

**STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES**

Jodi Brewer & Morning Star Fisheries, LLC

Standard Aquaculture Lease Application
Suspended Culture of Marine Algae
Sheepscot River, Southport, Maine

SHE EH

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Jodi Brewer & Morning Star Fisheries, LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 1.35¹ acres located in Ebenecook Harbor, Sheepscot River, Southport, Lincoln County, Maine. The proposal is for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*).

1. PROCEEDINGS

DMR held a pre-application meeting on this proposal on June 13, 2022, and a scoping session was held on October 27, 2022. DMR accepted the final application as complete on May 30, 2023. Notice of the completed application and public hearing was provided to state agencies, the Town of Southport, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. DMR sent a Harbormaster Questionnaire to the Harbormaster for the Town of Southport, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations. A response was received by DMR on June 7, 2023. Notice of the hearing was published in the *Boothbay Register* on April 24, 2025, and provided to state agencies, the Town of Southport, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. The public notice for the hearing stated that the proceeding would be conducted in-person and remotely and directed interested persons to register to provide testimony or ask questions during the proceeding. The deadline to register or request intervenor status was May 19, 2025. No applications for intervenor status were received by DMR. One person registered to participate in the hearing. A public hearing on this application was held on June 3, 2025.

Sworn testimony was given at the hearing by Jodi Brewer and Alex Hutchins, both affiliated with Jodi Brewer & Morning Star Fisheries, LLC. Additional DMR staff attended the hearing. The hearing was

¹ Applicant originally requested 1.37 acres. DMR calculations indicate the area is 1.35 acres.

recorded by DMR. The Hearing Officer was Maria Eggett. The record was closed on June 3, 2025. The evidentiary record before DMR regarding this lease application includes the record of testimony at the hearing. The evidence from all sources is summarized below.²

LIST OF EXHIBITS

1. Case file
2. Application
3. DMR site report, issued on July 10, 2024

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The applicant proposes to culture sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*) using suspended culture techniques (App 1-2). The applicant proposes to use five 850 linear foot culture lines as well as a cross-line, moorings, buoys, and chains/lines (App 4-5).

The applicant anticipates seeding algae from October to December. The applicant expects to tend the site weekly during the growing season, weather permitting (App 7). Marine algae will be harvested from April to May and the algae will be removed from the lines using a knife (App 8). The culture lines, cross-line, and dropper buoys will be removed from the site from June 1 to October 15 each year. The application states mooring components and corner marker buoys will remain on-site year-round (App 4-5).

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

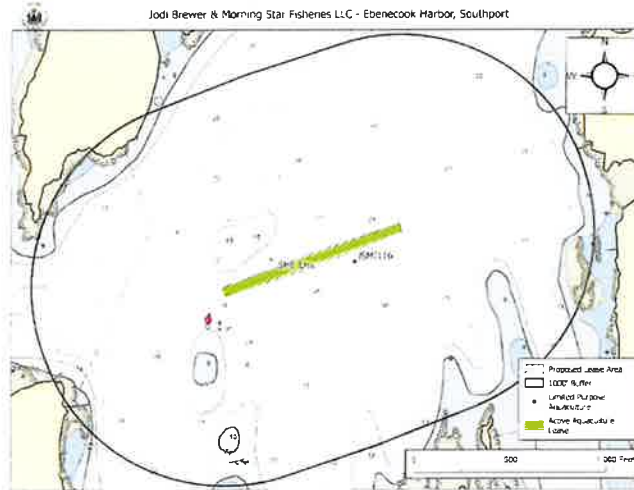


Figure 1: Aquaculture leases and LPA licenses in the vicinity of the proposed lease area³.

B. Site Characteristics

On September 27, 2023, DMR scientists assessed the proposed lease site. The proposal is situated in subtidal waters in Ebenecook Harbor. Southport Island is to the east, south, and west of the proposal. Green Island and Little Green Island are located to the northwest. The shoreline is rocky leading to mixed forest uplands with scattered residential homes. Depths were determined to be between 22.9 to 29.5 feet at mean low water (MLW). The bottom of the proposed lease site is primarily composed of mud (SR 2).

C. Site History

On January 9, 2019, Jodi M. Brewer was granted the 0.98-acre experimental lease, SHE EHx in accordance with 12 M.R.S.A. §6072-A. The experimental lease was issued for a three-year term and authorized the suspended culture of sugar kelp, winged kelp, strap kelp, and horsetail kelp using five 990 foot longlines suspended below the surface of the water, as well as moorings and buoys. Due to the potential for interference with navigation, the lease was conditioned that the longlines may only be deployed from October 15 to May 14 each year.

Jodi M. Brewer executed the lease agreement on September 25, 2019 with the term of the lease beginning on September 1, 2019, and continuing through August 31, 2022.⁴ On July 6, 2022, Jodi Brewer

³ All of the images in this decision were obtained from the DMR site report. Unless otherwise noted, all figures were created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.

⁴ Experimental leases have a maximum 3-year term. Chapter 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 term begins, and the lease agreement is signed.”

& Morning Star Fisheries, LLC submitted a standard lease application for the entirety of area encompassed by SHE EHx, which was prior to the expiration of SHE EHx⁵.

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of Standard aquaculture leases is governed by 12 M.R.S.A. §6072 and DMR Regulations, Chapter 2.37. The statute and regulations provide 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; other aquaculture uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; and 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 light at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

A. Riparian Access

When examining riparian access, the Commissioner considers whether the proposed lease will unreasonably interfere with the ingress and egress of riparian owners. 12 M.R.S.A. § 6072(7-A)(A). The Commissioner shall examine whether the riparian owners can safely navigate to their shore and consider the type of shore, the type of vessel that can reasonably land on that shore and the types of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures. Chapter 2.37(1)(A)(1).

The applicant has operated the 0.98-acre experimental lease, SHE EHx, within the boundaries of this proposal for over five years. During that time, no issues concerning riparian access have been reported to DMR.

DMR scientists observed two docks within 1,000 feet of the proposal during the site visit on September 27, 2023. One dock was moored 182 feet south of the proposal and appeared to be a work float. The other dock was attached to a pier 875 feet southwest of the proposal located on Dogfish Head, Southport Island. DMR observed numerous other docks located to the south and east on Southport Island, and one dock northwest of the proposal on Green Island (Figure 2).

⁵ 12 M.R.S.A. §6072-A(20) provides that if the lease holder applies for a Standard lease under 12 M.R.S.A. § 6072 prior to the expiration of the Experimental lease and that application encompasses all or a portion of the Experimental lease area then the holder may continue to operate the site while DMR considers the Standard lease application.

