STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Experimental Aquaculture Lease Application
Bottom culture of American Oysters,
East of Lehman Island, Sheepscot River

Maine Oyster, Inc.
SHE LE4
Docket #2016-10-E
Date: April 28, 2017

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Maine Oyster, Inc., a Maine corporation, applied to the Department of Marine Resources ("DMR") for a three-year experimental aquaculture lease on 3.91 acres[1] located in the Sheepscot River, east of Lehman Island, Newcastle, Lincoln County, for the purpose of cultivating American/Eastern oysters (*Crassostrea virginica*), using bottom culture techniques. DMR accepted the application as complete on August 25, 2016. No requests for a public hearing were received during the comment period and no hearing was held.

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 for their review, as well as to riparian landowners, the Town of Newcastle 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 *Lincoln County News* on September 28, 2016.

The evidentiary record before the Department regarding this lease application includes the application, the Department's site report dated March 22, 2017, and the case file. The evidence from all of these sources is summarized below.[2]

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

According to the application, the proposed lease site is for the expansion of the applicant's "current commercial production" of American oysters (App 2). The applicant proposes to seed up to 2.6 million oysters using bottom culture techniques (App 2). The oysters will be broadcast on the bottom of the proposed lease site and later harvested with a skiff drawn drag (App 2).

During the harvest season (April through December), the applicant will be on the site once per week. Seeding activities will occur in the fall and will be coordinated with harvest trips (App 2-A).

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[1] Applicant originally requested 5 acres. Applicant worked with DMR scientists to adjust the coordinates in order to decrease the total acreage of the proposed lease to less than 4 acres and to ensure all proposed lease tracts are subtidal. The adjusted coordinates are located within the location originally requested.

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

Operations will be conducted during daylight hours (App 2-A). No structures will be utilized on the proposed lease site. The applicant will access the proposed site via boat, so "no riparian land will be needed to access the lease site" (App 2).

B. Site History

The applicant has operated experimental leases, standard leases, and a limited purpose aquaculture licenses within the vicinity of the proposed lease site (App 2). The Department has not received any complaints regarding the operation of any of these leases and licenses.

C. Site Characteristics

On September 15, 2016 and December 8, 2016 DMR scientists visited the proposed lease site and assessed it and the surrounding area in light of the criteria for granting an aquaculture lease. The proposed site is comprised of four separate tracts referred to as Tract 1-Tract 4 in the site report (SR 2). The tracts occupy a shallow subtidal channel between Lehman Island and Cunningham Island in the Sheepscot River (SR 5). Water depths were measured during the December 8, 2016 site visit. At mean low water, depth ranged from approximately 0 feet to 8.4 feet (SR 5). The distances to shore, at mean low water, for Tract 1-Tract 4 are as follows:

Distances to Shore:

Tract 1

Boundary "B-C" to Nearest Point, Lehman Island	~1 foot to the west
Boundary "A-D2" to Nearest Point, Cunningham Island	~120 feet to the east
Boundary "D1-D2" to Nearest Point, Cunningham Island	~190 feet to the east

Tract 2

Boundary "E-H" to Nearest Point, Cunningham Island	~1 foot to the east
Corner G to Nearest Point, Lehman Island	~285 feet to the west
Corner F to Lehman Island	~170 feet to the west

Tract 3

Corner "I" to Cunningham Island	~85 feet to the east
Corner "J" to Lehman Island	~15 feet to the west

Tract 4

Corner "O" to mainland	~65 feet to the southeast
Corner "M" to Lehman Island	~10 feet to the west
Corner "N" to Lehman Island	~4 feet to the west

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 12).

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 visits, DMR staff observed two houses with docks located on the eastern shore of the channel. One dock is located on Cunningham Island ~230 feet northeast of the proposed lease site (SR 8). The second dock is situated ~450 feet south of the proposed lease site (SR 8). During the September 15, 2016 site visit floats and ramps were attached to both docks (SR 8). According to the site report:

> Due to the fact that the applicant proposes to use the area for the bottom culture of American oysters and does not propose to use any gear on the site, with the exception or corner markers required by MDMR Regulations Chapter 2.80, it is unlikely that this proposed lease will impede the ingress and egress of riparian owners (SR 8).

Based on this evidence, it appears that riparian access will not be affected by the proposed aquaculture operation.

