

**STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES**

**Chebeague Island Oyster Company LLC
CAS CHx**

Experimental Aquaculture Lease Application
Suspended Culture of Shellfish
Casco Bay, Chebeague Island, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Chebeague Island Oyster Company LLC applied to the Department of Marine Resources (DMR) for a 2.22¹ acre experimental lease in Chandler Cove, Casco Bay for the suspended culture of American/eastern oysters (*Crassostrea virginica*) for commercial aquaculture research and development.

1. PROCEDURAL HISTORY

DMR accepted the application as complete on March 16, 2023. Notice of the application and the 30-day public comment period was provided to state agencies, riparian landowners within 1,000 feet of the proposed site, the Town of Chebeague Island and its harbormaster, and others on DMR's email listserv. Notice to the municipality included a Harbormaster Questionnaire requesting information related to designated or traditional storm anchorages, navigation, riparian ingress and egress, and fishing or other uses of the area, among other considerations. A response was received on March 31, 2023, from the Harbormaster. Notice of the complete application and comment period was published in the August 29, 2024, in *The Northern Forecaster*². Title 12 M.R.S.A. §6072-A(6) provides that the Commissioner shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. No requests for a public hearing were received during either comment period and no hearing was conducted. The evidentiary record regarding this lease application includes the application, DMR's site report dated July 1, 2024, and the case file. The evidence from each of these sources is summarized below.³

LIST OF EXHIBITS

1. Case file
2. Application
3. DMR site report, issued on July 1, 2024

2. DESCRIPTION OF THE PROJECT

¹ Applicant originally requested 2.4 acres. DMR calculations indicate the area is 2.22 acres.

² Notice was originally published in the March 23, 2023, edition of the *Ellsworth American*. This occurred in error as the *Ellsworth American* is not widely circulated in the area, so notice was published a second time, on August 29, 2024, in the *Northern Forecaster* which is widely circulated in the area.

³ These sources are cited, with page references, as App (Application), CF (case file), and SR (site report).

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of the site for overwintering storage (App 4). The applicant is proposing to overwinter oysters in a maximum of 3,450 Vexar bags (34-inches by 18-inches by 4-inches) and/or 575 suspended bottom tray sets (4-foot by 3-foot by 18.5-inches), as well as mooring gear and buoys (App 13).

From May 15 to October 1, all gear except for 10 buoys and helical anchors, will be removed from the site (App 5). The application states that harvesting may occur over the winter, 1-2 days per week for approximately 2-4 hours per day (App 5). No routine maintenance is proposed, but the placement and extraction of the tray sets may occur up to seven days per week during the transition periods (App 5). A small crane on a pontoon boat for gear placement and retrieval is the only equipment proposed for on-site use (App 6).

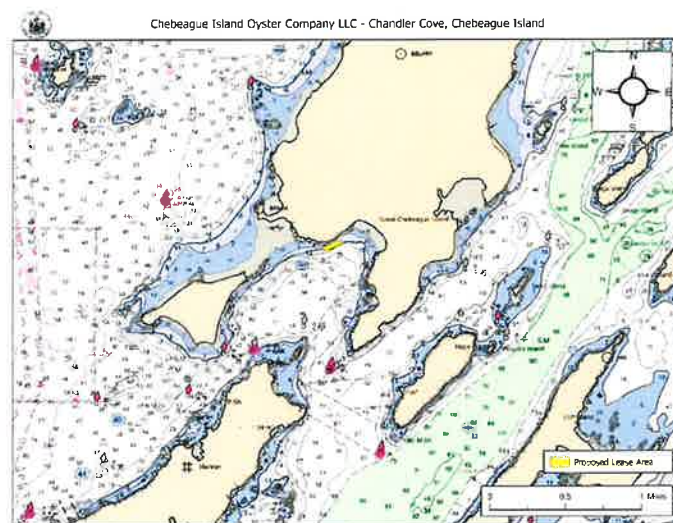


Figure 1: Vicinity map. Image generated by DMR staff.⁴

B. Site Characteristics

On June 11, 2024, DMR scientists assessed the proposed lease site. The Chebeague Island shoreline, in the vicinity of the proposal, consists of rocky, ledge with tall cliff faces to the north of the proposal and inner Chandler Cove, northeast of the proposal, contains a sand beach. There is a large mooring field east and south of the proposal.

