GROWING AREA WL

East Cundy Point, Harpswell to Small Point, Phippsburg

Sanitary Survey Report

2010 - 2022

Final

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02/24/2023

Sanitary Survey Officer signature: _____ Date:____2/24/23_____

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Executive Summary

This is a Sanitary Survey report for Growing Area WL in Sagadahoc County written in compliance with the requirements of the 2019 Model Ordinance and the National Shellfish Sanitation Program. The last Sanitary Survey was written in 2010, with Triennial reports authored in 2013, 2016, and 2019. The next Triennial Report for Growing Area WL is due in 2025, and the next Sanitary Survey will be written in 2034. During the review year, four stations (WL012.00, WK014.00, WK015.00 and WL018.00) were upgraded from Conditionally Approved to Approved, and no stations were downgraded. Two growing area sections in Growing Area WL will be reviewed for a possible upgrade in 2023; Tottman Cove (Phippsburg) and Cape Small Harbor (Phippsburg).

In 2014, hotspot shoreline surveys were conducted in Long Cove (West Bath), Mill Cove (West Bath), Dam Cove (West Bath), New Meadows River (GASSIDs WL009 and WL010; West Bath), Indian Rest (Harpswell), and Winnegance Bay (GASSID WL023; Phippsburg). There were no new actual or potential pollution sources identified during the 2014 hotspot surveys. The remainder of the growing area was surveyed in 2015. During the 2015 shoreline survey, six new actual or potential pollution sources were found which resulted in four new prohibited areas and an expansion of a pre-existing prohibited area in Brighams Cove (West Bath). Seven properties denied access to DMR during the 2015 shoreline survey.

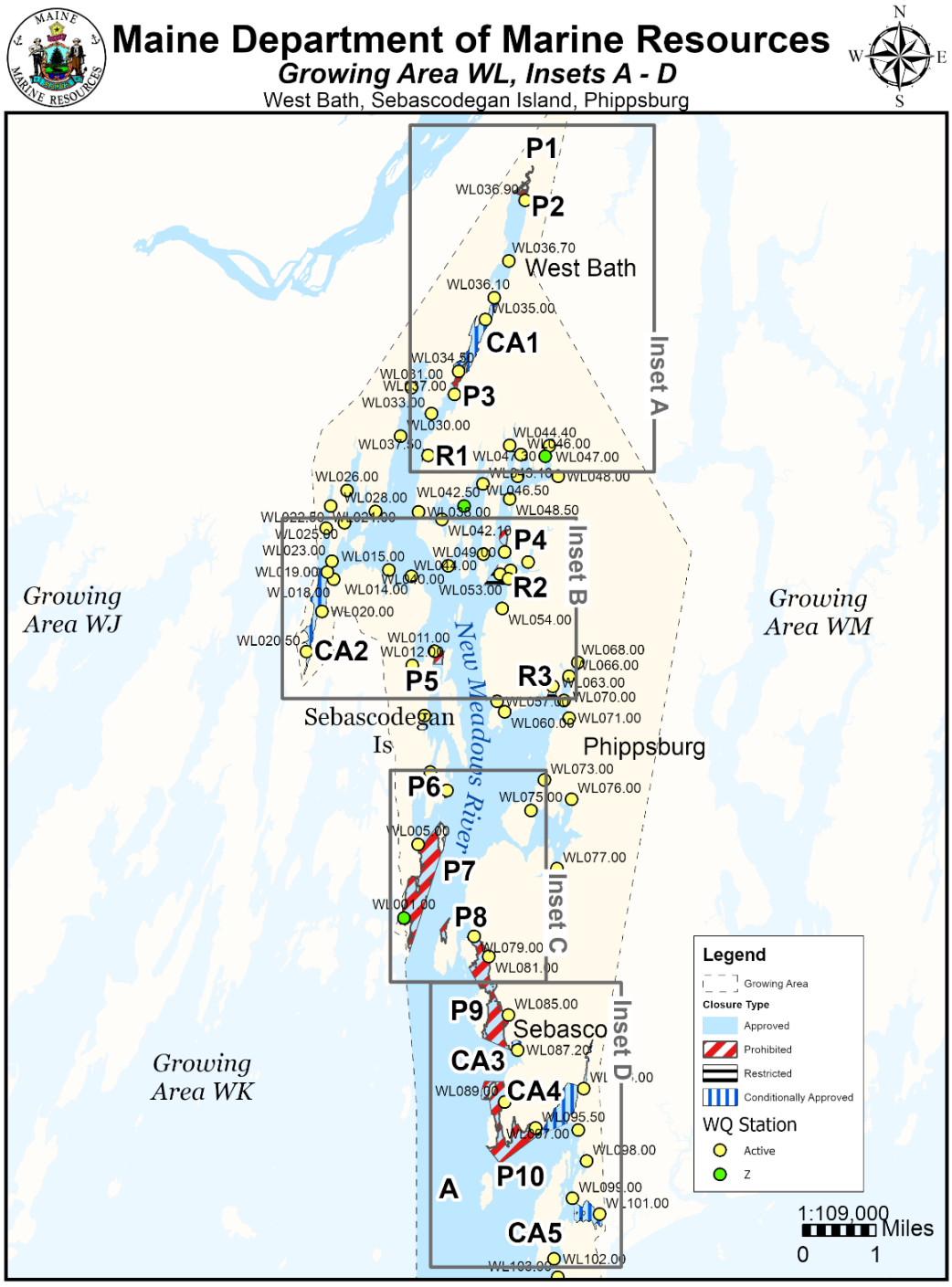
Description of Growing Area

Growing Area WL spans 510 miles of coastline and includes the shores, flats, and waters between East Cundy Point (Cundys Harbor, Harpswell) to Small Point (Phippsburg). This area includes the towns of Brunswick (population 17,033), Harpswell (population 5,031), West Bath (population 8,766) and Phippsburg (population 2,038) (2022 Census). The towns of Harpswell and Phippsburg experience large seasonal fluxes in population with many seasonal residences and summer attractions in both towns. These attractions include public beaches, hiking trails, nature preserves and campgrounds. Brunswick, West Bath, and Phippsburg directly neighbor the major city of Bath, with the town of Harpswell being close by as well. Development along the shoreline is spotty with clusters of homes separated by undeveloped land.

There are no Wastewater Treatment Plants (WWTPs) in Growing Area WL and 13 overboard discharges (OBDs). One OBD was removed from the Growing Area in 2022. The New Meadows River runs through the center of the Growing Area but does not act as a major freshwater influence. There are a total of five aquaculture leases in this Growing Area with four leases licensed for shellfish and one lease licensed for shellfish and kelp. Additionally, there are 63 Limited Purpose Aquaculture (LPAs) license permits in Growing Area WL. 54 LPAs are licensed for shellfish, eight licensed for shellfish and kelp and one license for marine algae. There is one wet storage site located between East Harpswell and Long Island (Harpswell) in the New Meadows River. The activities associated with the aquaculture leases, LPAs, and wet storage site are all monitored in accordance with the Model Ordinance.

Below is the map with 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 WL Overview Map with Active Water Quality Stations



This map is provided as a courtesy. Read the provided legal notice for closure details. Closures are not shown outside of the designated growing area. Maritime navigational aids are for reference only and are not suitable for maritime navigation.

History of Growing Area Classification

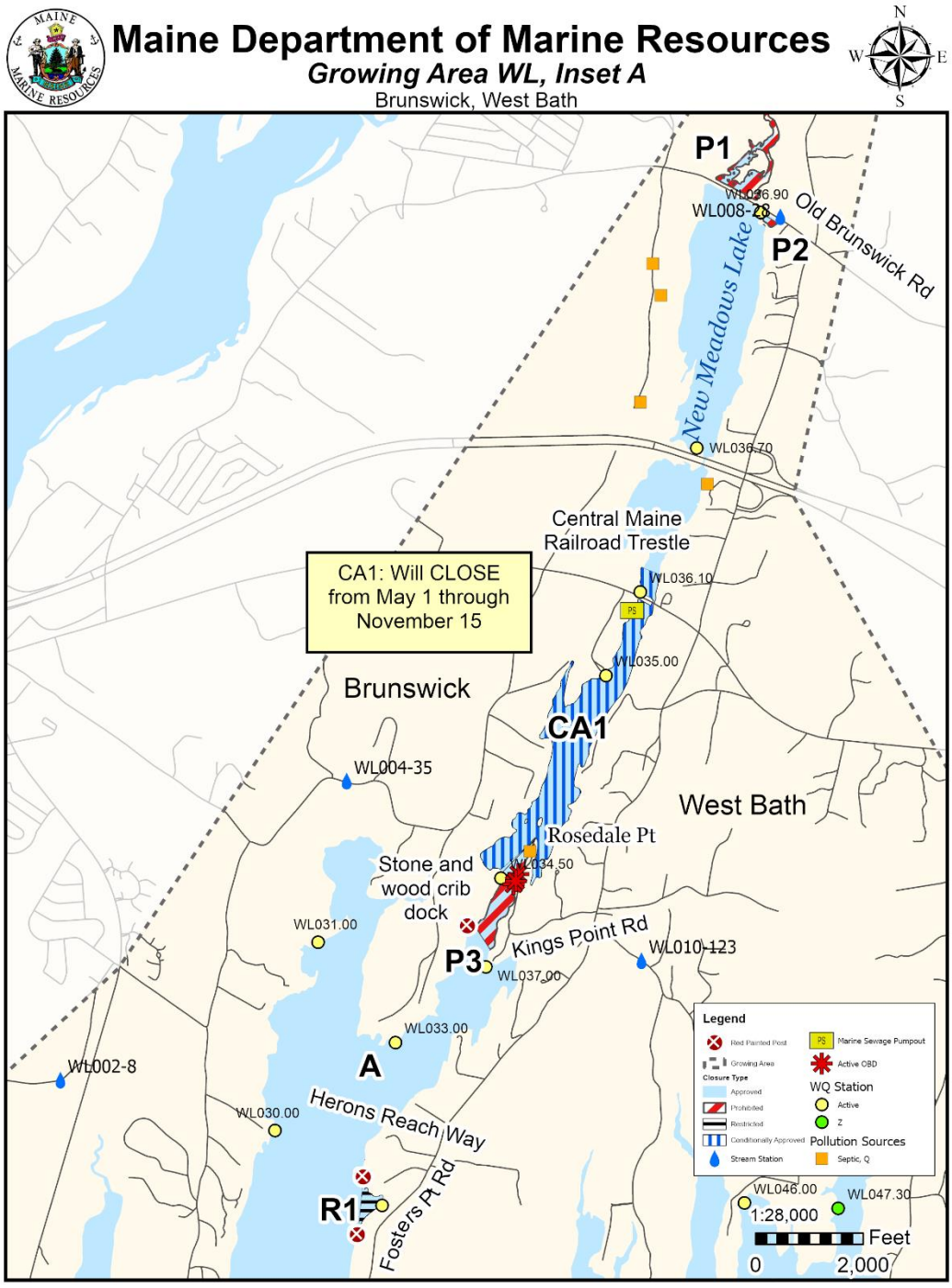
Reclassification addendums to the sanitary survey report are in the DMR central files.