Additionally, DMR scientists observed several moorings in the vicinity of the proposal. The closest observed mooring was 750 feet northwest of the proposal near Green Island. The moorings observed had a variety of power boats and sailboats attached.

A Harbormaster Questionnaire was completed by the local Harbormaster and submitted to DMR on June 7, 2023. The Harbormaster indicated that the proposal should not change any current riparian ingress and egress (SR 4-5).

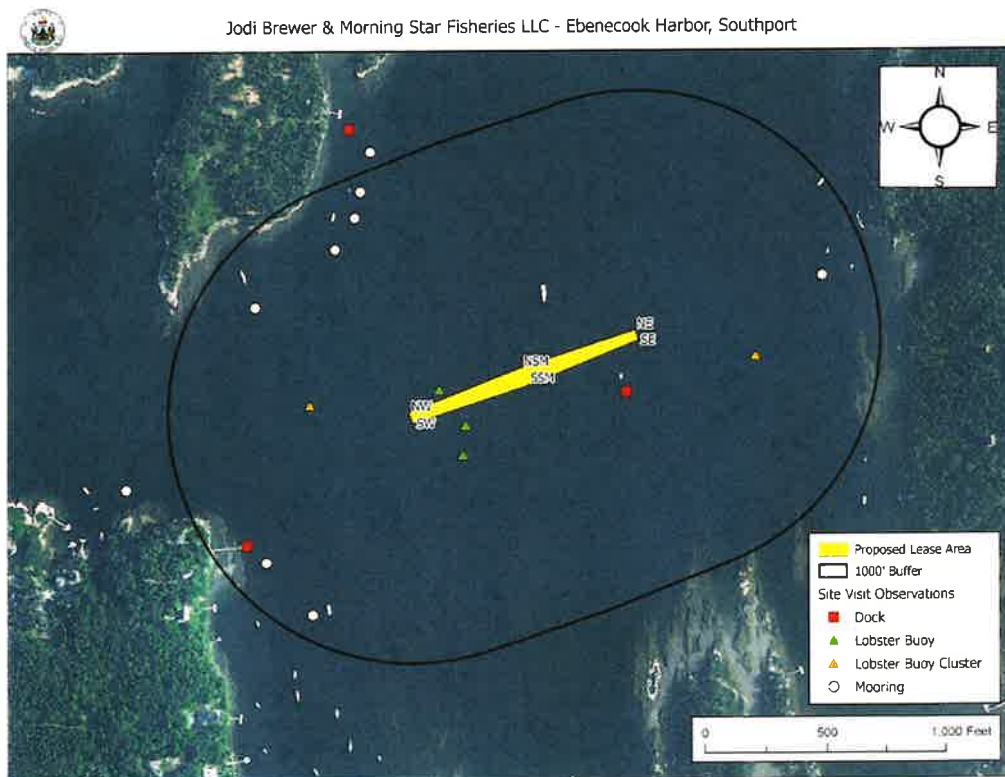


Figure 2. Proposed lease area with site visit observations.

No testimony or evidence was offered at the hearing concerning riparian ingress and egress. Given the distance from the proposed lease to any riparian land and/or structures, the proposed lease activities will not impede 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 proposed lease will interfere with navigation. 12 M.R.S.A. § 6072(7-A)(B). The Commissioner shall examine whether any lease

activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area and consider the current uses of the navigational channels in the area. Chapter 2.37(1)(A)(2).

The applicant has operated the 0.98-acre experimental lease, SHE EHx, within the boundaries of this proposal for over five years. During that time, no issues concerning navigation have been reported to DMR.

The proposal is in subtidal water in Ebenecook Harbor. There is a marked navigational channel running north-south to the west end of the proposal. The proposal is 185 feet northeast of the United States Coast Guard (USCG) red nun “2” marker and 1,820 feet south of USCG green can “3” marker. The proposed lease is located partially within the marked navigational channel. There is 865 feet of water at MLW between the northwest corner of the proposal and Green Island (Figure 3).

During the site visit, DMR observed several boats navigating in the area of the proposed lease. One recreational vessel was traveling north-south, three commercial fishing vessels were operating to the west, and a sailboat was navigating in the marked navigational channel north of the proposal (SR 5).

The Harbormaster indicated in the questionnaire that the proposal will not affect current navigation (SR 5).

During the public hearing, no testimony or evidence was offered regarding potential impacts to navigation.

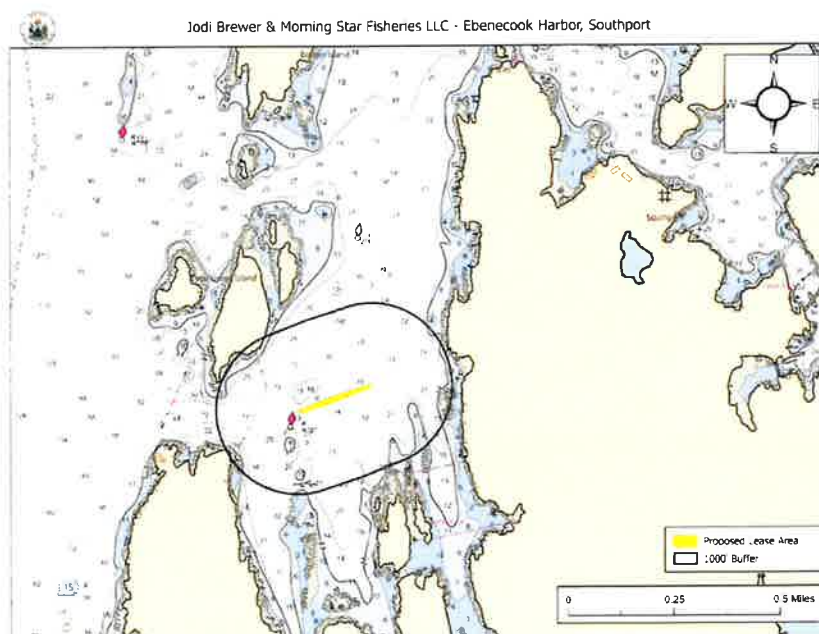


Figure 3. Navigational channels in the vicinity of the proposed lease area.

According to the experimental lease decision, although the lease site is partially within the marked channel, boats navigating in the area would have approximately 810 feet of navigable area between the proposed lease and the 12-foot depth contour line to the north. The original site report stated that if the proposal was granted, boats navigating to and from Love and Maddock Cove would be able to maintain a straight course to the marked navigational channel. Boats traversing to and from Pierce Cove may need to alter their traditional route to the marked navigational channel, but navigation would not be prevented (CF).

