

Figure 1. Vicinity map.¹

Location: South of Burying Island, Taunton Bay, Hancock, Hancock County, Maine

Purpose: Standard lease for suspended culture of American/eastern oysters (*Crassostrea virginica*)

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Report Preparation: Meryl Grady and Amanda Ellis

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 Present for 9/5/2025 and 10/7/2025 site visits

³ Present for 8/8/2025 and 10/7/2025 site visits

⁴ Present for 8/8/2025 site visit

⁵ Boat captain for 8/8/2025 and 9/5/2025 site visits



Application Overview

The applicant, Taunton Bay Oyster Co., Inc., is requesting a 7.46-acre, 20-year, standard lease south of Burying Island in Taunton Bay for the suspended culture of American/easter oysters (*Crassostrea virginica*). The proposed site would be used seasonally to grow oysters to a suitable size to then be bottom planted on a different lease held by the applicant. Flip farm baskets and buoys would be present March – December then removed from the site and stored on shore January-February. Mooring lines, backbone lines, and hauling lines would remain on site year-round, though they would be sunk to the seafloor January-February. Required lease boundary markers would be present year-round.⁶

General Characteristics

On August 8, 2025, Department of Marine Resources (DMR) scientists assessed the proposed lease site. DMR scientists arrived on site at approximately 10:30 AM. The proposed lease is situated in southern Taunton Bay, north of Cedar Point, and south of Burying Island. The shorelines in the vicinity of the proposal are rocky, leading to mixed forest uplands. There are scattered sandy beaches and residential properties. Burying Island, north of the proposal, has a sandy beach and rocky coastline leading to coniferous uplands. DMR revisited the proposal on September 5, 2025, to deploy a depth logging device in the vicinity of the proposal to gather additional information on tidal amplitude in Taunton Bay. DMR retrieved the depth logging device on October 7, 2025.

Depth

DMR scientists began collecting water depths at approximately 12:10 PM on August 8, 2025, at the proposed site, approximately 1.5 hours after the predicted high tide in Bar Harbor (Table 1). Measured depths at corners of the proposed lease site ranged from 8.4 to 9.0 feet. During the site visit, DMR scientists observed an approximate 1.5-hour tidal delay in Taunton Bay. The observed local high tide was approximately 12:15 PM, whereas high tide in Bar Harbor was predicted at 10:53 AM.

Due to hydrography south of the proposal and the presence of Sullivan Falls in Mt. Desert Narrows, the Bar Harbor tidal station may not fully reflect tidal amplitude within Taunton Bay. The nearest tidal station, Bar Harbor, is approximately 10.5 miles south of the proposal. Because of this, DMR deployed a depth logging device in the vicinity of the proposal to gather additional data on tidal amplitude.

Based on analysis of the data collected, approximate water depths at corners of the proposal at mean low water (MLW, 0.0 feet) are from 1.0 to 1.8 feet. DMR made the determination that the proposal is in subtidal waters.

⁶ Application pages 4,5,9



Table 1. Predicted tidal heights in Bar Harbor, Maine.⁷

Date	Time	Height (ft)
2025/08/08	4:46 AM	0.3 L
2025/08/08	10:53 AM	10.0 H
2025/08/08	4:51 PM	1.3 L
2025/08/08	11:00 PM	11.6 H

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 2). Sediment information was determined based on visual analysis of the video. The bottom of the proposed lease site is composed of muddy sand with shell hash.

Table 2. Bottom characteristics of the proposed site.

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group
Geologic Substrate	Unconsolidated Mineral Substrate	Fine Unconsolidated Substrate	Muddy Sand
Organic Substrate	Shell Substrate	Shell Hash	Unidentified

Position and Distances to Shore

The 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 3, Figures 2,3).

Application Coordinates (WGS84) – 7.46 Acres

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>	
N	44.54300°	-68.26476°	then 1,002 feet at 130° True to
E	44.54118°	-68.26188°	then 323 feet at 224° True to
S	44.54055°	-68.26275°	then 997 feet at 311° True to
W	44.54235°	-68.26563°	then 328 feet at 043° True to N

⁷ <https://tidesandcurrents.noaa.gov/stationhome.html?id=8413320>



Table 3. Approximate distances from proposal corners to surrounding features (Figures 2 & 3).