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 250 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 1. Growing Area WL, Inset Map A



This map is provided as a courtesy. Read the provided legal notice for closure details. Closures are not shown outside of the designated growing area. Maritime navigational aids are for reference only and are not suitable for maritime navigation.

Figure 2. Growing Area WL, Inset Map B

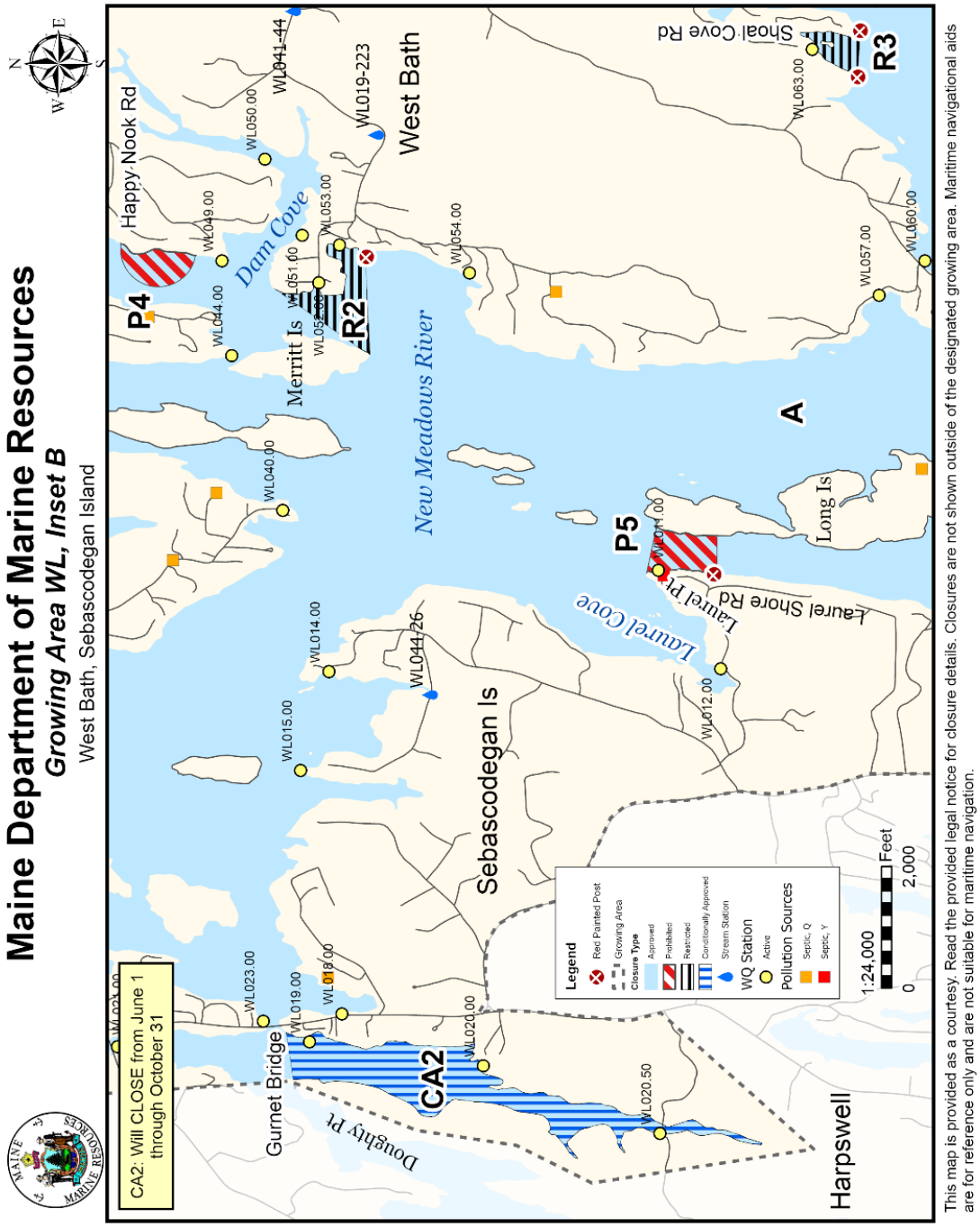
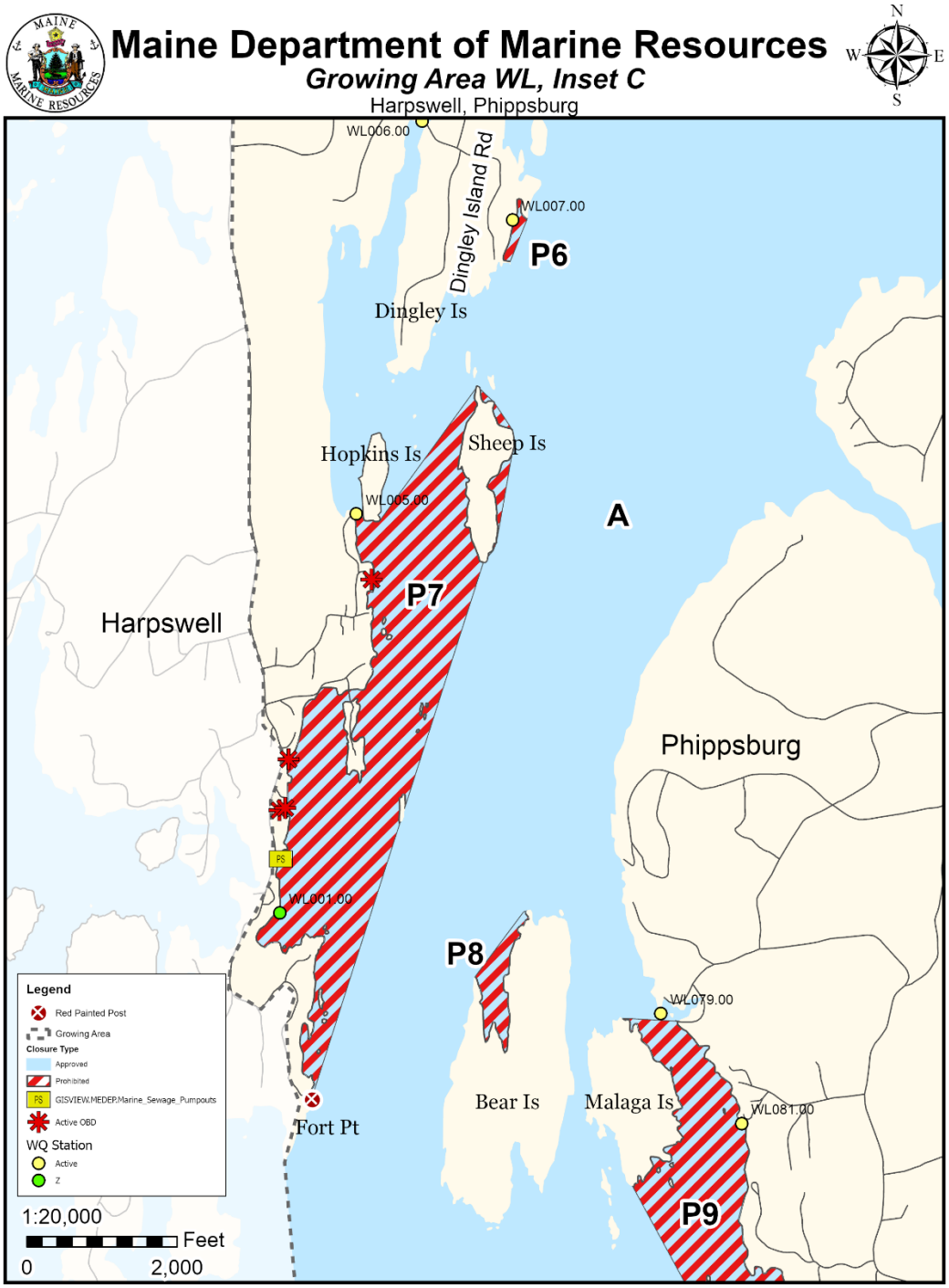
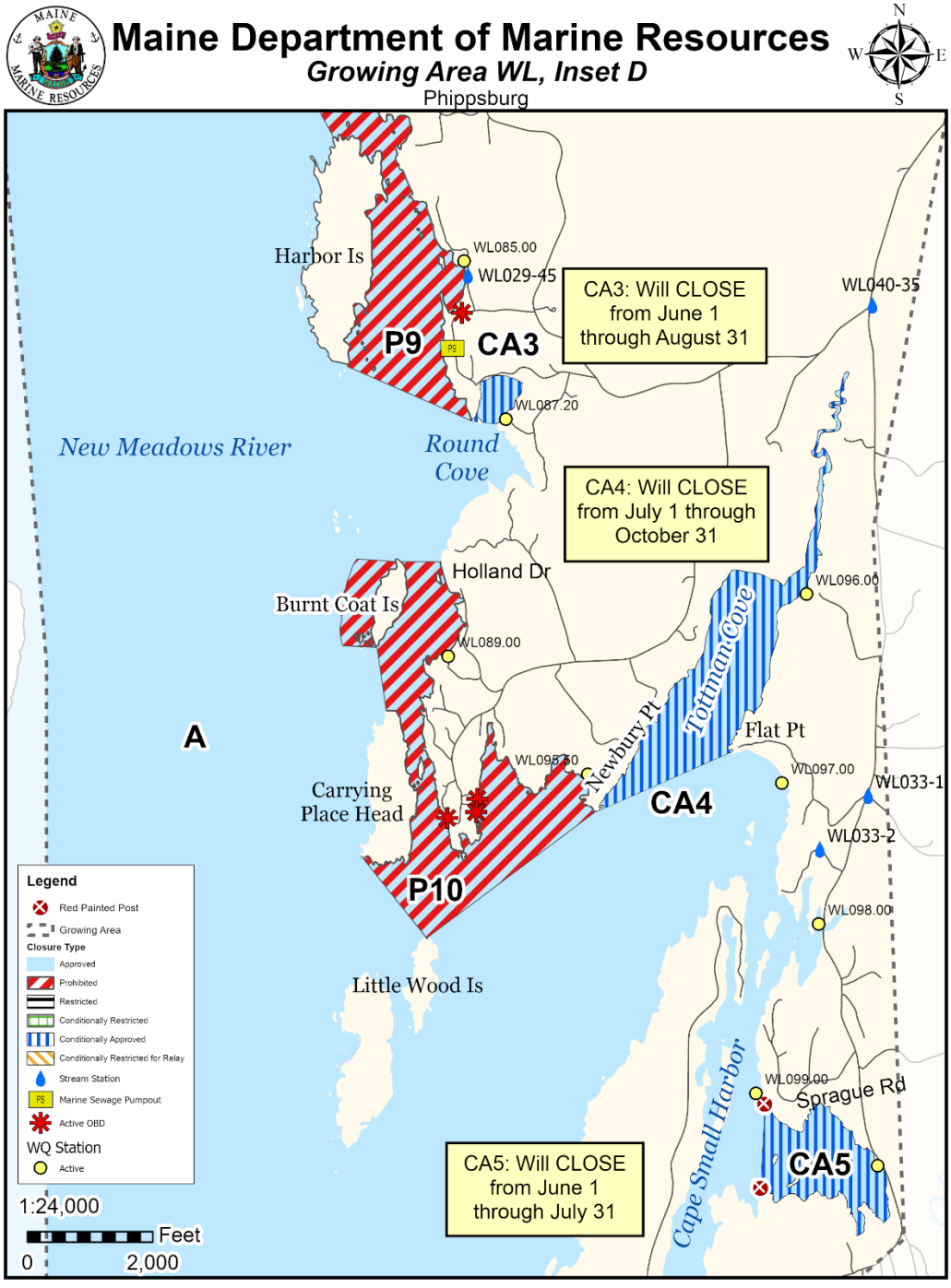


