



**DUNSTABLE WATER DEPARTMENT**  
**511 MAIN STREET**  
**DUNSTABLE, MA 01827**  
**(978) 649-4514 x230**  
**PWS ID#: 2081000**



**Website: [www.dunstable-ma.gov](http://www.dunstable-ma.gov)**

## **2015 Annual Consumer Confidence Report**

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### **Introduction**

This is the 2015 water quality report of the Dunstable Water Department (DWD) serving Dunstable, MA. This report is intended to provide you with important information about your drinking water. We know that you count on us for a safe and reliable supply of water every day and we are dedicated to providing the highest quality of service to you.

### **Highlights of 2015**

For information about the Water Department, please go to: [www.dunstable-ma.gov](http://www.dunstable-ma.gov) where you will find us under the heading "Departments". To learn more about the water supply, our distribution system, protection zones, capital improvements, and the Dunstable Water Department Profile, look under "Additional Links".

Water Chairman Bryan Conant resigned in February of 2016 after moving out of Dunstable. We wish to thank him for his service to the department. Scott Wilkins was appointed to the Water Board until May 2016 elections.

Although passed at the Annual Town Meeting, the water storage tank project failed at the ballot twice. The Board is currently reviewing their options and hope to be able to move forward with a project within the next year in order to address the issue of the aging hydropneumatic tanks.

The Water Department held two hearings in 2015 on amendments to the Schedule of Rates and Fees. These changes went into effect immediately.

### **Where Does My Water Come From?**

The DWD uses ground water as its water source. We have two wells located off of Main Street that service the center of town. These wells are called Salmon Brook Well #1 and Well #2. One well at a time runs, with the other used as a backup. The wells are approximately 90 feet deep, gravel packed, with the current capacity to pump 250 gallons per minute. In 2015, the system included over 1 mile of water main, 102 services and less than 1,000 users. In the past 12 months, the wells have produced and delivered over 9.8 million gallons, an average of over 26,753 gallons each day.

### **Is My Water Safe?**

In order to ensure that tap water is safe to drink, MassDEP and the Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Last year, as in years past, water supplied by the Dunstable Water Department met all federal and state drinking water quality standards. The Department vigilantly safeguards its water supplies and we are proud to report that our system has not exceeded any maximum contaminant level or other state or federal water quality standard.

### **Lead and Copper – Treatment Information**

Since 1996, the Dunstable Water Department has treated its water with potassium hydroxide (KOH) to counteract the effects of the corrosion of the water line that was causing elevated levels of lead and copper.

### **Board of Commissioners**

Bryan Conant ó Chairman - resigned  
Bob Gamache ó Vice Chairman  
Mark Conant ó Commissioner  
Scott Wilkins ó Commissioner 2/16

### **Staff**

Cheryl Mann - Secretary  
David Hardman ó Water Operator  
Don Pottle ó Associate Member  
David Tully ó Highway Foreman

### **Monthly Meetings**

The Water Department meets on the 4<sup>th</sup> Tuesday of each month at 6:00pm at the Dunstable Town Hall. The public is welcome at these meetings.

### **Contact Us**

If you have any questions about your water quality, the information contained in this report or your water service in general; please call us at our office 978-649-4514 x230  
Mon: 1267:30pm; Tues-Thurs- 8am-3pm  
Contact us at: [waterdth@charter.net](mailto:waterdth@charter.net)  
Fax: 978-649-8893

You may also direct questions to the Massachusetts DEP at 617-292-5770 or the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

### **Emergency Only**

Police 978-649-7445

## Source Water Assessment and Its Availability (SWAP)

The Source Water Assessment and Protection (SWAP) program, established under the federal Safe Drinking Water Act, requires every state to:

- inventory land uses within the recharge areas of all public water supply sources;
- assess the susceptibility of drinking water sources to contamination from these land uses; and
- publicize the results to provide support for improved protection.

In 2003, the MassDEP's Drinking Water Program evaluated the Dunstable Water Department as part of the SWAP program. The evaluation considered geology and hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to determine the degree of threat to our drinking water source. The Zone I for our well is a 400-foot radius around the wellhead. The Massachusetts drinking water regulations (310 CMR 22.00 Drinking Water) require public water suppliers to own the Zone I or control the Zone I through a conservation restriction. The Zone I for the well is owned and controlled by the Town of Dunstable - Dunstable Water Department and the Dunstable Conservation Commission. Approximately 50% of the Zone II -- the area of contribution to the wells -- consists of residential areas. The overall ranking of susceptibility to contamination for the system is moderate, based on the presence of only low & moderate threat land uses within the water supply protection areas. Those land uses include: Residential & fuel oil, lawn care, septic systems, Commercial & cemetery, and Miscellaneous & aquatic wildlife, fishing/boating, and storm water drains/retention basins.

## SWAP Recommendations to the Dunstable Water Department:

SWAP recommended that the Dunstable Water Department develop a wellhead protection plan. As a result, the Source Water Protection Committee was formed. This Committee worked for 1 ½ years on a bylaw which was approved at the 2008 ATM.

## SWAP Makes a Number of Recommendations to the Consumer

1. Septic system-Maintain your septic system. If systems fail or are not properly maintained, they can be a potential source of microbial contamination.
2. Household Hazardous Materials & Hazardous materials may include automotive wastes, paints, solvents, pesticides, fertilizers and other substances. Improper use, storage, and disposal of chemical products used in homes are potential sources of contamination.
3. Heating Oil Storage & If managed improperly, Underground and Aboveground Storage Tanks (UST and AST) can be potential sources of contamination due to leaks or spills of the fuel oil they store.
4. Stormwater & Catch basins transport storm water from roadways and adjacent properties to the ground. As flowing stormwater travels, it picks up debris and contaminants from streets and lawns. Common potential contaminants include lawn chemicals, pet waste, and contaminants from automotive leaks, maintenance, washing, or accidents.

