

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

Experimental Aquaculture Lease Application  
Suspended Culture of marine algae  
Cousins Island and Chebeague Island, Yarmouth

**Stewart Hunt**  
**CAS CI2x**

August 19, 2019

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

Stewart Hunt applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease located between Cousins and Chebeague Islands, Casco Bay, Yarmouth, Cumberland County. The proposed lease is 3.85<sup>1</sup> acres and is for the suspended cultivation of sugar kelp (*Saccharina latissima*), skinny kelp<sup>2</sup> (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and laver (*Porphyra sp.*). DMR accepted the application as complete on March 15, 2019. Two 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 DMR’s mailing list. Notice of the application and comment period was published in the April 4, 2019 edition of the - *Northern Forecaster*. The evidentiary record regarding this lease application includes the application, DMR’s site report dated July 19, 2019, and the case file. The evidence from each of these sources is summarized below.<sup>3</sup>

**2. DESCRIPTION OF THE PROJECT**

**A. Proposed Operations**

The purpose of the proposed experimental lease site is to determine the viability of a commercial seaweed operation (App 5). Applicant will deploy fifteen, one thousand foot longlines. In total, 4 granite blocks, 30 concrete moorings and associated line, 30 polyball buoys, and 45 buoy floats will be present at the site (App 6). The longlines will be suspended approximately seven feet below the surface of the water and will be spaced ten feet apart (SR 2, App 11). If approved, all gear except for four granite moorings, would be deployed at the site from October 1<sup>st</sup> to May 15<sup>th</sup>. Four granite moorings would remain on site all year (SR 2, App 14).

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<sup>1</sup> Applicant originally requested 4 acres. DMR calculations, based on the coordinated provided in the application indicate the area is 3.85 acres.

<sup>2</sup> In the application, skinny kelp was referred to as a morphotype of *Saccharina latissima* (*Saccharina latissima forma angustissima*). Skinny kelp is now considered a separate species (*Saccharina angustissima*) and will be referred to in this report as such.

<sup>3</sup> These sources are cited, with page references, as CF (case file), App (Application), SR (site report).

## **B. Site Characteristics**

On July 9, 2019 DMR scientists visited the proposed 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 Cousins and Littlejohn Islands and Chebeague Island. The southeastern shorelines of Cousins and Littlejohn Islands are lined with houses, docks and moorings (SR 2). Chebeague Island is less densely populated, and approximately five houses and one pier were observed by DMR staff during the site visit (SR 2). At low tides, a sandy and rocky spit extends from Chebeague Island to the northeast of the proposed site (SR 2). At the time of DMR's site visit, water depths at the corners of the proposed lease ranged from 22.5 to 33 feet. When correcting for tidal variation, depths range from 22.79-32.29 feet (SR 6).

## **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 available source of organisms to be cultured on the lease site.

### **A. Riparian Access**

The proposed lease is located more than 1,000 feet from all nearby shorelines (SR 7). During DMR's site visit, many houses, docks, and moorings were observed on Cousins and Littlejohn islands. Chebeague Island was less densely populated (SR 7). While some moorings were observed to the south of the proposed lease off Chebeague Island, no moorings were observed within the area immediately surrounding the proposed lease (SR 7). The Harbormaster Questionnaire noted that the proposed lease will not interfere with the ability of riparian owners to get to and from their properties.<sup>4</sup>

During the review period, the Department did not receive any public comments regarding riparian access. Based on the absence of public comments, and the information provided in the site report and harbormaster questionnaire, it is reasonable to conclude that there are no concerns regarding the effects of the proposed lease may have on riparian ingress and egress. It appears from this evidence that the 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.

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

## **B. Navigation**

The proposed lease site is in an area between Chebeague and Cousins Islands that experiences heavy vessel traffic, especially during summer months (SR 8). During their site visit, DMR scientists observe both commercial and recreational vessels in the area (SR 8). A navigational channel lies between Chebeague and Cousins Island but is limited by a rocky bar extending from the Chebeague Island shoreline. To help boaters avoid this hazard, a red nun guides vessels closer to Cousins and Littlejohn Island as they move through the area (SR 8). The proposed lease is located southeast of the rocky bar, and vessel traffic coming from the north would likely not be impacted by the proposed lease. However, vessels coming from the south and west may be impacted by the presence of the proposed lease when approaching the red nun (SR 8). The applicant notes that boaters typically stay close to Cousins and Littlejohn island to avoid this rocky ledge, and that the ledge would generally prevent boaters from passing directly through the proposed lease site (App 7).

It is unlikely, should the proposed lease be granted, that vessels in the area would be prevented from travelling between the proposed lease and the Chebeague Island shoreline. The proposed site is located over 1,000 feet from all adjacent shorelines, and there is more than 700 feet between the proposed lease and the 6-foot contour line (SR 8).

The Harbormaster Questionnaire indicated that the proposed lease would interfere with navigation between June 1<sup>st</sup> and November 1<sup>st</sup> but would not interfere from November 1<sup>st</sup> to May 15<sup>th</sup><sup>5</sup>. The applicant originally proposed that all gear would be onsite October 1<sup>st</sup> through May 15<sup>th</sup> (App 5). If the proposed lease is granted, to ensure the lease does not interfere with navigation, DMR will require that gear, with the exception for four granite mornings, may only be present in the water from November 1<sup>st</sup> to May 15<sup>th</sup> of each year. All gear, except for the granite moorings, must be removed from the water outside of the identified time period so it does not interfere with navigation. Conditions reflecting this requirement will be included in the lease.

Based on the evidence, and the condition described above, it appears that the proposed aquaculture activities will not unreasonably interfere with navigation.