Figure 3. Growing Area WL, Pollution Map C



This map is provided as a courtesy. Read the provided legal notice for closure details. Closures are not shown outside of the designated growing area. Maritime navigational aids are for reference only and are not suitable for maritime navigation.

Figure 4. Growing Area WL, Pollution Map D



This map is provided as a courtesy. Read the provided legal notice for closure details. Closures are not shown outside of the designated growing area. Maritime navigational aids are for reference only and are not suitable for maritime navigation.

State and Federal Licensed Waste Discharge Permits

Overboard Discharges (OBDs)

There are thirteen active OBDs that discharge treated effluent into the waters of Growing Area WL. One OBD was removed during the 2022 review year and five OBDs were removed during the 12-year evaluation period.

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 WL (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).

Growing Area Section	OBD ID	Location	Water Body	Current Prohibited Acreage
WL (P3)	1246 & 9146	West Bath	New Meadows River	13.1
WL (P3)	1562	West Bath	New Meadows River	
WL (P3)	1940	West Bath	New Meadows River	
WL (P6)	4060	Harpswell	New Meadows River	2.1
WL (P7)	2331	Harpswell	New Meadows River	223
WL (P7)	3002	Harpswell	Cundy's Harbor	
WL (P7)	3675	Harpswell	Cundy's Harbor	
WL (P7)	4548	Harpswell	Dingley Cove	
WL (P8)	2415	Phippsburg	New Meadows River	11
WL (P9)	1010	Phippsburg	Sebasco Harbor	189.1
WL (P10)	6665	Phippsburg	Fish House Cove	178.3
WL (P10)	7187	Phippsburg	Small Point Harbor	
WL (P10)	7232	Phippsburg	Small Point Harbor	

National Pollutant Discharge Elimination System (NPDES)

Table 2. NPDES Permitted Discharges

Growing Area Section	Permit ID	Type	Facility	Waterbody
WL (P9)	ME0021237	Minor Outfall	Sebasco Harbor Resort LLC	New Meadows River

There are no WWTPs in Growing Area WL.

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 WL that are considered discharges into the Growing Area and effect water quality.

Table 3. Growing Area WL Residential Pollution Sources.

Growing Area Section	Location ID	Date Surveyed	Direct or Indirect	Problem	Description	Town
P5	WL045-1	2015	Indirect	Y	No cover on tank, Tank full of sewage. Stakes mark square next to it. 41 Laurel Point Rd.	Harpswell

Industrial Pollution

There are no major industrial pollution sites in growing area WL such as chemical plants, steel mills, shipyards, or refineries. There are several seasonal businesses in Phippsburg including Sebasco Harbor Resort, Hermit Island Campground, and the Hamilton Audubon Sanctuary. None of these attractions were identified as pollution sources during the 2015 shoreline survey. All the shellfish areas adjacent to the businesses meet their present area classifications.

Fuel storage tanks for gasoline and diesel were noted at eight locations in the growing area. These tanks are near the shore and have containment walls and booms in the event of an accidental leak 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.

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. The New Meadows Marina, located on the upper New Meadows River in Brunswick, is a full-service marina and does not include any moorings. This marina only operates from May through October due to adverse weather in the winter months. Peak season for New Meadows Marina is from June through September. According to the 2020 marina evaluation, there are ten boats with toilets on the vessel, and no residents reported to live on any of the boats. There is a pump-out facility located in a storage building by the marina and is operated by marina employees. There are toilets onshore in the marina building that are on the town sewer. A dilution calculation was completed to verify the appropriate closure size and is monitored by stations WL035.00 and WL036.10.

Small mooring fields are scattered throughout the Growing Area. Sebasco Harbor Resort, Phippsburg, has a transient mooring space for 25 boats and is located within a Prohibited area larger than 100 acres. Cape Small Harbor, Phippsburg, has a mooring field with no structure attached and Basin Cove, Phippsburg, is a popular anchorage spot for sailboats in the summer months.

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 five 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 WL 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).

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 WL. A total of 196 samples were taken from freshwater streams during the review period (Table 4, Figures 2-5).

Table 4. Stream Samples in Growing Area WL 2008-2016; Scores > 163 cfu/100ml are highlighted in red.

Location ID	Sample Date	Pollution Type	Raw Score
WL016-30	4/24/2012	Stream	42
WL017-31	4/24/2012	Stream	35
WL022-33	4/24/2012	Stream	8
WL041-32	6/4/2012	Stream	740
WL016-30	6/4/2012	Stream	108
WL016-30	6/5/2012	Stream	24
WL041-32	6/5/2012	Stream	160
WL041-32	6/27/2012	Stream	1
WL016-30	6/27/2012	Stream	24
WL041-32	7/30/2012	Stream	340
WL041-32	8/21/2012	Stream	50
WL041-32	9/5/2012	Stream	660
WL041-32	10/2/2012	Stream	1
WL016-30	10/2/2012	Stream	58
WL041-32	10/31/2012	Stream	80
WL016-30	10/31/2012	Stream	200
WL016-30	12/19/2012	Stream	48
WL041-32	12/19/2012	Stream	200
WL017-158	10/8/2014	Stream	>1600
WL017-31	10/8/2014	Stream	>1600
WL019-222	10/8/2014	Stream	560
WL041-43	10/8/2014	Stream	1600
WL019-221	10/8/2014	Stream	800
WL017-157	10/8/2014	Stream	>1600
WL016-30	10/8/2014	Stream	840
WL012-29	10/8/2014	Stream	>1600
WL019-113	10/8/2014	Stream	>1600
WL017-157	10/14/2014	Stream	2
WL017-31	10/14/2014	Stream	100
WL019-113	10/14/2014	Stream	20
WL012-29	10/14/2014	Stream	4
WL016-30	10/14/2014	Stream	16
WL017-158	10/14/2014	Stream	11

Location ID	Sample Date	Pollution Type	Raw Score
WL019-221	10/14/2014	Stream	40
WL019-222	10/14/2014	Stream	1000
WL043-26	10/19/2014	Stream	144
WL043-27	10/19/2014	Stream	460
WL043-28	10/19/2014	Stream	120
WL043-30	10/19/2014	Stream	120
WL043-29	10/19/2014	Stream	98
WL043-26	10/22/2014	Stream	200
WL043-27	10/22/2014	Stream	220
WL043-28	10/22/2014	Stream	54
WL043-29	10/22/2014	Stream	100
WL043-30	10/22/2014	Stream	380
WL026-140	6/22/2015	Stream	44
WL023-7	6/22/2015	Stream	112
WL034-1	6/22/2015	Stream	76
WL040-35	6/22/2015	Stream	340
WL035-36	6/22/2015	Stream	300
WL034-2	6/22/2015	Stream	100
WL026-139	6/22/2015	Stream	300
WL033-2	6/22/2015	Stream	116
WL033-1	6/22/2015	Stream	54
WL034-3	6/22/2015	Stream	31
WL041-46	6/23/2015	Stream	>1600
WL022-33	6/23/2015	Stream	740
WL017-31	6/23/2015	Stream	38
WL016-30	6/23/2015	Stream	1580
WL022-34	6/23/2015	Stream	46
WL021-47	6/23/2015	Stream	560
WL019-223	6/23/2015	Stream	840
WL004-27	6/23/2015	Stream	240
WL041-45	6/23/2015	Stream	>1600
WL041-44	6/23/2015	Stream	>1600
WL017-159	6/23/2015	Stream	13
WL018-132	6/23/2015	Stream	142
WL043-26	6/23/2015	Stream	>1600
WL043-27	6/23/2015	Stream	<2
WL004-34	6/23/2015	Stream	1260
WL004-35	6/23/2015	Stream	40
WL018-132	7/14/2015	Stream	2
WL017-159	7/14/2015	Stream	<2

