

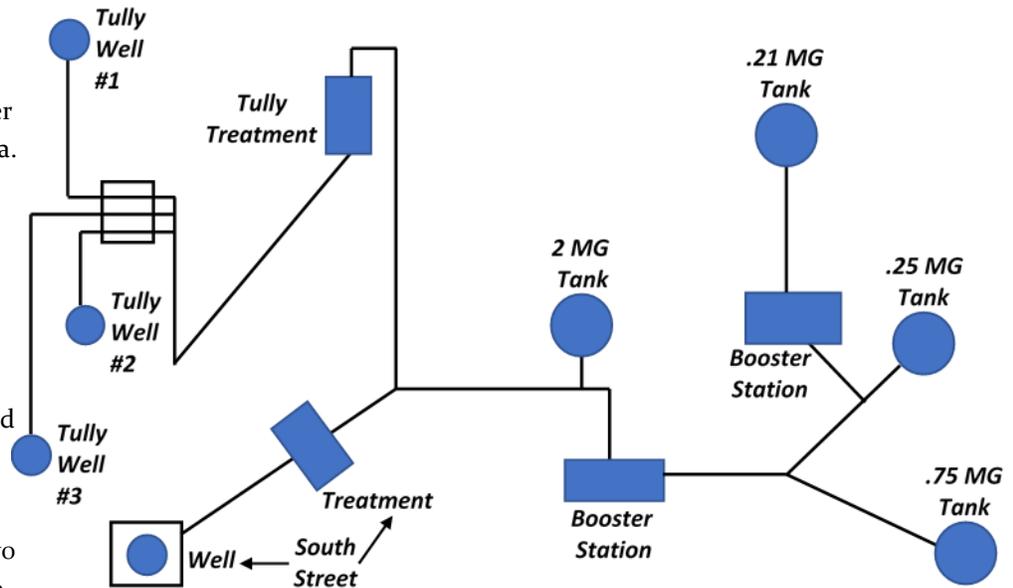
Waterwise Newsletter

Issue Date April 1, 2020

SOURCE TO TAP: *Where does my drinking water come from?*

The Town of Athol has four groundwater sources all located in the downtown area. Water is pumped from three of these sources to the Public Works facility for treatment before being distributed through the 58 miles of water distribution lines to the taps in your homes. The fourth groundwater source has a treatment facility of its own located off of Jones Street.

All of these sources pump from downtown to the uptown area where two booster stations are provided to assist in the filling of storage tanks and supplying the distribution system with an adequate supply of water.



Q: "Am I responsible for a water leak on my front lawn?"

A: Yes, the homeowner is responsible for repairs on their water service line from their house to the curb stop/shut off valve at the property line. The Town maintains the water main in the street to the curb stop/shut off valve.

Q: "How can I prevent my meter and/or water pipes from freezing?"

A: Try one or more of these tips...

- Open kitchen cabinets at night
- Allow water to trickle on really cold nights
- Wrap pipes and water meters located in cold spaces with insulation or heat tape
- Make sure outdoor spigots are off and drained
- If away for extended periods of time in winter months, considering pulling the meter and draining the pipes or simply leave the meter installed and lower the heat.
- Correct drafts in sills and foundations near the meter prior to winter setting in



The Super Says...
"What goes in the ground,
goes in your water."

STORMWATER POLLUTANTS

Stormwater runoff from roofs, driveways and streets carry pollutants back into our waterways. Use the guidelines below to help to keep our water clean. Simply pick things up and clean them up so we all can keep drinking it up!



- Only rain down the drain
- Clean up pet waste
- Throw trash in the garbage
- Use pesticides and fertilizers as needed and as directed
- Wash your car at the carwash instead of in your driveway
- Repair any leaks in your vehicle
- Inspect septic tanks

Source Water Assessment Plan

In 2003, a source water assessment plan was updated and prepared for the town to protect our water supplies. The program is to prevent any further contamination of our sources. Restrictions are in place to prevent hazardous materials and facilities from being allowed within the established protection zones. Our local agencies work very closely with the Public Works Department to prevent any type of contamination. **To receive a copy of the source water assessment plan, please contact the Department of Public Works at 584 Main Street, Room 24, Athol, MA 01331.**

“The sources of drinking water (both tap water and bottled water) include rivers lakes, streams, ponds, reservoirs, springs & 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.”

All drinking water, including bottled water may reasonably be expected to contain at least small amounts of some contaminants. The presence of some contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the environmental agency’s Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants that may be present in Source Water...

