

2024 Annual Water Quality Report

This report is the Southwest Harbor Water & Sewer District's Annual Water Quality Report serving Southwest Harbor and provides essential information about your drinking water. We know that you count on us for a safe and reliable water supply every day and our dedication to our customers is to provide the highest quality of service at a great value.

WATER SOURCE

The Southwest Harbor Water & Sewer District uses Long Pond as its water source. Our pump station(118 Long Pond Rd.) located at the headwaters of Long Pond pumps surface water to the Water Filtration Plant (89 Long Pond Rd).

WATER TREATMENT

This water utility uses three treatment techniques to ensure water quality. They include Filtration, Sodium Hypochlorite for disinfection, and Sodium Hydroxide for corrosion and pH control.

- <u>Filtration</u>, removes filterable contaminates from the source water. Large pressure filtration vessels filter our already pristine water through a synthetic media. While Southwest Harbor's exceptional source water qualified for a filtration waiver, Southwest Harbor felt an additional layer of public protection was warranted.
- <u>Sodium Hypochlorite</u> is added to ensure adequate water disinfection before delivery to you. Per EPA guidelines, Southwest Harbor Water has a disinfection level between 0.20 mg/l 0.79 mg/l in the entire system. Monthly bacteria samples are taken at two sites in the water system, and test results are reported to the Maine Drinking Water Program. Of the 24 samples taken in 2024, 0 failed.
- <u>Sodium Hydroxide</u> is used for maintaining the water's proper pH. This protects our distribution system and your home's plumbing system from corrosion.

MONITORING AND TESTING

Southwest Harbor Water & Sewer District has two Maine State licensed operators that monitor and test your water. Analyzers continuously monitor the treatment levels and the SCADA (supervisory control and data acquisition) system records all information. The operators are notified immediately by the SCADA of any variances and immediately respond to correct them. These operators also perform backup tests of the water daily and weekly.

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.

Southwest Harbor's assessment results are available at the Water & Sewer District's business office, or call the Maine DWP at (207) 287-2070. Our location in Acadia National Park and its current land use results in a low risk for bacteria and nitrates and a low risk for long-term, chronic contaminants. The park's extensive property ownership offers a fantastic protection program, and low future risk for contamination. We will continue to work with Acadia National Park and The Town of Southwest Harbor to maintain and support this feature.

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:

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- <u>Inorganic contaminants</u>, 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.
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- <u>Organic chemical contaminants</u>, 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 those 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: https://www.epa.gov/ccr/forms/contact-us-about-consumer-confidence-reports

LEAD and COPPER

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. Southwest Harbor Water & Sewer District is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. When your water has been sitting for several hours, flush your pipes for 30 seconds to 2 minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, and

you wish to have your water tested, contact us. 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

Southwest Harbor Water & Sewer District completed a Lead Service Line Inventory as required by the EPA's Revised Lead and Copper Rule. As of 6/1/2025 900 of 1050 of our service lines have been identified with 150 remaining to be identified. No lead or galvanized pipe requiring replacement were found so far. The Federal EPA Standard for Lead is 15 ppb or less, and copper is 1.3 ppm or less. Our levels are so low that we are only required to test once every three years under EPA guidelines. In August 2024, Southwest Harbor Water tested 10 sites in the distribution system. Results: Lead – 2.1 ppb and copper – 0.19 ppm. (0 sites failed out of the 10 tested). Our next L&C testing will be in the summer of 2027.

To view a hard copy of the survey results, please visit our office at 26 Village Green Way.

PFAS

Benchmark testing in 2025 has shown that there is no PFAS in Southwest Harbor Water District Water. PFAS are a group of manufactured chemicals that have been used in industry and consumer products like non-stick cookware, flame retardant clothing, furniture, and carpets. There are thousands of different PFAS, some of which have been more widely used and studied than others. One common concern is that PFAS generally break down very slowly, meaning that concentrations can accumulate in people, animals, and the environment over time.

