



2017 Consumer Confidence Report

Water Quality Report

Welcome to the 23rd annual Water Quality Report for customers of the South Berwick Water District. It provides important information about water, its quality and service.

The District is a quasi-municipal utility providing clean, safe drinking water and fire protection services 24 hours a day, 365 days a year, to the citizens of South Berwick and 10 residences in Berwick Maine.

The South Berwick Water District uses groundwater consisting of 7 well points, 1 gravel packed well and 8 bedrock wells. The wells are located in four separate well fields throughout the towns of South Berwick and 1 in Berwick. A bedrock well site located off Route 4 continues to be under construction for future use. The daily combined output of water is 1 million gallons per day.

Mission

Our mission is to assure an adequate supply of high quality water to the residents and businesses of South Berwick. We provide water for domestic, commercial, industrial, municipal, conservation, sanitary and fire protection services



Arsenic Update

Junction Road Arsenic Treatment Project

This project is for the removal of Arsenic at the Junction Road well facility. Past samples have exceeded the MCL of 0.010 mg/L and the uncertainty of future raw water levels has prompted the District to actively find a resolution. We are working closely with the Maine Drinking Water Program on this issue.

The District's engineering consultant has selected the most effective and economical solution for the District. The project has been awarded to Apex Construction and the treatment plant is currently under construction. This system is expected to be online by summer of 2018. The project is being funded through low interest loans from the Maine State Revolving Loan Fund Program.

The end result of this project will be the installation of arsenic removal pressure filters, an infiltration lagoon, and upgrades to instrumentation, electrical and chemical feed equipment.



Water Meter Change Out Program

The Water District continues with our meter change out program. We are targeting the oldest meters in our system. (Don't worry if your neighbor got a letter and you did not, this is an ongoing project.)

You will receive a letter from the South Berwick Water District requesting that you contact us to make an appointment to change your water meter. Please contact us quickly to make an appointment that is convenient for you.

We need access to the water meter which is usually located in the basement of your home, and looks like the picture above. Please be sure the area is clear of belongings so that the technician has room to work in that area.

The water will be shut off for a few minutes while the technician removes the old water meter and installs a new one. This process takes about 15 minutes provided there are no issues.

We appreciate your cooperation and quick response to our request.

Payment

Arrangements

We can work with you to make a payment arrangement at any time.

Please contact our office during business hours and we will set up a payment arrangement that is agreeable for both parties.



Flush Your Water Heater

South Berwick Water District supplies cold water to your home. In order to get hot water to your faucets, you typically have a water heater in your basement.

Your water heater should be flushed once a year. A clogged water heater can affect the water pressure and result in poor water quality in your home.

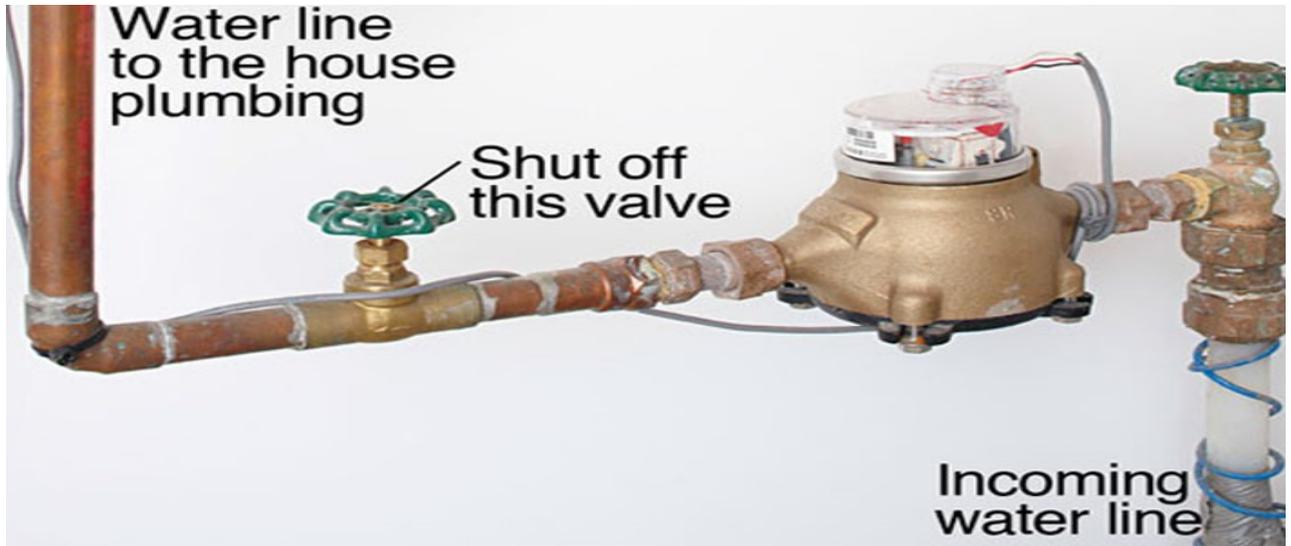
Fire Hydrants in your neighborhood



In case of an emergency, that hydrant will be the one needed by firefighters to protect your home. Every minute matters in an emergency

If there is a fire hydrant near your home, we ask that you be aware during snow removal. We find some hydrants buried under snow from a snow blower or plow. Please be cautious when removing snow .

