

**STATE OF MAINE**

**Shearwater Ventures, LLC**

**DEPARTMENT OF MARINE RESOURCES**

**CAS ELCx**

Experimental Aquaculture Lease Application

Docket #2016-03-E

Suspended culture of kelp

Little Chebeague Island, Casco Bay,

Town of Chebeague Island

August 18, 2016

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

Shearwater Ventures, LLC applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease on 3.83 acres<sup>1</sup> located in the coastal waters of the State of Maine, East of Little Chebeague Island in Casco Bay, in the Town of Chebeague Island, Cumberland County, Maine, for the purpose of cultivating Sugar Kelp (*Saccharina latissima*), Horsetail Kelp (*Laminaria digitata*), and Winged Kelp (*Alaria esculenta*), using suspended culture techniques. DMR accepted the application as complete on January 25, 2016. No one intervened in this case, and no public hearing was held on this application.

**1. THE PROCEEDINGS**

Notice of the application and the 30-day public comment period, and a copy of the DMR site report, 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 and environmental organizations, and others on the Department’s mailing list. Notice of the application and comment period was published in the Northern Edition of the *Forecaster* on March 10, 2016. No comments were received by the Department.

The evidentiary record before the Department regarding this lease application includes the case file, the application, and the Department’s site report. The evidence from all of these sources is summarized below.

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<sup>1</sup> The application listed the site size as 3.79 acres. This was revised to 3.83 acres in the DMR site report (SR 2)

**LIST OF EXHIBITS**

- A. Case file (CF).
- B. Application of Shearwater Ventures, LLC (App).
- C. DMR site report dated July 18, 2016 (SR).

**2. DESCRIPTION OF THE PROJECT****A. Proposed Operations**

The applicant proposes to culture native seaweeds using up to fifteen 1,050 foot long-lines submerged 7 feet below the surface of the water (SR 2). The purpose of this study is to demonstrate the viability of a commercial kelp farm and to determine the best alternative mooring configurations that would reduce efforts and costs associated with installation and removal of gear (App 7).

Seed stock will be acquired from Ocean Approved, LLC, and the applicant will transfer seed to the site when they are 2.5 mm in length. Seed string with sporelings will be applied to long lines and grown to harvestable size. Kelp will be harvested by lifting the long line to the surface and cutting the kelp at set intervals (App 8). The applicant will be utilizing this three-year study for commercial research (App 8). The applicant plans to add five long lines annually, culminating in a total of fifteen lines by the third year of the lease (App 14). The proposed site will be marked as required under DMR Chapter 2.80 (App 16).

**B. Site Characteristics**

Little Chebeague Island is a small undeveloped island with a shoreland adjacent to the proposed lease site with a sand beach leading to dense shrub and mixed forest upland. A survey of the bottom revealed mud and sand. (SR 7) The site report indicates that water depths on the proposed lease site at mean low water are a minimum of 20 feet, with deeper water in the southern and eastern portions of the site (SR 2).

The waters surrounding the proposed lease site are currently classified as “open/approved” for the harvest of shellfish (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 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 visit, DMR biologists determined the following distances from the proposed lease to nearby shores (SR 2):

##### **Approximate Distances to Shore**

Western Boundary to Nearest Point, Little Chebeague Is. (MLW) ~213 feet to the west

Western Boundary to White Ball ~110 feet to the west

S Corner to Red Nun "6" ~ 1,360 feet to the south

S Corner to Green Flashing Buoy "5" ~ 1,206 to the southeast

Eastern Boundary to Channel Edge (40' Contour) ~105 feet to the east

Southern Boundary to Nearest Float ~142 feet to the south

Southern Boundary to Nearest Mooring ~153 feet to the south

During the site visit, DMR staff observed no docks, shorefront residences, or other structures with which the proposed lease site would interfere. Little Chebeague Island is an uninhabited island owned by the Maine Bureau of Parks and Lands and access to this island is by foot, over a tidally exposed sandbar, or by directly landing vessels on one of the beaches. The proposed lease area is more than 200 feet from the island at MLW, and there are no other riparian landowners within 1,000 feet of the proposal (SR 3, App 4).

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

### **B. Navigation**

The site report describes navigation in the vicinity of the proposed lease site as follows:

The proposed lease area is located more than 100 feet to the west of the primary navigation channel in Chandler Cove and will not, if granted, impede vessels traveling through the cove.... According to the Harbormaster for the Town of Chebeague Island, Genaro Balzano, the area experiences heavy boat traffic (Harbormaster Questionnaire, March 5, 2016). The majority of boating activity around Little Chebeague Island is expected to occur during the summer months whereas this project, if granted, would be active between the months of September and May of each year. At MLW, the proposed lease would be more than 200 feet from Little Chebeague Island. Furthermore, the long-lines will be maintained 7 feet below the surface of the water, allowing shallow draft vessels to navigate over the farm (SR 4).

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**

During the site visit in April, no lobster trap buoys were observed within or near the proposed lease site. A float was observed 142 feet from the south boundary of the proposed site, possibly for the storage of traps and gear. Another raft was observed 440 feet to the south of the proposed lease area, and the Town informed DMR that the raft is used seasonally for the buying and selling of lobsters and bait (SR 4). Recreational fishing likely occurs from shore and by boat in the area during summer months, but DMR staff determined that the proposed lease will likely not hinder recreational fishing. The Harbormaster indicated on March 5, 2016 in a communication with DMR that there is some commercial lobster and scallop fishing and some recreational fishing.