Location ID	Sample Date	Pollution Type	Raw Score
WL023-7	7/14/2015	Stream	20
WL019-223	7/14/2015	Stream	104
WL016-30	7/14/2015	Stream	<2
WL021-47	7/14/2015	Stream	16
WL022-34	7/14/2015	Stream	<2
WL041-44	7/14/2015	Stream	46
WL017-31	7/14/2015	Stream	4
WL022-33	7/14/2015	Stream	<2
WL012-29	7/14/2015	Stream	220
WL041-46	7/14/2015	Stream	9.1
WL041-45	7/14/2015	Stream	112
WL035-36	7/21/2015	Stream	700
WL033-1	7/21/2015	Stream	88
WL033-2	7/21/2015	Stream	10
WL034-2	7/21/2015	Stream	96
WL034-1	7/21/2015	Stream	1580
WL004-35	7/21/2015	Stream	44
WL043-27	7/21/2015	Stream	42
WL043-26	7/21/2015	Stream	1020
WL023-7	7/21/2015	Stream	42
WL026-140	7/21/2015	Stream	31
WL026-139	7/21/2015	Stream	24
WL004-27	7/21/2015	Stream	11
WL043-26	8/24/2015	Stream	80
WL043-27	8/24/2015	Stream	260
WL012-29	8/25/2015	Stream	1360
WL035-36	8/25/2015	Stream	640
WL017-31	8/25/2015	Stream	880
WL041-44	8/25/2015	Stream	13
WL033-2	8/25/2015	Stream	740
WL033-1	8/25/2015	Stream	68
WL034-3	8/25/2015	Stream	440
WL034-2	8/25/2015	Stream	24
WL041- 46	8/25/2015	Stream	600
WL019-223	8/25/2015	Stream	98
WL041-45	8/25/2015	Stream	580
WL004-34	8/25/2015	Stream	420
WL004-35	8/25/2015	Stream	240
WL022-34	9/1/2015	Stream	11
WL023-7	9/1/2015	Stream	7.3

Location ID	Sample Date	Pollution Type	Raw Score
WL026-139	9/1/2015	Stream	480
WL022-33	9/1/2015	Stream	24
WL004-34	9/7/2015	Stream	31
WL004-35	9/7/2015	Stream	280
WL043-26	9/7/2015	Stream	60
WL016-30	9/7/2015	Stream	42
WL017-31	9/7/2015	Stream	52
WL012-29	9/7/2015	Stream	54
WL018-132	9/7/2015	Stream	<2
WL019-223	9/8/2015	Stream	220
WL023-7	9/8/2015	Stream	20
WL022-34	9/8/2015	Stream	54
WL041-44	9/8/2015	Stream	8
WL022-33	9/8/2015	Stream	29
WL026-139	9/8/2015	Stream	120
WL034-3	9/15/2015	Stream	260
WL035-36	9/15/2015	Stream	>1600
WL033-2	9/15/2015	Stream	60
WL033-1	9/15/2015	Stream	1560
WL026-143	5/15/2017	Stream	1.9
WL002-8	5/3/2021	Stream	24
WL002-8	6/2/2021	Stream	18
WL002-8	9/7/2021	Stream	1700
WL002-8	11/22/2021	Stream	1700
WL004-35	5/3/2021	Stream	9.1
WL004-35	6/2/2021	Stream	27.3
WL004-35	9/7/2021	Stream	108
WL004-35	11/22/2021	Stream	16
WL008-28	4/13/2021	Stream	82
WL008-28	5/19/2021	Stream	1180
WL008-28	10/4/2021	Stream	320
WL008-28	10/25/2021	Stream	134
WL010-123	4/13/2021	Stream	1.9
WL010-123	5/19/2021	Stream	92
WL010-123	10/4/2021	Stream	56
WL010-123	10/25/2021	Stream	26
WL012-29	10/4/2021	Stream	180
WL012-29	10/25/2021	Stream	160
WL016-30	4/13/2021	Stream	7.3
WL016-30	5/19/2021	Stream	1.9

Location ID	Sample Date	Pollution Type	Raw Score
WL016-30	10/4/2021	Stream	36
WL016-30	10/25/2021	Stream	4
WL017-31	4/13/2021	Stream	2
WL017-31	5/19/2021	Stream	8
WL017-31	10/4/2021	Stream	88
WL017-31	10/25/2021	Stream	11
WL019-223	4/13/2021	Stream	1.9
WL019-223	5/19/2021	Stream	1.9
WL019-223	10/4/2021	Stream	20
WL019-223	10/25/2021	Stream	27
WL023-7	4/13/2021	Stream	1.9
WL023-7	5/19/2021	Stream	2
WL023-7	10/4/2021	Stream	14
WL023-7	10/25/2021	Stream	2
WL026-140	4/13/2021	Stream	2
WL026-140	5/19/2021	Stream	1.9
WL026-140	10/4/2021	Stream	11
WL026-140	10/25/2021	Stream	11
WL029-45	4/13/2021	Stream	1.9
WL029-45	5/19/2021	Stream	1.9
WL029-45	10/4/2021	Stream	22
WL029-45	10/25/2021	Stream	2
WL033-1	4/13/2021	Stream	1.9
WL033-1	10/4/2021	Stream	18
WL033-1	10/25/2021	Stream	16.4
WL033-2	4/13/2021	Stream	1.9
WL033-2	10/4/2021	Stream	22
WL033-2	10/25/2021	Stream	18.2
WL040-35	4/13/2021	Stream	1.9
WL040-35	5/19/2021	Stream	2
WL040-35	10/4/2021	Stream	24
WL040-35	10/25/2021	Stream	8
WL041-44	4/13/2021	Stream	4
WL041-44	5/19/2021	Stream	60
WL041-44	10/4/2021	Stream	98
WL041-44	10/25/2021	Stream	64
WL041-46	4/13/2021	Stream	1.9
WL041-46	10/4/2021	Stream	80
WL041-46	10/25/2021	Stream	29
WL044-26	5/3/2021	Stream	3.6

Location ID	Sample Date	Pollution Type	Raw Score
WL044-26	6/2/2021	Stream	20
WL044-26	9/7/2021	Stream	60
WL044-26	11/22/2021	Stream	78

Agricultural Activities

There are no large-scale agriculture activities in Growing Area WL, but there are multiple small family operated farms. Runoff from heavy rainfall events can quickly transport animal waste and fertilizers to the watershed causing elevated fecal scores which can result in shellfish closures.

There is a small, organic farm located on Thomas Bay, Brunswick and grows organic vegetables. There are approximately 30 laying hens and some rabbits living on this farm as well. There is another farm in Brunswick, located on the upper portion of the New Meadows Lake, which has 20 to 30 heads of cattle. The cattle are pastured on the west side of Peterson Labem which runs parallel to New Meadows Lake and is sloped away from the shoreline of the lake. There is another pasture area on the east side of the road (adjacent to lake shore), which is rarely used for grazing (up to one week per year). Both pasture areas have buffer fencing that exclude cattle from low areas and gullies which may collect run-off from heavy rainstorms. Grass inside the buffer areas is not mowed, in order to slow water run-off. This farm is not a likely source of pollution to the New Meadows Lake.

In Phippsburg, there is a small, family-owned farm located near the head of Tottman Cove. This farm grows and sells organic produce, eggs, and flowers.

Wildlife Activity

There is an equestrian training and boarding center located in the headwaters of the New Meadows River in Brunswick. The facility has two barns, with boarding room for up to 20 horses and an outdoor exercise arena. The facility is located well over 500 feet away from the shoreline of the upper New Meadows marsh area (prohibited area) and has no streams draining the property to shore. There is also a buffer of vegetation between the property and the marsh.

Wildlife, especially wildfowl, can be occasionally observed in small numbers throughout the entire New Meadows River Watershed. Additionally, the marsh located north of New Meadows Lake has been identified as a suitable shorebird and wading bird habitat. The entire marsh area, as well as the upper portion of the New Meadows Lake is currently classified as prohibited.

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

There are three recreational areas in growing area WL that have the potential to impact water quality due to increased shore use during the summer months. Hermit Island Campground is located on a 255-acre peninsula in Small Point, Phippsburg. This campground has 225 campsites, six beach access points, hiking trails, and a small marina and wharf. The campground does not allow pets. Hermit Island has flush toilets and dry vault toilets on site. A portion of the eastern shore of Hermit Island is classified as conditionally approved based on season and is closed from June 1st through July 31st.

The Meadowbrook campground is located at the head of Brighams Cove, on Winnegance Bay in Phippsburg. It offers over 100 campsites, with power and water hookups; the campground also has flush toilets on site. The campsites are not located directly on the shore, and the campsite does not provide shore access to its guests. Pets are allowed at this campsite and with limited shorefront access, fecal pollution from animal waste is not a concern. Additionally, the head of Brighams Cove is currently classified as prohibited.