You can adopt a hydrant and keep it clear of snow in the winter. It would be beneficial for you and your neighbors in the event of an emergency.



Please update your contact information with the Water District so that we may contact you in case of an emergency. You may write on your payment slip or call 207-384-2257 to verify current information.

It is your responsibility to keep the water meter from freezing.

Please be sure you keep the area around the meter warm. Floors and concrete walls are extremely cold.

Repair cracks, broken windows and drafts in the area.

If in a closet or cabinet, keep doors open in cold weather so warm air can circulate in that area.

When doing remodeling projects, be mindful of the water meter and how it will be affected by your project.

A frozen water meter will flood your home. Prevention is cheaper than the alternative.

Water Shut Off Valve

You should have quick access to the Water Shut Off Valve attached to your water meter. Make sure the area is kept free of belongings and don't hide it in a cabinet.

When water is leaking in your house, you need to react quickly. The longer it takes for you to find it or move things to get access to it, the more damage you will have to your property.

Show all family members where the Shut Off Valve is located, marking it is a good idea. Show them how to turn off the valve to stop the water flow into the house.

You should test the shut off frequently to make sure it is in working order and have it repaired if needed.



Projects for 2018

The Water District will be replacing aging water mains in town. These projects are being done in conjunction with the Town of South Berwick's Road Improvement Plan. The Water District, Sewer District and Town of South Berwick have formulated a plan to upgrade infrastructure on certain roads to minimize costs.

Here is a list of water main replacements that will be done this year:

Grant St.

Webster St.

High St.

This project was re-scheduled from 2017 to 2018.

Dig Safe

Maine law requires all utility companies be notified of any excavation by means of motorized equipment (rototillers, tractors, sod cutters, etc.)

Calling Dig Safe is not the only phone call you need to make. Most small local utilities do not belong to the Dig Safe system due to the high cost of being a member. Before doing any type of earth work, from landscaping to major construction, please contact the South Berwick Water

SOUTH BERWICK WATER DISTRICT

2017 Consumer Confidence Report

General Information

Water System Contact Name:	John Leach
Address:	80 Berwick Road
City, State, Zip Code:	South Berwick, ME 03908
Report Covering Calendar Year:	Jan 1 — Dec 31, 2017
Upcoming Regularly Scheduled Meetings	First and Third Tuesday of every month

Source Water Information

Description of Water Source: Wells: 7

Water Treatment & Filtration Information: Chlorine for disinfection at all sites. Iron and Manganese removal at Willow Drive

Source Water Assessment:

The sources of drinking water includes rivers, lakes, ponds, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material and can pick up substances resulting from human or animal activity. The Maine Drinking Water Program (DWP) has evaluated all public water supplies as part of the Source Water Assessment Program (SWAP). The assessments included geology, hydrology, land uses, water testing information, and the extent of land ownership or protection by local ordinance to see how likely our drinking water source is to being contaminated by human activities in the future. Assessment results are available at town offices and public water systems.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health.

Running Annual Average (RAA): A 12 month rolling average of all monthly or quarterly samples at all locations. Calculation of the RAA may contain data from the previous year.

Locational Running Annual Average (LRAA): A 12 month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of the RAA may contain data from the previous year.

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

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

UNITS:

Ppm = parts per million or milligrams per liter (mg/L). pCi/L = picocuries per liter (a measure of radioactivity).

Ppb = parts per billion or micrograms per liter (ug/L). pos = positive samples MFL = million fibers per liter

Water Test Results

<i>Contaminant</i>	<i>Date</i>	<i>Result</i>	<i>MCL</i>	<i>MCGL</i>	<i>Possible Sources of Contamination</i>
Microbiological					
COLIFORM (TCR) (1)	2017	0 pos	0 pos/mo or 5%	0 pos	Naturally present in the environment
Inorganics					
ARSENIC (6)	12/7/2017	12 ppb	10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.
BARIUM	3/27/2017	0.032 ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
CHROMIUM	3/27/2017	1.5 ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
FLUORIDE (3)	3/27/2017	0.4 ppm	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
NITRATE (5)	3/27/2017	0.48 pp	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Radionuclides					
COMBINED RADIUM (-226 & -228)	3/27/2017	0.28 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits.
RADIUM -226	3/27/2017	0.8 pCi/l	5 pCi/l	0 pCi/l	Erosion of natural deposits.
Lead/Copper					
COPPER 90TH% VALUE (4)	1/1/2015—12/31/2017	0.234 ppm	AL = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
Disinfectants and Disinfection Byproducts					
DISTRIBUTION SYSTEM					
TOTAL HALOACETIC ACIDS (HAA5) (9)	LRAA(2017)	2 PPB Range (1.7—1.7 ppb)	60 ppb	0 ppb	By-product of drinking water chlorination.
TOTAL TRIHALOMETHANE	LRAA(2017)	8 PPB Range (7.8—7.8 ppb)	80 PPB	0 ppb	By-product of drinking water chlorination.
Chlorine Residual					
CHLORINE RESIDUAL		Range (.1—.3ppm)	4 ppm	4 ppm	By-product of drinking water chlorination.

