

2002 Water Quality Report

Working for You!

We are excited to present our 2002 Water Quality Report. Along with the report we have included a newsletter which will inform you of the many exciting changes and upgrades to your system. We are pleased to report that your Water Department has emerged from the past difficulties and is well on the way to being a solid operation both financially and technically.

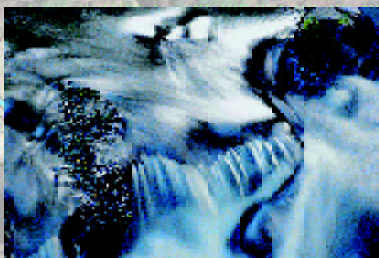
This report presents information about our operations, the quality of the water we deliver, and some useful information on water use. Each year, we will publish a new report highlighting any changes in our system and updating you with the most recent water quality information. We are pleased to provide this report which provides information on year 2002.

I wish to offer a special thanks to my staff for all their hard work. Also to each of you, our customers, who have helped us turn the District around.

The Dracut Water Department

The Dracut Water Department provides water to most of the residents and businesses in western Dracut and eastern Tyngsboro. Our water is supplied by two main sources: the Tyngsboro Well Field and the New Boston Well Field. The Source ID#s are given in the table below. In addition, we maintain a connection with the City of Lowell, which distributes water from the Merrimack River, to supplement our supply. To deliver the water we have three water storage tanks, multiple pump stations, and over 100 miles of water mains.

| Well Name | Source ID # |
|-------------------------------|-------------|
| Lowell Regional Water Utility | 3079000 01P |
| New Boston Well Field #1 | 3079000 03G |
| New Boston Well Field #2 | 3079000 02G |
| Tyngsboro Well Field #1 | 3079000 04G |
| Tyngsboro Well Field #2 | 3079000 05G |
| Tyngsboro Well Field #3 | 3079000 06G |
| Tyngsboro Well Field #4 | 3079000 07G |
| Tyngsboro Well Field #5 | 3079000 08G |



Improvements and Changes

In 2002 we continued to make improvements to the Water Department. Our in-house lab is up and running with daily water quality monitoring being done by our staff, which improves safety and saves money. Crews are actively working on the new line repair program, a project which aims to replace all undersized and outdated supply lines within the system. When this is complete, we will be better able to ensure the quantity and quality of water you expect. In response



to the many customers that requested it, we are happy to have established our quarterly billing program, providing customers with a more manageable bill. You can now pay your quarterly bill by mail, phone or e-mail with Visa or Mastercard. Finally, we have upgraded our pumping capacity and in-house controls which improves service and reduces downtime. Please look for more information on our proposed Home Maintenance Agreement. For a small annual fee, District crews would be able to repair any problem in your water line for no additional charge. With the average cost of repair in the thousands of dollars, a District offered plan to take care of home outside line leaks could be a wise investment. We will be sending out more information soon.



Le rapport contient des informations concernant la qualité de l'eau de votre communauté. Faites-le traduire, ou parlez-en à un ami qui le comprend bien.

Water Quality Testing Results

Several times each year, your water is collected and tested for over 120 possible impurities. The following table provides information about substances that have been detected in the most recent water quality testing. Some of the test were completed in years other than 2002. 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 a more information about the source of your water, contact the Dracut Water Supply District at 978-957-0441.

Water Quality Information

In order to ensure that tap water is safe to drink, the DEP 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.

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.

| Contaminant | Meets MCL | Range Detected | Date | MCL Goal |
|---|-----------|----------------|------|----------|
| Arsenic (ppm) | Yes | 0.0 - 0.026 | 2002 | 0.05 |
| Cadmium (ppb) | Yes | 0.0 - 0.5 | 2002 | 5 |
| Disinfectant residual (ppm) | Yes | 1.0 - 1.03 | 2002 | 1.0 |
| Iron (ppm) | Yes | 0.1 - 0.9 | 2002 | 0.3 |
| Lead (ppb) | Yes | 0 - 0.25 | 2002 | 0.05 |
| Nitrate (ppm) | Yes | 0 - 2.9 | 2002 | 10 |
| Seawater (ppm) | Yes | 0 - 2.5 | 2002 | 10 |
| Total Dissolved Solids (ppm) | Yes | 12 - 45.6 | 2002 | 500 |
| Turbidity (NTU) (measured at 1000 Hz) (ppm) | Yes | 0.05 - 0.25 | 2002 | N/A |

| Contaminant | Meets Standard | 90th Percentile | Date | Available Level |
|--------------|----------------|-----------------|------|-----------------|
| Lead (ppb) | Yes | 12 | 2002 | 15 |
| Copper (ppm) | Yes | 0.174 | 2002 | 1.3 |

Straw killed (dead) oysters are not a health concern. In 1996, the DEP and the DEP's Office of Research and Standards (ORS) reported that the oysters were safe to eat.

| Contaminant | Meets MCL | Range Detected | Year | SWM |
|------------------------|-----------|----------------|------|-----|
| Chlorine (ppm) | NA | 10.7 - 13.1 | 2002 | N/A |
| Chlorine Dioxide (ppm) | NA | 0.0 - 0.5 | 2002 | 20 |
| Sulfate (ppm) | NA | 2 - 23 | 2002 | 250 |
| Sodium (ppm) | NA | 0 - 46 | 2002 | N/A |

Terms and Abbreviations used in tables:

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water at which there is no known or expected risk to health. MCLGs allow for a margin of safety; **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 Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. It is based on 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 apply to the use of disinfectants to control microbial contaminants; **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which are designed to reduce the contaminant to a safe level; **ppm:** part per million by volume; **ppb:** parts per billion; **NA:** not applicable; **SWM:** State Water Monitoring; **SMCL:** These standards are developed to protect the aesthetic quality of drinking water and are not health based; **Massachusetts Office of Research and Standards (ORS):** This is the concentration of a chemical in drinking water, at or below which, based on the best available scientific information, effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as a potential need for further action; **Nephelometric Turbidity Unit (NTU):** measures the cloudiness or opacity of water that causes it to scatter or absorb light. This is usually measured in terms of small particulate matter suspended in the water; **Treatment Technique (TT):** A required treatment process intended to reduce the level of a contaminant in drinking water. The City is required to use a treatment technique to filter the source of the City's drinking water, the Merrimack River, to reduce the level of certain contaminants such as turbidity.

Notes

- ¹ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience health problems with their liver, kidneys, or central nervous systems, and may have an increased risk of cancer.
- ² This is the average of samples taken during the year.
- ³ Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

| CMR CAS | MCL/ MCLDL | Typical Source |
|------------|---------------|---|
| 2 | 2 | Discharge of drilling waste; Discharge from leach of batteries; Discharge of natural deposits |
| 5 | 5 | Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries run off from waste batteries and paints |
| 4 | 4 | By-product of drinking water chlorination |
| 0 | 60 | By-product of drinking water chlorination |
| 02 | | By-product of drinking water chlorination |
| 4 | 4 | Discharge of natural sources; Weathered lead which migrates during fires |
| 10 | 10 | Rundiff from leach used building from septic tanks, sewage treatment plants and pipes |
| 0 | 100 | By-product of drinking water chlorination |
| NA | 0 | By-product |

| Contaminant | MCL/ MCLDL | Typical Source |
|-------------|---------------|--|
| 10 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |
| 0 | 0 | Erosion of natural deposits; Leaching; Corrosion of household plumbing systems from wood preservatives |

Large amounts of lead may be released from old lead solder and lead pipes in homes with old plumbing.

| MCL | CRCG | Typical Source |
|------|------|---|
| NA | NA | Erosion of natural sources |
| 0.00 | 70 | Gasoline and diesel, leaching from underground storage tanks and gasoline and |
| 50 | NA | Erosion of natural sources |
| NA | 20 | Erosion of natural sources; Rundiff from use of road salt during winter |

Drinking water below which
Maximum Contaminant Level (MCL)
 water. MCLs are set as
Maximum Residual Concentration (MRC)
 water. There is
 no MCL for total
 dissolved solids (TDS).
 water
 reflect the benefits of
 concentration of a
 water system must
**Suggested Maximum
 Residual Concentration (SMRC)**
 etic qualities of drinking
**Drinking Water Quality
 Standards Guideline**
 h, adverse health
 as an indicator of the
 is the
 usually caused by very
 required process
 under the Surface
 River, to reduce



ars may experience
 sed risk of getting cancer.
 ator of the effectiveness of

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).

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 and fluoride for oral health. Lowell water is filtered and treated by the City of Lowell.

Sewer Program

Some of you have experienced temporary shutdowns due to the sewer project. This program continued through 2002 and into 2003. Both the Water Department and the Town try very hard to minimize any shutdowns and give notification whenever possible at least 2 days in advance. Sometimes emergencies happen and service is restored as soon as possible. During this time we wish to apologize for any inconvenience and thank you for your patience. The sewer program is a vital one to the health and welfare of thousands of residents.

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 Mr. Gary W. McCarthy, Executive Director-Superintendent of the Dracut Water Supply District at 978-957-0441. Internet access to information about your District will soon be available at www.DracutWater.com. Our main office is located at 59 Hopkins Street in Dracut. Our meetings are at the Dracut High School Library, and are usually held the 2nd and 4th Wednesdays of the month. Our meetings are broadcast on cable too. Our office receives calls 24 hours a day with after business "Emergency Call Service."

The Dracut Water Annual Water Report and Newsletter

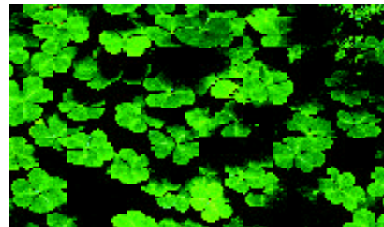
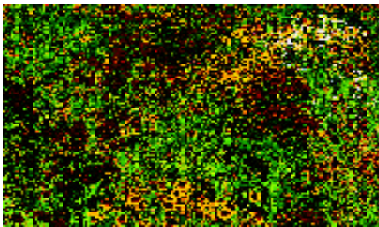
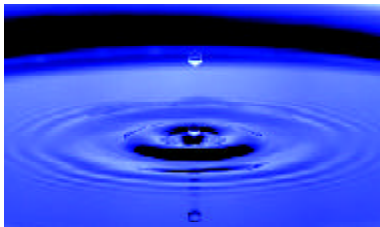
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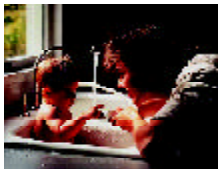
Water Conservation Tips

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 both the Town of Dracut and the Dracut Water Supply District encourage all its consumers to use water conservation measures, some are listed below.



Water conservation in your home

- ✍ Fixing 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.



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 Sat and even numbered houses on Tue, Thu, and Sun. No watering on Mondays. In the event time restrictions are required customers will be notified in the local news media along with community signs



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WATER QUALITY INFORMATION ENCLOSED!