Thomas Point Beach and Campground is located on Thomas Bay in Brunswick. This facility offers 64 campsites from mid-May to September, as well as picnic spots, a playground, and grounds for large gatherings (concerts, festivals, etc). Sanitation facilities are available on site for camping guests and day users; no sink or shower waste discharge onto the ground is allowed on the property, per park regulations. The sanitation facilities are maintained throughout the summer, and the septic tanks are pumped regularly. Pets less than 25 pounds are allowed at the campsites; however, no pets are permitted on the beach or any other public area of the park; immediate pet waste pick-up is required. Based on the current review, this area does not require any action to protect public health.

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 nine 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 WL is approximately 37 inches and the precipitation is not evenly distributed throughout the year. The wettest months are generally April and November with August is generally being 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 area WL.

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

The New Meadows River drains into Growing Area WL. However, temperature and salinity data indicates the New Meadows River functions more like a marine system than a freshwater river (State of the New Meadows River Report, 2002). Water quality in the river meets Approved standards and there are no conditional management plans based on river discharge/flow. There is one prohibited area in the river where licensed overboard discharges and localized pollution from the New Meadows Marina are present. The New Meadows River originates in a low-lying marsh area bordered by woods and fields that slope down to the marsh. Fresh water volume to the upper lake is minimal and flows through the lower lake, through a sluiceway and into the tidal main channel of the river (State of the New Meadows River Report, 2002). River volumes exhibits seasonal variation, with the highest flows during spring snowmelt and fall rainfall.

Hydrographic Influence

Water circulation in Casco Bay is dominated by tides. The tidal range in Casco Bay is nine feet. Tides are caused by the gravitational effects of the moon and sun on the ocean; other influences are heavy rainfall, low barometric pressure and strong onshore winds which will increase tides. Tide levels fluctuate during the month based on the positions of the sun, moon and earth. These fluctuations and the speed and direction of the tidal currents constantly change during a tidal cycle. Tidal currents have

the greatest energy when water is pushed in and out of bays and channels during the highest and lowest tide levels. Growing area WL is subject to a semidiurnal tidal cycle with two high tides and two low tides per day. The tidal cycle is 12 hours and 25 minutes long, so that high and low tides are 50 minutes later each day.

The CBEP and a study by True and Manning describe the circulation in Casco Bay as predominantly counterclockwise in direction. The greatest input of ocean water in eastern Casco Bay is through Broad Sound (just east of Great Chebeague Island) where the circulation pushes water into Middle Bay, Maquoit Bay and circulates in a westerly direction down to where it exits Casco Bay through Portland Channel. Broad Sound is the deepest channel in Casco Bay where colder, more saline water enters the inner Bay. When there is no wind and only tidal force on the currents, there is equal input from all channels into the inner bay from Casco Bay. The tidal flow shows minor variation in direction with depth. The True and Manning study further illustrated that circulation of the waters with Casco Bay can be affected by offshore winds, freshwater runoff from the Kennebec/Androscoggin River (especially in the spring) and the Western Maine Coastal Current (WMCC), depending on its location. The water in Middle Bay and Maquoit Bay is piled against the western shore which contributes to a southwesterly flow along the Yarmouth and Falmouth shores.

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 69 active water sampling sites in Growing Area WL and three investigative stations which do not currently have enough data to calculate a P90 score. It is recognized that access, icing, and safety considerations prevent some stations from being sampled on scheduled dates. Currently most stations in Growing Area WL meet their current NSSP classification standard, with the singular exception of WL087.20. Two water quality stations (WL096.00 and WL101.00) have water quality that meets the standards for Approved harvest and will be evaluated for an upgrade in 2023.

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). The percent change in P90 from 2021 to 2022 was calculated and

seven stations showed a substantial increase (percent change of 50 or higher) in P90 score. All seven of these stations are classified as "Approved" and have scores well below the maximum P90 of 31 required to maintain the "Approved" classification standard. Overall, the water quality in growing area WL 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	GM	SDV	MAX	P90	Min_Date
WL005.00	P	30	2.6	0.29	24	6.2	9/25/2017
WL006.00	A	30	3	0.36	62	8.8	9/25/2017
WL007.00	P	30	2.7	0.32	33	7.1	5/7/2018
WL010.00	A	30	2.6	0.29	20	6.3	9/25/2017
WL011.00	P	30	3.1	0.4	66	10.4	9/25/2017
WL012.00	A	30	3.9	0.44	98.2	14.5	10/9/2019
WL014.00	A	30	4.5	0.54	104	22.9	9/23/2019
WL015.00	A	30	3	0.37	34	9.3	5/1/2019
WL018.00	A	30	3.5	0.36	24	10.1	8/27/2019
WL021.00	A	30	3.4	0.38	44	10.7	9/25/2017
WL022.50	A	30	3.8	0.44	51	14.2	9/25/2017
WL023.00	A	30	2.2	0.19	11	4	9/25/2017
WL025.00	A	30	3.3	0.35	46	9.4	9/25/2017
WL026.00	A	30	3.6	0.33	28	9.8	9/25/2017
WL028.00	A	30	2.4	0.21	10	4.6	9/25/2017
WL030.00	A	30	2.6	0.27	25	6	9/25/2017
WL031.00	A	30	3.2	0.36	35	9.6	9/25/2017
WL033.00	A	30	3.2	0.32	20	8.3	9/25/2017
WL034.50	P	30	2.4	0.2	10	4.4	9/25/2017
WL036.70	A	30	2.6	0.34	36	7.2	9/25/2017
WL036.90	A	30	4.9	0.55	180	25.2	11/20/2017
WL037.00	A	30	3.4	0.35	31	10	5/21/2018
WL037.50	R	30	4	0.38	40	12.7	6/13/2018
WL038.00	A	30	2.4	0.21	10	4.5	5/21/2018
WL040.00	A	30	2.2	0.18	12	3.8	5/21/2018
WL042.10	A	30	2.4	0.24	18.1	4.9	6/13/2018
WL043.10	A	30	2.4	0.25	20	5.2	5/21/2018
WL044.00	A	30	2.2	0.15	8	3.4	6/13/2018
WL044.40	A	30	2.4	0.2	10	4.5	5/21/2018
WL046.00	A	30	2.8	0.22	10	5.5	6/13/2018
WL046.50	A	30	2.2	0.17	8	3.8	5/21/2018
WL047.00	A	30	3	0.27	15	6.8	5/21/2018
WL048.00	A	30	3	0.31	27	7.5	7/11/2018

Station	Class	Count	GM	SDV	MAX	P90	Min_Date
WL048.50	A	30	2.2	0.14	6	3.4	5/21/2018
WL049.00	A	30	2.2	0.16	7.3	3.6	6/13/2018
WL050.00	A	30	2.2	0.13	6	3.3	5/21/2018
WL051.00	A	30	2.2	0.19	14	3.9	5/21/2018
WL052.00	R	30	2.6	0.32	44	6.8	5/21/2018
WL053.00	R	30	2.1	0.15	6	3.3	5/21/2018
WL054.00	A	30	2.1	0.17	14	3.7	5/21/2018
WL057.00	A	30	2	0.19	22	3.6	5/21/2018
WL060.00	A	30	2.1	0.14	6	3.3	5/21/2018
WL063.00	R	30	2.1	0.15	10	3.3	5/21/2018
WL066.00	A	30	2.4	0.21	15	4.5	5/21/2018
WL068.00	A	30	3.1	0.35	22	9.1	5/21/2018
WL070.00	A	30	3.1	0.39	96	10.1	12/18/2017
WL071.00	A	30	3.6	0.49	100	15.6	12/6/2017
WL073.00	A	30	5	0.55	200	26.3	12/18/2017
WL075.00	A	30	4.1	0.54	126	20.6	12/18/2017
WL076.00	A	30	4.1	0.47	88	16.6	12/18/2017
WL077.00	A	30	3.7	0.46	54	14.7	11/29/2017
WL079.00	A	30	3.2	0.41	46	10.8	12/18/2017
WL081.00	P	30	3.8	0.42	48	13.3	12/18/2017
WL085.00	P	30	4.3	0.52	112	20.6	12/18/2017
WL089.00	P	30	3.5	0.51	300	16.6	12/18/2017
WL095.50	P	30	3.8	0.46	76	15.3	12/18/2017
WL097.00	A	30	2.5	0.33	26	6.9	12/18/2017
WL098.00	A	30	3.8	0.43	70	13.6	12/18/2017
WL099.00	A	30	3.4	0.42	70	11.7	12/18/2017
WL102.00	A	30	3.2	0.47	126	12.9	12/18/2017
WL103.00	A	30	2.6	0.35	44	7.7	12/18/2017

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.

