



Annual Water **Quality Report**

for Reporting Year 2024

Life
starts with
Clean
Water



MassDEP PWS ID # 4076002
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508-822-1820



2024 Water Quality Report

The Environmental Protection Agency (EPA) requires all community Water systems to provide an annual water quality report to all of their customers on or before July 1st of each year.

The Taunton Water Department provides all of the water for the inhabitants of the North Dighton Fire District. There are two existing connections to Taunton: one in a meter building on Dighton Avenue and the other on South Walker St.

A municipality, the North Dighton Fire District is comprised of the properties inside the village limits delineated by Forest Street and Lincoln Avenue (500 feet north of Tremont Street). A portion of the District is owned by each landowner within those boundaries. Currently, we provide both water and street light services for about 370 residential and 7 commercial clients.

The North Dighton Fire District was established by an act of the Massachusetts Legislature in 1912. The governing body of the District is made up of three elected officials known as the Prudential Committee or Board of Commissioners. They hold their meetings at the Fire District Office normally on the 1st Wednesday of each month. Schedules are posted at the Dighton Town Hall, the North Dighton Fire District's Office and on the Dighton Town Hall website.

All water is purchased from the city of Taunton. The Taunton Water Department is accountable for conducting the majority of the required water quality tests and informing the District Superintendent of any deficiencies. The District has the responsibility for sampling for bacteria (monthly), Chlorine (monthly), Trihalomethanes (quarterly), Haloacetic Acids (quarterly). Additionally, the North Dighton Fire District is mandated by the Department of Environmental Protection (DEP) to collect samples for both Lead and Copper. Lead and Copper samples were last taken in August of 2023 and are scheduled to be taken again in August of 2026.

As part of its regular preventative maintenance, the North

Dighton Fire District replaces water meters that are 15 years or older. Additionally, the District regularly maintains, repairs and/or replaces portions of the water distribution system as needed. Hydrants are routinely painted to prevent corrosion and ensure high visibility. The District aims to flush all hydrants at least once a year and all dead-ends at least twice. Commercial water meters undergo routine testing in accordance with the District's policy. Every year, the District allocates funds for projects to ensure clean and safe drinking water for all residents. In 2024, all hydrant valves were exercised and one fire hydrant was replaced. Also a nationwide effort is under way to identify the source material of every homeowner's water service line; hence, residents' help is much needed.

Residential water bills are mailed out in April and in October. These are based on the water used for the previous six months. The base water rate (Step 1) in 2024 was \$9.10 per 100 cubic feet (750 gallons). We offer Senior Citizens a semi-annual discount of \$15 on their spring and fall bills (the homeowner must be sixty-five years of age or older and have their primary residence within the district). The North Dighton Fire District also provides the streetlights for one of the best-lit communities in the area. The intent of this report is to keep you informed of your municipal water district. If you have any questions or concerns, please call the district at 508-822-1820 or attend one of the monthly meetings. This is your water department and your input is essential.

PRUDENTIAL COMMITTEE BOARD MEMBERS:

Bruce Perry (Chairman), Nicholas Noons, Michael Rose

ADMINISTRATOR/TREASURER/CLERK & RAO

Kelly Roberts

SUPERINTENDENTS

Gary Willette, Primary Operator

Robert Thibeault, Secondary Operator

Is My Water Safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are happy to inform you that all of our water samples met the drinking water standards. The Taunton Water Dept. is responsible to perform most of the necessary water quality tests and report any deficiencies to the North Dighton Fire District's superintendent. The North Dighton Fire District has the responsibility for sampling for bacteria (monthly), Chlorine (monthly), Trihalomethanes (quarterly) and Haloacetic Acids (quarterly). Also required by the Department of Environmental Protection (DEP), the North Dighton Fire District must take samples for both Lead and Copper. The next Lead and Copper tests will be in August of 2026. We are committed to providing you with information because informed customers are our best allies.



NORTH DIGHTON WATER QUALITY TABLE



Regulated Substances							
Substance (Unit of Measure)	Date Collected	MCL [MRDL]	MCLG [MRDLG]	YOUR WATER	Range Low-High	Violation	Typical Source
Chloramines (ppm)	2024	[4]	[4]	1.98	1.29 - 2.50	No	Water additive used to control microbes
Haloacetic Acids ¹ [HAAs] - Stage 2 (ppb)	Quarterly 2024	60	NA	35	26 - 52	No	By-product of drinking water disinfection
Total Trihalomethanes ¹ [TTHMs] - Stage 2 (ppb)	Quarterly 2024	80	NA	58	32 - 87	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

Substance (Unit of Measure)	Date Collected	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Sites Above AL/Total Sites	Violation	Typical Source
Copper (ppm) ²	17-Aug-2023	1.3	1.3	0.1	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb) ³	17-Aug-2023	15	0	3	0/10	No	Corrosion of household plumbing systems; Erosion of natural deposits

¹A single result over the MCL does not trigger a violation.

