STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

Robert E. Brewer

Standard Aquaculture Lease Application Suspended Culture of Shellfish/Marine Algae Penobscot Bay, Stonington, Maine PEN AI

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Robert E. Brewer, an individual, applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 2.891 acres in Penobscot Bay, southwest of Andrews Island, Stonington, Maine. The proposal is for the suspended culture of sea scallops (*Placopecten magellanicus*), blue mussels (*Mytilus edulis*) and sugar kelp (*Saccharina latissima*).

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on July 27, 2020, and a scoping session was held on December 21, 2020. DMR accepted the final application as complete on October 7, 2021. Notice of the completed application and public hearing was provided to state agencies, the Town of Stonington, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. Notice of the hearing was published in the *Penobscot Bay Press* on September 15 and October 5, 2023. The public notice for the hearing stated that the proceeding would be conducted in-person and directed interested persons to register in order to provide testimony or ask questions during the proceeding. No applications for intervenor status were received by DMR and no individuals registered to participate in the hearing. The public hearing was held on October 25, 2023.

Sworn testimony was given at the hearing by the applicant, Robert E. Brewer.

Additional members of the public attended the hearing but did not offer testimony. The hearing was recorded by DMR. The Hearing Officer was Maria Eggett.

The evidentiary record before DMR regarding this lease application includes three exhibits introduced at the hearing and the record of testimony at the hearing. The evidence from all sources is summarized below.²

LIST OF EXHIBITS

¹ Applicant originally requested 3.26 acres. DMR calculations indicate the area is 2.89 acres.

² Exhibits 1, 2, and 3 are cited below as: Case file – "CF", Application – "App", site report – "SR".

- 1. Case file
- 2. Application
- 3. DMR site report, issued on August 31, 2023

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The applicant proposes to culture sea scallops (*Placopecten magellanicus*), blue mussels (*Mytilus edulis*) and sugar kelp (*Saccharina latissima*) on the proposed lease site using suspended culture techniques (App 1). A maximum of 360 lantern nets (20-inch wide by six-feet long), 500 spat bags (two-foot by three-foot), 1,200 ear hanging lines (5/16-inch by 30-foot), and two 1,200 linear foot longlines are proposed for the site. Yellow lease marking buoys will be deployed at the corners (App 9).

The applicant anticipates seeding the lantern nets from the spat bags July through September. Routine tending and maintenance will occur from April to November, five days per week.

On August 10, 2017, DMR granted a 3.23-acre experimental lease (PEN AIx) to Robert E. Brewer. The decision provided authorization to cultivate sea scallops using suspended culture. Two 600-foot longlines with lantern nets, spat collecting bags, and dropper ropes were authorized to be deployed on PEN AIx. The applicant intends to replace the experimental lease with this proposal in the same area.

B. Site Characteristics

On August 2, 2023, DMR assessed the proposed lease site. DMR staff arrived on site at approximately 11:03 AM. Nearby Andrews Island is predominantly coniferous forest with a rocky shoreline. Deer Island Thorofare Lighthouse is approximately 2,100 feet southeast of the proposal at mean low water (MLW, 0.0 feet) (SR 2).

DMR staff began collecting depths at the proposed site at approximately 11:04 AM on August 2, 2023. The tide was in the late flood stage. Depths at the proposed lease site ranged from 61.9 feet at the southeast corner to 76.2 feet at the northwest corner. Correcting for tidal variation derives water depths at the next high tide to be a range from 62.4 to 76.7 feet. Water depths at MLW range from 52 to 66.3 feet (SR 2).

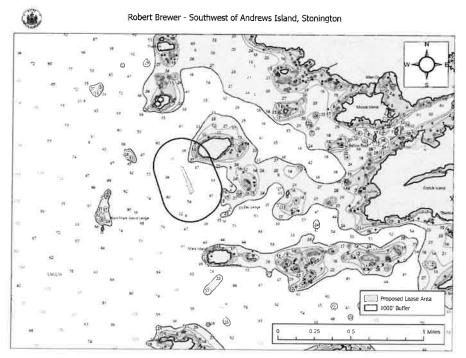


Figure 1: Proposed lease site and surrounding area. Image taken from DMR site report.

