

Figure 1. Vicinity map.¹

Location: Shorey Cove, Englishman Bay, Jonesport, Washington County, Maine

Purpose: Standard lease for suspended culture of sugar kelp (*Saccharina latissima*)² and winged kelp³ (*Alaria esculenta*).

Site Review: Geoffrey Shook and Katie Von Hohenleiten

Report Preparation: Geoffrey Shook and Meryl Grady

¹ Unless otherwise noted, all figures in this report were created in ArcGIS Pro version 3.3 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.

² The application lists the scientific name as *Laminaria saccharina*. The current accepted scientific name is *Saccharina latissima*.

³ The application does not list a common name. Winged kelp is an accepted common name for *Alaria esculenta*.



Application Overview

The applicant, Nautical Farms LLC, is requesting a 11.98⁴-acre, 20-year, standard lease in Shorey Cove in Englishman Bay for the suspended culture of marine algae. The applicant intends for the site to be active from October 1 through May 31 with some gear removed from the site from June 1 through September 30. Moorings and mooring balls would remain on site year-round.⁵ The applicant currently operates 3.92-acre experimental lease site ENG Rlx and Limited Purpose Aquaculture (LPA) sites MFOG520, MFOG620, MFOG720, and MFOG820 within Shorey Cove in the vicinity of the proposal (Figure 5). If the proposal is granted, ENG Rlx would be relinquished. LPAs would only be relinquished if required by DMR.⁶

General Characteristics

On July 21, 2025, Department of Marine Resources (DMR) scientists visited the proposed lease site. DMR scientists arrived on site at approximately 9:46 AM. The proposal is located in subtidal waters in Shorey Cove approximately 271 feet from the shoreline of Roque Island at mean low water (MLW) (Figure 1). In the vicinity of the lease, Great Head, on the northeast corner of Roque Island, was observed to have steep rock cliffs and ledges leading to primarily coniferous uplands. Sandy beaches were observed along the southern shore of Shorey Cove leading to primarily coniferous uplands.

Depth

On July 21, 2025, DMR scientists began collecting depths at the proposed site at approximately 9:46 AM. The tide was ebbing with the next low tide predicted at 2:33 PM (Table 1). Depths were determined to be between 19.9-22.5 feet at the proposal corners. Correcting for tidal variations derives depths at mean low water (MLW, 0.0 feet) to be between 10.8-13.4 feet at the proposal corners. Approximate depths at mean high water (MHW, 11.3 feet⁷) are between 22.1-24.7 feet at the proposal corners (Table 2). Water current was flowing in a northerly direction at the time of the site visit.

Table 1. Predicted tidal heights in Milbridge, Maine.⁸

Date	Time	Height (ft)
2025/07/21	2:21 AM	-0.5 L
2025/07/21	8:16 AM	10.3 H
2025/07/21	2:33 PM	0.7 L
2025/07/21	8:34 PM	12.3 H

Table 2. Collected and derived depths at corners of the proposed lease area.

Corner	Measured Depth (ft)	MLW Depth (ft)	MHW Depth (ft)
NW	22.5	13.4	24.7
NE	22.0	12.9	24.2
SE	19.9	10.8	22.1
SW	21.5	12.4	23.7

⁴ Applicant originally requested 12.24 acres. DMR calculations indicate the area is 11.98 acres.

⁵ Application page 5, 12

⁶ Application page 15

⁷ MHW in Milbridge, ME is 11.3 feet, NOAA Tide Station 8412581

⁸ <https://tidesandcurrents.noaa.gov/stationhome.html?id=8412581>



Bottom Characteristics

DMR scientists observed the bottom characteristics of the proposed lease site via a remotely operated vehicle (ROV). Bottom characteristics were categorized using the Coastal and Marine Ecological Classification Standard (CMECS), a national standard for describing features of the marine environment (Table 3). Sediment information was determined based on visual analysis of the video. The bottom of the proposed lease site is primarily composed of mud with a sheet algal bed.

Table 3. Bottom characteristics of the proposed site.

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group
Geologic Substrate	Unconsolidated Mineral Substrate	Fine Unconsolidated Substrate	Mud
Benthic/Attached Biota	Aquatic Vegetation Bed	Benthic Macroalgae	Sheet Algal Bed

Position and Distances to Shore

The geodesic measuring tool in ArcGIS Pro 3.3 was used to verify the distances and bearings between proposed lease corners. Distances to shore were determined using the measuring tool in ArcGIS Pro 3.3, a nautical chart provided by the National Oceanic and Atmospheric Administration (NOAA), and the application coordinates (Table 4, Figure 2,3).

Application Coordinates (WGS84) – 11.98 Acres

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>					
NW	44.593086°	-67.521967°	then	961	feet at	70°	True to
NE	44.593956°	-67.518486°	then	559	feet at	164°	True to
SE	44.592475°	-67.517925°	then	938	feet at	250°	True to
SW	44.591669°	-67.521344°	then	542	feet at	344°	True to NW

Table 4. Approximate distances from proposal corners to surrounding features (Figure 2,3).

