

**STATE OF MAINE**  
**DEPARTMENT OF MARINE RESOURCES**

**Norumbega Oyster Inc.**  
**DAM Mlx2**

Experimental Aquaculture Lease Application  
Suspended Culture of American Oysters (*Crassostrea virginica*)  
Damariscotta River, South Bristol, Maine

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

Norumbega Oyster Inc. applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located north of Wentworth Point, in the Damariscotta River, South Bristol, Lincoln County. The proposed lease is 2.77 acres and is for the suspended cultivation of American Oysters (*Crassostrea virginica*) for commercial research and development. DMR accepted the application as complete on February 13, 2023.

**1. THE PROCEEDINGS**

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 South Bristol and its Harbormaster, and others on DMR's mailing list. Notice of the complete application and comment period was published in the March 2, 2023, edition of *The Lincoln County News*. 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 the Department opted not to hold a hearing. The evidentiary record regarding this lease application includes the application, DMR's site report dated April 8, 2024, and the case file. The evidence from each of these sources is summarized below.<sup>1</sup>

**LIST OF EXHIBITS**

1. Case file
2. Application
3. DMR site report, issued on April 8, 2024.

**2. DESCRIPTION OF THE PROJECT**

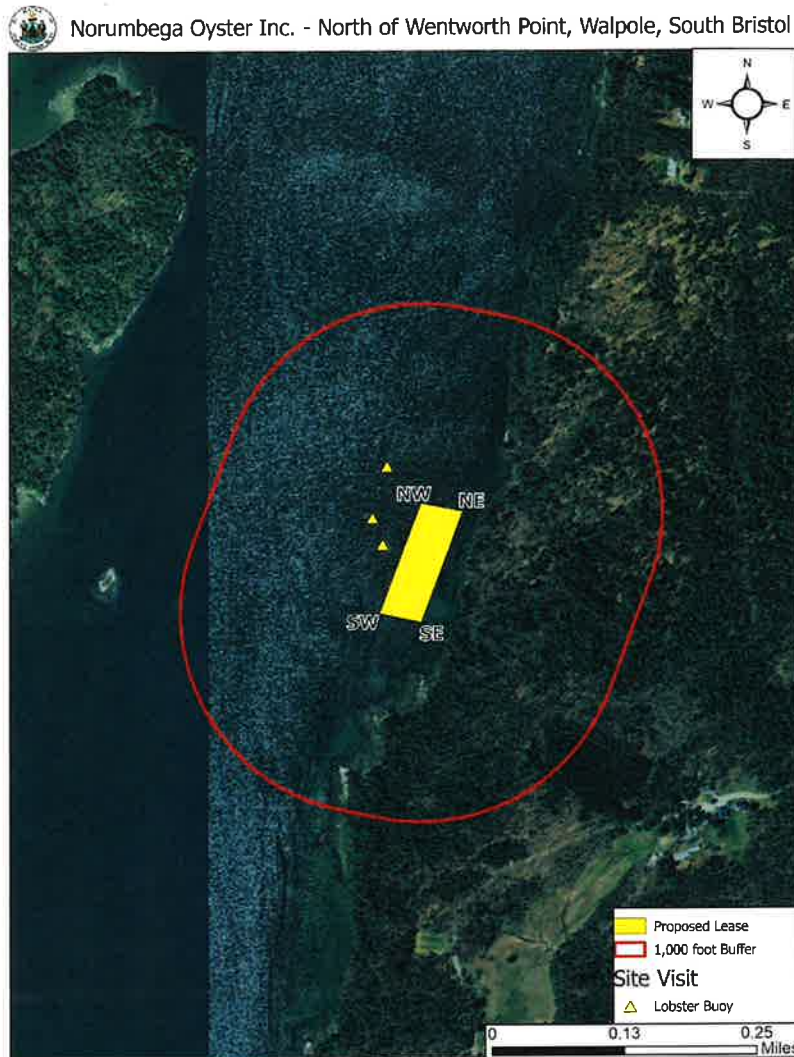
**A. Proposed Operations**

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

The purpose of the proposed experimental lease site is to determine if the proposed area is a viable area for oyster cultivation (App 4). The applicant is proposing to culture shellfish using sixteen longlines, each with twenty-five 6-pack oyster grow cages (App 13). The lines would be organized in two rows of eight lines each (App 13). Seeding would occur from April to August, and the applicant would be on site two to three times a week during this period (App 5). Harvesting would occur year-round and would occur one to two times a week (App 5). All gear would remain on the site year-round, with half of it being submerged to the sea floor from November to April (App 5).

Hydraulic lifting equipment would be used on site year-round, one to two times a week (App 6). From April to October, the hydraulic lifting equipment would be used for general cage maintenance (App 6). From November to May, the equipment would be used for product harvesting (App 6). A hydraulic sorting tumbler would be used one to two times a week from April to October (App 6). All gear would be located on a 22.5' long barge with no motor. The barge would be towed to the site by a 21' Carolina skiff as needed.



**Figure 1:** Proposed lease site and surrounding area. Image taken from DMR’s site report.

### **B. Site Characteristics**

On September 23, 2023, DMR scientists assessed the proposed lease area. DMR scientists arrived on site at approximately 10:44 AM (SR 2). The surrounding area is comprised of rocky shore that extends into forested uplands (SR 2). 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 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**

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, § 2.37(1)(A)(1).

