



Maude Robin McCoy & James W. Balano, III - Harrington Cove, Wheeler Bay, St. George

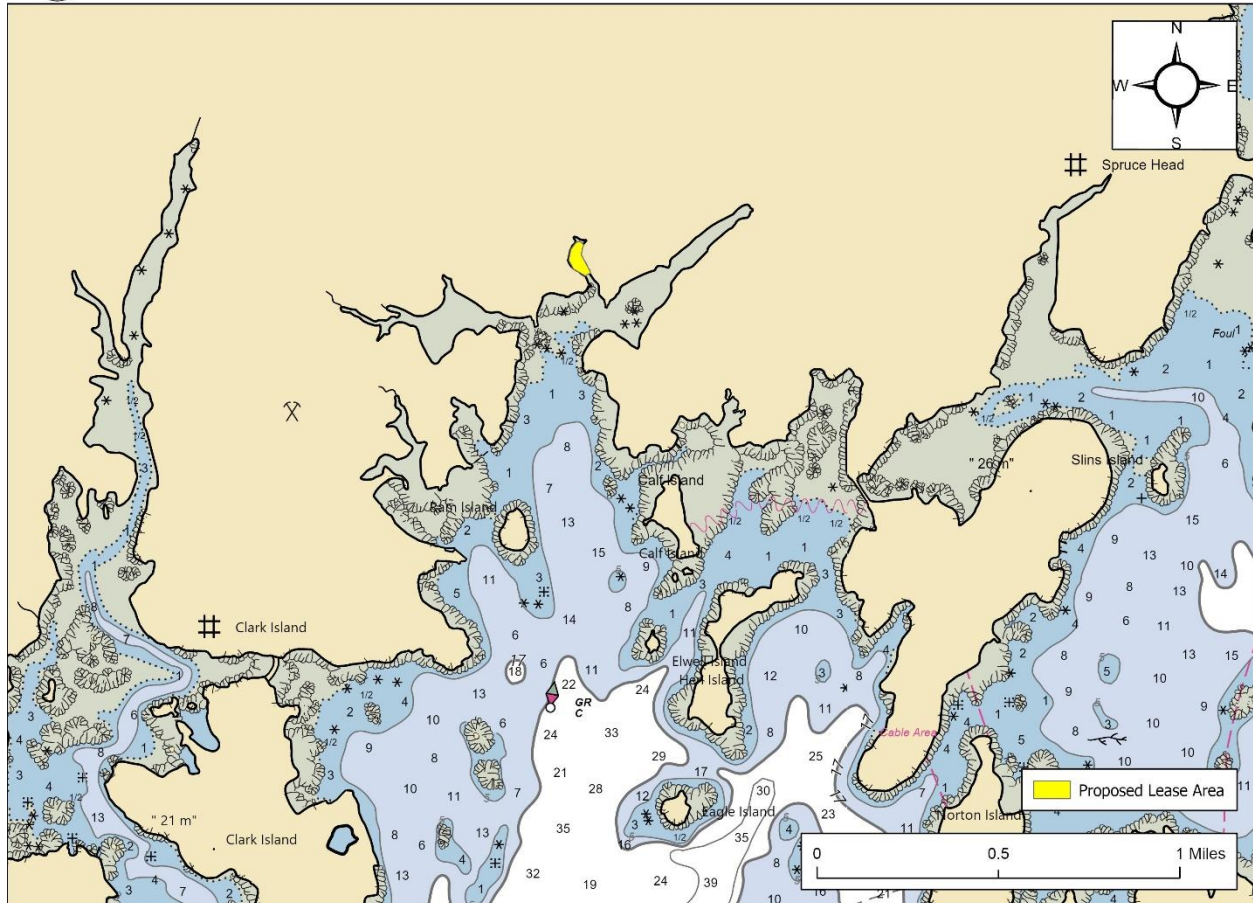


Figure 1. Vicinity map.¹

Location: Harrington Cove, Wheeler Bay, St. George, Knox County, Maine

Purpose: Standard lease for suspended culture of American/Eastern Oysters (*Crassostrea virginica*)

Site Review: Meryl Grady, Geoffrey Shook, Molly Waters

Report Preparation: Meryl Grady, Amanda Ellis

¹ Unless otherwise noted, all figures in this report were created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.



Application Overview

The applicants, Maude Robin McCoy and James W. Balano III, are requesting a 1.98-acre standard lease in Harrington Cove in Wheeler Bay, St. George for the suspended culture of American/Eastern oysters (*Crassostrea virginica*). The applicants currently operate experimental lease PEN WBx within the footprint of the standard lease proposal (Figure 4).

General Characteristics

On June 20, 2023, Maine Department of Marine Resources (MDMR) scientists assessed the proposed lease site. MDMR scientists arrived on site at approximately 11:00 AM. The proposal is situated within Harrington Cove and is surrounded by a rocky shoreline leading to forested uplands. A single house was observed due east of the proposed lease area overlooking the cove where the proposal is situated.