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner upon determining that the project will not unreasonably interfere with: the ingress and egress of riparian owners; navigation; fishing or other uses of the area, taking into consideration other aquaculture uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or the public use or enjoyment within 1,000 feet of beaches, parks, docking facilities, or conserved lands 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; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

A. Riparian Access

DMR's Chapter 2 regulations require the Commissioner to examine whether riparian owners can safely navigate to their shore. In examining riparian owner ingress and egress, the Commissioner "shall consider the type of structures proposed for the lease site and their potential impact on the vessels which would need to maneuver around those structures." Chapter 2, § 2.37.

Andrews Island, located approximately 620 feet northeast of the proposal at MLW, is a privately owned, uninhabited island. It is denoted as a Maine Coast Heritage Trust Island Preserve and is open to the public. There were no docks observed during DMR's site assessment (SR 4).

A Harbonnaster Questionnaire was sent to the harbonnaster for the Town of Stonington on October 20, 2021. The harbonnaster commented that the proposal would have no effect on riparian access. During the public hearing, no one offered testimony or evidence regarding 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

When examining navigation, the Commissioner considers whether the lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. According to the site report, the proposal is located approximately 620 feet southwest of Andrews Island at MLW and approximately 1,800 feet west of Western Deer Island Ledge at MLW. Red navigational aid "2" marking West Mark Island Ledge is approximately 0.66 miles to the southwest of the proposal.

DMR staff observed approximately 20 recreational vessels operating in the navigational channel approximately 1,200 feet southeast of the proposal. The vessels observed ranged from smaller outboard powered recreational vessels to mid-sized cruising sailboats. (SR 4, 5).

A Harbormaster Questionnaire was sent to the harbormaster for the Town of Stonington on October 20, 2021. The harbormaster commented that the proposal would have minimal effect on navigation. During the public hearing, no one offered testimony or evidence regarding potential impacts to navigation.

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

C. Fishing & Other Uses

When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area.

Fishing. During the site assessment, DMR staff observed moderate lobstering activity to the north and northwest of the proposal. The buoys nearest to the proposal were approximately 300 feet to the west. No lobster buoys were located within the proposed lease area.

No testimony was given at the public hearing concerning impacts to commercial or recreational fisheries. The harbormaster commented there is no commercial or recreational fishing within the lease area.

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

Other aquaculture uses: Except for PEN AIx, which is currently held by the applicant, there are no other aquaculture sites within 1,000 feet of the proposed lease site.

No testimony was received by other aquaculture lease or license holders in the area to indicate they have concerns regarding the proposed activities. Based on this evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture activities in the area.

Other water-related uses. The application states there are no other existing uses within the proposed site (App 22). No one offered testimony about other water-related uses of the area.

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

D. Flora & Fauna

When examining existing system support, the Commissioner considers the degree to which the use of the lease site will interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and marine and upland areas to support ecologically significant flora and fauna.

Site observations. On August 2, 2023, DMR conducted a transect via remotely operated vehicle to assess the epibenthic ecology of the proposed lease. The observed bottom was soft mud with several lobster burrows. The transect determined American lobster (*Homarus americanus*) are common in abundance (SR 5, 6).

Eelgrass. Data records of eelgrass collected by DMR in 2010 indicate no mapped eelgrass presence within 1,000 feet of the proposal.³ No eelgrass was observed within the proposal boundaries during DMR's site assessment (SR 7).

Wildlife. According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS (MEGIS), the proposed lease is not located within 1,000 feet of tidal waterfowl and wading bird habitat Data collected by the United States Fish and Wildlife Service in 2022 by aerial nest survey shows the closest bald eagle nesting site over three miles away from the proposal.