The experimental lease decision found that the longlines could interfere with navigation in the area during peak boating season, but that the interference could be mitigated by conditioning the lease so that longlines can only be deployed on the proposed site from October 15 through May 14 (CF). Therefore, pursuant to 12 M.R.S.A. §6072-A(15), DMR conditioned SHE EHx that no gear, excepting the corner marker buoys, be deployed on the lease site from May 15 through October 14.

This lease as proposed would increase the size of the culture area from 0.98 acres for the experimental lease to 1.35 acres for a standard lease. During the site visit, DMR observed several boats navigating in the area of the proposed lease (SR 5). The proposed lease size increase is to the north and south of the site and would not result in an increased impact to the existing navigational channel. The seasonal impacts of the gear on navigation identified in the experimental lease decision remain. Therefore, given the seasonal use of the area by mariners, DMR will require that all gear, including corner markers, and except for moorings and mooring chains, be removed from the water between May 15 and October 14 of each year. A condition reflecting this requirement will be included in the lease.

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

C. Fishing & Other Uses

When examining fishing and other uses, the Commissioner considers whether the proposed lease activities will unreasonably interfere with fishing or other uses of the area. 12 M.R.S.A. § 6072(7-A)(C). The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Chapter 2.37(1)(A)(3).

The applicant has operated the 0.98-acre experimental lease, SHE EHx, within the boundaries of this proposal for over five years. During that time, no issues concerning interference with fishing or other uses have been reported to DMR.

Fishing. During the site assessment, DMR observed three lobster buoys and two clusters of lobster buoys within 1,000 feet of the proposed lease. The closest lobster buoy observed was approximately 45 feet north of the proposal (Figure 2). During the site assessment, DMR observed a school of Atlantic menhaden

(*Brevoortia tyrannus*) inside the proposal boundaries. No other commercial or recreational fishing was observed during the site visit.

The Harbormaster indicated in the Harbormaster Questionnaire that there is no fishing within the boundaries of the proposal (SR 6).

According to the application, commercial and recreational fishing occur in and around the lease site from June to October (App 13).

The increased size of the standard lease could potential hinder fishing activities in the lease area. However, as discussed above in the navigation section, if approved, the lease will be conditioned so that all gear, including corner markers, and except for moorings and mooring chains, must be removed from the water between May 15 and October 14 of each year. This condition will also reduce adverse impacts to fishing activities in the lease area.

No testimony was given at the public hearing concerning impacts to commercial or recreational fisheries.

Other uses. The application states there is very little kayaking or swimming in the project vicinity (App 14). No evidence or testimony was provided at the hearing concerning other uses in the area. Because no gear, besides moorings and mooring chains, will be in the water between May 15 and October 14 of each year the lease will not impact kayaking or swimming, which traditionally occur in the summer months. Additionally, these activities can still occur when gear is deployed due to the type and nature of the gear.

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

D. Other Aquaculture Uses

Pursuant to 12 M.R.S.A. § 6072(7-A), in evaluating the proposed lease, the commissioner shall take into consideration the number and density of aquaculture leases in an area. The Commissioner shall consider any evidence submitted concerning other aquaculture uses of the area, the intensity and frequency of such uses, the degree of exclusivity required for each use as well as the number, size, location, and type of other aquaculture leases. Chapter 2.37(1)(A)(4).

There is one experimental aquaculture lease (SHE EHx) and one limited purpose aquaculture (LPA) license site (JSMI116) for recreational purposes within 1,000 feet of the proposal. Jodi Brewer currently operates SHE EHx within the boundaries of this proposal. This standard lease proposal is intended to replace SHE EHx (Figure 1, SR 6). The LPA license site is located approximately 50 feet to the southeast of the proposed site.

No evidence or testimony was given at the public hearing concerning other aquaculture uses of the area. The LPA, JSMI116, predates the experimental lease SHE EHx. During the period both the LPA and the experimental lease have been operational, no issues or operational conflicts have been reported to DMR. Therefore, DMR concludes that the proposed lease will not interfere with the operations of the existing LPA license JSMI116.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with existing aquaculture operations in the area.

E. Flora & Fauna

When examining the existing system support, the Commissioner considers whether the proposed lease activities will unreasonably interfere with significant wildlife and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support existing ecologically significant flora and fauna. 12 M.R.S.A. § 6072(7-A)(D). Such factors as the degree to which physical displacement of rooted or attached marine vegetation occurs, the amount of alteration of current flow, increased rates of sedimentation or sediment resuspension, and disruption of finfish migration shall be considered by the Commissioner in this determination. Chapter 2.37(1)(A)(5).

The applicant has operated the 0.98-acre experimental lease, SHE EHx, within the boundaries of this proposal for over five years. During that time, no issues concerning flora and fauna have been reported to DMR.

Site observations. DMR scientists utilized a remotely-operated vehicle (ROV) to assess the epibenthic ecology of the proposed lease during the site visit on September 27, 2023. Lobster burrows were abundant in the proposed lease footprint (SR 7).

Eelgrass. Recent records of eelgrass collected by the Maine Department of Environmental Protection (MDEP) in 2023 indicate no mapped eelgrass presence in the vicinity of the proposal.⁶ No eelgrass was observed within the proposal boundaries during DMR's site visit (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), there is no mapped Tidal Waterfowl and Wading Bird Habitat (TWWH) in the vicinity of the proposal. Data collected by the United States Fish and Wildlife Service in 2022 by aerial nest survey shows the closest mapped bald eagle nesting site to be approximately 1,790 feet northwest of the proposal.

⁶ Data obtained from The Maine Office of GIS "GISVIEW.MDEP.Seagrass2023". Widgeon grass was observed only in a tributary to the Great Salt Bay, upstream of a culvert that likely restricts tidal flow. Eelgrass was the dominant vascular species in all other locations. This is the most current record of mapped eelgrass within the vicinity of the proposal.

On June 21, 2023, an Environmental Review Coordinator with MDIFW responded by email to a “Request for Agency Review and Comment” stating that minimal impacts to wildlife are anticipated.⁷ During the site visit, DMR scientists observed herring gull (*Larus argentatus*), double-crested cormorant (*Nannopterum auritum*), a bald eagle (*Haliaeetus leucocephalus*), common loon (*Gavia immer*), and seal (species unidentified) in the general vicinity of the proposal (SR 8).

No evidence or testimony was given at the public hearing concerning significant flora and fauna in the area.

Based on the record, including the absence of eelgrass and mapped significant wildlife habitats, the proposed lease activities will not interfere with the ecological functioning of the area.

