

**STATE OF MAINE**  
**DEPARTMENT OF MARINE RESOURCES**  
Experimental Aquaculture Lease Application  
Suspended culture of shellfish  
Littlejohn Island, Yarmouth

**Thomas Henninger**  
**CAS LJ2x**  
July 26, 2019

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

Thomas Henninger applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease located north of Littlejohn Island in Casco Bay, Yarmouth, Cumberland County. The proposed lease is 2.06 acres<sup>1</sup> in size, and is proposed for the suspended cultivation of American/eastern oysters (*Crassostrea virginica*). DMR accepted the application as complete on October 24, 2018. No requests for a public hearing were received during the comment period, and no hearing was held.

**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 Yarmouth and its Harbormaster, and others on the Department’s mailing list. Notice of the application and comment period was published in the *Northern Forecaster* on December 6, 2018.

The evidentiary record before the Department regarding this lease application includes the application, the Department’s site report dated May 9, 2019, and the case file. The evidence from each of these sources is summarized below.<sup>2</sup>

**2. DESCRIPTION OF THE PROJECT**

**A. Proposed Operations**

The purpose of the proposed experimental lease is to assess the viability of a commercial lease operation in the chosen location (App 4<sup>3</sup>). American/eastern oysters (*C. virginica*) would be cultivated using floating and bottom cages, arranged in up to 16 parallel lines on the proposed site (App 10A). Up to 210 floating cages are proposed, with dimensions of 41” x 68” x 22” and up to 16 bottom cages, measuring 3’ x 4’ x 4’ are proposed (App 10A-11). During the winter months, cages would be sunk to the bottom for overwintering (App 5).

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<sup>1</sup> Applicant originally requested 2.17 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 2.06 acres.

<sup>2</sup> These sources are cited below, with page references, as CF (case file), App (application), SR (site report).

<sup>3</sup> The referenced page numbers are those displayed in the bottom of the application page.

## **B. Site Characteristics**

On April 25, 2019, 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 waters between Littlejohn and Cousins Islands in Casco Bay (SR 2). The surrounding uplands host a mixed forest; residential buildings and docks are located to the north and west of the proposed site on Cousins Island, while the section of Littlejohn Island located to the south of the proposed lease, is undeveloped (SR 2). The shoreline is composed primarily of rocks, with mudflats exposed at lower tidal stages to the west of the proposal (SR 2).

At mean low water, the proposed lease is located approximately 1,130 feet from Littlejohn Island to the south and approximately 1,050 feet from Cousins Island to the northwest (SR 4). Water depth within the proposed lease range between 7.5 and 8.5 feet at mean low water (SR 3). The bottom of the proposed lease site is comprised of mud (SR 8).

## **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 applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

### **A. Riparian Access**

The proposed lease is located north of Littlejohn Island and south of Cousins Island in Casco Bay (SR 5). Littlejohn Island, located over 1,130 feet to the south of the proposed lease, hosts an undeveloped shoreline (SR 4). Houses, docks, and stairs for shoreline access were observed to the north and west of the proposed lease, on the Cousins Island shoreline (SR 5). At the time of DMR's site visit on April 25, 2019, the closest docks were observed over 800 feet to the north of the proposed lease (SR 5). The proposed lease will not impede depth-appropriate vessels from utilizing this dock due to this distance. During DMR's site visit, an unlabeled white buoy, which was assumed to mark a mooring, was observed approximately 194 feet from the proposed lease (SR 5). According to the site report, "it is likely that, if this buoy marks a mooring, the use of said mooring would be impacted by the proposed lease" (SR 5).

However, during the review period, the Department did not receive any comments from members of the public concerning access to riparian owned land or the use or moorings in the vicinity of the proposed lease. Based on the absence of public comments it is reasonable to conclude that there are no concerns about the effects the proposed site may have on riparian ingress and egress, including the use of nearby moorings. Additionally, the Yarmouth Harbormaster stated in written comments that the proposed lease

application does not interfere with the ability of riparian landowners located within 1,000 feet of the proposed lease to get to and from their property.<sup>4</sup> It appears from this evidence that riparian ingress and egress will not be unduly affected by the proposed lease application.

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

## **B. Navigation**

The proposed lease is located in the cove between Littlejohn and Cousins Islands in Casco Bay (SR 2). Per page 6 of the site report:

A marked channel leading into the Royal and Cousins Rivers is located to the north and east of the proposed lease....Vessels navigating to and from the Royal and Cousins Rivers are unlikely to be impacted by the proposed lease, because it is located within a shallow cove more than 1,500 feet to the west of the channel.

