2022 Testing Result Presented Spring 2023

2022 WATER QUALITY REPORT

Douglas Water Department
Douglas, Massachusetts
DEP PWSID #2077000

This report is a snapshot of drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with information because informed customers are our best allies.

Public Water System Information

Address: 29 Charles Street
Contact Person: Robert Sullivan
Telephone: (508) 476-2400
Fax: (508) 476-4012
Email: rsullivan@douglas-ma.gov
Website: www.douglas-ma.gov

Glen Street Pump Station

A MANDATORY WATER BAN IN EFFECT

A mandatory water ban is in affect From May 1st Through September 30
No nonessential outdoor water use is allowed between the hours of 9:00 am –5:00 pm
For more information please visit out website:
https://www.douglas-ma.gov/228/Water-Ban

Robert Josey (Chairman) Keith Bloniasz (Secretary) Colin Haire (Vice Chairman), Robert Sullivan (Systems Manager)

Water System Improvements

Our water system is routinely inspected by the Department of Environmental Protection (DEP). The DEP 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. In 2021 we upgraded approximately 1300 ft. of 8' CI water main to 16" DI water main in North street, 3000 ft. of 6" CI with 12" DI in Gilboa Street. and extended 3000 ft. in Lackey Dam Road.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may attend the following meetings or educational events: The Water/Sewer Commission meets the first Tuesday of each month at 7:00 P.M., in the office of the WWTF, 29 Charles Street. Please feel free to participate in these meetings, or call Robert Sullivan if you have any questions about your water at (508) 476-2400, or call the EPA/CDC Safe Drinking Water Hotline (800) 426-4791, or on

Where Does My Drinking Water Come From?

Your water is provided by the following sources listed below:

Source Name	DEP Source ID#	Source Type	Location of source
Vacuum Tubular Wells	2077000-01G	Groundwater	West Street
Gravel Packed Well	2077000-02G	Groundwater	West Street
Glen St. Well #1	2077000-03G	Groundwater	Glen Street
Glen St. Well #2	2077000-04G	Groundwater	Glen Street

Location of Drinking Water Sources

Is My Water Treated?

Our water system makes every effort to provide you with potable drinking water. To improve the quality of the water delivered to you, we treat it with Potassium Hydroxide, for corrosion control, thus reducing lead and copper concentrations. Although lead and copper have not been detected in source water at concentrations above action levels established by EPA, lead and copper may be present in plumbing materials. Lead and copper typically enter drinking water through corrosion of lead and copper- bearing plumbing materials. The water quality of our system is constantly monitored by us and the DEP to determine if any additional treatment is required.

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. The Douglas Water Dept. 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 https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

We also add a small amount of Sodium Hypochlorite for distribution maintenance. This helps prevents the growth of bacteria within the distribution system.

How Are These Sources Protected?

The DEP has prepared a Source Water Assessment and Protection Program (SWAP) Report for the water supply sources serving this water system. A susceptibility ranking of high was assigned to this system using the information collected during DEP'S assessment. The SWAP Report notes the key issues of the activities in the Zones 1 and 2: Transportation corridor, Oil or Hazardous material storage, residential land uses. DEP recommends:

- To the extent possible, remove all non-water supply activities from the zones.
- Continue to inspect the zones regularly.
- Follow best management practices that focus on good housekeeping, spill prevention, and operational practices to reduce the use and release of hazardous materials.

The complete SWAP Report is available at the Water/Sewer Department Office, located at 29 Charles Street and at https://www.mass.gov/files/documents/2019/02/22/swap-cero-with-inst.pdf

Residents can help protect sources by: Practicing good septic system maintenance, supporting water supply protection initiatives at town meetings, contacting the Water Department or Board of Health to volunteer for monitoring or education outreach to schools, and limiting pesticide and fertilizer use. The town of Douglas has adopted an Aquifer Protection Bylaw to protect these wells.

Important Definitions

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.

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

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

ppm = parts per million, or milligrams per liter (mg/l) ND = Not Detected

ppb = parts per billion, or micrograms per liter (ug/l) N/A = Not Applicable

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

Secondary Maximum Contaminant Level (SMCL) - These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Massachusetts Office of Research and Standards Guideline (ORSG) - 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.

mrem/year - millirems per year - a measurement of radiation absorbed by the body

A Level 1 assessment - is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Compliance with Drinking Water Regulations:

In accordance with DEP requirements, the Water Department collects samples from each water source, storage tank, and various user taps on a monthly basis. All results of drinking water samples met applicable state and federally mandated health-based standards.