Therefore, the aquaculture activities as proposed will not unreasonably interfere with significant habitat and the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

F. Public Use & Enjoyment

When examining interference with public facilities, the Commissioner considers whether the proposed lease will unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved lands owned by the Federal Government, the State Government or a municipal governmental agency. 12 M.R.S.A. § 6072(7-A)(F). In determining interference with the public use or enjoyment of conserved lands, the Commissioner shall consider the purpose(s) for which the land was acquired. Chapter 2.37(1)(A)(7)).

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

No evidence or testimony was given at the public hearing concerning impacts to public use or enjoyment.

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.

⁷ Email correspondence between MDIFW and DMR

G. Source of Organisms

Pursuant to 12 M.R.S.A. §6072(7-A)(E), in evaluating the proposed lease, the commissioner shall determine that the applicant has demonstrated there is an available source of organisms to be cultured for the lease site. The Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. Chapter 2.37(1)(A)(6).

According to the application, sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*), would be sourced from Atlantic Sea Farms in Biddeford, Maine (App 2). This is currently an approved source for these species.

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

H. Light

When examining light, the Commissioner considers whether the proposed lease will cause an unreasonable impact from light at the boundaries of the lease site. 12 M.R.S.A. §6072(7-A)(G). Compliance with exterior lighting regulations is evaluated along with the requirement that the applicant demonstrate that all reasonable measures will be taken to mitigate light impacts associated with the lease activities. Chapter 2.37(1)(A)(8).

According to the application, lights would only be used on the proposed lease site in emergency situations (App 10). The lighting requirements in Chapter 2.37(1)(A)(8) do not apply to lights that are only used in emergencies.

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

I. Noise

When examining noise, the Commissioner considers whether the proposed lease will cause an unreasonable impact from noise at the boundaries of the lease site. 12 M.R.S.A. §6072(7-A)(G). Compliance with noise regulations is evaluated along with the requirement that the applicant demonstrate that all reasonable measures will be taken to mitigate noise impacts associated with the lease activities. Chapter 2.37(1)(A)(9).

According to the application, a lobster boat and a skiff are the only powered equipment proposed for the lease operations (App 9-10). The application states that the vessels will be turned off when possible to reduce noise output (App 10).

Considering that no other noise generating equipment is proposed, and that the proposed vessels are consistent with commonly observed watercraft in the area and will be shut off when possible, the limited noise generated by vessels would not be an unreasonable impact.

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

J. Visual Impact

When examining visual impact, the Commissioner must determine that the proposed lease is in compliance with visual impact criteria relating to color, height, shape and mass. 12 M.R.S.A. § 6072(7-A)(H). Compliance with visual impact regulations including building profiles, height limitations, roof and siding materials and color are evaluated. Chapter 2.37(1)(A)(10).

In response to a question from DMR at the hearing, the applicant confirmed that if the project is approved, all surface gear, excepting corner marker buoys, will comply with the approved colors so anything that is currently proposed as white, purple, or yellow will either be gray, black, brown, blue, or green (Brewer testimony). Lease sites must be marked in accordance with Chapter 2.80 of DMR's regulations, which specify that marker buoys must be yellow in color. If the lease is granted, the holder would be responsible for complying with these marking requirements.

At the hearing, the applicant stated the main structure of the lobster boat that will be used on-site is less than 20 feet in height from the waterline (Hutchins testimony).

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

4. CONCLUSIONS OF LAW

Based on the above findings, DMR concludes 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, as conditioned, will not unreasonably interfere with navigation.

- c. The aquaculture activities proposed for this site, as conditioned, will not unreasonably interfere with fishing or other uses of the area, including water-related uses.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses of the area.
- e. 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.
- f. 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.
- g. The applicant has demonstrated that there is an available source for stock to be cultured for the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- j. The aquaculture activities proposed for this site will comply with the visual impact criteria.

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.

5. DECISION

Based on the foregoing, the Commissioner grants a Standard lease to Jodi Brewer and Morning Star Fisheries, LLC for 1.35 acres for twenty years for the cultivation of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*) 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.

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 M.R.S.A. §6072 (7-B) and Chapter 2.37(B). 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 condition shall be incorporated into the lease:

1. All gear, including corner markers, and except for moorings and mooring chains, shall be removed from the water between May 15 and October 14 of each year.

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

Dated: _____

10.7.2025


Carl J. Wilson, Commissioner
Department of Marine Resources

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Jodi M. Brewer
Lease SHE EHx

Experimental Aquaculture Lease Application
Suspended Culture of Marine Algae
Ebenecook Harbor, Sheepscot River

January 9, 2019

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Jodi Brewer applied to the Department of Marine Resources (DMR) for an experimental aquaculture lease on 0.98 acres¹ located in Ebenecook Harbor, Sheepscot River, Southport, Lincoln County, Maine, for the cultivation of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), and strap kelp (morphologically distinct strain of *Saccharina latissima*) using suspended culture techniques. DMR accepted the application as complete on April 19, 2018. During the 30-day public comment period, more than five requests for a public hearing were received. A public hearing was held on November 26, 2018 at the Southport Town Hall in Southport, Maine. No one intervened in this case.

1. THE PROCEEDINGS

Notice of the application and the 30-day public comment period were provided to state and federal agencies, riparian landowners, the Town of Southport, and others on DMR's electronic notification list. Notice of the application and comment period was published in the *Boothbay Register* on May 3, 2018. Notice of the public hearing was published in the *Boothbay Register* on October 25, 2018 and November 8, 2018; and the November edition of *Commercial Fisheries News*. Sworn testimony was given at the public hearing by the following individuals:

Name	Affiliation (if applicable)
Jodi Brewer	Applicant
Alex Hutchins	Applicant's witness
Jon Lewis	DMR, Aquaculture Program Director
Flora Drury	DMR, Marine Scientist

¹ Applicant originally requested 1 acres. DMR calculations, based on the provided coordinates, indicate the area is 0.98 acres.

James Gagnon	Town of Southport, Harbormaster
Susie Arnold, Charles Cochrane, James Crimp, Seth Barker, William Furber, Doug Jones, Ken Colburn, Jeff Brown, Guy Randlett, Gary Arnold, Seth Barker, and Maynard Brewer	Members of the Public

Ms. Brewer and Mr. Hutchins described the proposed project. James Gagnon, Harbormaster for the Town of Southport discussed navigation within the area. Mr. Gagnon also submitted a rendering of navigational areas within the vicinity of the proposed lease site that were identified by the Town of Southport in 2001.² The rendering was entered as evidence by DMR and marked as “Exhibit 4.” In general, members of the public raised concerns regarding the affects the proposal may have on navigation. Each witness was subject to questioning by DMR, the applicant, municipal officials, and members of the public. The hearing was recorded by DMR. The Hearing Officer was Amanda Ellis.

