

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Experimental Aquaculture Lease Application
Suspended culture of Atlantic sea scallops, Penobscot Bay

Robert E. Brewer
PEN AIx
Docket #2017-04-E
August 10, 2017

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Robert E. Brewer applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease on 3.23¹ acres located in Penobscot Bay, southwest of Andrews Island, Stonington, Hancock County, for the purpose of cultivating Atlantic sea scallops (*Placopecten magellanicus*), using suspended culture techniques. DMR accepted the application as complete on April 19, 2017. No one intervened in this case. 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 which were requested to review the project, as well as to riparian landowners, the Town of Stonington 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 *Penobscot Bay Press* on May 18, 2017.

The evidentiary record before the Department regarding this lease application includes the application and the Department’s site report dated July 19, 2017, as well as the case file. The evidence from each of these sources is summarized below.²

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed lease site is to assess the commercial feasibility of growing scallops using Japanese ear hanging techniques (App 8). The technique involves deploying two 600-foot longlines that are suspended 15 feet below the surface of the water at mean low water. Each 600 foot longline has a maximum stocking density of 100,000 scallops (App 8). The site report notes:

Lantern nets, spat collecting bags, and dropper ropes with ear-hung scallops will be deployed from the longlines. Longlines will be parallel to one another and oriented north to south. The only gear visible from the surface will be high-flyer buoys marking the ends of each longline plus 16” black hard plastic balls at the ends and in the middle of each longline (App 8).

¹ Applicant originally requested 3.8 acres. DMR calculations, based on the provided coordinates, indicate the area 3.23 is acres in size.

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

The applicant will be working with Maine Sea Grant and the Maine Aquaculture Co-op to secure a processor who will prepare the scallops for market and distribution (App 8). Throughout the term of the lease, the applicant anticipates being on site at least every other day, during daylight hours.³ The applicant will access the proposed site from the Town of Stonington boat launch.⁴

B. Site History

The applicant currently has four Limited Purpose Aquaculture License (LPA) sites within the boundaries of the proposed lease area.⁵ The LPAs were originally granted in 2017 for the cultivation of sea scallops using longlines (SR 2). The Department has received no complaints regarding the operation of any of these licenses.

C. Site Characteristics

On June 29, 2017, DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting an aquaculture lease. The proposed site occupies subtidal waters outside of any well-traveled navigational channels (SR 2). The site report notes:

More than 600 feet to the northeast and east, respectively are Andrews Island and Western Deer I Ledge. Second Island is more than 2,000 feet to the north and Mark Island more than 2,000 feet to the south. To the west lie the open waters of Penobscot Bay. Except for the lighthouse on Mark Island, the surrounding islands are undeveloped and dominated by large expanses of ledge leading to interiors of primarily spruce forest (SR 2).

At mean low water, the distance from the proposed lease site to the closest shoreline, located on the northwestern side of Andrews Island, is ~615 feet (SR 7). At mean low water, water depths range between 55.6 feet at the southeast corner of the proposed lease and 68.6 feet at the northwest corner (SR 7). Depending upon tidal stages, the longlines will be submerged between 15 and 27 feet below the surface of the water (SR 7). Vertical dropper lines, measuring ~35 feet in length, will be suspended from the longlines. This configuration allows for 4-18 feet of space between the proposed gear and the benthos (SR 7). The bottom of the proposed site is characterized by soft mud (App 8). The current speeds vary between zero and two knots (App 8).

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).

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

³ CF, A. Ellis notes from phone call with R. Brewer dated 6/14/17

⁴ CF, A. Ellis notes from phone call with R. Brewer dated 6/14/17

⁵ The LPAs are designated RBRE-2-17 through RBRE-5-17.

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

The applicant indicates that the proposed operations would not interfere with ingress or egress (App 8). During the site visit, no docks or moorings were observed within the vicinity of the proposed lease site (SR 8). Maine Coast Heritage Trust, owner of Andrews Island, is the only riparian owner within 1,000 feet of the proposed site (SR 8). Andrews Island is undeveloped and is located more than 600 feet to the northeast of the proposed lease site (SR 8). The Harbormaster notes that there are no permitted moorings within the proposed lease area and that the proposed lease would not interfere with riparian ingress and egress (CF, Harbormaster Questionnaire). Activities at the lease site in subtidal waters will not hamper access to and from the uplands.