⁴ 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.



Figure 2. Proposed lease area with site visit observations. Image from DMR site report.

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that a lease for commercial aquaculture research and development or for scientific research may be granted by the Commissioner of DMR upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other uses of the area, taking into consideration other aquaculture uses in the area; with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

A. Riparian Access

Before granting a lease, the Commissioner must determine that the proposed project “will not unreasonably interfere with the ingress and egress of riparian owners[.]” 12 M.R.S.A. § 6072-A(13)(A). In examining riparian owner ingress and egress, the Commissioner “shall consider the type of structures

proposed for the lease site and their potential impact on the vessels which would need to maneuver around those structures.” Chapter 2.37(1)(A)(1)⁵.

During the site assessment, DMR did not observe any piers within 1,000 feet of the proposal. Two private piers and the Chebeague Island Ferry Terminal Pier are just over 1,000 feet southeast of the proposal. Scattered residential houses are present north of the proposal and throughout Chandler Cove. The shoreline adjacent to the northern boundary of the proposal consists of ledges and a large cliff face which can limit riparian access to the shoreline. Additionally, DMR observed a large mooring field to the east of the proposal. The mooring field consisted largely of commercial fishing vessels, recreational powerboats, and work floats. The mooring closest to the proposal is 115 feet to the east (Figure 2).

The local harbormaster indicated in the harbormaster questionnaire that the proposal will not have any effect on riparian ingress and egress.

In evaluating riparian ingress and egress, the commissioner must consider the following pursuant to Chapter 2.37(A)(1):

The Commissioner shall examine whether the riparian owners can safely navigate to their shore. The Commissioner shall consider the type of shore involved and the type of vessel that can reasonably land on that shore. The Commissioner shall consider the type of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures.

During the comment period, DMR did not receive any comments from riparian owners stating that access to their shorefront property would be adversely impacted by the proposal and the harbormaster stated the proposal will not impact access. Based on the record, it is reasonable to conclude that riparian ingress and egress will not be adversely affected.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.

B. Navigation

When examining navigation, the Commissioner considers whether the lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2).

The proposal is in shallow water outside of any navigational channel. There is 1,138 feet from the proposal to the Chebeague Island Ferry Terminal and 2,730 feet to green can “3”. During DMR’s site visit,

⁵ 13-188 C.M.R. ch. 2. The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

the ferry departed from the Chebeague Island Ferry Terminal and headed southerly in the navigational channel. A short time later, a ferry was observed navigating northerly near green can “3” and followed the navigational channel westerly (SR 4) (Figure 3).

The local harbormaster indicated in the harbormaster questionnaire that the area of the proposal is too shallow for navigation.