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

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

**Fishing.** At the time of DMR's site visit, there was one commercial lobster boat operating near proposed lease (SR 8). 10 lobster buoys were also observed in the area, one of which was within the boundaries of the proposed lease (SR 8). The application noted there is 'modest' lobstering during the summer months, but that conversations with lobster and crab fishermen in the area confirmed there is little activity after September (App 7). The applicant has not observed any recreational fishing at the site (App 7). The Harbormaster Questionnaire indicated that there is a lot of commercial and recreational fishing

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

within the area of the proposed lease between June 1<sup>st</sup> and November 1<sup>st</sup>, and that gear would need to be removed from the site between May 15<sup>th</sup> and November 1<sup>st</sup> to avoid interfering with commercial fishing<sup>6</sup>. One public comment was received during the comment period that expressed concern with the proposal operating in October due to fishing and the amount of gear present in the area and suggested the applicant should shift the proposed operations ¼ mile to the southwest.<sup>7</sup> The Town of Yarmouth, Maine has requested that all gear relating to sugar kelp only be allowed in the proposed location from November 1<sup>st</sup> to May 15<sup>th</sup> each year so that the proposed activities do not interfere with commercial fishing or navigation<sup>8</sup>. Given the considerations described above, and should the lease be granted, DMR will condition that gear, except for four granite moorings, be removed from the water between May 15<sup>th</sup> and November 1<sup>st</sup>.

Given the comments from the Harbormaster, one comment from the public, and activity observed during the site visit, and condition described above, it is reasonable to conclude that there are no concerns with the proposed activity, provided all gear (except for four granite moorings) is removed from the water between May 15<sup>th</sup> and November 1<sup>st</sup>. It appears from this evidence that the proposed lease is unlikely to unreasonably affect commercial and recreational fishing activities in the area.

**Exclusivity.** No exclusive use is requested.

**Other aquaculture uses.** There are six Limited Purpose Aquaculture (LPA) licenses located within one mile of the proposed lease (SR 9). The applicant, Stewart Hunt, holds the four LPA licenses located closest to the proposal (SR 9). Should this lease be granted, the applicant intends to discontinue those four LPAs (App 8). The next closest active aquaculture site to the proposal is LPA license KRKO117, which is permitted for the suspended culture of shellfish and is approximately 2,340 feet from the proposed location (SR 9). Due to this distance, and the absence of public comments concerning the impact of the proposal on the existing aquaculture operations, it is unlikely that the activities proposed by the applicant will negatively impact 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 review period, the Department did not receive any comments detailing other uses that are not already contemplated in other sections of this decision. 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 the conditions imposed on this lease, and existing aquaculture uses of the area, the proposed activities for this site will not unreasonably interfere with fishing or other related uses of the area.

#### **D. Flora & Fauna**

Tidal Wading Bird and Waterfowl Habitat is located approximately 690 feet from the proposed site in three directions (SR 9). This habitat type is defined as Significant Wildlife Habitat under Maine's Natural

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

<sup>7</sup> CF: Comment from Russell Langmaid received via e-mail on May 5, 2019

<sup>8</sup> CF: Harbormaster Questionnaire signed May 1, 2019

Resources Protection Act. Essential habitat for the roseate tern (*Sterna dougallii*), an endangered species under Maine’s Endangered Species Act, is located two miles from the proposed site, and seabird nesting islands are located about two miles to the northwest, northeast, and southeast of the proposal site (SR 10).

DMR sent a copy of the application to the Maine Department of Inland Fisheries and Wildlife (MDIFW) for their review and comment. MDIFW indicated that “there are no mapped resources of MDIFW jurisdiction in the proposed lease area, minimal impacts are anticipated”.<sup>9</sup>

Data maintained by the Maine Department of Environmental Protection and Casco Bay Estuary Partnership indicates that the closest documented eelgrass bed to the proposed lease site in 2018 was approximately 590 feet to the east (SR 10). The proposed lease, if granted, will likely not result in physical disturbance or shading of the eelgrass bed (SR10).

Based on the evidence that the proposed lease does not interact 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 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.

#### **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 11).

**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 municipal, state or federal governments.

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

The applicant intends to source sugar kelp, skinny kelp, winged kelp, horsetail kelp, dulse, Irish moss, and laver from Atlantic Sea Farms<sup>10</sup>. This source is approved by DMR.

**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, 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.

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<sup>9</sup> CF: Email from R. Settele (MDIFW) to C. Burke dated April 3, 2019.

<sup>10</sup> When the applicant applied, Atlantic Sea Farms was known as Ocean Approved. Ocean approved has since changed their name to Atlantic Sea Farms.

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 3.85 acres to Stewart Hunt 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>11</sup>; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

The lease is granted for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and laver (*Porphyra sp.*). 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 (12) (B) in the amount of \$5,000.00, conditioned upon performance of 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 MSRA §6072-A (15)<sup>12</sup>. Conditions are designed to

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<sup>11</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.”

<sup>12</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

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 purpose of the lease.

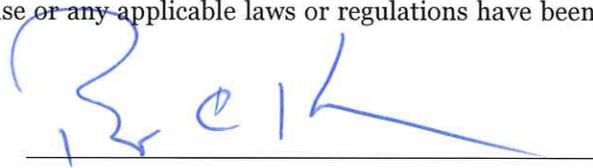
The following conditions shall be incorporated into the lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Between May 15<sup>th</sup> and November 1<sup>st</sup> each year, all gear, except for four granite moorings, must be removed from the site.

**7. REVOCAION 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: 5/17/15



Patrick C. Keliher, Commissioner  
Department of Marine Resources

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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.”