STATE OF MAINE                      Portland Oyster Company LLC
DEPARTMENT OF MARINE RESOURCES

Experimental Aquaculture Lease Application
Suspended culture of American/Eastern oysters     January 9, 2019
Spurwink River, Cape Elizabeth, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Portland Oyster Company, LLC applied to the Department of Marine Resources (DMR) for an experimental aquaculture lease comprised of 1.79 acres\(^1\) located in the Spurwink River, Cape Elizabeth, Cumberland County, Maine, for the cultivation of American/Eastern oysters (Crassostrea virginica) using suspended culture techniques. DMR accepted the application as complete on March 27, 2018. Five requests for a public hearing were received during the comment period. No public hearing was held.\(^2\) For the reasons described below the application is denied and a lease will not be issued.

1. THE PROCEEDINGS

Notice of the application and the 30-day public comment period were provided to state and federal agencies, riparian landowners, the Town of Cape Elizabeth, and others on the Department’s mailing list. Notice of the application and comment period was published in the Forecaster on April 20, 2018. The evidentiary record before the Department regarding this proposal includes the application, the Department’s site report dated September 4, 2018, and the case file. The Department also takes official notice of a October 1, 2018 decision denying a lease application submitted by Matthew Hassler and Robert Willette based on findings that the activities proposed to be conducted in a nearby area would have unreasonably interfered with navigation, the ability of the lease site and surrounding area to support existing ecologically significant flora and fauna, and fishing and other water related uses of the area; and of a decision dated January 2, 2019, denying an application submitted by Portland Oyster Company for an area that overlapped a portion of the Hassler/Willette proposal for the same reasons.

The evidence from these sources is summarized below.\(^3\)

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\(^1\) Applicant originally requested 1.80. DMR calculations indicate the area is 1.79 acres.
\(^2\) For experimental leases, the Department is required to hold a hearing when five or more written requests are received. The Department did not hold a hearing, because the evidence in the Department’s files indicated that the lease could not satisfy all of the criteria for granting an experimental lease and, based on that consideration, the applicant agreed to waive it.
\(^3\) These sources are cited below, with page references, as CF (case file), App (application), and SR (site report).
2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed lease is to conduct a scientific study to determine whether the culture of oysters, as proposed, will “improve the water quality for all living creatures in and on the river and for humans using the river for commercial and/or recreational use” (App 17). The application further specifies that the research and data obtained from the study is for commercial purposes (App 20). The applicants propose to deploy four longlines measuring 750 feet in length (App 16). Each longline would contain a maximum of 500 floating oyster bags (App 19). At full production, a total of 2,000 bags would be deployed. (App 18). During the winter months, the oysters would be overwintered in Seal Cove on Limited Purpose Aquaculture (LPA) license sites held by Greg Miller, who has an interest in Portland Oyster Company (App 20).

The proposed site is in DMR Pollution Area 12, which is classified as “Conditionally Approved” for the harvest of shellfish (SR 19). The harvest of shellfish is prohibited from May 1 through November 30 (SR 19). The applicants intend to harvest and sell their product during the closed period by relaying their oysters to one, or more of the LPA sites (App 20).

B. Site Characteristics

On May 22, 2018, DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting an experimental aquaculture lease. The proposed site occupies subtidal and intertidal waters in the Spurwink River. The applicants intended for the entire site to be subtidal (App 7). However, during the site visit there were sections of the proposed lease area that were exposed prior to and during low water (SR 2). The uplands to the west of the proposed site are characterized by a tidally exposed sandbar, which gives way to salt marsh (SR 2). The Rachel Carson National Wildlife Refuge (RCNWR) is located to the west of the proposed site (SR 2). The RCNWR manages a hand-carry boat launch, which is located approximately one mile to the north of the proposed site (SR 11). Staff observed residential properties beyond the RCNWR and to the west of the proposed site (SR 2). Marsh grass (*Spartina alterniflora*), and tidally exposed mud flats leading to mixed forest comprise the eastern shore of the river (SR 2).

Water depths at mid to low tide were less than 4 feet (SR 7). Per the site report:
The area of the proposed lease bounded by corners 1-10 remained subtidal throughout the falling tide. At slack low water a portion of the proposed lease, between corners 11 and 12, occupied the sandy intertidal (SR 8).4

Therefore, at low tidal stages the water will not be deep enough on certain sections of the proposed site, including corner 11, to support the floatation of suspended gear (SR 8). The bottom of the proposed lease site is comprised primarily of sand with sections of shell hash observed (SR 7).

