STATE OF MAINE

Thomas Martin

DEPARTMENT OF MARINE RESOURCES

CAS BIx

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

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Thomas Martin applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located east of The Brothers Island, in Casco Bay, Falmouth, Cumberland County. The proposed lease is 0.15 acres and is for the suspended cultivation of American/eastern oysters (*Crassostrea virginica*). DMR accepted the application as complete on January 27, 2022.

1. THE PROCEEDINGS

Notice of the application and the 30-day public comment period was provided to state agencies, riparian landowners, the Town of Falmouth and its Harbormaster, and others on DMR's mailing list. Notice of the complete application and comment period was published in the February 10, 2022, edition of *The Northern Forecaster*. 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. Two requests for a public hearing were received after the close of the comment period; therefore, no hearing was conducted. The evidentiary record regarding this lease application includes the application, DMR's site report dated August 28, 2023, and the case file. The evidence from each of these sources is summarized below.¹

LIST OF EXHIBITS

- 1. Case file
- 2. Application
- 3. DMR site report, issued on August 28, 2023

¹ These sources are cited, with page references, as App (Application), CF (case file), and SR (site report).

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of the site for oyster cultivation (App 5). The applicant is proposing to culture shellfish using a maximum of 48 semi-rigid bags (4-inches by 24-inches by 34-inches) and two oyster ranch cages (24-inches by 48-inches by 64-inches) as well as moorings and marker buoys (App 14, 18). The cages will be removed from the site or submerged from late fall to late spring (App 5). The applicant intends to seed, tend, and harvest May through October, approximately two days per week (App 5, 6). Oysters will be harvested by hand and no machinery will be used in site operations (App 6, 7).

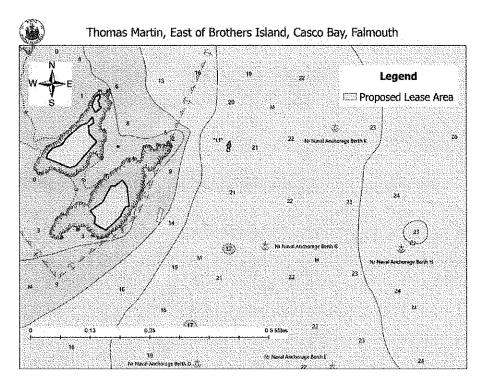


Figure 1: Vicinity map. Image generated by DMR staff.²

B. Site Characteristics

On July 7, 2022, Maine Department of Marine Resources (DMR) scientists assessed the proposed lease area. DMR scientists arrived on site at approximately 9:00 AM. The surrounding area is comprised of predominantly rocky shoreline, and a small patch of marsh, deciduous forest, and shrub uplands. The

²Unless 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.

proposed lease area is located east of The Brothers Island, which is undeveloped. The bottom of the proposed lease area is mud (SR 2).

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 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 water related 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 applicants have demonstrated that there is available source of organisms to be cultured on the lease site.

A. Riparian Access

The proposed lease area is located east of The Brothers Island, within Casco Bay, Falmouth. The proposed lease area is approximately 300 feet to the east of The Brothers Island at mean low water (MLW). The Brothers Island is privately owned and uninhabited. During the site visit on July 7, 2022, DMR did not observe any docks or other infrastructure around the shoreline of Brothers Island. DMR observed two large piers with docks on the mainland in Falmouth, approximately 2,430 feet from the northwest corner of the proposed lease area (SR 4).

A Harbormaster Questionnaire was received from the Falmouth Harbormaster, dated February 17, 2022. The Harbormaster indicated that no adverse impacts to riparian ingress or egress would be anticipated from the proposed lease. Additionally, the only riparian owner located within 1,000 feet of the site submitted comments to DMR in support of the proposal (Otis email).

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

B. Navigation

During the site visit, DMR observed a small skiff and a work barge traveling within general proximity of the site towards Portland, which is southwest of the proposed lease area. DMR also observed six boats in a small mooring field approximately 5,888 feet to the southeast along the shoreline of Diamond Island. The northeast corner of the proposed lease area is approximately 970 feet southwest of the green navigation aid "11" (SR 5).

