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# SEARSPORT WATER DISTRICT 2009 WATER QUALITY REPORT



## Welcome to SWD's 2009 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. The area surrounding the well is currently sparsely developed. An active railway system and gravel pit to the south and east including trucking traffic along Rte. 1A are 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	MCLG	MCL	RESULT	Potential Sources of Contaminants
<b>Organic Chemicals</b>	<b>NONE DETECTED IN ROUTINE SAMPLING</b>			
<b>Inorganic Chemicals</b>				
Barium (ppm)	2 ppm	2 ppm	.003 ppm 03/20/07	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
Copper (ppm)	1.3 ppm	AL > 1.3 ppm	0.14 ppm 01/01/08—12/31/10	Corrosion of household plumbing systems.
Chromium (ppb)	100 ppb	100 ppb	0.8 ppb 03/20/07	Water additive which promotes strong teeth; erosion of natural deposits.
Chloride			9 ppm 03/20/07	
Magnesium			3.5 ppm 03/20/07	
Sulfate			6 ppm 03/21/07	
Lead (ppb)	0 ppb	AL = 15 ppb	2.9 ppb 1/1/08—12/31/10	Corrosion of household plumbing systems.
Radionuclides Gross Alpha Screen Alpha emitters (pCi/l)	0	15	4.57 03/13/06	Erosion of natural deposits.
Trihalomethanes (ppb)	80 ppb	80 ppb	6.8 ppb 08/27/07	By-product of drinking water chlorination.
Total Coliform Bacteria	0 pos	1 pos	0 pos 2009	Naturally present in the environment.
Nitrate Nitrogen (ppm)	10 ppm	10 ppm	0.23 ppm 6/16/09	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Chlorine Residual	MRDL 4.0 ppm	MRDLG 4.0 ppm	RAA 0.44 ppm	By-Product of drinking water chlorination

### Definitions

**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 which, if exceeded, triggers treatment or other requirements which a water system must follow. 90% of sample results must be less than the action level to meet compliance.

**MCL:** Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**MCLG:** Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**mg/L:** milligrams per liter = parts per million (ppm).

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

**pos:** positive for the presence of coliform bacteria.

**BDL:** Below Detection Level

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

**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.

## LEAD AND COPPER SAMPLING RESULTS

During the summer of 2009 the Water District sampled water from 10 homes for lead and copper, as required by State and Federal regulations. These sites meet specific criteria which represent houses that have the highest potential for lead and copper corrosion. The results showed that all samples tested were below the action level for both, lead and copper. The action level is defined as a concentration set by regulators above which treatment is required if a certain percentage of samples exceed the action level. The 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 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.

*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).*

### WAIVER INFORMATION

In 2006, we applied for and were granted a partial or a full three-year waiver for water testing for certain synthetic organic compounds (SOC) (Phase II/V). This is an exemption from doing tests for insecticides, herbicides, fungicides, and certain other industrial chemicals that are regulated in drinking water. The State of Maine Drinking Water Program grants a waiver only upon determining, on a case by case basis, that "it will not result in an unreasonable health risk.: For any water tests that are not waived, we are required to report contaminants that were detected in our water supply in this CCR.



### 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 (liquid bleach) for disinfection. This is all necessary to maintain the quality of your water while meeting all EPA standards. The highest Radon levels for our system was 613 pCi/L, taken in April of 2000. Radon is found in the soil and bed-rock formations and is a water soluble, gaseous by-product of Uranium. Most Radon is released to the air moments after turning on the tap. The State of Maine currently recommends

follow-up action (treatment) for Radon levels in drinking water above 4,000 pCi/L. The U.S. EPA is considering setting federal national standards for Radon in drinking water. Breathing Radon released to air from tap water increases the risk of lung cancer over the course of your lifetime. If you seek more information about Radon, please contact this office or the State Drinking Water Program and request a Radon Fact Sheet.