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 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 the number and density of aquaculture leases in an 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. Navigation

During the site visit, staff observed kayaks, canoes, and small outboard powered vessels at several properties along the shoreline, suggesting that recreational boating is a regular occurrence throughout the area (SR 11). At the time of the site visit, staff observed two kayakers traveling south through the proposed lease area (SR 11). The kayakers were navigating closer to the eastern shore of the channel where the water is deeper (SR 11).

At mid to low tidal stages, the proposal, if granted, would encompass all navigable waters within the area (SR 11). Certain types of hand powered vessels, such as kayaks, capable of traversing through less than one foot of water may be able to travel to the west of the proposed site at low water (SR 11). However, these vessels would need to be pulled or carried over the tidally exposed sandbar between corners 11 and 12 (SR 12). Other vessels like stand-up paddle boards and canoes will have even greater difficulty with navigation given the depth and angle of paddle placement (SR 12). Corners 4 and 7 of the proposed site abut the eastern bank of the

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4 According to the site report, staff arrived at 9:17 am and proceeded to make observations through the remainder of the ebb tide. DMR staff observed the proposed lease area through the falling tide, walking the boundaries and collecting depth measurements. The site report notes: During the ~20 minutes prior to observed slack low water, MDMR staff also mapped the edge of the intertidal zone along the western shoreline" (SR 7).
river, so navigation between the eastern boundary of the proposed site and the eastern shore of the Spurwink River would be prohibited at all tidal stages. (SR 12). Given staff observations of kayakers and measured water depths, it is likely the deeper water along the eastern side of the channel is the preferred navigational route (SR 12).

![Map of proposed lease area](image)

**Figure 2**: Depicting the proposed lease area in relation to intertidal mapping conducted during the site visit. Based on this image, the proposed lease appears to encompass most of the navigable waters in this section of the Spurwink River.

The Department received several comments from individuals and entities familiar with the area. In general, most comments noted that the area is heavily utilized by canoes, kayaks, and stand-up paddle boards. Many commenters indicated that the proposal would likely have adverse effects on navigation. One commenter who is a riparian landowner indicated that the proposed aquaculture activities will occupy all deep water in the channel, which would displace a variety of vessels.”

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5 CF: Email from P. Jewett to C. Burke dated May 4, 2018.
the east bank of the river, to no closer than 20 feet from the west bank of the river. This will leave ample space for any craft to safely pass unimpeded by our proposed lease site at any time of day on the Scarborough side of the river” (App 20). However, the letter from the RCNWR indicates that “many sea kayaks are 15-17 feet and require deeper water that is found in the middle of the river and not available as a kayak gets closer to the bank.”

**Discussion:**

Based on the evidence, the proposed lease is situated in an area that is heavily utilized by recreational vessels at all tidal stages. If the lease was granted, it would encompass the entire navigable area within this section of the Spurwink River during mid to low tidal stages. Although certain vessels like kayaks may be able to navigate to the west of the proposed lease at low water, it would be very difficult, and individuals would have to hand carry their vessels over a tidally exposed sand bar. Finally, navigation to the east of the proposed site would be completely restricted at all tidal stages. Based on this evidence, the proposed lease would significantly change how recreational boaters navigate the area.

The applicants indicated that there would be 20 feet from the boundaries of the proposed lease site to the western bank of the river, which will provide adequate room for vessels to “pass unimpeded on the Scarborough side of the river” (App 20). However, this space is not large enough to provide vessels with adequate maneuverability considering the type of vessels that commonly frequent the area. It also does not take into consideration that at certain tidal stages individuals would be required to hand-carry vessels over a tidally exposed sandbar. Therefore, the 20 feet of space referenced in the application would not provide a reasonable area for navigation or maneuverability considering the types of vessels that utilize the site.

