



ET Triennial 2021

# **GROWING AREA ET**

**Mowery Point, Lubec to Shackford Head, Eastport  
Washington County, Maine**

**Triennial Report  
2019-2021**

**Final  
Erick Schaefer, Scientist I**



## Field Observations of Pollution Sources

### 2019

On July 2, 2019, a drive-through survey of growing area ET was completed by DMR staff and no new problems were discovered. No new pollution sources were observed during sample collection.

### 2020

On June 26<sup>th</sup> and July 30<sup>th</sup>, 2020, a drive-through survey of growing area ET was completed by DMR staff and no new problems were discovered. No new pollution sources were observed during sample collection.

### 2021

No routine or hotspot surveys were conducted or scheduled in 2021. A drive-through survey was conducted on 9/20/21 and 9/29/21. No problems were discovered.

## Review of Water Quality Results

Table 1 lists all Approved, Restricted, and Prohibited stations in Growing Area ET with their respective geomean and P90 calculations for 2021.

Refer to Appendix A for a key to interpreting the headers on all tables for the Geomean and P90 scores (Tables 1-5).

**Table 1.** Geomean and P90 Scores, Growing Area ET Approved, Restricted, Prohibited stations, 2021

Station	Class	Count	GM	SDV	MAX	P90	Appd_Std	Restr_Std
ET008.30	A	30	3.6	0.47	62	14.5	31	163
ET009.00	A	30	3.2	0.41	82	10.8	31	163
ET011.00	A	30	4.1	0.61	1700	24.9	31	163
ET011.10	A	30	3.7	0.51	136	16.8	31	163
ET012.00	A	30	2.9	0.3	22	7	31	163
ET013.00	A	30	3.4	0.4	52	11.4	31	163
ET020.00	A	30	3.2	0.42	74	11.1	31	163
ET023.00	A	30	2.6	0.28	38	6	31	163
ET025.00	A	30	2.9	0.46	140	11.8	31	163
ET026.00	A	30	2.3	0.28	44	5.4	31	163
ET029.00	A	30	2	0.14	8	3.1	31	163
ET032.00	A	30	2.9	0.41	112	9.8	31	163
ET033.50	A	30	2.7	0.37	100	8.3	31	163
ET036.00	A	30	1.9	0.09	6	2.6	31	163
ET039.00	A	30	3.8	0.53	580	18.4	31	163



Station	Class	Count	GM	SDV	MAX	P90	Appd_Std	Restr_Std
ET044.00	A	30	3.8	0.45	240	14.7	31	163
ET045.00	A	30	3.1	0.38	86	9.9	31	163
ET047.00	A	30	3.4	0.49	200	14.8	31	163
ET054.00	A	30	2.6	0.37	50	7.8	31	163
ET057.00	A	30	3.5	0.51	380	16.3	31	163
ET059.00	A	30	4.6	0.41	42	15.7	31	163
ET066.50	A	30	5.2	0.54	128	25.9	31	163
ET068.00	A	30	4	0.43	31	14.5	31	163
ET070.00	A	30	3.4	0.39	64	10.8	31	163
ET071.00	A	30	2.3	0.26	42	5	31	163
ET074.00	A	30	2	0.12	6	2.9	31	163
ET077.00	A	30	3	0.37	29	9	31	163
ET079.00	A	30	3.5	0.37	31	10.7	31	163
ET085.00	A	30	4.2	0.48	64	17.4	31	163
ET088.90	A	30	2.2	0.17	10	3.7	31	163
ET091.00	A	30	5	0.57	112	27.5	31	163
ET091.70	A	30	2.3	0.3	78	5.9	31	163
ET095.00	A	30	2.3	0.32	42	6.1	31	163
ET097.00	A	30	2.5	0.22	10	4.9	31	163
ET099.00	A	30	2.5	0.26	16	5.5	31	163
ET100.00	A	30	2.2	0.15	6	3.6	31	163
ET100.15	A	30	3.4	0.43	98	12.3	31	163
ET103.10	A	30	2.2	0.18	12	3.7	31	163
ET104.00	A	30	1.9	0	2	1.9	31	163
ET057.20	CA	30	5.3	0.56	88	28.4	31	163
ET008.00	R	30	3.4	0.4	52	11.4	31	163
ET060.00	R	30	8.2	0.62	520	51.3	31	163
ET063.00	R	30	7	0.64	1000	46.2	31	163
ET100.20	R	30	3.5	0.55	240	18.4	31	163

## CAMP Reviews, Inspection Reports, and Performance Standards

A portion of Hobart Stream, Edmunds is classified as Conditionally Approved based on season and is open from January 1<sup>st</sup> through May 31<sup>st</sup>. This area is monitored by stations 57.2. Marine Patrol and/or local Shellfish Wardens monitor for illegal harvesting activity in this area during the closed period. At the end of the year, 2021 station ET 57.2 met approved standards during the open period.


