Department of Marine Resources
Site Review

Jeff Putnam
107 Littlefield Rd
Chebeague Island, ME 0401

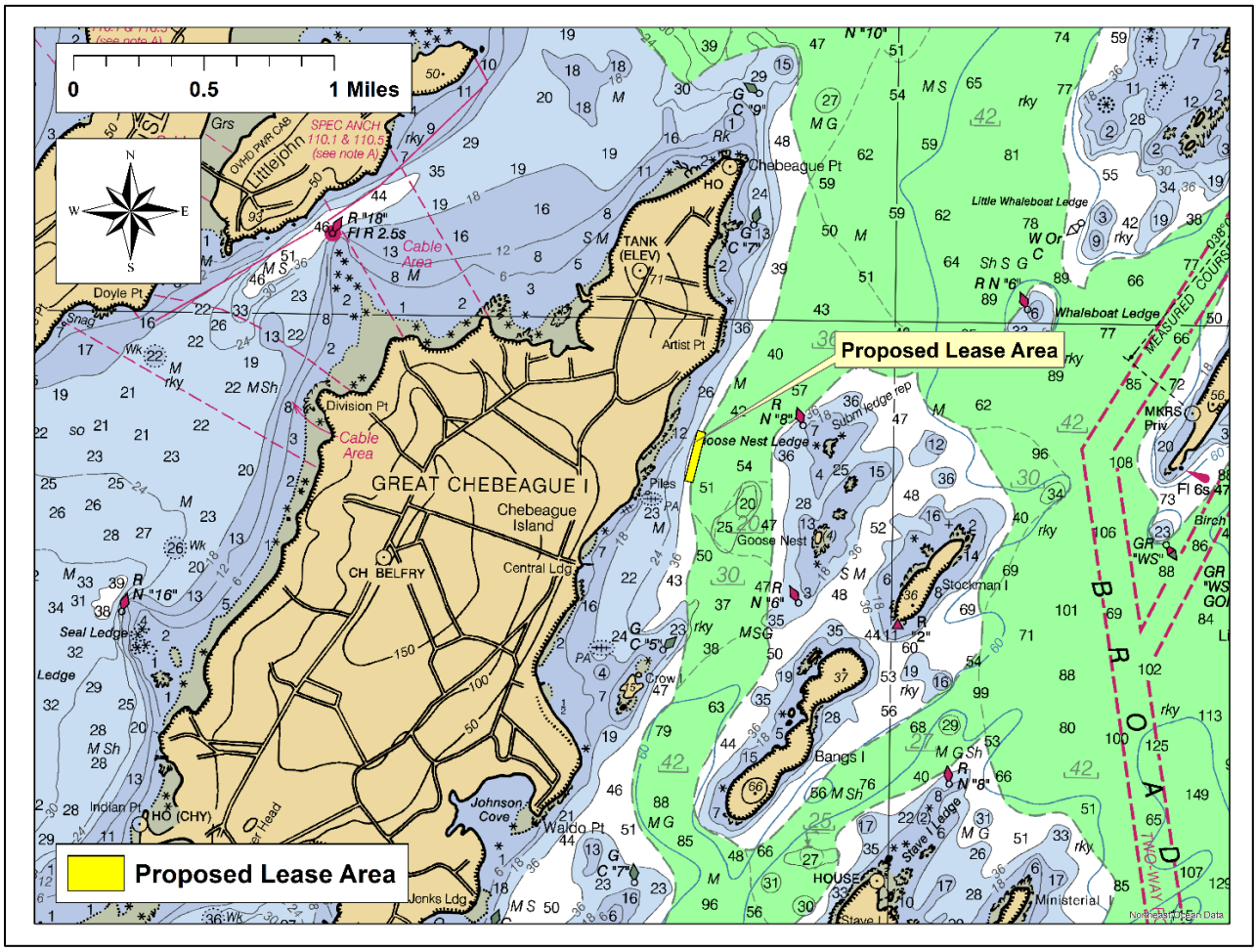


Figure 1: Vicinity map[1]

Location: East of Great Chebeague Island, Casco Bay, Chebeague Island, Cumberland County, Maine

Purpose: Experimental lease for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), shotgun kelp (*Agarum cribosum*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), nori/laver (*Porphyra sp.*), *Gracilaria tikvahiae*, and sea lettuce (*Ulva lactuca*)

Site Review: Flora Drury and Cheyenne Adams
Report Preparation: Cheyenne Adams and Marcy Nelson
Report Submitted: August 26, 2022

[1]All figures in this report were created in ArcMap version 10.8 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS (orthoCoastalCascoBay2018).

On March 23, 2022 Maine Department of Marine Resources (MDMR) staff Flora Drury and Cheyenne Adams visited the proposed experimental aquaculture lease. MDMR staff arrived on site at 2:45 pm; the tide was in the late flood stage.

The applicant, Jeff Putnam, is requesting 4.12[2] acres to the east of Great Chebeague Island, in Casco Bay, for the suspended culture of marine algae. Experimental leases are limited to 4 acres in size (as per 12 MRSA §6072-A(4)), and therefore the proposed lease area will be reduced to 4.00 acres, if the lease is granted.[3] The applicant proposes to deploy up to 10 suspended longlines, deployed 7 feet below the surface of the water. One section of the application states that longlines will be approximately 1,100 feet in length,[4] and another section appears to show the longlines slightly less than 1,000 feet in length.[5] As illustrated in the "Position and Distance to Shore" Section of this report below, the proposed lease area is approximately 1,039.57 feet long on the eastern boundary and 1,051.93 feet long on the western boundary. Therefore, the proposed length of longlines may not fit within the proposed site dimensions. Additionally, the reduction in lease acreage will further reduce the length the eastern and western boundaries, if the proposal is granted. Longlines and depth compensator buoys will be removed from the water June 1 – October 14, annually; 20 moorings (either 800-lb pyramid anchors or 2,000-lb blocks), 20 associated mooring buoys (A3 and A4 poly balls), and the required marker buoys will remain on site year-round.[6]

General Characteristics

The proposed lease occupies subtidal waters near the eastern shoreline of Great Chebeague Island, Casco Bay (Figure 1). The nearby shoreline is primarily sand beach, and the uplands exhibit mixed forest hosting several residential houses and associated structures (Image 1). Uninhabited islands and Harpswell are to the east of the proposal (Image 2).

[2] The application states 3.9 acres but DMR calculations, based on the coordinates provided, indicate the proposal is 4.12 acres
[3] Details provided in the "Position and Distance to Shore" section below
[4] Application, page 16
[5] Application, page 26
[6] Application, page 6 and page 16

Image 1: Facing north toward Great Chebeague Island from near the center of the proposal (March 23, 2022).

Image 2: Facing northeast from near the center of the proposal (March 23, 2022).

Image 3: Facing southeast from near the center of the proposal (March 23, 2022).

Image 4: Facing southwest from near the center of the proposal (March 23, 2022).

Depth

At the time of the Department's site assessment, depths at the corners of the proposed lease site ranged from 49.2 feet to 58.2 feet, as measured with a transom-mounted depth sounder. MDMR staff observed the depths of the proposed lease site at approximately 2:45 pm. Correcting for tidal variation derives water depths between 49.8 and 58.8 feet at the nearest high water, and water depths between 40.8 and 49.81 at mean low water (MLW, 0.0').

