

## 2016 Consumer Confidence Report

## Water Quality Report

Welcome to the 22nd annual Water Quality Report for customers of the South Berwick Water District. It provides important information about your water, it's quality and service.

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

The South Berwick Water District uses groundwater for it's supply. The well of supplies consist of a combination of well points (7), a gravel packed well (1) and bedrock wells (8) located in four separate well fields throughout the towns of South Berwick and Berwick. A bedrock well site located off Route 4 continues to be under construction for future use. The total combined output of the current supply is 1 million gallons per day.

## Mission

The mission of the South Berwick Water District is to assure an adequate supply of high quality water to the residents and others in the District and the towns of South Berwick and Berwick for domestic, sanitary, commercial, industrial and municipal services, conservation, vital resource protection and fire protection



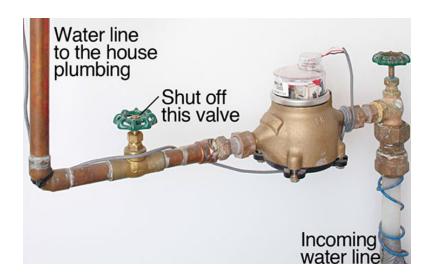
## Monthly Arsenic Test Results are being posted on our Facebook Page and Website

## **Junction Road Arsenic Treatment**

This project is for the installation of Arsenic removal treatment at the Junction Road well water facility. This project is due to the uncertainty of future raw water and arsenic levels exceeding the MCL of 0.010 mg/L. Past samples have exceeded the MCL and the District is working with the Maine Drinking Water Program to correct this issue.

The District's engineering consultant has evaluated several technology options in order to identify the most effective and economical solution for the District. Treatment plan design is currently underway and construction is slated to begin in October 2017. This system is expected to be online in early 2018. The project is to be funded through low interest loans from the Maine State Revolving 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 is conducting an annual 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 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. 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.

## **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 works for you.



## 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.

Please update your phone and email contact information. You may write on your payment slip or call our office 207-384-2257. Thank you!



## Adopt a Hydrant

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.



## Projects for 2017

The Water District will be replacing aging water mains on a number of streets. 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.

## 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 District to mark out your water line.

## **PWSID** ME0091470

## SOUTH BERWICK WATER DISTRICT

## **2016 Consumer Confidence Report**

## **General Information**

Water System Contact Name: South Berwick Water District

Address: 80 Berwick Rd.

City, State, Zip Code: South Berwick, ME 03908

**Report Covering Calendar Year:** Jan 1 - Dec 31, 2016

**Upcoming Regularly Scheduled Meeting( s):** First & 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 & Manganese removal at

Willow Drive

#### **Source Water Assessment:**

The sources of drinking water include 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.

## **Water Test Results**

<u>Contaminant</u>	Date	Results	MCL	MCLG	Source
coliform (TCR) (1) Inorganics	2016	0 pos	1 pos/mo or 5%	0 pos	Naturally present in the environment.
ARSENIC (6)	6/29/2016	17 ppb	10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass and electronics production wastes.
BARIUM	3/9/2015	0.009 ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
CHROMIUM	3/9/2015	1.5 ppb	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
FLUORIDE (3)	3/9/2015	0.4 ppm	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes Strong teeth. Discharge from fertilizer and aluminum factories.
Lead/Copper					
COPPER 90TH% VALUE (4)	1/1/2014 - 12/31/2016	0.336 ppm	AL = 1.3  ppm	1.3 ppm	Corrosion of household plumbing systems.
LEAD 90TH% VALUE (4)	1/1/2014 - 12/31/2016	5 ppb	AL = 15  ppb	0 ppb	Corrosion of household plumbing systems.

# Disinfectants and Disinfection Byproducts DISTRIBUTION SYSTEM

TOTAL 10 ppb 80 ppb Range (10.3-10.3 ppb) LRAA (2016) 0 ppb By-product of drinking water chlorination. TRIHALMETHANE (TTHM) (9)

## Chlorine Residual (Add chlorine residual information)

CHLORINE RESIDUAL

RAA .25 ppm Range (10-150 ppm) MRDL=4 ppm

MRDLG= 4 ppm

By-product of drinking water chlorination.

#### **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.

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

#### 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 ( $\mu$ g/L).

pos = positive samples.

MFL = million fibers per liter

#### 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 5 pCi/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 4000 pCi/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 Haloacetic 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 (You are not required to list detects for secondary contaminants, but this information, particularly sodium levels, might be useful to your customers. The decision to supply this information in your CCR is up to you.)

MAGNESIUM	1.2 ppm	3/9/2015
CHLORIDE	24 ppm	3/9/2015
ZINC	0.005 ppm	3/9/2015
SULFATE	30 ppm	3/9/2015
SODIUM	63 ppm	3/9/2015
NICKEL	0.0014 ppm	3/9/2015
MANGANESE	0.011 ppm	3/9/2015
IRON	0.061 ppm	3/9/2015

#### 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**, which 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).

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:

<a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>

## **Violations**

Violation I	Period	Violation Type
4/1/2016 -	6/30/2016	02 Violation - MCL, AVERAGE ARSENIC TREAT PT 4
7/1/2016 -	9/30/2016	02 Violation - MCL, AVERAGE ARSENIC TREAT PT 4
10/1/2016 -	12/31/2016	02 Violation - MCL, AVERAGE ARSENIC TREAT PT 4

Arsenic MCL Exceedance: In 2016, 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.

Please be sure your main shut off valve is in working order. In case of an emergency, this will prevent water damage to your property

## 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 meeting 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 Letelllier, Chairman Warren Spencer, Treasurer Henry Miller, Clerk Raymond Delcourt, Trustee Dwayne Rice, Trustee

## **Staff**

John Leach, Superintendent Eric Kulickowski, Water System Operator Pauline Brewster, Customer Service Rep

#### **Business Hours**

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