On October 22, 2021, a Wildlife Biologist with MDIFW responded by email to a "Request for Agency Review and Comment", stating the proposal is located near purple sandpiper habitat. MDIFW

³ Data obtained from The Maine Office of GIS "GISVIEW.MEDMR.Eelgrass"

stated that if total exclusion nets will be used to deter predatory sea ducks, it is recommended to use a maximum mesh size of 6 inches with a minimum of 3-millimeter twine to exclude eiders, and a maximum mesh size of 4 inches with a minimum of 3-millimeter twine to exclude scoters. A mesh size of larger than 6 inches paired with twine of less than or equal to 2 millimeters has been shown to cause sea bird entanglement.⁴ No exclusion nets are proposed for the lease site.

During DMR's site assessment, staff observed common tern (Sterna hirundo), osprey (Pandion haliaetus), bald eagles (Haliaeetus leucocephalus), and herring gulls (Larus argentatus).

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

When examining interference with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of beach, park, docking facility, or certain conserved lands owned by the Federal Government, the State Government, or a municipal government.

The proposal is not within 1,000 feet of any beach, park, docking facility, or other conserved lands owned by federal, state, or municipal governments (SR 9).

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

F. Source of Organisms

When examining the source of organisms, the Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices.

According to the application, the source for all stock is wild spat. This is currently an approved source for these species.

Therefore, the applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

G. Light

According to the application, one small deck light would be used on the proposed lease site. The applicant only anticipates working beyond daylight hours in extenuating circumstances.

⁴ Email correspondence between MDIFW and MDMR

Therefore, the proposed aquaculture activities will not result in an unreasonable impact from light at the boundaries of the lease site.

H. Noise

According to the application, a scallop washer would be used on-site from April to November, five days a week, up to eight hours per day. The applicant only anticipates working beyond daylight hours in extenuating circumstances. According to the applicant's testimony, the washer would be powered by the boat hydraulics and the noise generated would be similar to a lobster trap hauler. The applicant stated the boat has a muffler (Brewer testimony).

Based on this information, it appears that any noise generated by the proposed operations is unlikely to have a significant effect at the boundaries of the lease site.

Therefore, the aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease.

I. Visual Impact

All gear will be submerged with the exception of the required marker buoys and red buoys on high flyers with radar reflectors. At the hearing, the applicant testified the high flyers are proposed to better delineate the location of the gear within the boundaries of the site for local lobstermen. DMR regulations state the color of equipment, such as buoys, shall not compromise safe navigation or conflict with US Coast Guard (USCG) Aids to Private Navigation standards. While the high flyers are not required by DMR, there is no indication that they would compromise safe navigation or conflict with USCG standards. According to the applicant, the use of high flyers is a courtesy to local fishermen in the area.

Therefore, the equipment utilized on the proposed lease site will comply with the DMR's visual impact criteria.

6. 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 water-related uses of the area, taking into consideration other aquaculture uses in the area.
- d. The aquaculture activities proposed 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, docking facilities, or certain conserved lands owned by municipal, state, or federal governments.
- f. The applicant has demonstrated that there is an available source for organisms to be cultured for the lease site.
- g. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

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.

7. DECISION

Based on the foregoing, the Commissioner grants a lease to Robert E. Brewer for 2.89 acres for twenty years for the cultivation of sea scallops (*Placopecten magellanicus*), blue mussels (*Mytilus edulis*) and sugar kelp (*Saccharina latissima*) using suspended culture techniques. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.40 (2)(A) 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.

8. 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 M.R.S.A §6072 (7-B).⁵ 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. No conditions are imposed on this lease.

9. REVOCATION OF LEASE

The Commissioner may commence revocation procedures upon determining, pursuant to 12 M.R.S.A §6072 (11), that no substantial aquaculture has been conducted within the preceding year, that the

^{5 12} MRSA §6072 (7-B) states: "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."

lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

Dated:

d: 12/1/23

Patrick C. Keliher, Commissioner Department of Marine Resources