

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Suspended culture of American oysters
Casco Bay, Town of Chebeague Island

**Lessee: Chebeague Island Oyster
Company, LLC**
Lease CAS NLCx
Docket: #2016-01-E
Date of Decision: June 27, 2016

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

The Chebeague Island Oyster Company applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease on 0.65 acres located in the coastal waters of the State of Maine, north of Little Chebeague Island, Casco Bay, Town of Chebeague Island, Cumberland County, Maine, for the purpose of cultivating American oysters (*Crassostrea virginica*), using suspended culture techniques. DMR accepted the application as complete on January 14, 2016. No one intervened in this case, and no public hearing was held on this application.

1. THE PROCEEDINGS

Notice of the application, the DMR site report, 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 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 Thursday, March 17, 2016. No comments or requests for public hearing were received by the Department.

The evidentiary record before the Department regarding this lease application includes the application and the Department’s site report dated June 10, 2016, as well as the case file. The evidence from all of these sources is summarized below.¹

2. DESCRIPTION OF THE PROJECT

A. Site History

The site is located in an area where the applicant currently holds a Limited Purpose Aquaculture (LPA) site, WHET114 (SR 2).

¹ These sources are cited below, with page references, as CF (case file), App (application), SR (site report).

B. Site Characteristics

The proposed lease site is located within the intertidal zone, approximately 300 feet northwest of Little Chebeague Island and 1,960 feet southwest of Great Chebeague Island (SR 4). On April 13, 2016, DMR biologists visited the proposed lease site and assessed it and the surrounding area in light of the criteria for granting an experimental aquaculture lease, as described in the site report. The upland characteristics are described in the site report as follows:

Little Chebeague Island is a small, undeveloped island connected to Great Chebeague Island via a sandbar exposed at low water. The shoreline adjacent to the proposed lease can be characterized as sand beach leading to upland dominated by dense shrub and mixed forest (SR 7).

The sea bottom characteristics are as follows:

The sea bottom within the proposed lease area consists primarily of sand with little variation in topography (SR 7).

Outside of the lease boundaries, subtidal eelgrass was observed, but the lease site is in the intertidal zone, meaning there will be minimal to no impact on the subtidal eelgrass (SR 7-8).

The proposed lease is in an area currently classified by the Department of Marine Resources Water Quality Classification program as “open/approved for the harvest of shellfish” (SR 9).

C. Proposed Operations

The members of Chebeague Island Oyster Company have developed several 400-square-foot Limited-Purpose License (LPA) sites for oyster culture in the waters off Chebeague Island, including the LPA located within the proposed lease boundaries (WHET-1-14). The applicant intends to replace that LPA with the proposed experimental lease site, in order to determine how best to cultivate “several million oysters” for commercial purposes on a site of less than an acre (App 4).

The applicant will start the project using 500,000 seed oysters per year, utilizing three culturing methods:

- Vexar bags in Oyster Ranch style cages, with floats
- Vexar bags in wire cage trays, no floats
- Vexar bags attached to rebar frames (“rack and bag”)

All gear and oysters will be removed from the site for overwintering at one of the applicant’s LPA sites in Chandler’s Cove, off Great Chebeague Island (App 4).

The applicant will access the site at low tide on foot, and will use a 17’ Carolina Skiff (40 HP engine) and a 24’ modified pontoon boat (30 HP engine) at mid and high tides. Sorting activities will take place on the pontoon boat. Harvesting will take place from the pontoon boat at mid and high tides, with some harvesting done by foot at low tide, after which Vexar bags of oysters will be transferred to the pontoon or skiff for processing (App 4). According to the application and observations made at the time of the Department’s site assessment, all proposed gear would be exposed at lower tidal stages (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 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

Little Chebeague Island is an uninhabited island owned by the Maine Bureau of Parks and Lands. There are no other riparian landowners within 1,000 feet of the proposal (SR 5). No docks, moorings, or residences were observed within 1,000 feet during the site visit, indicating that the site will not interfere with any riparian access (SR 5). Because the site is located in intertidal waters, the permission of landowners to the mean low water whose property will be utilized is required by DMR Rule Chapter 2.64 (2) (C) (6), and 12 M.R.S. §6072(4)(F). In communications with DMR, the Maine Bureau of Parks and Lands indicated that it “sees no direct conflict with the recreational uses of Little Chebeague Island” and therefore granted permission for the proposed lease to occupy its intertidal land (SR 5).²

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

The application notes that kayakers occasionally travel past the proposed lease site between mid- and high tide, but that the site is too shallow for navigation at lower tides, and “sail and power boats very rarely venture into this area” (App 5).

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

The proposed lease activities are not expected to interfere with navigation in the general vicinity. At lower tidal stages navigation through the area is prohibited by a tidally exposed sand bar. At higher tidal stages there is adequate room for vessels to navigate between the proposed lease area, Chebeague Island, and Little Chebeague Island. A minimum of 300 feet separate the proposed lease area from Little Chebeague Island at Mean High Water (MHW). Furthermore, the site is located greater than 1,960 feet from Chebeague Island (Indian Point) at MHW. Vessels transiting through this area will be restricted more by shallow water depths than the proposed activities (SR 6).

² CF, email from Gary Best, Bureau of Parks and Lands, to Jon Lewis, DMR, June 7, 2016, stating, “We grant permission for the three year term of the experimental license period to conduct this study.”

It appears from this evidence that navigation in the area will not be unduly affected by the presence of the proposed lease site. Aquaculture lease sites are required to be marked for navigation purposes in accordance with U. S. Coast Guard requirements.