²Copper 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

³Infants 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.

What's a Cross-Connection?

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (back-siphonage).



Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools, or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination. Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We have surveyed industrial, commercial, and institutional facilities in the service area to make sure that potential cross-connections are identified and eliminated or protected by a backflow preventer. We also inspect and test backflow preventers to make sure that they provide maximum protection.

What can I do to help prevent a cross-connection?

Below are some very simple steps that you as a drinking water user can take to prevent such hazards, they are:

Don't:

- ☒ Submerge hoses in buckets, pools, tubs, sinks, ponds, chemicals, etc.
- ☒ Use spray attachments without a backflow prevention device.
- ☒ Use a hose to unplug blocked toilets, sewers, etc.
- ☒ Connect waste pipes from water softeners or other treatment systems to the sewer, submerged drain pipe, etc.

Do:

- ☒ Keep the ends of hoses clear of all possible contaminants.
- ☒ Buy appliances and equipment with a backflow preventer.
- ☒ If not already equipped with an integral (built-in) vacuum breaker, buy and install hose bibb type vacuum breakers on all threaded faucets around your home. These devices are inexpensive and are available at hardware stores or may be purchased directly at the North Dighton Fire District.)
- ☒ Install an approved backflow prevention assembly on all underground lawn irrigation systems.



Questions?

For more information about this report, or for any questions relating to your drinking water, please contact Gary Willette, Superintendent, at 508-822-1820. You can also visit our Web site at: www.ndfdwater.com

For more information on backflow prevention, contact the Safe Drinking Water Hotline at (800) 426-4791.



TAUNTON WATER QUALITY TABLE

Regulated Substances							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Barium (ppm)	2024	2	2	0.0052	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloramines (ppm)	2024	[4]	[4]	2	1.0 - 3.0	No	Water additive used to control microbes
Combined Radium (pCi/L)	2021	5	0	1.07	NA	No	Erosion of natural deposits
Fluoride (ppm)	2024	4	4	0.7	0.6 - 0.8	No	Water additive which promotes strong teeth
Haloacetic Acids [HAAs] - Stage 2 ¹ (ppb)	2024	60	NA	46.4	20.5 - 64.2	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	0.0943	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] - Stage 2 ¹ (ppb)	2024	80	NA	58.2	34.5 - 85.2	No	By-product of drinking water disinfection
Total Organic Carbon [TOC](ppm) removal ratio	2024	TT ²	NA	1	1.0 - 1.4	No	Naturally present in the environment
Turbidity ³ (NTU)	2024	TT	NA	0.34	NA	No	Soil runoff
Turbidity (Lowest monthly % of samples meeting limit)	2024	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff.
Tap water samples were collected for lead and copper analyses from sample sites throughout the community							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Sites Above AL/Total Sites	Violation	Typical Source
Copper (ppm)	2023	1.3	1.3	0.00691	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2023	15	0	1.8	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Secondary Substances							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Aluminum (ppb)	2024	200	NA	19.7	NA	No	Erosion of natural deposits; Residual from some surface water treatment processes
Chloride (ppm)	2024	250	NA	40.5	NA	No	Runoff/leaching from natural deposits
Manganese (ppb)	2024	50	NA	9.37	NA	No	Leaching from natural deposits
Odor (TON)	2024	3	NA	1	NA	No	Naturally-occurring organic materials
pH (Units)	2024	6.5-8.5	NA	9.2	NA	No	Adjusted for Corrosion Control
Sulfate (ppm)	2024	250	NA	7.11	NA	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids [TDS] (ppm)	2024	500	NA	157	NA	No	Runoff/leaching from natural deposits
Unregulated Substances ⁴							
Substance (Unit of Measure)	Year Sampled	Amount Detected	Range Low-High	Typical Source			
Bromodichloromethane (ppb)	2024	6.39	NA	Disinfectant by-product; Marine micro-algae			
Chlorodibromothane (ppb)	2024	0.6	NA	Disinfectant by-product			
Chloroform (ppb)	2024	17.2	NA	Disinfectant by-product; Chemical intermediat			
Sodium (ppm)	2024	38.6	NA	Erosion of natural deposits; soil runoff			
Other Unregulated Substances							
Calcium (ppm)	2024	2.39	NA	Limestone, marble, and other natural rock formations			
Hardness (ppm)	2024	11.4	NA	Dissolved from naturally occurring deposits.			
Magnesium (ppm)*	2024	1.32	NA	Minerals and sedimentary rock			
Potassium (ppm)	2024	1.22	NA	Runoff from fertilizer			
¹ Some people who drink water containing TTHMs in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of developing cancer.							
² The value reported under Amount Detected for TOC is the lowest ratio between percentage of TOC actually removed and percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.							
³ Turbidity measures suspended solids and indicates filter effectiveness.							
⁴ Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining their occurrence in drinking water and whether future regulation is warranted.							
*US EPA and MassDEP have established public health advisory levels for manganese to protect against concerns of potential neurological effects and a one-day and 10-day HA of 1000 ppb for acute exposure.							

