SOURCE WATER ASSESSMENT PROGRAM (SWAP)**
A SWAP report has been completed for the Rowley Water System. This report includes: discussion of land uses in the Water Supply Protection District, Protection recommendation and a Geographic Information Map. The overall ranking of susceptibility to contamination for Rowley is high based on continually monitor these zones to insure the safety of the water system. The complete report is available at the Rowley Water Dept. office or online at www.state.ma.us/dep/brp/dws. For more information please call the Rowley Water Dept. at 978-948-2640. This notice is being sent to you by the Rowley Water Dept.—PWS ID#3254000 Date distributed prior to 6/30/09.

Questions and Comments

Do you want to learn more about your drinking water? Do you have questions about information in this report? If you do, please call John Rezza, Superintendent of the Rowley Water Department. He can be reached at 978-948-2640.

Secondary Contaminants	MCL	MCLG	Rowley Water	Range of Detection	Sample Date	Violation	Typical Source of Contaminants
Manganese	None	0.05	0.4ppm	0-.6 ppm	7/17/2007	NO	Erosion of natural deposits
Flouride	4.0 ppm	4	.06 ppm		6/20/2006	NO	Erosion of natural deposits
INORGANIC CONTAMINANTS							
Nitrate	10.0 ppm	10.0 ppm	1.25ppm	.15-1.9ppm	4/14/2008	NO	Erosion of natural deposits: Discharge from fertilizers
Volatile Organic Compounds							
Tetrachloroethylene	5.0 ppb	0	.62 ppb	0-.62ppb	4/14/2008	NO	Vinyl ac pipe
Chloform			.88 ppb	.53-2.0 ppb	1/15/2008		disinfection by product
Total Trihalomethanes	80 ppb	N/A	14 ppb	13-16 ppb	8/4/2008	NO	By product of drinking water chlorination
Haleocitic Acids	60 ppb	N/A	N/D	0	8/4/2008	NO	By product of drinking water chlorination
Sodium Hypochlorite	2.0 ppm	N/A	0.08	.00-1.0	Daily 2008	NO	Disinfectant
Sodium	6/20/2006	9.56-72.6 ppm	27.7 ppm	N/A	20 ppm		Runoff from road salt
Total Coliform No. of samples	Highest # positive in month	MCL	MCLG	VIOLATION			
	0	1	0	NO			Naturally present in the environment
LEAD & COPPER	MEETS STANDARD	90TH PERCENTILE	DATE SAMPLED	ACTION LEVEL	#SITES ABOVE AL		TYPICAL SOURCE
Lead	Yes	.0025 ppm	8/20/2008	.015 ppm	1		Corrosion of household plumbing system: Erosion of natural deposits
Copper	Yes	.084 ppm	8/20/2008	1.3 ppm	0		Erosion of natural deposits leaching: Corrosion of household plumbing systems: wood preservatives

WATER QUALITY DATA

The following table lists all the drinking water contaminants that we detected during the 2007 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done 1/1/07-12/31/07. The state requires us to monitor certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality is more than one year. (Test results are from an independent laboratory certified by the State of Massachusetts to test drinking water.)

Terms & Abbreviations

- **Maximum Contaminant Level Goal (MCLG)** the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
- **Maximum Contaminant Level (MCL)** the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- **Action Level (AL)** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **90th Percentile** – out of every 10 homes sampled, 9 were at or below this level.
- **Secondary Maximum Contaminant Level (SMCL)** these standards are developed to protect the aesthetic qualities of drinking water and are not health based.
- **Parts per million (PPM)**
- **Parts per billion (PPB)**
- **Office of Research and Standards Guideline (OSRG)** this is the concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after lifetime exposure.

TIPS FOR CONSERVATION

1. Put a clock where it is visible from the shower; you don't have to get a more expensive waterproof clock if you can put it on a high point on a wall outside the shower. Your definition of a long shower will likely .
2. When watering your foundation, set an egg timer. Turn off your water when the timer goes off. The Cost of forgetfulness can run into thousands of gallons.
3. Instead of installing a whole sink water filtration system, get a water filter specifically for the faucet. Only filter the water for drinking water. Paying to filter your dish water or mop water is a great waste.
4. Use mulch. Soil additives and plants that require little water to help limit water use.
5. You'll drink about 75,000 litres (20,000 gallons) of water in your lifetime.
6. That frozen food in your refrigerator or microwave not your running water.
7. Toilets installed before 1992 are real water wasters. A new energy-efficient one can save a household \$90 a year in water costs.
8. Lime and mineral deposits can reduce your shower stream to a trickle. Unclog your showerhead overnight by putting vinegar into a sandwich bag and duct tape.
9. Run the dishwasher only when it is full.
10. Fix dripping faucets. A drop per second wastes 192 gallons per month! First try tightening all fittings a quarter to half a turn. No luck? The gaskets or O-rings might be worn out. To check, the faucet will need to be taken apart so for best results consult a plumber.
11. Add aerators. Most kitchen and bath faucets can be fitted with an aerator (\$5 to \$10 at hardware stores), which screws into the faucet opening and mixes air into the water stream for less water output while still maintaining adequate and steady pressure.
12. Keep drinking water in the refrigerator instead of running the faucet to "cool" the water.
13. Reuse water as often as you can. When you find a half-filled water glass, don't dump it down the drain, instead water a houseplant with it. Used bath water and water drained from the washing machine can be used to hydrate outdoor plants, lawns, trees and shrubs, provided you will not be using a soap that is toxic to plants or environmentally unfriendly. It is important to remember that it is not recommended that gray water be used on any plants that will bear or produce edible material.

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. The Rowley Water Dept. is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes 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://www.epa.gov/safewater/lead>.”

NITRATE: In drinking water 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.

Is our water system meeting other rules that govern our operations? The State and EPA require us to test our water on a regular basis to ensure its safety. We have implemented backflow prevention, facility security and Zone II regulations. We are also working on corrosion control.

*EPA’s MCL for fluoride is 4 ppm. However our State has a lower MCL to better protect human health.

**The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of certain beta particles.

TIPS ON WATER CONSERVATION

1. Sweep outside instead of using a hose.
2. Keep your yard healthy: dethatch, use mulch, etc.
3. Use soaker hoses or trickle irrigation systems for trees and shrubs. Consider getting a rain barrel.
4. Setup sprinklers to water the lawn or garden only – not the street or sidewalk.
5. Water the lawn or garden during the coolest part of the day (early morning is best).
6. Scrape rather than rinse dishes before loading into the dishwasher – wash only full loads.
7. Wash only full loads of laundry or use the appropriate water level or load size selection on the washing machine.
8. Repair all leaks (a leaky toilet can waste 200 gallons a day). Add food coloring to the toilet tank water and check the bowl in 15 minutes. (Don’t flush). Color in the toilet bowl probably means there’s a leak.
9. **Also customers with meter pits should regularly check the pit to make sure there are no water leaks. This can easily be done by making sure no water is running inside the home and checking the pit to see if the slow-flow dial or water dial is moving. If the dial is moving, you must call a plumber to find out where the leak is. The Water Department has had a number of homes with this problem. The homeowner is responsible for water that flows through the water meter whether used or wasted.**