**Table 2.** Hobart Stream Seasonal Conditional Area; Geometric Mean, Count, and P90 (OPEN status)

Station	Class	Count	GM	SDV	MAX	P90	Appd Std
ET057.20	CA	30	4.2	0.52	82	19.5	31

This area is open for 5 months and needs to be sampled monthly during the open period. Table

**Table 3.** CA samples collected in 2021

Station	Class	Closed	Open	X	Samples needed	Total	Comments
ET057.20	CA	6	5		5	11	CA open Jan-May

## Overview of Pollution Sources

### Permitted Discharges

The current listings of National Pollution Discharge Elimination System (NPDES) and State Licensed Discharge Sites for growing area ET are shown in Table 4. Where applicable, the pollution area for each of these sites is also shown. There is one Wastewater Treatment Plant (WWTP) associated with this growing area and one WWTP located in growing area ET. The Lubec WWTP is located within the upland boundary of growing area ES however the plant discharges into growing area ET. The Eastport Quoddy WWTP is in growing area ET, but discharges into growing area EU.

**Table 4.** Federal and State Licensed Discharges

Pollution Area	Permit ID	Type	Facility	Water Body
58 (A.1)	ME0102016	WWTP	Lubec	Lubec Channel
NA	ME0102148	WWTP	Eastport Quoddy	Passamaquoddy Bay
NA	MEG130018	salmon aquaculture	Cooke Aquaculture	Deep Cove
NA	MEG130020	salmon aquaculture	Cooke Aquaculture	South Bay
NA	MEG130031	salmon aquaculture	Cooke Aquaculture	Cobscook Bay
NA	MEG130028	salmon aquaculture	Cooke Aquaculture	Broad Cove

### Residential

All residential pollution sources are reported to the local plumbing inspector (LPI). Table 5 shows all new and pre-existing pollution sources in area ET that are considered discharges into the growing area and affect water quality.


**Table 5. Growing Area ET Residential Pollution Sources**

Pollution Area	Location ID	Date Surveyed	Direct or Indirect	Problem	Description	Town
ET P3	ET056.413	07/01/2015	Indirect	Yes	Septic breakout	Whiting

### Non-point Pollution Sources

Freshwater streams, drainages, and tidal creeks are the major source of non-point discharge into growing area ET. 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 14 samples were taken from freshwater streams during the triennial review period.

**Table 6. Growing Area ET Stream Samples**

Pollution Area	Sample Date	Stream ID	Pollution Type	Score
ET approved	28-Jul-21	ET058-406	Stream	160
ET R2	17-Apr-19	ET073-411	Stream	102
ET R2	06-May-19	ET073-411	Stream	1.9
ET R2	13-May-19	ET073-411	Stream	62
ET R2	20-May-19	ET073-411	Stream	42
ET R2	28-Jul-21	ET073-411	Stream	144
ET approved	28-Jul-21	ET074-411	Stream	20
ET approved	17-Apr-19	ET098-416	Stream	2
ET approved	06-May-19	ET098-416	Stream	8
ET approved	13-May-19	ET098-416	Stream	58
ET approved	20-May-19	ET098-416	Stream	4
ET approved	05-Jun-19	ET098-416	Stream	1.9
ET approved	28-Jul-21	ET098-416	Stream	4
ET approved	28-Jul-21	ET102-417	Stream	10

### Marinas

There are no commercial marinas in this growing area.



### Mooring Fields

This area has 5 mooring fields that consist of work boats used for lobster fishing and trawling. All these areas have less than 20 boats and do not require any type of management. They can be seen in the table below. There are no Marine pumpouts in this area and it is not located in a NDA.

