Experimental Aquaculture Lease Application Suspended Culture of Shellfish Maquoit Bay, Freeport, Maine

## FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Love Point Oysters, LLC applied to the Department of Marine Resources (DMR) for a 3.99 acre experimental lease east of Pettingill Island in Maquoit Bay, in the town of Freeport, Cumberland County, for the suspended culture of American/eastern oysters (*Crassostrea virginica*) for commercial aquaculture research and development.

## 1. THE PROCEEDINGS

DMR accepted the application as complete on May 17, 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 Freeport and its harbormaster, and others on DMR's email listsery. 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. No response was received from the Harbormaster. Notice of the complete application and comment period was published in the June 1, 2023, 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. No requests for a public hearing were received during the comment period, and no hearing was conducted. The evidentiary record regarding this lease application includes the application, DMR's site report dated May 30, 2024, and the case file. The evidence from each of these sources is summarized below.

# **LIST OF EXHIBITS**

- 1. Case file
- 2. Application
- 3. DMR site report, issued on May 30, 2024

## 2. <u>DESCRIPTION OF THE PROJECT</u>

<sup>&</sup>lt;sup>1</sup> 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 compare growth rates and quality of oysters versus an alternate site (App 5). The applicant is proposing to culture oysters using a maximum of 270 OysterGro 6-bag cages (60-inches by 36-inches by 24-inches), 1,620 HDPE mesh bags (35-inches by 18-inches by 3-inches), as well as line, mooring gear, and buoys (App 17).

The gear will remain on-site year-round but will be submerged from January to March (App 16). The applicant intends to seed the site between May and November. Site maintenance will occur year-round, 1-4 times per week (App 6). Electric and hydraulic pot haulers will be used on-site to raise and submerge the oyster cages (App 7).

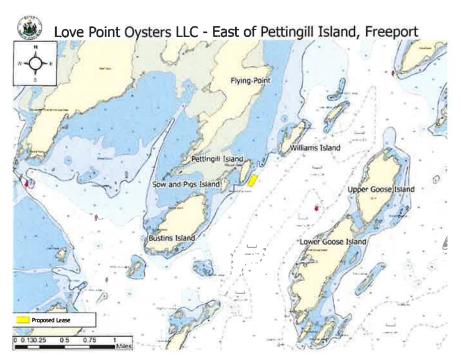


Figure 1: Vicinity map. Image generated by DMR staff. 2

# B. Site Characteristics

On October 4, 2023, DMR assessed the proposed lease site. The eastern shore of Pettingill Island is uninhabited in the vicinity of the proposal.<sup>3</sup> The island consists of a rocky coastline leading to forested uplands (Figure 2).

<sup>&</sup>lt;sup>2</sup> 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.

<sup>&</sup>lt;sup>3</sup> According to aerial Imagery taken in 2019 and 2022.

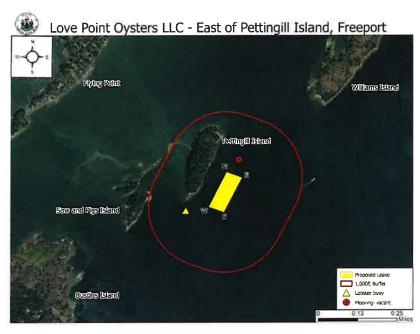


Figure 2. Proposed lease area with site visit observations. Image from DMR site report.

## 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). DMR's Chapter 2 regulations<sup>4</sup> require the Commissioner to examine whether riparian owners can safely navigate to their shore. 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, § 2.37(1)(A)(1).

During the site visit on October 4, 2023, DMR observed one vacant mooring located approximately 263 feet to the north of the proposal. DMR did not observe any docks, houses, or other moorings in the vicinity of the proposal (SR 4).

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 received a comment from a riparian owner in support of the proposed lease. The comment stated that access to their shorefront property would not be impeded by the proposal. Based on this comment and absence of any riparian structures, it is unlikely the proposed lease will adversely impact access.

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). In examining navigation, 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." Chapter 2, § 2.37(1)(A)(2).

The proposal is located approximately 267.9 feet to the east of Pettingill Island at MLW. There is approximately 4,353.9 feet of navigable water between the proposal and the western shore of Lower Goose Island at MLW. The charted main navigational channel is located approximately 890.7 feet to the east of the proposal (Figure 3)(SR 4).

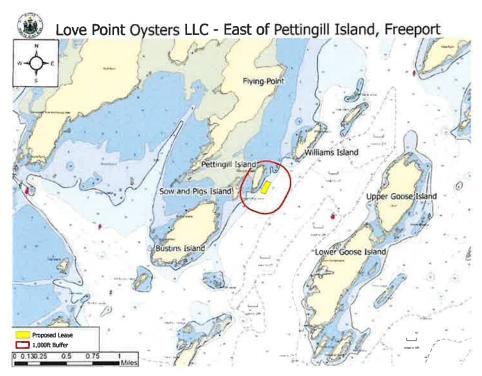


Figure 3. Navigational channels in the vicinity of the proposal. Image from DMR site report.

