



GROWING AREA WY

Islesboro

**Triennial Report
2019-2021**

**Final
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Field Observations of Pollution Sources

Drive by surveys were constructed during regular water quality sampling runs.

Review of Water Quality Results

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

Refer to Appendix A for a key to interpreting the headers on table for the Geomean and P90 scores (Table 1).

Table 1. Geomean and P90 Scores, Growing Area WY Approved, Restricted, Prohibited stations, 2021. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
WY001.00	A	30	1.9	0.09	6	2.6	4/24/2017
WY001.50	A	30	2	0.15	12	3.2	4/24/2017
WY002.00	A	30	2.1	0.2	14	3.9	4/24/2017
WY003.00	A	30	2.3	0.21	15	4.4	4/24/2017
WY004.00	A	30	2.1	0.17	16	3.5	4/24/2017
WY006.00	A	30	2.2	0.2	18	4.1	4/24/2017
WY008.00	A	30	2.2	0.2	20	4.1	4/24/2017
WY009.50	A	30	2.2	0.21	14	4.2	4/24/2017
WY010.00	A	30	2	0.11	6	2.9	4/24/2017
WY010.50	A	30	2	0.12	8	2.9	4/24/2017
WY012.00	A	30	2.1	0.15	10	3.3	4/24/2017
WY013.00	P	30	2	0.15	12	3.2	4/24/2017
WY013.20	A	30	2	0.13	11	3	4/24/2017
WY013.70	A	30	2	0.14	12	3.1	4/24/2017
WY016.00	P	30	1.9	0.05	3.6	2.2	4/24/2017
WY019.00	P	30	1.9	0.05	4	2.3	4/24/2017

CAMP Reviews, Inspection Reports, and Performance Standards

There are no conditional areas in growing area WY.

Overview of Pollution Sources

Permitted Discharges

The current listings of National Pollution Discharge Elimination System (NPDES) and State Licensed Discharge Sites for growing area WY are shown in Table 2. The pollution area for each of these sites is also shown. All overboard discharges (OBDs) are located in current Prohibited areas. Single OBD systems associated with more than one residence will have multiple permit IDs.



Table 2. Federal and State Licensed Discharges

Growing Area Section	Permit Id	Type	Facility	Water Body
P5	ME0100269	WWTP	Islesboro, Dark Harbor	Dark Harbor
P1	6426	OBD	Islesboro	Sabbathday Harbor
P1	5258	OBD	Islesboro	Sabbathday Harbor

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 WY that are considered discharges into the Growing Area and affect water quality. All residential pollution sources are within appropriately sized closures.

Table 3. Growing Area WY Residential Pollution Sources

Growing Area Section	Location ID	Date Surveyed	Direct or Indirect	Problem	Description	Town
P1	WYA0309.001	11/15/2012	Direct	Yes	Unlicensed OBD	Islesboro
P1	WYA0296.001	11/9/2012	Direct	Yes	Unlicensed OBD	Islesboro
P2	WYA0349.001	11/1/2012	Direct	Yes	Straight Pipe	Islesboro
P5	WYA0508.001	11/19/2012	Direct	Yes	Potential unlicensed OBD	Islesboro

Non-point Pollution Sources

Freshwater streams, drainages and tidal creeks are the major source of non-point discharge into Growing Area WY. 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. No stream samples were taken from freshwater streams during the three-year review period. The most recent sampling attempt was from 2018.

Table 4. Growing Area WY Stream Samples

Growing Area Section	Location ID	Sample Date	Pollution Type	Score
A1	WY001-245	11/19/2018	Stream	62
A1	WY004-1	11/19/2018	Stream	100
P2	WY007-241	11/19/2018	Stream	54
A1	WY007-242	11/19/2018	Stream	72
A1	WY017-1	11/19/2018	Stream	31
A1	WY017-2	11/19/2018	Stream	14
A1	WY019-246	11/19/2018	Stream	25
A1	WY020-1	11/19/2018	Stream	35
A1	WY023-1	11/19/2018	Stream	34
A1	WY024-243	11/19/2018	Stream	12
A1	WY025-244	11/19/2018	Stream	40



Marinas

The marina community in Maine only operates for a portion of the year due to adverse winter weather conditions. All marinas in WY are in Prohibited areas.

Table 5. Growing Area WY Marinas

Growing Area Section	Name	Town	Waterbody
P3	Grindel Point Marina	Islesboro	West Penobscot Bay
P5	Tarratine Club	Islesboro	Ames Cove

Agriculture Activities

No significant sources of agricultural pollution were identified during the 2012 shoreline sanitary survey. There are no identified slaughter houses, large scale manure spreading operations or garden centers in the area.

Industrial Pollution

No significant sources of industrial pollution were identified during the 2012 shoreline sanitary survey.

WWTP, Pump Stations and CSO Pollution Areas

Dark Harbor WWTF: The Dark Harbor WWTF MEPDES permit issued in 2016 allows for an average daily flow of 0.0637 mgd and discharges through an 8-inch diameter gravity outfall pipe. The original Prohibited area around the Dark Harbor WWTF was created with traditional intertidal harvest in mind. It was a narrow closure that hugged the shoreline and was found to be ineffective due to the rising interest in aquaculture in this area of Maine. An aquaculture lease could have been situated too close to the WWTF outfall so in September 2018 the prohibited area was reconfigured to better protect public health. A Prohibited area (WY P5) of 1510 acres now surrounds the WWTF sufficiently enclosing the 79-acre dilution zone. The extended Prohibited area boundaries are a result of enforcement discussions with Marine Patrol.

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

There are several recreation areas on Islesboro, but none have been identified as a threat to water quality.

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 2019-2021, water quality has remained consistent. All stations have met compliance both with the number of samples required, but also with the geomean and P90 scores. One investigative station remains in the growing area and at end of year 2021 has 24 of the 30 required samples for classification. This station is expected to have enough samples to be classified at end of year 2022.

Overall water quality and shoreline survey results meet the NSSP Model Ordinance requirements.



Table 6. Area WY Sample Count Tables, 2021

Station	Class	Closed	Open	Investigative	Total	Samples Required	Comments
WY001.00	A		6		6	6	
WY001.50	A		6		6	6	
WY002.00	A		6		6	6	
WY003.00	A		6		6	6	
WY004.00	A		6		6	6	
WY006.00	A		6		6	6	
WY008.00	A		6		6	6	
WY009.50	A		6		6	6	
WY010.00	A		6		6	6	
WY010.50	A		6		6	6	
WY012.00	A		6		6	6	
WY013.00	P	6			6	6	
WY013.20	A		6		6	6	
WY013.70	A		6		6	6	
WY016.00	P	6			6	6	
WY019.00	P	6			6	6	
WY019.50	X			6	6	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.

X = investigative station

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. <https://www.maine.gov/dmr/shellfish-sanitation-management/maps/index.html>