Table 1: Tide predictions at Chebeague Point, Great Chebeague Island (43.7667° N, 70.1000° W)[7]

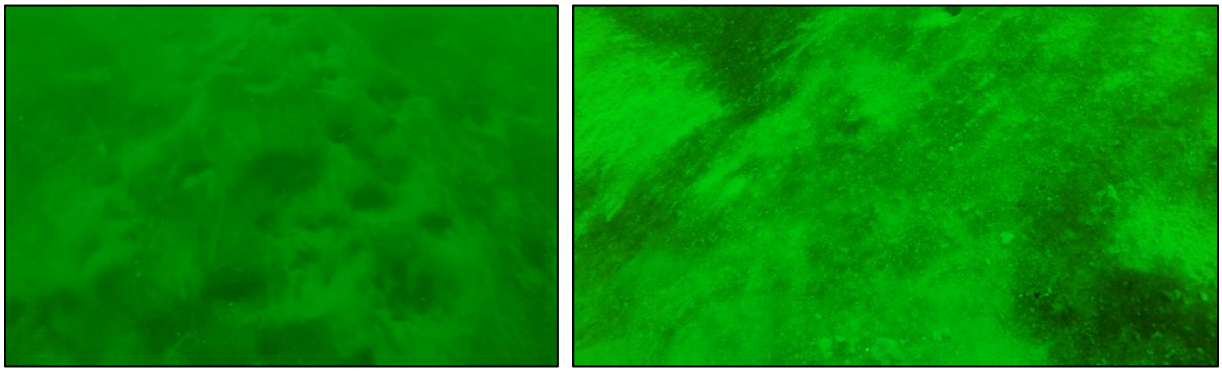
Date	Time	Height (ft)
3/23/2022	9:24 AM	-0.52 L
3/23/2022	3:43 PM	8.99 H
3/23/2022	9:37 PM	0.49 L

Bottom Characteristics

MDMR staff observed the bottom characteristics of the site via a drop camera transect on March 23, 2022 (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; no sediment samples were collected, or grain size analysis performed. The section of bottom observed was composed of mud sediment (Images 5 & 6).

Table 2. Bottom characteristics of drop camera transect of proposed site.

Substrate Origin	Substrate Class	Substrate Subclass	Substrate Group (Subgroup)
Geologic Substrate	Unconsolidated Mineral Substrate	Fine Unconsolidated Mineral Substrate	Mud



Images 5 & 6: Bottom of proposed lease site (March 23, 2022).

[7] http://tbone.biol.sc.edu/tide/tideshow.cgi

Position and Distances to Shore

The measuring tool and coordinate geometry (COGO) report tool in ArcMap 10.8 were used to verify the distances and bearings between proposed lease corners. Distances to shore were determined using the measuring tool in ArcMap 10.8, digital orthophotography provided by the Maine Office of GIS, and the application coordinates. The proposed lease area, based on the coordinates provided in the application, is 4.12 acres. Since experimental leases cannot be granted in excess of 4 acres, the proposed area was reduced by approximately 30 feet on the southern boundary.[8]

WGS84 Coordinates – 4.12 acres (Figure 2)

Corner	Latitude	Longitude	
NW	43.743850° N	70.098386° W	*then 172.54 feet at 106.70° True to*
NE	43.743720° N	70.097758° W	*then 1,039.57 feet at 194.25° True to*
SE	43.740946° N	70.098676° W	*then 170.86 feet at 282.57° True to*
SW	43.741042° N	70.099309° W	*then 1,051.93 feet at 14.16° True to NW.*

Reduced WGS84 Coordinates – 4.00 acres (Figure 2 & 3)

Corner	Latitude	Longitude	
NW	43.743850° N	70.098386° W	*then 172.54 feet at 106.70° True to*
NE	43.743720° N	70.097758° W	*then 1,007.62 feet at 194.25° True to*
SE[9]	43.741031° N	70.098648° W	*then 170.96 feet at 282.12° True to*
SW[8]	43.741124° N	-70.099282° W	*then 1,021.33 feet at 14.16° True to NW.*

Table 2: Approximate Distances to Shore (Figures 1-3)	
NW Corner to Nearest Point, Great Chebeague Island (~MLW)	~490 feet to the northwest
NE Corner to Goose Nest Ledge, nearest point (~MLW)	~2,200 feet to the southeast
NE Corner to Red Nun "8" Navigational Buoy (NOAA Chart)	~1,900 feet to the northeast
Revised SE Corner to Goose Nest Ledge, nearest point (~MLW)	~2,5400 feet to the northeast
Revised SW Corner to Nearest Point, Great Chebeague Island (~MLW)	~710 feet to the northwest

[8] C. Adams discussed this change with the applicant on the phone on 7/18/2022 and the applicant expressed no concerns over the revised coordinates.
[9] Revised

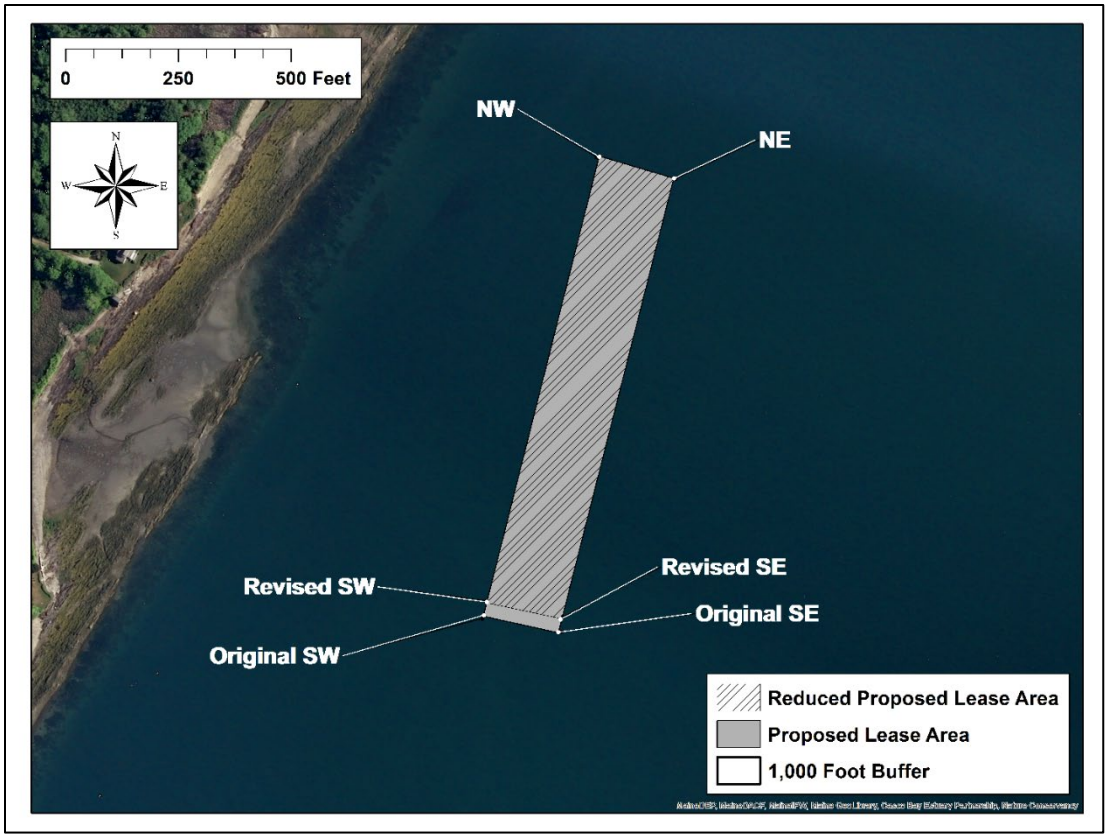


Figure 2: Reduced proposed lease area.