The evidentiary record before the DMR regarding this lease application includes the four exhibits introduced at the hearing (see exhibit list below), and the record of testimony at the hearing itself. The evidence from these sources is summarized below.³

LIST OF EXHIBITS

1. Case file (CF)
2. Application (App)
3. DMR site report (SR)
4. Navigational areas as identified by the Town of Southport in 2001.

2. DESCRIPTION OF THE PROJECT

² According to Mr. Gagnon, in 2001 Bigelow Laboratory began exploring the feasibility of a proposed lease site in Ebenecook Harbor, within the Town of Southport. In response, the Town of Southport Harbormaster and Harbor Committee identified navigational areas, or “channels.” Mr. Gagnon could not find any documentation of these navigational areas or “channels” being officially adopted or otherwise recognized by municipal officials. However, he recommended that the identified navigational areas, or “channels” remain open. Mr. Gagnon indicated that the proposed site is close to the navigational areas or “channels” that were originally identified in 2001.

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

A. Proposed Operations

The purpose of the proposed lease site is “to determine an optimum growth environment as well as seeding and harvest times” (App 6). The applicant proposes to cultivate kelp on five longlines that, according to the application, would be approximately 990 feet in length.⁴ The longlines will be oriented east to west across the proposed site and spaced approximately 9.5 feet apart (App 10). The applicant will deploy 12 moorings on the proposed lease site year-round (Brewer/Drury). At the end of each mooring would be a 24-inch poly ball, which floats at the surface of the water (App 10). The applicant intends to install the horizontal longlines on the proposed site from September through the end of May.

B. Site Characteristics

On May 25, 2018, DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting an experimental aquaculture lease. The proposed site occupies subtidal waters in Ebenecook Harbor (SR 2). Southport Island is situated to the south, east, and west of the proposed site. Green Island and Little Green Island are located to the northwest (SR 2). Moorings and docks are located along the shorelines of Southport and Green Island (SR 2). Staff noted an increased density of moorings and docks in Maddock Cove, which is located to the south of the proposed lease site (SR 2). At mean low water, the distance from the northwest corner of the proposed lease site to the shoreline of Green Island is approximately 850 feet (SR 5). The southwest corner of the proposed lease site is approximately 185 feet from red nun “2” (SR 5).⁵ Calculating for mean low water, depths ranged from 22.5 to 28.5 feet (SR 6).

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 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

⁴ During the hearing, Flora Drury noted that based on DMR calculations the site measures approximately 995 feet in length, while the proposed longlines measure 990 feet. Based on these measurements, Ms. Drury asked Ms. Brewer if the proposed longlines would stay within the boundaries of the lease site. Ms. Brewer indicated that the longlines will likely be shortened.

⁵ Calculated using a NOAA chart.

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

Docks utilized for riparian access are located to the east and south of the proposed site on Southport Island and to the northwest of the proposed area on Green Island (SR 6). There are several moorings within Ebenecook Harbor, which are located primarily near existing docks (SR 6). During the site visit, staff observed a variety of vessels secured to the moorings including motorboats and sailboats (SR 6). The highest density of docks and moorings in Ebenecook Harbor are found in Maddock Cove, which is located approximately 1,000 feet to the south of the proposed lease area on Southport Island (SR 6).

The closest dock, located on Dogfish Head, Southport Island, is approximately 915 feet to the southwest of the proposed site (SR 6). The closest mooring is located approximately 410 feet to the south of the proposal (SR 6). Per the site report, “given these distances, it appears that the proposed lease location provides adequate room for riparian landowners navigating to and from existing infrastructure” (SR 6). Finally, the proposed site is approximately 850 feet from the nearest shoreline on Green Island, which provides a reasonable navigable area for riparian access to this shoreline (SR 6). Activities at the proposed lease site in subtidal waters are unlikely to hamper access to and from the shore.

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

B. Navigation

The proposed site is situated in the center of Ebenecook Harbor, which is bordered by Southport Island to the south, east, and west, and Green Island to the northwest (SR 6). During the site visit, DMR staff observed approximately ten vessels navigating in the harbor. There is a marked channel, which guides navigation within the Ebenecook Harbor. Per the site report:

Boats navigating through the harbor would keep red nun "2" to their south and green can "3" to their west. The proposed lease is located approximately 185 feet to the northeast of the red nun, and therefore, the proposed lease is located in this marked channel (SR 7).

Although the proposed site is in the marked channel, boats navigating in the area would have approximately 810 feet of navigable area between the proposed lease and the 12-foot contour line to the north (SR 7). Figure 1 depicts the location of the proposed site in relationship to navigation.