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 applicant notes that boat traffic in the vicinity of the proposed lease is "extremely light" (App. 2). The proposed site would utilize bottom culture techniques, without gear, making it unlikely to impede navigation (SR 8). The site report indicates that navigation in the vicinity of the proposed lease may be limited when applicant is harvesting during low tide (SR 7). At low tide the navigable channel between

Lehman Island and the mainland may become narrow, limiting the navigational capabilities of certain vessels (SR 8). However, harvesting will occur once a week from April through December (App 2-A). A possible impediment, once a week, during low tide does not appear to constitute an unreasonable interference with navigation (SR 8). Furthermore, on September 1, 2016 DMR sent a copy of the application and site report to the Newcastle Harbormaster for review. During the review period, DMR did not receive any comments from the Newcastle Harbormaster concerning navigation. The absence of comments suggests that the Newcastle Harbormaster does not have any concerns about navigation.

Based on the evidence, it is reasonable to conclude 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 applicant has not witnessed commercial fishing within the proposed lease site and their activities would not limit lobster fishing or recreational angling activities within the boundaries of the proposed lease (App 3). The applicant noted: "In the sixteen years we have held experimental leases, standard leases, and LPAs in the general area we have not had problems of any kind" (App. 2). At the time of both DMR site visits, no fishing was observed within the boundaries of the proposed lease site. The site report notes the following, "The proposed lease is unlikely to disrupt commercial or recreational fishing in the area as it is located below the mean low water mark and will not be populated with gear" (SR 8). It appears from this evidence that the proposed lease site is unlikely to affect fishing in the area.

Exclusivity. With the exception of lobster fishing and recreational hook and line fishing, the applicant requests exclusive use of the proposed lease bottom (App 3). Thus, a condition will be added to the lease prohibiting dragging, shellfish harvesting, or disturbance of the bottom without the authorization of the leaseholder. 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).

Other aquaculture leases. According to the site report, the applicant has two existing aquaculture leases for the culture of American oysters located within 1 mile of the proposed experimental lease[3], and a pending experimental lease application[4] (SR 8). There is one limited purpose aquaculture license, for the culture of American oysters, ~0.66 miles to the northeast of the proposed lease site[5] (SR 7). The proposed lease will not interfere with current aquaculture operations in the area.

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[3] SHE LE: a 2.97 acre lease, located ~1,780 feet to the northeast of the proposed lease (SR 8); and SHE LE2: a 1.57 acre lease, located ~1,250 feet to the east of the proposed lease (SR 8).
[4] DMR Docket #2016-06E located ~840 feet east of the proposed lease.
[5] FARM114 located 1.09 miles to the northeast

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[6] Navigation and fishing will be permitted on the lease site.

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. According to the site report:

> DMR Regulation 2.64 (3) does not require an underwater site assessment for proposed experimental leases and as result of this DMR scientists did not dive the proposed site. From a previous dive off the southeast side of Lehman Island in September 2016 DMR scientists documented sugar kelp (*Saccharina latissima*) and sea lettuce (*Ulva lactuca*) along with other Phaeophyta and Rhodophyta. Green crabs (*Carcinus maenas*) and hermit crabs (*Pagurus sp.*) were also observed (SR 9).

Historical records indicate that eelgrass (*Z. marina*) was not present in the proposed lease area (SR 10). However, the historical record does not preclude the future possibility of eelgrass establishment in the proposed lease area.

Fisheries and Wildlife. During the site visit on September 15, 2016 DMR staff observed double-crested cormorant (*Phalacrocorax auritus*), yellowlegs (*Totanus sp*), and a bald eagle (*Haliaeetus leucocephalus*) in the vicinity of the proposed lease (SR 11). On December 8, 2016 Herring gulls (*Larus argentatus*) were observed near the lease site (SR 11). In addition, corner H of Tract 2 is located within Tidal Waterfowl/Wading Bird Habitat as classified by Maine Department of Inland Fisheries and Wildlife (SR 11). Copies of the application were provided to the Maine Department of Inland Fisheries and Wildlife (MDIFW) for review and comment. MDIFW indicated that "minimal impacts to wildlife are anticipated" (SR 11). MDIFW based their determination on the fact that no structures or permanent gear would be used, on the lease site, by the applicants.

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[6] **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 activities 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

According to the site report, there are no public docking facilities or beaches within 1,000 feet of the proposed lease (SR 12).

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 Muscongus Bay Aquaculture, a hatchery located in Bremen, Maine (App 1).

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:

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 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 3.91 acres to Maine Oyster, Inc. for three (3) years, the term of the lease to begin within twelve months of the date of this decision, on a date chosen by the lessee[7]; 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 bottom 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 no discharge and no structures a bond or escrow account is not required.

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)[8]. 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, shellfish harvesting, and disturbance of the bottom are prohibited on the lease site except by authorization of the leaseholder.

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

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[7] 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."

[8] 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. 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: 4/28/17

Patrick C. Keliher
Commissioner,
Department of Marine Resources