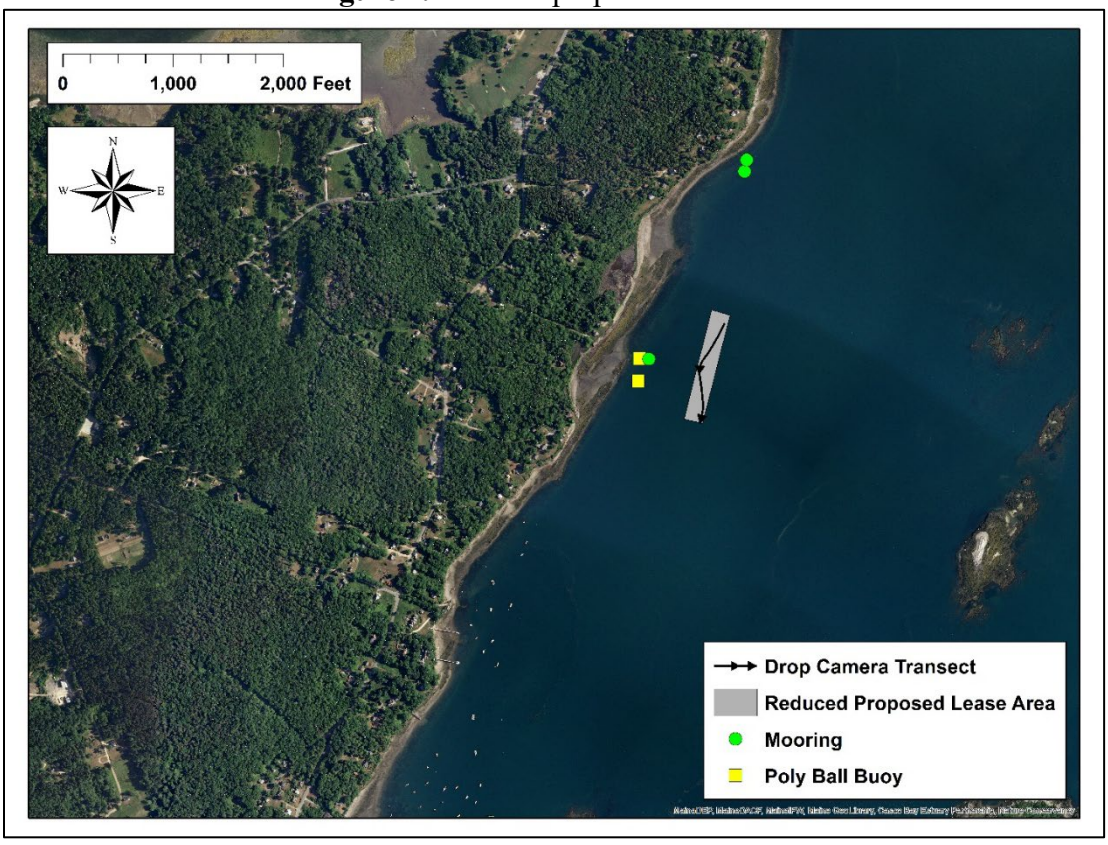


Figure 3: Reduced proposed lease area and surrounding features.

The criteria MDMR uses to determine the suitability of an experimental aquaculture operation to a particular area (MDMR Regulations Chapter 2.64(11)(A)) are discussed, with respect to the proposal, below:

(1) Riparian Owners Ingress and Egress

The proposed lease occupies subtidal waters approximately 490 feet from the shoreline of Great Chebeague Island at the nearest point at mean low water. Numerous houses were observed along the nearby shoreline, including approximately seven houses directly west of the proposal. Some of these houses maintained stairs to the shoreline immediately west of the proposal and to the northwest. Two moorings with winter stick buoys were observed near the shoreline, just over 1,280 feet to the northwest of the proposal. An additional mooring buoy and two poly ball buoys were observed approximately 430 and 490 feet to the west of the proposal, respectively. No vessels were observed on any of these moorings. Finally, there is a mooring field and boat yard farther southwest along the Great Chebeague Island shoreline, which is discussed in "Section 2: Navigation." The applicant is proposing to deploy longlines from October 15 through June 1 and leave two rows of 10 mooring buoys in place during the off-season. The rows of mooring buoys would run approximately perpendicular to the shoreline and would be spaced approximately 1,000 feet apart from each other, at a minimum.

In consideration of the observed shoreline stairs and sand beach, landing vessels directly on the shoreline to the west of the proposal may be commonplace. It is expected that the use of nearby moorings and shore landing primarily occurs during the summer season but there may be some overlap with the times that longlines are proposed, particularly in late May and late October. Great Chebeague Island has a ferry terminal on the southern end of the island, but residents may also use private vessels to access the mainland, which could extend the season that moorings are used and shore landing is common.

During the months that longlines are deployed, access to the observed moorings would not be prevented. Based on the depth of the area, according to NOAA Charts, and estimated mooring swing, it's likely that at least 400 feet would remain available for navigation between the proposal and the nearest mooring. However, traditional access routes may be altered, particularly from the north or east, and use of the mooring may be more cumbersome due to the proximity of deployed aquaculture gear, if the proposal is granted. Access to the shoreline directly west of the proposal would require navigating around the proposed lease area. Vessels that are capable of landing directly on shore are likely capable of maneuvering in the ~490 feet between the proposal and the shoreline, at the nearest point.

During months that only mooring buoys are deployed, traditional access routes to the nearby moorings and shoreline are unlikely to be affected. Although two rows of mooring buoys would remain on site if the lease is granted, they would be approximately perpendicular to the shoreline and riparian landowners could easily navigate around or between them. The distance to the nearest mooring from the nearest row of mooring balls would be approximately 600 feet, but access to the mooring from the north or east would likely require navigating between the two rows of proposed mooring buoys. Although sufficient space (~1,000 feet) would be available between the two rows of mooring buoys for riparian navigation, riparian landowners may choose to avoid the area, if the least is granted, at least until they are familiar with the operations.

(2) Navigation

As mentioned above there is a mooring field southwest of the proposal and near Great Chebeague Island's shoreline. The nearest mooring that appears to be associated with this mooring field is approximately 1,710 feet from the proposal, according to digital orthophotography taken in 2018 and provided by the Maine Office of GIS.[10] Due to this distance, it is unlikely that the proposed lease would prevent access to the mooring field or interfere with the use of any moorings. However, the presence of the mooring field may result in increased vessel traffic in the area, and mariners traveling to and from the mooring field may be required to alter traditional routes and navigate around the proposed longlines and/or mooring buoys, depending on the season.

Automatic Information System (AIS) data for 2021 show a vessel count of 100-200 between the proposal and the Red Nun "8" navigational buoy, and a vessel count of 60-100 to and from the mooring field to the southwest of the proposal (Figure 4). Additionally, the 2021 AIS data show a vessel count of 20-40 within the proposed lease area. Not all vessels are equipped with AIS data, and therefore smaller recreational and commercial vessels may occur in a greater amount or closer proximity to the lease than is represented by AIS data.

With approximately 490 feet between the proposal and Great Chebeague Island to the west, and approximately 1,900 feet between the proposal and the Red Nun "8" navigational buoy to the east, there is likely sufficient space for vessels to maneuver around the proposal, if it were granted. However, the presence of longlines and/or two rows of mooring buoys may cause some amount of vessel congestion if multiple vessels are attempting to transit the area simultaneously. While vessel traffic is expected to be heaviest during summer months when longlines are removed from the site, there could be some overlap between increased boat traffic and the months that longlines are deployed, particularly late May and late October. Additionally, the two rows of mooring buoys that would remain onsite year-round would be oriented roughly perpendicular to the general flow of traffic as shown by AIS data, which may cause mariners to avoid the entire lease area, if it is granted.

