SEARSPORT WATER DISTRICT

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SEARSPORT WATER DISTRICT 2021 WATER QUALITY REPORT

Welcome to SWD's 2021 Water Quality Report

(This report covers the calendar year between January 1 thru December 31, 2021)

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 safe and reliable water and the staff here at the Searsport Water District (SWD) are trained and dedicated in doing just that. Our state of the art inline analyzers monitor the water 24 hours a day to assure its safety. In order to further assure that your water is free of any potential contaminants we collect samples throughout the system each and every month and send those samples to a State certified testing laboratory. We believe that we have some of the best drinking water in the State of Maine, and we take our jobs very seriously when it comes to protecting it.

Where Does Your Water Come From?

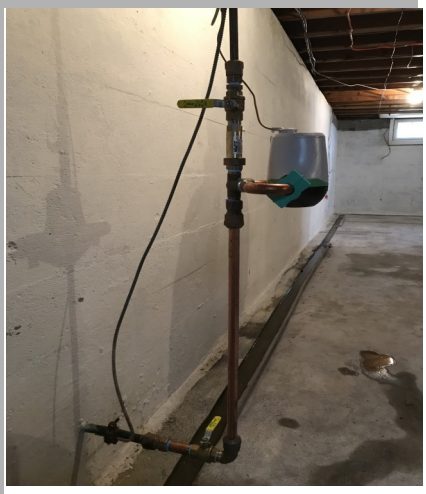
The primary water supply for the Searsport Water District is from a single gravel packed well located along Rte. 1A in Prospect, Maine. This well receives its water primarily in the form of precipitation, which is stored naturally in a large underground aquifer within the communities of Prospect and Stockton Springs. Much of the area surrounding the well is currently undeveloped and is owned by the Searsport Water District. We also own and maintain a smaller backup well and share an emergency interconnection with the Belfast Water District. These backups assure that we can provide water to all of our customers without interruption in service. The emergency interconnection enables both utilities to provide water to each other in the event of an emergency or during times when routine maintenance is necessary.

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 and public water systems.

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.



Water Meter Replacement Program

Slowly but surely we continue the process of replacing the older water meters throughout the system. Above is a photo showing the installation of the new radio read water meter complete with new ball valves and a backflow preventer. At the time of the meter installation we will gladly install new valves and a backflow preventer if they are needed. Our current customers will be required to pay for the new valves, backflow preventer and any other parts necessary to complete the upgrade. The water meter and labor are free.

Note: This does not apply to new construction.

Water Test Results

CONTAMINANT	DATE	RESULTS	MCL	MCLG	Possible Sources of Contamination
Microbiological					
Coliform (TCR) (1)	2021	**0 pos**	1 pos/month or 5%	0 pos	Naturally present in the environment.
Inorganics					
Barium	5/14/2019	**0.0029 ppm**	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Chromium	5/14/2019	**1.4 ppb**	100 ppb	100 ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
Fluoride (3)	5/14/2019	**0.2 ppm**	4 ppm	4 ppm	Erosion of natural deposits. Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories.
Nitrate (5)	3/16/2021	**0.25 ppm**	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Radionuclides					
Combined Uranium	5/14/2019	**5.4 ppb**	30 ppb	0 ppb	Erosion of natural deposits.
Gross Alpha (7)	5/1/2018	**3.01 pCi/l**	15 pCi/l	0 pCi/l	Erosion of natural deposits.
Lead/Copper					
Copper 90th% Value (4)	1/1/2019 — 12/31/2021	**0.2 ppm**	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
Lead 90th% Value (3)	1/1/2019 — 12/31/2021	**6 ppb**	AL=15 ppb	0 ppb	Corrosion of household plumbing systems.
Disinfectants and Disinfection Byproducts.					
Total Haloacetic Acids (HAA5) (9)	LRAA (2021)	**3.6 ppb Range (3.6-3.6 ppb)**	60 ppb	0 ppb	By-product of drinking water chlorination.
Total Trihalomethane (TTHM) (9)	LRAA(2021)	**13.5 ppb Range (13.5-13.5)**	80 ppb	0 ppb	By-product of drinking water chlorination.
CHLORINE RESIDUAL	2021	**Range (0.38 - 1.22)**	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 LRAA 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 = micrograms per liter (ug/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 test 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 and 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 the 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 Radium226 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.

