SEARSPORT WATER DISTRICT

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SEARSPORT WATER DISTRICT 2020 WATER QUALITY REPORT

Welcome to SWD's 2020 Water Quality Report

(This report covers the calendar year between January 1 thru December 31, 2020)

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?

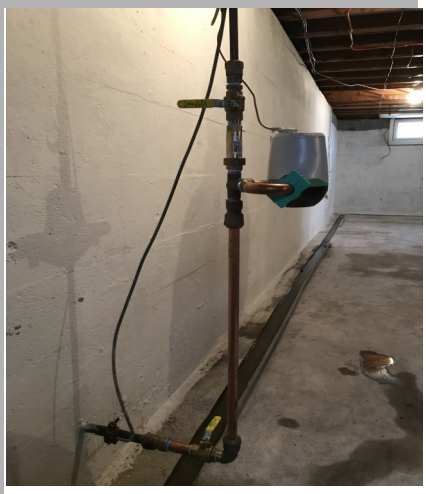
The primary water supply for the Searsport Water District is from a single gravel packed well located along Rte. 1A in Prospect, Maine. This well receives its water primarily in the form of precipitation, which is stored naturally in a large underground aquifer within the communities of Prospect and 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

We here at the Searsport Water District 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 meters 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)	2020	**0 pos**	1 pos/month or 5%	0 pos	Naturally present in the environment.
Inorganics					
Barium	5/142019	**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)	3/31/2020	**0.27 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)	1/1/2016—12/31/2018	**0.11 ppm**	AL=1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.
Lead 90th% Value (3)	1/1/2016—12/31/2018	**1.1 ppb**	AL=15 ppb	0 ppb	Corrosion of household plumbing systems.
Disinfectants and Disinfection Byproducts.					
Total Haloacetic Acids (HAA5) (9)	LRAA (2020) Range (4.5 - 4.5 ppb)	**4.5 ppb**	60 ppb	0 ppb	By-product of drinking water chlorination.
Total Trihalomethane (TTHM) (9)	LRAA(2020) Range (7.8 - 7.8 ppb)	**7.8 ppb**	80 ppb	0 ppb	By-product of drinking water chlorination.
CHLORINE RESIDUAL	2020	**Range (0.72 - 1.40)**	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.

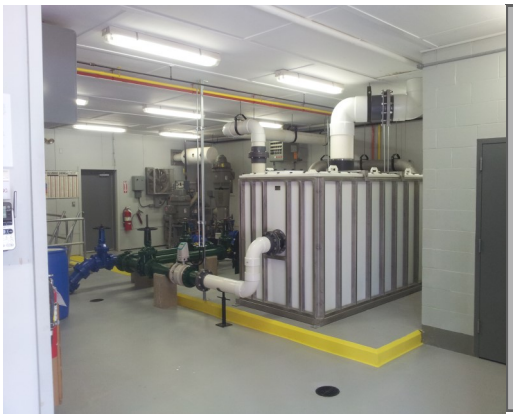
Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants 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 2020.

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 approximately 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 2020

In 2020 the District continued its efforts to replace the old 10" cast iron water main along Route 1 in Searsport, which dates back to 1909, with new 12" ductile iron water main. Old troublesome watermains on Mortland Road from the library to the High School and on Seaport Avenue in Stockton Springs were also replaced. On Mt. Ephraim Road we also had to relocate our 12" ductile iron water main to the downstream side of that culvert to accommodate a new concrete box culvert that was replaced by the MDOT in July. During the course of the water main replacement projects all water services to residents and businesses within those areas were replaced from the new main to the utility owned water shut off valve located at the customers property line. Several new fire hydrants were installed in strategic locations for firefighting purposes and to allow the water utility to adequately flush and maintain the water mains, which we do annually. Due to winter shutdown the section of water main along Route 1 between Nichols Street and Mortland Road and the 1" water main on Warren Street will be replaced in the spring of 2021. The Route 1 water main replacement project is necessary in preparation of the Maine Department of Transportation's (MDOT's) planned rebuild of Route 1 in Searsport between Savage Road and Station Avenue, which is scheduled to begin in early 2022. Funding for these 2020 water main replacement projects was provided by the Maine Drinking Water Program State Revolving Fund (MDWPSRF) and the Maine Municipal Bond Bank (MMBB). Total project costs was estimated at $3,190,124.00 and $1,595,062 of the total costs is forgiveness funds from the Maine Drinking Water Program. The principal amount of $1,595,062.00 will be financed over a 30-year period with the Maine Municipal Bond Bank (MMBB) at an interest rate of 1%.

To date the District has been able to keep rates low by opting not to increase rates until absolutely necessary, with the last rate increase dating back to January 1, 2015. As all of us have witnessed, raising rates sooner may have created more of an impact on those who were financially impacted by the COVID-19 pandemic. However, now with the pandemic on its downswing and with us nearing the end of our water main replacement projects, it is now time to increase water rates to pay for the water main bonds. We anticipate a rate increase of approximately 13% beginning on August 1, 2021. We will be mailing information to all customers regarding the rate increase no later than mid May, 2021.

During the year our crew had many obstacles to overcome beginning with COVID-19 protocols and keeping up with projects which included, the replacement of several water meters throughout the system, repairs to services and water mains, hydrant replacements and/or repairs, along with regular maintenance and repairs. Our daily operations and maintenance includes regular maintenance to our six (6) pumping and flow control stations, three (3) reservoirs, and the office and maintenance garage complex. We also maintain 32+/- miles of water mains and 176 fire hydrants throughout the entire water system. One larger project which we completed, was the installation of a new hydrant near the end of the Harris Road water main. This hydrant allows for us to provide a more efficient flushing capabilities along that section of the water system and provided us with the ability to connect a 2" water main to the existing hydrant lateral. This new 2" line replaced an old and badly deteriorated 1" water main that fed four (4) homes within that area. The new 2" line was extended from the hydrant lateral along Harris Road where the four (4) homes were then connected to it. These are just a few of the duties we do throughout the course of a year but are worth mentioning in this report.

In 2020, the District pumped a total of 136,791,000 gallons of water which is an increase of 18,368,000 gallons from 2019. Our daily average usage for 2020 was 373,745 gallons per day or 260 gallons per minute. This amount is 58.72% 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 2020 was 64,911,440 gallons. This amount is a decrease of 1,686,620 gallons as compared to 2019.

In closing I would like to reflect on how COVID-19 changed the way we did business and how it affected so many. When COVID-19 hit the U.S. in early 2020, who would have known how lives would be changed forever. First and foremost, our deepest sympathies go out to all of you who have lost loved ones from COVID-19. Our hearts are broken, and we want you all to know we are with you every step of the way. I do not think anyone could have prepared for a such a horrible virus, that not only moved fast, but did so with furry. Thank you to all the first responders, who worked tirelessly and put their own lives on the line to provide the best care possible to all those who were afflicted.

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,

Herb 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