Feature	Distance
NW corner to Squire Point at MLW	~3,259' to west
NW corner to Little Ram Island at MLW	~7,200' to the north
NW corner to green navigational aid "7"	~6,140' to the west
NE corner to Great Head at MLW	~271' to the east
NE corner to Little Ram Island at MLW	~6,985' to the north
SE corner to Great Head at MLW	~310' to the east
SE corner to Shorey Cove southern shore at MLW	~1,620' to the south
SW corner to Shorey Cove southern shore at MLW	~1,865' to the south
SW corner to Squire Point at MLW	~3,244' to the west

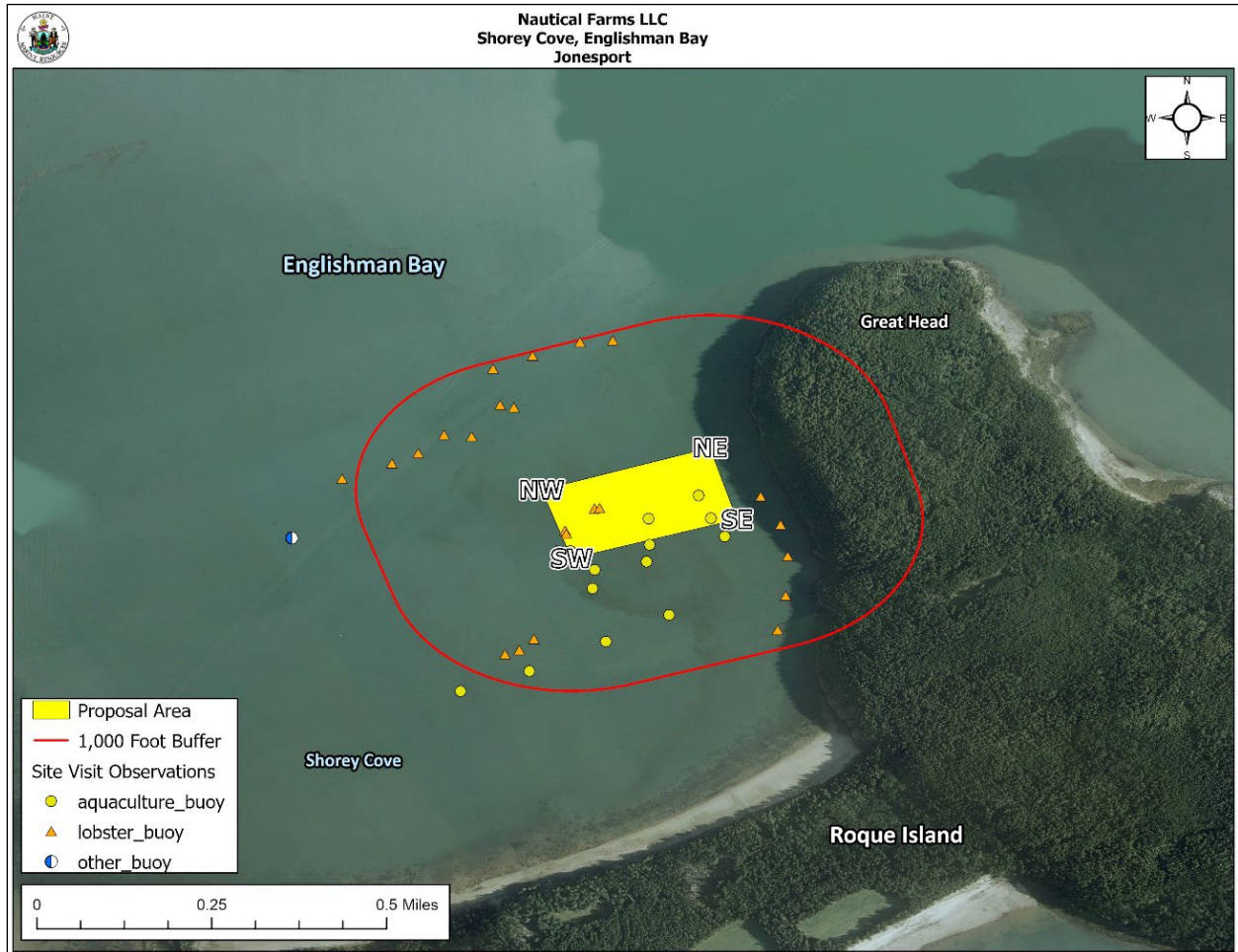


Figure 2. Proposed lease area with site visit observations.

Pursuant to statute and regulation, aquaculture leases are evaluated in consideration of applicable decision criteria. The Site Report documents DMR'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, DMR scientists observed one residential property with a pier and dock on Squire Point approximately 3,562 feet to the west-southwest of the proposal (Figure 8). DMR scientists did not observe any moorings within the vicinity of the proposal (Figure 2).

