

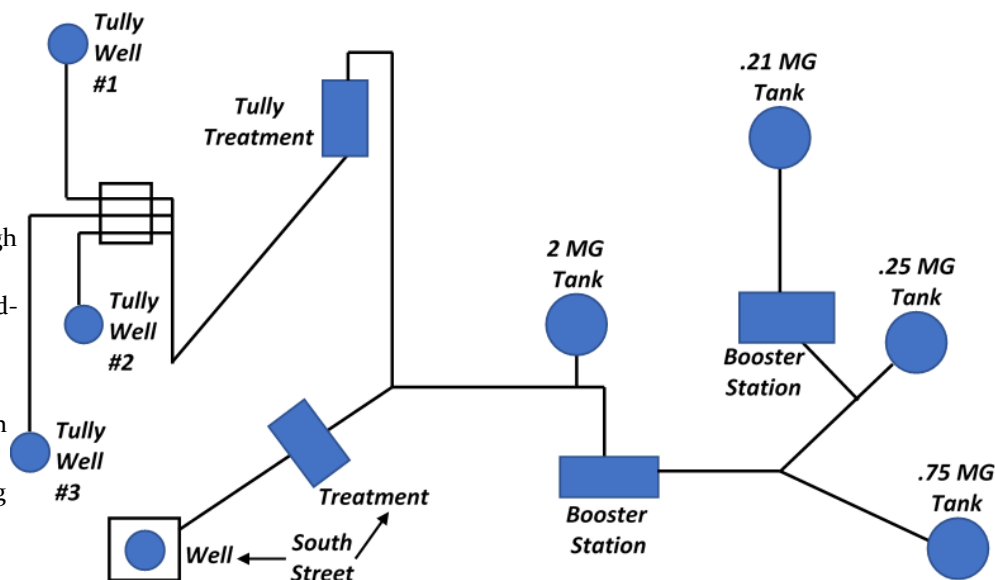
Waterwise Newsletter

Issue Date April 1, 2022

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: "Is water from an outside garden hose safe to drink?"

A: No. Standard vinyl garden hoses are manufactured with substances that enable hoses to be flexible. Such hoses are not healthy to drink from as the substances/chemicals can leach into the hose water and be ingested. Instead, look for food-grade hoses approved by the U.S. Food and Drug Administration (FDA) for drinking water use.

Q: "Can hot water from the tap be used for cooking?"

A: Cold water is recommended as hot water is more likely to contain rust, copper and lead from your household plumbing and water heater.

Q: "Why are fire hydrants sometimes called fire plugs?"

A: There was a time when drinking water was distributed through wooden pipes. To get water to fight fires, a hole would be drilled into the wooden pipes. After a fire is put out, the holes would be filled with wooden plugs called "fire plugs". These plugs were cataloged for potential use in the future.

Q: "What are 'forever chemicals'?"

A: Forever chemicals are those that never break down and can remain present in the human body. Perfluoralkyl and Polyfluoralkyl (PFAS) are such chemicals. Regulatory agencies mandate regular sampling for PFAS. To date, Athol hasn't exceeded any maximum contaminant levels.



The Super Says... "Masks in the Trash"

THE UNMASKED TRUTH



In the wake of Covid-19, the improper disposal of masks has become the latest culprit of clogs in sewer collection systems and residential sewer lines in our community and those around the world. Such clogs create backups in sewer mains, wastewater equipment, and homeowner service lines resulting in costly repairs for all.

Consider the following when unmasking:

- 1) **Disposable masks are NOT recyclable.**
They are made of synthetic fabrics, not paper, and should be disposed of with your household solid waste/trash.
- 2) **Masks not trashed is litter.**
Masks dropped on the ground can find their way into stormwater drains impacting fish and wildlife as well as drinking water supplies.
- 3) **Masks are NOT flushable.**
They don't break down like toilet paper and can clog toilets and drains as well as damage wastewater treatment plant equipment.

