

STATE OF MAINE

Marsden Brewer

DEPARTMENT OF MARINE RESOURCES

PEN SRx

Experimental Aquaculture Lease Application

Suspended Culture of Marine Algae and Scallops

June 26, 2020

Eastern Penobscot Bay, Deer Isle

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Marsden Brewer applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located northwest of Sellers Rock, Eastern Penobscot Bay, in Deer Isle, Hancock County, Maine. The proposed lease is 3.93 acres¹ and is for the suspended cultivation of sugar kelp (*Saccharina latissima*), and sea scallops (*Placopecten magellanicus*).

1. THE PROCEEDINGS

DMR accepted the application as complete on December 5, 2019. Notice of the application and the 30-day public comment period were provided to state and federal agencies, the Town of Deer Isle, and others on DMR's mailing list.² Notice of the application and comment period was published in the December 19, 2019 edition of the *Penobscot Bay Press*. During the comment period, DMR did not receive any requests for a public hearing, and no hearing was held. The site report was issued on May 29, 2020. The evidentiary record regarding this lease application includes the application, DMR's site report, and the case file. The evidence from each of these sources is summarized below.³

2. DESCRIPTION OF THE PROJECT

A. Site Characteristics

On April 30, 2020 DMR visited the proposed lease site and assessed the area in consideration of the criteria governing experimental leases. The proposed lease occupies subtidal waters to the northwest of Sellers Rock on the western side of Deer Isle (SR 2). Sheephead Island and Southwest Harbor are located

¹ The applicants originally requested 4 acres, but DMR calculations based on the provided coordinates indicates that the proposed site is 3.93 acres.

² Applicable law requires that personal notice of the completed application and comment period be sent to riparian landowners within 1,000 feet of the proposed site. However, there are no riparian landowners within 1,000 feet of the proposal. In addition to personal notice to the municipality, DMR sends a questionnaire to the local Harbormaster. However, Deer Isle is not served by a Harbormaster, so it was sent to a DMR Marine Patrol Officer, who is familiar with the area.

³ These sources are cited, with page references, as CF (case file), App (Application), SR (site report).

to the northeast of the proposed site (SR 2). The shoreline of Deer Isle is to the east of the proposed area, while open waters of Penobscot Bay extend to the south and west of the site (SR 2). The shorelines of Deer Isle and Sheephead Island are rocky, and the uplands are characterized by coniferous forest (SR 2). Correcting for mean low water, depths at the proposed lease site range from ~58.45 feet at the northern boundary to ~69.45 feet at the southern boundary (SR 2). At mean low water, the northeast corner of the proposed site is ~2,880 feet to the nearest point of land on Sheephead Island Ledges (SR 6).

B. Proposed Operations

The applicant is proposing to cultivate scallops using four longlines that are 600 feet in length and deployed along a single row (App 13B). The longlines would be suspended at least 20 feet below the surface of the water (App 9). The longlines would hold up to 560 lantern nets, 200 spat collection bags, and a maximum of 250 dropper lines that would contain ear-hung scallops (App 6).⁴ The spat bags would be deployed during July and August, whereas the lantern nets and dropper lines would be on the site year-round (App 4). The scallops would be harvested from January through September (App 4). The applicant would harvest any wild sugar kelp that set and established on the lines used to cultivate scallops (App 4). The sugar kelp would be harvested May through June (App 4).

The applicant would use a pressure washer powered by the hydraulic system on the boat used to service the site (App 6). Grading and pressure washing would be conducted on a work float that is located outside the boundaries of the proposed lease site (App 6). During seeding and harvest periods the applicant would be at the site a few days each week (App 5). The applicant would visit the site every two weeks in the summer and every four weeks in the winter to conduct routine maintenance (App 5). Since this proposal includes the possession, transport, or sale of whole or roe on scallops, if the lease is granted Marsden Brewer will need to obtain a Memorandum of Understanding from the DMR Bureau of Public Health.

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

⁴ The application never specified the maximum number of dropper lines. On June 16, 2020, DMR staff contacted the applicant to obtain an estimate of the maximum number of dropper lines. The applicant indicated that a single 600-foot line, with only droppers, could support a maximum of 250 dropper lines. However, the applicant is experimenting with this gear type and anticipates (possibly) gradually increasing the number of dropper lines (not to exceed the maximum) throughout the term of the lease.

not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other water related uses of the area, taking into consideration other aquaculture uses in the 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 on the lease site.