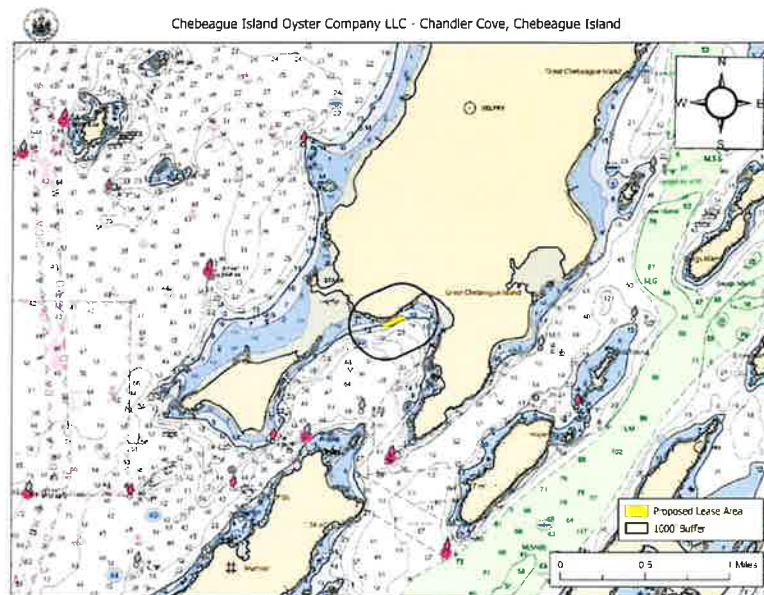


Figure 3. Navigational channels in the vicinity of the proposed lease area.

In evaluating navigation, the commissioner must consider the following pursuant to Chapter 2.37(A)(2):

The Commissioner shall examine whether any lease activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area. The Commissioner shall consider the current uses and different degrees of use of the navigational channels in the area in determining the impact of the lease operation.

Given the distances to the navigation channel, the harbormaster’s comment, and that no comments were received from the public concerning impacts to navigation, it is reasonable to assume that the proposed lease will not unreasonably interfere with navigation.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.

C. Fishing & Other Uses

When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other uses, including water-related uses, of the area. 12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3).

Fishing. In examining fishing and other uses, the Commissioner “shall consider such factors as the number of individuals that participate in recreational or commercial fishing, the amount and type of fishing gear utilized, the number of actual fishing days, and the amount of fisheries resources harvested from the area.” Chapter 2, § 2.37(1)(A)(3).

During the site visit, DMR documented two lobster buoys within the proposal boundaries and eleven in the general vicinity of the proposal. DMR recorded the location of buoys closest to the proposal, as seen in Figure 2. DMR observed lobster (*Homarus americanus*) within the proposal boundaries on underwater camera footage collected during the site visit. DMR did not observe any commercial or recreational fishing during the site visit (SR 5-6).

The local harbormaster indicated in the harbormaster questionnaire that there is no fishing activity during the season the proposal is intended to be in use (October 1 – May 15) (SR 5-6).

In evaluating fishing, the commissioner must consider the following pursuant to Chapter 2.37(A)(3):

The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. This examination shall consider such factors as the number of individuals that participate in recreational or commercial fishing, the amount and type of fishing gear utilized, the number of actual fishing days, and the amount of fisheries resources harvested from the area.

No comments regarding impacts to fishing were received by DMR. Additionally, no concerns were expressed by the harbormaster about impacts from the proposed lease on fishing in the project area. Given the lack of public comment and the light level of activity, it is unlikely that the proposed lease will interfere with commercial and recreational fishing activities in the area.

Other uses. According to the application, no other activities have been observed in the lease boundaries (App 7). No comments regarding impacts to other uses of the lease area were received by DMR.

Other aquaculture uses. In evaluating other aquaculture uses, the Commissioner must consider the following pursuant to Chapter 2.37(A)(4):

The Commissioner shall consider any evidence submitted concerning other aquaculture uses of the area. The intensity and frequency of such uses as well as the degree of exclusivity required for each use shall be factors in the Commissioner's determination of whether any interference is unreasonable. The number, size, location, and type of other aquaculture leases shall be considered by the Commissioner.

There are three Limited Purpose Aquaculture (LPA) sites and no aquaculture leases within 1,000 feet of the proposed lease site. The LPAs within 1,000 feet of the proposal are as follows: JPUT216 is 134 feet south of the proposal, WHIS416 is 339 feet northeast of the proposal, and WHIS213 is 500 feet northeast of the proposal. WHIS416 and WHIS213 are held by David Whiston who is a member of Chebeague Island Oyster Company LLC⁶ (SR 6).