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.

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 storm-water 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, 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 septic systems.
- Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.



- Approximately 70% of the Earth's surface is water.
- Nearly 97% of Earth's water is salty and undrinkable.
- Only 1% of freshwater is usable; 2% is locked in ice and glaciers.
- Up to 60% of the human adult body is water; 78% in infants.
- The same amount of water exists on Earth today as when first formed.

A HEALTHY HOME = A SAFE HOME



Lead is a toxic metal and is found in homes with lead service lines, lead pipes, faucets, and plumbing fixtures. Also containing lead are welding solder and pipe fittings made prior to 1986. Lead can be harmful to your health and varies upon exposure and consumption.

Know Your Home's Age

Nearly every home built before the implementation of the 1986 Safe Drinking Water Act have either lead pipes or lead solder present.



Know Your Property's Pipes

Lead primarily enters drinking water through plumbing materials and service lines. Water that is corrosive (i.e. low pH or acidic), can leach lead from service lines and plumbing materials into your drinking water at your taps. Lead service lines (the pipe connecting your house to the water main in the street) are generally a dull gray and are soft. To detect a lead service line, you can gently scratch the pipe's surface. If it turns bright silver, it's lead. Other pipe materials include copper, galvanized, PVC (plastic), and PEX (flexible plastic).



Unsure about the health of your home? Call 978-721-8448, to schedule your free survey today! We'll assist you in identifying possible lead sources and offer mitigation solutions.

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 978-721-8448. 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 any of the following types of cross-connections:

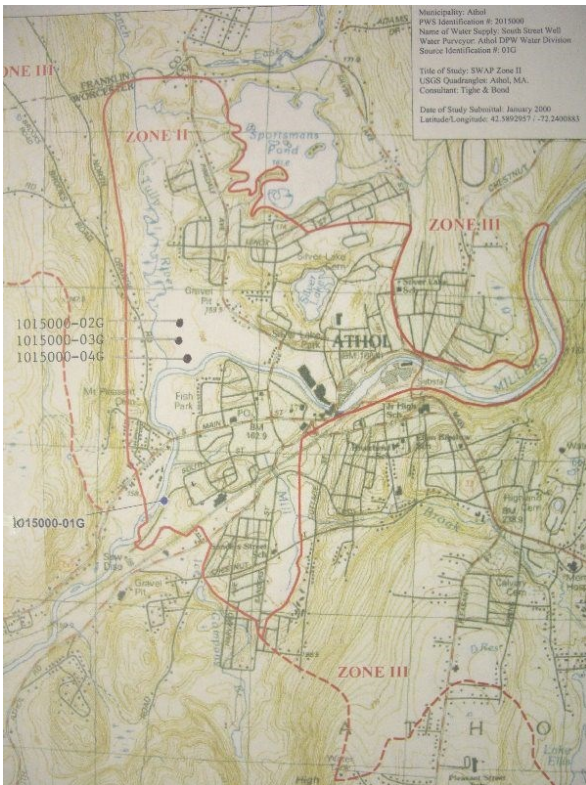
- ⚠ A hose connected to a sink faucet that could result in back-siphonage under a low pressure situation
- ⚠ A garden hose connected to a fertilizer/pesticide sprayer attachment
- ⚠ A garden hose connected to an outdoor spigot with the other end submerged in a pool
- ⚠ A water feed to a boiler
- ⚠ A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

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 Zone II to avoid contamination to our water supply from improper disposal of hazardous materials from residential, commercial, and industrial facilities.

