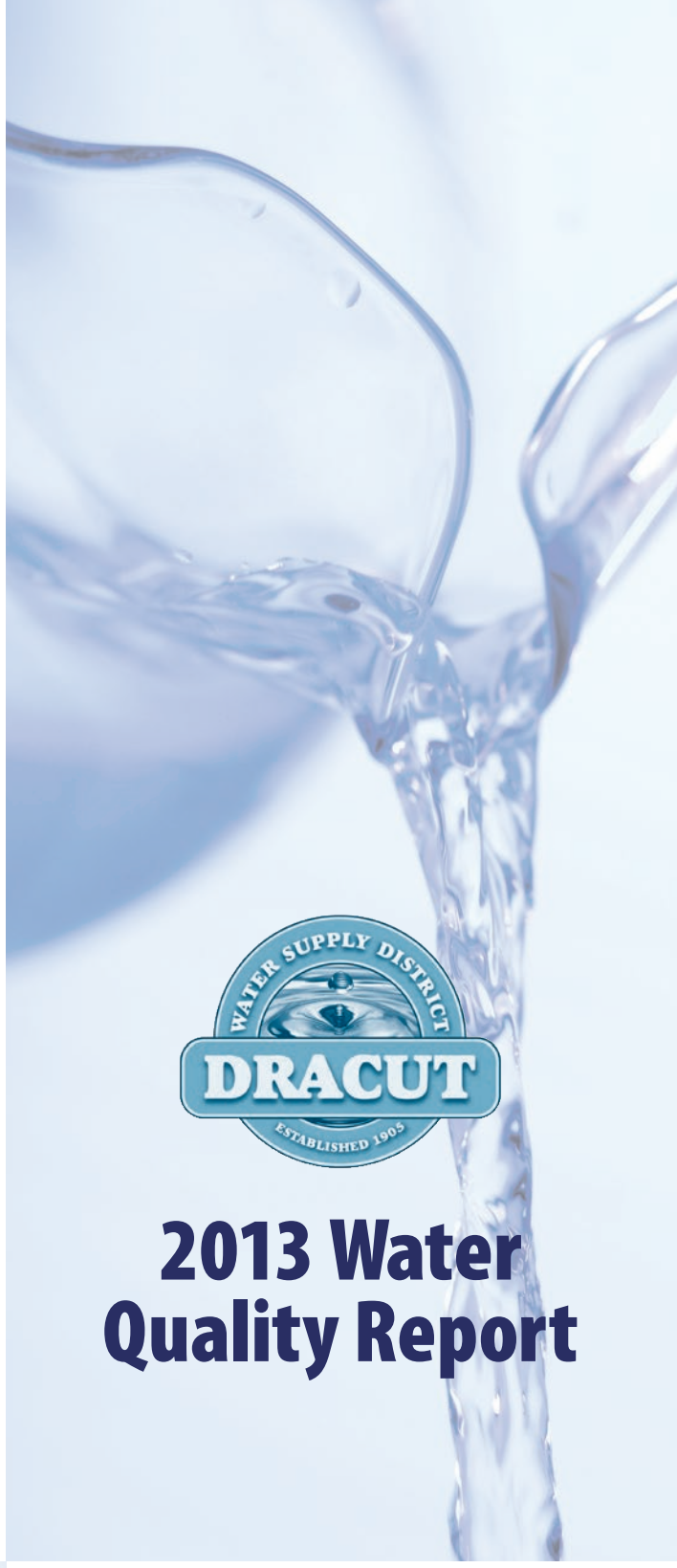
Potential Substances in Water

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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and 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 can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants,** which can be naturally-occurring or be the result of oil and gas production and mining activities.

59 Hopkins Street
Dracut, MA 01826
PWSID 3079000



2013 Water Quality Report

We are pleased to present the 2013 Consumer Confidence Report (CCR) required by the government for all water systems to inform customers of the quality and content of their drinking water. This past year, the financial audit report showed a strong financial picture for the District.

The State has been developing new regulations that will apply to all public water systems in the near future. The District has been monitoring how these new regulations will affect our sources of water. It is becoming very clear that there will be an increased cost to provide water in the future under these new regulations. I urge you to be aware of these potential increases and to take an active role by commenting on these regulations as the State publishes them for public comment.

Major improvements to the water system included new replacement well construction, engineering design for 3 booster pump station upgrades and design for new security at all District locations.

The District continues with the routine programs for water main and hydrant replacements along with the installation of replacement water meters and system flushing.