The Dunstable Water Department has a copy of this report for public review during normal office hours. The DWD's SWAP report can also be viewed online at [www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2081000.pdf](http://www.mass.gov/eea/docs/dep/water/drinking/swap/cero/2081000.pdf).

## What is a Cross Connection?

A cross connection is a connection between a drinking water pipe and a polluted source. The pollution can come from your own home, such as a fertilizer spray unit on your garden hose. If the water pressure drops because of fire hydrant use in town or a water main break, fertilizer may be sucked back into the drinking water pipes through the hose. Using an attachment on your hose called a backflow-prevention device can prevent this problem. The Water Department recommends the installation of backflow prevention devices, such as a low-cost hose bib vacuum breaker, for all inside and outside hose connections. You can purchase this at a hardware store or plumbing supply store. This is a great way for you to help protect the water in your home as well as the drinking water system in your town! For additional information on cross connections and on the status of your water systems cross connection program, please contact the DWD at 978-649-4514 x230.



## Definitions

**ppm** = parts per million, or milligrams per liter (mg/l)

**ppb** = parts per billion, or micrograms per liter (ug/l)

**pCi/l** = picocuries per liter (a measure of radioactivity)

**MCL** = maximum contamination level. The highest level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG** = maximum contamination 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.

**AL** = action level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.

**Unregulated Contaminants** are substances without MCLs for which EPA requires monitoring. For some of these substances, the Massachusetts Office of Research and Standards (ORS) have developed state guidelines or secondary MCLs.

**SMCL**=secondary maximum contaminant level-These standards are developed to protect aesthetic qualities of drinking water & are not health based.

**ORSG** = Mass. Office of Research and Standards guideline. This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.



**DUNSTABLE WATER DEPARTMENT**  
**2015 WATER QUALITY TABLES**

In 2015 we monitored your drinking water for bacteria, volatile organic contaminants (VOCs), perchlorate, nitrate, and lead & copper. The following tables list all of the drinking water contaminants that we detected during calendar year 2015 or during the most recent round of testing performed in accordance with the regulations. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. To better understand the tables, see page 2 for definitions and page 4 for EPA educational information.

Lead and Copper*	Date Collected	90 <sup>th</sup> Percentile*	Action Level (AL)	MCLG	# of Sites Sampled	# of Sites above AL	Exceeds AL (Y/N)	Possible Sources
Lead (ppb)	9/19/14	5	15	0	10	0	N	Corrosion of Household plumbing systems
Copper (ppm)	9/19/14	0.4	1.3	1.3	10	0	N	Corrosion of Household plumbing systems

\* Nine out of every 10 homes sampled were at or below this level. The 90<sup>th</sup> percentile is compared to the action level to determine compliance for each contaminant. The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Inorganic Contaminants	Date collected	Highest Result	Range	MCL	MCL G	Violation (Y/N)	Possible Sources
Nitrate (ppm)	6/3/15	2.42	2.22 6 2.42	10	10	N	Runoff from fertilizer use; leaching from septic tanks; natural deposits
Radioactive Contaminants Gross alpha (pCi/l)	6/2/15	1.7	1.7	15	0	N	Erosion of natural deposits

Contaminant	Date Collected	Result	MCL	MDL	MRL	Violation (Y/N)	Possible Sources
Perchlorate 02G	09/29/2015	ND	2.0	0.3	0.3	N	Natural sources
Perchlorate 03G	09/29/2015	ND	2.0	0.3	0.3	N	Natural sources

Unregulated and Secondary Contaminants	Date Collected	Range	Average	SMCL	ORSG	Possible Sources
Sulfate (ppm)	2/27/15	9.5 6 10.6	10.05	250	--	Natural sources
Sodium (ppm)	5/7/12	26.2 6 26.4	26.3*	--	20	Natural sources; runoff from road salt
Manganese (ppb)	2/27/15	.1 - .8	.45	50	300	Erosion of natural deposits

\* Sodium-sensitive individuals, such as those experiencing hypertension, kidney failure, or congestive heart failure, who drink water containing sodium should be aware of levels where exposures are being carefully controlled.

Bacteria	Highest # Positive Samples in a month	MCL	MCLG	Violation (Y/N)	Possible Source of Contamination
<b>Total Coliform</b>	0	1	0	N	Naturally present in the environment
<b>E.coli</b>	0	*	0	N	Human and animal fecal waste

\*Compliance with the E.coli MCL is determined upon additional repeat testing.

### Monitoring Waivers

For the 2014-2016 compliance periods, MassDEP has reduced the DWD's monitoring requirements for volatile organic contaminants, synthetic organic contaminants, inorganic chemicals and perchlorate for both wells. The Water Department applied and was approved in 2015.

### Sanitary Survey and Compliance in 2015

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations of our system. Our Sanitary Survey was conducted in 2014 and as part of our ongoing commitment to you, we made the following improvements to the way we do business: we are reporting additional chemical usage readings to MassDEP, we now maintain a maintenance log, and we are conducting training of our staff. The Dunstable Water Department was in full compliance with water testing for the calendar year 2015.

### Educational Information from EPA

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

**Pesticides and Herbicides**, may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

**Inorganic Contaminants**, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming.

**Organic Chemical Contaminants**, include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

**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. Dunstable Water Dept. is responsible for providing high quality 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 materials, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

### 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 systems disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice 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 (800-426-4791).

**Additional Copies of this Report:** The DWD's 2015 CCR will be posted online at: [www.dunstable-ma.gov/waterdept](http://www.dunstable-ma.gov/waterdept). Additional hard copies may be obtained by contacting the Department at 978-649-4514 x230.