Secondary Contaminants: We are not required to list these but choose to do so for those who are monitoring sodium levels.

CHLORIDE:	**8.0**	**ppm**	**5/14/2019**	**SULFATE:**	**5.0**	**ppm**	**5/14/2019**
MAGNESIUM:	**3.3**	**ppm**	**5/14/2019**	**ZINC:**	**0.0051**	**ppm**	**5/14/2019**
SODIUM:	**6.2**	**ppm**	**5/142019**	**IRON:**	**0.061**	**ppm**	**5/14/2019**

All other regulated drinking water contaminants were below detection levels.

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 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.

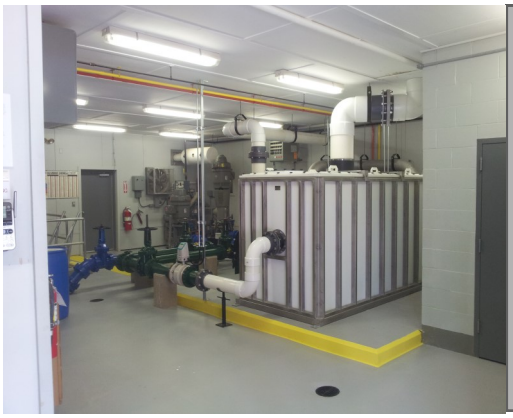
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. 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. 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 the following link: **http://www.epa.gov/safewater/lead**

WAIVER INFORMATION—In 2019, 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, HERBICIDES, CARBAMATE PESTICIDES, SEMIVOLATILE ORGANICS. This waiver was granted due to the absence of these potential sources of contamination within a half mile radius of the water source(s).

Violations: No Violations in 2021.

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 the Searsport Water District Office at (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



Water System Data & Treatment

The Searsport Water District provides drinking water and fire protection to approximately 1157 customers via 32 +/- miles of water mains. We also maintain 3 in-ground concrete reservoirs which have a combined storage capacity of 1.7 million gallons of treated water. Our treatment process is simple yet effective. It includes aeration for Radon and CO2 removal and the addition of Sodium Hypochlorite (bleach). Removal of CO2 helps increase pH thus significantly reducing corrosion within the distribution system. Sodium hypochlorite (bleach) is also added for disinfection. This is all necessary to maintain the quality of your water while meeting, and in most cases, exceeding all EPA standards. We are also fortunate to have a connection with the Belfast Water District. This interconnection provides both utilities with the ability to supply safe drinking water to each other in the event of an emergency.

DISTRICT OPERATIONS FOR THE YEAR 2021

In 2021 the District completed the replacement of the 1909 era 10" cast iron water main along Route 1 in Searsport with new 12" ductile iron water main. The fragile 6" AC (Asbestos Cement) water main on Norris Street was also replaced along with a short 6" cast iron section on Cross Street and Cottage Street. Upon completion of those streets the contractors moved to Union Street and Black Road south where the older 6" cast iron water main was replaced along those areas with new 12" ductile iron water main. Also, approximately 800 feet of 12" water main needed to be removed and replaced to allow the MDOT to install a new box culvert at the Carley Brook Crossing on Route 1A in Stockton Springs. Upon completion of these projects the district had enough remaining funds from the 2021 project to replace an additional 1,000 feet of water main on Black Road South, the entire section of water main on Steamboat Avenue, along with funds to make necessary modifications to the Searsport Water District's Booster Station on Prospect Street. These extra projects will be completed in 2022. Funding for the 2021 water main replacement projects were provided by the Drinking Water Program State Revolving Fund (DWPSRF). Total project costs were estimated to be $1,864,000.00 with $1,491,200 in combined forgiveness funds from DWPSRF and the American Recovery Plan Act (ARPA). The remaining principal amount of $372,800.00 will be financed over a 30-year period with the Maine Municipal Bond Bank (MMBB) at an interest rate of 1%.