Notes:

- 1)Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
- 2)E. Coli: E. Coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems.
- 3)Fluoride: For those systems that fluoridate, fluoride levels must be maintained between 0.5 to 1.2 ppm. The optimum level is 0.7 ppm.
- 4)Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 5)Nitrate: Nitrate 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 advice from your health provider.
- 6)Arsenic: While your drinking water may meet EPA's standard for Arsenic, if it contains between 5 to 10 ppb you should know that the standard balances the current understanding of arsenic's possible health effects against the costs of removing it from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. Quarterly compliance is based on running annual average.
- 7)Gross Alpha: Action level over 5pCi/L requires testing for Radium 226 and 228. Action level over 15 pCi/L requires testing for Uranium. Compliance is based on Gross Alpha results minus Uranium results = Net Gross Alpha.
- 8)Radon: The State of Maine adopted a maximum Exposure Guideline (MEG) for Radon in drinking water at 4000pCi/L, effective 1/1/07. If Radon exceeds the MEG in water, treatment is recommended. It is also advisable to test indoor air for Radon.
- 9)TTHM/HAA5: Total Trihalomethanes and Halo acetic Acids (TTHM and HAA5) are formed as a by-product of drinking water chlorination. This chemical reaction occurs when chlorine combines with naturally occurring organic matter in water. Compliance is based on running annual average.

All other regulated drinking water contaminants were below detection levels.

Secondary Contaminants

NICKEL	3/27/2017	0.0012 ppm
SODIUM	3/27/2017	10 ppm
MANGANESE	3/27/2017	0.037 ppm
MAGNESIUM	3/27/2017	2.2 ppm
SULFATE	3/27/2017	12 ppm
ZINC	3/27/2017	0.0075 ppm
IRON	3/27/2017	0.06 ppm

Health Information

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. 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, 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 can also come from gas stations, urban runoff, and septic systems.

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

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 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 (1-800-426-4791) or at the following link:

<https://www.epa.gov/ccr/forms/contact-us-about-consumer-confidence-reports>

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. South Berwick Water District 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 the following link:

<http://www.epa.gov/safewater/lead>



Violations

Violation Period	Violation Type
1/1/2017— 3/31/2017	02 Violation — MCL, Average Arsenic Treat PT 4
6/1/2017— 9/30/2017	66 Violation — Lead Consumer Notice LCR) Lead & Copper Rule
10/1/2016—12/31/2016	02 Violation — Public Notice, MCL, Average Arsenic Treat PT 4

Arsenic MCL Exceedance: In 2017, our water system exceeded the arsenic standard of 10 ppb. Our water system has been placed on quarterly sampling for Arsenic. Results of subsequent Arsenic testing will be made available. Some people who drink water containing Arsenic well in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

All Consumer notifications required by the Maine Drinking Water Program regulations were done as required. Our submission of the certification forms to the MDWP was late which resulted in the following Violations.

Arsenic MCL Exceedance: In 2016, our water system exceeded the arsenic standard of 10 ppb. Maine Drinking Water Program regulations require customer notification. Notifications were sent in accordance with the regulations. The certification form was submitted late to the MDWP.

We are required to notify any customer who participated in our lead/copper testing of their individual lead results. In 2017, we failed to provide the certification form to the Maine Drinking Water Program by the deadline.

Waiver Information

In 2017, our system was granted a 'Synthetic Organics Waiver.' This is a three year exemption from the monitoring/reporting requirements for the following industrial chemical(s): TOXAPHENE/CHLORDANE/PCB, CARBAMATE PESTICIDES. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source(s).



Questions, Comments and Further Information

We are proud of the work we do for you, and to be your source for all your water services.

If you have any questions, comments or concerns about your water quality or service, please call the South Berwick Water District at (207) 384-2257 during business hours.

The Board of Trustees meets on the first and third Tuesday of each month. The annual meeting is the first Monday of March. These meetings are open to the public and you are welcome to attend.

***In case of an emergency after hours
please call South Berwick Dispatch at 207-384-2254
They will contact a Water District Employee to assist with your emergency***

South Berwick Water
District

80 Berwick Rd.
South Berwick, ME 03908

Phone: 207-384-2257
Fax: 207-384-2762
Email: info@sbwd.org

Trustees

Douglas Letellier, Chairman
Warren Spencer, Treasurer
Henry Miller, Clerk
Raymond Delcourt, Trustee
Dwayne Rice, Trustee

Staff

John Leach, Superintendent
Eric Kulickowski, Water System Operator
Pauline Brewster, Office Manager

Business Hours

Monday—Friday 9:00am—12:00pm 1:00pm—4:00pm