



Dedham-Westwood Water District
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ANNUAL WATER QUALITY REPORT FOR 2013
MADEP PUBLIC WATER SUPPLY ID #3073000

Water Commissioners

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The Water We Drink

As a service to our customers, the Dedham-Westwood Water District (DWWD) is proud to distribute our Annual Water Quality Report. It is designed to inform you about your drinking water quality and the services we deliver to you every day. It is a continuous commitment on our part to provide the highest quality water and service that meets and exceeds all state and federal drinking water standards and regulations. Thank you for allowing us to provide your family with high quality water this year. In our ongoing efforts to maintain a safe and dependable water supply, it is necessary to continuously improve your water system.

Public Participation

We ask that all our customers help protect our water sources, which are at the heart of our community, our way of life, and our children's future. Important educational information may be included with your bill or found on our website. The Water Commission meetings are usually held on the second and last Tuesday evening of the month and the public is invited. If you have any questions about this report, water quality, public meetings, or your water utility, please contact Eileen Commane at (781) 461-2779.

How Is The Purity Of My Water Ensured?

Your Water District routinely monitors for components in your drinking water according to federal and State laws. The enclosed table shows the results of our monitoring for the period of January 1 to December 31, 2013. All drinking water including bottled water may be reasonably expected to contain at least small amounts of some contamination. It is important to remember that the presence of these contaminants does not necessarily pose 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 at 1-800-426-4791.

What Is The Source Of Dedham -Westwood Water?

The source of your drinking water is groundwater from fourteen wells. In Westwood, five wells are located by the Neponset River near University Avenue and one well is by Rock Meadow Brook near Dover Road. In Dedham, eight wells are by the Charles River near Bridge Street. Other facilities include two water treatment plants, four water storage tanks, six pressure booster systems and approximately 200 miles of water main. We serve a population of about 39,300 through approximately 13,000 meters and customer service lines. The Dedham-Westwood Water District has emergency water connections with Boston, Norwood, Needham and the MWRA. There is a non emergency connection with the MWRA which is used throughout the year for less than 1% of the supply. For a copy of the 2013 MWRA Water Quality report, call our office.

Is Water That Meets Federal Drinking Water Standards Safe?

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 system disorders and 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/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

How Does Dedham-Westwood Monitor The Quality Of My Water?

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:

- Inorganic substances, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- Turbidity, naturally occurring sediment in the water, which can interfere with the disinfection process.
- Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come

from gas stations, urban storm water runoff, and septic systems.

- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production, and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA and the Massachusetts Department of Public Health regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Resource Protection

All Water District groundwater supply areas are protected by resource protection zoning by-laws restricting activities and uses within those boundaries. The District actively enforces wellhead protection controls; provides wellhead protection information through newsletters, the website, and with water audit kits; monitors land uses and development within its wellhead areas; and participates in education programs on source protection, environmentally sound lawn care, and conservation. Conservation efforts include rebates on low flow fixtures, an increasing block rate for high users and offering an educational program to local elementary schools on resource protection and conservation.

How Are Our Sources Protected?

The Department of Environmental Protection has prepared a Source Water Assessment Program (SWAP) report for the water supply sources serving our water system. The SWAP report notes the following as key issues: activities in the Zone I (400 foot radius around wells); hazardous materials storage and use; residential land uses; transportation corridors; hazardous materials contamination sites; and comprehensive wellhead protection planning. The report commends the District on actively enforcing wellhead protection controls; providing wellhead protection information through newsletters, the website, and with water conservation kits; requiring variable depth monitoring wells for new businesses near the White Lodge wells; a cooperative effort between UMASS and Massachusetts DOT for road salt monitoring along Routes 128 and I-95; participation in educational programs on environmentally sound lawn care, conservation and resource protection; and participating in regional efforts to evaluate and enhance resources in the area.

What Can Be Done To Improve Protection?

The SWAP report recommends inspection of Zone I areas regularly, and when feasible to remove non-water supply related activities; educating residents on ways they can help to protect drinking water sources (i.e. proper management of septic systems), partnering with local businesses to ensure proper storage, handling, and disposal of hazardous materials; and working with emergency response teams to identify sensitive areas in case of a spill.

The Water District follows the recommendations by increasing educational efforts with residents and businesses and promoting best management practices for protecting supplies; by continuing to promote protection and conservation measures with town boards approving new developments; by preparation of a Wellhead Protection Plan; and by encouraging regional cooperation in protecting supplies that cross town boundaries.

How Can Residents Help Protect Sources?

Residents can contribute to wellhead protection efforts by managing septic systems properly, careful disposal of household hazardous materials and prescription drugs, proper maintenance of home heating oil tanks, and limiting herbicides and pesticides, as well as water use on landscaping. Support of local zoning bylaws or other supply protection initiatives is also important.

