TOWN OF ATHOL—WATER DIVISION PWS #1015000

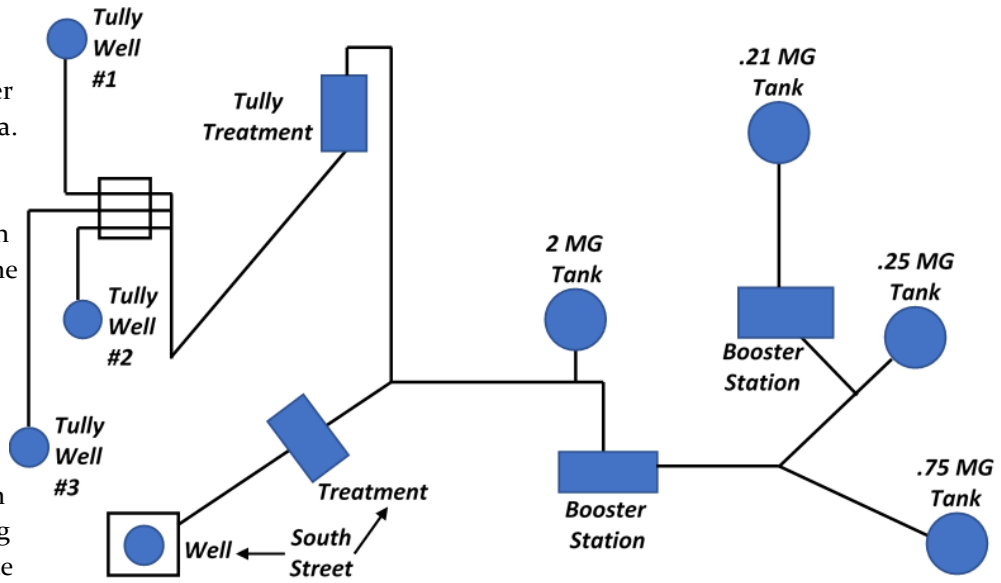
Waterwise Newsletter

Issue Date April 1, 2024

SOURCE TO TAP: *Where does your 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 pumped through 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.



LIVING WITH PFAS

Which do you use daily, personally or professionally, that may contain PFAS, per– and polyfluoroalkyl substances?

To learn more about PFAS and potential health effects, visit https://www.mass.gov/info-details/per-and-polyfluoroalkyl-substances-pfas

The Super Says... "Drink Athol's water; it's good for you."

ACCOLADES & UPGRADES

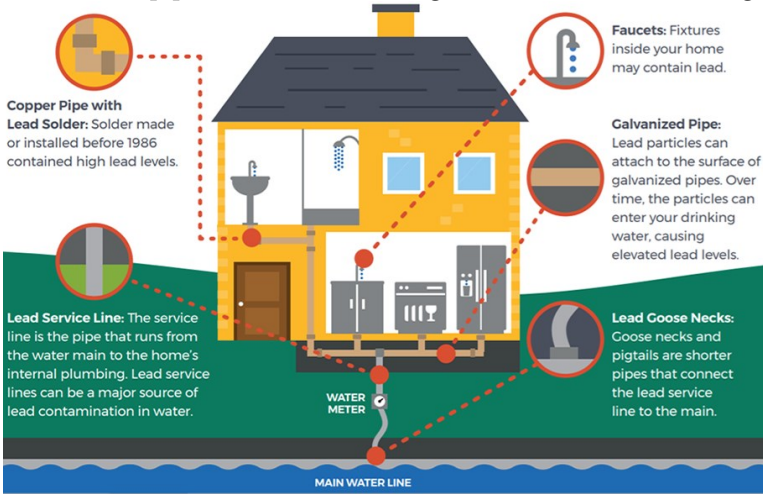
The awards continue to pile up for the Athol DPW Water Division with the latest being the prestigious Department of Environmental Protection's (EPA) Drinking Water Supply Award for Medium Sized Community Systems received in April 2023. This regulatory award is presented for compliance, licensed operational staff, maintenance operations, and water sampling program that tests for hundreds of contaminants.