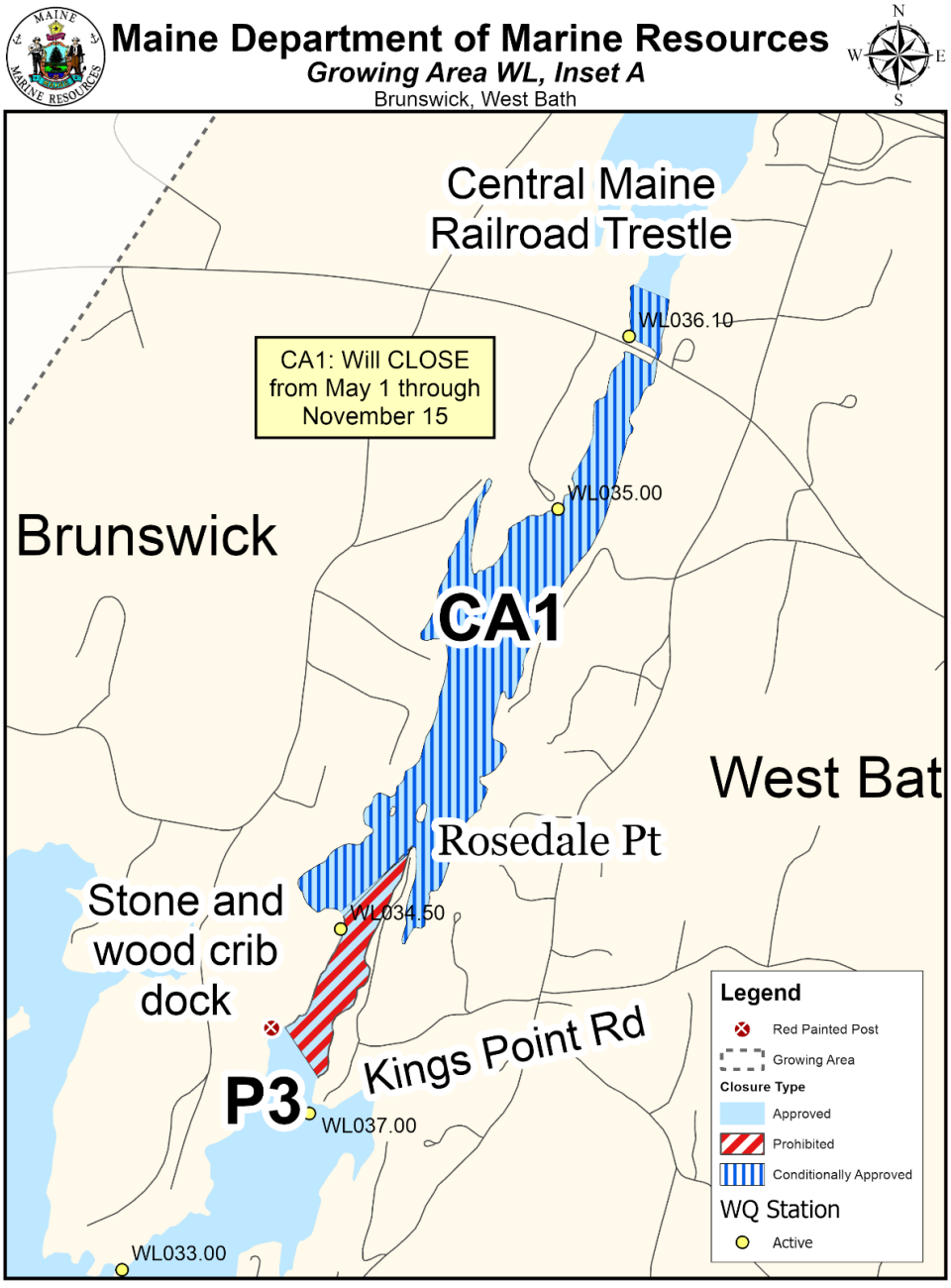
CAMP Reviews, Inspection Reports, and Performance Standards

Annual Review of CA1 New Meadows River, West Bath, Conditional Area Management Plan

Scope

Growing Area Section CA1 in the New Meadows River in West Bath is classified as Conditionally Approved due to seasonal pollution. It is unlawful to dig, take possess any clams, quahogs, oysters, mussels or whole or roe-on scallops from the shores, flats, and waters in this area from May 1st through November 15th. This area is south of a line beginning at the Central Maine Railroad trestle; and north of a line beginning at the north tip of Rosedale Point (West Bath) then running southwest to a large stone and wood crib dock on the west shore (Brunswick). This Conditional Area is monitored by stations WL035.00 and WL036.10.

Figure 5. CA1 New Meadows River, West Bath Conditionally Approved area



Compliance with management plan

The New Meadows River Conditional Area remains in compliance with the current conditional area management plan (CAMP). Marine Patrol and/or the local Shellfish Warden monitor illegal harvesting

activity for this area during the closed period. See CAMP annual reviews for information on annual compliance with the current CAMP.

Adequacy of reporting and cooperation of involved persons
No reporting is required for this Conditional Area.

Compliance with Growing Area criteria
The area continues to meet the criteria for Approved harvest during the Open status based on P90 calculations and no other known sources of pollution in the area Table 6).

Water sampling compliance history
All Conditionally Approved stations were sampled a minimum of six times in the Open status (Table11). Additional collections occurred during closed status to monitor seasonal impacts.

Analysis-Recommendations
The New Meadows Conditionally Approved area continues to meet the standards for seasonal Approved harvest and remains in compliance with the CAMP.

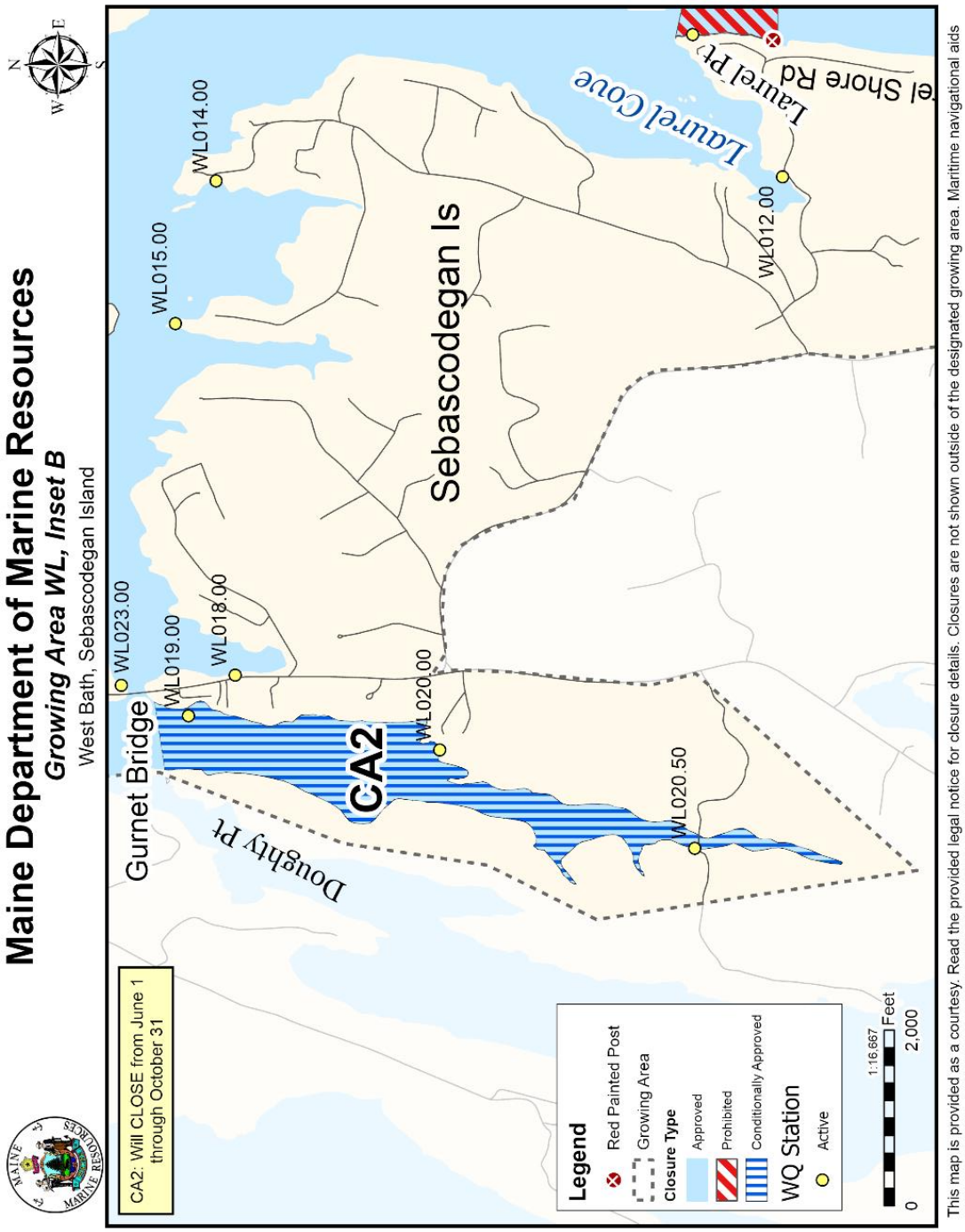
Table 6. P90s for Conditional Area stations calculated using data from the open status. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
WL035.00	CA	30	2.2	0.19	18.2	3.9	1/21/2015
WL036.10	CA	30	2.3	0.27	31	5.2	4/27/2015

Annual Review of CA2 Doughty Cove, Harpswell, Conditional Area Management Plan

Scope
Doughty Cove, Harpswell is classified as Conditionally Approved because of seasonal pollution. This area is south of a line beginning at the northern most tip of Doughty Point running east to southwest side of the Gurnet bridge. This area is closed to harvesting from June 1st through October 31st and is monitored by stations Wl019.00, WL020.00 and WL020.50.

Figure 6. CA2 Doughty Cove, Harpswell Conditional Area



Compliance with management plan
The Doughty Cove Conditional Area remains in compliance with the current CAMP. See CAMP annual reviews for information on annual compliance with the current CAMP.

Adequacy of reporting and cooperation of involved persons
No reporting is required for this Conditional Area.

Compliance with Approved growing area criteria
The area continues to meet the criteria for Approved harvest during the open status of November 1st through April 30 based on P90 calculations (Table 7).

Water sampling compliance history
Water samples are collected at least monthly during the open status and throughout the year (Table 10). The P90 value meets the standard for Approved harvest during the open status (Table 7).

Analysis-Recommendations
The Doughty Cove Conditionally Approved area continues to meet the standards for seasonal Approved harvest during the open status and remains in compliance with the CAMP. Recommend continued water quality monitoring and open communication with the harbor master to ensure continued compliance with the CAMP.

