

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

Experimental Aquaculture Lease Application

Suspended culture of marine algae

Casco Bay, Chebeague Island

**Great Ledge Cove Seafood, LLC****CAS CHANx**

Docket #2017-9-E

December 5, 2017

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

Great Ledge Cove Seafood LLC, a Maine company, applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease on 3.57 acres<sup>1</sup> located in Casco Bay, Chebeague Island, in Cumberland County, for the suspended culture of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*). DMR accepted the application as complete on June 27, 2017. During the 30-day public comment period, six requests for a public hearing were received by the Department. A public hearing was held on November 29, 2017 at the Chebeague Hall Community Center, Chebeague Island, Maine. No one intervened in this case.

**1. THE PROCEEDINGS**

Notice of the application and the 30-day public comment period were provided to state and federal agencies, which were requested to review the project, as well as to riparian landowners, the Town of Chebeague Island and its Harbormaster, members of the Legislature, representatives of the press, aquaculture organizations, and others on the Department’s mailing list. Notice of the public hearing was published in the November 2017 edition of *Commercial Fisheries News* and in the northern edition of *The Forecaster* on October 26, 2017 and November 16, 2017.

Sworn testimony was given at the hearing by the applicant, represented by Justin Papkee; Flora Drury, Aquaculture Scientist, DMR Aquaculture Division; Craig Stewart, a local scallop and lobster fisherman; and James Crimp, Marine Economic Development Associate, Island Institute. Justin Papkee described the proposed project. Craig Stewart, as the applicant’s witness, addressed scallop fishing activity within the vicinity of the proposed lease. Flora Drury described the Department’s site visit. James Crimp described Mr. Papkee’s involvement in the Island Institute’s Aquaculture Business Development Program. No representatives from federal, or other state agencies, indicated their presence at the hearing, but Marjorie Stratton, Chebeague Town Administrator; Viktoria Johnson, Chebeague Town Clerk; Genaro Balzano, Chebeague Harbormaster; Jay Corson, Chebeague Selectman; and Robert Earnest, a member of the Chebeague Shellfish Conservation Commission attended the hearing.

Each witness was subject to questioning by the Department, the applicant, and members of the public. The hearing was recorded by DMR. The Hearing Officer was Amanda Ellis.

---

<sup>1</sup> The applicant originally applied for 3.96 acres, but DMR calculations indicate the area is 3.57 acres.

The evidentiary record before the Department regarding this lease application includes the application and the Department's site report dated September 26, 2017, as well as the case file. The evidence from these sources is summarized below.