Feature	Distance
N corner to Burying Island shoreline at MLW	~1,700' to the northeast
N corner to nearest shoreline at MLW	~1,430' to the southwest
E corner to Burying Island shoreline at MLW	~2,225' to the north
E corner to nearest shoreline at MLW	~1,300' to the south
S corner to nearest shoreline at MLW	~1,100' to the south
W corner to nearest shoreline at MLW	~1,160' 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

The land nearest to the proposal is the mainland shoreline approximately 1,100 feet south of the proposal at MLW. It is approximately 1,700 feet from the proposal to Burying Island to the north at MLW. During the site visit on August 8, 2025, DMR scientists observed residential properties south, east, and west of the proposal. All properties were over 1,100 feet from the proposal. DMR scientists also observed one mooring approximately 1,330 feet north of the proposal. There were three small boats tied up to the mooring. DMR scientists also observed beach chairs on the Burying Island shoreline (Figure 2).

A Harbormaster Questionnaire was sent to the Town of Hancock on October 26, 2023. DMR did not receive a response.

(2) Navigation

The proposal is located in shallow, subtidal water approximately 1,700 feet south of Burying Island and 1,100 feet north of the mainland shoreline at MLW. There are two deeper water navigational channels in the vicinity of the proposal. One navigational channel allows for access to upper Taunton Bay/Hog Bay. It is approximately 930 feet from the proposal to the western border of the navigational channel to upper Taunton Bay. Water depth in this channel is approximately 17-54 feet at MLW. The other navigational channel allows for access to western Taunton Bay/Egypt Bay. It is approximately 100 feet from the proposal to the western border of the navigational channel. Water depth in this channel is approximately 6-23 feet at MLW. Water depth at MLW in the vicinity of the proposal is 1.0 to 1.8 feet (Figure 3).

During DMR's site visit on August 8, 2025, two powerboats were observed transiting in the main navigational channel; one was observed traveling north and one was observed traveling south.

