GROWING AREA EE

Swans Island and Frenchboro

Sanitary Survey Report

2010 - 2018

Final

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Executive Summary

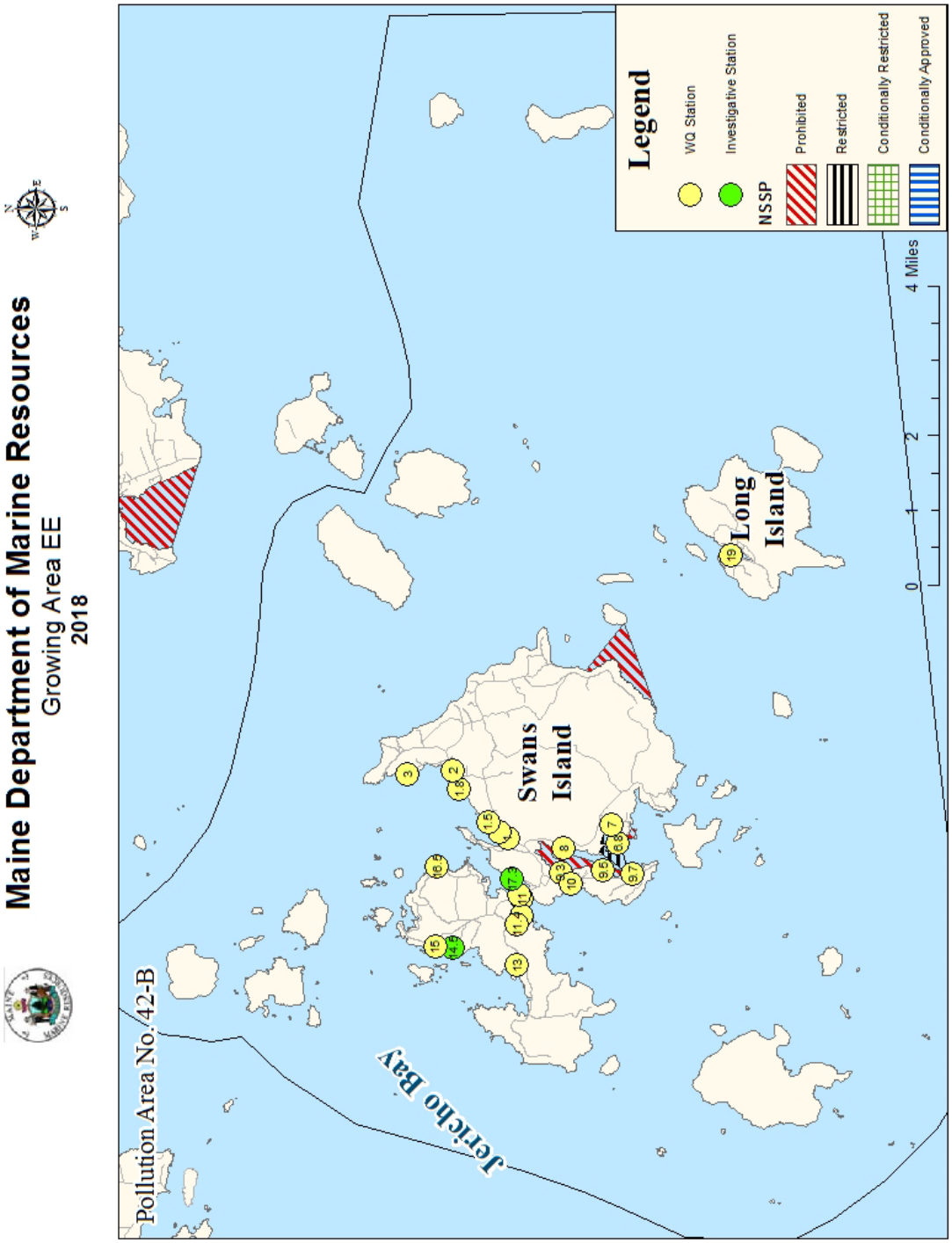
This is a Sanitary Survey report for Growing Area EE in Hancock County written in compliance with the requirements of the 2017 Model Ordinance and the National Shellfish Sanitation Program. The last sanitary survey was conducted in 2009 and triennial surveys in 2015 and 2012. A portion of two pollution areas in Growing Area EE will be reviewed for a possible upgrade in 2019; Toothacher Cove (Swans Island) and Buckle Island Harbor (Swans Island). Three investigative stations (EE 1.2, 1.5, and 1.8) now have the required 30 samples and were changed to active water quality stations. There were 8 new actual or potential pollution sources found resulting in one new prohibited area and one expanded prohibited area. Five water quality stations were deactivated during the review year, EE 6.4, 9, 11.5, 16.6, and 16.8. Water quality has shown improvement over the review period at all stations except at water quality station EE7. The next sanitary survey is due in 2030 and the next triennial in 2021.