Depth

On June 20, 2023, MDMR scientists began collecting depths at the proposed site at approximately 11:30 AM. The tide was flooding with the next high tide predicted to occur at 1:33 PM (Table 1). Depths were collected in the center of the proposal and determined to be between 3.3 and 7.8 feet (Figure 2). Correcting for tidal variations derives water depths to be approximately 5.4 to 9.9 feet at the next high tide and 0.0 to 1.2 feet at mean low water (MLW, 0.0 feet) (Table 1).

Table 1. Predicted tidal heights in Tenants Harbor, Maine.²

Date	Time	Height (ft)
2023/06/20	12:49 AM	10.2 H
2023/06/20	7:18 AM	0.1 L
2023/06/20	1:33 PM	8.7 H
2023/06/20	7:17 PM	1.5 L

Bottom Characteristics

MDMR scientists observed the bottom characteristics of the proposed lease site via drop camera (Figure 2). Bottom characteristics were categorized using the Coastal and Marine Ecological Classification Standard (CMECS), a national standard for describing features of the marine environment (Table 2). Sediment information was determined based on visual analysis of the video. The bottom of the proposed lease site is primarily composed of mud.

Table 2. Bottom characteristics of the proposed site.

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group
Geologic Substrate	Unconsolidated Mineral Substrate	Fine Unconsolidated Substrate	Mud

² <https://www.usharbors.com/harbor/maine/tenants-harbor-me/tides/?tide=2023-06#monthly-tide-chart>



Position and Distances to Shore

The measuring tool in ArcGIS Pro 2.9 was used to verify the distances and bearings between proposed lease corners. Distances to shore were determined using the measuring tool in ArcGIS Pro 2.9, digital orthophotography provided by the Maine Office of GIS, and the application coordinates (Table 3, Figure 2).

Application Coordinates (WGS84) – 1.98 Acres

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>	
A	44.006227°	-69.164517°	then 91.8 feet at 055° True to
B	44.006368°	-69.164228°	then 292.5 feet at 333° True to
C	44.007076°	-69.164751°	then 103.1 feet at 010° True to
D	44.007355°	-69.164686°	then 41.4 feet at 026° True to
E	44.007456°	-69.164614°	then 44.4 feet at 324° True to
F	44.007555°	-69.164712°	then 42.6 feet at 296° True to
G	44.007607°	-69.164857°	then 50.1 feet at 254° True to
H	44.007569°	-69.165040°	then 127.0 feet at 217° True to
I	44.007292°	-69.165333°	then 161.9 feet at 191° True to
J	44.006856°	-69.165451°	then 148.1 feet at 152° True to
K	44.006501°	-69.165177°	then 200.3 feet at 120° True to A

Table 3. Approximate distances from proposed lease corners to surrounding features (Figure 2).

Feature	Distance
Corner B to private pier southeast	~530 feet to the southeast
Corner A to private pier southwest	~950 feet to the southwest



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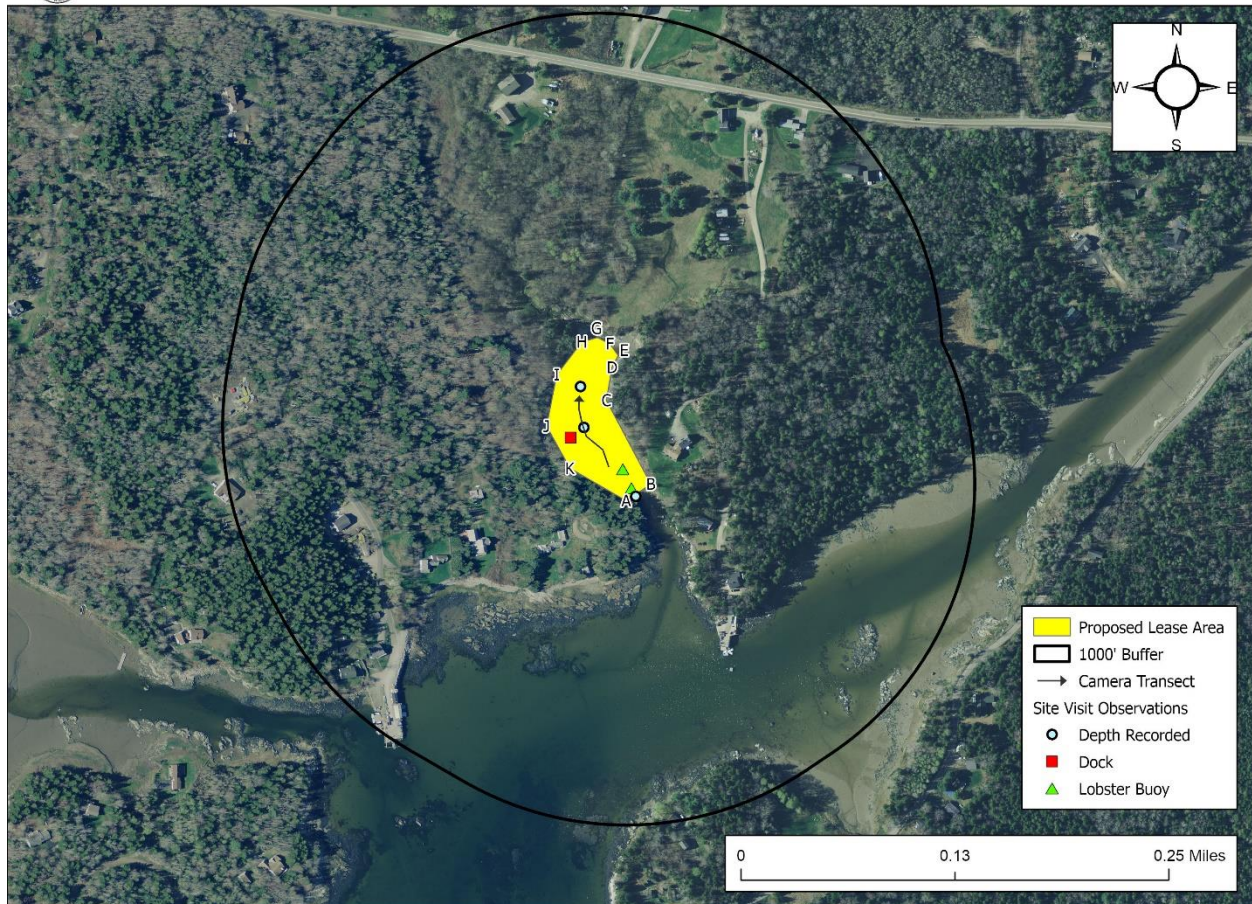


