

**STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES**

**Kimberly Grindle
PEN THx**

Experimental Aquaculture Lease Application
Suspended Culture of Marine Algae
Penobscot Bay, Isleboro, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Kimberly Grindle applied to the Department of Marine Resources (DMR) for a three-year¹ experimental aquaculture lease located in Turtle Head Cove, in Penobscot Bay, Isleboro, Waldo County. The proposed lease is 3.91² acres and is for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), and winged kelp (*Alaria esculenta*) for commercial aquaculture research and development. DMR accepted the application as complete on January 18, 2023.

1. THE PROCEEDINGS

Notice of the application and the 30-day public comment period was provided to state agencies, the Town of Isleboro and its harbormaster, and others on DMR's mailing list. The application identified no known riparian landowners within 1,000 of the proposed lease site. Notice of the complete application and comment period was published in the February 2, 2023, edition of *The Courier-Gazette*. Title 12 M.R.S.A. §6072-A (6) provides that the Commissioner shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. No requests for a public hearing were received; therefore, no hearing was conducted. The evidentiary record regarding this lease application includes the application, DMR's site report dated April 1, 2024, and the case file. The evidence from each of these sources is summarized below.³

LIST OF EXHIBITS

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

¹ The application did not indicate a requested term, therefore, DMR uses the 3-year maximum as a default.

² Applicant originally requested 4.0 acres. DMR calculations indicate the area is 3.91 acres.

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

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of the site for commercial marine algae cultivation (App 4). The applicant is proposing to culture marine algae using fifteen 600-linear foot culture lines⁴ with depth control buoys and weights, as well as moorings and marker buoys (App 11). The moorings with chain and site marker buoys will remain in place year-round. All other gear will be removed from the site from July 1 to September 30 every year (App 11). The applicant intends to tend the site at least weekly from late October to June. Harvesting will occur in the spring using two skiffs, an electric winch, and an electric pot hauler (App 5).

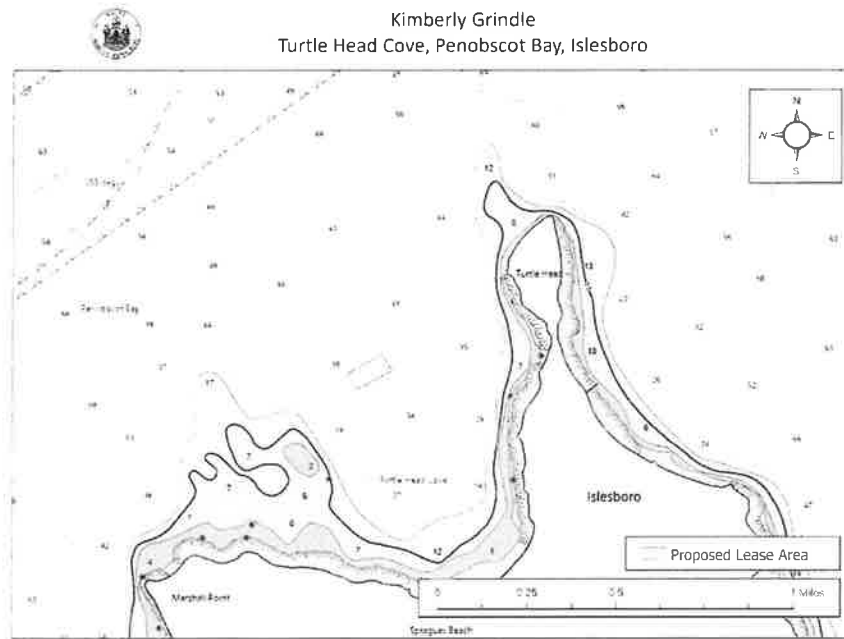


Figure 1: Vicinity map. Image generated by DMR staff.⁵

⁴ The gear table in the application indicates 9,000 [linear feet] of sink long line is proposed for the lease. The overhead view (App 22) depicts fifteen 600-foot-long lines.

⁵ Unless otherwise noted, all figures in this report 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.

B. Site Characteristics

On September 28, 2023, DMR scientists assessed the proposed lease site beginning at 1:00 PM. The shoreline of Turtle Head Cove, in the vicinity of the proposal, consists of forested uplands. Sprague's Beach is approximately 3,120 feet to the southeast of the proposal at mean low water (MLW).

DMR began collecting depths at 1:03 PM at the proposed site, which was approximately 2.5 hours after high tide. Measured depths at corners of the proposed lease site ranged from 47.1 to 48.9 feet. Correcting for tidal variation derives water depths at the last high tide to be from 51.3 to 53.1 feet and at MLW (0.0 feet) to be from 40.0 to 41.8 feet (SR 2).

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 for commercial aquaculture research and development may be granted by the Commissioner of DMR upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other 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 available source of organisms to be cultured on the lease site.

A. Riparian Access

Before granting a lease, the Commissioner must determine that the proposed project "will not unreasonably interfere with the ingress and egress of riparian owners[.]" 12 M.R.S.A. § 6072-A(13)(A). 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 2.37(1)(A)(1).