A Harbormaster Questionnaire was received by DMR from the local Harbormaster on August 15, 2024. The Harbormaster stated there are no permitted moorings within the boundary of the proposal and riparian owners should not be affected.



(2) Navigation

The proposal is located entirely within Shorey Cove. The southern limit of the east to west navigational waterway for Englishman Bay in the vicinity of Roque Island is located approximately 1,308 feet to the north of the proposal. Due to shoal (shallow) waters around Squire Point that could be a hazard to navigation at MLW, there is approximately 3,237 feet of navigable water in Shorey Cove between the western boundary of the proposal and Squire Point to the west (Figure 3).

During the site visit, DMR scientists observed three powerboats navigating in the channel to the north of the proposal. Two of the observed boats were transiting to the west and one was transiting to the east.

The Harbormaster indicated in the Harbormaster Questionnaire that the proposal will not affect navigation in the area.

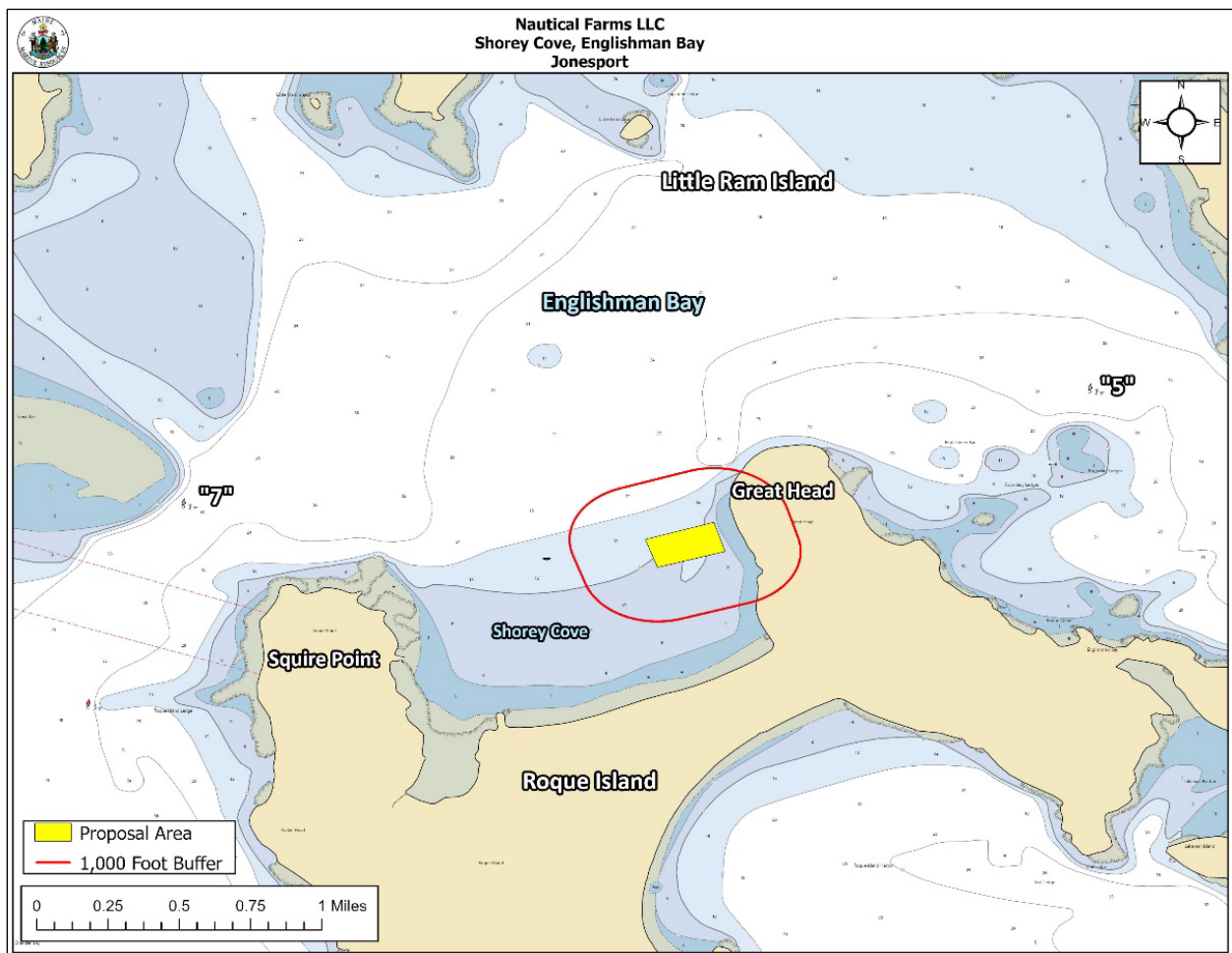


Figure 3. Navigational channels in the vicinity of the proposed lease area.



