

GROWING AREA EI

Great Head, Bar Harbor to Schoodic Point, Winter Harbor

Triennial Report 2020-2022

Final Hannah Horecka, Scientist II



Field Observations of Pollution Sources

On May 26th and 27th, 2020, a drive through survey of growing area EI was completed by DMR staff and no new problems were discovered. No new pollution sources were observed during sample collection.

On July 6th and November 8th, 2021, drive through surveys of growing area EI were completed by DMR staff and no new problems were discovered. No new pollution sources were observed during sample collection.

On February 9th, 2022 DMR received results for MST analysis of Trenton stream sampling on 8/31/21 from UNH Steve Jones.

Table 1. MST results from sampling on 8/31/21

Trenton DI	EΡ		PC	R Mar	kers		qPCR :	qPCR Markers	
SampleID	Date	Mammal	Human	Dog	Ruminant	Canada Goose	Mammal	Human	
#210	8/31/2021	+	+	+	-		4.98E+06	<1.67E+03	
#211	8/31/2021	+	-				9.70E+05	<1.67E+03	
#212	8/31/2021	+	-			-	2.13E+06	<1.67E+03	
#213	8/31/2021	+	-			-	9.94E+05	<1.67E+03	
#214	8/31/2021	+	-	-			1.49E+06	<1.67E+03	
#215	8/31/2021	+	-	+			6.69E+06	<1.67E+03	
#216	8/31/2021	+	-				1.81E+06	<1.67E+03	

On April 27, 2022, quarterly stream and MST sampling was conducted. Follow up survey of stream EI013-210 in Trenton seaplane ramp Restricted area with growing area scientist HH and Laura Crossley from ME DEP. Surveyed stream along RDR Property and collected samples for bacteria and MST analysis. Surveyed campground on southern shore of stream. Located malfunctioning pump station on upper leach field. Owners notified DMR the situation was remediated and was confirmed on April 29, 2022 when HH rechecked the now properly working system.



Table 2. MST results from samples collected on 4/27/22

	Trenton I	DEP		PCR	Markers			
SampleID	Date	FC per 100mL	volume filtered	Mammal	Human	Dog		
EI 13-210	4/27/2022	33	300	+	+	-		
EI 13-215	4/27/2022	18	300	+	+	-		
PS6	4/27/2022	20	200	+	+	-		
PS7	4/27/2022	16	300	+	+	-		
PS10	4/27/2022	10	300	+	+	-		
PS11W	4/27/2022	9.1	300	+	1	-		
PS11E	4/27/2022	6	300	+	-	-		
*yellow highlights sample points down stream of Rt 3								
	*orange l	nighlights	sample po	oints on Rt 3	,	-		

On May 9, 2022 received referral from Clarissa Trasko of Maine DEP of potential dumping of human waste along the high water mark in front of one of the properties. HH spoke on the phone to person reporting issue on the phone to gather details of potential pollution source. On May 10, 2022 DMR and DEP investigated and it was determined the issue was a deep pile of rotting seaweed on top of anoxic-smelling mud. Area around camper on property was inspected for any pipes or other concerns and nothing concerning was observed.

On May 10, 2022 HH also visited outhouse at Lamoine Beach Park to confirm proper maintenance of outhouse was occurring. Outhouse did not appear to be over-flowing but did not appear to have been pumped recently. Used wads of toilet paper and used diapers were observed around and near trees surrounding the outhouse. Town office was notified, and they will contact the maintenance company to make sure the area is cleaned properly. On June 10, 2022 HH visited outhouse at Lamoine Beach Park to confirm maintenance company cleaned up the area properly. The area immediately around the outhouse was sufficiently cleaned. The brush in the wooded area has grown up considerably so much of the area was out of view but what could be viewed appeared to have been cleaned sufficiently as well.

On June 28, 2022 DEP staff LC and DMR staff HH met with Trenton CEO Angela Chamberlain a Trenton ramp area property to discuss potential sources of human fecal pollution in the stream area. Two septic systems were dyed (office building and clam building/apartment) and no failure was noted. Staff were instructed to watch for dye in stream through the next day but no report of dye was received. Discussed other potential sources of human waste on property – carelessness of pump truck operators when weekly pumping out portapotty and septic tanks, parties on property with people using woods as bathroom, camper trailer tank, etc. More MST sampling will be scheduled to confirm results of 4/27/22 samples.