Given that the proposed lease would operate September to May, it would have limited overlap with commercial or recreational fishing seasons (SR 5, App 8). Applicants solicited input from lobstermen, scallop draggers, Long Island Selectman, the Island Institute, Ocean Approved LLC, Chebeague Island residents, Friends of Casco Bay and Maine Island Trail Association, and no objections were received (App 10).

**Other aquaculture leases.** DMR staff determined the following straight line distances between existing aquaculture leases and licenses, and the proposed lease site (SR 5-6):

- Chebeague Island Oyster Company, Little Chebeague Island, proposed lease for the suspended culture of American oysters (#2016-01E): ~1,050 feet to the northwest.
- Henry Whetham, Little Chebeague Island, LPA for the suspended culture of American oysters (WHET1 14): ~1,289 feet to the northwest.
- Ocean Approved, LLC, Little Chebeague Island, long-line culture of seaweed (CAS LC12): ~2,112 feet to the southwest.
- Ocean Approved, LLC., west of Indian Point, Chebeague Island, long-line culture of seaweed (CAS CHEB): ~2,872 feet to the northwest.
- Trundy Point, LLC, south of Little Chebeague Island, suspended culture of blue mussels (CAS LONG): ~3,545 feet to the southwest.
- David Whiston, Great Chebeague Island, LPA for the suspended culture of shellfish (WHIS416): ~3,823 feet to the northeast.
- David Whiston, Great Chebeague Island, LPA for the suspended culture of shellfish (WHIS213): ~3,992 feet to the northeast.
- David Whiston, Great Chebeague Island, LPA for the suspended culture of shellfish (WHIS112): ~4,430 feet to the northeast.
- David Whiston, Great Chebeague Island, LPA for the suspended culture of shellfish (WHIS314): ~4,485 feet to the northeast.
- Jeff Putnam, Chebeague Island, LPA for the suspended culture of shellfish (JPUT116): ~1.55 miles to the northeast.
- Erin Love, Long Island, LPA for long-line culture of marine algae (ELOV116): ~1.97 miles to the southwest.

Based on this evidence of distances from other sites, and the applicant's notification to major operators in the area of the proposal which raised no objections (App 10), it appears that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

**Exclusivity.** The applicant requests that there be no lobstering or dragging within the proposed site to minimize the risk of gear entanglement (App 10). These restrictions are reasonable in order to enable the aquaculture project to be carried out while encouraging the greatest number of compatible uses of the area, as provided in 12 MRS §6072-A (15). Conditions reflecting these restrictions will be included in the lease.

**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. Lobster and crab fishing and dragging will be prohibited within the boundaries of the lease site. The lease must be marked in accordance with DMR Rule 2.80<sup>2</sup>

#### D. Flora & Fauna

The site report notes that no SCUBA survey of marine life at the proposed lease site was conducted as part of the site visit. According to 2013 data, eelgrass is present in varying levels of coverage around the island, but the proposed site is over 80 feet from the boundary of documented eelgrass beds (SR 7, App 12).

A Habitat Outreach Biologist at the Maine Department of Inland Fisheries and Wildlife stated in communications with DMR that there will be no impacts to resources under their jurisdiction (SR 8). The shallows surrounding the island are designated Tidal Wading Bird and

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#### <sup>2</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 States Coast Guard's Aids to Private Navigation standards and requirements.

Waterfowl Habitat, but the proposed lease site is located outside the boundaries of the significant parts of the habitat (SR 8). The area of the proposed lease site is currently classified as open/approved for the harvest of shellfish (SR 8).

Based on this evidence, it appears that the kelp aquaculture project 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**

As noted in the site report, Little Chebeague Island is owned by the State of Maine Bureau of Parks and Lands and is used by the public for a variety of recreational activities. As the site report notes, most of the boating activity around the island will occur during the summer, when the lease operations would not take place. The proposed lease site is located more than 200 feet from the shore of the island, so it will not interfere with access to the island. Moreover, with the kelp lines submerged seven feet below the surface when the lease is in use from September to May, the gear will be largely invisible from the shore, and shallow-draft boats can navigate across the site to reach the shore. It appears from this evidence that the applicant's operations will not interfere with the use and enjoyment of Little Chebeague Island by the public.

**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**

According to the application, seed stock for this proposed lease site will be obtained from Ocean Approved, LLC (App 7).

**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*) to be cultured for the lease site.

#### **4. CONCLUSIONS OF LAW**

Based on the above findings, I conclude that:

- A. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
- B. The aquaculture activities proposed for this site will not unreasonably interfere with navigation.
- C. 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.
- D. 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. 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. 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 the requested experimental lease of 3.83 acres to Shearwater Ventures, 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>3</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 purpose of cultivating Sugar Kelp (*Saccharina latissima*), Horsetail Kelp (*Laminaria digitata*), and Winged Kelp (*Alaria esculenta*) using suspended

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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.”

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>4</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:

- A. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
- B. Dragging and lobstering within the lease site are prohibited except by authorization of the leaseholder.
- C. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

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<sup>4</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.”

**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: Aug. 18, 2016



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