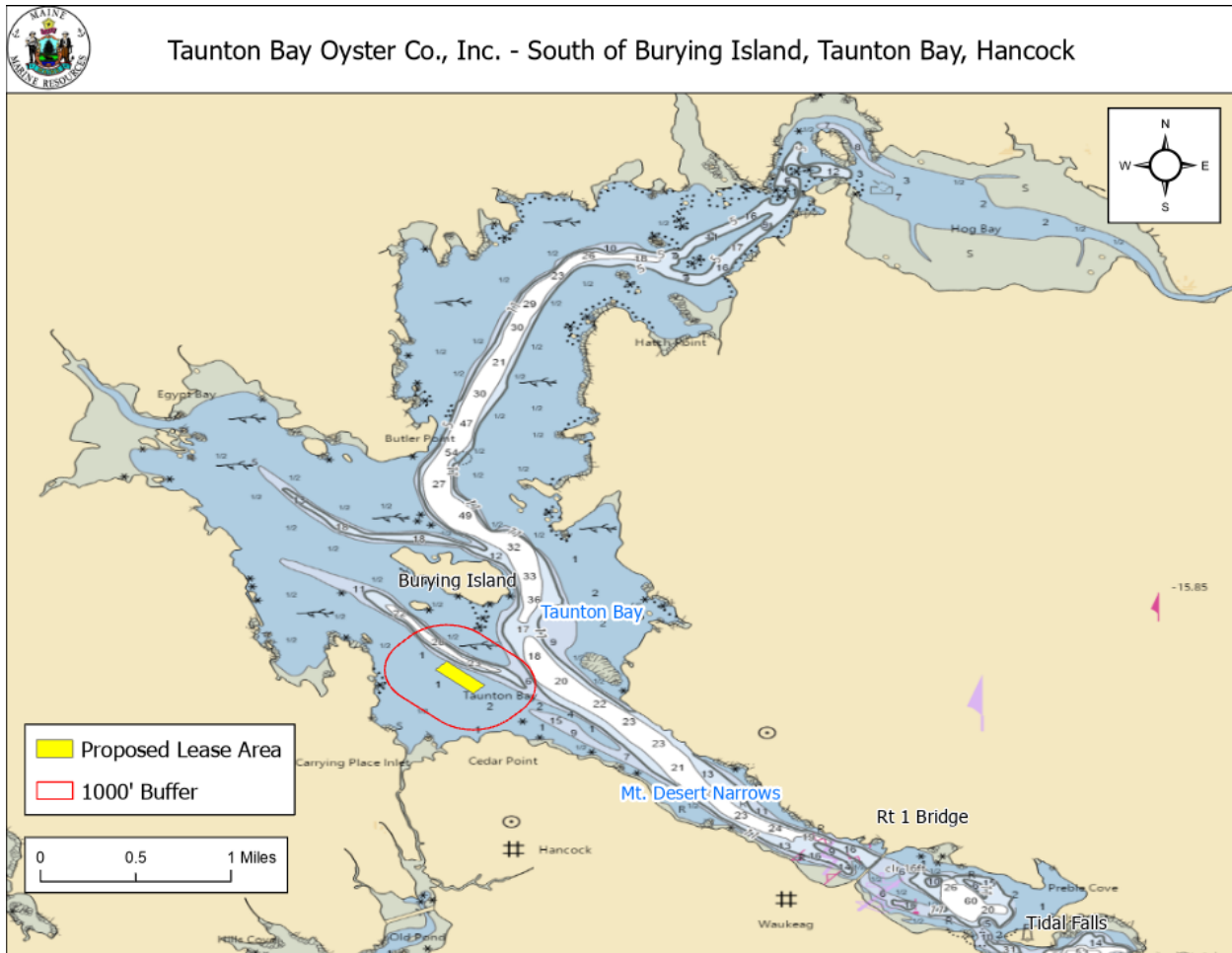


Figure 3. Navigational channels in the vicinity of the proposed lease area.

(3) Fishing and Other Uses

During the site visit, DMR observed 38 lobster buoys in the general vicinity of the proposal. The closest buoy was located approximately 280 feet northeast of the proposal (Figure 2). DMR scientists observed one lobster boat actively tending traps north of the proposal in the channel during the site visit on August 8, 2025. No other recreational or commercial fishing activity was observed.

(4) Other Aquaculture Uses

There are four limited purpose aquaculture (LPA) sites within 1,000 feet of the proposal. BRIG623, BRIG723, BRIG823, and BRIG923 are within the boundaries of this standard lease proposal. They are licensed to Michael Briggs, owner of Taunton Bay Oyster Co., Inc., and would be relinquished if this lease is granted.⁸ There are no licensed aquaculture leases within 1,000

⁸ Application pages 12,13



feet of the proposal. TAUN SB2, held by Taunton Bay Oyster Company, Inc., is approximately 1,470 feet southeast of this proposal (Figure 4).