A. Riparian Access

There are no riparian landowners within 1,000 feet of the proposal. However, DMR staff did observe and consider any access points (i.e. moorings and docks) near the vicinity of the proposed lease site. The closest observed docks were more than 3,500 feet from the proposed lease area (SR 7). If granted, the site would be 4,356 feet in length and positioned almost parallel to the Deer Isle shoreline (SR 7). The length and orientation of the proposed site may require some larger vessels to circumnavigate the area, but the longlines would be kept at least 20 feet below the surface of the water (SR 7). Given this depth, it is likely that most vessels would have a draft that allows them to navigate through the site (SR 7).

Although there are no riparian landowners within 1,000 feet of the proposed site, notice of the completed application and comment period were provided to the municipality and general public. The Harbormaster Questionnaire indicates that the proposed site “is far enough offshore that it will not affect any navigation into any riparian properties.”⁵ During the comment period, DMR did not receive any other comments specific to riparian ingress and egress. Based on the record, it is unlikely that the proposal will interfere with riparian ingress and egress.

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

B. Navigation

The proposed lease is in Eastern Penobscot Bay to the west of Deer Isle (SR 8). Sellers Rock, the nearest navigational obstruction, is ~2,010 feet to the southeast of the proposed area (SR 8). The navigational channel runs between Deer Isle and Eagle Island in a north-south direction (SR 8). Both Sellers Rock and the navigational channel are marked by Red Nun “2,” which is ~1,880 to the southeast of the

⁵ CF: Harbormaster Questionnaire signed December 19, 2019.

proposed site (SR 6, 8). A portion of the proposed site is within the marked channel, but it is unlikely to impede vessel traffic in deep waters to the west of the proposal (SR 8).

During the site visit, no vessels were observed in the immediate vicinity of the proposed area (SR 8). Vessel traffic in the area may be moderate during the summer months (SR 8). However, the proposed site is only 40 feet wide, so any vessel traveling in a north-south direction could maneuver around the proposal without having to make significant modifications to their original course (SR 8). The longlines would be deployed 20 feet below the surface of the water, so vessels with an appropriate draft would be able to traverse over the proposed site (SR 8).

According to the Harbormaster Questionnaire navigation within the area would not be impacted by the proposal, if granted.⁶ During the comment period, DMR did not receive any other comments concerning navigation. Based on the record, it is unlikely that the proposal will adversely impact navigation.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.

C. Fishing & Other Uses

Fishing. During the site visit, staff observed between five and ten lobster trap buoys several hundred feet to the west of the proposed lease (SR 8). No lobster fishing activity was observed within the boundaries of the proposed site, but it may be more prevalent in the immediate area during the summer and fall months. Fishing for sea scallops (*Placopecten magellanicus*) and green sea urchins (*Strongylocentrotus droebachiensis*) occur during the fall and winter months in Maine state waters via dive and drag harvest (SR 8). Both the urchin and scallop season had ended for the year at the time of DMR's site visit (SR 8). However, scallop fishing is common in Penobscot Bay (SR 8).

The application indicates that this area was selected based on the lack of commercial fishing activity and that the layout of the site is intended to provide for lobster fishing around the aquaculture gear (App 7). DMR staff did not conduct an underwater assessment of the site, but the application indicates that the bottom of the site is comprised of mud (SR 8, App 10). DMR staff usually observe scallops in areas with sand and shell substrate (SR 8). The Harbormaster Questionnaire indicates that lobster and scallop fishing occur in the area, but these activities have not presented a conflict with other aquaculture

⁶ CF: Harbormaster Questionnaire dated December 19, 2019

sites held by the applicant in the vicinity of this proposal.⁷ DMR did not receive any other comments about commercial fishing in the area.

The site report indicates that recreational fishing and boating may be more prevalent in this area during the summer months (SR 8). The applicant indicated that he has not observed any recreational fishing in the area (App 7). The applicant has observed some sailboats in the bay, but not any other water related uses such as swimming or kayaking (App 7). The Harbormaster Questionnaire indicates that there is recreational boat traffic in the area, but that the existing aquaculture sites have not conflicted with these existing uses.⁸ DMR did not receive any other comments concerning recreational fishing or boating.