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.

A Harbormaster Questionnaire was sent to the Town of Freeport. No response was received by DMR. No comments regarding impacts to navigation were received by DMR.

Given the distances to the navigation channel and that no comments were received from the public concerning impacts to navigation, the record shows 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.** During the site visit, DMR documented one lobster buoy approximately 389.5 feet southwest of the proposal. Overall, DMR observed sparse fishing in the vicinity of the proposal, but did observe light lobster fishing activity near the southern end of Williams Island (SR 5).

The application states that seasonal lobstering and bait fishing occur in this area, with traps observed approximately 100 feet from the proposed lease site (App 8).

In evaluating fishing and other uses, 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 observed in the area, it is unlikely that the proposed lease will interfere with commercial and recreational fishing activities in the area.

Other uses. According to the application, kayaking occurs in the area but the lease as proposed should not impact navigation or enjoyment of the bay (App 8). During DMR's site visit, seven tandem kayaks were observed paddling to the north of the proposal near the southern end of Williams Island (SR 5). No comments regarding impacts to other uses of the lease area were received by DMR.

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

## D. Other Aquaculture Uses

DMR's Chapter 2 regulations require the Commissioner to 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 a factor 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." Chapter 2, § 2.37(1)(A)(4).

There are four limited purpose aquaculture (LPA) licenses within 1,000 feet of the proposed lease site. Three LPAs are located within the proposal boundaries (CBAR422, CBAR522, BHAM722) and one is located 36 feet to the east of the proposal (BHAM822). The LPAs are licensed to Cameron Barner and Ben Hamilton, both of whom are principals of Love Point Oysters, LLC.<sup>4</sup> All four LPAs will be relinquished if this proposal is granted.<sup>5</sup> There are no aquaculture leases or additional LPA sites within 1,000 feet of the proposed lease site (SR 5-6).

**Therefore**, based on the information in the record, the aquaculture activities proposed for this site will not unreasonably interfere with existing aquaculture operations in the area.

#### E. 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, § 2.37(1)(A)(5)). "Such factors as the degree to which physical displacement of rooted or attached marine vegetation occurs, the amount of alteration of current flow, increased rates of sedimentation or sediment resuspension, and disruption of finfish migration shall be considered by the Commissioner in this determination." Chapter 2, § 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 using underwater camera footage.

| Species Observed                    | Abundance  |
|-------------------------------------|------------|
| Rockweed (Ascophyllum nodosum)      | Occasional |
| Crab (Cancer spp)                   | Occasional |
| Mud snail (Ilyanassa sp.)           | Common     |
| Hermit Crab (Pagurus spp.)          | Common     |
| Horseshoe crab (Limulus polyphemus) | Rare       |

#### Eelgrass (Zostera marina)

Records of eelgrass collected by the Maine Department of Environmental Protection (MDEP) in 2022 indicate no mapped eelgrass presence in the vicinity of the proposal. The nearest mapped eelgrass is

approximately 2,147.5 feet southwest of the proposal.<sup>4</sup> No eelgrass was observed on underwater camera footage within the proposal boundaries during DMR's site assessment.

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 approximately 680 feet to the southeast of mapped Tidal Waterfowl and Wading Bird Habitat (TWWH). Data collected by the United States Fish and Wildlife Service in 2023 by aerial nest survey shows two bald eagle nesting sites in the vicinity of the proposal. The nests are located approximately 698 and 1,150 feet west of the proposal. The proposal is located outside of the recommended 660-foot buffer zone. On August 10, 2023, a Resource Biologist with MDIFW responded by email to a "Request for Agency Review and Comment" stating minimal impacts to wildlife are anticipated for this project.<sup>5</sup>

During the site assessment, DMR observed double-crested cormorants (Nannopterum auritum) and American black ducks (Anas rubripes) in the general vicinity of the proposal.

MDIFW reviewed the proposal and did not express any concerns about the lease impacts. Considering MDIFW's expertise and the site report, it is unlikely the proposed activities will unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

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

## F. 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)).

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.

<sup>&</sup>lt;sup>4</sup> Data obtained from The Maine Office of GIS "GISVIEW.MEDEP.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.

<sup>&</sup>lt;sup>5</sup> Email correspondence between MDIFW and DMR

## G. 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 Muscongus Bay Aquaculture (Bremen, Maine) and Mook Sea Farm (Walpole, Maine). These are approved sources for stock.

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

## 4. <u>CONCLUSIONS OF LAW</u>

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 other aquaculture uses of the area.
- 5. The aquaculture activities proposed will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.
- 6. 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.
- 7. 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 application for the proposed experimental lease of 3.99 acres to Love Point Oysters, 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 lessee<sup>6</sup>; 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 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-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 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:

Patrick C. Keliher, Commissioner

<sup>&</sup>lt;sup>6</sup> DMR Rule 2.64 (14) provides:

<sup>&</sup>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."

# **Department of Marine Resources**