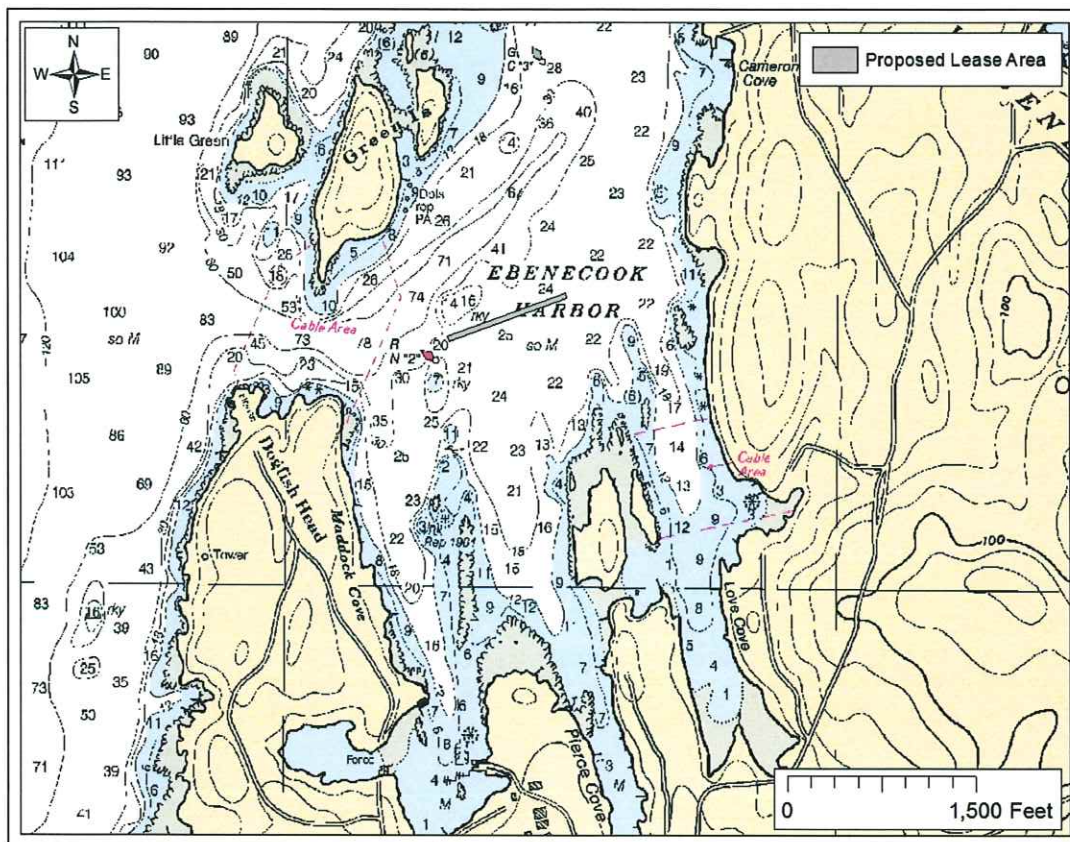


Figure 1: The proposed lease site and navigation in Ebenecook Harbor. Image from site report.

The proposed site is perpendicular to Maddock, Pierce, and Love Coves, which are situated in the southern portion of Ebenecook Harbor (SR 7). The site report indicates that if the proposal is granted, boats navigating to and from Love and Maddock Cove would be able to maintain a straight course to the marked navigational channel (SR 7). Boats traversing to and from Pierce Cove may need to alter their traditional route to the

marked navigational channel, but navigation would not be prevented (SR 7). Except for moorings, the applicant intends to remove gear from the site during the months of June, July, and August (App 6, SR 7). Therefore, “the site would not be active during the time of year when recreational and commercial boating activities are most prevalent” (SR 7).

During the public hearing, several members of the public testified about the existing navigational uses of the area, and the impacts the proposal may have on navigation. These impacts included the potential conflict between the proposed timing of longline deployment on the requested site, and peak boating activity in the area. In addition, concerns were raised regarding the possible impacts the proposed year-round deployment of 12 moorings within the proposed lease site would have on navigation and anchorage within Ebenecook Harbor. Each of these concerns is detailed in the section below.

Timing of Boating Activity and Placement of Longlines

The applicants indicated that they may deploy longlines at the beginning of September and remove them at the end of the May. The longlines would be submerged seven feet below the surface of the water. In general, members of the public who testified indicated that the proposed lease is in an area of Ebenecook Harbor that is heavily utilized by a variety of vessels. Ken Colburn testified that boating activities are most frequent from the middle of May through October 12 of each year. Although the application indicates that the longlines would be deployed seven feet below the surface of the water, Mr. Colburn testified that many vessels transiting the area from the middle of May through October 12 have drafts greater than seven feet. Charles Cochrane, testified that his sailboat draws ten feet and that the proposed deployment of longlines during the month of September and the later part of May would hinder access to his mooring in Pierce Cove. Mr. Cochrane was also concerned that the proposed site could interfere with the regattas and sailboat races hosted by the Southport Yacht Club.

Proposed Moorings

If the lease is granted as originally proposed, the longlines will be removed during the months of June, July, and August. However, the applicants intend to deploy 12 moorings year-round on the lease site. If the lease is granted, there will be five moorings on the eastern and western ends of the proposed site. The moorings at the ends of the proposed site would be spaced approximately 9.5 feet apart (App 10). There would be two moorings in the middle of each northern and southern side of the proposed site (App 10). These two moorings would be spaced

approximately 450 feet from the moorings on the western and eastern side of the proposed site (App 10). The image included below is an overhead view of the proposed layout of moorings/polyballs. It also includes the approximate distances between the respective moorings/polyballs. Each mooring would have a 24-inch polyball floating at the surface of the water. Mr. Hutchins testified that the lines securing the polyballs to the moorings are kept tight, which limits their scope.

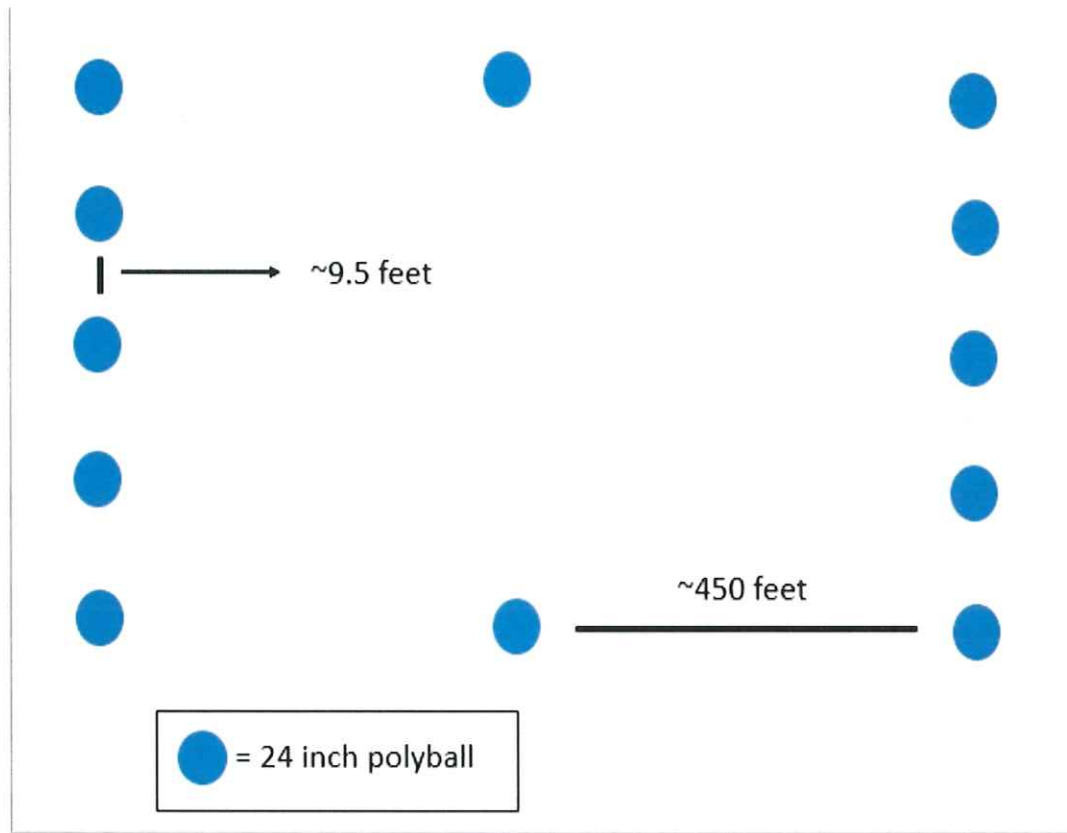


Image 1: Depicts the proposed layout of the moorings/polyballs on the site, and the approximate distances between each mooring/polyballs on the ends and sides of the proposed area. Image not to scale and does not include proposed lease boundaries. Image generated by DMR staff.