Figure 2. Proposed lease area with site visit observations.

Pursuant to statute and regulation, aquaculture leases are evaluated in consideration of applicable decision criteria. The site report documents MDMR’s observations of the area and other information, in consideration of those criteria, as noted below:

(1) Riparian Ingress and Egress

During the site visit on June 20, 2023, MDMR observed one dock within the proposed lease area. The dock is owned by one of the co-applicants of this standard lease proposal.³ There was one house observed due east of the proposal that overlooks the cove where the proposal is located. MDMR scientists also observed two privately owned piers located 530 feet southeast and 950 feet southwest of the proposal. Both piers appeared to be associated with commercial fishing activity.

³ Application page 11



Maine Department of Marine Resources Site Report

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A Harbormaster Questionnaire was completed by the local harbormaster and submitted to the MDMR Aquaculture Division on August 1, 2022. The harbormaster indicated that the proposal would have very little impact on riparian ingress and egress.

The proposal is intertidal so the applicant is required to obtain written permission from riparian owner(s) for the use of any intertidal lands that they own which will be used. The standard lease application includes permission to access the proposed lease site across parcel 233-057 owned by one of the lease applicants. The applicant also needs to include written permission to use the intertidal portion of parcel 233-057 for aquaculture activities. There are two other parcels (233-049 and 233-050) whose intertidal lands are also proposed to be utilized. The application does not include permission from the owner of these parcels.

(2) Navigation

The proposal is located in an intertidal finger in Harrington Cove. The nearest navigational channel is approximately 2,200 feet south of the proposal (Figure 3). MDMR did not observe any vessels operating in the vicinity of the proposal during the site assessment.

The harbormaster indicated in the Harbormaster Questionnaire that the proposal would have no effect on navigation.