- Microbial Contaminants, such as viruses and bacteria, that may come from sewerage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Pesticides and Herbicides that may come from a variety of sources such as agriculture, urban storm-water runoff, and residential uses.
- Inorganic Contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.
- Organic Chemical Contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive Contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.



- Less than 1% of the Earth’s water can be used by people.
- The weight of water: 1 cubic foot = 7.48 gallons or 62.4 pounds
- A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year.

Water you know?



Conservation Corner

Conserve water, lower your cost, and replenish our valuable resource by trying these helpful tips!

Turn Off Taps: Turn off water while brushing your teeth or shaving. Keep a pitcher of water in your refrigerator instead of running the tap numerous times for cold water.

Shower Savers: Shorten showers; more time equals more use and more money. Install new low-flow shower heads that use water at a rate of 2 gallons per minute (gpm) versus 5 gpm.

Toilet Talk: Color water to check for leaks. Add a couple of drops of food coloring to your tank. If the water appears in the bowl, you have a leak. Repair leak and/or replace with new low-flow toilet.

Meter Maintenance: Identify leaking pipes or a leaking meter. While no water is being used, read your meter before and after a 2-hour period. No change; no problem. If the readings differ, you have a leak.

• **Replenish our resources by removing roof drains and sump pumps from sanitary sewers and divert water to your back yards allowing water to naturally flow back into the ground.**

▲ **Important: It’s illegal to have your sump pumps and roof drains connected to the town’s sanitary sewer.**

2019 Water Quality Report

Public Water Supply Identification Number 1015000

The Town of Athol Water Division is pleased to share that our water system had another successful year of supplying you with the highest quality of water. This was made possible with the team of professional staff working for you here in the Town of Athol Department of Public Works. Our staff is dedicated in its efforts to work as a team to continuing providing you with water of the highest quality. To better understand the water chemistry here in the Town of Athol, please review the information below and the report on the reverse side. You may contact the Town of Athol Water Division at 978-249-4542 with any questions.

Understanding this Report

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

The Athol Water Division routinely monitors for contaminants in your drinking water according to federal and state laws. This report covers the period of January 1, 2019 to December 31, 2019. The water division wants you to understand all drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose 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 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 (800-426-4791).

DEFINITIONS

Massachusetts Department of Environmental Protection (DEP) - the state agency responsible for setting and enforcing drinking water regulations

Maximum Contaminant Level (MCL) - the highest level of a contaminant allowable in drinking water. MCLs are set as close to 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

Secondary Maximum Contaminant Level (SMCL) - Established 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.

Office of Research and Standards Guideline (ORSG) - concentration of a chemical in drinking water at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure

90th Percentile - out of every 10 samples, 9 were at or below an accepted level

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

ppm - parts per million or milligrams per liter (mg/l); one part per million corresponds to 1 minute in 2 years or a single penny in \$10,000.00

ppb—one part per billion (one penny in \$10,000,000)

pCi/L - picocuries per liter; a measurement of radioactivity in water

ug/L - micrograms per liter; parts per billion

Unregulated Contaminants - substances without MCLs for which the Environmental Protection Agency (EPA) requires monitoring but has not yet established drinking water standards.

LEAD AND COPPER

Understand the source water and water within the distribution system is lead free. However, older homes may have lead soldered joints or lead and copper pipes that may dissolve into the water. The Town of Athol treats their water to prevent this process from occurring.

"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 Town of Athol 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 it 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>

Town of Athol Water Division

2019 Water Quality Report

PWS #1015000

Below are substances that were detected in the town's drinking water during the past 5 years. None of these substances were detected above the allowable limit. Copies of the 2019 Water Quality Report will be available at the Town Clerk's Office, the Town of Athol website, <http://www.athol-ma.gov>, and at the Department of Public Works at 584 Main Street, Athol, MA. Please direct any questions you may have about this report to the Department of Public Works by calling 978-249-4542.

