SEARSPORT WATER DISTRICT

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SEARSPORT WATER DISTRICT 2012 WATER QUALITY REPORT

Welcome to SWD's 2012 Water Quality Report

This report provides you with information regarding the quality of your drinking water. We know that you count on us each and every day for a safe and reliable supply of drinking water and the staff here at the Searsport Water District (SWD) are trained and dedicated in doing just that while also providing you, our customer, with the highest quality of service possible. We also monitor the water that you drink 24 hours per day and have your water tested by State operated and/or independent, State certified testing laboratories each and every month. This is done as part of our assurance to you that your water is safe to drink each and every day .

Source Water Assessment
(Drinking Water Program)

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 and 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, public water suppliers, and the DWP. For more information about the SWAP, please contact the DWP at telephone (207) 287-2070.

ABOUT THE REGULATIONS

The Safe Drinking Water Act directs the State, along with the Environmental Protection Agency (EPA), to establish and enforce minimum drinking water standards. These standards set limits on certain biological, radioactive, organic substances sometimes found in drinking water. Two types of standards have been established. Primary drinking water standards are achievable levels of drinking water quality to protect your health. Secondary drinking water standards provide guidelines regarding taste, odor, color, and other aesthetic aspects of your drinking water which do not present a health risk.

Where Does Your Water Come From?

The primary water supply for the Searsport Water District comes from a single gravel packed well located along Rte. 1A in Prospect, Maine. This well receives its water primarily in the form of precipitation, which is stored naturally in a large underground aquifer within the communities of Prospect and Stockton Springs. Much of the area surrounding the well is owned by the Searsport Water District and is currently sparsely developed. An active railway system and gravel pit to the south and east and trucking traffic along are the primary areas of concern. Signs with emergency call numbers have been installed throughout the watershed area for the purpose of providing immediate information should an accidental spill occur.

The EPA requires that we test several parameters. Here are just a few.

Water Test Results After Treatment

Although many regulated Organic and Inorganic Chemicals were not found, here is a list of chemicals that were detected in the water after treatment.

CONTAMINANT	DATE	RESULTS	MCL	MCLG	SOURCE
Microbiological					
Coliform (TCR)	2012	**0 pos**	1 pos/month or 5%	0 pos	Naturally present in the environment.
Inorganics					
Barium (ppm)	08/31/2010	**0.0031 ppm**	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Chromium	08/31/2010	**1.8 ppb**	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
Fluoride	8/31/2010	**0.2 ppm**	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teet. Discharge from fertilizer and aluminum factories.
Nitrate	5/8/2012	**0.24 ppm**	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Radionuclides					
Gross Alpha, Excl. Radon & Uranium-238 (7)	5/9/2012	**4.93 pCi/l**	15 pCi/l	0 pCi/l	Erosion of natural deposits.
Uranium	8/31/2010	**5.7 ppb**	30 ppb	0 ppb	Erosion of natural deposits.
Copper/Lead					
Copper 90th% Value (4)	1/1/2011—12/31/2013	**0.14 ppm**	AL=1.3 ppm	0 pCi/l	Corrosion of household plumbing systems.
Lead 90th% Value (4)	1/1/2011—12/31/2013				Corrosion of household plumbing systems.
Disinfectants and Disinfection ByProducts.					
TTHM (9)	RAA (2010)	**5.2 ppb**	80 ppb	0 ppb	By-product of drinking water chlorination.
Chlorine Residual	2012	**RAA 0.30 ppm**	MRDL = 4 ppm	MRDLG = 4 ppm	By-Product of drinking water chlorination

Definitions

MCL — Maximum Contaminant Level = The highest level of a contaminant that is allowed in drinking water.
MCLG — Maximum Contaminant Level Goal = The level of a contaminant in drinking water below which there is no known or expected risk to health.
RAA — Running Annual Average = The average of all monthly or quarterly samples for the last year at all sample locations.
AL — Action Level = The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
MRDL — Maximum Residual Disinfectant Level = 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.
MRDLG — Maximum Residual Disinfectant Level Goal = 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.
TT — Treatment Technique = 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).
ppb = parts per billion = micrograms per liter (ug/l).
pCi/L = picocuries per liter (a measure of radioactivity).
pos = positive samples.

WAIVER INFORMATION—In 2010, our system was granted a "Synthetic Organics Waiver". This is a three year exemption from the monitoring/reporting requirements for pesticides, herbicides, fungicides and other industrial chemicals. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source.

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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum and can also come from gas stations, urban runoff, and septic systems.

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, persons 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. Guidelines, jointly developed by the EPA and the CDC, on appropriate means to lessen the risk of infection by cryptosporidium 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.

Searsport 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 Act Hotline or at: **http://www.epa.gov/safewater/lead**

NOTES:

1. Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take < 40 samples per month.
2. Arsenic: The U.S. EPA adopted the new MCL standard in October 2001. Water systems must meet this new standard by January 2006.
3. Fluoride: Fluoride levels must be maintained between 1-2 ppm, for those water systems that fluoridate the water.
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 tome because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health provider.
6. Gross Alpha: Action level over 5 pCi/L requires testing for Radium. Action level over 15 pCi/L requires testing for Radon and Uranium.
7. Uranium: The U.S. EPA adopted the new MCL standard of 30 ug/L(ppb), in December 2000. Water systems must meet this new standard after December 2003.
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. The U.S.EPA is proposing setting federal standards for Radon in public drinking water.
9. TTHM/HAA5: Total Trihalomethanes (TTHM) and Haloacetic Acids (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.