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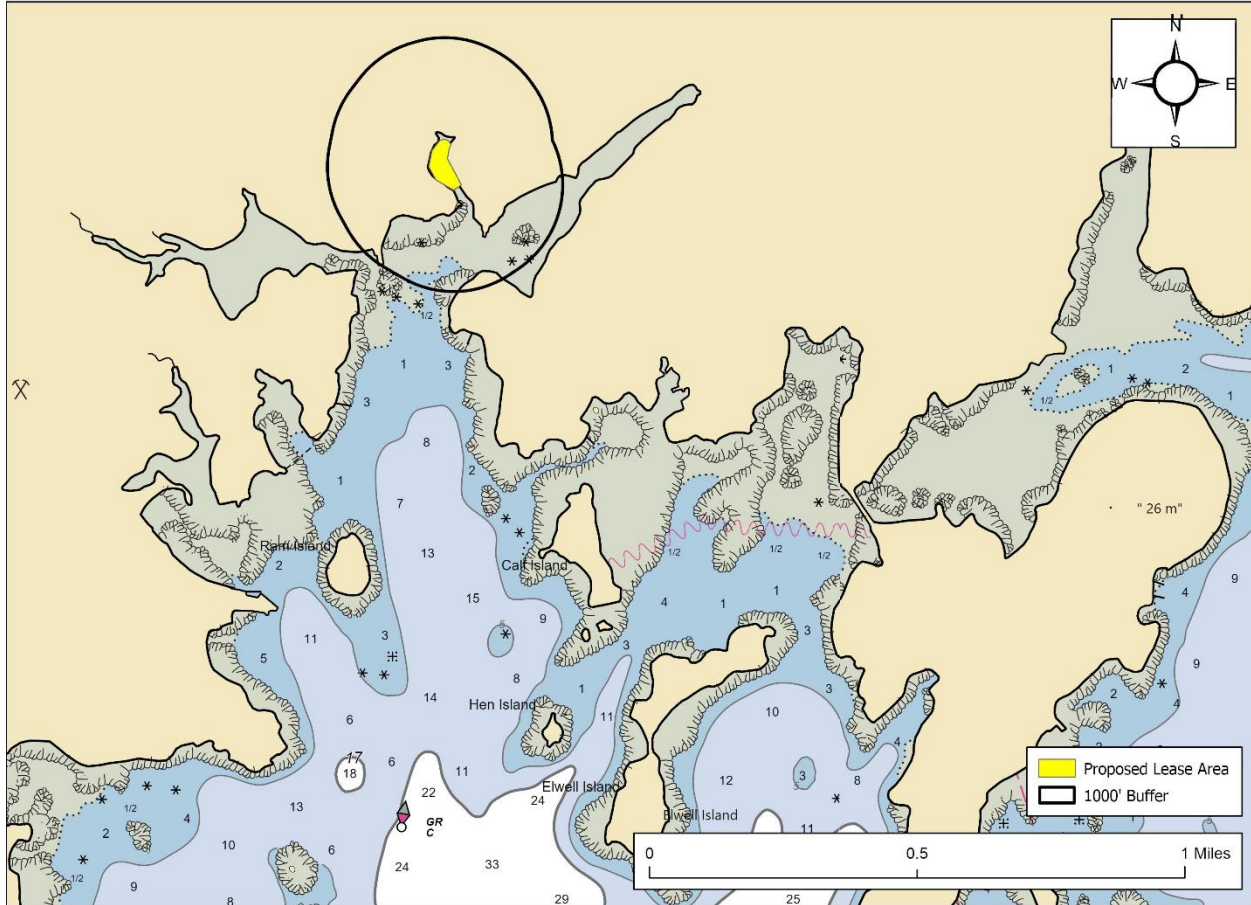


Figure 3. Navigational channels in the vicinity of the proposed lease area.

(3) Fishing and Other Uses

During the site assessment, MDMR scientists observed two lobster-style buoys located within the proposed lease area (Figure 2). Based on shallow water depth, muddy bottom composition, and the presence of an active aquaculture lease, it is likely the buoys were marking gear associated with the aquaculture lease or possibly green crab traps. MDMR did not observe any commercial or recreational fishing activity within the boundaries of the proposed lease.

The harbormaster indicated in the Harbormaster Questionnaire that there is no commercial or recreational fishing within the area of the proposal.



The Town of St. George has a shellfish conservation program in accordance with 12 M.R.S.A. § 6671 and because the site is located within the intertidal, the applicant is required to obtain consent from the municipality. The applicant provided this permission with the application.⁴

(4) Other Aquaculture Uses

The applicants currently operate experimental lease PEN WBx within the boundaries of this proposal. This standard lease proposal is intended to replace PEN WBx. There are four limited purpose aquaculture sites within 1,000 feet of the proposed lease site – MMCC521, MMCC621, MMCC721, and MMCC821. All four LPAs are held by one of the co-applicants of this standard lease proposal (Figure 4).