During the hearing, Charles Cochrane and William Furber indicated that Ebenecook Harbor is a designated anchorage. Messrs. Cochrane and Furber contend that if the lease was granted, the moorings will prevent mariners from anchoring within the area. However, the applicant testified that depending on the size of the boat mariners would be able to anchor within

the boundaries of the proposed lease site, and they are not requesting that anchoring be excluded within the proposed area. Mr. Cochrane further noted that the polyballs will be in the navigable waterway, which could conflict with sailing activities hosted by the Southport Yacht Club. During the hearing, James Gagnon, Harbormaster for the Town of Southport suggested possibly removing, or dropping the polyballs below the surface of the water during the summer months when the site is inactive.

In addition, Ken Colburn raised concerns regarding the visual impacts the year-round deployment of moorings may have on the area. Mr. Colburn suggested that DMR require the applicants to develop an alternative to the polyballs that would mitigate the visual impacts of the proposal. Mr. Colburn suggested using lobster buoys during the summer months instead of the polyballs.

A. Discussion

Timing of Boating Activity and Placement of Longlines

Ebenecook Harbor is utilized frequently by recreational and commercial boaters from the middle of May through early October. Regattas and sailboat races also occur within the area during this period. The applicants propose to deploy longlines, seven feet below the surface of the water, from September through the end of May. Some members of the public identified this time (September-May) as when boating activities most frequent. Although the longlines are seven feet below the surface of the water, there are vessels that have drafts greater than seven feet. If the lease is granted as proposed, the longlines could interfere with navigation in the area during peak boating season. However, this interference can be adequately mitigated by conditioning the lease so that longlines can only be deployed on the proposed site from October 15 through May 14. This condition is necessary to encourage the greatest multiple uses of the area, while also allowing for the aquaculture activity.

Proposed Moorings

DMR evaluated the concerns about the moorings interfering with anchorage in Ebenecook Harbor. Based on details provided in testimony and comments, DMR utilized a

swing radius that assumes a 100-foot vessel is attempting to anchor.⁶ In its analysis, DMR assumed 10 feet of freeboard, a depth of 40 feet at mean low water, and a 10:1 ratio for scope.

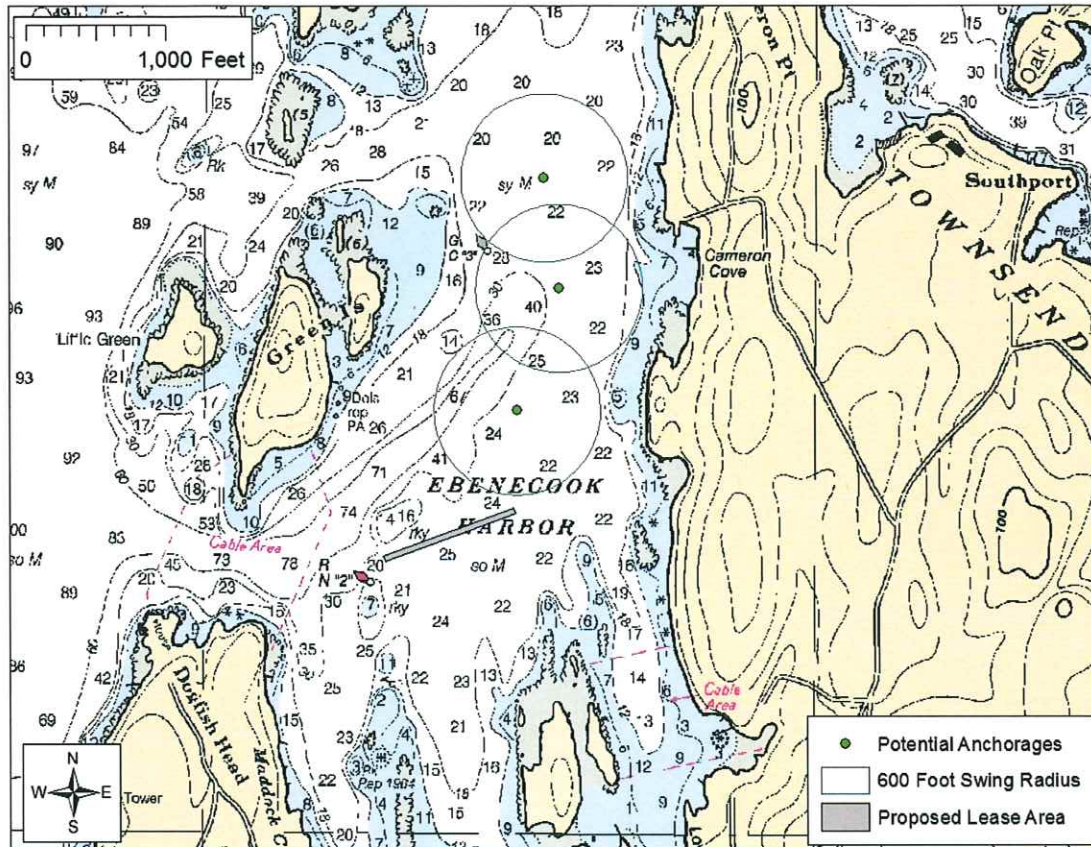


Figure 2: Possible anchorages that do not overlap with the proposed lease site. Image generated by DMR staff.

Based on DMR calculations, there are possible anchorages to the northeast of the proposed lease area that would support the large vessels as referenced in testimony and comments submitted to DMR. Although anchorage within the boundaries of the proposed lease site may be limited to certain vessels, the proposed site does not prevent the use of Ebenecook Harbor as an anchorage. Therefore, DMR has determined that the proposed lease site does not unreasonably interfere with the use of Ebenecook Harbor as an anchorage.

⁶ The size of the vessel was based on a copy of a letter William Furber sent to the United States Coast Guard and subsequently provided to DMR as a courtesy. A copy of the letter was emailed to the Department after the comment period had closed. However, Mr. Furber read from portions the letter in his testimony at the public hearing. A copy of the letter is in the case file.