Description of Growing Area

Growing Area EE is in Hancock county and consists of numerous islands that are located in the southern end of Blue Hill Bay, just southwest of Mount Desert Island. Swan's Island (pop. 332) and Frenchboro (pop. 61) make up the majority of this growing area with several surrounding mostly uninhabited islands and ledges. The area is bounded by Marshall Island in the west, and Frenchboro (Long Island) in the south, by the Duck Islands in the east, and by Pond, Placentia, and Black Islands in the north. Since this area is made up of relatively small islands, there is no defined upland boundary. This is a rural area with sparse population and land use is predominantly residential with a few small fishing piers. There are no municipal wastewater treatment facilities and only one licensed overboard discharge (OBD). There are 25 shellfish limited purpose aquaculture permits (LPAs) in this growing area. The activities associated with the LPAs are monitored in accordance with the Model Ordinance.

Below (Figure 1) is the map with Pollution Area boundaries and growing area boundaries. Closures within the growing area can be found in legal notices in DMR central files on the DMR website.

Figure 1. Growing Area EE Overview Map with Active Water Stations



History of Growing Area Classification

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

Pollution Sources Survey

Summary of Sources and Location

The growing area shoreline is divided into 2-mile segments that are identified using unique Growing Area Shoreline Survey Identification (GASSID) numbers. All properties and potential pollution sources within 500 feet of the shoreline are identified and inspected. The inspection includes a property description, physical address, location of the septic system and any other relevant potential or actual pollution sources. A GPS point to identify the source location(s) and the data are entered electronically in the field and stored in DMR central files.