In addition to our accolades are system upgrades. The Water Division used a "Historical" funding opportunity to upgrade water lines on Green and Kennebunk Streets. This project replaced Cast Iron Water Mains dating back to 1888, but more importantly it created two system bypasses to move water effectively and efficiently between pressure zones in the event of an emergency. This 1.2 million dollar project was funded with monies from the Federal American Rescue Plan Act (ARPA).

Our priority is ensuring a safe water supply and providing quality drinking water. We're regularly told that Athol's water is really good. With pride, we say "It really is."

"LEADING" YOU KNOW

Regulatory agencies, EPA and MassDEP, warn consumers that lead can enter drinking water through pipes that come into your home. These pipes are called "lead service lines." They're pipes used to connect homes to the main water line. In homes served by lead service lines, the most significant source of lead in drinking water, lead can leach from the pipes into tap water. It can also be found in other plumbing materials and faucets. Water with high acidity or low mineral content can corrode pipes and faucets causing lead to leach into drinking water.



To protect public health, regulators have **mandated** that all PWS **must** complete a comprehensive Lead Service Line Inventory by **October 16, 2024** identifying every water user's type of service line, and the Athol Water Division needs your help. To start, consumers can help by uploading their service line photos using MassDEP's **Mass Lead Service Line Identification (MA-LSLI)** app at https://app.smartsheet.com/b/form/f9ee39b7972f443ca63e8b936cd7f92b or by scanning the QR code.

To schedule a free in-home survey, call 978-721-8448 today!

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.

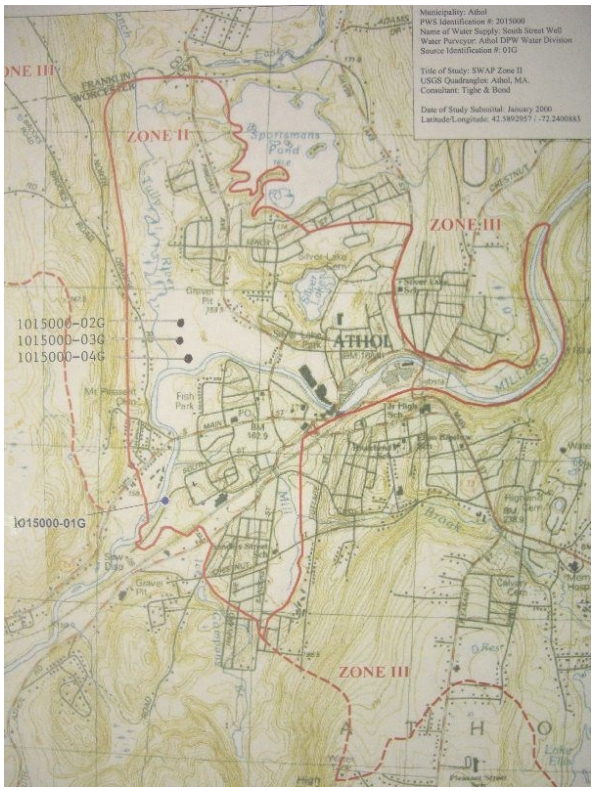
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Athol is responsible for providing high quality drinking 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 http://www.epa.gov/safewater/lead

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 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.

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 1-800-426-4791.