CONSTRUCTION ON TAP



- ◆ Walnut/Canal St. Phase #2 Reconstruction
- ◆ Green St. Water Main Replacement
- ◆ Kennebunk St. Water Main Replacement
- ◆ Five Points TIP Reconstruction Project
- ◆ Booster Pump Station Generator Replacement

2021 End of Construction

- ◆ Walnut St. Phase #1 Reconstruction Project—replaced 700' of water main and hydrants on Walnut St. from Church St. to Union St.
- ◆ Tully Replacement Well #2 completed.
- ◆ Relocated fire hydrant in intersection to edge of road at Chestnut Hill and Old Keene Rd.
- ◆ Replaced fire hydrants on Silver Lake St., Unity Av., and Batchelder Rd.

VIEW FROM THE SUPER'S DESK

Hello and welcome to the Athol DPW Consumer Confidence Report (CCR) also known as the Water Quality Report. This report shares with you all of Athol's water quality results for the previous year. This is required by both Federal and State law. The Athol DPW Water Division provides your home and business with excellent water quality, sufficient quantity, and superior fire protection. We're a customer friendly team who are "at your service" as it relates to your Public Water Supply. Our staff is available 24 hours per day, 7 days per week, 365 days per year.

Many folks may not realize that the DPW Water Division must attend multiple trainings each year to continually stay in compliance with all Federal and State regulatory requirements. All staff members possess, and in some instances exceed, those requirements. We take pride in delivering to you the cleanest, safest, and greatest tasting drinking water possible. We accomplish this each year at a reasonable cost of less than 1 cent per gallon of water consumed.

We do have times where disruption of service causes rusty water or a loss of water pressure during a water main break or a planned construction project. We try to alleviate disruption concerns by notifying folks in advance and during emergencies by using the CodeRED call back system administered by the local Fire Department. If you're not currently enrolled, please contact the DPW Administrative office (978 721-8448) or the Athol Fire Department (978-249-3598). Please be patient during these incredibly stressful times. Our crews want to restore water just as soon as we can. We will work effectively, efficiently, safely, and responsibly for all our customers.

With Water Works Pride,

Richard Kilhart

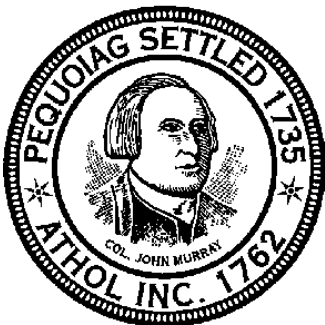


Above: Matt Bardsley opens a water gate valve.



THE STAFF BEHIND YOUR TAPS

Richard Kilhart, Superintendent.....	D3/T2 Water Licenses
Paul Raskevitz, Assistant Superintendent	DC/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/T1, T2 OIT Water Licenses
Dave Craven, Primary Distribution Operator	D2/T2 Water Licenses
Rob Bergquist, Secondary Distribution Operator	D1/D2/T1 OIT Water Licenses
Billy Sykes, Operator.....	D1/T1 OIT Water Licenses
Andy Belloli, Operator.....	D2/T2 Water Licenses
Jeremy Burnett, Operator.....	D1/T1 OIT Water Licenses



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 978-721-8448. 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—8PM
Friday	Closed

Copies of this newsletter and included 2021 Water Quality Report will be available at the Town Clerk's Office, the Town of Athol website <http://www.athol-ma.gov> and Department of Public Works at 584 Main Street, Athol, MA.

2021 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 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 that 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, 2021 to December 31, 2021.

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

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.