[10] *orthoCoastalCascoBay2018*

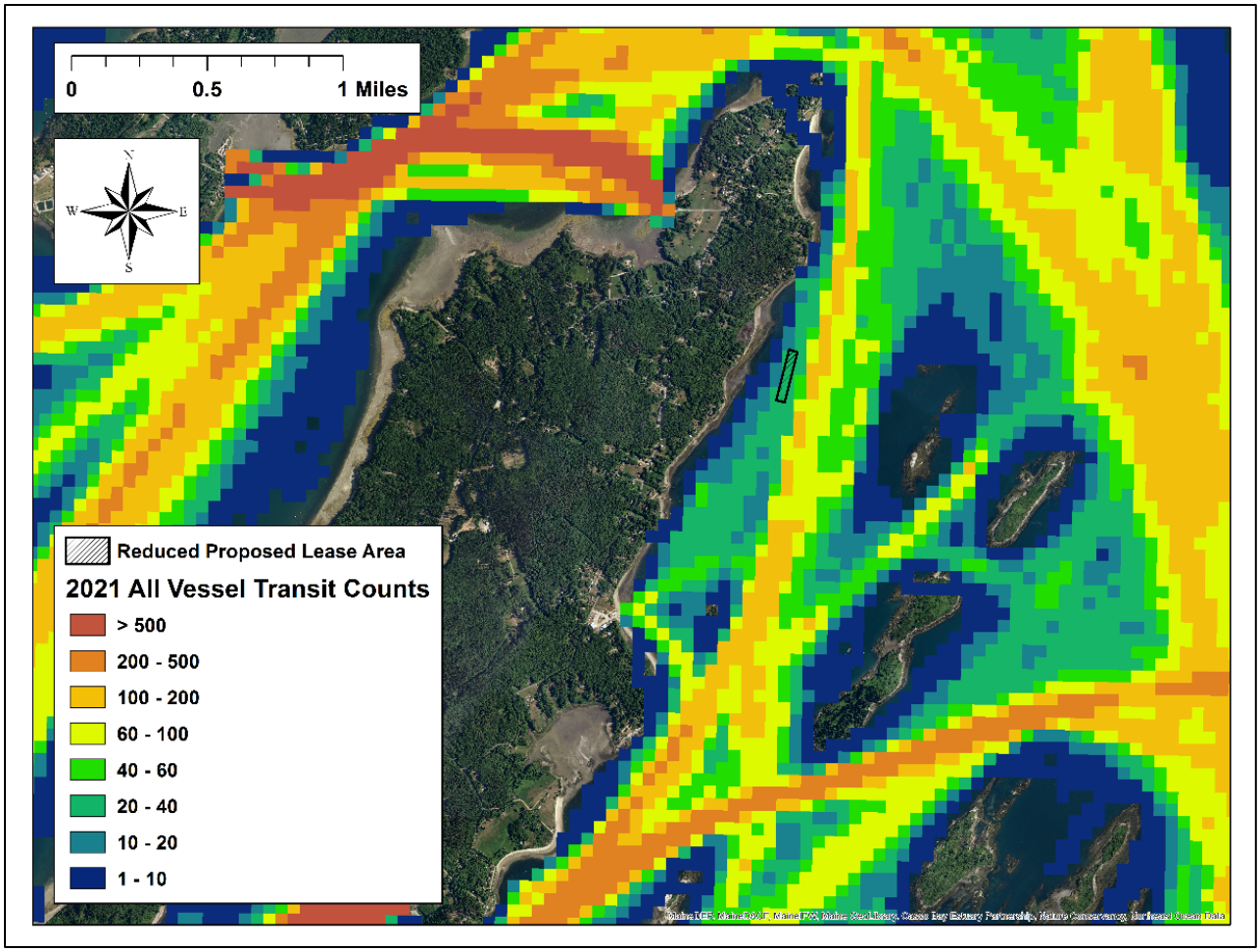


Figure 4. Automatic Identification System (AIS) 2021 vessel count data in the vicinity of the proposed lease.[11]

(3) Fishing and Water-Related Uses

At the time of MDMR's site assessment on March 23, 2022, one fouled lobster-style buoy was observed in the general area. The lobster (*Homarus americanus*) fishery in Maine is seasonal, following the annual migration and molt cycle of lobsters. Therefore, lobster fishing may be more prevalent or in closer proximity to the proposal at other times of the year than when the site visit was conducted. It's possible that lobster traps could be set between the two rows of mooring buoys that would remain onsite year-round, spaced approximately 1,000 feet apart. However, it is unknown if lobster fishermen would be comfortable doing so. If lobster fishing is prevalent in the area during late October or late May, for example, when longlines are deployed, lobster traps would be displaced from the proposed lease area. Finally, the applicant included four letters of support with their application, all of which state that the proposal does not interfere with lobster fishing.

No other signs of commercial fishing were observed, and no commercially important species were seen in the drop camera video.

[11] https://services.northeastoceandata.org/arcgis1/rest/services/MarineTransportation/MapServer

(4) Other Aquaculture Uses

There are 33 leases, 109 LPA licenses, and 14 pending applications within Casco Bay (Figures 5 & 6, Tables 3 & 4). All of the pending applications shown in Figure 4 and listed in Table 4 were received prior to the application under consideration in this report. The nearest aquaculture site to the proposal is the LPA license site REAR217, which is approximately 4,820 feet to the southwest and approved for the suspended culture of shellfish. Additionally, there is a pending 3.86-acre marine algae lease application approximately 100 feet to the north of the proposal considered in this report.

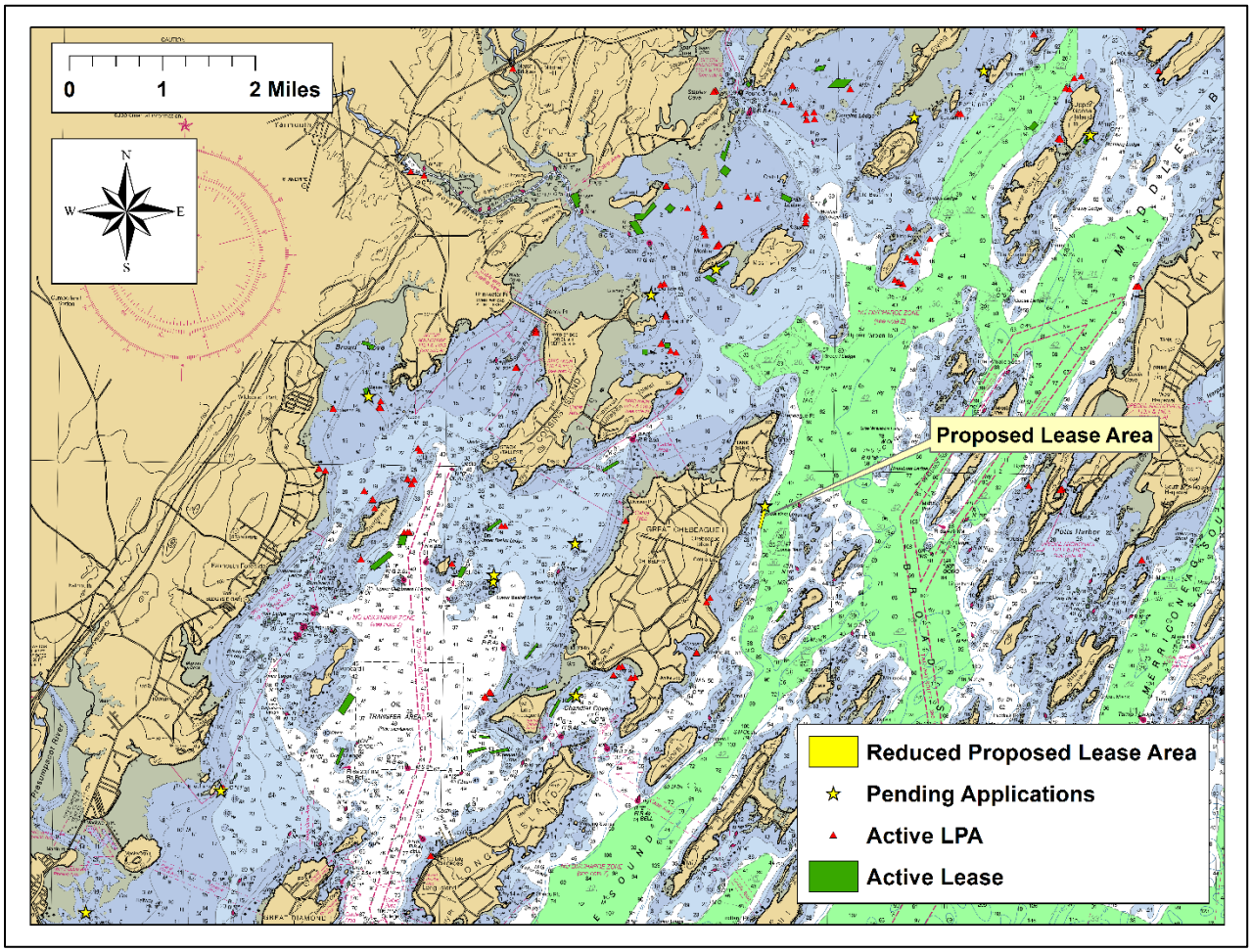


Figure 5: Aquaculture activity in Casco Bay.