**Therefore,** the aquaculture activities proposed for this site will unreasonably interfere with navigation.

**B. Flora & Fauna**

**Site Observations.** During the site visit, Department staff walked and kayaked most of the proposed site and surrounding area (SR 14). Department staff observed a variety of marine flora and fauna including periwinkles (*Littorina* sp.), sand shrimp (*Crangon septemspinosa*), and barnacles (*Balanus* sp.) (SR 14). Staff also noted Canada geese (*Branta canadensis*), gulls (*Larus* sp.), peeps (*Calidris* sp.), sandpiper (*Tringa* sp.), sparrows (*Ammodramus caudacutus*), and one snowy egret (*Egretta thula*) in the surrounding saltmarsh and along the intertidal

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6 CF: Letter from RCNWF dated May 17, 2018  
7 For a complete list of observed species and their relative abundance, see page 14 of the site report.
Approximately four least terns (*Sternula antillarum*) and ten common terns (*Sterna hirundo*) were actively foraging in the shallow subtidal water throughout the proposed lease area (SR 16).

**Fisheries and Wildlife.** Based on data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposed lease site is located within an area categorized as “Essential Habitat” for least terns and piping plovers, which are listed as endangered under the Maine Endangered Species Act (SR 17). The proposed lease is almost entirely within saltmarsh sparrow (*Ammodramus caudacutus*) habitat, which is a species of special concern in the State of Maine (SR 17). In addition, the proposed lease and surrounding shallow subtidal and saltmarsh are also classified as Tidal Wading Bird and Waterfowl Habitat (TWWH), which is defined under Maine’s Natural Resources Protection Act (NRPA) as Significant Wildlife Habitat (SR 17).

DMR sent a copy of the lease application to MDIFW for its review and comment. On June 26, 2018 MDIFW and DMR staff visited the proposed lease site. On August 22, 2018, MDIFW submitted the following comment regarding the proposal: “additional leases for oyster culture in the Spurwink River may significantly alter and unreasonably harm foraging opportunities for the State Endangered least tern.”

RCNWR also raised concerns about the proposed operations disturbing a variety of wildlife, including least terns.

**Discussion:**

Essential Habitats are areas, established through rule-making, that have physical or biological features that are essential to the conservation of an endangered or threatened species. The proposed site is in an area essential to the nesting, feeding, and brood rearing for least terns and piping plovers, which are designated as state endangered species. During the site visit, staff observed least terns actively foraging within the proposed lease area. At full production, a combination of 2,000 bags would be deployed from spring through fall. The site would also be serviced on a consistent basis, as the applicants tend to the gear and harvest product. The gear and associated activities may displace and disturb the state endangered least tern. Considering the scale of the proposed operations, the location within an Essential Habitat, and the purpose of such a habitat designation, the documented presence of state endangered least terns with the boundaries of the proposed lease site, and feedback from MDIFW it is

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8 Pursuant to 12 M.R.S.A. §12806 state agencies may not permit, license, fund, or carry out projects that will significantly alter an Essential Habitat or violate protection guidelines that have been adopted for the habitat. MDIFW must review and approve pending permits or licenses before issuance. If the Department had granted the proposed lease, the decision would need to be reviewed by MDIFW prior to issuance. In consideration of the evidence, it seems unlikely that MDIFW would issue a permit, even if the Department had granted the lease.

9 CF: MDIFW agency comments regarding the proposal, email dated August 22, 2018.

reasonable to conclude that the proposal will unreasonably interfere with the ecological functioning of the area.

Therefore, the aquaculture activities proposed for this site will unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

C. Fishing & Other Water Related Uses

During the site visit, Department staff did not observe any commercial or recreational fishing near the proposed lease site (SR 12). However, the site report indicates that shellfish harvesting is likely to occur in the intertidal area that surrounds the proposed lease (SR 12).\(^{11}\) Staff observed soft-shell clam (Mya arenaria) shells throughout the proposed lease site and surrounding intertidal area (SR 12). According to data maintained by DMR’s Recreational Fisheries Program, shoreline angling occurs from the Higgins Beach area through the mouth of the Spurwink River (SR 12). Average daytime fishing activity in the area from May through October ranges from one to four anglers near the beginning and end of the fishing season to five to eight anglers during peak season (SR 12).

