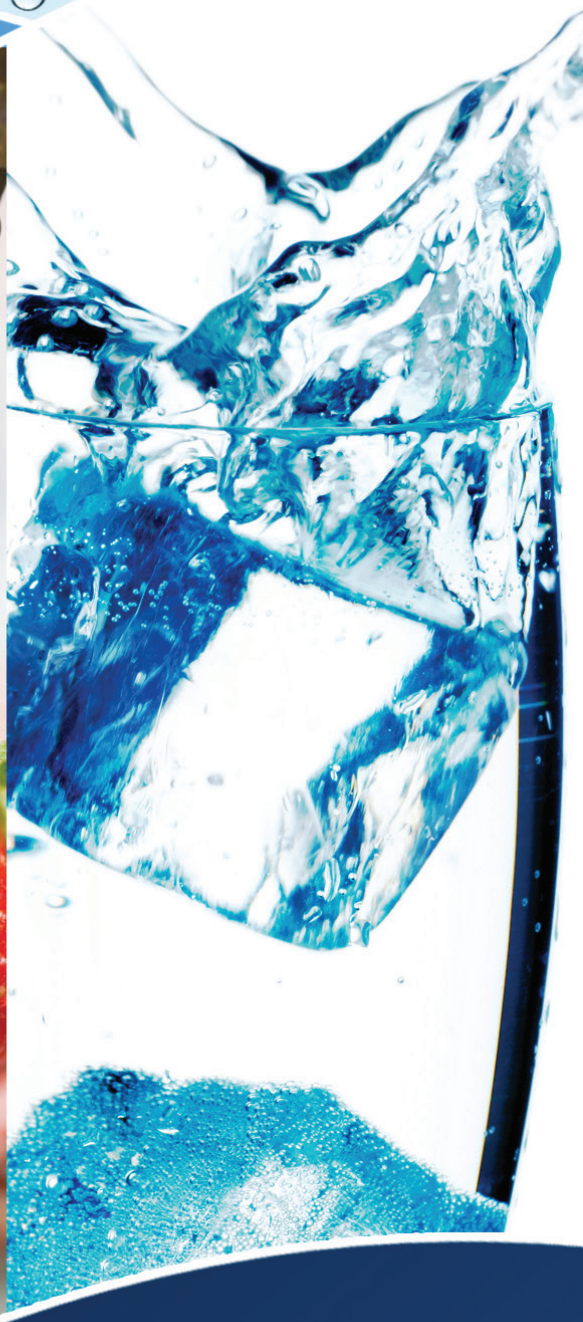
ANNUAL WATER QUALITY REPORT

Water Testing Performed in 2014



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

Este relatório contem a informação importante sobre sua água bebendo. Tenha-o por favor traduzido por um amigo ou por alguém que o compreende e o pode o traduzir para você.

Ta broszura zawiera wazne informacje dotyczace jakosci wody do picia. Przetlumacz zawartosc tej broszury lub skontaktuj sie z osoba ktora pomoze ci w zrozumieniu zawartych informacji.

Presented By
Taunton DPW Water

PWS ID#: 4293000

Our Mission Continues

We are proud to present once again our annual water quality report covering all testing performed between January 1 and December 31, 2014. Most notably, last year marked the 40th anniversary of the Safe Drinking Water Act (SDWA). This rule was created to protect public health by regulating the nation's drinking water supply. We celebrate this milestone as we continue to manage our water system with a mission to deliver the best quality drinking water. By striving to meet the requirements of SDWA, we are ensuring a future of healthy, clean drinking water for years to come.

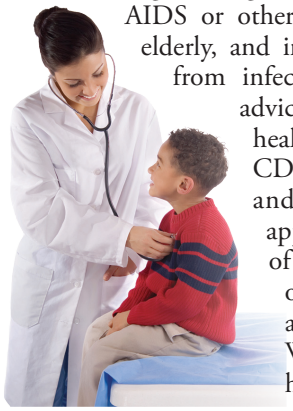
Please let us know if you ever have any questions or concerns about your water.

Community Participation

To voice your concerns about your drinking water, please send a letter to the DPW Water Division Superintendant, Cathal O'Brien, DPW, 90 Ingell St., Taunton, MA 02780, in care of the Water Division Office.

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 (800) 426-4791 or http://water.epa.gov/drink/hotline.



Substances That Could Be in Water

To ensure that tap water is safe to drink, the Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater 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 stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Home Plumbing

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. We are 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 www.epa.gov/safewater/lead.

Where Does My Water Come From?

The drinking water supplied by our system comes from six surface water sources and two wells. The surface water sources are: Assawompset, Pocksha, Great Quittacus, Little Quittacus, Long (these five hydrologically interconnected ponds are collectively known as the Assawompset Pond Complex), and Elders Pond. All six reservoirs are located in parts of Freetown, Lakeville, Middleborough, and Rochester, Massachusetts. Raw water from these ponds is treated at the Charles J. Rocheleau Water Filtration Plant located in Lakeville. The two gravel-packed wells are located on the campus of the Paul A. Dever State School and the water pumped from the wells is treated at the Myles Standish Industrial Park Storage Tank.

The treated water is then pumped to the distribution system, where it is either delivered to your home or business or sent to one of five storage facilities around the city. The Prospect Hill Reservoir (22.5 million gallons), East Taunton Elevated Storage Tank (1 million gallons), the Westville Elevated Storage Tank (.3 million gallons), the Oakland Elevated Storage Tank (.75 million gallons), and the Myles Standish Industrial Park Elevated Storage Tank (1 million gallons) combined provide more than 25 million gallons of distribution storage. Our system has two interconnections to supply both the Village of North Dighton Water District and the Commonwealth of Massachusetts Bridgewater Correctional Complex with potable water. Our system also has potable water services in parts of Berkley, Lakeville, Middleboro, Norton, and Raynham.