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 application explains that while Little Chebeague Island is an undeveloped island accessible as a state park, most of the activity occurs on the opposite side of the island from the northwest shore where the proposed lease would be located. The application observes that beachcombers walk the shoreline, which is a few hundred feet upland from the proposed lease site (App 5). Recreational fishing, including clamming, occurs several hundred yards to the north, near the sand bar, but the applicant has not observed any fishing activity at or near the proposed lease site (App 5).

The site report notes that:

On April 13, 2016 a single lobster (*Homarus americanus*) pot buoy was observed to the west of the proposed lease area. No other commercial or recreational fishing activities were observed in the immediate vicinity. Lobster fishing is more prevalent in the deeper subtidal waters to the north and beyond the influence of the proposed lease.

Recreational fishing is expected to occur from shore and by boat in the area during the summer months. Except within its immediate footprint, the proposed lease, if granted, will not hinder recreational fishing in the area.

In a Harbormaster Questionnaire returned to MDMR on March 15, 2016, Genaro Balzano, Harbormaster for the Town of Chebeague Island, was unaware of any commercial or recreational fishing within the area of the proposed lease (SR 6).

Exclusivity. The applicant would not object to kayaking on and around the proposed site nor to recreational fishing off the southwest side of the site(App 5). According to the application, there is no need to restrict navigation on the site, owing to the natural limitations of water depth (App 5).

A condition will be placed on the lease prohibiting shellfish harvesting on the lease site except by the leaseholder and its authorized agents. This restriction is 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. MRS §6072-A (15). A condition reflecting this restriction will be included in the lease.

Other aquaculture leases. Several aquaculture leases and license sites are listed in the site report as being in the vicinity of the proposed lease site. Other than the applicant's LPA, WHET-1-14, the nearest site is the lease CAS CHEB, located 0.37 miles northwest of the proposed lease site. The others are all one-half mile or more distant. The report states that "The proposed activities are unlikely to impact existing aquaculture operations in the area" (SR 7).

Based on this evidence, it appears that the proposed lease will not unreasonably interfere with fishing or such other activities as take place in the area. The lease must be marked in accordance with DMR Rule 2.80³.

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. The condition described above will be included in the lease.

D. Flora & Fauna

Site Observations. The applicant has observed hermit crabs, green crabs, periwinkles, sand dollars, shore birds such as herring and black-backed gulls, terns, and great blue herons near the site. Worm tubes have been observed in the vicinity of the site. Mussel remnants have been found on the sand bar a hundred yards from the site and some European oysters were found in tidal pools at the sand bar as well. Lobster traps were observed over 500 feet west of the site in deeper water. Some rockweed attached to the rocks across the flats and uphill was observed. Small sprouts of eelgrass were observed over less than 1% of the proposed site (App 5).

There was no eelgrass observed by DMR staff within the lease boundaries, but the site report states that eelgrass was noted in surrounding subtidal waters. However, since the lease site is located mainly in the intertidal zone, “minimal to no impact to subtidal eelgrass beds is expected” (SR 8).

Fisheries and Wildlife. The report notes that the shallows surrounding Little Chebeague Island, including the proposed lease site, are designated as Tidal Wading Bird and Waterfowl Habitat (SR 8-9). DMR sent a copy of this lease application to the Maine Department of Inland Fisheries and Wildlife (MDIF&W) for its review and comment. According to the site report, comments from that Department indicate that MDIF&W “anticipates ‘minimal adverse impacts to wildlife...’ from the proposed activities, provided eelgrass beds are avoided.” (SR 8)

³ **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.

Based on this evidence, it appears that this lease site will not affect subtidal eelgrass beds or otherwise 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

According to the site report,

Little Chebeague Island is owned by The State of Maine, Bureau of Parks and Land. It is accessible by foot from Great Chebeague Island via a sandbar exposed at low tide. Recreational boaters, kayakers, and beachgoers regularly use the island. There are, however, no public docking facilities within 1000 feet of the proposed lease. Access to the island, via the water, would require anchoring in the shallows offshore or landing vessels directly on one of the beaches (SR 9).

As noted in the application, most of the activities on Little Chebeague Island occur on the beaches on the south side, whereas the proposed lease site is located in the intertidal zone approximately 300 feet off the northwest shore (App 4-5). The Bureau of Parks and Lands stated that it “sees no direct conflict with the recreational uses of Little Chebeague Island as a result of the experimental lease with Chebeague Island Oyster Company LLC.”⁴ Based on this evidence, it appears that the applicant’s operations will not interfere with the use 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, or state park facilities.

F. Source of Organisms

According to the application, seed stock for this proposed lease site will be obtained from Muscongus Bay Aquaculture and Mook Sea Farm (App 4).

Therefore, I find that the applicant has demonstrated that there is an available source of American oysters (*Crassostrea virginica*) 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.

⁴ CF, email from Gary Best, Bureau of Parks and Lands, to Jon Lewis, DMR, June 7, 2016

- 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 American oysters (*Crassostrea virginica*) 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 0.65 acres to Chebeague Island Oyster Company, 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;⁵ 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 American 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)⁶. Conditions are designed to

⁵ 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.”

⁶ 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.”

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:

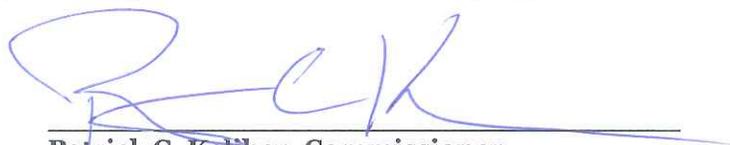
- A. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
- B. Shellfish harvesting is prohibited except by the leaseholder or its authorized agents.
- C. Other public uses that are not inconsistent with the purposes of the lease are permitted within 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: _____

6/27/16



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