Figure 2. Growing Area EE, Pollution Map A

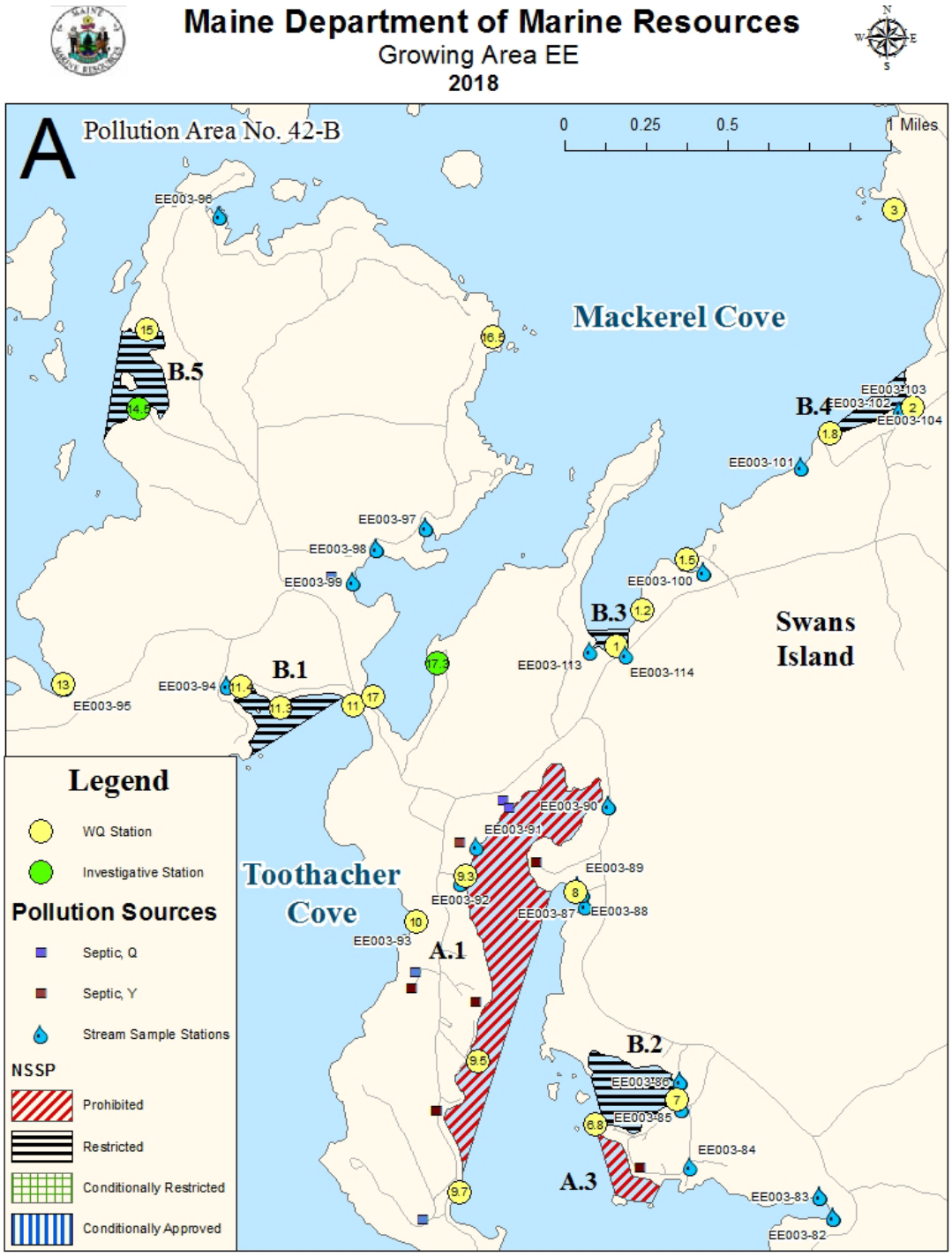
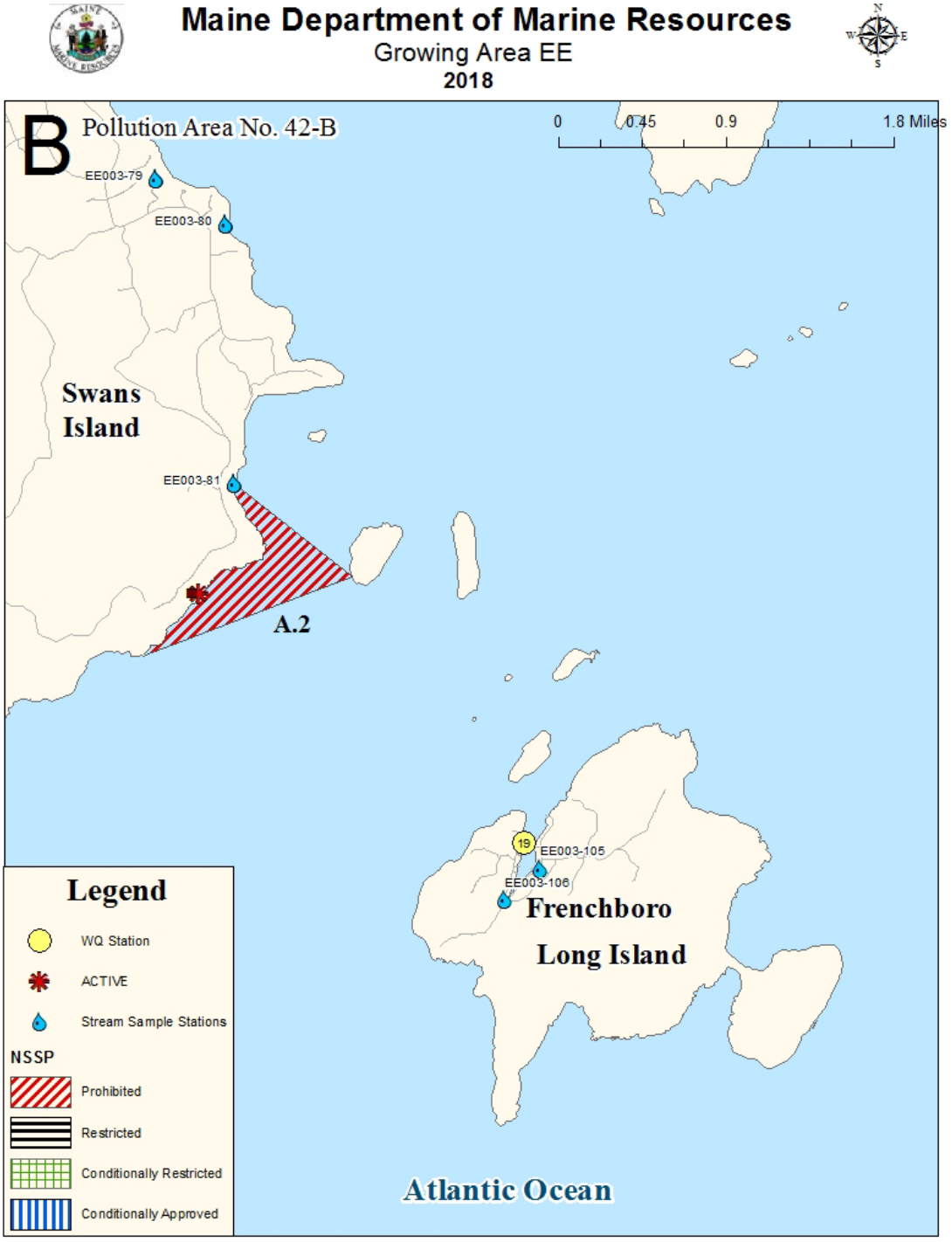


Figure 3. Growing Area EE, Pollution Map B



State and Federal Licensed Waste Discharge Permits

Overboard Discharges (OBDs)

There is one overboard discharge (OBD) that discharges its treated effluent into the waters of Growing Area EE. It discharges into the Atlantic Ocean near Red Point, Swans Island (Figure 3). One OBD was removed over the past nine review years.