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 proposed site is not located within a major navigation channel and it “is surrounded by more than 600 feet of open, navigable water on all sides” (SR 8). The site report describes the following:

At all tidal stages, vessels in the area will have substantial room and adequate water depths (>30 feet) to navigate on all sides of the proposed lease site. Additionally, because the applicant plans to submerge all gear a minimum of 15 feet below the surface, mariners will likely be able to navigate through much of the proposed lease site (SR 8).

The Harbormaster indicates that the proposed lease will not interfere with navigation (CF, Harbormaster Questionnaire).

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.

C. Fishing & Other Uses

During the site visit, limited commercial fishing activity was observed within the vicinity of the proposed lease site (SR 9). A single trap buoy was observed along the middle of the proposed southern

boundary. Approximately four trap buoys were located to the south of the proposed lease boundary, ~25 trap buoys were located to the east, and ~50 trap buoys were located to the north (SR 9). Based on the application and site report, most commercial fishing activity occurs outside the proposed lease boundaries. The site report notes: “the proposed aquaculture operation, if granted, will not obstruct access to the surrounding areas” (SR 9). According to the Harbormaster, the proposed lease activities will not interfere with commercial or recreational fishing in the area (CF, Harbormaster Questionnaire). It appears from this evidence that the proposed lease site is unlikely to affect fishing in the area.

Exclusivity. Although the applicant requests exclusive use of the proposed lease area to avoid possible gear entanglement (App 8), the Department recognizes that not all uses of the waters within the lease boundaries would conflict with the gear. For example, most boats can navigate across the site, but commercial fishing such as lobstering, trawling, or dragging could damage the lease gear. Therefore, commercial and recreational fishing will be prohibited within the proposed lease area.

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 MRS §6072-A (15). Conditions reflecting these restrictions will be included in the lease.

Other aquaculture leases.

Besides the four LPAs held by the applicant, there are no other aquaculture licenses or leases within one mile of the proposed lease site (SR 9).⁶

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 2.80⁷ Navigation 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.

⁶ The nearest aquaculture site, not operated by the applicant, is located south of Crotch Island and ~2 miles to the east (BREW112).

⁷ **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.

D. Flora & Fauna

Site Observations. During the site visit DMR scientists noted the following:

One harbor seal pup (*Phoca vitulina*) was observed hauled out on the eastern side of Western Deer I Ledge. The proposed lease is located more than 1,900 feet to the west and is unlikely to disturb seals resting on this tidally exposed ledge. Another seal was observed swimming in the open waters around the proposed lease. Additionally, two osprey (*Pandion haliaetus*) were observed over Andrews Island while several common eiders (*Somateria mollissima*) were noted in the surrounding waters (SR 10).

Data collected by DMR, between 2001 and 2010, does not indicate the presence of eelgrass within the vicinity of the proposed lease site (SR 10).

Fisheries and Wildlife.

DMR sent a copy of this lease application to the Maine Department of Inland Fisheries and Wildlife (MDIF&W) for their review and comment. DMR received the following comment from MDIF&W regarding the proposed site:

MDIFW recently surveyed Andrews Island and the ledges southeast of Andrews Island for wintering purple sandpipers and harlequin ducks. In 2015, MDIFW also conducted red knot surveys during the fall migration period. During those surveys, there were only one purple sandpiper and minimal number of other migratory shorebirds documented; no red knots were observed. MDIFW does not anticipate significant adverse impacts to migratory shorebirds, including red knots or harlequin ducks, from this project.⁸

Based on data maintained by MDIF&W the proposed site is more than 1,000 feet to the south of the ¼ mile boundary encompassing a bald eagle (*Haliaeetus leucocephalus*) nest on Second Island (SR 10).

Based on this evidence, it appears that the culture of Atlantic sea scallops (*P. magellanicus*) 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 11).

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.

⁸ CF, MDIF&W correspondence to DMR dated 6/15/17.

F. Source of Organisms

Seed stock will be procured by the applicant, who is authorized to collect scallop spat pursuant to DMR Special License #2016-72-00.

Therefore, I find that the applicant has demonstrated that there is an available source of Atlantic sea scallops (*P. magellanicus*), 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 Atlantic sea scallops (*Placopecten magellanicus*) 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 3.23 acres to Robert E. Brewer 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 lessee⁹; 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 Atlantic sea scallops (*Placopecten magellanicus*) 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,

⁹ 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.”

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)¹⁰. 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. Commercial and recreational fishing is prohibited 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.

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: 8/10/17

Patrick C. Keliher, Commissioner
Department of Marine Resources

¹⁰ 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.”