Source Water Assessment and Protection Program

In September 2002, the Massachusetts Department of Environmental Protection (MADEP) completed a Source Water Assessment and Protection Program Report (SWAP) for the City of Taunton's public water system. The Source Water Assessment and Protection Program, established under the federal Safe Drinking Water Act, requires every state to (1) inventory land uses within the recharge areas of all public water supply sources, (2) assess the susceptibility of drinking water sources to contamination from these land uses, and (3) publicize the results to provide support for improved protection.

The Taunton Water System was assigned a susceptibility ranking of high based on the MADEP assessment of potential pollution sources in our watershed. These threats include a variety of land uses, such as cranberry bogs, horse farms, transportation corridors (local roads and highways), and septic systems/cesspools. The SWAP report is available at the Taunton DPW Water Division, City Hall, 15 Summer Street, Taunton, MA 02780, and online at http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-the-source-water-assessment-and-protection-pr.html.

In light of our system's ranking, we currently participate in several programs to protect our water supply. We are voting members of the APC Management Committee, a group of the abutting communities and state officials who meet quarterly to manage and protect the Assawompset Pond Complex. We also actively review and comment on all permitted activities within 400 feet of any of our source waters. We regularly patrol the ponds in cooperation with other APC members to protect the integrity of the APC itself. For more information, contact William Schwartz, Sanitary Engineer, at (508) 947-0690, ext. 112.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the DEP has a Web site (www.mass.gov/eea/agencies/massdep/water/drinking/) that provides complete and current information on water issues in Massachusetts, including valuable information about our watershed.

The Benefits of Fluoridation

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system the fluoride level is adjusted to an optimal level averaging one part per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. Our water system has been providing this treatment since 1980. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the U.S. who receive the health and economic benefits of fluoridation.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact Jon Chase, Water Treatment Facility Chief Operator, at (508) 947-0690, ext. 111. You can also visit our Web site at www.taunton-ma.gov.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

How Is My Water Treated and Purified?

The surface water treatment process consists of a series of steps. First, water is drawn from Elders Pond, the terminal reservoir of the water supply system. Caustic soda is added as a pretreatment to help increase the alkalinity. An oxidant is added when needed to help remove naturally occurring manganese from the water. Then carbon dioxide gas is added to increase the alkalinity of the water for improved coagulation of sediment. Then, a coagulant (polyaluminum hydroxychloride) is added to cause small particles to clump together (called floc), making them heavy enough to settle into a basin from which the accumulated sediment is removed. The water is then filtered through four 39-inch-deep, anthracite coal-and-sand filter beds to remove any remaining particles. As these smaller suspended particles are removed, the turbidity of the water is greatly reduced and clear water is produced. The water exiting the filters is then run through an ultraviolet light system to help reduce the amount of chemical disinfectant required. Next, chloramines are added for disinfection to prevent waterborne diseases and to provide a disinfectant residual as the water travels from the treatment plant through the distribution system and to your home or business. Before leaving the treatment plant, caustic soda (to adjust final pH for corrosion control) and fluoride (to prevent tooth decay) are also added.

The ground water treatment process is similar from surface water treatment process; however, the water from the Dever Wells does not require filtration. The treatment process consists of adding and mixing certain chemicals (caustic soda to adjust the pH, chloramines for disinfection, and fluoride to prevent tooth decay) to the water pumped from the Dever Wells before it enters the distribution system.

What's a Cross-connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage).

Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination.

Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they are providing maximum protection.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/index.cfm. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2014	15	0	1.37	0–3.1	No	Erosion of natural deposits
Chloramines (ppm)	2014	[4]	[4]	1.53	1.00–2.04	No	Water additive used to control microbes
Combined Radium (pCi/L)	2014	5	0	0.5	0–1	No	Erosion of natural deposits
Fluoride (ppm)	2014	4	4	0.94	0.34–1.32	No	Water additive which promotes strong teeth
Haloacetic Acids [HAA]–Stage 2 (ppb)	2014	60	NA	28.0	0–41.5	No	By-product of drinking water disinfection
Nitrate (ppm)	2014	10	10	1.52	0–1.52	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Perchlorate (ppb)	2014	2	NA	0.56	0.26–0.56	No	Inorganic chemicals used as oxidizers in solid propellants for rockets, missiles, fireworks and explosives.
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2014	80	NA	51.0	27.9–58.5	No	By-product of drinking water disinfection
Total Organic Carbon (ppm)	2014	TT	NA	2.85	1.99–4.50	No	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2014	1.3	1.3	0.05	0/31	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2014	15	0	5	1/31	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2014	200	NA	6	0–172	No	Erosion of natural deposits; Residual from some surface water treatment processes
Color (Units)	2014	15	NA	1	0–7	No	Naturally-occurring organic materials
Iron (ppb)	2014	300	NA	13	0–172	No	Leaching from natural deposits; Industrial wastes
Manganese (ppb)	2014	50	NA	13	0–36	No	Leaching from natural deposits

UNREGULATED SUBSTANCES [1]				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2014	4.6	0–4.6	Disinfectant by-product; Marine micro-algae
Chlorodibromomethane (ppb)	2014	0.5	0–0.5	Disinfectant by-product; Chemical intermediate
Chloroform (ppb)	2014	12.1	0.7–12.1	Disinfectant by-product; Chemical intermediate
Sodium (ppm)	2014	26.2	NA	Erosion of natural deposits; soil runoff

[1] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Definitions

90th Percentile: Out of every 10 homes sampled, 9 were at or below this level.

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

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

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): SMCLs are established to regulate the aesthetics of drinking water like taste and odor.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.