An overboard discharge (OBD) is the discharge of wastewater from residential, commercial, and publicly owned facilities to Maine's streams, rivers lakes, and the ocean. Commercial and residential discharges of sanitary waste have been regulated since the mid-1970's when most direct discharges of untreated waste were banned. Between 1974 and 1987 most of the "straight pipes" were connected to publicly-owned treatment works or replaced with standard septic systems. Overboard discharge treatment systems were installed for those facilities that were unable to connect to publicly-owned treatment works or unable to install a septic system because of poor soil conditions or small lot sizes.

All overboard discharge systems include a process to clarify the wastewater and disinfect it prior to discharge. There are two general types of treatment systems; mechanical package plants and sand filters. Sand filter systems consist of a septic tank and a sand filter. In such systems, the wastewater is first directed to a holding tank where the wastewater solids are settled out and undergo partial microbial digestion. The partially treated wastewater then flows from the tank into a sand filter, consisting of distribution pipes, layers of stone and filter sand, and collection pipes within a plastic liner. The wastewater is biologically treated as it filters down through the sand, and is then collected and discharged to a disinfection unit. Mechanical package plants consist of a tank, where waste is mechanically broken up, mixed and aerated; mechanical systems require electric power, and must have an operating alarm on a separate electrical circuit that will activate if the treatment unit malfunctions due to a power failure. The aerated treated wastewater is held in a calm condition for a time, allowing for solids to settle and for the waste to be partially digested by naturally occurring bacteria. The clarified water from the tank is then pumped off the top into a disinfection unit. There are two types of disinfection units, UV and chlorinators (most common). In a chlorinator, the treated water contacts chlorine tablets and remains in a tank for at least 20 minutes where bacteria and other pathogens are killed. The treated and disinfected water is discharged from the disinfection unit to below the low water mark of the receiving waterbody (the ocean, a river, or a stream) via an outfall pipe.

OBDs are licensed and inspected by the Maine Department of Environmental Protection. At each inspection, DEP looks for tags on each treatment unit identifying the service contractor and the last date of service. If an OBD is not properly maintained, or if the OBD malfunctions, it has the potential to directly discharge untreated wastewater to the shore; therefore, preventative closures are implemented surrounding every OBD located in growing area EE (Table 1). The size of each closure is determined based on a dilution, using the permitted flow rate of the OBD (in gallons per day, GPD), and the depth of the receiving water that each OBD discharges to; the fecal concentration used for this dilution calculation is $1.4X10^5$ FC /100 ml. Single OBD systems associated with more than one residence will have multiple permit IDs. All current closures are of adequate size to protect public health.

Table 1. Overboard Discharges (OBDs).

Pollution Area (Section)	OBD ID #	Location	Receiving Waterbody	Flow (gpd)	Acres Needed for Closure	Current Prohibited Acreage
40-B (A.2)	6896	Swans Island	Atlantic Ocean	300	4.1	176 acres

National Pollutant Discharge Elimination System (NPDES)

Table 2. NPDES Permitted Discharges

Pollution Area (Section)	Permit ID	Type	Facility	Waterbody
N/A	ME0110426	Atlantic Salmon Aquaculture	Phoenix Salmon US, Inc. - Black Island	Atlantic Ocean

Phoenix Salmon US, Inc. - Black Island
This site has discharges related to salmon aquaculture. This does not pose a health risk and does not require a closure.

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 3 shows all new and pre-existing pollution sources in area EE that are considered discharges into the Growing Area and effect water quality.

Table 3. Growing Area EE Residential Pollution Sources.

Pollution Area	Location ID	Date Surveyed	Direct or Indirect	Problem	Description	Town
42-B (A.3)	EE003	2018	Indirect	Y	Malfunctioning cesspool	Swans Island
42-B (A.1)	EE003	2018	Indirect	Y	Outhouse overflowing	Swans Island
42-B (A.1)	EE003 (EE00184.001)	1997	Direct	Y	SO Pipe	Swans Island
42-B (A.1)	EE003 (EE00164.001)	2011	Direct	Y	SO Pipe	Swans Island
42-B (A.1)	EE003-7	2013	Indirect	Y	Septic breakout	Swans Island

Industrial Pollution

There are no major industrial pollution sites in growing area EE such as chemical plants, steel mills, ship yards, or refineries. None of the small industries were identified as pollution sources during the 2018 survey. All the shellfish areas adjacent to the businesses meet their present area classifications.

