GROWING AREA EM

Pleasant River, Addison, Cape Split, Columbia Falls, and Harrington

Triennial Report
2020-2022

Final
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Field Observations of Pollution Sources

2020

On August 12th, 2020, a drive-through survey of growing area EM was conducted by DMR staff, and no new problems were discovered. No new pollution sources were observed during sample collection.

2021

On October 19th, 2021, a drive-through survey of growing area EM was conducted by DMR staff, and no new problems were discovered. No new pollution sources were observed during sample collection

2022

Drive through 5/25/22 New construction noted at EM 7, 10, and 13. No issues found

Review of Water Quality Results

Table 1 lists all Approved, Restricted, and Prohibited stations in Growing Area EM 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 1. Geomean and P90 Scores, Growing Area EM Approved, Restricted, Prohibited Stations, 2022. Geomeans and P90s not meeting current classifications are highlighted in yellow.

Station	Class	Count	GM	SDV	MAX	P90			Min_Date
EM001.00	A	30	3.1	0.44	80	11.6			6/18/2018
EM003.00	A	30	4.1	0.54	106	20.8			3/25/2019
EM005.00	A	30	3.2	0.49	126	13.7			8/13/2018
EM006.00	A	30	2.6	0.33	50	7			6/18/2018
EM010.00	A	30	6.1	0.55	108	31.4			6/18/2018
EM012.50	A	30	2.4	0.31	70	6.3			6/18/2018
EM012.80	A	30	3.2	0.5	128	14.2			1/23/2019
EM013.50	A	30	4.1	0.59	960	24.2			3/25/2019
EM009.00	P	30	8.6	0.52	80	40.2			12/18/2018
EM013.00	R	30	7.6	0.81	1700	82.8			3/25/2019

All stations met their current classification standard with EM 10 being right at the approved standard of 31 CFU 100ml.

CAMP Reviews, Inspection Reports, and Performance Standards

Batson Brook is classified as Conditionally Approved with an open status of December 1st through June 30th based on seasonal variability in water quality. The conditional area is monitored by station EM 11. Marine Patrol and/or local Shellfish Wardens monitor illegal harvesting activity in this area during the closed period. This management plan remains in compliance.

Table 2. Batson Brook 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
EM011.00	CA	30	3.7	0.46	90	14.2	4/18/2018

Overview of Pollution Sources

Permitted Discharges

The current listings of the State Licensed Discharge Sites for growing area EM are shown in Table 3. There are no current National Pollution Discharge Elimination System (NPDES) permits in growing area EM. The pollution area for each of these sites is also shown. All overboard discharges (OBDs) are in current Prohibited areas. Closure sizes are appropriate.

Table 3. State Licensed Discharges-OBDs

Pollution Area	Permit ID	Type	Facility	Water Body
EM P1	3406	OBD	Columbia Falls	Pleasant River
EM P1	5104	OBD	Columbia Falls	Pleasant River
EM P1	5105	OBD	Columbia Falls	Pleasant River
EM P1	5107	OBD	Columbia Falls	Pleasant River
EM P1	5102	OBD	Columbia Falls	Pleasant River
EM P1	5106	OBD	Columbia Falls	Pleasant River
EM P1	6212	OBD	Columbia Falls	Pleasant River
EM P1	2998	OBD	Riverbend Apartments	Pleasant River
EM P2	3405	OBD	Addison	Western Bay

Residential

There are no residential pollution problems in this area.

Non-point Pollution Sources

Freshwater streams, drainages, and tidal creeks are the major source of non-point discharge into Growing Area EM. 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. Due to a change in stream sampling protocol, no samples were collected during this review period. Streams are not sampled the year of the Triennial report and for the

following two years for any streams that had scores of 163 CFU/100ml or greater during the preceding year. There will be a minimum of 4 samples a year collected streams in this area beginning in 2023.

Marinas

The marina community in Maine only operates for a portion of the year due to adverse winter weather conditions. In growing area EM there is only one small anchorage/mooring area in Addison, with no actual significant marinas and thus no problems associated with them. In the small mooring in Addison Village, there are primarily small workboats. There is a small commercial pier at Greens Point. These anchorage areas are all in already closed areas. There are also some individual moorings at private properties, but overall these moorings and anchorages pose no problems to water quality in EM.

Mooring Fields

Several mooring fields are scattered throughout the growing area with the largest number of boats at the town landing in Addison. Two other small commercial mooring fields are located at His Cove and Caler Cove. There are no Marine Pump Outs located in this growing area and the area is not considered a Federal NDA.

Table 4. Growing Area EM Mooring Fields

Town	Name	# of boats	Operating Dates	Comments
Addison	Upper Pleasant	<100	year-round (May-Oct most boats)	Current Prohibited Area EM P1
Addison	His Cove	5	year-round (May-Oct most boats)	EM Approved area
Addison	Caler Cove	<10	year-round (May-Oct most boats)	EM Approved area

Agriculture Activities

The Pleasant River Bed and Breakfast/ Llama Keep is the only major agriculture in the growing area of EM. It is located on the Southern end of Dyer Cove on the West shore of Pleasant Bay. This farm raises and sells domestic llamas (*Lama glama*) mainly for the protection of livestock on other farms (llamas are good for predator deterrence and defense for sheep and other livestock). They also raise Red Deer (*Cervus elaphus*) and keep other farm animals such as horses and goats. The population of animals kept in their fields fluctuates from around 30 to 50 animals at any given time, and these fields surround a tidal marsh area. The farm may pose threat to water quality from runoff from the pastures. Currently, the area associated with potential farm run-off is classified as Restricted.

Industrial Pollution

There is no heavy industrial activity in the growing area such as chemical plants, steel mills, shipyards, or refineries. None of the small industries (small boat builders and boat storage yards) were identified as known pollution sources during the 2016 survey. All the shellfish areas adjacent to the businesses meet their present area classifications.

WWTP, Pump Stations, and CSO Pollution Areas

There are no Waste Water Treatment Plants (WWTP), pump stations, or Combined Sewer Overflows (CSO) in this growing area.

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 consistent or improved. Four changes were made to pollution areas in EM during 2020 based on year-end 2019 data: Pollution Area No. 53A (B.1), (Dyer Cove) was changed from Restricted to Approved, Pollution Area No. 53A (A.2) was changed from Prohibited to Approved, 53A B2 (Carrying Place Cove) went from Restricted to Approved, and Pollution Area No. 53A (D.1) (Ramsdell Cove) was changed from Conditionally Approved to Approved. In 2021, an Approved area (Batson Brook) was changed to Conditionally Approved based on seasonal water quality issues. In 2022, all stations have met compliance both with the number of samples required, but also with the Geomean and P90 scores. Water quality and shoreline survey results meet the NSSP Model Ordinance requirements. All conditional area management plans continue to achieve compliance.

Table 5: Area EM Sample Count Tables, 2022

Station	Class	Closed	Open	X	Samples Required	Total	Comments
EM001.00	A		7		6	7	
EM003.00	A	7	7		6	14	flood
EM005.00	A		8		6	8	
EM006.00	A	5	7		6	12	flood
EM009.00	P	7			0	7	
EM010.00	A		7		6	7	
EM011.00	CA	4	7		7	11	CA is open 7 months
EM011.10	X	4	7	11	7	11	CA boundary
EM012.50	A		7		6	7	
EM012.80	A		7		6	7	
EM013.00	R		7		6	7	
EM013.50	A		7		6	7	

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), 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, the Approved standard is 31, Restricted standard is 163