DMR considered the Harbormaster's suggestion with regards to removing or dropping the polyballs below the surface of the water. Removing, or submerging the polyballs below the surface of the water would leave the surface of the proposed lease area unobstructed, and mariners would not have to maneuver around the polyballs. However, Ebenecook Harbor is a designated anchorage and the polyballs will alert mariners to tackle within the proposed lease area. Removing or dropping the polyballs below the surface of the water could inadvertently lead to entanglement. Therefore, DMR does not recommend removing, or dropping the polyballs below the surface of the water.

It is unlikely that the 12 polyballs will unreasonably interfere with navigation in the area. Unlike the longlines, which span nearly the entire length of the proposed site, the polyballs are limited in scope and area. Most vessels will be able to navigate through the proposed lease site and around the proposed moorings/polyballs. In addition, mariners that want to avoid the moorings will have approximately 810 feet to navigate between the proposed lease and the 12-foot contour line to the north (SR 7). It is possible that some vessels may change their traditional approaches based on the presence of the moorings/polyballs. However, these changes are not unreasonable and the proposed polyballs do not unduly restrict navigation.

With regards to possible visual impacts of the polyballs, experimental lease proposals are not subject to the visual impact criteria contained in DMR Chapter 2.37(A)(10). This criterion only applies to standard lease applications. However, in accordance with 12 MRSA §6072-A (15) and DMR Chapter 2.37(B), the Commissioner could establish conditions governing the use of the lease area, including the deployment of gear. In this instance, the proposed polyballs are within industry standards and do not represent a significant deviation from how moorings, on aquaculture sites, are typically marked. Therefore, DMR will not condition the lease to require the applicants to develop an alternative to the polyballs.

In consideration of the evidence and the condition restricting the deployment of longlines, it is unlikely that the proposed operations will have an unreasonable impact on navigation.

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

C. Fishing & Other Water-Related Uses

Fishing

During the site visit, staff observed three lobster buoys in the immediate vicinity of the proposed lease area (SR 8). The closest lobster buoy was approximately 84 feet to the south of the proposed area (SR 8). DMR staff indicated that it is likely lobster fishing increases in the area during the summer months (SR 8). Staff did not observe other types of commercial fishing, and did not observe any recreational fishing, although those activities may occur area (SR 8). At the public hearing, no fishermen indicated that the proposal would unreasonably interfere with their existing operations.

Other water-related uses

Members of the public, who testified, indicated that the area is used for jet-skiing, water-skiing, and other types of water dependent activities. For the reasons described in section 3.B of this decision, some felt that the deployment of longlines would preclude these activities from occurring. However, given the seasonality of these activities, the condition established in section 3.B of this decision, which limits longline deployment from October 15 through May 14 addresses these concerns.

Exclusivity

To avoid possible entanglement with submerged longlines, the applicant requests that lobster fishing be prohibited within the boundaries of the proposed lease site (App 8). For the reasons described above, the applicant will be prohibited from deploying longlines from May 15 through October 14. DMR will prohibit lobster fishing during this period, but it will be permitted within the boundaries of the proposed site during other times of year. The condition is intended to mitigate the potential of seasonal gear conflict between the lobster fishery and the proposed site.

The application also notes, “While there is currently no fishing done by way of dragging I would request that it be restricted in case dragging may take place in the future” (App 8). DMR will condition the lease so that dragging is prohibited within the boundaries of the proposed site. The condition is intended to mitigate the potential of gear conflict should dragging occur in the area during the lease term.

Other aquaculture uses

There is one aquaculture lease and three Limited Purpose Aquaculture (LPA) licenses located within one mile of the proposal. The lease and two LPAs are held by the applicant for the suspended culture of marine algae.⁷ If the proposed lease is granted, the applicant will relinquish the two LPAs. The third LPA, not held by the applicant, is for the suspended culture of American/eastern oysters (*C. virginica*) and is located 65 feet to the south of the proposed lease area (SR 8).⁸ During the site assessment staff also observed a moored float, stacked with oyster cages, approximately 410 feet to the south of the proposed lease site (SR 8). The float is not located within the boundaries of an existing aquaculture lease or license site, but appears to be associated with aquaculture operations within the area (SR 8). Given the distance between the proposed lease site and float, “it is unlikely that the proposal would interfere with this existing aquaculture use.”

Therefore, considering the conditions imposed on the lease, and existing aquaculture activities, the proposed site will not unreasonably interfere with fishing or other water related uses of the area.

D. Flora & Fauna

Site Observations. During the site visit, DMR staff observed herring gulls (*Larus argentatus*), terns (*Sterna sp.*), and double-crested cormorants (*Phalacrocorax auritus*) in the vicinity of the proposed lease site (SR 10). Based on historical eelgrass (*Zostera marina*) data, in 2005, the closest eelgrass beds were located over one mile to the south of the proposed area (SR 11).

Fisheries and Wildlife. Based on data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), a bald eagle (*Haliaeetus leucocephalus*) habitat buffer is located 465 feet to the north of the proposed site (SR 10). In addition, a seabird nesting island is located approximately one mile to the northwest of the proposed site (SR 10). Tidal waterfowl and wading bird habitat is located approximately one mile to the northeast of the proposed area (SR 10). DMR sent a copy of the lease application to MDIFW for their review and comment. MDIFW indicated that “minimal impacts to wildlife are anticipated.”⁹

⁷ Lease acronym SHE B1x and LPA acronyms: JBRE117 and JBRE217

⁸ LPA acronym: JSMI116

⁹ CF: Email from J. Perry (Environmental Review Coordinator, MDIFW) to C. Burke dated May 16, 2018.

Based on this evidence, it appears that the culture of marine algae as proposed for this lease site will not interfere with the ecological functioning 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, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site (SR 11).

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, or docking facilities owned by municipal, state, or federal governments.

F. Source of Organisms

Seed stock for the proposed lease site will be sourced from Ocean Approved located in Saco, Maine (App 1). Ocean Approved is a DMR approved source of seed stock.

Therefore, the applicant has demonstrated that there is an available source of sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), and strap kelp (morphologically distinct strain of *Saccharina latissima*) 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 riparian ingress and egress.
- B. Given the conditions imposed on the lease, 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 uses of the area, taking into consideration existing aquaculture uses 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 sugar kelp (*Saccharina latissima*), horsetail kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), and strap kelp (morphologically distinct strain of *Saccharina latissima*) 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 0.98 acres to Jodi 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 lessee¹⁰; 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*), horsetail kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), and strap kelp (morphologically distinct strain of *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. 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.

¹⁰ 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. 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)¹¹. 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:

- A. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
- B. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.
- C. Except for required marker buoys, no gear shall be deployed on the lease site from May 15 through October 14.
- D. Lobster fishing is prohibited within the lease boundaries from October 15 through May 14.
- E. Dragging is prohibited 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: _____

11/9/17



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

¹¹ 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.”