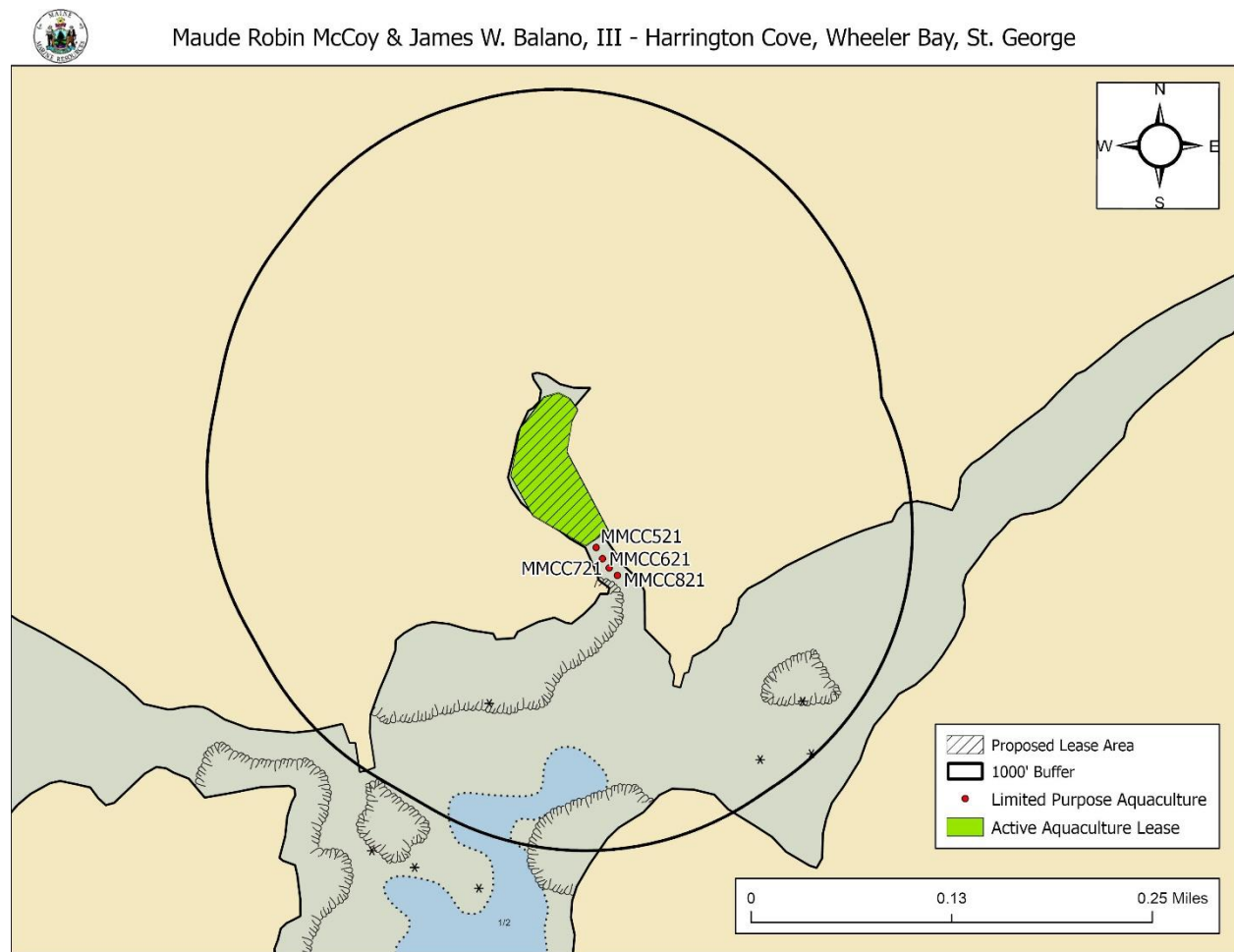


Figure 4. Aquaculture leases and LPA licenses in the vicinity of the proposed lease area.

⁴ Application page 41



(5) Existing System Support

Epibenthic Flora and Fauna

MDMR scientists conducted one drop camera transect to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed in the video transects is described below in Table 4.

Table 4. Species observed using underwater camera footage.

Species Observed	Abundance
European Green Crab (<i>Carcinus maenas</i>)	Common
Rockweed (<i>Ascophyllum nodosum</i>)	Occasional

Eelgrass (*Zostera marina*)

Records of eelgrass collected by MDMR in 2010 indicate no mapped eelgrass presence in the boundaries of the proposal. The nearest mapped eelgrass is approximately 760 feet southwest of the proposal (Figure 5).⁵ No eelgrass was observed within the proposal boundaries during MDMR's site assessment.

⁵ Data obtained from The Maine Office of GIS "GISVIEW.MEDMR.Eelgrass". This is the most current record of mapped eelgrass in the vicinity of the proposal.



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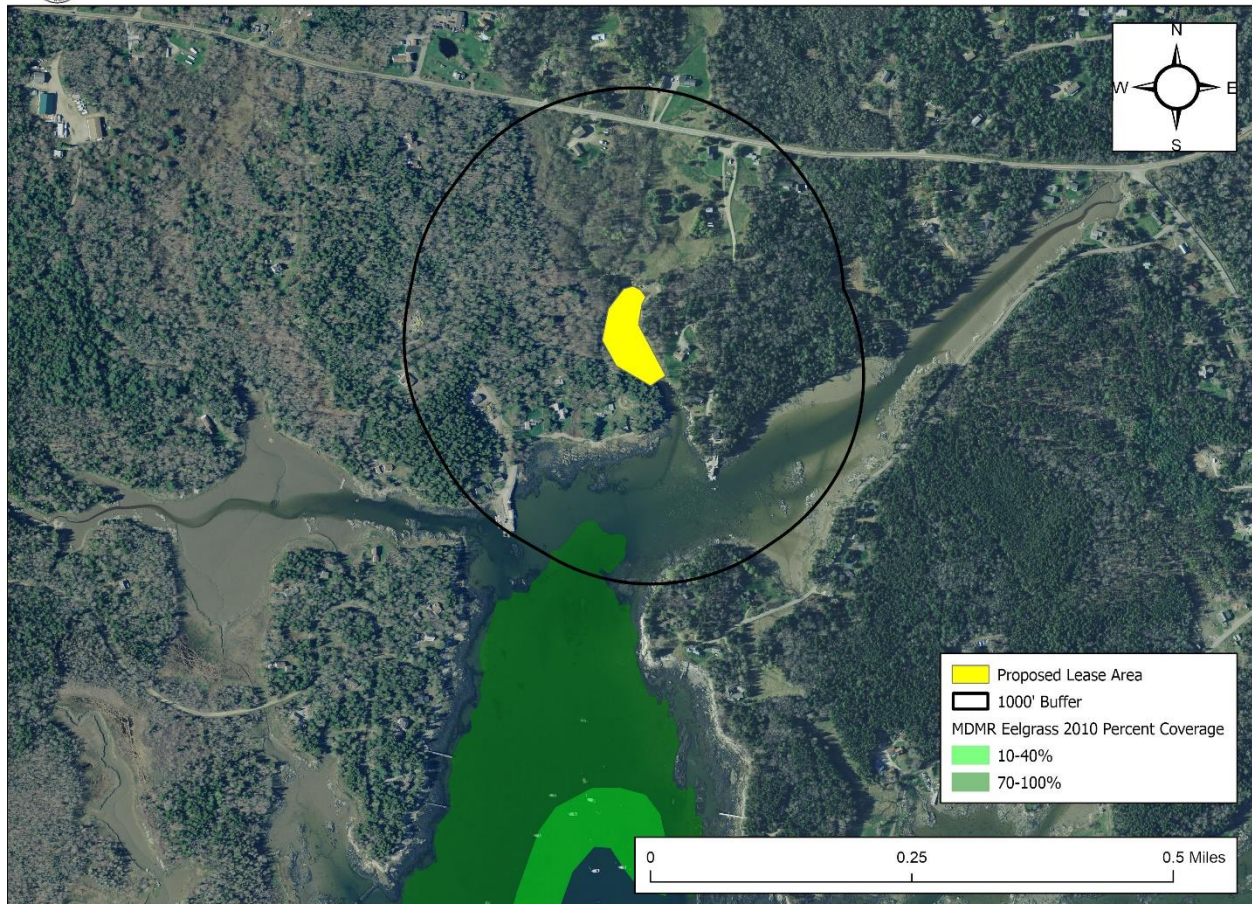