According to the site report, navigation within the cove in which the proposed lease is located may be impacted by the proposal (SR 6). If the proposed lease were to be granted, vessels navigating in or out of the cove would have to navigate to the north or south of the proposal, due to its location in the center of the cove's mouth. However, because the Cousins Island shoreline is located approximately 1,050 feet to the north of the proposed lease, and the rocks off the Littlejohn Island shoreline are located approximately 715 feet to the south, adequate room is available for depth-appropriate vessels to navigate on either side of the proposed lease site (SR 4).

The Yarmouth Harbormaster indicated that the proposed lease does not interfere with navigation in designated channels.<sup>5</sup> During the review period, the Department did not receive any public comments regarding navigation. Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on navigation within the area. It appears from this evidence that navigation in the area will not be unduly affected by the proposed lease application.

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

## **C. Fishing & Other Uses**

**Fishing.** According to the Yarmouth Harbormaster, little to no commercial and/or recreational fishing activities occur within the area of the proposed lease.<sup>6</sup> During the site visit on April 25, 2019, no fishing activities were observed within the lease site (SR 6). In the site report, DMR acknowledged that commercial and recreational uses of this area are "more prevalent in the summer months" (SR 6). If granted, the location and size of the proposed lease would not prevent commercial or recreational fishing activities from occurring between Littlejohn and Cousins Islands.

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<sup>4</sup> CF: Harbormaster Questionnaire dated May 1, 2019.

<sup>5</sup> CF: Harbormaster Questionnaire dated May 1, 2019.

<sup>6</sup> CF: Harbormaster Questionnaire dated May 1, 2019.

Given the absence of public comments expressing concerns regarding interference with fishing, it is reasonable to conclude that there are no concerns about the effects the proposed site may have on commercial or recreational fishing. It appears from this evidence that the proposed lease is unlikely to unreasonably affect commercial and recreational fishing activities in the area.

**Other aquaculture uses.** Three Limited Purpose Aquaculture (LPA) licenses and two experimental aquaculture leases are located within one mile of the proposed lease (SR 6). The closest aquaculture site is an LPA license located within the proposed lease site and held by the applicant (SR 6). The closest aquaculture operation held by another individual is an experimental lease CAS LJIx, which is located approximately 960 feet to the southwest of the proposed lease and permitted for the suspended culture of shellfish (SR 7). Due to this distance, and the absence of public comments concerning the impact of the proposal on existing aquaculture operations, it is unlikely that the activities proposed by the applicant will adversely affect existing aquaculture leases and licenses in the area. Based on this evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture uses in the area.

**Other water-related uses.** During the site visit on April 25, 2019, DMR staff did not observe other water-related uses of the proposed lease area not described elsewhere in this decision. During the review period, the Department did not receive any public comments detailing other uses of the area. Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

**Therefore,** considering 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**

Data collected in 2018 and 2013 show the closest documented eelgrass (*Zostera marina*) beds to be located approximately 110 and 650 feet respectively from the proposed lease site (SR 8). During DMR's site review, no eelgrass was observed when assessing the bottom of the proposed lease via a remotely operated vehicle (SR 8).

Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIF&W), show that the proposed lease is located approximately 680 feet from Tidal Wading Bird and Waterfowl Habitat (SR 7). DMR sent a copy of the lease application to MDIF&W for their review and comment. MDIF&W indicated: "minimal impacts to wildlife are anticipated".<sup>7</sup>

Based on the evidence that the proposed lease does not intersect with historical eelgrass beds or mapped wildlife habitat, 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 culture of shellfish, as proposed for this lease site, will not interfere with the ecological functioning 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.

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<sup>7</sup> CF: Email from J. Perry, MDIF&W Environmental Review Coordinator, dated January 9, 2019.

#### **E. Public Use & Enjoyment**

Per the site report, “There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site” (SR 10).

**Therefore**, 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.

#### **F. Source of Organisms**

American/eastern oyster seed would be obtained from Mark Green, in Peaks Island, Maine (App 2). This source is approved by DMR.

**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, I conclude 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, taking into consideration the number and density of aquaculture leases in 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 2.06 acres to Thomas Henninger 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>8</sup>; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

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<sup>8</sup> DMR Rule 2.64 (14) provides:

This lease is granted to the lessee for the cultivation of American/eastern oysters (*Crassostrea virginica*) using suspended culture techniques. 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 sq. ft. 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) (D) 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 MRSA §6072-A (15)<sup>9</sup>. 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.

The following conditions shall be incorporated into the lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

**7. REVOCACTION 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: \_\_\_\_\_

*July 26, 2019*



Patrick C. Keliher, Commissioner  
Department of Marine Resources

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“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.”

<sup>9</sup> 12 MRSA §6072-A (15) provides that:

“The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose. The commissioner may grant the lease on a conditional basis until the lessee has acquired all the necessary federal, state and local permits.”