Contaminant ¹ (unit of measurement)	Date(s) or Frequency Collected	MCL or MRDL	SMCL or ORSG	Highest Amount Detected or Highest RAA ²	Range Detected	Violation Y/N	Possible Sources
Regulated Inorganic Compounds (IOCs)							
Fluoride ³ (ppm)	Monthly 2019	4		0.8	0.6 - 0.8	N	Erosion of natural deposits; added to water for dental hygiene
Nitrate ⁴ (ppm)	5/8/19	10		0.900	0.859 - 0.900	N	Runoff from fertilizer use; leaching from septic tanks
Regulated Radioactive Contaminants							
Gross Alpha (pCi/L)	8/5/19	15		0.557	--	N	Erosion of natural deposits
Radium 226 & 228 (pCi/L)	8/16/19	5		0.12	--	N	Natural deposits
Regulated Disinfection/Disinfection By-Products (DBPs)							
Chlorine (ppm)	Monthly	4.0		1.23	0.01- 1.23	N	Additive to control bacteria
Haloacetic Acids [HAA5s] (ppb)	2/19/19 - 11/19/19	60		22	<1.00 - 22	N	By-product of drinking water disinfection
Total Trihalomethanes [TTHMs] (ppb)	2/19/19 - 11/19/19	80		23	16.9 - 23	N	By-product of drinking water chlorination
Regulated Bacteria Testing - Revised Total Coliform Rule (RTCR)							
Total Coliform	Monthly	1		ND	--	N	Naturally present in the environment
E.Coli	Monthly	1		ND	--	N	Human and animal fecal waste
Unregulated Inorganic Compounds (IOCs) / Secondary Contaminants							
Sodium (ppm)	5/16/17 - 6/20/17		20 ORSG	78.9	47.8 - 78.9	N	Winter deicing operations
Iron (ppm)	5/9/19		0.3	1.4	<50 - 1400	N	Natural and industrial sources; aging water system
Manganese (ppm)	5/9/19		0.05	0.0823	6.7 - 82.3	N	Natural deposits and industrial uses
Unregulated Volatile Organic Compounds (VOCs) / Secondary Contaminants							
Chloroform (ppb)	5/7/19		70 ORSG	1.41	--	N	By-product of drinking water chlorination; TTHM
Bromodichloromethane (ppb)	5/7/19		*	1.76	--	N	By-product of drinking water chlorination; TTHM
Chlorodibromomethane (ppb)	5/7/19		*	1.44	--	N	By-product of drinking water chlorination; TTHM
Methyl Tertiary Butyl Ether (ug/L)	2/3/15	70		0.97	--	N/A	Fuel additive; leaks/spills from gasoline storage tanks
Lead and Copper⁵	Date(s) Collected	Action Level (AL)	90th Percentile	90th %> AL Y/N	# of Sites Sampled	# of Sites Above AL	% of Sites Above AL
Lead (ppb)	6/13/17	15	2.3	N	20	1	5
Copper (ppb)	6/13/17	1.3	0.184	N	20	None	Zero

¹The Town of Athol Water Division was granted a sampling waiver for Inorganic and Synthetic Organic Compounds on July 11, 2017.

²Running Annual Average (RAA) = highest running annual average of four consecutive quarters

³Fluoride: A naturally occurring element in many water supplies in trace amounts. In our system the fluoride level is adjusted to an optimal level averaging one part per million (ppm or mg/L) 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 1960. There are over 3.9 million people in 140 Massachusetts water systems and 184 million people in the United State who receive health and economic benefits of fluoridation.

⁴Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

⁵The state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

¹Compliance with RTCR is based on the E.Coli MCL and upon additional repeat testing.

*There is no Office of Research and Standards Guideline (ORSG) health benchmark for this contaminant.

PROTECTION OF THE WATER SYSTEM

The Public Works Department and Local Agencies can only provide a certain amount of protection without the help of you the resident and consumer. We ask that you assist us in protecting our valuable water resources by reporting any illegal dumping of gasoline, oil or other hazardous materials on the ground by calling the Public Works Office at 978-249-4542. Reports of suspicious activity around the Water Department Buildings or Water Storage Tanks should be directed to the State Police Department at 800-525-5555.



CROSS CONNECTION PROTECTION

A cross connection is any actual or potential connection between the public water supply and a source of contamination or pollution. Contamination can occur from the following types of cross connections:

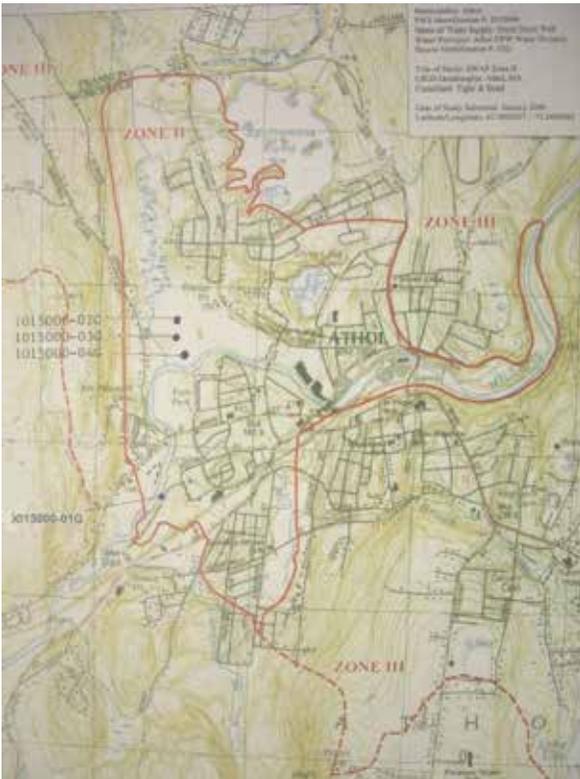
- ⚠️ A garden hose connected to an outdoor spigot with the other end submerged in a pool
- ⚠️ A garden hose connected to a fertilizer/pesticide sprayer attachment
- ⚠️ A water feed to a boiler
- ⚠️ A water line feed to a chemical tank
- ⚠️ A hose connected to a sink faucet that could result in back-siphonage under a low pressure situation

Protect Your Home

The Athol Water Division recommends that residents purchase low cost Hose Bibb Vacuum Breakers and install them on all threaded faucets both in and outside of your home. These devices will prevent hazardous water from being siphoned back into your home.

Commercial, Industrial, Municipal & Institutional Buildings

Our staff surveys buildings for hazardous cross connections. If hazards are found, owners must eliminate or install proper devices for protection against back siphonage. We visit facilities regularly twice a year to test backflow devices to ensure they are functioning properly. If your facility undergoes any changes since an initial survey where plumbing has been altered in any way, you need to notify the Athol DPW to determine if a new survey is necessary.



Zone II is the Department of Environmental Protection approved primary recharge area for our aquifer. It is very important to protect the land within the Zone II to avoid contamination to our water supply from improper disposal of hazardous materials from residential, commercial and industrial facilities.

HYDRANT HEALTH & HELP

Athol has approximately 522 fire hydrants that are maintained by the Department of Public Works. By way of its Flushing Program, the DPW keeps those hydrants healthy by flushing them twice a year to ensure the quality of your drinking water. We ask that you

become a Hydrant Helper too and keep our hydrants happy!

HELPFUL HINTS TO BEING A HYDRANT HELPER

- See a hydrant in need of a fresh coat of paint? Call the DPW at 978-249-4542. A clearly marked hydrant increases visibility in times of emergency.
- Help our Emergency Responders help you by removing snow and ice from hydrants. There should be 3-foot perimeter around the hydrant with a clear path to the street.



Happy the Hydrant

CONSTRUCTION ON TAP



- Construction continues on the replacement of Tully Well #2.
- Preliminary design work through the Community Development Block Program (CDBG) for the Walnut Street water main replacement
- Church Street water main replacement project

2019 End of Construction

- Glen Street new water main, services and hydrant
- Marble Street new water main, services and hydrants
- W. Chestnut Street water main extension and hydrant
- Templeton Road water main extension and hydrant

Staff

Public Works Superintendent ~ Douglas A. Walsh

Administrative Clerk ~ Diana Cooley

Chief Water Operator ~ Robert Hughes

Water Treatment Operator ~ David Craven

Assistant Superintendent ~ Richard Kilhart

Environmental Compliance ~ Jennifer Shaw

Water Utility Foreman ~ David Carr

Water Distribution Operator ~ Matthew Bardsley

Water Operator ~ Ryan Herk



Serving the community and providing quality drinking water are, from the left, Ryan Herk, David Carr, Robert Hughes, David Craven, and Matthew Bardsley.



If you have questions about this newsletter or would like to know more about your water utility, please contact the Athol Department of Public Works office located at 584 Main St., Room 24, Athol, MA 01331 or by calling 978-249-4542. A member of our professional staff will be happy to answer any questions you may have.

Office Hours

Monday, Wednesday, Thursday	8AM—5PM
Tuesday	8AM—5PM
Friday	Closed

Copies of this newsletter and included 2019 Water Quality Report will be available at the Town Clerk's Office, the Town of Athol website at <http://www.athol-ma.gov> and Department of Public Works at 584 Main Street, Athol, MA.