We, your elected Water Commissioners, cannot succeed without the strong team of dedicated professionals serving you. We appreciate all their hard work and are proud to work with each of them.

We thank you for all your support during the last year. Please continue to share all your comments, questions, or concerns regarding the District with any of us.

— *Water Commissioners Robert Corey, William Morin, William "Zee" Zielinski*


Robert Corey


William Morin


William "Zee" Zielinski

The Dracut Water Supply District Working for You!

The Dracut Water Supply District provides water to most of the residents and businesses in almost two thirds of Dracut as well as areas in Tyngsboro. The District has 3 sources of water—one well field in Dracut, one well field in Tyngsboro and we purchase supplemental water from the City of Lowell. To deliver the water we have 3 water storage tanks, 7 booster pump stations, 8 pressure zones with over 100 miles of mains. Our water system has been in the process of and continues to upgrade, add and install new water distribution improvements to better serve you—our customers. We are excited to present our 2013 Water Quality Report. The report presents important information about our operations, the quality of the water provided and useful tips on water use. This report will be sent every year to keep you updated with system upgrades and your most recent water quality information. A special thanks to our staff and our customers who help to continue the success story of the 'New and Improved Dracut Water Supply District'.

Important Health Information

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, 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).

"We never know the worth of water till the well is dry." —THOMAS FULLER

Want More Information?

Do you want to learn more about your drinking water? Do you have questions regarding this report? The Dracut Water Supply District responds to all concerns, questions and comments. Please contact Mark R. Riopelle, Executive Director–Superintendent at 978-957-0441 or via e-mail to *mark.riopelle@dracutwater.com.*

The main office & field office buildings are located at 59 Hopkins St., Dracut. Water Commissioner Board meetings are usually held the second and fourth Wednesday of each month at 7:00 p.m. in the field office conference room. The office receives calls 24 hours a day including weekends and holidays with after business hours going to the "emergency call service." Whatever your water needs might be—it's just a phone call away.

Source Water Assessment Protection (SWAP)

The SWAP program was established under the Federal Safe Drinking Water Act. Call the office for a copy of the District's SWAP Report or check out the report on our website at *www.dracutwater.com*. For additional information on water quality visit the Mass.gov website.

Water Supply Sources

Well Name	Source ID#
Tyngsboro Well Field #5	3079000 08G
Tyngsboro Well Field #4	3079000 07G
Tyngsboro Well Field #3	3079000 06G
Tyngsboro Well Field #2	3079000 05G
Tyngsboro Well Field #1	3079000 04G
New Boston Well Field #2R	3079000 09G
New Boston Well Field #1	3079000 03G
Lowell Regional Water Utility (Additional Supplemental Source)	3079000 01P