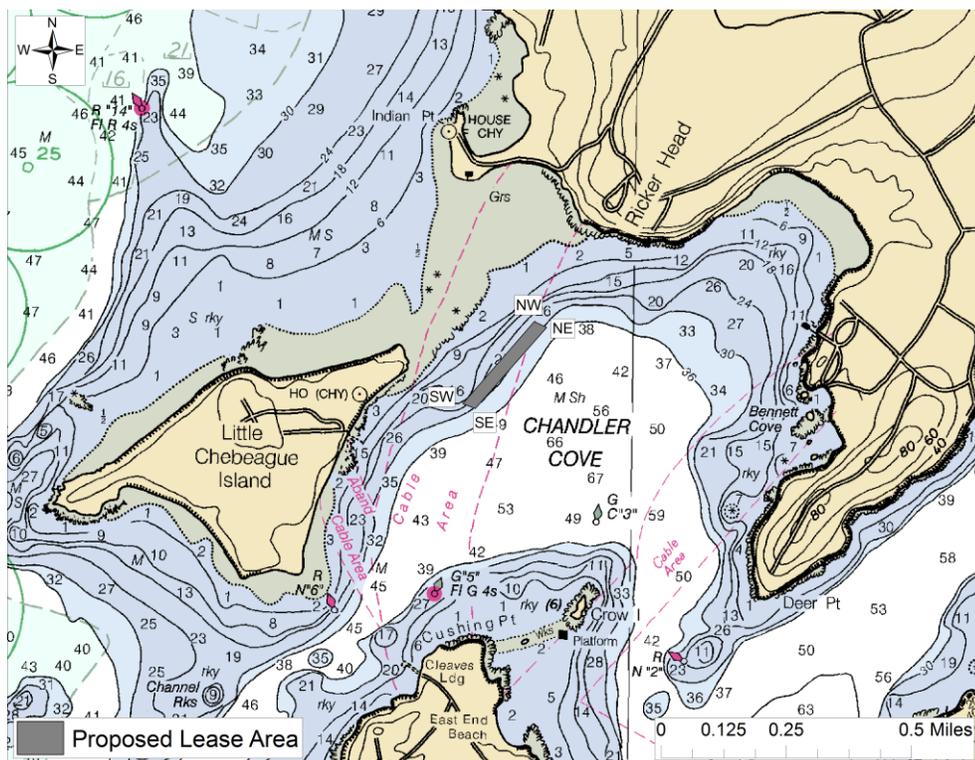
## **LIST OF EXHIBITS<sup>2</sup>**

1. Case file (CF)
2. Application signed and dated (App).
3. DMR site report dated (SR).

## **2. DESCRIPTION OF THE PROJECT**

### **A. Site Characteristics**

On August 25, 2017, 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 in Chandler Cove, which is surrounded by Great Chebeague Island to the north and east, Little Chebeague Island to the southwest, and Long Island to the south (SR 2). Great Chebeague and Little Chebeague Islands are connected by a tidally exposed sand bar, which is located to the west of the proposed site (SR 2).



**Figure 1:** Vicinity map depicting the proposed lease area with labeled corners.

<sup>2</sup> Exhibits 1, 2, and 3 are cited below, with page references, as CF1 (case file), App2 (application), SR3 (site report). Other exhibits are cited by exhibit number.

The uplands of Great Chebeague Island are characterized by fields and mixed forests (SR 2). Several houses are present along the shoreline of Great Chebeague Island (SR 2). Little Chebeague Island is uninhabited and owned by the State of Maine Bureau of Parks and Lands (SR 2). Water depths, at mean low water, range from 22.9 feet at the middle point along the western boundary of the proposed site to 31.6 feet at the northeast corner of the proposed site (SR 6). The nearest distance to shore at mean low water is ~380 feet from the western boundary of the proposed site (SR 5). The bottom of the proposed site is characterized by soft mud, and the current varies from 0 to 2 knots (SR 11, App 10).

The proposed lease is in an area currently classified by the Department of Marine Resources Water Quality Classification program as “approved for the harvest of shellfish” (SR 7). However, this classification will not affect the harvest of marine algae, because such classifications are currently only relevant to shellfish operations.

### **B. Proposed Operations**

The purpose of the proposed operation is to explore the commercial feasibility of cultivating sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*) (App 8). The applicant plans to deploy 15 longlines that are approximately 1,100 feet in length (App 8). Mr. Papkee testified that the longlines will be spaced ten feet apart and will be submerged seven feet below the surface of the water. The longlines will be seeded during the fall over a period of one to three days (App 8). Once seeding has ended the site will be monitored on a weekly basis (App 8). In spring, the kelp will be harvested, by hand, over a period of two to 15 days (App 8). Mr. Papkee testified that after the kelp is harvested, the longlines will be removed from the proposed site and returned once seeding resumes in the fall. The moorings will remain on the proposed site throughout the year (App 8). Access to the site will be from Long Island or Portland (App 9).

### **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 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. Riparian Access**

During the site assessment, DMR staff did not observe any docks or moorings within the immediate vicinity of the proposed lease (SR 7). According to the site report:

Three piers with floats attached, and approximately 20 moorings, were observed by MDMR staff over 2,000 feet to the northeast of the proposal in the head of Chandler Cove. The proposed lease operations are unlikely to interfere with ingress or egress from observed piers and moorings (SR 7).

Staff also observed a ramp, ~1,290 feet north of the proposed lease site, which led from the uplands to the shoreline (SR 7). Staff noted that the ramp appeared to provide riparian owners with beach access and water access for hand-carry vessels (SR 7). Given the distance from the ramp to the proposed lease area, the site report notes: “the proposed aquaculture activity would not impede the possibility of installing a dock or float in this area in the future” (SR 7).

Activities at the proposed lease site in subtidal waters are unlikely to hamper access to and from the shore.