On September 26, 2022 – Quarterly stream and MST sampling. Follow up sampling at the Trenton stream study locations for MST analysis.



Table 3. MST results from samples collected on 9/26/22

Trenton DEP		PCR Markers					qPCR Markers- copy#/100 ml	
SampleID	Date	Mammal	Human	Dog	Ruminant	Canada Goose	Mammal	Human
PS7	9/26/22	+	+					<167
EI013-210	9/26/22	+	-					<167
EI013-213	9/26/22	+	+					376
EI013-214	9/26/22	+	+					11,287
EI013-215	9/26/22	+	+					<167

shading denotes human qPCR above unacceptable threshold of 4200 copy#/100 ml

On October 26, 2022 DMR staff conducted a drive through survey growing area EI. No new pollution sources were noted.

At end of year 2022 OBD DEP ID 4010 was reported removed in 2022. Actual removal date was 12/17/2021

Review of Water Quality Results

Table 4 lists all Approved, Restricted, and Prohibited stations in Growing Area EI with their respective geomean and P90 calculations for 2022.

Refer to Appendix A for a key to interpreting the headers on all tables for the Geomean and P90 scores (Table 4Table 9).

Table 4. Geomean and P90 Scores, Growing Area EI Approved, Restricted, Prohibited stations, 2022. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI001.00	A	30	4.7	0.68	1160	35.6	7/30/2018
EI008.00	P	30	3.3	0.4	35	10.8	7/30/2018
EI023.70	P	30	2.4	0.27	20	5.4	7/30/2018
EI024.00	A	30	2	0.14	11	3.2	6/11/2018
EI029.00	A	30	2.2	0.21	24	4.2	7/30/2018
EI031.00	P	30	2.9	0.39	80	9.1	6/11/2018
EI033.00	A	30	1.9	0.05	4	2.3	6/11/2018
EI034.00	A	30	2.4	0.24	12	4.8	7/30/2018
EI034.20	A	30	4.1	0.55	240	21.2	6/11/2018
EI034.30	A	30	3.7	0.54	180	18.6	3/20/2019
EI034.70	A	30	3.8	0.47	90	15.6	3/20/2019



Station	Class	Count	GM	SDV	MAX	P90	Min Date
EI036.00	R	30	3.6	0.67	1380	26.7	5/30/2018
EI037.00	A	30	2.8	0.3	31	7	1/22/2018
EI039.00	A	30	2.6	0.26	18	5.6	5/7/2018
EI040.00	A	30	2.4	0.28	22	5.6	5/7/2018
EI041.00	A	30	2	0.13	10	3.1	5/7/2018
EI042.00	A	30	2.2	0.23	27	4.3	5/7/2018
EI042.10	P	30	1.9	0	2	1.9	5/7/2018
EI043.00	A	30	2.2	0.15	6	3.4	5/7/2018
EI044.00	A	30	3.2	0.29	13	7.8	5/7/2018
EI046.00	A	30	2.7	0.32	31	7.3	5/7/2018
EI047.60	A	30	3.7	0.39	46	12	5/7/2018
EI050.80	A	30	2.1	0.15	10	3.4	5/7/2018
EI051.00	A	30	2.9	0.41	60	10.1	4/12/2018
EI054.00	A	30	1.9	0	1.9	1.9	1/30/2018
EI058.00	A	30	2	0.1	6	2.7	1/30/2018
EI061.00	A	30	1.9	0.05	4	2.3	3/19/2018
EI064.00	P	30	3.1	0.48	92	13.2	1/30/2018
EI065.00	A	30	2.1	0.18	15	3.8	1/30/2018
EI069.00	A	30	2	0.14	8	3.1	6/12/2018
EI070.10	A	30	2.4	0.3	44	6	6/12/2018
EI070.15	A	30	2.5	0.23	16	5	4/25/2018
EI070.20	A	30	4	0.66	1500	28.5	3/19/2019
EI070.40	A	30	2.4	0.24	22	5.1	3/19/2019
EI070.41	A	30	2.6	0.4	108	8.9	4/1/2019
EI070.48	P	30	3.7	0.43	40	13.4	6/12/2018
EI070.49	P	30	4.1	0.38	26	12.8	7/31/2018
EI070.52	P	30	5.3	0.44	60	19.7	6/12/2018
EI070.70	A	30	4.7	0.63	760	30.4	6/12/2018
EI070.82	A	30	5.2	0.71	760	42.7	6/12/2018
EI070.90	A	30	3.2	0.37	44	9.8	6/12/2018
EI072.50	A	30	2.7	0.35	94	7.8	8/5/2019
EI073.00	A	30	4.7	0.56	148	25	6/12/2018
EI074.00	A	30	5	0.48	44	21.4	4/25/2018
EI074.20	A	30	6.4	0.51	52	29.7	5/7/2019
EI075.00	A	30	2.4	0.22	11	4.9	6/12/2018
EI075.60	A	30	4.7	0.68	1700	35.2	6/12/2018
EI075.90	P	30	2.8	0.48	440	11.7	6/12/2018
EI082.00	A	30	3.1	0.47	90	12.4	6/12/2018
EI084.00	A	30	2.5	0.31	25	6.4	6/12/2018
EI086.00	A	30	2.5	0.31	35	6.5	6/12/2018



Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI087.00	A	30	2.2	0.25	20	4.8	6/12/2018
EI089.00	P	30	2	0.12	7.3	2.9	6/12/2018
EI098.00	A	30	4	0.46	56	16	6/12/2018
EI105.00	A	30	3.6	0.61	1480	22.2	6/13/2018
EI106.00	A	30	2.7	0.52	320	12.7	6/13/2018
EI107.00	A	30	2.2	0.22	16	4.4	6/13/2018
EI108.00	P	30	1.9	0.05	3.6	2.2	6/13/2018
EI109.00	A	30	2.5	0.23	16	5	6/13/2018
EI110.70	A	30	3.3	0.43	88	12.2	6/13/2018
EI111.00	A	30	2.8	0.46	380	10.9	6/13/2018
EI112.00	A	30	2.1	0.26	48	4.6	6/13/2018
EI113.00	P	30	1.9	0.05	4	2.3	4/25/2018

CAMP Reviews, Inspection Reports, and Performance Standards

Bar Harbor Bar in Bar Harbor is classified as Conditionally Restricted with an open period of March 1 through May 31 based on the presence of 10 or more boats with heads at the Downtown Harbor Marina and combined sewage overflow (CSO) discharges at the Rodick Street and West Street pump stations for the Bar Harbor Wastewater Treatment Facility (WWTF). This area is monitored by station EI 9. This area is used as a commercial fishing wharf, recreational boat mooring field and other recreational uses. Cooperation on behalf of the local shellfish wardens and WWTF personnel is excellent. Marine Patrol and/or local Shellfish Wardens monitor for illegal harvesting activity in this area during the closed period. This management plan remains in compliance.

Table 5. Bar Harbor Bar Marina and WWTF Conditional Area; Geometric Mean, Count and P90 (OPEN status). Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI009.00	CR	30	2.2	0.18	10	3.8	3/19/2013

Mud Creek in Lamoine is classified as Conditionally Approved with an open status of October 1st to April 30th based on seasonal variation in water quality. This conditional area is monitored by station EI 45. Marine Patrol and/or local Shellfish Wardens monitor illegal harvesting activity for this area during the closed period. This management plan remains in compliance.

Table 6. Mud Creek Seasonal Conditional Area; Geometric Mean, Count and P90 (OPEN status). Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI045.00	CA	30	3.2	0.41	86	10.8	10/31/2016



Mill Brook in Franklin is classified as Conditionally Approved with an open status of December 1st to May 31st based on seasonal variation in water quality. This conditional area is monitored by station EI 71. Marine Patrol and/or local Shellfish Wardens monitor illegal harvesting activity for this area during the closed period. This management plan remains in compliance.

Table 7. Mill Brook Seasonal Conditional Area; Geometric Mean, Count and P90 (OPEN status). Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI071.00	CA	30	3.2	0.43	80	11.6	5/13/2014

Springer Creek in Franklin is classified as Conditionally Approved with an open status of October 1st to May 31st based on seasonal variation in water quality. This conditional area is monitored by station EI 71.5. Marine Patrol and/or local Shellfish Wardens monitor illegal harvesting activity for this area during the closed period. This management plan remains in compliance.