Let's talk a little about the 2022 water main replacement projects. With 2022 MDOT projects now set in place to begin in the summer of 2022, it was necessary for the district to secure additional funding to pay for any associated water main adjustments that may be necessary. At the Searsport/Stockton Springs Town Line the MDOT will be replacing a large culvert with a concrete box culvert, similar to what they did on Route 1A in 2021 at the Carley Brook crossing. This will require the contractor to remove a section of 12" water main while this project is under construction. The Searsport Water District prepared for this project in advance by installing two additional hydrants on each side of the project area to accommodate a temporary water main while construction is under way. The cost of replacing the water main in that area is the responsibility of the water district. Also, while the MDOT Route 1 road reconstruction project is underway in Searsport, the Searsport Water District will be responsible for all cost associated with making necessary adjustments as well as repairing and/or replacing water main gate valve boxes within the construction area. The Searsport Water District also realized it would be necessary to replace additional water mains in the following locations: Water Street, Howard Street, Leach Street, Park Street, Elm Street, and Navy Street in Searsport. Approximately 2,000 feet of water main on the Cape Jellison Road in Stockton Springs will also be replaced. Funds for the 2022 projects will also come from the Maine Drinking Water Programs State Revolving Fund (MDWP-SRF) and the American Recovery Plan Act (ARPA) .

In 2021, the District pumped a total of 106,153,000 136,791,000 gallons of water which is a decrease of 30,638,000 gallons from 2020. Our daily average usage for 2021 was 290,830 gallons per day or 202 gallons per minute. This amount is 45.69% of the total daily safe yield based on a calculated safe yield of 636,500 gallons per day. Total water sold to metered customers during 2021 was 66,788,920 gallons, which is an increase of 1,877,480 gallons over 2020.

In closing we want to thank you, our customers, for understanding the need to replace the old deteriorating water mains throughout the system. It's an expensive venture, however would be totally unaffordable if it was not for the forgiveness funds that we have received from the MDWP-SRF Program and most recently the ARPA program. The forgiveness funds coupled with a low 1% interest loan from the Maine Municipal Bond Bank (MMBB) has helped us make these monumental improvements to your water system without raising rates to an unaffordable level. With the next set of bonds maturing in 2033 and 2034 the district has begun the task of developing a water main replacement plan which will prioritize replacement of older water main once those bonds are paid.

Again, we thank you all very much and look forward to providing you with some of the best drinking water in the State of Maine. Remember, we are here for you, and should you need emergency assistance after hours please call the emergency number at 1-800-660-3398. Please feel free to call us at (207) 548-2910 between the hours of 7:30 a.m. to 3:30 p.m. or email us at info@searsportwater.org should you have any other questions or concerns. You can also find us on the web at www.searsportwater.org or like us on Facebook @ Searsport Water District where construction and service disruption information will be posted as it occurs.

Sincerely,

Herbert Kronholm

Herbert Kronholm, Superintendent
Searsport Water District

Current Contacts at the Searsport Water District

Trustees	Operators	Office Staff
William Shorey, Chairman	Herbert Kronholm, Superintendent	Brenda Storey, Office Mgr.
Bruce Mills, Treasurer	Timothy Wilson, Foreman	Kyle Anne Benson, Office Asst.
Larry Clark, Clerk	Harold Porter, Service Technician	

Phone: (207) 548-2910 Fax: (207) 548-6719 Business hours are Monday – Friday 7:30 a.m. to 3:30 p.m.

email: info@searsportwater.org Visit our website: www.searsportwater.org Like us on Facebook: Searsport Water District

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