**Table 7.** Growing Area ET Mooring Fields

Town	Name	# of boats	Operating Dates	Comments
Lubec	Lubec Narrows	19	year round(May-Oct most boats)	Prohibited ET P2
Lubec	Globe Cove	12	year round(May-Oct most boats)	<20 boats
Edmunds	Whiting Bay	10	year round(May-Oct most boats)	<20 boats
Pembroke	Pennemaquan River	10	year round(May-Oct most boats)	<20 boats
Eastport	Broad Cove	7	year round(May-Oct most boats)	<20 boats

### Agriculture Activities

Only one commercial farm was identified in the 2021 Triennial. The property is a dairy farm in Edmunds. The cows are in pastures >200 feet from the water with large grass barriers. WQ Station ET 47 is located where the stream meets the saltwater and sample results meet approved standards. The portion of the stream upstream from ET 47 is classified as Restricted, Pollution area ET R4. There are no identified slaughterhouses, large-scale manure spreading operations, or garden centers in the area.

### Industrial Pollution

There is no heavy industrial activity such as chemical plants, shipbuilding, oil refineries, or manufacturing plants in the growing area.

### WWTP, Pump Stations, and CSO Pollution Areas

The Lubec WWTP license W-006306-59-B-R (ME0102016) is a primary treatment facility that serves approximately 600 households. The permit allows the discharge of a monthly average flow of 0.166 million gallons per day (MGD) of primary treated sanitary wastewater to Passamaquoddy Bay (Lubec Narrows) in Lubec, Maine. The average depth of the receiving waters is 32 feet. No changes have occurred at this plant therefore the 212-acre Prohibited area (Pollution Area ET P2.) is sufficient for the required 160-acre closure.



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

Area ET includes both state and federal conservation lands. These lands include hiking trails and are visited during the summer months. The entire growing area is subject to an influx of visitors during the summer months. The primary destinations are Eastport and Cobscook Bay State Park. Currently, water quality scores in these areas do not indicate significant impacts.

### 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.

### Station Changes

In the latest triennial period, four stations (ET 7, ET 27, ET 64, ET 69) were deactivated due to either access issues or growing area review that determined they were in areas that did not require monitoring due to lack of resources or proximity to other water quality stations. One new station was activated to better monitor a resource area and three Investigative stations (ET 88.9, ET 91.7 and ET 100.15) were added to the SRS regular schedule.

### Summary

For the review period of 2019-2021, water quality has remained consistent or improved. Overall water quality and shoreline survey results meet the NSSP Model Ordinance requirements.

On May 3, 2019 Sipp Bay (Perry) was reclassified from Restricted to Approved. On May 6, 2019 Globe Cove (Lubec) was reclassified from Restricted to Approved.

**Table 8. Area ET Sample Count Tables, 2021**

Station	Class	Closed	Open	X	Samples needed	Total	Comments
ET008.00	R		7		6	7	
ET008.30	A		7		6	7	
ET009.00	A		7		6	7	
ET011.00	A		7		6	7	
ET011.10	A		7		6	7	
ET012.00	A		6		6	6	
ET013.00	A		7		6	7	



ET Triennial 2021

Station	Class	Closed	Open	X	Samples needed	Total	Comments
ET020.00	A		7		6	7	
ET023.00	A	4	7		6	11	flood
ET025.00	A		7		6	7	
ET026.00	A		7		6	7	
ET029.00	A		7		6	7	
ET032.00	A		7		6	7	
ET033.50	A		7		6	7	
ET036.00	A		7		6	7	
ET039.00	A		7		6	7	
ET044.00	A		7		6	7	
ET045.00	A		7		6	7	
ET047.00	A		7		6	7	
ET054.00	A	5	7		6	12	flood
ET057.00	A		7		6	7	
ET057.20	CA	6	5		5	11	CA open Jan-May
ET059.00	A		7		6	7	
ET060.00	R		7		6	7	
ET063.00	R		7		6	7	
ET066.50	A		7		6	7	
ET068.00	A		7		6	7	
ET070.00	A		7		6	7	
ET071.00	A		7		6	7	
ET074.00	A	3	7		6	10	flood
ET077.00	A		7		6	7	
ET079.00	A		7		6	7	
ET085.00	A		7		6	7	
ET088.90	A		2	5	6	7	new station 2017
ET091.00	A		7		6	7	
ET091.70	A		3	4	6	7	new station 2017
ET095.00	A	3	8		6	11	flood
ET097.00	A		7		6	7	
ET099.00	A		7		6	7	
ET100.00	A		7		6	7	
ET100.15	A		3	4	6	7	new station 2016





Station	Class	Closed	Open	X	Samples needed	Total	Comments
ET100.20	R		7		6	7	
ET103.10	A		7		6	7	
ET104.00	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), Approved (A), and Investigative (X).

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

Min\_Date = oldest date sampled included in the calculations.