Figure 5. Mapped eelgrass (*Z. marina*) in the vicinity of the proposed lease area.

Wildlife

According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS (MEGIS), the proposed lease is located within mapped Tidal Waterfowl and Wading Bird Habitat (Figure 6). Data collected by the United States Fish and Wildlife Service in 2022 by aerial nest survey shows the closest mapped Bald Eagle nesting site to be approximately 2.25 miles southwest of the proposal.⁶

On July 28, 2022, a Wildlife Biologist with MDIFW responded by email to a “Request for Agency Review and Comment” and stated that minimal impacts to wildlife are anticipated.⁷

During the site assessment, MDMR scientists observed gulls (*Larus* sp.) and double-crested cormorants (*Nannopterum auritum*) in the vicinity of the proposal.

⁶ Data obtained from USFWS “Bald_Eagle_Nests_-_Maine_2023”

⁷ Email correspondence between MDIFW and MDMR



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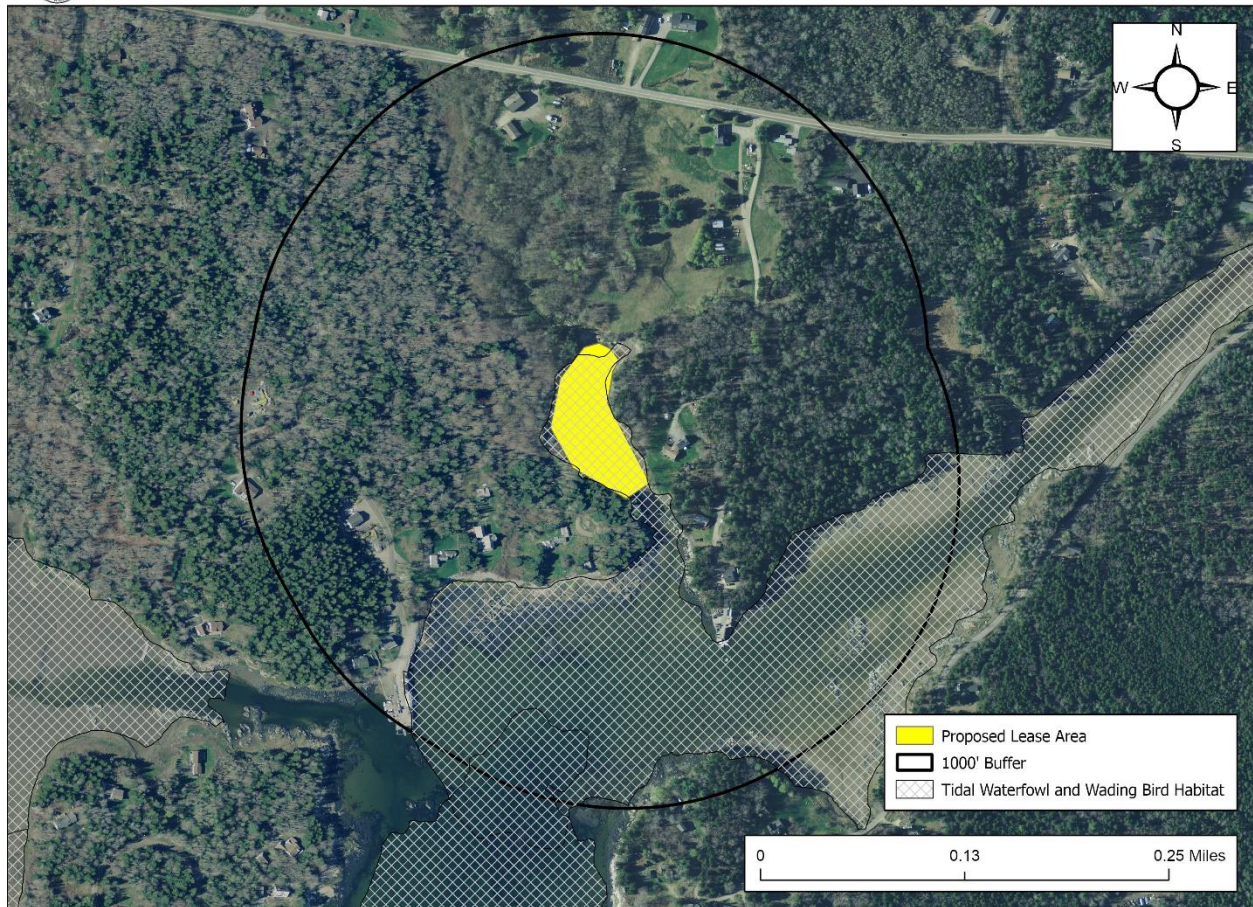