Marinas

The marina community in Maine only operates for a portion of the year due to adverse winter weather conditions. The management of marinas in Maine allows for shellfish growing areas to be available to harvesters, for at least a portion of the year, to direct market harvest by utilizing conditional area management plans. Small mooring fields are scattered throughout the growing area with the largest number in Burntcoat Harbor. This mooring field is almost exclusively workboats without heads. This area is not a common overnight stopping areas for recreational boaters and not identified as pollution risks due to the number of boats and types of usage. However, this area is enclosed in a Prohibited area due to other point sources of pollution.

Storm water

Storm water runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality if the runoff is discharged untreated (US EPA 2009). Thus, storm water pollution is caused by the daily activities of people within the watershed. Currently, polluted storm water is the largest source of water quality problems in the United States.

The primary method to control storm water discharges is the use of best management practices (BMPs). In addition, most major storm water discharges are considered point sources and require coverage under a NPDES permit. In 1990, under authority of the Clean Water Act, the U.S. EPA promulgated Phase I of its storm water management program, requiring permitting through the National Pollution Discharge Elimination System (NPDES). The Phase I program covered three categories of discharges: (1) “medium” and “large” Municipal Separate Storm Sewer Systems (MS4s) generally serving populations over 100,000, (2) construction activity disturbing 5 acres of land or greater, and (3) ten categories of industrial activity. In 1999, US EPA issued Phase II of the storm water management program, expanding the Phase I program to include all urbanized areas and smaller construction sites.

Although it is a federal program, EPA has delegated its authority to the Maine DEP to administer the Phase II Small MS4 General Permit. Under the Small MS4 GP, each municipality must implement the following six Minimum Control Measures: (1) Public education and outreach, (2) Public participation, (3) Illicit discharge detection and elimination, (4) Construction site storm water runoff control, (5) Post-construction storm water management, and (6) Pollution prevention/good housekeeping. The permit

requires each city or town to develop a draft Storm Water Management Plan that establishes measurable goals for each of the Minimum Control Measures. The City or Town must document the implementation of the Plan, and provide annual reports to the Maine DEP. Currently the discharge of storm water from 30 Maine municipalities is regulated under the Phase II Small MS4 General Permit however, no municipalities located within the boundaries of growing area EE fall under these regulations. Additionally, the Maine Storm Water Management Law provides storm water standards for projects located in organized areas that include one acre of more of disturbed area (Maine DEP 2009).

Along roadways several storm water pipes and ditches of varying diameters were identified during the shoreline surveys. Water sampling stations in these areas meet Approved or Restricted criteria and are classified appropriately. No specific impact from the storm drains has been identified.

Non-Point Pollution Sources

Non-point source (NPS) pollution is water pollution affecting a water body from diffuse sources, such as polluted runoff from agricultural areas draining into a river, significant rainfall, high river flows or astronomical high tides. Nonpoint source pollution can be contrasted with point source pollution, where discharges occur to a body of water at a sole location, such as discharges from a chemical factory, urban runoff from a roadway storm drain or from ships at sea. NPS may derive from various sources with no specific solution to rectify the problem, making it difficult to regulate. Freshwater streams, drainage from rainstorm runoff and tidal creeks are the major source of non-point discharge into Growing Area EE. A total of 61 samples were taken from freshwater streams during the review period (Table 4).

Streams associated with consistently high scores are monitored to determine if they affect the water quality of growing area waters. Streams EE003-113, 114, and 94 were involved in a nonpoint pollution study during the 2016 and 2017 field seasons. The streams were included in an accelerated sampling schedule and sampled in association with the corresponding water quality station to determine the streams' impacts on water quality.

Table 4. Stream Samples in Growing Area EE 2010-2018; Scores > 163 cfu/100ml are highlighted in red.

Pollution Area	Locaiton ID	Date	Pollution Type	Score cfu/100ml
42-B	EE003-100	11/27/2012	Stream	2
42-B	EE003-100	11/23/2015	Stream	102
42-B	EE003-101	11/27/2012	Stream	6
42-B (B.4)	EE003-102	11/27/2012	Stream	46
42-B (B.4)	EE003-102	11/23/2015	Stream	1000
42-B (B.4)	EE003-103	11/27/2012	Stream	<2
42-B (B.4)	EE003-103	11/23/2015	Stream	150
42-B (B.4)	EE003-104	11/27/2012	Stream	7.3