Water Quality Test Results

Regulated Substance	Highest Level Detected	Highest Level Allowed (Epa's Mcl) *	Ideal Goals (Epa's Mclg) *	Range	Violation	Date	Major Sources
Sodium	32.9 ppm	no MCL	none set	n.d. to 32.9	NO	7/20/2012	Erosion of natural deposits; Runoff from orchards; Waste from electric and glass production.
Radium 226	0.2 pCi/L *	5 pCi/L	0 pCi/L	n.d. * to 0.2	NO	9/1/2011 C	Erosion of natural deposits
Gross Alpha	0.4 pCi/L	15 pCi/L	0 pCi/L	n.d. * to 0.7	NO	9/1/2011 C	Erosion of natural deposits
Fluoride	1.6 ppm	4 ppm	4 ppm	n.d. to 1.6	NO	4/5/2013	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Copper	0 of 34 B 416 ppb	1,300 ppb (Action Level)*	1,300 ppb	n.d. to 416	NO	8/5/2013	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead	0 of 34 B 0.0 ppb D	15 ppb (Action Level)*	0	n.d. to 0.0	NO	8/5/2013	Corrosion of household plumbing systems; Erosion of natural deposits
Sulfate	15.6 ppm	no MCL	none set	n.d. to 15.6	NO	10/31/2013	Erosion of natural sources
Nitrate	1.23 ppm	10 ppm	10 ppm	n.d. to 1.23	NO	7/18/2013	Runoff from fertilizer use; Leaching from septic tanks sewage; Erosion of natural deposits
Total Trihalomethanes (TTHM)	50.0 ppb D	80 ppb	0	n.d. to 50.0 D	NO	9/11/2008 C	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	15 ppb	60 ppb	0	n.d. to 15.0 D	NO	5/15/2008 C	By-product of drinking water chlorination
Manganese	220 ppb	50 (Secondary MCL)	300 (EPA Health Advisor)	73 - 220	NO	10/31/2013	Erosion of natural deposits.
Total Trihalomethanes (TTHM)	69.8 ppb D	80 ppb	0	n.d. to 69.8D	NO	2013	By-product of drinking water chlorination
Turbidity A	100.0% 0.17	TT = percentage of samples less than 0.5 NTU TT = 0.5 NTU	TT	0.06 to 0.17	NO	2013	Soil runoff
Haloacetic Acids (HAA5)	22.7 ppb D	60 ppb		0 to 22.7D	NO	2013	By-product of drinking water chlorination
Chlorine Residual	1.01 ppm	4 ppm	4 ppm	0.47 to 1.01	NO	2013	By-product of drinking water disinfection
Chlorite	0.52 ppm	1.0 ppm	0.8 ppm	n.d. to 0.52	NO	2013	By-product of drinking water disinfection
Perchlorate	0.42 ppb	2.0 ppb	none set	N/A	NO	2013	Rocket propellant, fireworks, numitions, flaires, blasting agents. Aged water treatment disinfection chemicals
Nitrate	0.25 ppm	10 ppm	10 ppm	N/A	NO	2013	Runoff from fertilizer use; Leaching from septic tanks sewage; Erosion of natural deposits
Fluoride	1.11 ppm	4 ppm	4 ppm	0.91 to 1.11	NO	2013	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Gross Alpha	0.5 (+-1.1)	15 pCi/L	0 pCi/L	N/A	NO	2009C	Erosion of natural deposits
Radium 228	0.1(+-0.6)	5 pCi/L	0 pCi/L	N/A	NO	2009C	Erosion of natural deposits
Sodium	25.9 ppm	no MCL	none set	N/A	NO	2013	Erosion of natural deposits; Runoff from orchards; Waste from electric and glass production.
Sulfate	5.0 ppm	no MCL	none set	5.0	NO	2013	Erosion of natural sources
Chloroform	19.82 ppb	no MCL	none set	n.d. to 19.82	NO	2013	By-product of drinking water chlorination
Bromodichloromethane	4.08 ppb	no MCL	none set	n.d. to 4.08	NO	2013	By-product of drinking water chlorination
Copper	0 of 50 B 40 ppb	1,300 ppb (Action Level)*	1,300 ppb	n.d. to 40	NO	2012	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
Lead	0 of 50 B 1.0 ppb D	15 ppb (Action Level)*	0	n.d. to 1.0	NO	2012	Corrosion of household plumbing systems; Erosion of natural deposits

Listed above are 17 regulated & unregulated contaminants for which monitoring was required and detected in Dracut and Lowell drinking water. Not listed are over 100 other contaminants monitored but not detected.

*** DEFINITIONS:**

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) – The level of a contaminant in drinking water below which there is no known or expected risk to health.

ppm – One part per million.

ppb – One part per billion.

n.d. – none detected

Action Level – The concentration of a contaminant which triggers a treatment or other requirement that a water system must follow.

Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water. The City is required under the Surface Water Treatment Rule to filter the source of the City's drinking water, the Merrimack River, to reduce contaminant levels such as turbidity.

NTU – Nephelometric Turbidity Unit measures the characteristic or propety of water that causes it to scatter or absorb light. This is usaully caused by very small particulate matter suspended in the water.

SPECIAL EXPLANATIONS:

- Results represent water pumped from Dracut Water Supply District (DWSD) wells.
- Results represent water purchased from City of Lowell.
- A Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the Water Treatment Plant filtration system.
- B This is the number of sites above the action level.
- C This is the most recent test result required by EPA Regulations.
- D Highest Level Detected & Range are not always the same because results are averages or 90th percentile.

UNREGULATED OR SECONDARY SUBSTANCE: MANGANESE

Level Detected: 218 ppb
Secondary MCL: 50
EPA Health Advisory: 300
Range: 105–218
Date: 7/20/12
Major Sources: Erosion of natural deposits

DEFINITIONS:

Maximum Contaminant Level (MCL) – The highest level of a contaminant that is allowed in drinking water.
ppb – One part per billion.

SPECIAL EXPLANATIONS:

Results represent water pumped from Dracut Water Supply District Wells.