DMR did not receive any comments concerning the potential for interference with existing aquaculture near the proposal site.

Therefore, the activities proposed for this site will not unreasonably interfere with fishing or other water related uses of the area, including other aquaculture related uses.

D. Flora & Fauna

When examining existing system support, the Commissioner considers the degree to which the use of the lease site will interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and marine and upland areas to support ecologically significant flora and fauna (12 M.R.S.A. § 6072-A(13)(D); Chapter 2.37(1)(A)(5)).

DMR utilized a remotely operated vehicle to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed are described below in Table 1 (SR 7).

Table 1. Species observed as common or abundant on underwater camera footage.

Species Observed	Abundance
Hermit Crab (<i>Pagurus</i> spp)	Abundant
Rockweed (<i>Ascophyllum nodosum</i>)	Common
Rock Barnacle (<i>Semibalanus balanoides</i>)	Common
Common Periwinkle (<i>Littorina littorea</i>)	Common
Northern Whelk (<i>Buccinum undatum</i>)	Common
Sugar Kelp (<i>Saccharina latissima</i>)	Common

Eelgrass (*Zostera marina*)

Recent records of eelgrass collected by the Maine Department of Environmental Protection (MDEP) indicate mapped eelgrass presence in the vicinity of the proposal. The nearest mapped eelgrass is approximately 123 feet northeast of the proposal and 188 feet west of the proposal (Figure 4). No eelgrass was observed on underwater camera footage within the proposal boundaries during DMR's site assessment.⁷

⁶ Application page 8 and 29

⁷ Data obtained from The Maine Office of GIS "GISVIEW.MEDEV.Seagrass2022". Widgeon grass was observed only in the New Meadows River area off Old Brunswick Road near shore. Eelgrass was the dominant vascular species in all other locations. This is the most current record of mapped eelgrass within the vicinity of the proposal.



Figure 4. Mapped eelgrass (*Z. marina*) in the vicinity of the proposed lease area. Image from DMR site report.

Eelgrass (*Zostera marina*) is a perennial and is typically biologically active from early summer to early fall. Given the lack of eelgrass observed at the site and the seasonality of the proposed lease activity, it is unlikely the proposal will adversely impact eelgrass.

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 partially within mapped Tidal Waterfowl and Wading Bird Habitat (TWWH) (Figure 5). 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 1 mile southeast of the proposal on Hope Island.



Figure 5. Mapped Tidal Waterfowl and Wading bird Habitat.⁸ Image taken from DMR site report.

⁸ Data obtained from USFWS "Bald_Eagle_Nests_-_Maine_2023" and MDIFW maintained SDE Feature Class "GISVIEW.MEIFW.Twwh"

On August 3, 2023, a Resource Biologist with MDIFW responded by email to a “Request for Agency Review and Comment” stating a portion of this lease falls within TWWH so it is recommended that the proposal be located outside of mapped resource in an effort to preserve TWWH.⁹

During the site assessment, DMR scientists observed double-crested cormorant (*Nannopterum auritum*), mallard (*Anas platyrhynchos*), herring gull (*Larus argentatus*), a red-tailed hawk (*Buteo jamaicensis*), common eider (*Somateria mollissima*), and a peregrine falcon (*Falco peregrinus*) in the general vicinity of the proposal.

On August 26, 2024, DMR notified MDIFW that the proposal had been renoticed and the comment period reopened. DMR informed MDIFW that a proposed lease cannot be relocated after the application is deemed complete. In light of that, DMR asked for clarification of the August 3, 2023, comment to enable DMR to determine if the lease site as proposed would negatively impact flora and fauna in a manner that would necessitate the application being denied or substantively modified by DMR on that criterion. DMR also included a copy of application and the DMR site report. MDIFW responded stating that based on the details of the TWWH at this site (which does not contain an eelgrass component), the project location, and the proposed activities, minimal impacts from this project are anticipated¹⁰.