Does My Drinking Water Meet Current Health Standards?

Through routine treatment, monitoring, and system maintenance, we are committed to providing you with safe, potable, and palatable drinking water. The results of all drinking water sample analyses met applicable state and federally mandated health-based standards.

Do I Need To Be Concerned About Certain Contaminants Detected In My Water?

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

2022 WATER QUALITY TESTING RESULTS

Lead & Copper	Date(s) Collected	90th Percentile	Action Level	MCLG	# of Sites sampled	# of Sites Above Action Level	Violation	Possible Source of Contamination
Lead (ppb)	2022	2.4	15	0	24	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2022	0.29	1.3	1.3	24	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Regulated Contaminants	Date(s) Collected	Highest Detect Value	Range Detected	MCL	MCLG	Viola-tion	Possible Source of Contamination
Inorganic Contaminants							
Barium (ppm)	4/1/20	0.018	0.0– 0.018	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (ppm)	04/05/22	2.4	1.1- 2.4	10	10	No	Runoff from fertilizer use;leaching from septic tanks; sewage; erosion of natural deposits
Perchlorate (ppb)	08/04/22	0.24	0.18—0.24	2.0	n/a	No	Rocket Propellants, Fireworks, Munitions, Blasting Agents
Disinfection Containinants							
Total Trihalomethanes(TTHMs)(ppb)	8/08/2022	5.6	5.3 - 5.6	80	n/a	No	Byproduct of Drinking water chlorination
Haloacetic Acids (HAA5s) (ppb)	8/08/2022	2.4	2.2 - 2.4	60	n/a	No	Byproduct of Drinking water chlorination
Chlorine (ppm)	5 times a month	0.60	0.0 - 0.60	4	4	No	Water additive used to control microbes

Regulated Contaminants	Date(s) Collect-ed	Detect Result or range	Highest Quarterly Average	MCL	Viola-tion	Possible Source of Contamination	Health Effects
PFAS6 (ppt)	2022	0 - 2.9	2.9	20	No	Discharges and emissions from industrial and manufacturing sources associated with the production or use of these PFAS, including production of moisture and oil resistant coatings on fabrics and other materials. Additional sources include the use and disposal of products containing these PFAS, such as fire-fighting foams.	Some people who drink water containing these PFAS in excess of the MCL may experience certain adverse effects. These could include effects on the liver, blood, immune system, thyroid, and fetal development. These PFAS may also elevate the risk of certain cancers.

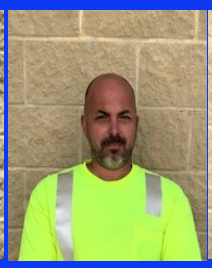
Unregulated Contaminants	Date(s) Collected	Highest Detect Value	Range Detected	Average Detected	SMCL	ORSG	Possible Source of Contamination
Sodium (ppm)	4/1/20	30	27 –30	n/a	-	20	Road salting; erosion of natural deposits
Perflourobutane sulfonic acid(PFBS) (ppt)	2022	3.0	ND - 3.00	n/a		†	
Perflourohexanoic acid (PFHxA) (ppt)	2022	2.46	ND - 2.46	n/a		†	

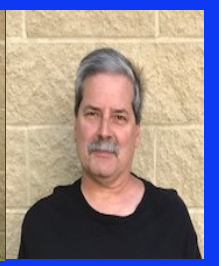
Sodium is a naturally-occurring common element found in soil and water. It is necessary for the normal functioning of regulating fluids in human systems. Some people, however, have difficulty regulating fluid volume as a result of several diseases, including congestive heart failure and hypertension. The guideline of 20 mg/L for sodium represents a level in water that physicians and sodium sensitive individuals should be aware of in cases where sodium exposures are being carefully controlled. For additional information, contact your health care provider, your local board of health or the Massachusetts Department of Public Health, Bureau of Environmental Health Assessment at 617-624-5757.

†There is no ORS Guideline for this compound.

DOUGLAS WATER DEPARTMENT


Robert Sullivan


Stephen Theriault


Peter Higley


Adam Furno


Lee Bloniasz

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2022 WATER QUALITY REPORT

SUBSTANCES FOUND IN SOURCE 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:

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 residential uses.

Radioactive Contaminants - which 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, the Department of Environmental Protection (DEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit 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 that must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water then 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 some 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 lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).