The proposed lease is over 1,000 feet away from any shoreline. During the site visit, DMR did not observe any moorings or docks within 1,000 feet of the proposal. There was a cluster of three moorings with attached floats for winter storage approximately 1,578 feet southeast of the proposal. There was one anchored sailboat, approximately 1,550 feet, to the east of the proposal (SR 4). DMR did not receive any comments or concerns about riparian access.

DMR did not receive a response to the Harbormaster Questionnaire sent to the Town of Isleboro.

Therefore, given the distance from the shoreline and the lack of public comments, 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. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2).

The main navigational channel is located approximately 3,780 feet to the north of the proposal and is used as a shipping lane to access Searsport and Belfast Harbor. During the site visit, DMR observed two powerboats navigating in the general vicinity of the proposal and one sailboat that motored into the cove and anchored east of the proposal.

DMR did not receive a response to the Harbormaster Questionnaire sent to the Town of Isleboro. No comments from the public were received concerning navigation.

Therefore, given the distance to the navigational channel and the lack of public comments, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.

C. Fishing & Other Uses

Fishing. 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 (12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3)).⁶ Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area (Chapter 2.37(1)(A)(4)).

During the site visit, DMR documented two individual lobster buoys and two lobster buoy clusters in the vicinity of the proposal. The individual lobster buoys were approximately 8 feet and 210 feet from the proposal boundaries. The lobster buoy clusters were approximately 928 feet and 1,041 feet southwest of the proposal. In general, DMR observed light lobstering activity in the general vicinity of the proposal.

The application states no commercial fishing activity occurs in the general area during the cultivation period from October to June (App 6). The application also states no recreational fishing occurs in the general area. No comments concerning fishing were received by DMR. DMR did not receive a response to the Harbormaster Questionnaire sent to the Town of Isleboro.

⁶ 13-188 C.M.R. ch. 2. The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

Therefore, it is reasonable to conclude that there are no concerns regarding the potential effect of the proposed lease on commercial and recreational fishing activities in the area.

Other aquaculture uses. There are no aquaculture leases or limited purpose aquaculture (LPA) sites within 1,000 feet of the proposal (SR 5).

Therefore, considering the 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

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 (12 M.R.S.A. § 6072-A(13)(D); Chapter 2.37(1)(A)(5)).

On September 28, 2023, DMR utilized an ROV to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed is described below:

Species observed during site assessment

Species Observed	Abundance
Sand Dollar (<i>Clypeasteroida</i> sp.)	Occasional
Northern Sea Star (<i>Asterias rubens</i>)	Occasional
Crab (<i>Cancer</i> sp.)	Occasional

Historical records of eelgrass collected by DMR in 2010 indicate no mapped eelgrass presence in the vicinity of the proposal.⁷ No eelgrass was observed during DMR's site assessment (SR 7).

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 located approximately 3,590 feet to the north of mapped Tidal Waterfowl and Wading Bird Habitat. Data collected by the United States Fish and Wildlife Service in 2023 by aerial nest survey⁸ shows the closest mapped bald eagle nesting site to be approximately 1.6 miles south of the proposal on Islesboro. Additionally, DMR observed common loon (*Gavia Immer*), black scoter (*Melanitta americana*), and harbor seal (*Phoca vitulina*) in the general vicinity of the proposal.

⁷ Data obtained from The Maine Office of GIS "GISVIEW.MDMR.Eelgrass". This is the most current record of mapped eelgrass within the vicinity of the proposal.

⁸ Data obtained from USFWS "Bald_Eagle_Nests_-_Maine_2023".

On February 3, 2023, a Wildlife Biologist with MDIFW responded by email to a “Request for Agency Review and Comment” stating minimal impacts to wildlife are anticipated for this project.⁹ DMR did not receive any additional comments concerning impacts to flora or fauna.

Therefore, given MDIFW’s expert analysis, 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 of a proposed experimental lease with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of a beach, park, or docking facility owned by the federal, state, or a municipal governments (12 M.R.S.A. § 6072-A(13)(F); Chapter 2.37(1)(A)(7)).

There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site.

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

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. 12 M.R.S.A. § 6072-A(13)(E); Chapter 2, § 2.37(1)(A)(6).

The applicant proposes to obtain stock from Atlantic Sea Farms in Saco, Maine or Summit Point LLC in Falmouth, Maine. These facilities are currently an approved source for the proposed stock. If the applicant is unable to obtain stock from these facilities, then it must come from another DMR approved source.

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

4. CONCLUSIONS OF LAW

Based on the above findings, the Department concludes that:

⁹ Email correspondence between MDIFW and DMR.

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.
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 3.91 acres to Kimberly Grindle, 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 suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), and winged kelp (*Alaria esculenta*) for commercial aquaculture research and development. 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 square feet of structures and no discharge, a bond or escrow account is required. The lessee shall post a bond or establish an escrow

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.”

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 M.R.S.A §6072-A (15) 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.

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: _____

8/12/24



Patrick C. Keliher, Commissioner
Department of Marine Resources