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

### **B. Navigation**

Chandler’s Cove is used by commercial and recreational boaters (App 9, SR 8). According to the site report:

The proposed lease is located along the western edge of the widest section of the marked channel that leads through Chandler Cove. Approximately 1,750 feet are available for navigation between the proposed lease site and the nearest navigational marker on the opposite side of the channel (SR 8).

During the review period, the Chebeague Harbormaster noted that the proposed area would not interfere with navigation, but indicated that the area is “frequently used by boaters to cut across the bar at hightide.”<sup>3</sup> At high tide more than 1,000 feet of navigable waters remain to the north of the proposal (SR 8). Per the site report, “it is unlikely that navigation to the sand bar from the east, and over the sandbar at high tide in appropriate vessels, will be hindered by the proposed lease.” (SR 8). Furthermore, under the DMR rules, high tide shortcuts are not considered as navigational ways.<sup>4</sup> There is an existing experimental lease located ~305 to the southwest of the proposed lease site (SR 10).<sup>5</sup> The site report notes “there is adequate room for vessels in the area to navigate between the two lease sites.” (SR 8).

Boat traffic in the area tends to increase during the summer months; but the longlines will be removed during the summer months leaving only the moorings and mooring balls on the proposed site when boat traffic is heaviest (App 9, SR 8).

---

<sup>3</sup> CF, Harbormaster Questionnaire received July 17, 2017.

<sup>4</sup> Chapter 2.37(1)(A)(2) related to navigation decision criteria provides, in part:

High tide “short cuts” shall not be considered navigational ways for the purposes of this section.

<sup>5</sup> The existing lease is CAS ELCx.

It appears from this evidence that navigation in the area will not be unduly affected by the presence of the proposed lease site.

**Therefore, I find** that the aquaculture activities proposed for this site will not unreasonably interfere with navigation. The lease site must be marked in accordance with U.S. Coast Guard requirements.

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

The area is used by commercial and recreational fishermen during their respective seasons, with lobster and scallop fishing being the primary commercial activity.<sup>6</sup> In regards to scallop fishing, the site report notes:

MDMR scallop harvester reports indicate that scallops have been caught in almost all of Chandler Cove, with greater catch rates in the cove's deeper waters. Scallop surveys conducted by MDMR in December of 2016 and January of 2017 show the presence of scallop seed, along with sublegal and harvestable scallops, within Chandler Cove (SR 9).

The application notes that most scallop fishing occurs in deeper waters located to the south of the proposed lease site and should not present a conflict (App 9). Craig Stewart, a commercial lobster and scallop fishermen in the area, testified that he had not seen anyone scallop fishing within the proposed lease area and that he did not believe the proposed operations would interfere with fishing. In regards to lobster fishing, staff noted the following:

Two lobster buoys were observed to the west of the proposed site, three were observed to the north, and a few were observed to the south. The nearest apparent lobster trap buoy was located ~317 feet to the northwest. Lobster trap buoys were present in greater numbers to the east of the site. During the time of the Department's visit one lobster boat was observed hauling lobster traps to the east of the site, in the middle of Chandler Cove (SR 9).

Per the application, Mr. Papkee discussed his proposal with local lobstermen, who indicated that their gear is currently deployed away from the proposed site (App 9).

It appears from this evidence that the proposed lease site is unlikely to affect fishing in the area.

**Exclusivity.** The applicant is requesting that dragging and lobster fishing be prohibited within the proposed lease boundaries to avoid gear entanglement (App 9).

These restrictions are reasonable to enable the aquaculture project to be carried out while encouraging the greatest number of compatible uses of the area, as provided in 12 M.R.S.A §6072(7-B). Conditions reflecting these restrictions will be included in the lease.

**Other aquaculture leases.** There are ten aquaculture sites within one mile of the proposed lease (SR 10).<sup>7</sup> The closest aquaculture site is ~305 feet from the proposal and is an experimental lease for the cultivation of marine algae. The experimental lease is issued to Shearwater Ventures, and referenced

---

<sup>6</sup> CF, Harbormaster Questionnaire, July 17, 2017.

<sup>7</sup> Five aquaculture leases and five Limited Purpose Aquaculture (LPA) licenses. For a complete list, see page 10 of the site report.

in section 3.B of this decision. The applicant discussed his proposal with representatives of Shearwater Ventures, who indicated that the proximity between their existing lease site and the proposed lease would not be a problem (App 9). The Department sent notice of the application to leaseholders within 1,000 feet of the proposed site and no comments were received.