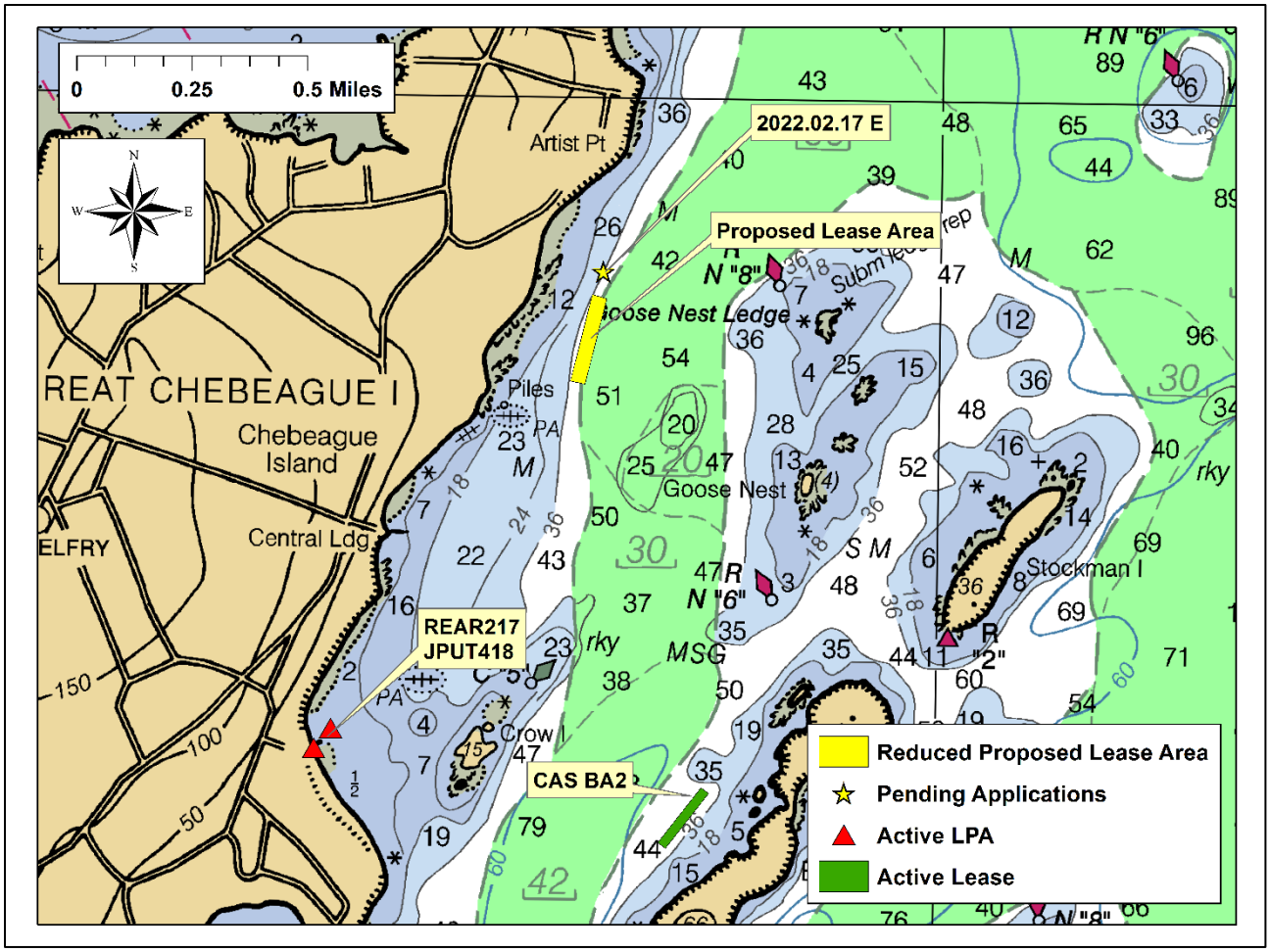


Figure 6: Aquaculture activity in the vicinity of the proposal.

Table 3: Aquaculture sites in Casco Bay.

Lease/License Acronym	Lease/License Holder	Acreage
CAS BA2	WILD OCEAN AQUACULTURE, LLC.	2
CAS LONG	WILD OCEAN AQUACULTURE, LLC.	1.74
CAS LJIx	WOLFE NECK OYSTER COMPANY, LLC.	1.93
CAS LCI2	WILD OCEAN AQUACULTURE, LLC.	0.86
CAS BASK2	WILD OCEAN AQUACULTURE, LLC.	4.01
CAS MIx	BUTTERFIELD, KEITH	3.55
CAS CHEB2	WILD OCEAN AQUACULTURE, LLC.	3.03
CAS CHANx	GREAT LEDGE COVE SEAFOOD, LLC	3.57
CAS SI	THE MAINE SCALLOP COMPANY, LLC.	5.36
CAS CIx	OCEANS BALANCE, INC.	3.93
CAS NLC	CHEBEAGUE ISLAND OYSTER COMPANY, LLC.	1.96
CAS BC2	BASKET ISLAND OYSTER COMPANY, LLC.	3.59
CAS CI2x	HUNT, STEWART	3.85
CAS LCI3x	GREAT LEDGE COVE SEAFOOD, LLC	3.73
CAS LCI4x	TRAIN, STEPHEN	3.98
CAS SI2	SUMMIT POINT, LLC	10.37

CAS BC2x	HENNINGER, THOMAS	2.75
CAS CF3	WILD OCEAN AQUACULTURE, LLC.	11
CAS LJ2x	HENNINGER, THOMAS	2.06
CAS ELMx	BUTTERFIELD, KEITH	3.19
CAS CSHx	HERMIT ISLAND OYSTER COMPANY, LLC	0.78
CAS LI	MAINE SOURCE SEAFOOD	3.47
CAS RCx	DIRIGO MARINE RESOURCES, LLC	2.99
CAS ELC	SHEARWATER VENTURES, LLC.	3.83
CAS NLC3x	CHEBEAGUE ISLAND OYSTER COMPANY, LLC.	1.73
CAS UBLx	STEWART HUNT	3.94
CAS LI2	MOESER, AMANDA	8.62
CAS RC2	MAINE OCEAN FARMS, LLC	9.86
CAS SP	HARRASEEKET OYSTER CO. LLC1	4.74
CAS SP2	LOVE POINT OYSTERS, LLC.	4.79
CAS CB	LOVE POINT OYSTERS, LLC.	3.89
CAS LI3	WOLFE NECK OYSTER COMPANY	7.64
AGAI121	Alicia Gaiero	LPA
AGAI221	Alicia Gaiero	LPA
AMGA121	Amy Gaiero	LPA
AMGA221	Amy Gaiero	LPA
BBUR120	Benjamin Burnes	LPA
BBUR220	Benjamin Burnes	LPA
BBUR320	Benjamin Burnes	LPA
BCLE117	Brian Clement	LPA
BCOF121	Bailey Coffin	LPA
BCOF221	Bailey Coffin	LPA
BDIC118	Blake Dickison	LPA
BDIC218	Blake Dickison	LPA
BDIC318	Blake Dickison	LPA
BERI117	Brian Ericson	LPA
BERI320	Brian Ericson	LPA
BERI421	Brian Ericson	LPA
BERI521	Brian Ericson	LPA
BHAM320	Ben Hamilton	LPA
BHAM420	Ben Hamilton	LPA
BHAM521	Ben Hamilton	LPA
BHAM621	Ben Hamilton	LPA
BMCK115	Becky McKinnell	LPA
CBAR321	Cameron Barner	LPA
CBLA120	Carolyn Blackburn	LPA
CBLA220	Carolyn Blackburn	LPA
CBLA320	Carolyn Blackburn	LPA
CBLA421	Carolyn Blackburn	LPA
CGAI121	Carolyn Gaiero	LPA
CGAI221	Carolyn Gaiero	LPA
CHGA121	Chelsea Gaiero	LPA
CHGA221	Chelsea Gaiero	LPA
EORA317	Eric Oransky	LPA
GDAW120	Butch Dawbin	LPA