*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](http://www.epa.gov/safewater) - AWWA: [www.awwa.org](http://www.awwa.org) - Maine DWP: [www.medwp.com](http://www.medwp.com)*



**DISTRICT OPERATIONS FOR THE YEAR 2009**

In 2009 we were busy working on the planning, financing and construction phase of replacing water mains in Searsport and Stockton Springs. Due to the timing of the finance package that we received from USDA Rural Development we weren't able to start construction until October 2009. The two projects that we were able to complete were the Union Street/Mortland Road main replacement project in Searsport and the bay crossing along Mill Pond in Stockton Springs. Thanks to cooperation with the Town of Searsport we were able to save approximately \$25,000.00 on the Mortland Road/Union Street project by eliminating the need to put in temporary pavement over the winter. We will however put permanent pavement in place when the paving plants open up in the spring. With the excessive amount of grant money that we received we were also able to save approximately \$14,500.00 in interim finance charges as we were able to complete the loan portion of the projects within a 6 week period, thus eliminating all but approximately \$100.00 of the finance charges. The remaining main replacement project along Sylvan Street in Stockton Springs as well as the well rehab project will be completed in the spring of 2010. The total costs for these projects is estimated to be no more than \$850,000.00 with \$622,000.00 being in the form of a grant and the remaining \$228,000.00 in the form of a loan with an interest rate of 2.5% and will be paid back over a 40 year period.

In 2009 we also were able to finish the installation of fencing and entrance gates within our source water protection area. Money for these projects came in the form of a \$5,000.00 source water protection grant from the Maine Drinking Water Program. We also continue to work on our surveying project around Half Moon Pond. Our intent at Half Moon Pond is to sell property that is located behind the existing camp owners along Ruth Lane and Moose Path Lane. This property was originally set aside for the purpose of providing an area for the existing camp owners to install their sub-surface wastewater disposal systems. Division and sale of this property will allow for the camp owners to own the land that their systems are located on. It will also provide them with an area that they may be able to store necessary items further away from the pond in order to better protect the quality of the pond. Since the Searsport Water District plans to maintain Half Moon Pond as an emergency backup water supply we feel that this plan best fits our source water protection plan.

Construction with the office remodel project had to be put on hold for the summer and has resumed again this winter as time allows. Our final phase of the project, which is the main office area, is expected to be completed in the spring of 2010. Once completed we will install new siding and shingles thus will complete the final phase of this project.

We received approval from the Maine Department of Environmental Protection (MDEP) to go ahead with the Oil Tank Replacement Program. Oil tanks within our wellhead protection area will be replaced, if needed, using a \$30,000.00 grant from MDEP. This program will start in the spring of 2010 and will be administered by the Searsport Water District.

During the year the Searsport Water District also joined the Maine Water/Wastewater Agency Response Network (MEWARN). This provides utilities throughout Maine with resources in the event of an emergency or natural disaster. By joining Maine WARN the District will qualify for Federal relief should the District provide to and/or need assistance from other utilities. Maine WARN was developed shortly after the natural disaster occurred in Bethel, Maine whereas mudslides ultimately destroyed the water supply for the town of Bethel.

In 2009 the District pumped a total of 120,423,000 gallons of water. This amount is down 804,000 from the previous year. Our daily average was 329,926 gallons per day or 229 gallons per minute. This amount is 51.834% of the total daily safe yield based on a safe yield of 636,500 gallons per day.

In 2010 the District will be applying for an additional \$2,850,000 in funding from USDA Rural Development for the purpose of making more necessary upgrades. If approved it appears that the District will receive a maximum grant of 45% (\$1,282,500) with the remaining 55% (1,567,500) provided in the form of a low interest loan which will be paid back over a 40 year period. Due to recent census data we anticipate that this will be the last year, for several years to come, that we will qualify for such a significant amount of grant money. Therefore we do not anticipate that we will not make any more upgrades to the system until our MMBB bond matures in 2018. This bond alone will bring back to the district approximately \$54,000.00 annually. Those funds then can be used to continue the Districts efforts to make necessary improvements to its system without the need to increase water rates.

**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](mailto:info@searsportwater.org) or visit our website: [www.searsportwater.org](http://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