A comment received from the RCNWR noted the following:

*The Refuge also manages hunting and fishing programs in select areas in the Spurwink Division. Waterfowl, turkey and deer are all hunted according to State and federal guidelines. The river is well known as a fantastic place to fish. Given the possible intensity of this operation during the hunt season, we are concerned over possible disturbance to our hunting and fishing public. The area is heavily used by sportsman, fisherman and recreational boaters..."*

During the site visit, staff observed spent cartridges along the western shoreline, which indicates that hunting occurs within this area of the Spurwink River (SR 12). If the lease was granted, traveling through or fishing within the boundaries of the proposed lease would be limited to the 8-foot wide spacing between rows of gear, or outside the boundaries of the proposed site at the appropriate tidal stages (SR 13). In addition to the concerns expressed by RCNWR, the Department received several comments from members of the public indicating that the area is utilized heavily by recreational vessels.

\(^{11}\) Although the applicants may not have intended for portions of the proposed lease site to be intertidal, measurements and observations during the site visit indicate otherwise. Pursuant to Chapter 2.54(C)(6) the Department requires the written permission of all intertidal landowners. In addition, 12 MRSA §6072(3) specifies that the Commissioner may not lease areas in the intertidal zone without the permission of the municipal officers, provided the municipality has an authorized shellfish conservation program. Based on Department records, the Town of Scarborough has an authorized shellfish conservation program. Because the Department is denying the lease, these permissions do not need to be satisfied prior to any rights accruing.

\(^{12}\) CF: Letter from RCNWR to DMR dated May 17, 2018.
Other Aquaculture Uses: There are currently no active aquaculture operations within the Spurwink River (SR 13). Matthew Hassler and Robert Willette submitted an application for the suspended culture of American oysters on 2.89 acres, located 23 feet to the south of the Portland Oyster Company proposal. The application was accepted by the Department as complete on December 4, 2017. In a decision dated October 1, 2018, the Department denied the application submitted by Hassler/Willette as the Commissioner found it would have unreasonably interfered with navigation, the ability of the lease site and surrounding area to support existing ecologically significant flora and fauna, and fishing and other water related uses of the area. Portland Oyster Company submitted an application for an area that overlapped a portion of the Hassler/Willette proposal. The Portland Oyster Company application was accepted by the Department as complete on January 11, 2018. On December 10, 2018, the Department notified the applicants that in accordance with 12 M.R.S.A §6072-A(5) and Chapter 2.10(4)(A)(2), the Commissioner determined that the experimental lease application submitted by Portland Oyster Company LLC could not be granted as it would not satisfy all the requirements for granting an experimental lease set forth in 12 M.R.S.A §6072-A.13

Discussion:

The evidence indicates that recreational fishing and boating occurs frequently in the area. In addition, the RCNWF actively manages a fishing program in the area. If the lease was granted, fishing would be limited within the boundaries of the lease or areas outside the lease boundaries. However, the spacing between rows of gear is 8-feet wide, which is not large enough for vessels to adequately maneuver through the site. Based on multiple water-based uses of the area, including recreational boating and fishing it also seems unlikely that the proposed spacing of gear within the proposed lease boundaries could accommodate multiple uses at any one time.

It appears that the proposal would displace and significantly alter existing water based uses of the area, including recreational fishing and boating. It may also hinder existing hunting and fishing programs that are actively managed by the RCNWF. In addition, the Department has denied one lease application for similar aquaculture activates near this proposal. The Department also found that a previous application submitted by Portland Oyster Company LLC for nearly the same area could not satisfy all the requirements for granting an experimental lease.

13 Cf. Copy of a decision signed by the Commissioner on January 2, 2019. The decision provides an overview of the overlapping applications and provides the basis for the Department's findings. The applicants were provided notice of the Commissioner's intent to take official notice of these matters by the provision of a draft decision and were provided an opportunity to contest the substance or materiality of the facts so noticed by the submission of comments and exceptions.
Therefore, the aquaculture activities proposed for this site will unreasonably interfere with fishing and other water related uses of the area.

4. CONCLUSIONS OF LAW

The evidence in the record supports the conclusion that the proposed aquaculture activities do not meet all the requirements for granting an experimental lease set forth in 12 M.R.S.A §6072-A. Since the application fails to satisfy all criteria, it must be denied.

5. DECISION

Based on the foregoing, the Commissioner denies the application of Portland Oyster Company, LLC for a lease to cultivate American/Eastern oysters (*Crassostrea virginica*) using suspended culture techniques on 1.79 acres located in the Spurwink River, Cape Elizabeth.

Dated: 1/9/19

Patrick C. Keliher, Commissioner, Department of Marine Resources