Table 8. Springer Creek Seasonal Conditional Area; Geometric Mean, Count and P90 (OPEN status). Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI071.50	CA	30	4.4	0.47	70	18.4	4/25/2016

Sorrento Harbor in Sorrento is classified as Conditionally Approved with an open status of October 1st to April 30th based on the presence of 10 or more boats with heads at the Sorrento Harbor marina. This conditional area is monitored by stations EI 91, 93, and 96. The marina was evaluated by the water quality scientist on 4/26/2022 prior to closing and 9/30/2022 prior to the reopening date. Both inspections found the marina within compliance. Marine Patrol and/or local Shellfish Wardens monitor illegal harvesting activity for this area during the closed period. This management plan remains in compliance.

Table 9. Sorrento Harbor Marina Conditional Area; Geometric Mean, Count and P90 (OPEN status). Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
EI091.00	CA	30	2.1	0.18	12	3.6	11/6/2018
EI093.00	CA	30	2	0.11	6	2.9	11/6/2018
EI096.00	CA	30	2.5	0.38	92	7.9	11/6/2018

Overview of Pollution Sources

Permitted Discharges

The current listings of National Pollution Discharge Elimination System (NPDES) and State Licensed Discharge Sites for growing area EI are shown in Table 10. The pollution area for each of these sites is also



shown. All overboard discharges (OBDs) are located in current Prohibited areas. One OBD was reported removed in 2022. Closure sizes are appropriate. Single OBD systems associated with more than one residence will have multiple permit IDs.

Table 10. Federal and State Licensed Discharges

Closure Area	Permit ID	Туре	Facility	Water Body
P9, P10, CR1	ME0101214	WWTP	Town of Bar Harbor POTW – Main Plant	Frenchman Bay
Р9	ME0102466	WWTP	Town of Bar Harbor POTW – Hulls Cove Facility	Hulls Cove
P7	ME0102474	WWTP	Town of Bar Harbor POTW– DeGregoire Park Plant	Frenchman Bay
P10	MEG210008	Waste Snow	Town of Bar Harbor Snow Dump	Frenchman Bay
N/A	ME0037036	Minor Wastewater Outfall	Eastern Maine Mussel Corp.	Taunton Bay
P4	ME0102130	WWTP	Town of Sorrento POTW	Back Cove
N/A	MEU507755	Process Water	Franklin Processing Inc.	Taunton Bay
N/A	ME0110183	Aquaculture	Center for Cooperative Aquaculture Reseach	Taunton Bay
P10	ME0100731	WWTP	Winter Harbor Utilities District	Henry Cove
P13	ME0090051	WWTP	Acadia National Park – National Park Service	Arey Cove
N/A	ME0037397	Minor Wastewater Outfall	Acadia Aqua Farms LLC	Jordan River
P10	6263	OBD	Residential	Frenchman Bay
P9	3227	OBD	Residential	Frenchman Bay
P9	2371	OBD	Residential	Frenchman Bay
P8	1507	OBD	Residential	Salsbury Cove
P12	2777	OBD	Residential	Frenchman Bay
P12	1666	OBD	Residential	Frenchman Bay
P12	2436	OBD	Residential	Frenchman Bay
P14	3610	OBD	Commercial	Arey Cove

Residential

All residential pollution sources are reported to the local plumbing inspector (LPI). Once the system has been documented as being fixed, staff members from DMR can re-assess the water quality data and shoreline survey information to determine if the area is safe for shellfish harvest. Table 11 shows all new and pre-existing pollution sources in area EI that are considered discharges into the Growing Area and affect water quality. All residential pollution sources are within appropriately sized closures.