(3) Fishing and Other Uses

During DMR’s site visit, scientists observed 25 lobster buoys within the vicinity of the proposal with the closest located within the proposal boundaries. DMR scientists observed several lobster boats working in the distance at the northern end of Englishman Bay approximately 1.3 miles north of the proposal. A white buoy with a blue stripe labeled “CGO” was observed approximately 1,393 feet to the west (Figure 2). The buoy appears on nautical charts as a black trapezoid with a circle at the bottom (Figure 4) and is listed on “U.S. Chart No. 1”⁹ as a “mooring buoy”. DMR scientists did not determine the purpose or use of the buoy.

The Harbormaster indicated in the Harbormaster Questionnaire that there is commercial lobster fishing and recreational fishing for mackerel and pollock in the vicinity of the proposal.

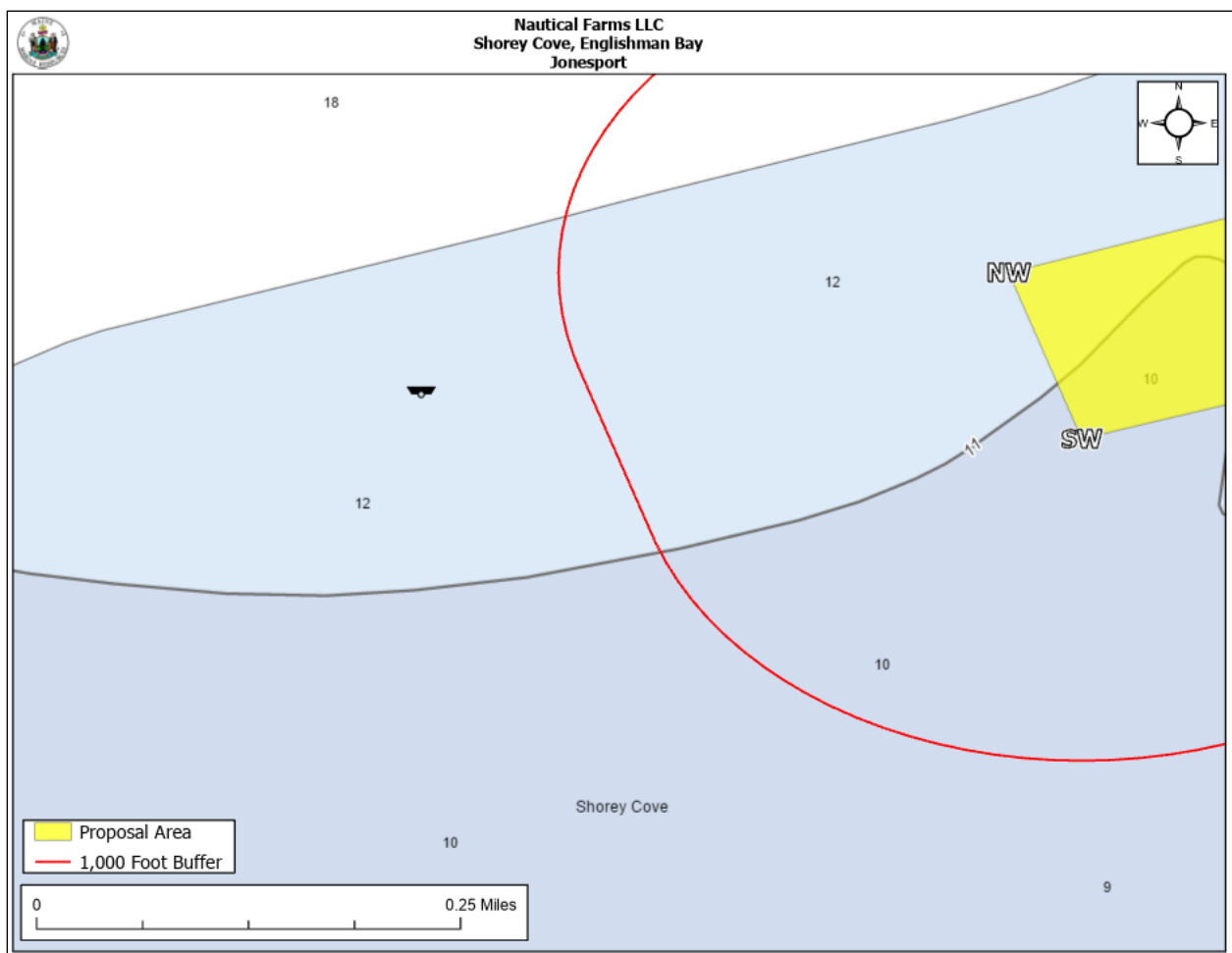


Figure 4. Mapped mooring in the vicinity of the proposed lease area.