During the site visit on September 20, 2023, DMR did not observe any docks or moorings in the vicinity of the proposal (SR 4).

A Harbormaster Questionnaire was received from the South Bristol Harbormaster, dated May 28, 2023. The Harbormaster stated that no adverse impacts to riparian ingress or egress would be anticipated from the proposed lease.

DMR did not receive any additional comments specific to riparian ingress or egress.

**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 any lease activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area. 12 M.R.S.A. § 6072-A(13)(B). 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).

During the site visit, DMR observed that the proposal was approximately 70.8 feet east of the start of the navigational channel in the area (SR 5). The proposal is located approximately 115.2 feet to the west of the eastern shoreline at mean low water (MLW) and approximately 1,709.2 feet to the east of the western shoreline at MLW (SR 3).

The application states that a large amount of both commercial and recreational vessels of all sizes travel in the middle of the main navigational channel approximately 600’ to the east during the summer months (App 7).

In response to the Harbormaster Questionnaire, the Harbormaster stated that no adverse impacts to navigation would be anticipated from the proposed. No other comments concerning navigation were received by DMR.

Although there is a large amount of boat traffic occurring in the navigation channel adjacent to the proposal, the location of the proposal is not in the navigational channel and therefore would not interfere with navigation within the channel.

**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 of the area. 12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3). 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 2.37(1)(A)(3).

**Fishing.** During the site visit, DMR observed three lobster buoys within 1,000 feet of the proposal, with distances of 110 feet, 202.3 feet, and 253.7 feet (SR 5). Additional lobstering activity was observed to the west of the proposal located in the main river channel (SR 5).

The application states that commercial lobstering takes place in the channel to the west of the proposal from April to December (App 7). Most of this activity begins approximately 400 feet away from the proposal (App 7). The application states that no traps have been observed in the proposed lease site for the past two years (App 7). The application states no recreational fishing occurs in the area (App 7).

In response to the Harbormaster Questionnaire, the Harbormaster stated that lobstering occurs west of the proposal, and that the proposal would not impact recreational fishing in the area. No other comments concerning fishing were received by DMR.

While recreational fishing and lobstering does occur in the area, it is stated by the applicant and the town Harbormaster that all lobstering in the area occurs to the west of the proposal, and not within the proposal area. DMR did not observe fishing activities within the boundaries of the proposed site. Additionally, the location of the proposal leaves over 100 feet between the proposal boundary and the eastern shoreline for fishing to occur, and over 1,700 feet between the proposal boundary and the western shoreline for fishing in deeper waters to occur.

**Other uses.** The applicant has not observed any other uses in the area of the proposal (App 7). No comments regarding other uses in the area of the proposal were received by DMR. **Therefore,** the activities proposed for this site will not unreasonably interfere with fishing or other 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 no Limited Purpose Aquaculture sites within 1,000 feet of the proposed lease site (SR 6). One experimental lease, DAM Mlx, is located 50 feet north of the proposal (SR 6). DAM Mlx is held by Norumbega Oyster Inc., the applicant for this proposal. DMR did not receive any comments concerning other aquaculture uses.

**Therefore,** the activities proposed for this site will not unreasonably interfere with other aquaculture uses of 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). "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).

During DMR's site visit, staff utilized a remotely operated vehicle (ROV) to assess the epibenthic ecology of the proposed lease (SR 7). DMR staff observed hermit crabs (*Pagurus spp.*), shrimp (*Crangon septemspinosa*), and green crab (*Carcinus maenas*) (SR 7). All were common to the area (SR 7).

No eelgrass (*Zostera marina*) was observed on underwater camera footage within the proposal boundary during the site visit (SR 8). Additionally, records of eelgrass collected by Maine Department of Environmental Protection in 2023 indicates no mapped eelgrass presence in the vicinity of the proposal (SR 8).

There are no documented bald eagle nests within 1,000 feet of the proposed lease area (SR 9). 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 not located within Tidal Waterfowl and Wading Bird Habitat (TWWH) (SR 9). On March 7, 2023, a Wildlife Biologist with MDIFW responded by email to a “Request for Agency Review and Comment”, stating that minimal impacts to wildlife are anticipated for this project.<sup>2</sup>

Based on this evidence, the proposed aquaculture activities for this lease site will not interfere with the ecological function of the area.

**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.

#### **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 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, § 2.37(1)(A)(7); Chapter 2, § 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.

#### **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 stock from Muscongus Bay Aquaculture. 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.

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<sup>2</sup> Email correspondence between MDIFW and DMR

#### **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 other aquaculture uses of the area.
5. 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.
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 requested experimental lease of 2.77 acres to Norumbega Oyster Inc., 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>3</sup>; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

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<sup>3</sup> 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.”



This lease is granted to the lessee for the suspended cultivation of American 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(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 course of the lease, that aquaculture has been conducted in a manner substantially injurious to marine organisms, or that any conditions of the lease or any applicable laws or regulations have been violated.

Dated: \_\_\_\_\_

3/3/25



Patrick C. Keliher, Commissioner  
Department of Marine Resources