Water Quality Testing Results

Several times each year, your water is collected and tested for over 120 possible impurities. The table (above) provides information about substances that have been detected in the most recent water quality testing. Some of the tests were completed in years other than 2013. Because the water delivered to you could have come from either Lowell or Dracut or be a mix of the two, the data presented in the table represents the results of testing done by the Lowell Regional Water Utility and the Dracut Water Supply District. If you are interested in more information about the source of your water, contact the Dracut Water Supply District (978-957-0441).

Water Quality Information

In order to ensure that tap water is safe to drink, the MADEP and EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. We treat our water according to EPA's regulations.

How Do We Treat Your Water?

In order to ensure that tap water is safe to drink and in compliance with federal and state regulations, your water receives a variety of treatments including potassium hydroxide and phosphate for corrosion control as well as fluoride to prevent tooth decay/ cavitives. Lowell water is filtered and treated by the City of Lowell.

Water Conservation Tips

Weather continues to be a factor all over the nation. Water, once thought of as an unlimited resource, now proves itself to be more precious and vital than ever. Given that, it is upon all of us to use it wisely. To that end the Dracut Water Supply District encourages all its consumers to use water conservation measures, some of which are listed below.

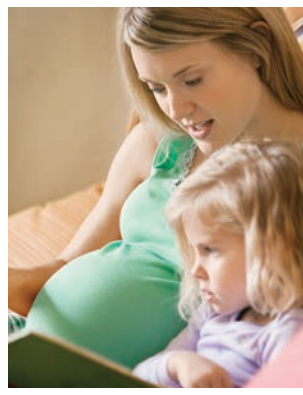
Water Conservation Outside

- Minimize the size of your lawn as lawn watering may consume more than 30% of summer residential water use.
- Use mulch around plants and shrubs and choose plants that don't need much water.
- Use water from a bucket to wash your car, and save the hose for rinsing.
- Sweep clippings and leaves from walks and driveways rather than using the hose.
- Dracut's Outside Watering Guidelines allow odd numbered houses on Wed, Fri, and Sun and even numbered houses on Tues, Thurs, and Sat. No watering on Mondays.
  In the event time restrictions are required customers will be notified in the local news media along with community signs
- Underground sprinkler systems require moisture sensors.

Water Conservation in Your Home

- Fix leaking faucets, pipes, toilets, etc.
- Install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Don't use the toilet for trash disposal.
- Take shorter showers.
- When washing hands, brushing teeth or shaving, use only as much water as you need.

Message from the EPA



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. Dracut Water Supply District 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 *www.epa.gov/safewater/lead*.

Visit Us on the Web www.dracutwater.com

The District has a newly designed web site with an emphasis on customer service and access to information. Hopefully you will find it user-friendly and informative. Some of the new features include a new interactive GIS map showing water mains and house lots. There are new links to both of the communities that we serve—the Towns of Dracut and Tyngsborough.

You can continue to pay your water bill on-line in a safe secure environment.

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirement Not Met For Dracut Water Supply District

Our water system violated a monitoring requirement during the third quarter (July–September) of 2013. Even though this was not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. ***During the third quarter of calendar year 2013 we monitored for perchlorate but did not report the results to DEP in a timely manner.***

What should I do?

There is nothing you need to do at this time.

The table below list the contaminants we did not properly report to DEP during the compliance period noted above, how often we are suppose to sample for these contaminants and how many samples we are supposed to take, how many samples we took, when samples should have been reported to DEP.

Contaminant	Required Sampling Frequency	Number of samples taken	Samples were taken	When all sample results should have been reported	When sample results were reported
Perchlorate	2 per quarter	2	7/15/13	by 10/10/13	12/13/13

What happened?

In the third quarter of 2013, the District took the required samples for Perchlorate but failed to report the results to DEP in a timely manner. The District laboratory usually submits sample results electronically to a DEP database. In this case the results were submitted to the District as a hard copy report and the District failed to forward the hard copy to MADEP by the reporting deadline.

What is being done?

The District has established a procedure for reviewing the quarterly sample results and differentiating electronic sample results and hard copy reports. Hard copy reports will not be filed away without certified mail receipts showing MADEP has received hard copies by the reporting deadline.

For more information, please contact Mark R. Riopelle, 978-957-0441, 59 Hopkins Street, Dracut, MA.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

While we regret this sample reporting delay, we wish to assure our customers that all results for perchlorate was below levels that would affect your health. Chemicals continue to be added to your water to protect your plumbing and your health.

Mark R. Riopelle
Executive Director–Superintendent
Dracut Water Supply District, PWSID 3079000
January 2014