In consideration of the record, and the operations proposed, the site would not adversely affect flora or fauna.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

E. Public Use & Enjoyment

When examining interference with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of a beach, park, or docking facility owned by the Federal Government, the State Government, or a municipal government (12 M.R.S.A. § 6072-A(13)(F); Chapter 2.37(1)(A)(7)) and 2.64(11)(A)).

The proposed lease is within 1,000 feet at MLW of beach property owned by a municipal government. Part of Chandler Cove Beach is owned by the Town of Chebeague Island. The proposed lease is not within 1,000 feet of any park or docking facility owned by federal, state, or municipal governments.

⁹ Email correspondence between MDIFW and DMR

¹⁰ The second comment deadline ended on September 28, 2024. On November 4, 2024, MDIFW submitted an email clarifying its earlier comment in response to DMR’s request. Although MDIFW’s response was submitted after the close of the comment period, DMR accepted it because it was provided by a sister agency at DMR’s request, and because it clarified IF&W’s initial comment that was provided during the comment period.

The harbormaster stated that the proposed lease would have no effect on any beaches, parks, or docking facilities owned by federal, state, or municipal governments.

The Town was notified of the complete application and the comment period, but no comments from the Town were received by DMR. In addition, from May 15 to October 1, all gear except for 10 buoys and helical anchors, will be removed from the site (App 5). Therefore, the proposed site would be devoid of aquaculture gear and associated activities at times of year when use of the beach would likely be most frequent. In consideration of the record, it is unlikely that the proposed lease would unreasonably interfere with the public use or enjoyment of the beach.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal governments.

F. Source of Organisms

When examining the source of organisms, the Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices (12 M.R.S.A. § 6072-A(13)(E); Chapter 2.37(1)(A)(6).

The applicant proposes to obtain American/eastern oysters (*Crassostrea virginica*) stock from Mook Sea Farm (Walpole, Maine). This is an approved source for stock. If the applicant is unable to obtain stock from this hatchery, then it must come from another DMR approved source.

Therefore, the applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

4. CONCLUSIONS OF LAW

Based on the above findings, the Department concludes that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of riparian owners.
2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation.
3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.
4. The aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

5. The aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments.

6. The applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072-A.

5. DECISION

Based on the foregoing, the Commissioner grants the requested experimental lease of 2.22 acres to Chebeague Island Oyster Company LLC, for three years, the term of the lease to begin within twelve months of the date of this decision, on a date chosen by the lessee¹¹; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

This lease is granted to the lessee for the suspended cultivation of American/eastern oysters (*Crassostrea virginica*). The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. Because this is an experimental lease with more than 400 square feet of structures and no discharge, a bond or escrow account is required. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule Chapter 2.64 (12)A in the amount of \$5,000.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 M.R.S.A § 6072-A (15) and 2.64(11)(B). Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease. No conditions are imposed on this lease.

7. REVOCATION OF EXPERIMENTAL LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 MRSA §6072-A (22) that no substantial aquaculture or research has been conducted on the site over the

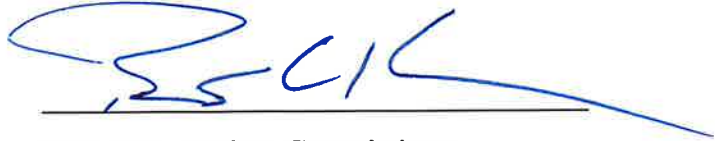
¹¹ DMR Rule 2.64 (14) provides:

“The term of the lease shall begin within 12 months of the Commissioner’s decision, on a date chosen by the applicant. No aquaculture rights shall accrue in the lease area until the lease term begins and the lease is signed.”

course of the lease, that aquaculture has been conducted in a manner substantially injurious to marine organisms, or that any condition of the lease or any applicable laws or regulations have been violated.

Dated: _____

2/10/2025



Patrick C. Keliher, Commissioner
Department of Marine Resources