Definitions

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

AL = Action Level; the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. For both Lead and Copper, the AL is equal to the MCL.

MCL = Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible.

MCLG = Maximum Contaminant Level Goal; the level of a contaminant in drinking water below which there are no known or expected health risks. MCLG's allow for a margin of safety.

NA = Not applicable

ND = Not detected; indicates that the substance was not found by laboratory analysis.

NTU = Nephelometric Turbidity Units; (a measure of water clarity).

PPB = Parts per billion, or micrograms per liter (ug/l); Denotes one part per 1,000,000,000 parts, one part in 10⁹. This is equivalent to 50 drops of water in an Olympic-size swimming pool.

PPM = Parts per million, or milligrams per liter (mg/l); Denotes one part per 1,000,000 parts, one part in 10⁶. This is equivalent to one drop of water in 50 liters.

PPT = Parts per trillion, or nanograms per liter (ng/l); Parts per trillion (ppt): Denotes one part per 1,000,000,000,000 parts, one part in 10¹². This is equivalent to 1 drop of water in 20 Olympic-size swimming pools.

Range of Samples = Lowest to highest values of the samples taken.

SMCL = Secondary Maximum Contaminant Level; SMCLs are established to regulate the aesthetics of drinking water like appearance, taste and odor.

TT = Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water.

Taunton Water Test Results

Taunton water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information shown here represents only those substances that were detected; Taunton's goal is to keep all detects below the respective maximum allowed levels. The State recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

View Taunton's CCR online at <https://www.taunton-ma.gov/DocumentCenter/View/2489/City-of-Taunton-Annual-Water-Quality-Report>

Where Does My Water Come From?

The drinking water purchased from Taunton comes from six surface water sources and two wells. The surface water sources are Assawompset, Pocksha, Great Quittacas, Little Quittacas, and Long (five hydrologically interconnected ponds that are collectively known as the Assawompset Pond Complex), and Elders Pond. All six reservoirs are located in parts of Freetown, Lakeville, Middleborough, and Rochester, MA. Raw water from these ponds is treated at the Charles J. Rocheleau Water Filtration Plant located in Lakeville. The treated water is then pumped to the Village of The North Dighton Fire District where it is either delivered to your home or business.

In September 2002, the Massachusetts Department of Environmental Protection (MADEP) completed a Source Water Assessment and Protection Program Report (SWAP) for the City of Taunton's public water system. The Source Water Assessment and Protection Program, established under the federal Safe Drinking Water Act, requires every state to (1) inventory land uses within the recharge areas of all public water supply sources, (2) assess the susceptibility of drinking water sources to contamination from these land uses, and (3) publicize the results to provide support for improved protection.

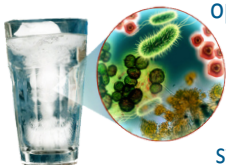
The Taunton Water System was assigned a susceptibility ranking of high based on the MADEP assessment of potential pollution sources in their watershed. These threats include a variety of land uses, such as cranberry bogs, horse farms, transportation corridors (local roads and highways), and septic systems/cesspools. The SWAP report is available at the Taunton DPW Water Division, City Hall, 90 Ingell Street, Taunton, MA, 02780, and online at:

<https://www.mass.gov/doc/taunton-water-department-swap-report/download>

Why Could There Be Contaminants In 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:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.



Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

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 storm water runoff, and septic systems.

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

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



Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water and have replaced all known lead service lines from the mains to the service boxes, but we 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/lead.

The Benefits of Fluoride

Fluoride is a naturally occurring element in many water supplies in trace amounts. In our system, the fluoride level is adjusted to an optimal level averaging 0.7 parts per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. Our water system has been providing this treatment since 1980. There are over 4 million people in 130 Massachusetts water systems and 209 million people in the U.S. who receive the health and economic benefits of fluoridation.