DEFINITIONS

- **AL** Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- **LRAA** Locational Running Annual Average: A 12-month rolling average of all monthly or quarterly samples at specific sampling locations. Calculation of the RAA may contain data from the previous year.
- 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.
- **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.
- **RAA** Running Annual Average: 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.
- **SMCL** Secondary Maximum Contaminant Level
- 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 or micrograms per liter (μ g/L).

ppt = parts per trillion or nanograms per liter (ng/L).

pos = positive samples.

MFL = million fibers per liter

NTU= Nephelometric Turbidity Unit

WATER TEST RESULTS – TURBIDITY

Turbidity	DATE	RESULTS	UNITS	LIMIT	SOURCE
Highest Monthly Reading	5/3/24	0.26	NTU	5 NTU	Soil Runoff

WATER TEST RESULTS – PRIMARY STANDARDS

CONTAMINANT	DATE	RESULTS	RANGE	MCL	MCLG	SOURCE	
MICROBIOLOGICAL							
COLIFORM (TCR) (9)	2024	0 pos		1 pos/mo or 5%	0 pos	Naturally present in the environment.	
INORGANICS							
ARSENIC (1)	6/4/2024	<1 ppb		10 ppb	0 ppb	Erosion of natural deposits. Runoff from orchards, glass, and electronics productions wastes.	
BARIUM	6/4/2024	0.0021ppm		2 ppm	2 ppm	Discharge of drilling wastes and from metal refineries. Erosion of natural deposits.	
FLUORIDE (3)	6/4/2024	<0.2 ppm		4 ppm		Erosion of natural deposits. Discharge from fertilizer and aluminum factories.	
NITRATE (6)	6/4/2024	<0.2 ppm		10 ppm	10 ppm	Runoff from fertilizer use. Leaching from septic tanks, sewage.	
RADIONUCLIDES							
COMBINED RADIUM (-226 & -228)	6/4/2024	<0.7 pCi/l		5 pCi/l	0 pCi/l	Erosion of natural deposits.	
COMBINED URANIUM	6/4/2024	<0.67ppb		20 ppb	0 ppb	Erosion of natural deposits.	
RADIUM-226	6/4/2024	0.5 pCi/l		5 pCi/l	0 pCi/l	Erosion of natural deposits.	
RADIUM-228	6/4/2024	<0.7 pCi/l		5 pCi/l	0 pCi/l	Erosion of natural deposits.	
DISINFECTION AND DISINFECTION BYPRODUCTS							
TOTAL HALOACETIC ACIDS (HAA5) (10)	LRAA 2024	37 ppb	24-47 ppb	60 ppb	0 ppb	By-product of drinking water chlorination.	
TOTAL TRIHALOMETHANE (TTHM) (10)	LRAA 2024	43 ppb	36-51 ppb	80 ppb	0 ppb	By-product of drinking water chlorination.	
LEAD AND COPPER							
COPPER 90 TH % VALUE (5)	LRAA 2024	0.19 ppm	0.032- 0.30 ppm	AL = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems.	
LEAD 90 TH % VALUE (5)	LRAA 2024	2.1 ppb	<0.5- 4.51ppb	AL = 15 ppb	0 ppb	Corrosion of household plumbing systems.	
Number of sampling sites exceeding the action level: 0	Complete lea available upo	ad tap sampling da on request.	ata are				

CHOLORINE RESIDUAL						
CHLORINE RESIDUAL 2024	JAL 2024 .39 ppm AVG.	0.20 - 0.79	MRDL=4	MRDLG=4p		
	2024	.55 ppili AVG.	0.20 - 0.13	ppm	pm	

