



2019 Consumer Confidence Report

Southwick Water Department

Southwick, Massachusetts

MASSDEP PWSID # 1279000



This report is a snapshot of the drinking water quality that we provided last year. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards. We are committed to providing you with this information because informed customers are our best allies.

1. PUBLIC WATER SYSTEM INFORMATION

Address: 454 College Highway
Southwick, MA 01077
Contact Person: Randal Brown,
P.E, DPW Director
Telephone #: 413-569-6772
Internet Address:
www.southwickma.org/water-division

Water System Improvements

Our water system is routinely inspected by the Massachusetts Department of Environmental Protection (MassDEP). MassDEP inspects our system for its technical, financial, and managerial capacity to provide safe drinking water to you. To ensure that we provide the highest quality of water available, your water system is operated by a Massachusetts certified operator who oversees the routine operations of our system. As part of our ongoing commitment to you, last year we made the following improvements to our system: Began construction of a new pump station on Jarry Drive and completed the installation of the new water main on College Highway from Jarry Drive to Tannery Road.

These upgrades are an important part of supplying quality water to our users.

Opportunities for Public Participation

If you would like to participate in discussions regarding your water quality, you may attend Water Commissioners meetings which are typically held on the first and third

Thursday of the month starting at 6pm, unless otherwise posted.

2. YOUR DRINKING WATER SOURCE

Where Does My Drinking Water Come From?

Southwick's water system is composed of 51 miles of water mains, 2 wells, 4 pumping stations, and 2 storage tanks. Southwick also

maintains an interconnection with SWSC to provide a supplemental water supply source during times of peak demand. Southwick's drinking water originates from the Great Brook Aquifer. Over the years, the Town has purchased over 170 acres of land over the aquifer in order to control land use and preserve water quality.

Source Name	Mass DEP Source ID#	Source Type	Location of Source
Great Brook Well # 1	1279000-01G	Ground Water	Northeast Section of Southwick
Great Brook Well # 2	1279000-02G	Ground Water	Northeast Section of Southwick
Cobble Mountain Reservoir	1281000-02S	Surface Water	Interconnection with Springfield Water
Borden Brook Reservoir	1281000-04S	Surface Water	Interconnection with Springfield Water

How Are These Sources Protected?

MassDEP has prepared a Source Water Assessment Program (SWAP) Report for the water supply source(s) serving this water system. The SWAP Report assesses the susceptibility of public water supplies. What is My System's Ranking?

A susceptibility ranking of high was assigned to this system using the information collected during the assessment by MassDEP.

Where Can I See The SWAP Report?

The complete SWAP report is available at the DPW Office at Town Hall and online at <https://www.mass.gov/service-details/the-source-water-assessment-protection-swap-program>. For more information call the Southwick Water Department at 413-569-6772.

Is My Water Treated?

Our water system makes every effort to provide you with safe and pure drinking water. To improve the quality of the water delivered to you, we add a disinfectant to protect you against microbial contaminants. The water quality of our system is constantly monitored by us and MassDEP to determine the effectiveness of existing water treatment and to determine if any additional treatment is required.

3. SUBSTANCES FOUND IN TAP WATER

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reser-

voirs, 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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, and farming.

Pesticides and herbicides -which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

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

All 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 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 some 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 and Prevention

(CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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. Southwick 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>.

4. IMPORTANT DEFINITIONS

Maximum Contaminant Level (MCL) - 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.

Maximum Contaminant Level

Goal (MCLG) -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.

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

Secondary Maximum Contaminant Level (SMCL) - These standards are developed to protect the aesthetic qualities of drinking water and are not health based.

Unregulated Contaminants - Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulation is warranted.

Massachusetts Office of Research and Standards Guideline (ORSG) - This is the concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

Maximum Residual Disinfectant Level (MRDL) - The highest level of a disinfectant (chlorine, chloramines, chlorine dioxide) allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant (chlorine, chloramines, chlorine dioxide) below which there is no known expected risk to health.

MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (ug/l)
ND = Not Detected
N/A = Not Applicable

5. WATER QUALITY TESTING RESULTS

What Does This Data Represent?

The water quality information presented in the table is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table.

MassDEP has reduced the monitoring requirements for synthetic organic contaminants in 2015 and inorganic contaminants at the point of entry in 2014 because the source is not at risk of contamination. The last samples collected for these contaminants were found to meet all applicable US EPA and MassDEP standards.