WHERE CAN I SEE THE SWAP REPORT?

The complete SWAP report can be viewed online at <http://www.mass.gov/dep/water/drinking/swapreps.htm> or at the Water District's office.

The following table shows the water quality results (Please refer to the definition key on page 4 for clarification on table results).

DATA TABLE DEFINITION KEY:

Maximum Contaminant Level (MCL): 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.
Maximum Contaminant Level Goal (MCLG): 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.
Secondary Maximum Contaminant Level (SMCL): The highest level of a contaminant that is allowed in drinking water for the secondary contaminants.
ND: Not detected.
Maximum Residual Disinfectant Level (MRDL): 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.
Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements, which a water system must follow.
90th Percentile: Out of every 10 homes, 9 were at or below this level.
mg/L or PPM (parts per million): 1 drop in 10 gallons, 1 inch in 16 miles, or one penny in \$10,000.
ug/L or PPB (parts per billion): 1 drop in 10,000 gallons, 1 inch in 16,000 miles, or one penny in \$10,000,000.

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How Is Our Water Supply Treated?

Your drinking water is continuously treated to provide you with a safe reliable water supply. The treatment process consists of several steps. The water is first aerated which helps oxidize minerals in the water such as iron and manganese. Next the water is filtered to remove any suspended material. Chlorine is added to provide disinfection. The pH of the water is adjusted to an optimum level so it is not corrosive to pipes and plumbing fixtures. Finally, fluoride is added to prevent dental cavities.

Cross Connections, Backflow Prevention And Your Drinking Water System

A *cross connection* is any temporary or permanent arrangement or connection between a public water system or consumer's drinking water system and any source or system containing non-potable water or other substances. One example of a cross connection is the piping between a public water system and a customer's lawn irrigation sprinkler system. The most common cross connection is caused by the garden hose.

Backflow is the undesirable reversal of flow of non-potable water or other substances through a cross connection and into the piping of a public water system or consumer's potable water system. The best way to prevent backflow is to make sure there is no connection between potable and non-potable sources. Never submerge a hose in soapy water buckets, pools, tubs, sinks, drains or chemicals. Purchase and install a hose bib vacuum breaker for all threaded water fixtures. These inexpensive, easy to install devices are found at local hardware stores. Contact your plumber or call us with any questions.

Water District Improvements

\$1.4 Million dollars was invested in the Water System during the past year. Highlights include the installation of 3000 feet of water main, 10 fire hydrants, 79 water services and 979 meters. In Dedham, water main was replaced in Pine Street. In Westwood, mains were replaced in the School Street area. Paving work remains to be completed.

Sodium Study Concluded

The District continues to press the Mass DOT to designate the stretch of Route 128 between the East St Rotary and Route 138 as low salt zone to reduce the impact of snow and ice treatment on the drinking water.

Water Conservation Tips

Conserve water and save on utility bills by upgrading your older toilet and clothes washer with newer, more water efficient models.

Conserve water in warmer weather, and:

- Repair any leaky faucets or hoses
- Wash your car with a bucket of water & sponge
- Let grass grow longer & don't bag the clippings
- Use soaker hoses & don't water mid-day
- Invest in a rain barrel. See our website DWWD.org or call us for details at **781-329-7090**

Rebates for Water Efficient Toilets & Clothes Washers

The DWWD is currently offering residential rebates for the purchase of *qualifying* WaterSense labeled toilets* and Energy Star rated clothes washers.

Take advantage of this offer to put some money back into your wallet, reduce your utility bills, and feel good about protecting your local water supply.

Residents are also eligible to receive FREE WaterSense labeled showerheads and faucet aerators, simply by visiting the District Office.

Rebate terms and conditions apply.

Why Replace Your Toilet with a WaterSense Model?

Toilets are by far the main source of water use in the home, accounting for nearly **30 percent** of an average home's indoor water consumption. Older, inefficient toilets that use as much as 6 gallons per flush also happen to be a major source of wasted water in many homes.

Recent advancements have allowed toilets to use 1.28 gallons per flush or less while still providing equal or superior performance. The **WaterSense label** is used on toilets that are independently certified to meet rigorous criteria for both performance and efficiency.

By replacing old, inefficient toilets with WaterSense labeled models, the average family can reduce water used for toilets by 20 to 60 percent—that's nearly **13,000 gallons** of water savings for your home every year!

*Learn more: www.epa.gov/watersense

The Dedham-Westwood Water District shares an interest in promoting the efficient use of water as a means to minimize the long term cost of water supply operations, facilitate regulatory compliance, and minimize environmental impacts. With these goals in mind, they have joined with multiple towns in the Neponset Watershed to successfully obtain grant funding from MassDEP to create a limited time rebate program. The grant period ends on June 30, 2014.