Pollution Area	Locaiton ID	Date	Pollution Type	Score cfu/100ml
42-B (B.3)	EE003-113	11/23/2015	Stream	<2
42-B (B.3)	EE003-113	5/1/2016	Stream	<2
42-B (B.3)	EE003-113	6/6/2016	Stream	92
42-B (B.3)	EE003-113	7/10/2016	Stream	<2
42-B (B.3)	EE003-113	8/7/2016	Stream	<2
42-B (B.3)	EE003-113	11/7/2016	Stream	6
42-B (B.3)	EE003-113	3/8/2017	Stream	2
42-B (B.3)	EE003-113	4/2/2017	Stream	<2
42-B (B.3)	EE003-113	5/7/2017	Stream	<2
42-B (B.3)	EE003-113	6/4/2017	Stream	<2
42-B (B.3)	EE003-114	11/23/2015	Stream	320
42-B (B.3)	EE003-114	5/1/2016	Stream	<2
42-B (B.3)	EE003-114	6/6/2016	Stream	2
42-B (B.3)	EE003-114	7/10/2016	Stream	>1600
42-B (B.3)	EE003-114	8/7/2016	Stream	4
42-B (B.3)	EE003-114	9/21/2016	Stream	<2
42-B (B.3)	EE003-114	10/16/2016	Stream	>1600
42-B (B.3)	EE003-114	11/7/2016	Stream	46
42-B (B.3)	EE003-114	3/8/2017	Stream	<2
42-B (B.3)	EE003-114	4/2/2017	Stream	<2
42-B (B.3)	EE003-114	5/7/2017	Stream	<2
42-B (B.3)	EE003-114	6/4/2017	Stream	2
42-B (B.3)	EE003-114	7/9/2017	Stream	2
42-B	EE003-78	11/27/2012	Stream	2
42-B	EE003-79	11/27/2012	Stream	4
42-B	EE003-80	11/27/2012	Stream	<2
42-B (A.2)	EE003-81	11/27/2012	Stream	<2
42-B	EE003-82	11/27/2012	Stream	<2
42-B	EE003-83	11/27/2012	Stream	<2
42-B (B.2)	EE003-85	11/23/2015	Stream	180
42-B (B.2)	EE003-86	11/27/2012	Stream	540
42-B (B.2)	EE003-86	11/23/2015	Stream	700
42-B (A.1)	EE003-92	11/27/2012	Stream	33
42-B	EE003-93	11/27/2012	Stream	<2

Pollution Area	Locaiton ID	Date	Pollution Type	Score cfu/100ml
42-B (B.1)	EE003-94	11/23/2015	Stream	122
42-B (B.1)	EE003-94	6/6/2016	Stream	340
42-B (B.1)	EE003-94	7/10/2016	Stream	76
42-B (B.1)	EE003-94	8/7/2016	Stream	84
42-B (B.1)	EE003-94	9/21/2016	Stream	320
42-B (B.1)	EE003-94	10/16/2016	Stream	>1600
42-B (B.1)	EE003-94	11/6/2016	Stream	9.1
42-B (B.1)	EE003-94	3/8/2017	Stream	10
42-B (B.1)	EE003-94	4/2/2017	Stream	<2
42-B (B.1)	EE003-94	5/7/2017	Stream	6
42-B (B.1)	EE003-94	6/4/2017	Stream	2
42-B (B.1)	EE003-94	7/9/2017	Stream	<2
42-B	EE003-97	11/27/2012	Stream	2
42-B	EE003-97	11/23/2015	Stream	84
42-B	EE003-97	12/27/2017	Stream	11
42-B	EE003-98	11/27/2012	Stream	<2
42-B	EE003-98	11/23/2015	Stream	4
42-B	EE003-99	11/27/2012	Stream	<2
42-B	EE003-99	11/23/2015	Stream	28

Agricultural Activities

There are no large-scale agriculture activities in Growing Area EE. Pollution from small agriculture operations can be introduced into the growing area as nonpoint source pollution transported by runoff from large rainfall or snowmelt events. Smaller farms are encouraged to follow best management practices to help avoid effects animal waste and agricultural pollutants can have on water quality. No small farms appeared to be directly impacting the growing area during the 2018 shoreline survey.

Domestic Animals and Wildlife Activity

The salt marshes and mudflats of the growing area provide valuable habitat to a variety of wildlife. Commonly observed bird species include a variety of gulls, sea and inland ducks, cormorants, geese, great blue herons, egrets, swans, and others. Mammals living within the growing area include dogs, cats, whitetail deer, muskrat, squirrels, chipmunks, rabbits, moles, mice, bats, shrews, weasels, skunks, raccoons, and others. Maine Inland Fish and Wildlife surveys indicate that migratory waterfowl numbers begin to increase in the early autumn months, and typically peak in late fall or early winter. Although

large numbers of birds can, in theory, pose a threat the growing area water quality, such occurrences are very difficult to document. Because this growing area is an island with few large predators, overpopulation of wildlife such as deer and raccoons impacts water quality through nonpoint source pollution in streams. Raccoon latrines have been noted by volunteers and Maine Inland Fisheries and Wildlife staff along streams across the island and especially near Cottles Cove (PA 42-B (B.3)). Deer have often been observed in a field near the stream that drains into Toothacher Cove (PA 42-B (B.1)).