	Date(s) Collected	90th Percentile	Action Level	MCLG	# of sites sampled	# of sites above Action Level	Possible Source of Contamination
Lead and Copper							
Lead (ppm)	8/15/2017 & 8/29/2017	.0044	0.015	0	20	0	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	8/15/2017 & 8/29/2017	.143	1.3	1.3	20	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Regulated Contaminant	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
Inorganic Contaminants							
Barium (ppm)	11/7/2017	0.234	0.234	2	2	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (ppm)	11/12/2019	2.75	2.68 - 2.82	10	10	N	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Disinfectants and Disinfection By-Products							
Total Trihalomethanes (TTHMs) (ppb)	Quarterly in 2019	56.625	35.6-80	80	N/A	N	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	Quarterly in 2019	53.375	43-77	60	N/A	N	Byproduct of drinking water disinfection
Chlorine (ppm) (free)	Daily in 2019	0.12	0-0.93	4	4	N	Water additive used to control microbes

Unregulated and Secondary Contaminants
Unregulated contaminants are those for which there are no established drinking water standards. The purpose of unregulated contaminant monitoring is to assist regulatory agencies in determining their occurrence in drinking water and whether future regulation is warranted.

Unregulated Contaminants	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG	Possible Source
Sodium (ppm)	11/7/2017	10.7	10.7	N/A	20	Discharge from the use and improper storage of sodium - containing de-icing compounds or in water - softening agents
Iron (ppb)	5/16/2017	<50-94.4	72.2	300	N/A	Naturally occurring, corrosion of cast iron pipes
Manganese (ppb)	5/16/2017	<2-5.5	3.75	50	Health Advisory of 300	Natural sources as well as discharges from industrial uses
pH	2018	7.56	7.56	6.5-8.5	N/A	Runoff and leaching from natural deposits; seawater influence

6. COMPLIANCE WITH DRINKING WATER REGS Does My Drinking Water Meet Current Health Standards?

We are committed to providing you with the best water quality available. We are proud to report that last year your drinking water met all applicable health standards regulated by the state and federal government.

Drinking Water Violations

There were no drinking water violations in our system for the 2019 calendar year.

7. EDUCATIONAL INFORMATION

Cross-Connection Control and Backflow Prevention

The Southwick Water Department makes every effort to ensure that the water delivered to your home

and business is clean, safe and free of contamination. Our staff works very hard to protect the quality of the water delivered to our customers from the time the water is extracted via deep wells from underground aquifers or withdrawal point from a surface water source, throughout the entire treatment and distribution system. But what happens when the water reaches your home or business? Is there still a need to protect the water quality from contamination caused by a cross-connection? If so, how?

What is a cross-connection?

A cross-connection occurs whenever the drinking water supply is or could be in contact with potential sources of pollution or contamination. Cross-connections exist in piping arrangements or equipment

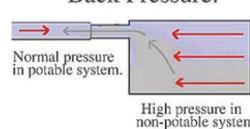
that allows the drinking water to come in contact with non-potable liquids, solids, or gases (hazardous to humans) in event of a backflow.

What is a backflow?

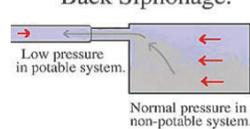
Backflow is the undesired reverse of the water flow in the drinking water distribution lines. This backward flow of water can occur when the pressure created by equipment or a system such as a boiler or air-conditioning is higher than the water pressure inside the water distribution line (back pressure), or when the pressure in the distribution line drops due to routine occurrences such as water main breaks or heavy water demand causing the water to flow backward inside the water distribution system (back siphonage). Backflow is a problem that many water consumers are unaware of,

a problem that each and every water customer has a responsibility to help prevent.

Back Pressure:



Back Siphonage:



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

Without the proper protection

something as simple as a garden hose has the potential to contaminate or pollute the drinking water lines in your house. In fact over half of the country's cross-connection incidents involve unprotected garden hoses. There are very simple steps that you as a drinking water user can take to prevent such hazards, they are:

- * NEVER submerge a hose in soapy water buckets, pet watering containers, pool, tubs, sinks, drains, or chemicals.
- * NEVER attached a hose to a garden sprayer without the proper backflow preventer.
- * Buy and install a hose bibb vacuum breaker in any threaded water fixture. The installation can be as easy as attaching a garden hose to a spigot. This inexpensive device is

available at most hardware stores and home-improvement centers.

- * Identify and be aware of potential cross-connections to your water line.
- * Buy appliances and equipment with backflow preventers.
- * Buy and install backflow prevention devices or assemblies for all high and moderate hazard connections.

If you are the owner or manager of a property that is being used as a commercial, industrial, or institutional facility you must have your property's plumbing system surveyed for cross-connection by your water purveyor. If your property has NOT been surveyed for cross-connection, contact your water department to schedule a cross-connection survey.