⁹ “U.S. Chart No. 1” is the definitive guide and reference manual for understanding nautical charts. It describes all symbols, abbreviations, and terms used on official nautical charts. <https://nauticalcharts.noaa.gov/publications/docs/us-chart-1/ChartNo1.pdf>



(4) Other Aquaculture Uses

There is one licensed aquaculture lease and one limited purpose aquaculture (LPA) site within 1,000 feet of the proposed lease site (Figure 5). The applicant currently operates experimental lease ENG Rlx partially within the boundaries of the proposed lease site. The proposed lease is intended to replace ENG Rlx. The applicant also operates LPA site MFOG520 approximately 940 feet south of the proposal. LPAs MFOG620, MFOG720, and MFOG820 are also operated by the applicant and are approximately 1,030 feet, 1,130 feet, and 1,295 feet south of the proposal, respectively. If the proposed lease is granted, the LPAs would only be relinquished if required by DMR.¹⁰

At the time of the site visit, DMR scientists observed 13 buoys related to aquaculture within the vicinity of the proposal (Figure 2).

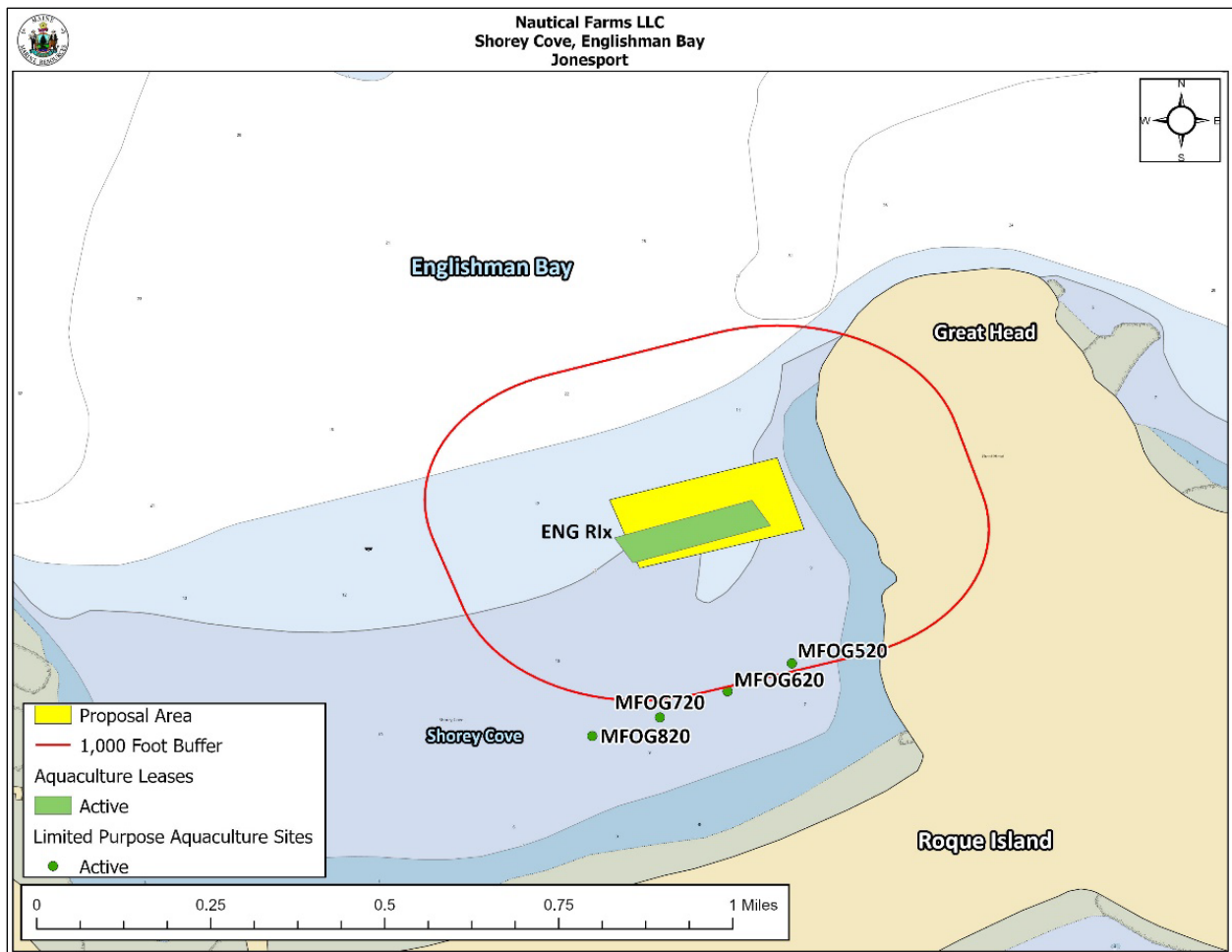


Figure 5. Aquaculture leases and LPA licenses in the vicinity of the proposed lease area.

