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SEARSPORT WATER DISTRICT 2022 WATER QUALITY REPORT

Welcome to SWD's 2022 Water Quality Report *(This report covers the calendar year between January 1 thru December 31, 2022)*

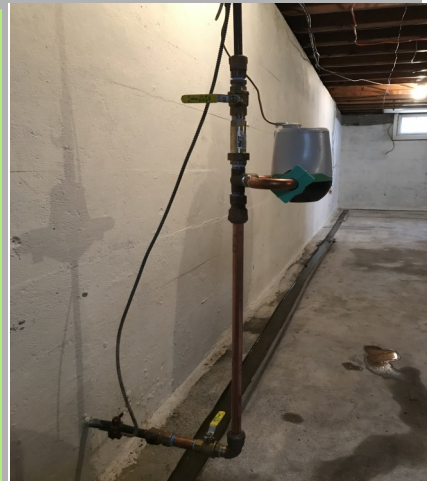
This report provides you with information regarding the quality of your drinking water. We know that you count on us each and every day for safe and reliable water and the staff here at the Searsport Water District (SWD) are trained and dedicated in doing just that. Our state of the art inline analyzers 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

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 or 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.



Water Meter Replacement Program

The Searsport Water District has currently replaced more than 50% of 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 necessary. 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.

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, or 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 Test Results

CONTAMINANT	DATE	RESULTS	MCL	MCLG	Possible Sources of Contamination
Microbiological Coliform (TCR) (1)	2022	0 pos	1 pos/month or 5%	0 pos	Naturally present in the environment.
Inorganics Barium	4/4/2022	0.0031 ppm	2 ppm	2 ppm	Discharge of drilling wastes. Discharge from metal refineries. Erosion of natural deposits.
Fluoride (3)	4/4/2022	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)	4/4/2022	0.28 ppm	10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage. Erosion of natural deposits.
Radionuclides Combined Radium (-226 & -228) Combined Uranium Gross Alpha (7) Radium-228	12/20/2022 4/4/2022 5/1/2018 12/20/2022	0.363 pCi/l 6.6 ppb 3.01 pCi/l 0.363 pCi/l	5 pCi/l 30 ppb 15 pCi/l 5 pCi/l	0 pCi/l 0 ppb 0 pCi/l 0 pCi/l	Erosion of natural deposits. Erosion of natural deposits. Erosion of natural deposits. 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 (2022)	1.3 ppb Range (1.3-1.3 ppb)	60 ppb	0 ppb	By-product of drinking water chlorination.
Total Trihalomethane (TTHM) (9)	LRAA(2022)	9.8 ppb Range (9.8-9.8)	80 ppb	0 ppb	By-product of drinking water chlorination.
CHLORINE RESIDUAL	2022	Range (0.65 - 1.14)	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).

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

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

pos = positive samples.

MFL = million fibers per liter.

Notes:

- Total Coliform Bacteria: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
- 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.
- 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.
- Lead/Copper: Action levels (AL) are measured at consumer's tap. 90% of the test must be equal to or below the action level.
- 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.
- 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.
- 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.
- 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.
- 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.
- PFAS: The degree of risk depends on the level of chemicals and duration of exposure. Laboratory studies of animals exposed to high doses of PFAS have shown numerous negative effects such as issues with reproduction, growth and development, thyroid function, immune system, neurology, as well as injury to the liver. Research is still relatively new, and more needs to be done to fully assess exposure on the human body.

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

CHLORIDE:	10	ppm	4/4/2022	SULFATE:	5.0	ppm	4/4/2022
MAGNESIUM:	3.6	ppm	4/4/2022	ZINC:	0.004	ppm	4/4/2022
SODIUM:	6.9	ppm	4/4/2022	IRON:	0.092	ppm	4/4/2022

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, people 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 2022, 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 2022.

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 underground 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) for disinfection. Removal of CO₂ increases the pH of our drinking water thus significantly reducing corrosion within the distribution system. This is all necessary to maintain the quality of your water while meeting, and in most cases, exceeding all EPA standards. As mentioned earlier, we are fortunate to have an interconnection with the Belfast Water District. This interconnection allows both utilities to provide safe drinking water to each other in the event of an emergency.