In response to the Harbormaster Questionnaire, the Harbormaster indicated that no adverse impacts to navigation would be anticipated from the proposed lease.

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

C. Fishing & Other Uses

Fishing. During the site visit conducted on July 7, 2022, DMR observed four lobster buoys. Two buoys were within 1,000 feet of the proposed lease area. One buoy was to the east of the proposal and one to the south. Two additional buoys were observed to the south of The Brothers Island. DMR also observed two boats fishing for striped bass (*Morone saxatilis*). One recreational boat was to the north of the site casting near the ledges of Brothers Island and the other was observed south of The Brothers Island (SR 6).

The application states both commercial and recreational fishing activity occur in the general area but is uncommon in the project footprint (App 7). No comments concerning fishing were received by DMR. In response to the Harbormaster Questionnaire, the Harbormaster indicated there is no fishing activity within the proposed lease site.

Therefore, it is reasonable to conclude that there are no concerns regarding the potential effect of the proposed lease on commercial and recreational fishing activities in the area.

Other aquaculture uses. There is one existing Limited Purpose Aquaculture (LPA) site held by the applicant (TMAR222) approximately 220 feet north of the proposed lease area (SR 6). The applicant intends to relinquish the LPA if this lease is granted (App 9).

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

D. Flora & Fauna

On July 7, 2022, DMR conducted two transects utilizing an underwater camera to assess the epibenthic ecology of the proposed lease. The video footage showed many lobster burrows, but no lobsters were observed during the site assessment (SR 7).

Data collected by the Maine Department of Environmental Protection (DEP) and Casco Bay Estuary Partnership (CBEP) in 2022 indicates eelgrass (*Zostera marina*) presence west of the proposed lease. During DMR's site assessment on July 7, 2022, drifting eelgrass was observed within the general vicinity of the proposed lease area. No eelgrass was observed attached to the seafloor within the proposed lease area during the underwater camera transects (SR 7).

During the site visit conducted on July 7, 2022, DMR observed an osprey flying within proximity of the proposed lease area as well as several gulls, eider ducks and two cormorants on the intertidal ledge of Brothers Island.

There are no documented bald eagle nests within 1,000 feet of the proposed lease area. 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 tidal waterfowl and wading bird habitat (TWWH). On March 21, 2022, a Wildlife Biologist with MDIFW responded by email to a "Request for Agency Review and Comment", stating that they recommend the applicant move the proposed lease 100 to 200 feet east or southeast so the lease area is located on the edge or just outside of the mapped TWWH. MDIFW also recommends activities within the intertidal zone be minimized to the extent practicable.³

Based on the evidence that the proposed lease does not interact with historical eelgrass beds and because DMR's site report does not contain concerns regarding the impact of the proposed lease on the surrounding ecosystem, it appears that the proposed aquaculture activities for this lease site will not interfere with the ecological function of the area. MDIFW recommended the lease site be moved but did not state that the chosen location would adversely impact waterfowl. Additionally, the site is not located in the intertidal zone as suggested by the MDIFW comments. Therefore, it is reasonable to assume impacts to the TWWH would be minimal.

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

There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site.

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.

³ Email correspondence between MDIFW and DMR

F. Source of Organisms

The applicant proposes to obtain stock at Muscongus Bay Aquaculture in Bremen, Maine. This hatchery is currently listed as an approved source for the proposed 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 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 any riparian owner.
- 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 0.15 acres to Thomas Martin, 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 lessee⁴; 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. Since 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 2.64 (10) (s) in the amount of \$5,000.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statues 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 (7-B).58 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) and DMR Rule Chapter 2.64 (13) that no substantial research has been conducted on the site within the preceding year, that research has been conducted in a manner injurious to the environment or to marine organisms, or that any conditions of the lease or any applicable laws or regulations have been violated.

Dated: (0 (6 28

Patrick C. Keliher, Commissioner

Department of Marine Resources

⁴ DMR Rule 2.64 (14) provides:

[&]quot;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."