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

CONSTRUCTION ON TAP

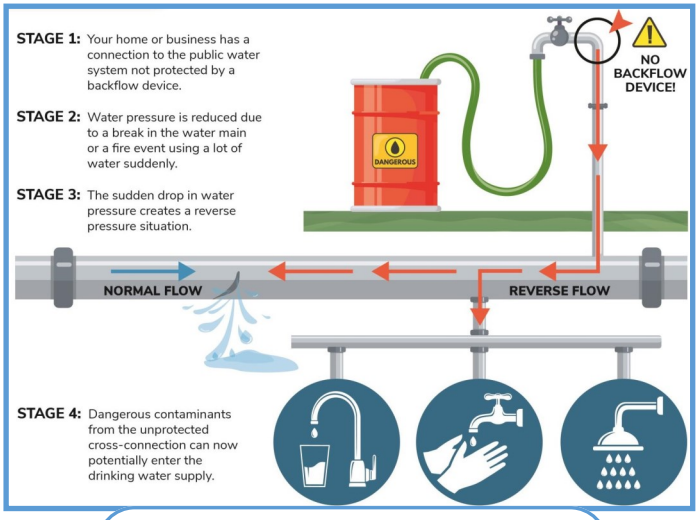
- Canal/Lumber St. Reconstruction Project
- Leonard St. Water Main Replacement Project
- Crescent St. Sluiceway Sidewalk Bridge Repair
- Five Points TIP Reconstruction Project
- Lead Service Line Inventory/Replacement Program
- Main Booster Station - Replacement of Manual Transfer Switch

2023 End of Construction

- Kennebunk/Green St. Water Main Replacement
- Birch St. Water Main Replacement
- Water Tank Cleaning & Inspections at Pleasant St. Tank and Main Tank
- Tully Well #2 raw water flow meter replacement
- Demolition of Hillside Terrace Water Filtration
- Hydrant Replacements - Bryant St./Spring St., Pinedale Av./Lenox St., New Sherborn Rd., Petersham Rd.

PROTECTION OF THE WATER SYSTEM

The Public Works Department and Local Agencies can only provide a certain amount of protection without help from Athol residents and consumers. Please assist us in protecting our valuable water resources by reporting any illegal dumping of gasoline, oil or other hazardous materials by calling the Public Works office at 978-721-8448. Reports of suspicious activity around the Water Department Buildings or Water Storage Tanks should be directed to the State Police 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. Examples of potential cross-connection contamination are:

- ⚠ A water feed to a boiler
- ⚠ A hose connected to a sink faucet that could result in back-siphonage under a low pressure situation
- ⚠ 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 line feed to a chemical tank with no air gap

Protect Your Home

The Athol Water Division recommends purchasing low-cost, no lead Hose Bibb Vacuum Breakers and install them on all threaded faucets both in and outside of your residence. 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.

VIEW FROM THE SUPER'S DESK

The Town of Athol has secured millions of dollars in infrastructure project funds this year. The Department of Public Works has completed water main replacements on Kennebunk & Green Streets. This involved the replacement of 135-year-old Cast Iron water main. Sewer lines in that area have also been re-lined for structural integrity before final paving. Canal and Lumber Streets are also on the docket for potential replacement. Although these additional projects are significant, they are only a small portion of the Water & Sewer Distribution and Collection systems. Of Athol's 58 miles of water main, approximately 45 miles of 100-year-old pipe remains in service. This terminology is called "pipe beyond its useful life". This doesn't mean it's not safe or will break down but likely in need of replacement to avoid those things associated with lack of service.

We strive to keep your water and sewer rates reasonable while continuing to balance the need for replacement as we continue to keep this aging infrastructure clean, safe and most of all affordable. Water services cost you less than one (1) cent per gallon.

Please remember that with construction comes disruption. Please be aware of our crews in the street. Keep them safe, slow down at construction sites. We want to go home to our families too.

With Water Works Pride,

Richard Kilhart

TODAY'S WORKFORCE, TOMORROW'S FUTURE

Richard Kilhart, Superintendent	*D3/T2 Water Licenses*
Paul Raskevitz, Assistant Superintendent	*D3/T1 Water Licenses*
Jennifer Shaw, Environmental Compliance	*D1/D2/T1 OIT Water Licenses*
Bob Hughes, Primary Treatment Operator	*D2/T2 Water Licenses*
Matt Bardsley, Secondary Treatment Operator	*D2/T2 Water Licenses*
Dave Craven, Primary Distribution Operator	*D2/T2 Water Licenses*
Billy Sykes, Secondary Distribution Operator	*D1/D2/T1 OIT Water Licenses*
Joe Verheyen, Operator	*D1/T1 OIT Water Licenses*
Andy Belloli, Operator	*D2/T2 Water Licenses*
Jeremy Burnett, Operator	*D1/T1 OIT Water Licenses*
Nick Burnett	*Operator in Training*
Chris Lawrence	*Operator in Training*

For questions about this newsletter or information about your water utility, please visit the Athol Department of Public Works office located at 584 Main St., Room 24, Athol, MA 01331 or call 978-721-8448. Our professional staff are happy to assist you.