GDAW220	Butch Dawbin	LPA
GDAW321	Butch Dawbin	LPA
GDAW421	Butch Dawbin	LPA
GRE310	Mark Green	LPA
GWIL221	Greg Williams	LPA
GWIL322	Greg Williams	LPA
GWIL422	Greg Williams	LPA
GWIL522	Greg Williams	LPA
HERR120	Chris Herreid	LPA
HERR220	Chris Herreid	LPA
HHEN319	Heidi Henninger	LPA
HHEN419	Heidi Henninger	LPA
JBRO121	Jennifer Brown	LPA
JBRO221	Jennifer Brown	LPA
JFOR121	Jacob Forgit	LPA
JFOR221	Jacob Forgit	LPA
JFOR321	Jacob Forgit	LPA
OHEI120	Owen Heil	LPA
JPUT116	Jeff Putnam	LPA
JPUT216	Jeff Putnam	LPA
JPUT317	Jeff Putnam	LPA
JPUT418	Jeff Putnam	LPA
JTHO119	Jonathan Thomas	LPA
KCSP219	Kenneth C. Sparta	LPA
KCSP319	Kenneth C. Sparta	LPA
KCSP419	Kenneth C. Sparta	LPA
KISF120	Kristin Isfeld	LPA
KISF220	Kristin Isfeld	LPA
KISF320	Kristin Isfeld	LPA
KISF420	Kristin Isfeld	LPA
KKOE117	Kyle Koerber	LPA
MBRO121	Mike Brown	LPA
MBRO221	Mike Brown	LPA
MODL318	Matthew Odlin	LPA
MODL418	Matthew Odlin	LPA
MODL518	Matthew Odlin	LPA
MODL618	Matthew Odlin	LPA
MTRA118	Marcia Train	LPA
NHEN118	Nathaniel Henninger	LPA
NHEN218	Nathaniel Henninger	LPA
NHEN318	Nathaniel Henninger	LPA
NHEN418	Nathaniel Henninger	LPA
NJOH120	Nathan Johnson	LPA
NJOH220	Nathan Johnson	LPA
NJOH320	Nathan Johnson	LPA
NJOH420	Nathan Johnson	LPA
PSTO1117	Peter Stocks	LPA
PSTO1217	Peter Stocks	LPA
PSTO1317	Peter Stocks	LPA
REAR117	Robert Earnest	LPA

REAR217	Robert Earnest	LPA
RKEY118	Ralph Keyes	LPA
RKEY219	Ralph Keyes	LPA
SBER117	Sean Bergen	LPA
SMOL121	Sam Molloy	LPA
THEN118	Thomas Henninger	LPA
THEN418	Thomas Henninger	LPA
TMAR222	Thomas Martin	LPA
TMOL220	Todd Molloy	LPA
TMOL420	Todd Molloy	LPA
TMOL521	Todd Molloy	LPA
TMOL621	Todd Molloy	LPA
TNIC119	Travis Nickerson	LPA
TNIC219	Travis Nickerson	LPA
TNIC319	Travis Nickerson	LPA
TNIC419	Travis Nickerson	LPA
WFER118	William Ferdinand Jr.	LPA
WFER219	William Ferdinand Jr.	LPA
WHIS112	David Whiston	LPA
WHIS213	David Whiston	LPA
WHIS416	David Whiston	LPA
WLEA118	William Leathers	LPA
WLEA218	William Leathers	LPA
ZPET118	Zachary Pettit	LPA
ZPET218	Zachary Pettit	LPA
ZPET318	Zachary Pettit	LPA

Table 4: Pending lease applications in Casco Bay received prior to the application considered in this report.

Application ID	Applicant
2019.10.31 S	Wolfe Neck Oyster Co
2019.11.22 S	Summit Point LLC
2020.07.01 S	Thomas Henninger
2021.04.23 S	Keith Butterfield
2021.05.07 S	Stewart Hunt
2021.05.17 S	Bailey Coffin
2021.09.09 S	Travis Nickerson
2021.1.10 S	Great Ledge Cove Seafood
2022.01.25 E	Summit Point LLC
2022.01.25 E	Summit Point LLC
2022.01.27 E	Stuart Ryan
2022.01.27 E	Thomas Martin
2022.02.07 E	Restorative Aquaculture
2022.02.17 E	Beth Putnam

(5) Existing System Support

Epibenthic Flora and Fauna

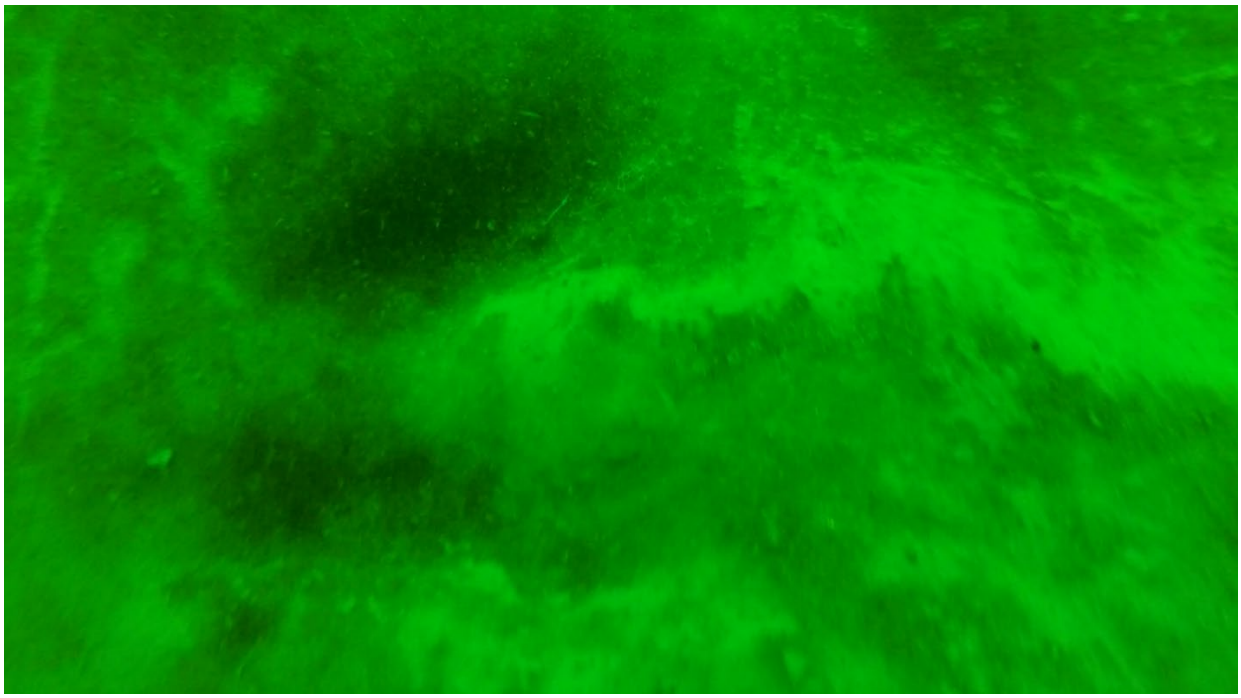
On March 23, 2022, MDMR staff conducted a drop-camera transect within the proposed site to assess the epibenthic ecology of the area (Figure 2). Species observed included abundant benthic microalgae and a brief sighting of a sturgeon (Images 7 & 8). All species observed and relative abundances are listed in Table 5.

A conclusive identification of the sturgeon to species level was not possible with the video footage obtained. In response to the sighting, MDMR requested information from the appropriate regional Consultation Biologist at the National Oceanic and Atmospheric Administration (NOAA).[12] The Consultation Biologist at NOAA stated:

"Since this area has not been identified as a potential sturgeon foraging site[,] I would not be too concerned that sturgeon would be using the area occasionally. There are no special measures that would be required to minimize interactions between sturgeon and the proposed gear."

Table 5: Species observed during MDMR drop camera transect on March 23, 2022.

Species Observed	Abundance
Burrows	Abundant
Benthic microalgae (potentially diatoms)	Abundant
Crab (potentially *Carcinus maenus)*	Rare
Sturgeon (*Acipenser sp.*)	Rare
Miscellaneous plant debris	Rare



Images 7: Benthic microalgae on bottom of proposed lease (March 23, 2022).