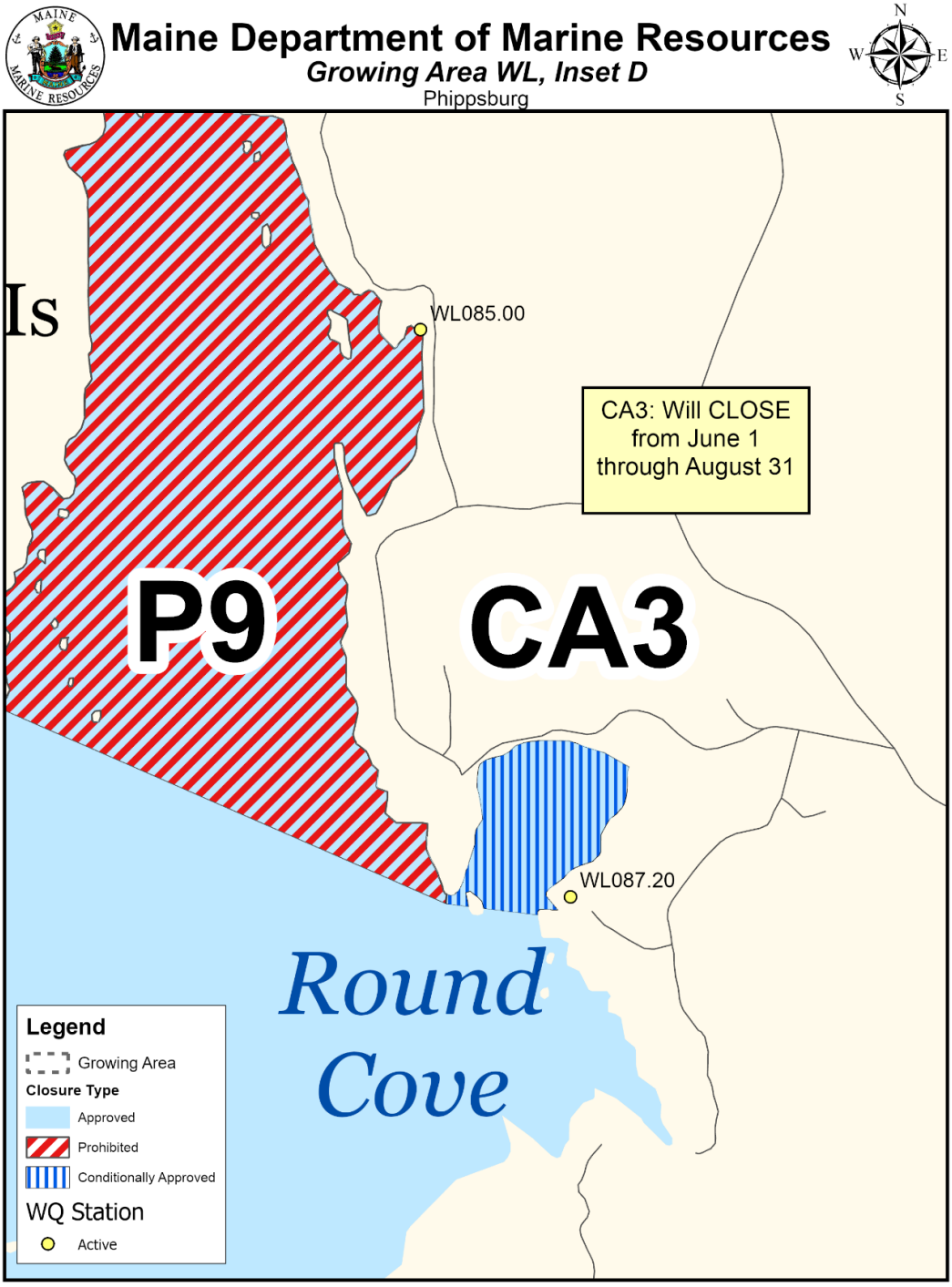
Table 7. P90s for Conditional Area stations calculated using data from the open status. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
WL019.00	CA	30	3.4	0.44	34.5	12.8	11/6/2017
WL020.00	CA	30	4.3	0.64	340	29	11/6/2017
WL020.50	CA	30	4.5	0.59	120	26.2	11/6/2017

Annual Review of CA3 Round Cove, Phippsburg, Conditional Area Management Plan

Scope
Round Cove, Phippsburg, is classified as Conditionally Approved because of seasonal pollution and is closed to harvest from June 1st through August 31st. This area is north of a line beginning at the point of land at the end of Shell Lane running southeast to the opposite shore at the mount of Round Cove. The Round Cove Conditional Area is monitored by station WL087.20.

Figure 8. CA3 Round Cove, Phippsburg Conditional Area



This map is provided as a courtesy. Read the provided legal notice for closure details. Closures are not shown outside of the designated growing area. Maritime navigational aids are for reference only and are not suitable for maritime navigation.

Compliance with management plan
The Round Cove Conditional Area is not in compliance with the CAMP because the P90 score in open status (40.2) is above the maximum value of 31 (Table 8). See CAMP annual reviews for additional information on annual compliance with the current CAMP.

Adequacy of reporting and cooperation of involved persons
No reporting is required for this Conditional Area.

Compliance with approved growing area criteria
The area does not currently meet the criteria for Approved harvest during the open status of September 1st through May 31st based on P90 calculations (Table 8).

Water sampling compliance history
Water samples are collected at least monthly during the open status and throughout the year (Table 11).

Analysis-Recommendations
The Round Cove Conditionally Approved area does to meet the standards for seasonal Approved harvest. The CAMP needs to be reviewed to either expand the closure period or downgrade the station.

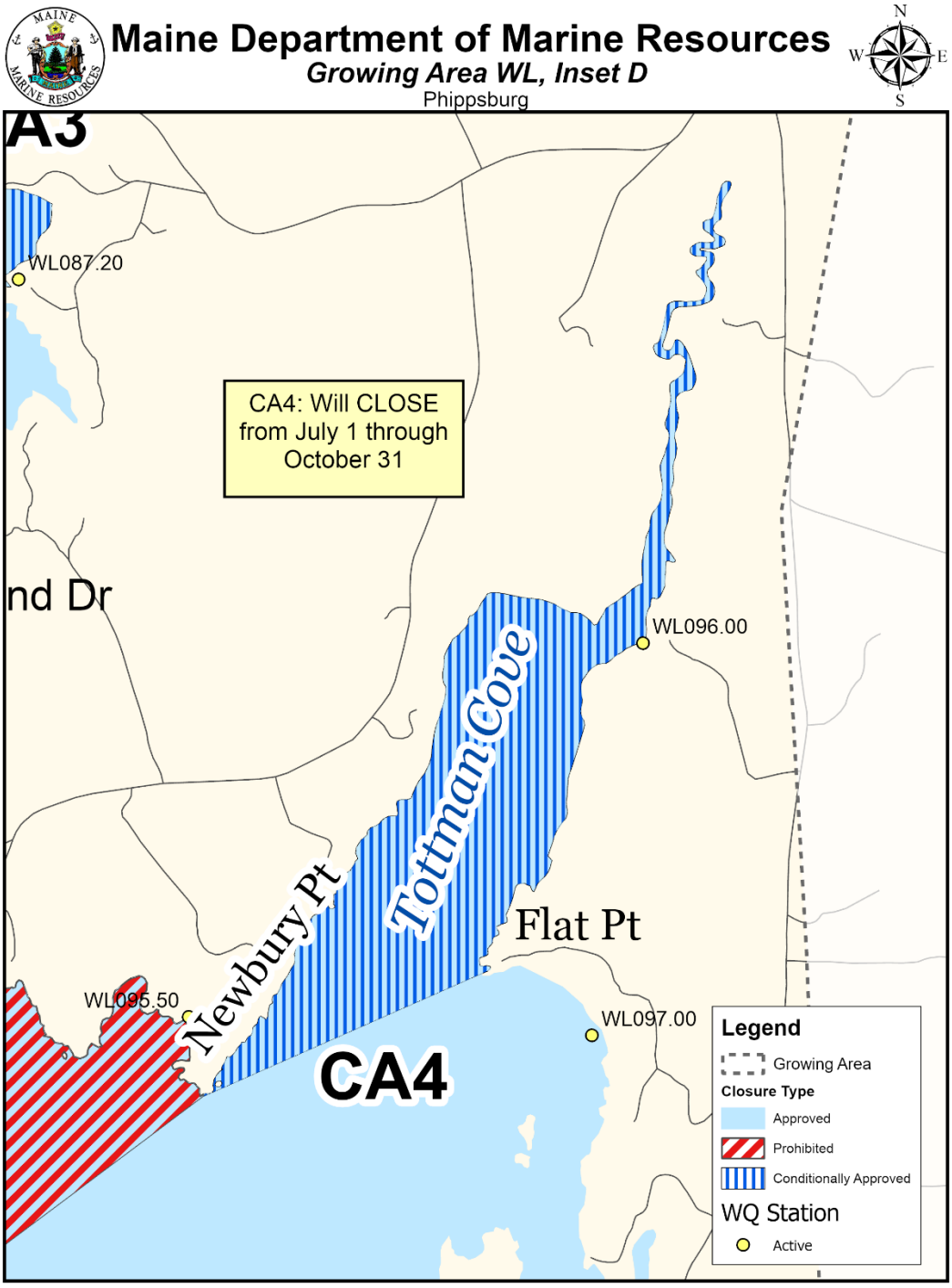
Table 8. P90s for Conditional Area stations calculated using data from the open status. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
WL087.20	CA	30	5.1	0.69	300	40.2	9/9/2015

Annual Review of CA4 Tottman Cove, Phippsburg, Conditional Area Management Plan

Scope
Growing Area Section CA4 in Tottman Cove, Phippsburg is classified as Conditionally Approved due to seasonal pollution. It is unlawful to dig, take possess any clams, quahogs, oysters, mussels or whole or roe-on scallops from the shores, flats and waters in this area from July 1st through October 31st. This area is north of a line beginning at the south tip of Newbury Point, then running northeast to the west tip of Flat Point. The Tottman Cove Conditional Area is monitored by station WL096.00.

Figure 9. CA4 Tottman Cove, Phippsburg Conditionally Approved area



Compliance with management plan
The Tottman Cove Conditional Area remains in compliance with the current CAMP. Marine Patrol and/or the local Shellfish Warden monitor illegal harvesting activity for this area during the closed period. See CAMP annual reviews for information on annual compliance with the current CAMP.

Adequacy of reporting and cooperation of involved persons
No reporting is required for this Conditional Area.