Table 11. Growing Area EI Residential Pollution Sources

Closure Area	Location ID	Date Surveyed	Direct or Indirect	Problem	Description	Town
R1	EI013-175	8/17/2016	Indirect	Yes	Overflow pipe far corner of LF	Trenton
R1	EI013-2	6/19/2013	Indirect	Yes	Green pipe discharging from small house into brook	Trenton
Р6	EI023-4	7/1/2016	Indirect	Yes	Muddy spot front of house with high fecal scores	Lamoine
P2	EI041-194	8/12/2013	Indirect	Yes	Confirmed malfunctioning system, breakout below LF	Franklin
P2	EI041-188	8/12/2013	Indirect	Yes	Horse manure pile in front of barn - runoff to small ditch into bay	Franklin

Non-point Pollution Sources

Freshwater streams, drainages and tidal creeks are the major source of non-point discharge into Growing Area EI. Because of this, streams may be treated like point source discharges and may have dilution areas around them if they impact water quality in the area. A total of 86 samples were taken from freshwater streams during the three-year review period.

Table 12. Growing Area EI Stream Samples

Growing		Sample	Pollution	Score
Area Section	Location ID	Date	Type	cfu/100ml
R1	EI013-210	3/30/20	Stream	62
R1	EI013-213	3/30/20	Stream	64
R1	EI013-214	3/30/20	Stream	80
R1	EI013-215	3/30/20	Stream	1.9
R1	EI013-216	3/30/20	Stream	52
R1	EI013-210	3/31/20	Stream	26
R1	EI013-211	3/31/20	Stream	2
R1	EI013-210	7/8/20	Stream	126
R1	EI013-211	7/8/20	Stream	420
R1	EI013-212	7/8/20	Stream	1480
R1	EI013-213	7/8/20	Stream	50
R1	EI013-214	7/8/20	Stream	680
R1	EI013-215	7/8/20	Stream	700
R1	EI013-216	7/8/20	Stream	1700
R1	EI013-211	9/30/20	Stream	1700
R1	EI013-214	9/30/20	Stream	1700
R1	EI013-216	9/30/20	Stream	1700
R1	EI013-210	12/22/20	Stream	20
R1	EI013-211	12/22/20	Stream	15
R1	EI013-212	12/22/20	Stream	42



Growing		Sample	Pollution	Score
Area Section	Location ID	Date	Туре	cfu/100ml
R1	EI013-213	12/22/20	Stream	46
R1	EI013-214	12/22/20	Stream	31
R1	EI013-215	12/22/20	Stream	6
R1	EI013-216	12/22/20	Stream	25
R1	EI013-210	3/24/21	Stream	1.9
R1	EI013-211	3/24/21	Stream	1.9
R1	EI013-212	3/24/21	Stream	3.6
R1	EI013-213	3/24/21	Stream	2
R1	EI013-214	3/24/21	Stream	8
R1	EI013-215	3/24/21	Stream	1.9
R1	EI013-216	3/24/21	Stream	1.9
R1	EI013-210	8/31/21	Stream	240
R1	EI013-211	8/31/21	Stream	144
R1	EI013-212	8/31/21	Stream	760
R1	EI013-213	8/31/21	Stream	134
R1	EI013-214	8/31/21	Stream	76
R1	EI013-215	8/31/21	Stream	1220
R1	EI013-216	8/31/21	Stream	180
P2	EI041-183	9/21/21	Stream	64
Α	EI043-184	9/21/21	Stream	33
CA2	EI044-185	9/21/21	Stream	62
CA1	EI045-186	9/21/21	Stream	6
P1	EI047-189	9/21/21	Stream	50
Α	EI051-189	9/21/21	Stream	9.1
Α	EI053-190	9/21/21	Stream	126
Α	EI053-191	9/21/21	Stream	18
P1	EI147-187	9/21/21	Stream	40
R1	EI013-210	10/19/21	Stream	54
R1	EI013-211	10/19/21	Stream	66
R1	EI013-212	10/19/21	Stream	156
R1	EI013-213	10/19/21	Stream	64
R1	EI013-214	10/19/21	Stream	52
R1	EI013-215	10/19/21	Stream	720
R1	EI013-216	10/19/21	Stream	66
R1	EI013-210	12/20/21	Stream	44
R1	EI013-211	12/20/21	Stream	1.9
R1	EI013-213	12/20/21	Stream	22
R1	EI013-214	12/20/21	Stream	50
R1	EI013-216	12/20/21	Stream	25