[12] Emails between C. Adams and D. Bean dated 7/27/2022 and 8/19/2022

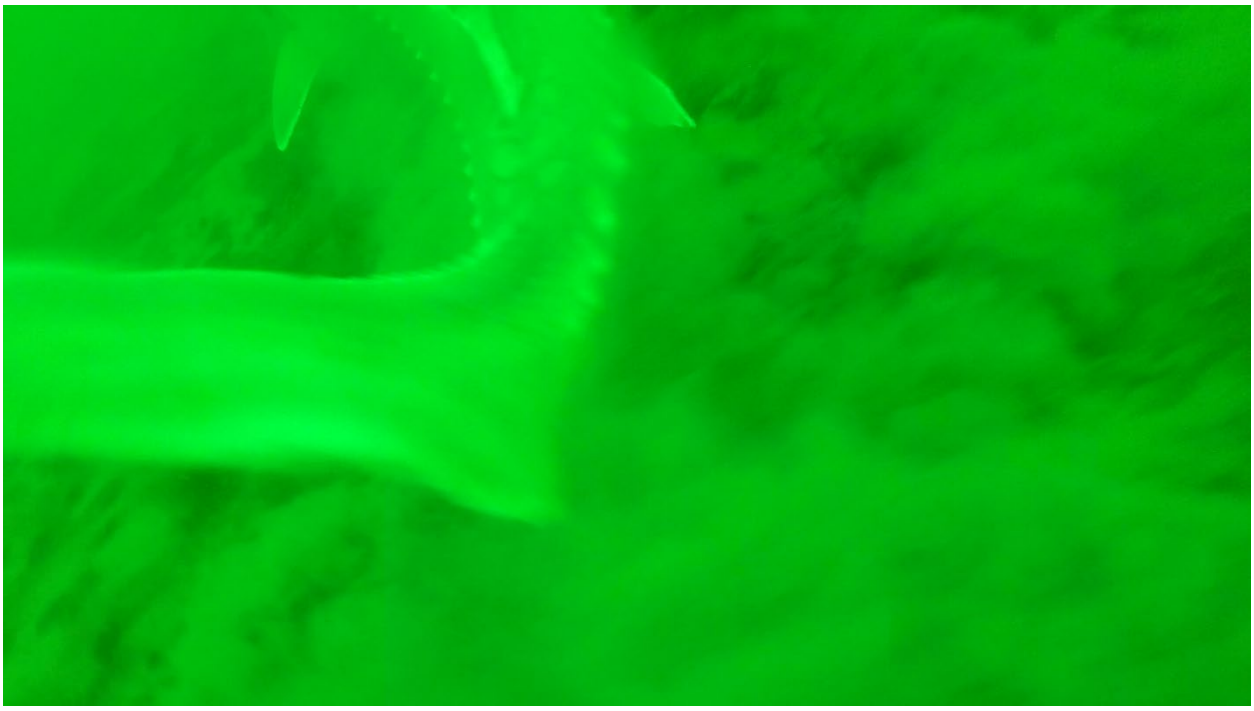


Image 8: Sturgeon (*Acipenser sp.*) on the bottom of proposed lease (March 23, 2022).

Wildlife

According to GIS (Geographic Information System) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIF&W) and available through the Maine Office of GIS, Tidal Wading Bird and Waterfowl Habitat is located approximately 370 feet from the proposed lease (Figure 7). This habitat type is defined under Maine's Natural Resources Protection Act (NRPA) as Significant Wildlife Habitat.

On March 15, 2022, a Wildlife Biologist at MDIF&W responded, by email, to a "Request for Agency Review and Comment" stating "minimal impacts to wildlife are anticipated for this project".

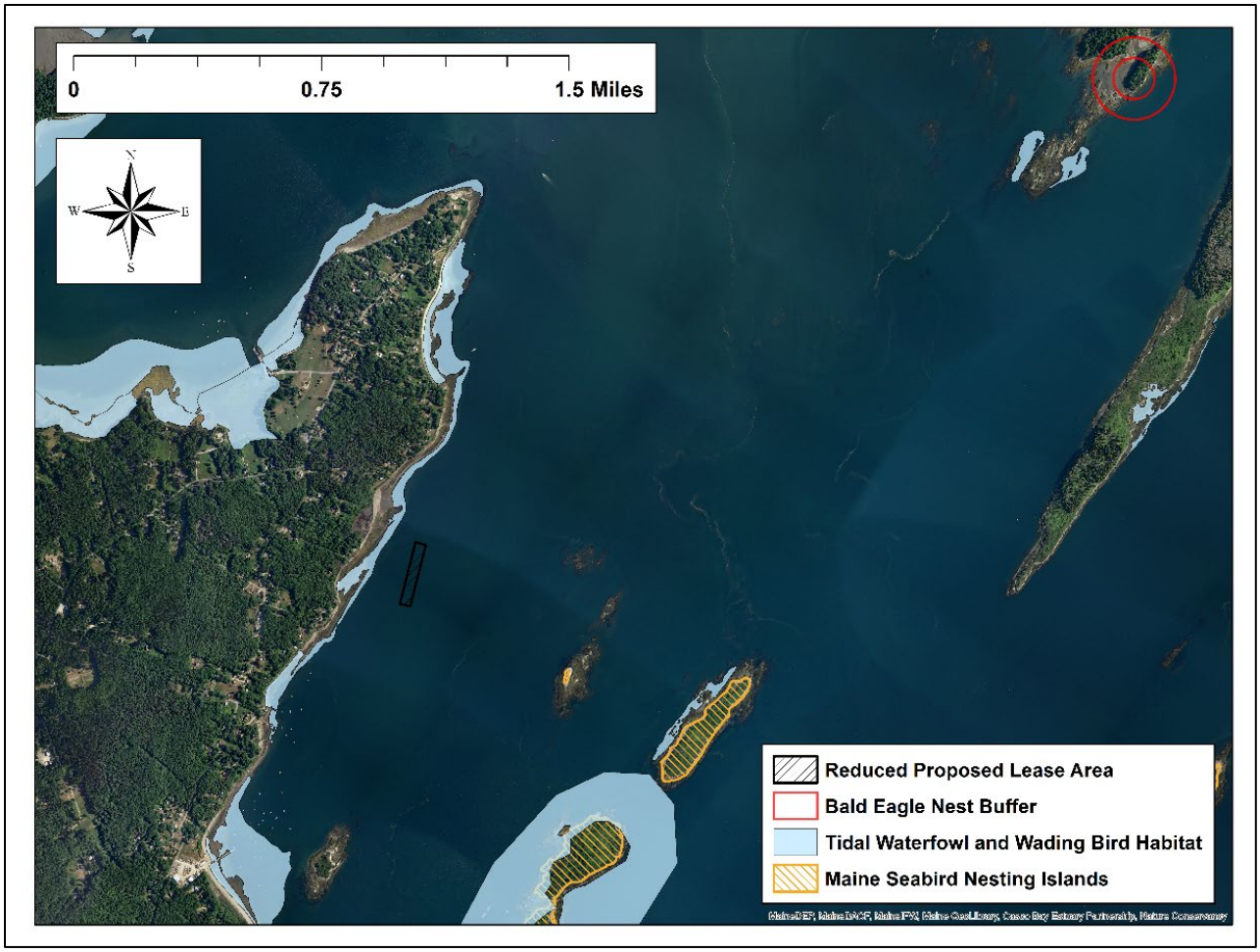


Figure 7: Seabird Nesting Islands[13] and Tidal Wading Bird and Waterfowl Habitat[14] and Bald Eagle Nest Buffer[15] near the proposed lease site.

Eelgrass

According to data collected by The Maine Department of Environmental Protection in collaboration with Friends of Casco Bay in 2018, the nearest documented presence of eelgrass (*Zostera marina*) is located approximately 360 feet from the proposed lease site (Figure 8). Additionally, due to the water depth, eelgrass beds are not expected to establish within or nearby the proposed lease area.