¹⁰ Application page 15



(5) Existing System Support

Epibenthic Flora and Fauna

DMR scientists utilized an ROV to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed in the video footage is described below in Table 5.

Table 5. Species observed on underwater video footage.

Species Observed	Abundance
Sand Shrimp (<i>Crangon septemspinosa</i>)	Occasional

Eelgrass (*Zostera marina*)

Records of eelgrass collected by DMR in 2010¹¹ indicate there is no eelgrass mapped within 1,000 feet of the proposal. The nearest mapped eelgrass is approximately 1,097 feet south of the proposal (Figure 6).

During DMR’s site visit, scientists did not observe any eelgrass within the boundaries of the proposal on underwater footage.

¹¹Data obtained from The Maine Office of GIS “GISVIEW.MEDMR.Eelgrass”. This is the most current record of mapped eelgrass within the vicinity of the proposal.

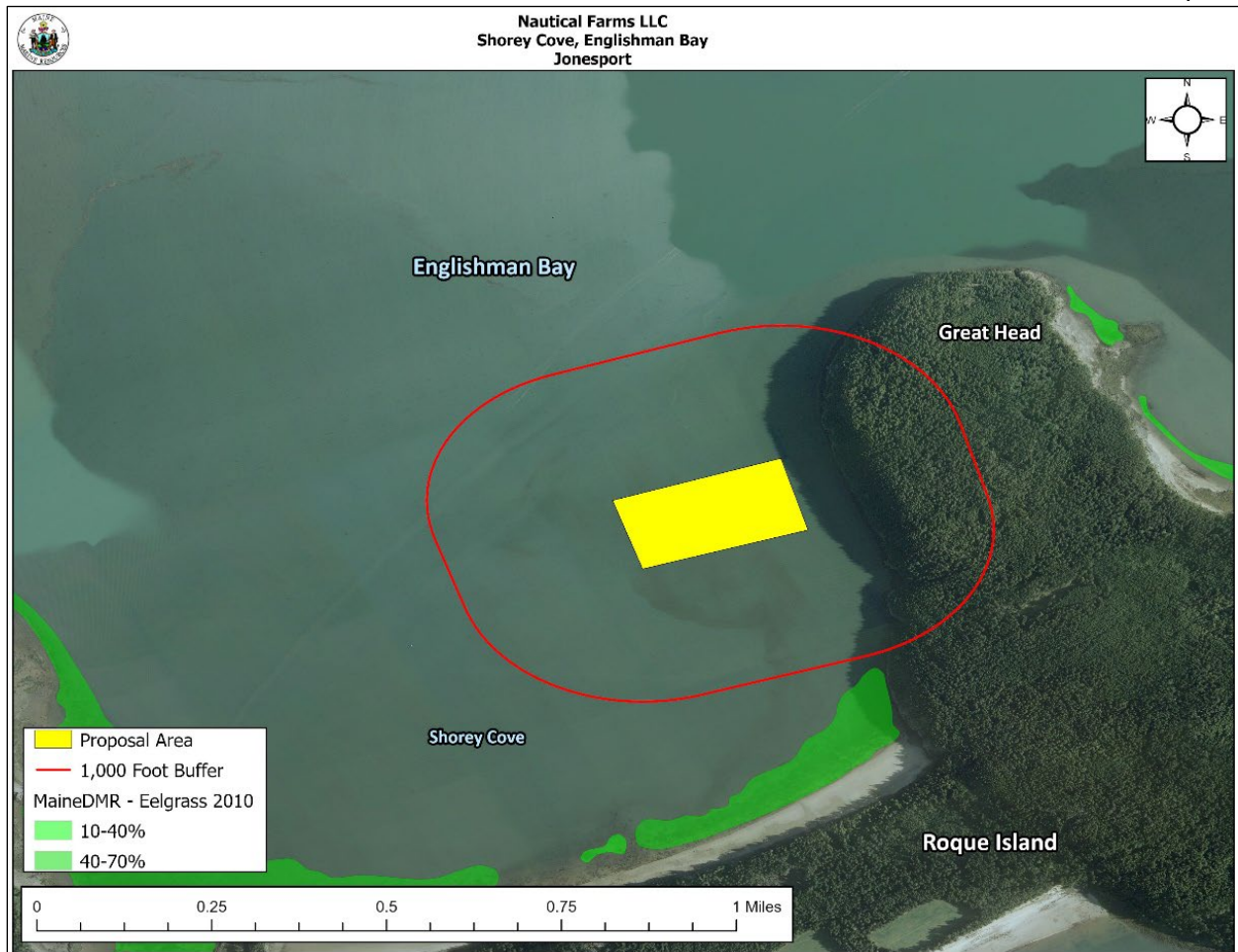


Figure 6. Mapped eelgrass (*Z. marina*) in the vicinity of the proposed lease area.