Figure 6. Mapped Tidal Waterfowl and Wading Bird Habitat.⁸

(6) Interference with Public Facilities

The proposed lease is not within 1,000 feet of any beach, park, docking facility, or conserved lands owned by federal, state, or municipal governments (Figure 7).

⁸ Data obtained from MDIFW maintained SDE Feature Class "GISVIEW.MEIFW.Twwh"



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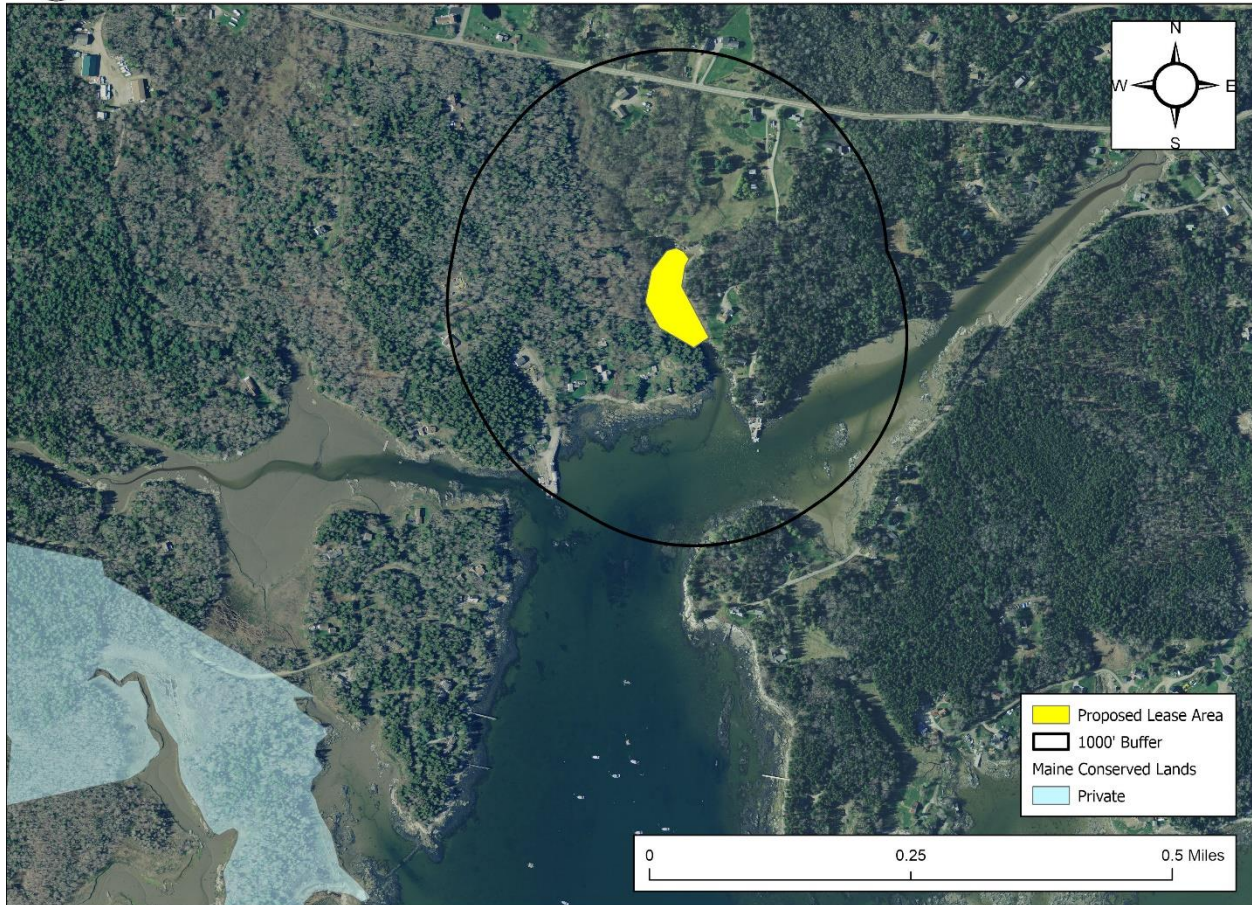