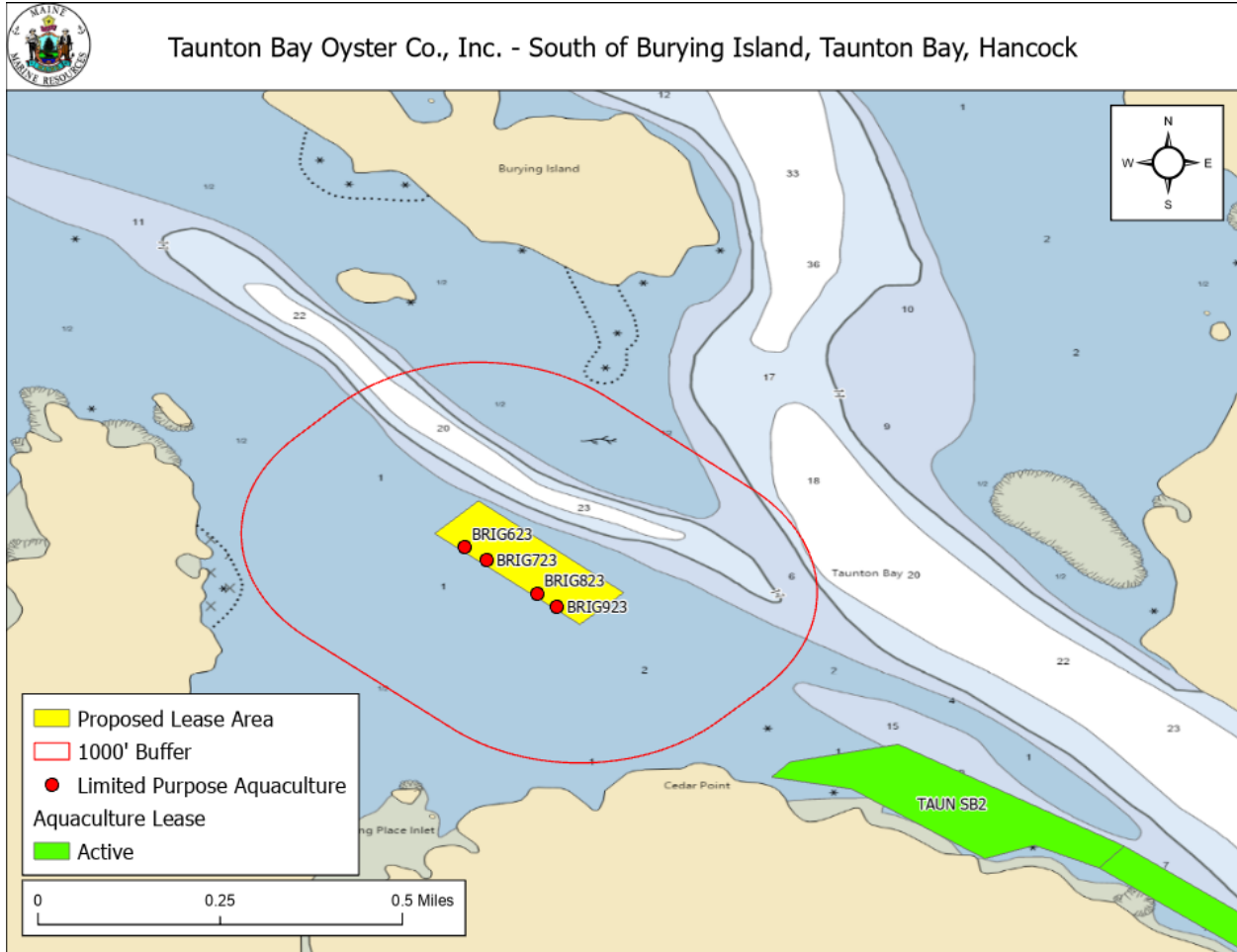


Figure 4. Aquaculture leases and LPA licenses in the vicinity of the proposed lease area.

(5) Existing System Support

Epibenthic Flora and Fauna

On August 8, 2025, 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 4.

Table 4. Species observed on underwater video footage.

Species Observed	Abundance
Sand Shrimp (<i>Crangon septemspinosa</i>)	Common
Red seaweed (<i>Dasysiphonia japonica</i>)	Occasional
Crab (<i>Cancer</i> sp.)	Occasional



Species Observed	Abundance
Sugar kelp, unattached (<i>Saccharina latissima</i>)	Occasional
European green crab (<i>Carcinus maenas</i>)	Occasional
Small baitfish (unidentifiable)	Occasional

Eelgrass (*Zostera marina*)

Historical records of eelgrass collected by DMR in 2010⁹ indicate mapped eelgrass presence in the boundaries of the proposal (Figure 5). No eelgrass was observed on underwater video footage within the proposal boundaries during DMR’s site visit.