DISTRICT OPERATIONS FOR THE YEAR 2022

Construction: In the spring of 2022 we replaced the old 6” cast iron main on Steamboat Avenue with a new 8” ductile iron main. We also added two (2) additional fire hydrants along this street to assure all residential homes were covered in the event of a fire as well and to allow the district to adequately flush the water system within that area. A new 8” ductile iron water main was also installed on Black Road South westerly of the Union Street intersection. This main replaced a 1” copper line that was feeding several homes within that area. A new fire hydrant was also installed on the end of this main as well.

The MDOT culvert replacement project at the Searsport/Stockton Springs town line was completed. During this project the Searsport Water District installed a temporary by-pass water main which fed the entire Searsport community as the culvert project required the removal of the district’s 12” water main for the purpose of installing the new concrete box culvert. This project went well and the temporary water main was able to handle the demands of the Searsport system during this time.

Due to delays in receiving materials the district’s 3.4 million dollar water main replacement projects scheduled to begin in 2022 were postponed until the spring of 2023. These projects include replacing water mains as follows: Water Street, Howard Street, Leach Street, Park Street, Elm Street, Church Street, Navy Street, and Savage Road all of which are in Searsport. In Stockton Springs we will replace the water main on Cape Jellison Road northeasterly of the town garage and install additional hydrants for flushing purposes along this line and on the Cape Road near the Health Center.

The MDOT Route 1 upgrade through Searsport Village was also postponed as the result of receiving no bids from contractors. The MDOT changed the terms of the contract to allow for daytime construction and finally received two (2) bids and awarded the contract to Gordan Construction based in Sangerville, Maine. This project is schedule to begin in either May or June 2023.

Operations: In 2022, the District pumped a total of 109,811,000 gallons of water, which is an increase of 3,658,000 gallons from the previous year. Our average pumping rate was 300,852 gallons per day or 209 gallons per minute. This amount is 47.27% of the total daily safe yield based on our calculated daily safe yield of 636,500 gallons. Total water sold to metered customers during 2022 was 70,059,924 gallons. This amount is an increase of 3,270,984 gallons over water sales in 2021.

We here at the Searsport Water District strive to provide you, our customer, with the best water possible and we do it proudly. This is done through our continuous efforts to protect our groundwater source of supply and by flushing the entire water system on a semi-annual basis to maintain the high quality water that you deserve. We inspect each of our 6 pumping stations, 3 concrete water storage tanks, and 32 +/- miles of water mains on a routine basis and in many cases, this is accomplished daily. Water quality controls are also in place and monitored continuously 24 hours a day.

NEED HELP PAYING YOUR WATER BILL? Contact our office and we’ll be glad to assist you with filling out an application to the Maine Housing Authority for funding through their water assistance program. This program will stop accepting applications on July 1, 2023 so please get your applications in early as time is running out and they currently have funding in place to help the hard working folks here in Maine to assist with both the water and sewer bills. To date many of our customers have qualified for and received a combined total of more than \$ 17,000.00 from this program.

We want to thank all of you for your support and greatly appreciate your patience while we continue our efforts to make improvements to your water system. Please remember that we work in some very harsh environments and are sometimes making repairs and locating water lines out in the streets, so please drive cautiously when you see us, or any other construction/utility worker as working near traffic is a very dangerous occupation. We thank you again for watching out for us while we are watching out for you.

Again, we thank you all very much and are proud to be able to provide 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](https://www.facebook.com/SearsportWaterDistrict) 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

William Shorey, Chairman

Bruce Mills, Treasurer

Larry Clark, Clerk

Operators

Herbert Kronholm, Superintendent

Timothy Wilson, Foreman

Harold Porter, Service Technician

Office Staff

Brenda Storey, Office Mgr.

Kyle Anne Manzie, Office Asst.

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](https://www.facebook.com/SearsportWaterDistrict)

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