

SALEM SOUND COASTWATCH

2025 Tributaries and Water Quality Monitoring - Summary

Location: Manchester-by-the-Sea, MA

Water Body: Sawmill Brook

Precipitation: 8/12/25, 8/26/25, and 9/16/25: DRY; 10/9/2025: WET

Samples Collected by Salem Sound Coastwatch staff and volunteers: Susan Marsh, Katy Serth, and Chris Bresnahan

Summary of Findings:

Sawmill Brook at School Street (100) had elevated bacterial levels compared to upstream at Lincoln Street (152), especially during the wet sampling day. Lower bacterial levels would be expected at Manchester Harbor (169), where the Sawmill Brook is diluted by ocean water. Storm runoff carries pollution, including road debris, pet waste, fertilizer, septic overflow, and silt, all of which are harmful to sensitive aquatic ecosystems.

Date	Site ID	Time	48 hour rainfall in inches	Enter/o/100mL	Ammonia ppm	Surfactants mg/L	Chlorine mg/L	Temperature oC	Salinity ppt	Conductivity mS/cm	pH	Dissolved Oxygen mg/L	Water Body	Field Notes
8/12/2025	169	8:52	0.00	221	-	-	-	27	-	-	-	-	Harbor	Testing done through the CB&S Program
8/12/2025	100	8:08		341	-	-	-	0	-	-	-	-	Sawmill	Testing done through the CB&S Program
8/12/2025	100	12:20	0.00	-	0	-	0.06	22.5*	0.3	0.622	6.45	7	Sawmill	*12-19°C (53.6-66.2°F) ideal for fish; 22°C is upper limit
8/12/2025	152	8:19		695	-	-	-	0	-	-	-	-	Sawmill	Testing done through the CB&S Program
8/12/2025	152	8:20		557	-	-	-	0	-	-	-	-	Sawmill	Field Duplicate; Testing done through the CB&S Program
8/12/2025	152	13:20	0.00	-	0	-	0.04	22*	0.03	0.557	6.43	5	Sawmill	*12-19°C (53.6-66.2°F) ideal for fish; 22°C is upper limit
8/26/2025	169	7:47	0.35	313	-	-	-	30	-	-	-	-	Harbor	Testing done through the CB&S Program
8/26/2025	100	8:03	0.35	2,732	-	-	-	0	-	-	-	-	Sawmill	Testing done through the CB&S Program
8/26/2025	152	8:16		272	-	-	-	-	-	-	-	-	Sawmill	Testing done through the CB&S Program
9/16/2025	169	9:25	0.00	-	0	-	0.03	18.5	29.9	40.15*	6.59	7	Harbor	
9/16/2025	100	9:55	0.00	-	0	-	0	15.8	0.3	0.4536	6.65	9	Sawmill	
9/16/2025	152	10:25	0.00	-	0	-	0.2	15.6	0.2	0.2556	6.59	9	Sawmill	
10/9/2025	169	9:50	0.56	-	0	-	0.07	17.4	30.2	39.37*	5.8	6	Harbor	
10/9/2025	100	10:15	0.56	-	0.1	-	0	12.5	0.2	0.394	5.94	-	Sawmill	
10/9/2025	152	10:45	0.56	-	0	-	0	13.2	0.3	0.1963	5.92	7	Sawmill	



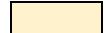
Wet Day > 0.2" rainfall in 24 hours



> 104 CFU/100 > 0.5mg/l > 0.25 mg/L > 4 mg/L >22°C > 1.0 ppt > 1.5 mS/cm 6.5 - 8.5 <=6.0



Salinity >0.01 elevates surfactant



Salinity elevates conductivity



Google Map of all 2025 CB&S Site Locations:

https://www.google.com/maps/@42.5230148,-70.917919,2507m/data=!3m1!1e3!4m2!6m1!1s1XweSQeqgdoG4znx4fmnASwqj09kj1c?authuser=0&entry=ttu&g_ep=EgoyMDI1MDEyMC4wIKXMDSoASAFQAw%3D%3D