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SEARSPORT WATER DISTRICT 2010 WATER QUALITY REPORT



Welcome to SWD's 2010 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)	2010	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.
Copper 90th% Value (4)	1/1/2008-12/31/2010	0.14 ppm	AL = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
Fluoride	8/31/2010	0.2 ppm	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Lead 90th% Value (4)	1/1/2008-12/31/2010	2.9 ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing systems.
Nitrate	8/31/2010	0.21 ppm	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Radionuclides					
Gross Alpha, Excl. Radon & U	3/13/2006	4.57 pCi/l	15 pCi/l	0 pCi/l	Erosion of natural deposits.
Disinfectants and Disinfection byproducts.					
TTHM	RAA (2010)	5.2 ppb	80 ppb	0 ppb	By-product of drinking water chlorination.
Chlorine Residual	2010	RAA 0.36 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).

pCi/L = picocuries per liter (a measure of radioactivity).

ppb = parts per billion = micrograms per liter (ug/l).

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 time 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.



Water System Data & Treatment

The water distribution system includes approximately 32 +/- miles of water mains serving over 1000 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 that have a total combined holding capacity of 1.7 million gallons. This is enough water to provide 2000 gallons per minute for 14 hours in the event of a major fire. This amount of storage will also serve our system for nearly 5 days should we suffer problems with our well and/or our pumping station. We also have an emergency interconnection with the Belfast Water District whereas we can supply each other with up to 504,000 gallons per day in the event of an emergency.

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 2010

In 2010 we finished replacing water mains along Sylvan Street and Highland Avenue in Stockton Springs. This portion of the main replacement program included the installation of a new 12" main that was installed in the back side of our Reservoir #2 and extended down Upper Sylvan Street and crossed Rte. 1 to Lower Sylvan Street. This also included a new 8" main along Highland Avenue tying the 10" line along Church Street to the new 12" line on Upper Sylvan Street. This 8" line replaced a 1" line that had previously served approximately 5 homes. The 12" line on Upper Sylvan Street replaced an old 6" line.

In 2011 the District plans include installing a new 12" main from the Sylvan Street / Route 1 junction and extend it to the Route 1 / Station Avenue intersection in Searsport. This main will replace approximately 4 +/- miles of old 8" main that was installed in the early 1900's. This will significantly improve flows from the District's source of supply to the Town of Searsport. It will also provide the necessary facilities to pump water back to reservoir 2 in Stockton Springs from our interconnection with the Belfast Water District. This would be necessary should the District need to remove the well from service for maintenance purposes. Such maintenance to the District's well is scheduled to take place in the fall of 2011. The total cost for making these upgrades is estimated to be approximately \$3,800,000. The funding breaks down as follows: 45% Grant and 55% Loan from the Maine Drinking Water State Revolving Fund (MDWP-SRF) program and the United States Department of Agriculture Rural Development (USDA-RD) program. The loan for MDWP-SRF is for 30 years with an interest rate of 0%. The USDA-RD loan is for 40 years with an interest rate of 3.25%. We here at the District anticipate that this will be the last project that we will apply for until the District retires its next bond in 2018.

Construction on the Searsport Water District office building was recently completed. This project was done over a 3 year period using staff labor to do the bulk of the work. We would like to thank long time employee Bruce Page for leading this project and doing most of the carpentry and finish work that was involved. Construction on this project was done as time permitted with a completely updated building as a result. The roofing and siding were replaced by Northeast Construction through grant money that was left over from the water main replacement projects.

Several old oil tanks were replaced within the District's Groundwater/Aquifer Protection Area in Stockton Springs. This project was paid for through funds received from the Maine Department of Environmental Protection's (MDEP) Oil Tank Replacement Program at no cost to the Searsport Water District or to the homeowners who received the oil tanks. The Searsport Water District administered this program.

The Board of Trustees also work hard on several projects including a plan to sell District owned property to several of the camp owners at Half Moon Pond. The properties sold, which were located adjacent to and behind existing camps along Ruth Lane and Moosepath Lane, provided the camp owners the opportunity to own the property that their septic systems were or are to be located on. Owning these properties will also provide the camp owners with the ability to create a "safe area" for the purpose of locating a septic system, if they don't already have one, as well as an area for storage in order to locate items further away from the pond. Land has also been set aside for the Town of Searsport for the purpose of providing future public access to the Town's only Great Pond.

In 2010 the District pumped a total of 120,194,000 gallons of water. This amount is down 229,000 from 2009 and 1,033,000 from 2008. Our daily average was 329,298 gallons per day or 228.68 gallons per minute. This amount is 51.74% of the total daily safe yield based on a safe yield of 636,500 gallons per day.

Current Contacts at the Searsport Water District

Trustees

William Shorey, Chairman

Bruce Mills, Treasurer

Larry Clark, Clerk

Licensed Operators

Herbert Kronholm, Superintendent

R. Bruce Page, Foreman/Service Tech.

Stephen Sherer, Service Tech.

Office Staff

Brenda Corbin, Office Mgr.

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