Based on this evidence, it appears that the proposed lease will not unreasonably interfere with fishing or other uses of the area. The lease must be marked in accordance with DMR Rule 2.80<sup>8</sup>

**Therefore, considering the number and density of aquaculture leases in the area, I find** that the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.

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

**Site Observations.** During the site visit, Department staff commonly observed American lobster (*Homarus americanus*), rock crab (*Cancer sp.*), and northern cerianthid anemone (*Cerianthus borealis*).<sup>9</sup> Herring gulls (*Larus argentatus*) were also observed roosting on the shoreline to the west of the proposed lease site and soaring overhead; and double-crested cormorants (*Phalacrocorax auritus*) were noted near the proposed lease site (SR 14). Ms. Drury testified that staff observed dead eelgrass (*Zostera marina*) within a portion of the proposed lease site, which likely drifted onto the proposed site from another location. Per the site report:

Data collected by the Maine Department of Marine Resources in 2013 suggests no historical presence of eelgrass within the immediate vicinity of the proposed lease site. The nearest documented beds are located ~194 feet to the northwest along the edge of the sandbar that separates Great Chebeague and Little Chebeague Islands (SR 13).

**Fisheries and Wildlife.** The Department sent a copy of this lease application to the Maine Department of Inland Fisheries and Wildlife (MDIFW) for their review and comment. MDIFW noted that “there are no mapped resources of MDIFW jurisdiction in the immediate project site.”<sup>10</sup>

---

#### <sup>8</sup>**2.80 Marking Procedures for Aquaculture Leases**

1. When required by the Commissioner in the lease, aquaculture leases shall be marked with a floating device, such as a buoy, which displays the lease identifier assigned by the Department and the words SEA FARM in letters of at least 2 inches in height in colors contrasting to the background color of the device. The marked floating device shall be readily distinguishable from interior buoys and aquaculture gear.
2. The marked floating devices shall be displayed at each corner of the lease area that is occupied or at the outermost corners. In cases where the boundary line exceeds 100 yards, additional devices shall be displayed so as to clearly show the boundary line of the lease. In situations where the topography or distance of the lease boundary interrupts the line of sight from one marker to the next, additional marked floating devices shall be displayed so as to maintain a continuous line of sight.
3. When such marking requirements are unnecessary or impractical in certain lease locations, such as upwellers located within marina slips, the Commissioner may set forth alternative marking requirements in an individual lease.
4. Lease sites must be marked in accordance with the United State’s Coast Guard’s Aids to Private Navigation standards and requirements.

<sup>9</sup> For a complete list of observed species see page 11 of the site report.

<sup>10</sup> CF, Email from MDIFW to the Aquaculture Division dated July 21, 2017.

It appears that the culture of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*) as proposed for this lease site will not interfere with the ecological functioning of the area.

**Therefore, I find** that 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**

There are no public docking facilities on Little Chebeague Island, so any boaters visiting the area need to anchor their vessels or pull them onshore (SR 15). During the site visit, staff observed several kayaks on the eastern shore of Little Chebeague Island (SR 15). During the review period, the Department sent a copy of the application and site report to the Maine Bureau of Parks and Lands and no comments were received. Based on the absence of comments, it is reasonable to conclude that the Maine Bureau of Parks and Land does not have any concerns related to public use or enjoyment of Little Chebeague Island.

**Therefore, I find** that 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**

Seed stock for this proposed lease site will be obtained from Ocean Approved in South Portland, Maine (App 1).

**Therefore, I find** that the applicant has demonstrated that there is an available source of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*).

#### **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 sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*) 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 an experimental lease of 3.57 acres to Great Ledge Cove Seafood, 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>11</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 cultivation of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), and winged kelp (*Alaria esculenta*) 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>12</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. Dragging and lobster fishing are prohibited within the lease boundaries, except by authorization of the leaseholder.

---

<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 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.”

3. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

**7. REVOCATION 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:** \_\_\_\_\_

\_\_\_\_\_  
**Patrick C. Keliher, Commissioner**  
**Department of Marine Resources**