Growing		Sample	Pollution	Score
Area Section	Location ID	Date	Туре	cfu/100ml
R1	EI013-210	3/30/22	Stream	2
R1	EI013-211	3/30/22	Stream	1.9
R1	EI013-212	3/30/22	Stream	1.9
R1	EI013-213	3/30/22	Stream	1.9
R1	EI013-214	3/30/22	Stream	4
R1	EI013-215	3/30/22	Stream	1.9
R1	EI013-216	3/30/22	Stream	13
R1	EI013-210	4/27/22	Stream	33
R1	EI013-214	4/27/22	Stream	40
R1	EI013-215	4/27/22	Stream	18
R1	EI013-210	9/14/22	Stream	580
R1	EI013-211	9/14/22	Stream	440
R1	EI013-212	9/14/22	Stream	920
R1	EI013-213	9/14/22	Stream	22
R1	EI013-214	9/14/22	Stream	148
R1	EI013-215	9/14/22	Stream	1040
R1	EI013-216	9/14/22	Stream	160
R1	EI013-210	9/26/22	Stream	130
R1	EI013-213	9/26/22	Stream	50
R1	EI013-214	9/26/22	Stream	50
R1	EI013-215	9/26/22	Stream	300
R1	EI013-210	11/30/22	Stream	31
R1	EI013-211	11/30/22	Stream	120
R1	EI013-212	11/30/22	Stream	144
R1	EI013-213	11/30/22	Stream	16
R1	EI013-214	11/30/22	Stream	12
R1	EI013-215	11/30/22	Stream	35

Marinas

The marina community in Maine only operates for a portion of the year due to adverse winter weather conditions. Of the 9 marinas, one has a classification of Conditionally Approved, four are in Prohibited areas, and the remaining four marinas were not identified as pollution risk due to the number of boats and types of usage. These smaller mooring fields are almost exclusively day-use workboats without heads and/or a few day-use pleasure boats. These are not common overnight stopping areas for recreational boaters.

Table 13. Growing Area EI Marinas

Closure Area	Name	Name Town	
P10	Downtown Harbor Marina	Bar Harbor	Frenchman's Bay
Р9	Marina at Canoe Point	Bar Harbor	Frenchman's Bay



Closure Area	Name	Town	Waterbody
	Lamoine State Park	Lamoine	Frenchman's Bay
	Hancock Town Dock	Hancock	Frenchman's Bay
	Sullivan Harbor Marina	Sullivan	Sullivan Harbor
P5	Back Cove Marina	Sorrento	Back Cove
CA4	Sorrento Town Dock	Sorrento	Sorrento Harbor
	Bunkers Cove Marina	Gouldsboro	Bunkers Cove
P11	Winter Harbor Marina	Winter Harbor	Winter Harbor

Agriculture Activities

No significant sources of agricultural pollution were identified during the 2016 sanitary survey. There are no identified slaughterhouses, large scale manure spreading operations or garden centers in the area. A few small agricultural operations have been identified as potential or actual pollution sources for growing area EI. A small horse farm on Martin Cove had been previously identified as a potential pollution source, but during the last survey in 2016 was not identified as an issue and water quality data does not show any negative impacts on the growing area. A small farm near Egypt Stream was also identified as a point source of pollution due to runoff from a horse manure pile making its way to Egypt Stream. This source is contained within a Prohibited area in Egypt Bay (Closure Area P2).

Industrial Pollution

There are no large sources of industrial pollution in growing area EI. None of the small industries (small boat builders, boat storage yards, an inactive international ferry wharf, and wildlife nature boat tour businesses) were identified as pollution sources during the 2016 survey.

Hancock County – Bar harbor Airport is located in Trenton adjacent to Bar Harbor Narrows. The airport provides services for commercial connector airlines, general air, and air shipping companies. Aircraft maintenance and servicing is available. The airport is a Class III facility and must comply under the FAA Part 139, Class III airport operational and safety requirements. These include A recordkeeping system and new personnel training (per §139.303), Safety areas (per §139.309), Snow and ice control plan (per §139.313), Aircraft rescue and firefighting response, HAZMAT handling/storage (per §139.321), Airport Emergency Plan, Self-inspections (per §139.327), Wildlife hazard management (per §139.337) and Airport condition reporting (per §139.339). No pollution source has been identified impacting adjacent water quality stations (EI 36, 37 or 39).

