2023 Water Quality Report
Turners Falls Water Department
226 Millers Falls Road
Turners Falls, Massachusetts 01376-1605
PWS ID#1192000

We are once again proud to present our annual water quality report, covering all testing performed between January 1 and December 31, 2023. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.
Please share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies. For more information about this report, or for any questions relating to your drinking water, please call Jeffrey Hildreth, Water Department Superintendent or Suzanne Leh, Clerk/Collector at (413) 863-4542.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the first Wednesday of each month, beginning at 5:00 p.m., at the Water Department Office, 226 Millers Falls Road, Turners Falls. Our Annual Meeting of the Turners Falls Fire District is held in the spring.
2023 Board of Water Commissioners: Bruce Merriam, Kenneth Morin, Edward Pelis. Certified Water Operators: Stephen Fitzpatrick, Jason Watroba. Water Operators: Riley Watroba, Austin Felix

Where Does My Water Come From?

The Turners Falls Water Department's main source of water consists of one ground water artesian well located off Center Street in Montague Center. Gravel-packed Well#1192000 2G pumps *1.2 to 2 million gallons of water per* day to the filter plant. At the plant, the water is sand filtered for the removal of iron and manganese; the treated, filtered water is then discharged into the gravity-fed distribution system. The Hannegan Brook Well located near Lake Pleasant can yield 1.44 MGD to meet future water demands. The water quality is good and only requires the addition of water treatment chemicals for pH adjustment. The storage facilities in Turners Falls have a total storage capacity of 6.3 million gallons. Lake Pleasant and Green Pond are emergency backup surface water supplies. Please call Jeff or Suzanne to answer any questions at
(413) 863-4542, e-mail: clerk@turnersfallswater.com, superintendent@turnersfallswater.com or www.turnersfallswater.com

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections.
These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa. gov/drink/hotline.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the MA Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (U.S. EPA) prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.
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. Substances 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, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; Pesticides and Herbicides, which may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses; Organic

Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and which may also come from gas stations, urban storm water runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.
More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Lead in Drinking Water

How does lead get in my drinking water?
In Massachusetts, most drinking water sources like reservoirs and groundwater are lead free. When lead is present in water, it is typically due to the water flowing through lead pipes or plumbing in homes with lead parts or solder. Service lines, which are the pipes that connect your home to the water main, could have lead in them. Inside your home, you may have lead pipes, copper pipes connected with lead solder, or brass faucets or fittings containing lead. Lead levels are highest when the water has been sitting in lead pipes for several hours. Hot water causes lead to enter water faster.

How does lead get into my body?
In many cases, most exposure to lead is from paint dust, paint chips and soil contaminated with lead. Lead can also get into your body by drinking or cooking with water containing lead. Young children absorb lead more easily than adults, and lead can be passed from a mother to her unborn child. For these reasons, lead in drinking water can be an important source of exposure for pregnant women, young children, and infants that are fed powdered formula.
Lead is not absorbed through the skin. Bathing or showering in water containing lead should be safe.

What can I do right now to protect my family?
Run your water before using and use COLD water. Always use cold water for drinking and cooking. Do not use hot water for cooking or baby formula. Hot water usually has higher lead levels than cold water. Running the water before using will usually reduce any lead levels by flushing out the water that has been sitting in lead pipes for several hours.
Boiling water does not eliminate lead. If there is lead in your water, boiling it will increase lead levels.

Statement from Environmental Protection Agency:
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 Turners Falls Water Department 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 http://www.epa.gov/safewater/lead.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water.
Here are a few tips: Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
Turn off the tap when brushing your teeth.
Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
Use your water meter to detect hidden leaks. Write down the meter reading before going to bed at night or leaving for a day. Include all numbers, write down the new reading in the morning and subtract the prior reading. If there has been a change it is probably due to a leak.

What is 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 (backsiphonage).

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. For more information, review the Cross-connection Control Manual from the U.S. EPA's Web site at http://water.epa.gov/infrastructure/drinkingwater/pws/crossconnectioncontrol/ index.cfm. You can also call the Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment, Protecting Turners Falls Water Supply

The Department of Environmental Protection (DEP) has prepared a Source Water Assessment Program (SWAP) for the water supply source serving this water system. This report is a planning tool to support local and state efforts to improve water supply protection. Although the TFWD has many safeguards in place, the overall susceptibility ranking to contamination of the groundwater supplies is high, based on the presence of numerous high-ranking threat land-uses within the Zone II water supply protection areas. The report commends our water system on its proactive approach to source protection. A complete SWAP report is available at the TFWD, the Board of Health office, and online at http://www.mass.gov/dep/water/drinking/swapreps.htm. For more information, call the TFWD at 863-4542.
Things You Can Do to Protect Our Water Supply Take used motor oil and other such fluids to the town's hazardous waste collection sites, Use fertilizers and pesticides sparingly and do not use the river beds to dispose of any waste.

Turners Falls Water Quality Data

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less 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.

Tap water samples were collected for Lead and Copper analyses from sample sites throughout the community.
Our next round of lead and copper sampling will be in 2024.

Substance (Unit of measure)	Date Collected	90th percentile	Action Level	#MCLG	# of sites sampled	# of sites above Action Leve	Possible source of Contamination
Lead (ppb)	7/25/23	1.1	15	0	20	0	Corrosion of household plumbing systems. Erosion of natural deposits
Copper (ppm)	7/23/23	0.0276	1.3	1.3	20	0	Corrosion of household plumbing. Erosion of natural deposits; leaching from wood preservation

Secondary Contaminants	Date Collected	Result or Range Detected	Average Detected	SMCL	ORSG or Health Advisory	Possible Sources
Manganese	8/16/2023	0-.005 ug/L	.0025ug/L	50 ug/L	300*	Natural sources as well as discharges from industrial uses.
Sodium	08/16/2023	10.3-11.1 mg/L	10.7 mg/L	20 mg/L		Discharge from the use and improper storage of sodium-containing de-icing compounds or in water softening agents

*****US EPA and Mass Dep have established public health advisory levels for manganese to protect against concerns of potential neurological effect and a one day and 10 day HA of 1000 ppb for acute exposure.

Inorganic Contaminants	Date(s) Collected	Highest Result or Highest Running Average Detected	Range Detected	MCL Or MRDL	MCLG or MRDLG	Violation (Y/N)	Possible Source(s) of Contamination
Arsenic (ppb)	8/11/2020	1		10	N/A	**N**	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Nitrate (ppm)	8/17/2023	0.105	0-0.105	10	10	**N**	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrite (ppm)	8/16/23	0.105	0-0.105	1	1	**N**	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

PFAS

On October 2, 2020, MassDEP published its PFAS public drinking water standard or Massachusetts Maximum Contaminant Level (MMCL) of 20 nanograms per liter (ng/L), or parts per trillion (ppt) applicable to community (COM) and non-transient non-community (NTNC) systems for the sum of the concentrations of six specific PFAS. This drinking water standard is set to be protective against adverse health effects for all people consuming the water.

The Turners Falls Water Department did take samples in 2021, 2022 and 2023 and had No Detects.

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.
MCL (Maximum Contaminant Level): 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.
MCLG (Maximum Contaminant Level Goal): 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.
Mg/L: Milligram per liter
MRDL (Maximum Residual Disinfectant Level): 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.
MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
NA: Not applicable.
ND (Not detected): Indicates that the substance was not found by laboratory analysis.
ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).
ppm (parts per million): One part substance per million parts water (or milligrams per liter).
SMCL (Secondary Maximum Contaminant Level): They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.
Ug/L: Microgram per liter