Recreation Areas (beaches, trails, campgrounds, etc.)

The concern for actual or potential pollution from recreational areas is because many of them allow dogs and some have bathroom facilities. Activities at the recreational areas may contribute to water quality problems by placing added pressure on the watershed. For instance, they may contribute to erosion (trails, building footbridges, etc.), dog waste not picked up may accumulate and wash off after rainfall, new trails may be put into areas that didn't have human activity before and they may put added pressure on wildlife to congregate in other places where we may see water quality decline.

There are a few day use beaches and hiking areas including Toothacher Cove (Swans Island), Sand Beach (Swans Island), Hockamock Head (Swans Island), and Frenchboro Preserve (Frenchboro). Use in these areas is seasonal and has shown no impacts on water quality in the area. There are no commercial campgrounds in the growing area. Although there are a few beaches in the area, swimming in the ocean in this area is relatively rare, as the water temperatures rarely exceed 65°F.

Hydrographic and Meteorological Assessment

Tides

Coastal Maine experiences a mixed, semi-diurnal tide, with diurnal inequalities that are more pronounced on spring tides. Except for very few isolated areas with extensive saltwater marshes, tides are not considered to be contributors to fecal contamination. The National Oceanic and Atmospheric Administration data for a station at Eastport indicate a mean tidal range of 18.35 ft. The mean tidal range for most of Maine is 9 feet to 13 feet. Unlike areas with small diurnal tides, this extreme volume exchange results in significant bacterial dilutions. Currents in the area are predominantly driven by the tides.

Rainfall

The mean annual precipitation in growing area EE is approximately 44 inches and the precipitation is not evenly distributed throughout the year. The wettest months are generally April and November while August is typically the driest month. Much of the precipitation in the winter comes as snow and may affect runoff rates in spring upon melting. Flood closures are implemented when areas receive greater than two inches of rainfall in a twenty-four-hour period. Rainfall is monitored by numerous rain gauges

located along the entire Maine coast and reported primarily through the Weather Underground website. Some areas of Maine have documented fecal influences resulting from rainfall of greater than one inch in a twenty-four-hour period. These areas are considered rainfall conditional areas and are Conditionally Approved based on the one-inch closure trigger. No rainfall areas have been identified in growing are EE.

Maine DMR is working collaboratively with the University of Maine on a statewide coastal project determining how various watershed characteristics influence fecal contamination of marine waters during rainfall events. This research clusters watersheds based on similar characteristics then models how rainfall and associated pollution is distributed. The model is being refined to incorporate margin watershed influences.

Winds

Migratory weather systems cause winds that frequently change in strength and direction. Gulf of Maine winds are generally westerly, but often take on a northerly component in winter and a southerly one in summer. Strongest winds are generated by lows and cold fronts in fall and winter and by fronts and thunderstorms during spring and summer. Extreme winds are usually associated with a hurricane or severe nor'easter and can reach 125 knots. In Maine, wind is not a contributor to fecal pollution because marine currents are primarily influenced by the size and duration of the normal tidal cycle.

River Discharge

There are no large rivers draining into growing area EE.

Hydrographic Influence

Water circulation in growing area EE is dominated by tides as discussed previously. Wave action due to onshore winds also result in significant bacterial dilutions.

Water Quality Studies

Map of Sampling Stations

Most marine fecal pollution of Maine waters comes from non-point sources. DMR uses Systematic Random Sampling (SRS) to monitor this influence and uses a pre-established schedule at an adequate frequency to capture all meteorological, hydrographic and/or other pollution events that trigger non-point pollution contribution. Using SRS will detect intermittent and unfavorable change in water quality and the program accepts the estimated 90th percentile (P90) as the standard to measure variance of a data set.

There are presently 21 active water sampling sites in Growing Area EE and 2 investigative stations which do not currently have enough data to calculate a P90. It is recognized that access, icing, and safety considerations prevent some stations from being sampled on scheduled dates. Currently all stations in Growing Area EE meet their current NSSP classification standard. Three investigative stations reached their required number of samples and were changed to active water sampling sites in 2018. Two water quality stations (EE 11.3 and 15) now have water quality that meets the standards for Approved harvest and will be evaluated for an upgrade in 2019.