Small individual storage tanks for gasoline and diesel were noted at five locations in the growing area. These tanks are near the shore. Tanks have containment walls and booms in the event of an accidental leak in a tank or spillage when unloading. The oil response team from the Maine DEP contacts Maine Marine Resources when a spill occurs, and a decision will be made whether a shellfish closure is necessary.

WWTP, Pump Stations and CSO Pollution Areas

Bar Harbor WWTP, Main Plant: The Bar Harbor WWTP, Main Plant MEPDES permit allows for an average daily flow of 2.0 mgd and the end of the outfall is in 10 feet of water at mean low water. No changes have occurred at this plant therefore the 1099-acre Prohibited area is sufficient for the required 446-acre closure. This WWTP is associated with three active CSO outfalls: Main Street Pump Station, Rodick Street Pump Station, and West Street Pump Station.



Bar Harbor WWTP, Hulls Cove: The Bar Harbor WWTP, Hull Cove MEPDES permit allows for an average daily flow of 0.150 mgd and the end of the outfall is in 8.75 feet of water at mean low water. No changes have occurred at this plant therefore the 719-acre Prohibited area is sufficient for the required 136-acre closure. This WWTP is associated with one active CSO outfall: Hulls Cove Pump Station.

Bar Harbor WWTP, DeGregoire Park: The Bar Harbor WWTP, DeGregoire Park MEPDES permit allows for an average daily flow of 0.012 mgd and the end of the outfall is in 3 feet of water at mean low water. No changes have occurred at this plant therefore the 134-acre Prohibited area is sufficient for the required 14-acre closure.

Sorrento WWTP: The Sorrento WWTP MEPDES permit allows for an average daily flow of 3,420 gpd and the end of the outfall is in 5.81 feet of water at mean low water. No changes have occurred at this plant therefore the 48-acre Prohibited area is sufficient for the required 10-acre closure.

Winter Harbor WWTP: The Winter Harbor WWTP MEPDES permit allows for an average daily flow of 0.125 mgd and the end of the outfall is in 8 feet of water at mean low water. No changes have occurred at this plant therefore the 127-acre Prohibited area is sufficient for the required 87-acre closure.

Acadia National Park WWTP: The Yarmouth WWTP MEPDES permit allows for an average daily flow of 45,000 gpd and the end of the outfall is in 5 feet of water at mean low water. No changes have occurred at this plant therefore the 77-acre Prohibited area is sufficient for the required 35-acre closure.

Conservation/Recreation Areas (beaches, trails, etc.)

Growing area EI is heavily used by recreational users year-round. There are several day-use beaches and picnic areas including Acadia National Park (Mount Desert Island and Schoodic Point), Lamoine State Park (Lamoine), Lamoine Beach (Lamoine), Reversing Falls Park (Hancock), and Taunton Bay Conservation Areas (Hancock, Franklin, and Sullivan). Dogs are allowed in these areas and signs are posted saying they are to be leased and their feces collected and carried out.

Comprehensive Report of Findings

Emergency Closures: The reports summarizing emergency closures such as flood and biotoxin closures for the entire state are in the DMR central files.

Reclassifications: Reclassification addendums to the sanitary survey report are in the DMR central files.

Summary

For the review period of 2020-2022, water quality has remained fairly consistent, however there were several water quality classification changes over the review period.

On February 28, 2020 Mud Creek, Lamoine was changed from Approved to Conditionally Approved.

On July 20, 2020 Carrying Place Cove, Hancock was changed from Conditionally Approved to Approved.

On August 21, 2020 Thomas Bay, Bar Harbor was changed from Conditionally Approved to Approved.



Station EI 45 and 71.5 were downgraded to Conditionally Approved in early 2022. Stations EI 1, 70.82, 71, and 75.6 will be downgraded to Restricted or Conditionally Approved. At end of year 2022, all stations except EI 1, 70.82, 71, and 75.6 have met compliance both with the number of samples required, but also with the geomean and P90 scores. A portion of the Trenton Seaplane Ramp Restricted area can be upgraded to Approved due to water quality meeting approved standards year-round and updated shoreline survey information including MST analysis in 2021 and 2022.