Compliance with Growing Area criteria
The area continues to meet the criteria for Approved harvest during the Open status based on P90 calculations and no other known sources of pollution in the area (Table 9).

Water sampling compliance history
All Conditionally Approved stations were sampled a minimum of six times in the Open status (Table 11). Additional collections occurred during closed status to monitor seasonal impacts.

Analysis-Recommendations
The Tottman Cove Conditionally Approved area continues to meet the standards for seasonal Approved harvest and remains in compliance with the CAMP. Water quality in this area is improving and station WL096.00 should be reviewed for a possible upgrade in 2023.

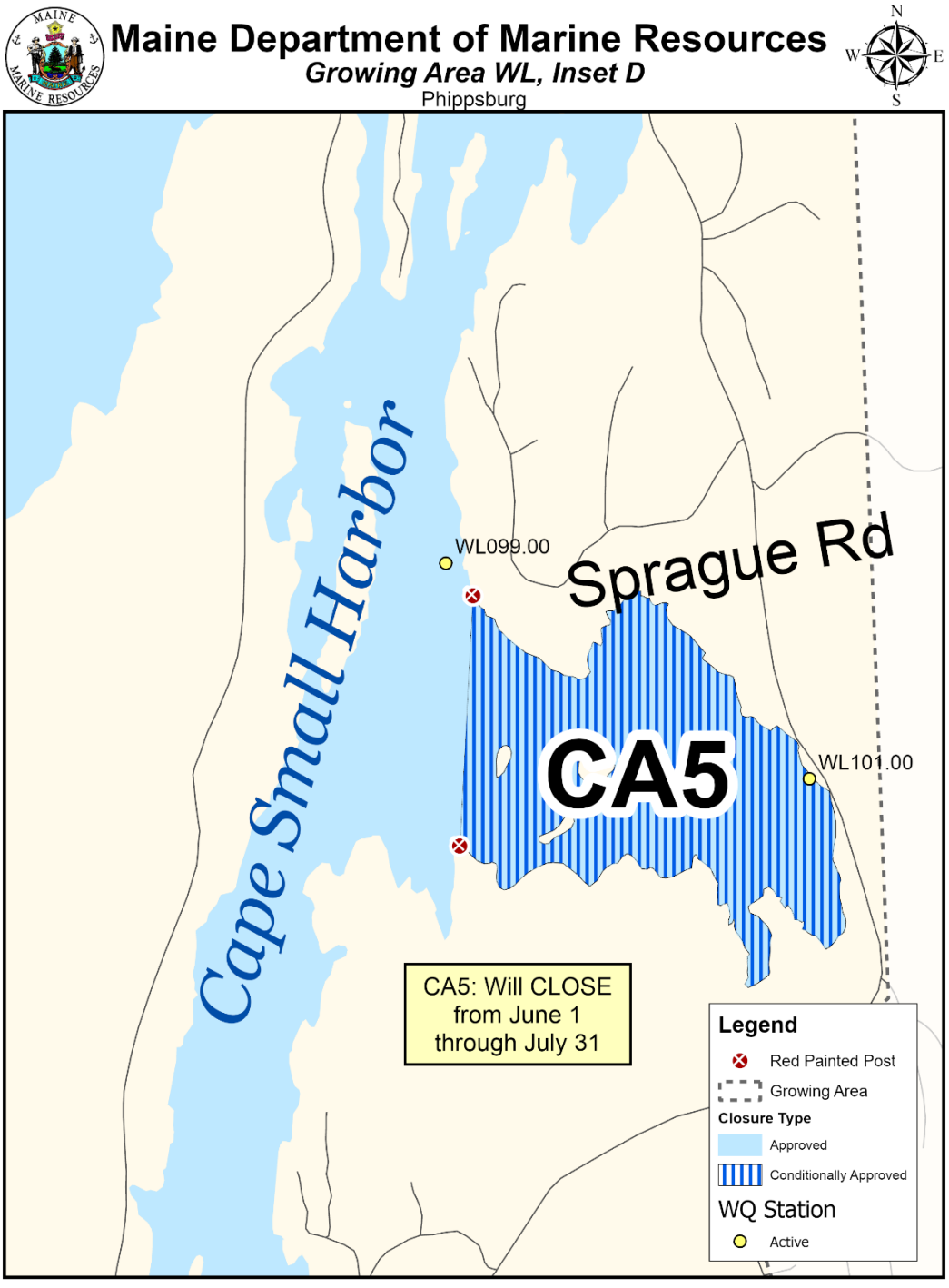
Table 9. P90s for Conditional Area stations calculated using data from the open status. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
WL096.00	CA	30	2.9	0.33	18.2	7.8	2/14/2018

Annual Review of CA5 Cape Small Harbor, Phippsburg, Conditional Area Management Plan

Scope
Growing Area Section CA5 in Cape Small Harbor, Phippsburg is classified as Conditionally Approved. This area is closed to harvesting from June 1st through July 31st because of seasonal pollution. The Cape Small Harbor Conditional Area is east of a line beginning at a red painted post on the shore approximately 110 yards from Sprague Road, then running south to a red painted post on the opposite shore. This area is monitored by station WL101.00.

Figure 10. CA4 Tottman Cove, Phippsburg Conditionally Approved area



Compliance with management plan
The Cape Small Harbor Conditional Area remains in compliance with the current CAMP. Marine Patrol and/or the local Shellfish Warden monitor illegal harvesting activity for this area during the closed period. See CAMP annual reviews for information on annual compliance with the current CAMP.

Adequacy of reporting and cooperation of involved persons
No reporting is required for this Conditional Area.

Compliance with Growing Area criteria
The area continues to meet the criteria for Approved harvest during the Open status based on P90 calculations and no other known sources of pollution in the area (Table 10).

Water sampling compliance history
All Conditionally Approved stations were sampled a minimum of six times in the Open status (Table 11). Additional collections occurred during closed status to monitor seasonal impacts.

Analysis-Recommendations
The Cape Small Harbor Conditionally Approved area continues to meet the standards for seasonal Approved harvest and remains in compliance with the CAMP.

Table 10. P90s for Conditional Area stations calculated using data from the open status. Geomeans and P90s not meeting current classifications are highlighted in red.

Station	Class	Count	GM	SDV	MAX	P90	Min Date
WL096.00	CA	30	2.9	0.33	18.2	7.8	2/14/2018

Recommendation for Future Work

The Round Cove (Phippsburg) CAMP needs to be reviewed in 2023 due to the high P90 score from station WL087.20 (Table 8). This area needs to either be downgraded or adjust the open/closed period. The Tottman Cove (Phippsburg) and Cape Small Harbor (Phippsburg) Conditional Areas are showing improved water quality and should be reviewed for possible upgrades in 2023.

Table 11. Count table of samples collected in Growing Area WL during the 2022 season.

Station		Class	Closed	Open	X	Total	Samples Required	Comments
WL001.00		X			6	6	X	
WL005.00		P	6			6	6	
WL006.00		A		6		6	6	
WL007.00		P	6			6	6	
WL010.00		A		6		6	6	
WL011.00		P	6			6	6	

Station		Class	Closed	Open	X	Total	Samples Required	Comments
WL012.00		A		2		2	6	Classification change from CA to A 10/2022
		CA	3	4		7		
WL014.00		A		1		1	6	Classification change from CA to A 10/2022
		CA	2	5		7		
WL015.00		A		2		2	6	Classification change from CA to A 10/2022
		CA	3	4		7		
WL018.00		A		2		2	6	Classification change from CA to A 10/2022
		CA	3	4		7		
WL019.00		CA	3	6		9	6	
WL020.00		CA	3	6		9	6	
WL020.50		CA	2	6		8	6	
WL021.00		A		6		6	6	
WL022.50		A		6		6	6	
WL023.00		A		6		6	6	
WL025.00		A		6		6	6	
WL026.00		A		6		6	6	
WL028.00		A		6		6	6	
WL030.00		A		6		6	6	
WL031.00		A		6		6	6	
WL033.00		A		6		6	6	
WL034.50		P	6			6	6	
WL035.00		CA	6	3		9	3 open/6 total	Marina
WL036.10		CA	6	3		9	3 open/6 total	Marina
WL036.70		A		6		6	6	
WL036.90		A		6		6	6	
WL037.00		A		6		6	6	
WL037.50		R		6		6	6	
WL038.00		A		6		6	6	
WL040.00		A		6		6	6	
WL042.10		A		6		6	6	
WL042.50		X			6	6	X	
WL043.10		A		6		6	6	
WL044.00		A		6		6	6	
WL044.40		A		6		6	6	
WL046.00		A		6		6	6	
WL046.50		A		6		6	6	
WL047.00		A		6		6	6	
WL047.30		X			6	6	X	
WL048.00		A		6		6	6	

Station		Class	Closed	Open	X	Total	Samples Required	Comments
WL048.50		A		6		6	6	
WL049.00		A		6		6	6	
WL050.00		A		6		6	6	
WL051.00		A		6		6	6	
WL052.00		R		6		6	6	
WL053.00		R		6		6	6	
WL054.00		A		6		6	6	
WL057.00		A		6		6	6	
WL060.00		A		6		6	6	
WL063.00		R		6		6	6	
WL066.00		A		6		6	6	
WL068.00		A		6		6	6	
WL070.00		A		6		6	6	
WL071.00		A		6		6	6	
WL073.00		A		6		6	6	
WL075.00		A		6		6	6	
WL076.00		A		6		6	6	
WL077.00		A		6		6	6	
WL079.00		A		6		6	6	
WL081.00		P	6			6	6	
WL085.00		P	6			6	6	
WL087.20		CA	1	6		7	6	
WL089.00		P	6			6	6	
WL095.50		P	6			6	6	
WL096.00		CA	1	6		7	6	
WL097.00		A		6		6	6	
WL098.00		A		6		6	6	
WL099.00		A		6		6	6	
WL101.00		CA		6		6	6	
WL102.00		A		6		6	6	
WL103.00		A		6		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.
X = investigative station