Wildlife

During the site visit, DMR scientists observed herring gulls (*Larus argentatus*) and great cormorant (*Phalacrocorax carbo*) in the general vicinity of the proposal.

The Department of Inland Fisheries and Wildlife (IFW) has jurisdiction over inland fisheries and wildlife resources of the State. IFW also has the authority to conserve wildlife populations and their ecosystems through applicable state laws and rules. DMR provides IFW with notice and the opportunity to comment on all complete lease applications. In addition, the Site Report also includes IFW designated and mapped habitat types that are within 1,000 feet of the lease proposal, if applicable.

According to Geographic Information System (GIS) data maintained by IFW and available through the Maine Office of GIS (MEGIS), there are not any mapped habitat types within 1,000 feet of the lease proposal (Figure 7).



Though bald eagles are no longer listed on Maine’s Endangered and Threatened Species List, the United States Fish and Wildlife Service (USFWS) may also have jurisdiction over the management and conservation of the species based on applicable law and rule. Data collected by USFWS in 2023 by aerial nest survey shows there is no mapped bald eagle nesting site within the vicinity of the proposal (Figure 7).

IFW was provided with the opportunity to comment on this proposal. On August 8, 2024, a Resource Biologist with IFW responded by email to a “Request for Agency Review and Comment” stating that minimal impacts to wildlife are anticipated for this project.¹²

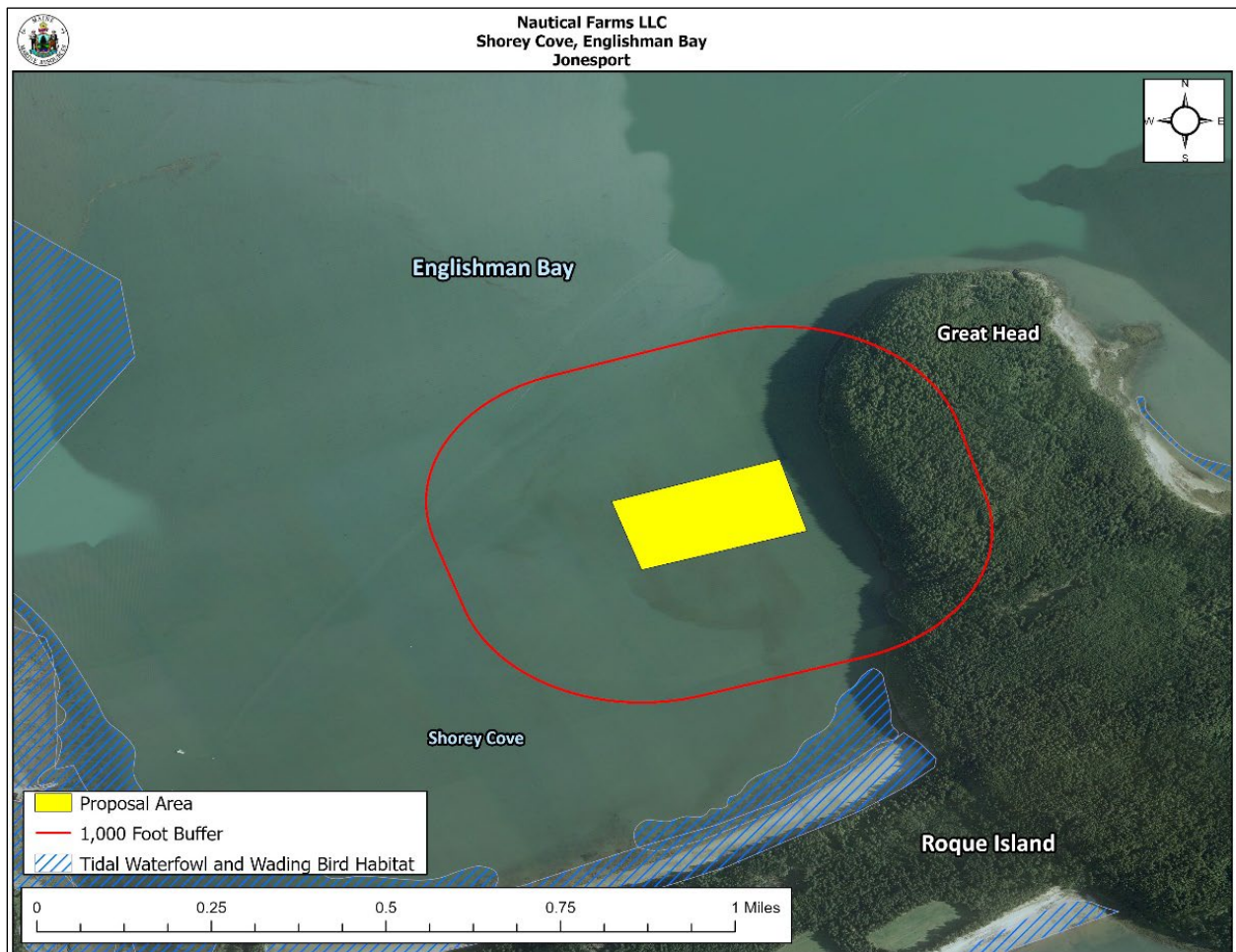


Figure 7. Mapped habitats in the vicinity of the proposed lease area.¹³

¹² Email correspondence between IFW and DMR

¹³ Data obtained from USFWS “Bald_Eagle_Nests_-_Maine_2023” and IFW “EHRTERN”, “EHPLVTRN”, “GISVIEW.MEIFW.Twwh”, “ShorebirdAreas”, and “SNI”.