[13] Data obtained from MDIWF maintained SDE Feature Class "GISVIEW.MEIFW.sni"
[14] Data obtained from MDIWF maintained SDE Feature Class "GISVIEW.MEIFW.Twwh"
[15] Data obtained from: https://services.arcgis.com/QVENGdaPbd4LUkLV/arcgis/rest/services/Maine_Bald_Eagle_Nests_2021/FeatureServer

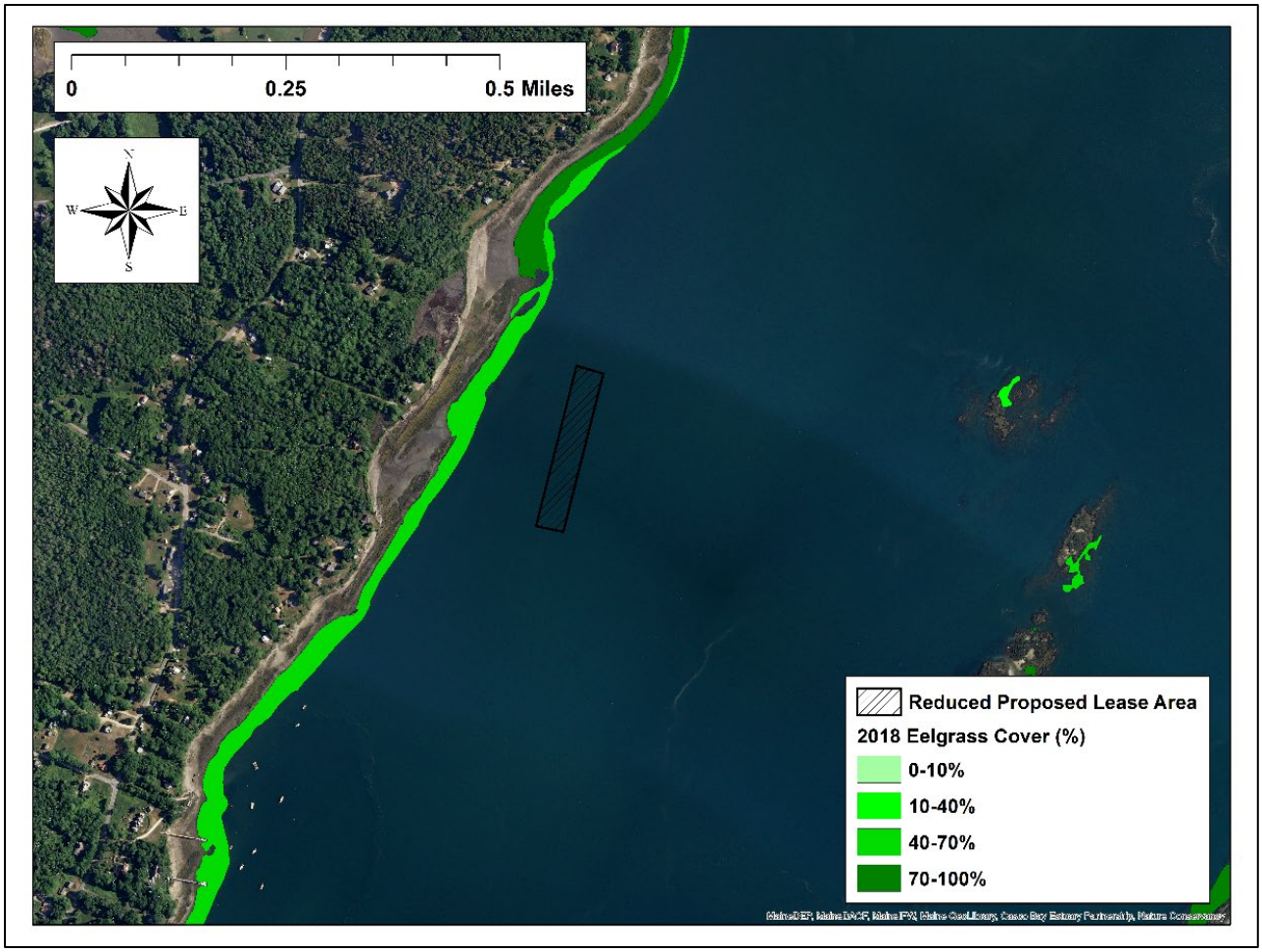


Figure 8: Historical eelgrass (*Z. marina*) in vicinity of proposed lease.[16]

(6) Source of Organisms to be Cultured

The applicant lists Atlantic Sea Farms in Biddeford, Maine as the proposed source of marine algae. The source is approved by MDMR.

(7) Interference with Public Facilities

There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site. However, a lot held in municipal conservation is approximately 1,030 feet to the west of the proposal (Figure 9).

[16] Data obtained from Maine Department of Environmental Protection maintained Feature Class "GISVIEW.MaineDEP..Eelgrass2018"

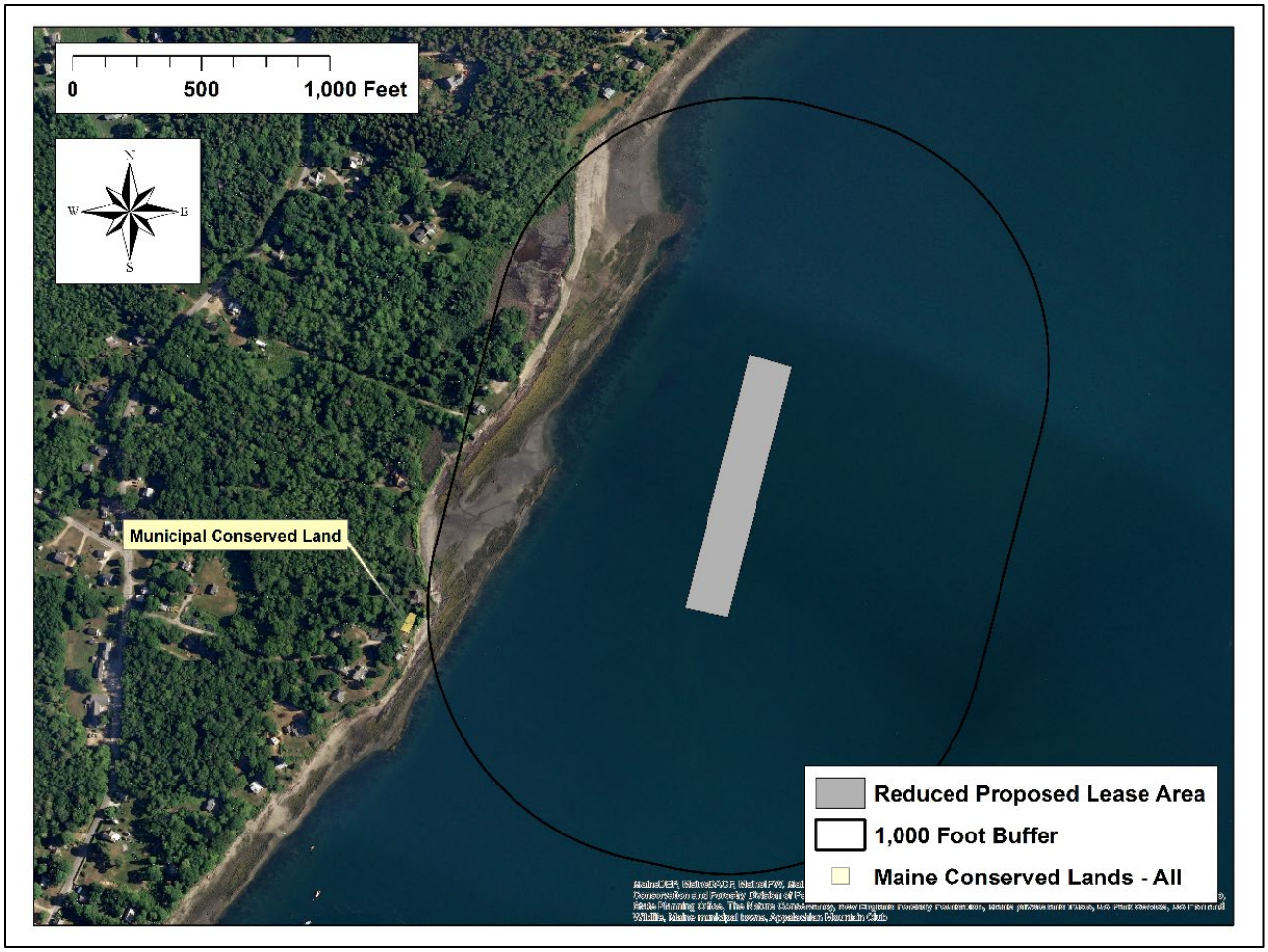


Figure 9: Municipal conserved land near the proposal.[17]

[17] Data obtained from Maine Department of Conservation, Agriculture, and Forestry maintained feature layer "Conserved_Land"