Office Hours

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

This newsletter and included 2023 Water Quality Report are available online at http://athol-ma.gov. Hard copies are available at the Town Clerk's Office and the Department of Public Works located at 584 Main Street, Athol, MA.

Town of Athol Water Division

2023Water 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. Working for you to make this possible are Athol's Department of Public Works professional staff. Our staff is dedicated in its efforts to work as a team to continue 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 following pages. You may contact Athol Water Division's Primary Water Treatment Operator, Bob Hughes, at 978-721-8448 with any questions.

Understanding this Report

To ensure tap water is safe to drink, the EPA and MassDEP prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration and the 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, 2023 to December 31, 2023.

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 and 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

Action Level (AL) - 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. This number is compared to the action level to determine lead and copper compliance.

ppm - parts per million or milligrams per liter (mg/L)

ppb - one part per billion or micrograms per liter (ug/L)

ppt– parts per trillion

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

Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water

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

Contaminants that may be present in Source Water…

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 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, or farming.
- Organic Chemical Contaminants, which include synthetic and volatile organic chemicals; 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.

Town of Athol Water Division
2023 Water Quality Report
PWS #1015000

Below are substances detected in the Town's drinking water during the past 5 years. None of which were detected above the allowable limit. Copies of this report will be available at the Town Clerk's Office, Athol's website, **http://athol-ma.gov**, and the Department of Public Works at 584 Main Street, Athol, MA. For questions, please call the Athol DPW 978-721-8448.

Contaminant[1] (unit of measurement)	Date(s) or Frequency Collected	MCL or MRDL	SMCL, MCLG, ORSG	Highest Detection or Highest RAA[2]	Range Detected	Violation Y/N	Possible Sources
Regulated Inorganic Contaminants (IOCs)							
Barium (ppm)	5/17/23	2		0.017	--	N	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits
Fluoride[4] (ppm)	Monthly	4	2	0.821	0.634-0.821	N	Water additive which promotes strong teeth
Nitrate (ppm)	5/17/23	10	10	1.58	1.16-1.58	N	Fertilizer runoff; leaching from septic tanks
Perchlorate (ppb)	9/6/23	2	N/A	0.50 (J)	ND-0.50 (J)	N	Rocket propellants, fireworks, munitions, flares, blasting agents
PFAS6 (ppt)	4/19/23, 10/18/23	20	N/A	5.2	ND-5.2	N	Discharges/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.
Regulated Secondary Contaminants							
Chloride (ppm)	3/16/22[3] 5/18/22[3] 8/17/22[3]		250	68.5	57.7-68.5	N	Runoff and leaching from natural deposits; seawater influence
Copper (ppm)	3/16/22[3] 5/18/22[3] 8/17/22[3]		1	0.003	0.003-0.0019	N	Internal corrosion of household plumbing; erosion of natural deposits
Manganese (ppb)	5/17/23		50	10.6	6.95-10.6	N	Natural deposits and industrial uses
Odor [Threshold Odor Number] (T.O.N.)	3/16/22[3] 5/18/22[3] 8/17/22[3]		3	1	ND-1	N	Naturally occurring organic materials that form ions when in water; seawater influence
pH	3/16/22[3] 5/18/22[3] 8/17/22[3]		6.5-8.5	7.58	7.24-7.58	N	Runoff and leaching from natural deposits; seawater influence
Sodium (ppm)	5/17/23		20 ORSG	104	56.8-104	N	Winter deicing operations
Sulfate (ppm)	3/16/22[3] 5/18/22[3] 8/17/22[3]		250	11.4	9.78-11.4	N	Runoff and leaching from natural deposits; industrial wastes
Total Dissolved Solids [TDS] (ppm)	3/16/22[3] 5/18/22[3] 8/17/22[3]		500	201	183-201	N	Runoff and leaching from natural deposits; seawater influence
Zinc (ppm)	3/16/22[3] 5/18/22[3] 8/17/22[3]		5	0.0203	ND-0.0203	N	Corrosion of household plumbing systems; erosion of natural deposits
Regulated Disinfection/Disinfection By-Products (DBPs)							
Chlorine (ppm)	Bi-Monthly	4		1.12	0.02-1.12	N	Water additive to control bacteria
Haloacetic Acids [HAA5s] (ppb)	Quarterly	60	N/A	7.92	ND-7.92	N	Byproduct of drinking water disinfection
Total Trihalomethanes [TTHMs] (ppb)	Quarterly	80	N/A	32.7	11.2-32.7	N	Byproduct of drinking water chlorination
Regulated Radioactive Contaminants							
Gross Alpha (pCi/L)	8/17/22[3]	15		0.591	--	N	Erosion of natural deposits
Radium 228 (pCi/L)	8/17/22[3]	5		0.153	--	N	Erosion of natural deposits
Regulated Microbiological Contaminants							
Total Coliform Bacteria	Bi-Monthly	TT	0	ND	--	N	Naturally present in the environment
E.coli	Bi-Monthly	†	0	ND	--	N	Human and animal fecal waste
Regulated Volatile Organic Compounds (VOCs)							
Toluene (ppm)	9/6/23	1		0.56	--	N	Discharge from petroleum factories