(6) Interference with Public Facilities

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

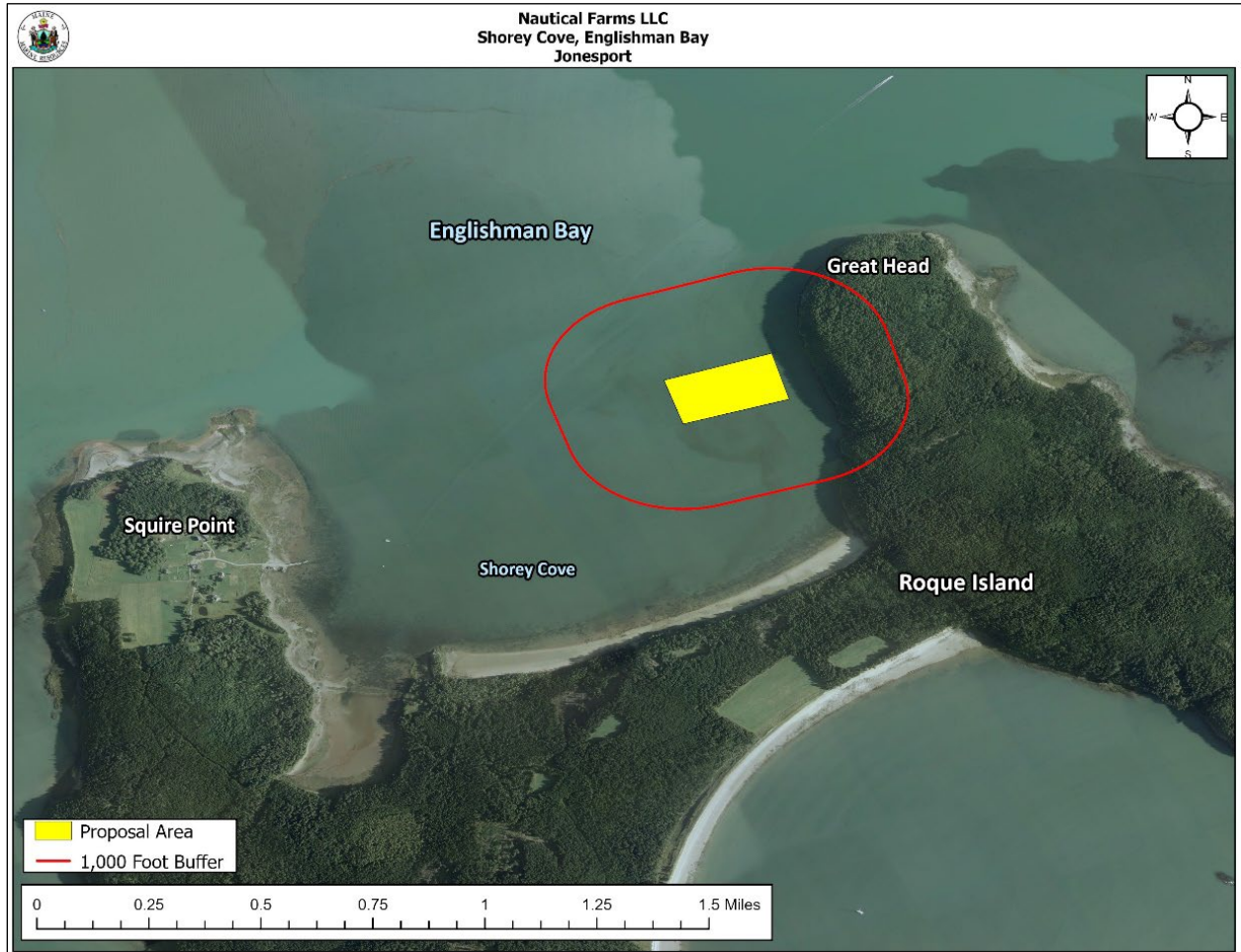


Figure 8. Public facilities near the proposed lease site.¹⁴

(7) Water Quality

The proposed lease is currently located within an area classified as Approved by the DMR Bureau of Public Health and Aquaculture.

¹⁴ Data obtained from The Maine Office of GIS "GISVIEW.MECONSLANDS.Conserved_Lands"