Figure 7. Public facilities near the proposed lease site.⁹

(7) Water Quality

The proposed lease is currently located within an area classified as “Conditionally Approved” by the MDMR Bureau of Public Health and Aquaculture (Figure 8). The area closes for the harvesting of shellfish for 14 days following 1” of rainfall in a 24-hour period.

⁹ Data obtained from The Maine Office of GIS “GISVIEW.MECONSLANDS.Conserved_Lands”



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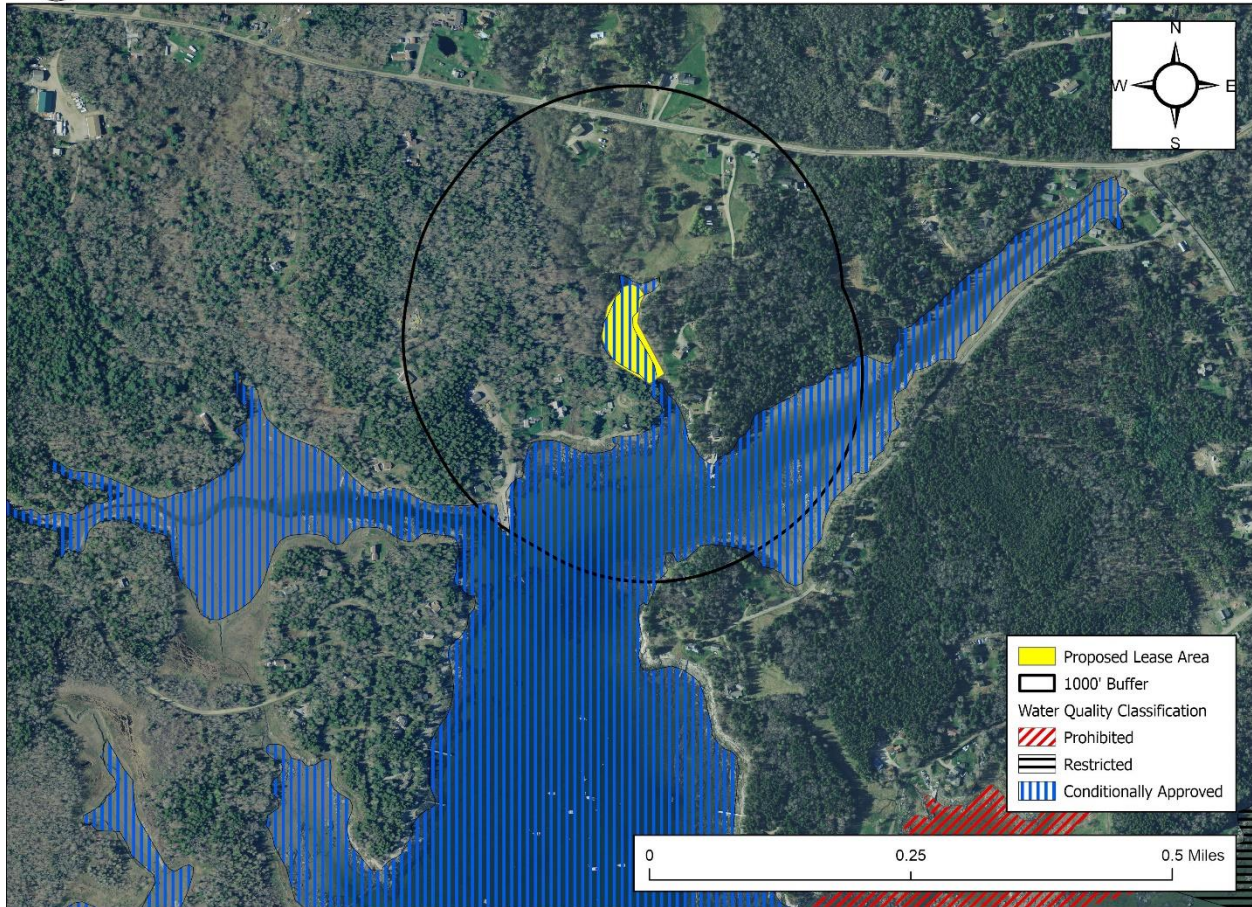


Figure 8. Water quality classifications in the vicinity of the proposed lease site.¹⁰

¹⁰ Data obtained from MDMR Bureau of Public Health and Aquaculture "MaineDMR Public Health – Current NSSP Classifications"