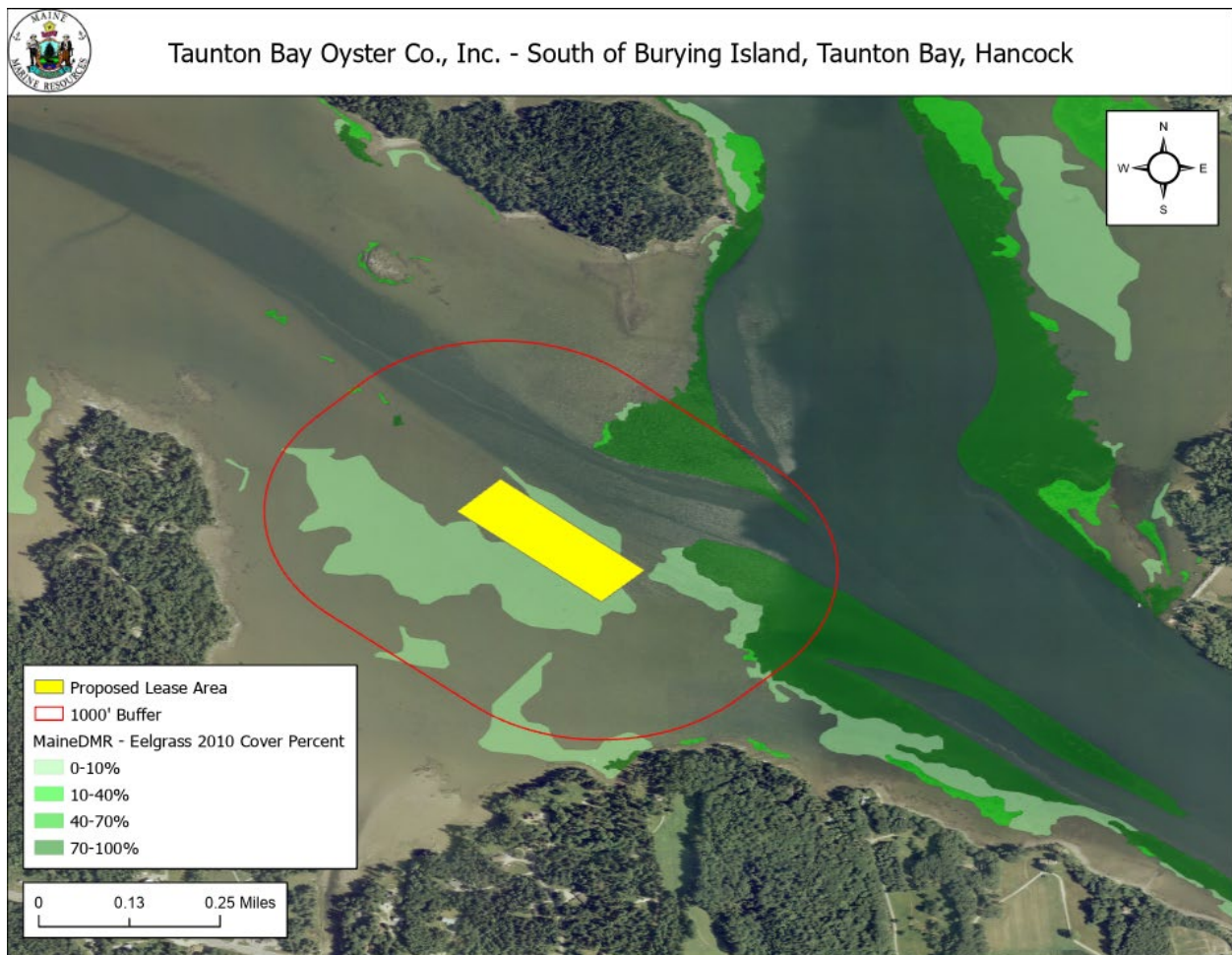


Figure 5. Mapped eelgrass (*Z. marina*) in the vicinity of the proposed lease area.

⁹ Data 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.



Department of Marine Resources Site Report

Taunton Bay Oyster Co., Inc
South of Burying Island, Taunton Bay
Hancock

Wildlife

During DMR's site visit, scientists observed common tern (*Sterna hirundo*), herring gull (*Larus argentatus*), common loon (*Gavia immer*), laughing gull (*Leucophaeus atricilla*), bonaparte's gull (*Chroicocephalus philadelphia*), double-crested cormorant (*Nannopterum auritum*), great cormorant (*Phalacrocorax carbo*), bald eagle (*Haliaeetus leucocephalus*), and harbor seal in the general vicinity of the proposal. The harbor seal was observed swimming.

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 two mapped habitat types within 1,000 feet of the lease proposal. The proposal is located entirely within Tidal Waterfowl and Wading Bird Habitat (TWWH), and is approximately 625 feet south of Shorebird Area, which are types of Significant Wildlife Habitat designated and regulated by IFW (Figure 6).¹⁰

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 the closest bald eagle nesting site to be over 2,500 feet north of the proposal (Figure 6).