Town of Athol Water Division
2023 Water Quality Report
PWS #1015000

(Continued)

Contaminant[1] (unit of measurement)	Date(s) or Frequency Collected	MCL or MRDL	SMCL, MCLG, ORSG	Highest Detection or Highest RAA[2]	Range Detected	Violation Y/N	Possible Sources
Unregulated Volatile Organic Compounds (VOCs)							
Bromomethane (ppb)	5/17/23		10 ORSG	0.67	--	N	Run-off from use as a fumigant
Bromodichloromethane (ppb)	2/17/21[3]		*	0.97	<0.50-0.97	N	Trihalomethane; Byproduct of drinking water chlorination
Chlorodibromomethane (ppb)	2/17/21[3]		*	1.5	<0.50-1.5	N	Trihalomethane; Byproduct of drinking water chlorination
Lead and Copper	**Date(s) Collected**	**Action Level (AL)**	**90th Percentile**	**90th %> AL Y/N**	**# of Sites Sampled**	**# of Sites Above AL**	**Possible Source of Contamination**
Lead (ppb)	6/19/23-6/23/23	15	2.4	N	30	0	Corrosion of household plumbing
Copper (ppm)	6/19/23-6/23/23	1.3	0.180	N	30	0	Corrosion of household plumbing

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

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

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

[4]**Fluoride: A naturally occurring element in many water supplies in trace amounts. In Athol's system, the fluoride level is adjusted to an optimal level averaging one part per million (ppm) to improve oral health in children. At this level, it is safe, odorless, colorless and tasteless. Fluoride has a Secondary Maximum Contaminant Level (SMCL) of 2 ppm.**

[5]**Perchlorate concentrations between the Minimum Detection Limit (MDL) and the Minimum Reporting Limit (MRL) must be reported as estimated (J) values (i.e., perchlorate is positively present but tentatively quantified). Microbac Laboratories has an MDL of 0.16. The MRL is 1.0.**

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

[†]**The Maximum Contaminant Level (MCL) is based on the occurrence of a condition that includes routine and repeat samples.**

INFORMATION

We welcome you to learn more about the Athol DPW, or view our 2023 Water Quality Report digitally, by scanning the QR Code above.

Wet Your Whistle with Athol's Winning Water