Water Quality Discussion and Classification Determination

P90s for all active stations with a minimum of 30 samples were calculated and all stations meet their classification standards (Table 5). Overall the water quality in growing area EE appears to be improving or remaining constant.

Table 5. P90 calculations for stations with a minimum of 30 samples. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	MFCount	GM	SDV	MAX	P90	Appd_Std	Restr_Std
EE001.00	R	30	30	5.6	0.75	1020	52.4	31	163
EE001.20	A	30	30	3.7	0.57	140	20.4	31	163
EE001.50	A	30	30	4.2	0.5	130	18.8	31	163
EE001.80	A	30	30	4.3	0.59	380	24.9	31	163
EE002.00	R	30	30	6.6	0.59	88	38.2	31	163
EE003.00	A	30	30	3.2	0.43	84	11.5	31	163
EE006.80	A	30	30	3.1	0.41	36	10.6	31	163
EE007.00	R	30	30	11.1	0.75	320	102.3	31	163
EE008.00	A	30	30	3.7	0.4	46	12.4	31	163
EE009.30	P	30	30	4	0.43	72	14.6	31	163
EE009.50	P	30	30	2.8	0.34	66	7.8	31	163
EE009.70	A	30	30	3	0.35	38	8.8	31	163
EE010.00	A	30	30	3.5	0.45	78	13.9	31	163
EE011.00	A	30	30	3.1	0.47	240	12.8	31	163
EE011.30	R	30	30	4.7	0.54	68	23.6	31	163
EE011.40	R	30	30	5.8	0.67	900	43	31	163
EE013.00	A	30	30	3.4	0.49	320	14.8	31	163
EE015.00	R	30	30	3.5	0.58	200	20.4	31	163
EE016.50	A	30	30	2.6	0.41	160	9.2	31	163
EE017.00	A	30	30	3.1	0.52	108	14.5	31	163
EE019.00	A	30	30	2.1	0.15	8	3.3	31	163

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.

8/16/18 – Pollution Area 42-B Lunt's Harbor (Frenchboro) was reclassified from Approved to Prohibited due to the report of a potential pollution point source.

9/14/18 – Pollution Area 42-B (B.3) Cottles Cove was reduced due to water quality meeting the approved standards and the reclassification of stations from investigatory to Approved.

9/28/18 – Pollution Area 42-B (B.2) Mill Pond was reduced due to water quality meeting the approved standards.

10/4/18 – Pollution Area 42-B (A.1) Burntcoat Harbor was expanded due to the location of a pollution point source during the regular shoreline sanitary survey. The Trafton Wharf area was reclassified from Approved to Prohibited due to the location of a pollution point source during the regular shoreline sanitary survey.

11/6/18 – Pollution Area 42-B Lunt's Harbor (Frenchboro) was reclassified from Prohibited to Approved due to results of pollution source investigation.

CAMP Reviews, Inspection Reports, and Performance Standards

There are no conditional areas in growing area EE.

Recommendation for Future Work

Water quality stations EE 11.3 (Toothacher Cove) and EE 15 (Buckle Island Harbor) meet the standard for Approved harvest at end of year 2018 and will be evaluated for a possible upgrade in 2019. No stations in growing area EE required a downgrade due to end of year 2018 P90 scores.

Table 6. Count table of samples collected in growing area EE during the 2018 season.

Station	Class	Investigative	Random		Total	Comments
		X	Closed	Open		
EE001.00	R			8	8	
EE001.20	A			2	8	Reached 30 samples, classified as A
	X	6				
EE001.50	A			3	8	Reached 30 samples, classified as A
	X	5				
EE001.80	A			3	8	Reached 30 samples, classified as A
	X	5				
EE002.00	R			8	8	
EE003.00	A			8	8	
EE006.40	A			2	2	Station Deactivated
EE006.80	A			1	8	Reclassified R to A
	R			7		
EE007.00	R			8	8	
EE008.00	A			8	8	
EE009.00	P		1		1	Station Deactivated
EE009.30	P		8		8	
EE009.50	P		8		8	
EE009.70	A			8	8	
EE010.00	A			8	8	
EE011.00	A			8	8	
EE011.30	R			8	8	
EE011.40	R			8	8	
EE011.50	X	2			2	Station Deactivated
EE013.00	A			8	8	
EE014.50	X	8			8	
EE015.00	R			8	8	
EE016.50	A			8	8	
EE016.60	X	2			2	Station Deactivated
EE016.80	X	2			2	Station Deactivated
EE017.00	A			8	8	
EE017.30	X	8			8	
EE019.00	A			6	6	

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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, Approved standard is 31, Restricted standard is 163
Min_Date = oldest date sampled included in the calculations.