IFW was provided with the opportunity to comment on this proposal. On November 1, 2023, a Resource Biologist with IFW responded by email to a "Request for Agency Review and Comment" stating that the lease is located within high value TWWH, which is comprised of aquatic bed, reef, and reef-mudflat complex. IFW recommends relocating the lease outside of the mapped resource to help preserve and protect TWWH.¹¹

¹⁰ <https://www.maine.gov/ifw/programs-resources/environmental-review/significant.html>

¹¹ Email correspondence between IFW and DMR

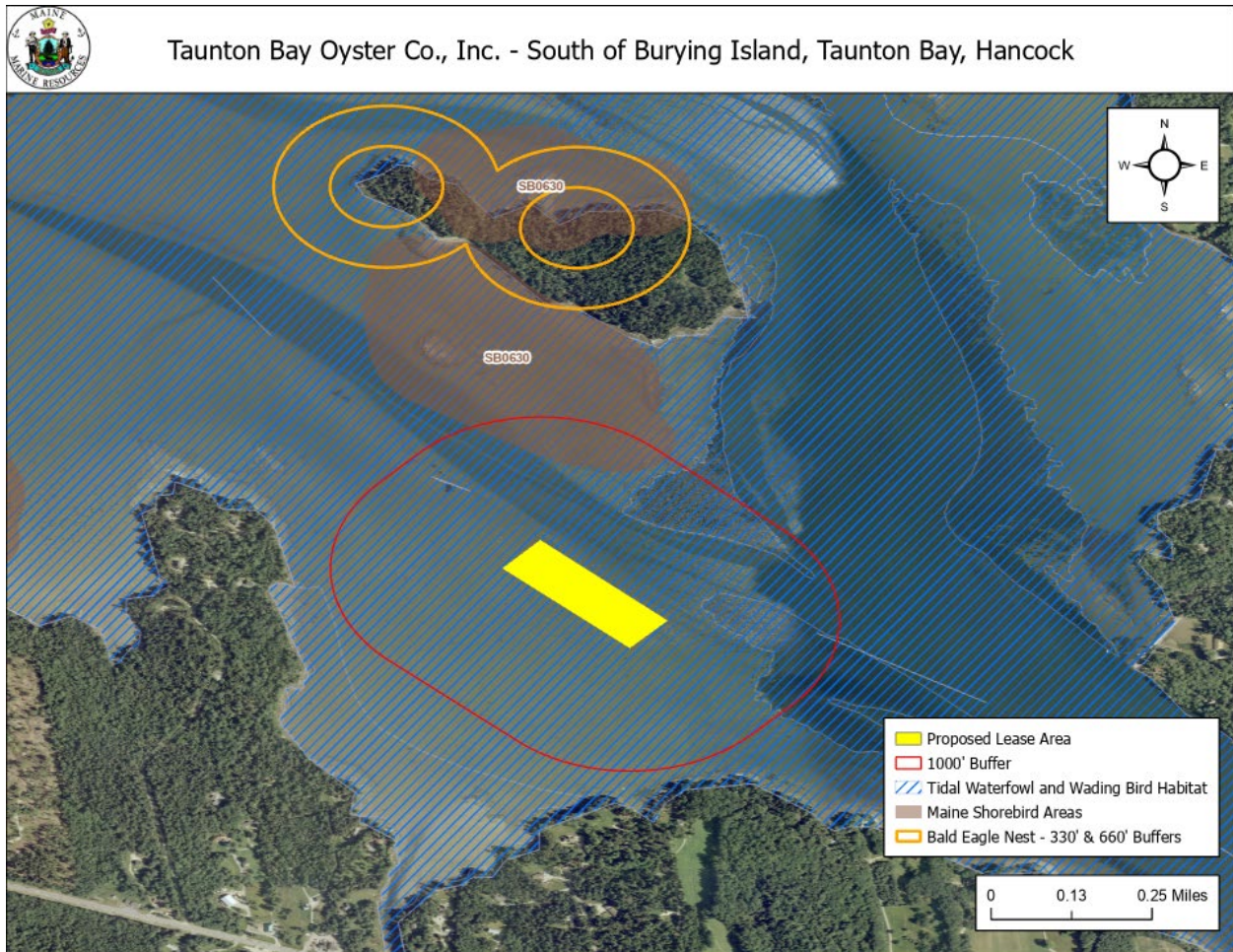


Figure 6. Mapped habitats in the vicinity of the proposed lease area.¹²

¹² 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 beach, park, docking facility, or conserved lands owned by federal, state, or municipal governments (Figure 7). Burying Island, approximately 1,700 feet north of the proposal, is held in a conservation easement by IFW.



Figure 7. Public facilities in the vicinity of the proposed lease area.¹³

(7) Growing Area Classification

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

¹³ Data obtained from 'Maine_Conserved_Lands' managed by the Maine Department of Agriculture, Conservation, & Forestry