Violations: Violation Period: 1/1/2011 - 12/31/2019 Violation Type: 03 Violation—MONITORING, ROUTINE MAJOR RADIUM-228
We are required to monitor our drinking water fro specific contaminants on a regular basis. Results of regular monitoring indicate whether or not our drinking water meets health standards. During 2012, we did not test for, or failed to collect all necessary tests for Radium-228. NOTE: This sample is required every 9 years and was missed in 2012. However, on 3/4/2013 samples were taken and the test results are as follows: 0.518 +/- 0.437 (0.906) pCi/l. This amount is below the MCL.

Water System Data & Treatment

The water distribution system includes approximately 32 +/- miles of water mains serving nearly 1,100 customers. Our treatment process includes aeration for radon removal, sodium silicate to control corrosion and sodium hypochlorite (bleach) for disinfection. This is all necessary to maintain the quality of your water while meeting all EPA standards. We also maintain 3 in ground concrete reservoirs with a total combined holding capacity of 1.7 million gallons.

Where Can You Get More Information? - This report is only a summary of activities during the past year. If you have any questions about your water quality, please call (207) 548-2910 during business hours (Mon – Fri between 7:30 a.m. and 3:30 p.m.). For additional information, contact the Maine Department of Human Services Drinking Water Program at (207) 287-2070, the EPA's Safe Drinking Water Hotline At 1-800-426-4791, the National Center for Disease Control (CDC) at (404) 639-3311, or visit one of the following web sites. USEPA: www.epa.gov/safewater – AWWA: www.awwa.org – Maine DWP: www.medwp.com

DISTRICT OPERATIONS FOR THE YEAR 2012

In 2012 the District finished the remainder of its water main replacement project along Route 1 between Searsport and Stockton Springs. Completion of this project eliminated a significant portion of the 1909 era 8" water main that provided water to the Searsport area. Once the old main was removed from service we found that the pumping rates were significantly reduced. The location, depth and lack of isolation valves on the old main made it extremely difficult to pin point leaks along that line. In some areas where Route 1 was rebuilt in the 1950's the old main was nearly 11 feet deep. At present a 0.8 mile section of old 8" main still exists along Route 1 and will need to be replaced within the next few years. Once this has been completed the entire main line from Reservoir 2 in Stockton Springs to Station Avenue in Searsport will consist of new 12" D.I. water main and will have the ability to provide up to, and in some cases more than, 2,200 gallons per minute for fire protection demands.

As part of the 2011/2012 water main replacement project the District also replaced its Supervisory Control and Data Acquisition (SCADA) equipment. This system provides all operational data to the main office and within each of the District's pumping facilities. It also provides emergency information to the District personnel via an automated paging system in the event of an emergency and/or failure.

During the spring of 2012 the District also purchased 200 new water meters with radio read technology along with the necessary software and meter reading equipment. These meters are replacing our oldest pulse read meters and are now being installed by our service technicians. During the course of replacing these meters it may be necessary for some residential customers to install new valves and/or backflow preventers as required by the Maine Department of Health and Human Services Drinking Water Program. The District's service technicians may be able to install these items during the time of the meter replacement. If we are able to do this during the meter install we will charge the customer for materials only, thus eliminating the cost for a plumber to do the install at a later date. All customers receiving the new radio read meters will be switched over to a monthly billing cycle rather than a quarterly billing cycle. This will provide the customer with a smaller monthly bill rather than a larger quarterly bill and will also make the customer aware of any potential leaks sooner than later, thus keeping their water bill to a minimum.

The District has also hired a forester to oversee wood harvesting operations within the District's 300 +/- acres of watershed protection areas. In 2012 the District harvested approximately 140 of those acres on the Searsport side of Half Moon Pond. This program is necessary to maintain a healthy forest throughout the District's watershed.

After being in service for nearly 18 years it was necessary for the District to take it's only well off-line to be cleaned during the last week of November. This project took 1 week to complete and during this time it was necessary for the District to purchase water from the Belfast Water District. Although most areas were not affected during this operation, some areas did experience a reduction in water pressure. A new pump, which the District purchased as an emergency replacement nearly 8 years ago, was installed at the same time as the old pump had significant signs of wear.

In 2012, the District pumped a total of 111,768,000 gallons of water. Water purchased from Belfast during the well cleaning project totaled 3,441,832 gallons. Total system usage during 2012 totaled 115,209,832 gallons. This amount is down 28,177,168 gallons from 2011. The decrease in system demand was largely due to the elimination of leaks along the old Route 1 water main. Our daily average was 314,781 gallons per day or 219 gallons per minute. This amount is 49.45% of the total daily safe yield based on a safe yield of 636,500 gallons per day.

We are also pleased with the addition of two (2) new employees who have replaced employees who have left the profession. Kyle Anne Benson started in July as our new Office Assistant and Tim Wilson started in October as our new Service Technician. Kyle and Tim have already proved to be great assets to our team and we are thrilled to have them aboard.

Current Contacts at the Searsport Water District

Trustees	Licensed Operators	Office Staff
William Shorey, Chairman	Herbert Kronholm, Superintendent	Brenda Corbin, Office Mgr.
Bruce Mills, Treasurer	R. Bruce Page, Foreman/Service Tech.	Kyle Anne Benson, Office Asst.
Larry Clark, Clerk	Timothy Wilson, Service Tech.	

Phone: (207) 548-2910 Fax: (207) 548-6719 email: info@searsportwater.org or visit our website: www.searsportwater.org

Business hours are Monday – Friday 7:30 a.m. to 3:30 p.m.

In case of an emergency during non business hours please call the Waldo County Dispatch Center @ 1-800-660-3398