NOTES

- 1) <u>Arsenic</u>: While your drinking water may meet EPA's standard for Arsenic, if it contains between 5 to 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 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 RAA.
- 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) <u>Fluoride</u>: Fluoride is a neurotoxin. While small amounts of Fluoride can occur naturally in water supplies, adding Fluoride to a water supply is a poor practice. Fluoride use had been largely abandoned in Europe and is being slowly abandoned in North America.
- 4) <u>Gross Alpha</u>: Action level over 5 pCi/L requires testing for Radium 226 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.
- 5) <u>Lead/Copper</u>: Action levels (AL) are measured at consumer's tap. 90% of the tests must be equal to or below the action level.
- 6) <u>Nitrate</u>: 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.
- 7) **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 effects on the human body.
- 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) <u>Total Coliform Bacteria</u>: Reported as the highest monthly number of positive samples, for water systems that take less than 40 samples per month.
- 10) <u>TTHM/HAA5</u>: Total Trihalomethanes and Halo acetic 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 LRAA.
- 11) <u>Turbidity</u>: Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

SECONDARY STANDARDS

Secondary standards are the non-regulated parameters monitored for aesthetic concerns and do not present a health risk. Secondary contaminants that were detected are listed in this table.

SECONDARY STANDARDS WATER TEST RESULTS						
CONTAMINANT	RESULT (ppm)	DATE				
IRON	<.1	6/4/2024				
ZINC	<0.001	6/4/2024				
SULFATE	2	6/4/2024				
SODIUM	11.1	6/4/2024				
MAGNESIUM	.63	6/4/2024				
CHLORIDE	11	6/4/2024				
MANGANESE	0.0012	6/4/2024				

WATER TEST RESULTS - UNREGULATED CONTAMINANT PFAS

CONTAMINANT	DATE	RESULTS	UNITS	LIMIT	METHOD
PFOS	3/26/2025	<2.00	ng/l	4	EPA 537.1
PFOA	3/26/2025	<2.00	ng/l	4	EPA 537.1
PFNA	3/26/2025	<2.00	ng/l	10	EPA 537.1
PFHxS	3/26/2025	<2.00	ng/l	10	EPA 537.1
HFPO-DA	3/26/2026	<2.00	ng/l	10	EPA 537.1
PFAS Total Maine 6	3/26/2025	<2.00	ng/l		EPA 537.1

VIOLATIONS

No Violations in 2024

WAIVER INFORMATION

Synthetic Organics Waiver. (22-24) This waiver was granted due to the absence of potential sources of contamination with $\frac{1}{2}$ mile of water source. Next SO test 6/2025

ABOUT YOUR WATER SUPPLY

The system has over 1,000 services serving over 2500 customers and provides fire protection service through 94 fire hydrants. We have produced and delivered over 100,000,000 gallons of water in the last twelve months with an average of 354,838 gallons each day during peak tourist months. The system also maintains 1.06 million gallons of water in our three storage tanks, allowing us to meet peak system demand periods and maintain an adequate supply for firefighting activities.

This report summarized our activities during the year 2024. If you have any questions about your water quality, please contact us. Office hours are Monday – Thursday, 6:30 a.m. – 3:00 p.m. excluding holidays.

Southwest Harbor Water & Sewer District 26 Village Green Way P.O. Box 1100 Southwest Harbor, ME 04679

Office 207-244-3948

Email: dclark@swhdistrict.org

For more information, please visit us on the web at: https://swhdistrict.org/

Lee Worcester - *Chairman*Ralph Dunbar - Vice Chairman
Ken Minier - Treasurer

Karen Reddersen - Town Manager/Clerk

Allen Willey - Trustee

Board of Trustee meetings are held monthly and open to the public. For upcoming meeting date, please visit our website: swhdistrict.org

Aaron Zurek - Interim Director Debbie Clark - Administrator

<u>Plant Operations and Distribution</u> Eric Schoff - Foreman

Aaron Zurek

Please share this information with anyone who drinks our water (or their guardians), especially those who may not have received this report directly (for example, people in apartments, nursing homes, schools, and businesses).