Overall water quality and shoreline survey results meet the NSSP Model Ordinance requirements. All conditional area management plans continue to achieve compliance. The one malfunction found in a Restricted area during a 2021 survey with ME DEP staff was corrected within 24 hours.

Table 14. Area EI Sample Count Tables, 2022

Station	Class	Closed	Open	Total	Samples Required	Comments
EI001.00	A		7	7	6	
E1008.00	P	7		7	6	
E1009.00	CR	9	3	12	6	
EI023.70	P	7		7	6	
EI024.00	A		7	7	6	
EI029.00	A		7	7	6	
EI031.00	P	7		7	6	
EI033.00	A		7	7	6	
EI034.00	A	6	7	13	6	flood
EI034.20	A		7	7	6	
EI034.30	A		7	7	6	
EI034.70	A		7	7	6	
E1036.00	R		7	7	6	
EI037.00	A		6	6	6	
E1039.00	A	7	6	13	6	flood
EI040.00	A	8	6	14	6	flood
EI041.00	A		6	6	6	
EI042.00	A	7	6	13	6	flood
EI042.10	P	6		6	6	
EI043.00	A		6	6	6	
EI044.00	A		6	6	6	
EI045.00	CA	4	7	11	7	
EI046.00	A		6	6	6	
EI047.60	A		6	6	6	
EI050.80	A		6	6	6	
EI051.00	A		6	6	6	
EI054.00	A		6	6	6	



Station	Class	Closed	Open	Total	Samples Required	Comments
EI058.00	A	10	6	16	6	flood
EI061.00	A		6	6	6	
EI064.00	P	6		6	6	
EI065.00	A		6	6	6	
EI069.00	A	2	7	9	6	New flood
EI070.10	A		7	7	6	
EI070.15	A		7	7	6	
E1070.20	A		7	7	6	
EI070.40	A		7	7	6	
EI070.41	A		7	7	6	
EI070.48	P	7		7	6	
EI070.49	P	7		7	6	
EI070.52	P	7		7	6	
EI070.70	A		7	7	6	
EI070.82	A		7	7	6	
EI070.90	A		7	7	6	
EI071.00	CA	5	6	11	6	
EI071.50	CA	3	8	11	6	
EI072.50	A		7	7	6	
EI073.00	A		7	7	6	
EI074.00	A		7	7	6	
EI074.20	A		7	7	6	
EI075.00	A		7	7	6	
EI075.60	A		7	7	6	D () ()
EI075.90	P	12		12	6	Deactivated as flood station
EI082.00	A		7	7	6	
EI084.00	A		7	7	6	
E1086.00	A		7	7	6	
EI087.00	A		7	7	6	
E1089.00	P	7		7	6	
EI091.00	CA	1	7	8	7	
EI093.00	CA	1	7	8	7	
E1096.00	CA	1	7	8	7	
E1098.00	A		7	7	6	
EI105.00	A		7	7	6	
EI106.00	A	8	7	15	6	flood
EI107.00	A		7	7	6	



Station	Class	Closed	Open	Total	Samples Required	Comments
EI108.00	P	7		7	6	
EI109.00	Α		7	7	6	
EI110.70	A		7	7	6	
EI111.00	A		7	7	6	
EI112.00	A	7	7	14	6	flood
EI113.00	P	7		7	6	

Appendix A.

Key to Water Quality Table Headers

Station = water quality monitoring station

Class = classification assigned to the station; Prohibited (P), Restricted (R), Conditionally Restricted (CR), Conditionally Approved (CA), Investigative (X) and Approved (A).

Count = the number of samples evaluated for classification, must be a minimum of 30.

GM = means the antilog (base 10) of the arithmetic mean of the sample result logarithm (base 10).

SDV = standard deviation

Max = maximum score of the 30 data points in the count column

P90 = 90th percentile, Approved standard is 31, Restricted standard is 163

Min Date = oldest date sampled included in the calculations.

Reference Material

An interactive map is available on the DMR website for reference. This map includes water quality station locations, end of year P90 scores, current classifications, and other information. Shellfish Closures and Aquaculture Leases Map | Department of Marine Resources (maine.gov)