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

2021 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://www.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 Amount Detected or Highest RAA ²	Range Detected	Violation Y/N	Possible Sources
Regulated Inorganic Contaminants (IOCs)							
Barium (ppm)	1/7/20 ³	2		0.0267	0.0144-0.0267	N	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits
Fluoride ⁴ (ppm)	Monthly 2021	4	2	0.802	0.568-0.802	N	Water additive which promotes strong teeth
Nitrate (ppm)	5/19/21 6/23/21	10	10	1.58	0.981-1.58	N	Runoff from fertilizer use; leaching from septic tanks
Nitrite (ppm)	5/20/20 ³	1	1	<0.0100	<0.0100	N	Runoff from fertilizer use; leaching from septic tanks
Perchlorate (ppb)	8/18/21	2	N/A	0.38	0.26-0.38	N	Rocket propellants, fireworks, munitions, flares, blasting agents
PFAS6 (ppt)	Quarterly	20	N/A	8	ND-8	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.
Unregulated PFAS Contaminants							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	Quarterly		*	ND	--	N	-
N-ethyl perfluorooctanesulfonamidoacetic acid (NtFOSAA)	Quarterly		*	ND	--	N	-
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	Quarterly		*	ND	--	N	-
Perfluorobutanesulfonic acid (PFBS)	Quarterly		*	2 (J) ⁵	ND-2 (J) ⁵	N	-
Perfluorododecanoic acid (PFDoA)	Quarterly		*	ND	--	N	-
Perfluorohexanoic acid (PFHxA)	Quarterly		*	1 (J) ⁵	ND-1 (J) ⁵	N	-
Perfluorotetradecanoic acid (PFTA)	Quarterly		*	ND	--	N	-
Perfluorotridecanoic acid (PFTDA)	Quarterly		*	ND	--	N	-
Perfluoroundecanoic acid (PFUnA)	Quarterly		*	ND	--	N	-
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3ONS)	Quarterly		*	ND	--	N	-
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)	Quarterly		*	ND	--	N	-
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	Quarterly		*	ND	--	N	-
Regulated Secondary Contaminants							
Iron (ppb)	5/18/21 5/19/21		300	70.4	ND -70.4	N	Natural and industrial sources; aging water system
Manganese (ppb)	5/18/21 5/19/21		50	13.5	5.1-13.5	N	Natural deposits and industrial uses
Sodium (ppm)	5/20/20 ³		20 ORSG	93.4	51.9-93.4	N	Winter deicing operations
Regulated Disinfection/Disinfection By-Products (DBPs)							
Chlorine (ppm)	Bi-Monthly	4		1.33	0.01-1.33	N	Water additive to control bacteria
Haloacetic Acids [HAA5s] (ppb)	Quarterly	60	N/A	2.9	ND-7.5	N	By-product of drinking water disinfection
Total Trihalomethanes [TTHMs] (ppb)	Quarterly	80	N/A	18.1	12.2-21.3	N	By-product of drinking water chlorination

Town of Athol Water Division 2021 Water Quality Report PWS #1015000

(Continued)

Contaminant (unit of measurement) ¹	Date(s) or Frequency Collected	MCL or MRDL	SMCL, MCLG, ORSG	Highest Amount Detected or Highest RAA ²	Range Detected	Violation Y/N	Possible Sources
Regulated Radioactive Contaminants							
Gross Alpha (pCi/L)	8/5/19 ³	15		0.557	--	N	Erosion of natural deposits
Radium 226 & 228 (pCi/L)	8/16/19 ³	5		0.12	--	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
Unregulated Volatile Organic Compounds (VOCs)							
Bromodichloromethane (ppb)	2/17/21		*	0.97	<0.50-0.97	N	By-product of drinking water chlorination; TTHM
Chlorodibromomethane (ppb)	2/17/21		*	1.5	<0.50-1.5	N	By-product of drinking water chlorination; TTHM
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)	11/18/21-12/9/21	15	3.3	N	60	2	Corrosion of household plumbing
Copper (ppm)	11/18/21-12/9/21	1.3	0.164	N	60	None	Corrosion of household plumbing

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

³The 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.

⁴Fluoride: 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) to improve oral health in children. At this level, it is safe, odorless, colorless, and tasteless. Fluoride has a secondary contaminant level (SMCL) of 2 ppm.

⁵A 'J' flag means that the result is lower than the Reporting Limit (RL) and higher than the Method Detection Limit (MDL).

*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 2021 Water Quality Report digitally, by
scanning the QR Code above.*

Better Than Bottled