Exclusivity. The applicant is requesting that commercial and recreational fishing be excluded from the lease area (App 9). The applicant is also asking that vessels with a draft of more than 12 feet be excluded from the proposed site. Based on the record, there is no evidence to suggest that commercial or recreational fishing activities are occurring at the site and, therefore, would not conflict with the operation of this site, if it is granted. If this proposal is granted, it would need to be marked in accordance with DMR and U.S. Coast Guard regulations. Marking the site in accordance with these regulations, would alert mariners and fishermen to the boundaries of the aquaculture activities. According to the record, mariners could navigate around the site. Therefore, if the lease is granted, DMR will not include conditions that expressly restrict these uses.

Other aquaculture uses. There are six Limited Purpose Aquaculture (LPA) licenses and one pending experimental lease application within a mile of the proposed area (SR 9). Marsden Brewer holds four of the LPAs⁹ and would relinquish one¹⁰ if the proposed lease were to be granted (SR 9). The other two LPAs¹¹ in the area are held by Robert Brewer, who is the applicant's son and business partner (SR 9). All LPAs are for the cultivation of sea scallops using suspended culture techniques (SR 9). Robert Brewer has also applied for an experimental lease that, based on DMR records, is ~750 feet to the west of this proposal. Robert Brewer's experimental lease application is also for the cultivation of scallops and sugar kelp (SR 9).

Other water-related uses. During the review period, DMR did not receive any comments detailing other water-related uses that are not already contemplated in other sections of this decision. Based on

⁷ CF: Harbormaster Questionnaire dated December 19, 2019

⁸ CF: Harbormaster Questionnaire signed December 19, 2019

⁹ BREW318, BREW418, BREW518, and BREW618

¹⁰ BREW318 would be relinquished

¹¹ RBRE910 and RBRE1020

the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

Therefore, considering other aquaculture uses of the area, the activities proposed for this site will not unreasonably interfere with fishing or other water related uses of the area.

D. Flora & Fauna

Based on historical eelgrass (*Zostera marina*) data collected by DMR in 2008, the closest eelgrass beds were approximately one mile from the proposed site, near the Deer Isle and Sheephead shorelines (SR 10). Although an underwater site assessment was not conducted, it is unlikely that water depths at this location would support the growth of eelgrass. Typically, eelgrass is observed in shallow water with adequate light penetration for photosynthesis (SR 10). During the site assessment, staff observed various species of gull (*Larus sp.*) (SR 9).

Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that the proposed lease is located over a mile from the nearest tidal waterfowl and wading bird habitat and from the nearest seabird nesting, feeding, and staging areas (SR 9). Bald eagle (*Haliaeetus leucocephalus*) nests are located on Sheep Islands and The Porcupines (SR 10). In Maine, bald eagles are designated as a Species of Special Concern and are protected by the federal Bald and Golden Eagle Protection Act (SR 10). The U.S. Fish and Wildlife Service mandates a 600-foot protective buffer around eagle nests (SR 10). The proposed lease is more than 1.9 miles from the respective 600-foot buffers (SR 10).

DMR sent a copy of the application to MDIFW for their review and comment. MDIFW indicated that “minimal impacts to wildlife are anticipated for this project.”¹² Based on the evidence, it is reasonable to conclude that the proposed lease will not have an unreasonable impact on the ecological function of the area.

Therefore, 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

Per the site report, “there are no beaches, docking facilities, or conserved lands owned by federal, state, or municipal government within 1,000 feet of the proposed lease site” (SR 11).

¹² CF: Email from R. Settele to C. Burke on December 19, 2019

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal governments.

F. Source of Organisms

The applicant intends to source stock from the wild via scallop spat collection bags, or in the case of sugar kelp, wild set on the gear used to cultivate scallops (App 2). These sources of stock are approved by DMR (SR 11).

Therefore, the applicant has demonstrated that there is available source of stock 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 stock 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 3.93 acres to Marsden 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 lessee¹³; 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*), and 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 (12)(B) 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 MSRA §6072-A (15).¹⁴ 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 purpose of the lease. No conditions will be incorporated into the lease.

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

¹³ 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.”

¹⁴ 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.”

environment or to marine organisms, or that any conditions of the lease or any applicable laws or regulations have been violated.

Dated: 6/26/2020



Patrick C. Keliher, Commissioner
Department of Marine Resources