

**STATE OF MAINE
DEPARTMENT OF MARINE
RESOURCES**

**Keith Miller & Ben Stendel
PEN EIX**

Experimental Aquaculture Lease Application
Suspended Culture of marine algae
St. George, Maine

January 28, 2020

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Keith Miller and Ben Stendel applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease located southwest of Elwell Island in Wheeler Bay, in St. George, Knox County, Maine. The proposed lease is 3.92¹ acres and is for the suspended cultivation of sugar kelp (*Saccharina latissima*), skinny kelp² (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and laver (*Porphyra sp.*).

1. THE PROCEEDINGS

DMR accepted the application as complete on May 6, 2019. Notice of the application and the 30-day public comment period were provided to state and federal agencies, riparian landowners, the Town of St. George and its Harbormaster, and others on DMR’s mailing list. Notice of the application and comment period was published in the May 23, 2019 edition of the *Courier Gazette*. During the comment period, DMR did not receive any requests for a public hearing, and no hearing was held. The site report was issued on October 10, 2019. The evidentiary record regarding this lease application includes the application, DMR’s site report, and the case file. The evidence from each of these sources is summarized below.³

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

¹ Applicant requested 4 acres. DMR calculations indicate the area is 3.92 acres

² In the application, skinny kelp was referred to as a morphotype of *Saccharina latissima* (*Saccharina latissima forma angustissima*). Skinny kelp is now considered a separate species (*Saccharina angustissima*) and will be referred to in this decision as such.

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

The purpose of the proposed experimental lease site is to determine the viability of a commercial seaweed operation (App 5). The applicant is proposing to culture marine algae from October to June, annually, and intends to culture algae on 1,000-foot horizontal lines suspended 7 feet below the surface of the water. There will be 13 longlines in total, spaced 10 feet apart (App 12-14). Longlines, depth control lines and buoys, and concrete weights will be removed by mid-June, while 30 cement moorings and associated mooring lines and buoys are proposed to remain onsite throughout the year (App 15, SR 2).

B. Site Characteristics

The proposed lease occupies subtidal waters between Elwell, Eagle, and Hen Islands in Wheeler Bay (SR 2). Granite ledges and evergreen forests mark the shorelines and uplands of the surrounding islands (SR 2). Houses, structures, and/or tent platforms are visible on all three of the surrounding islands (SR 2). During DMR’s site visit on September 5, 2019, depths at the corners of the proposed site ranged from 29.5-26.6 feet. When correcting for tidal variation, depths are approximately 4.9 feet lower at mean low water (SR 2). Figure 1 shows the location of the proposed lease and the surrounding area.

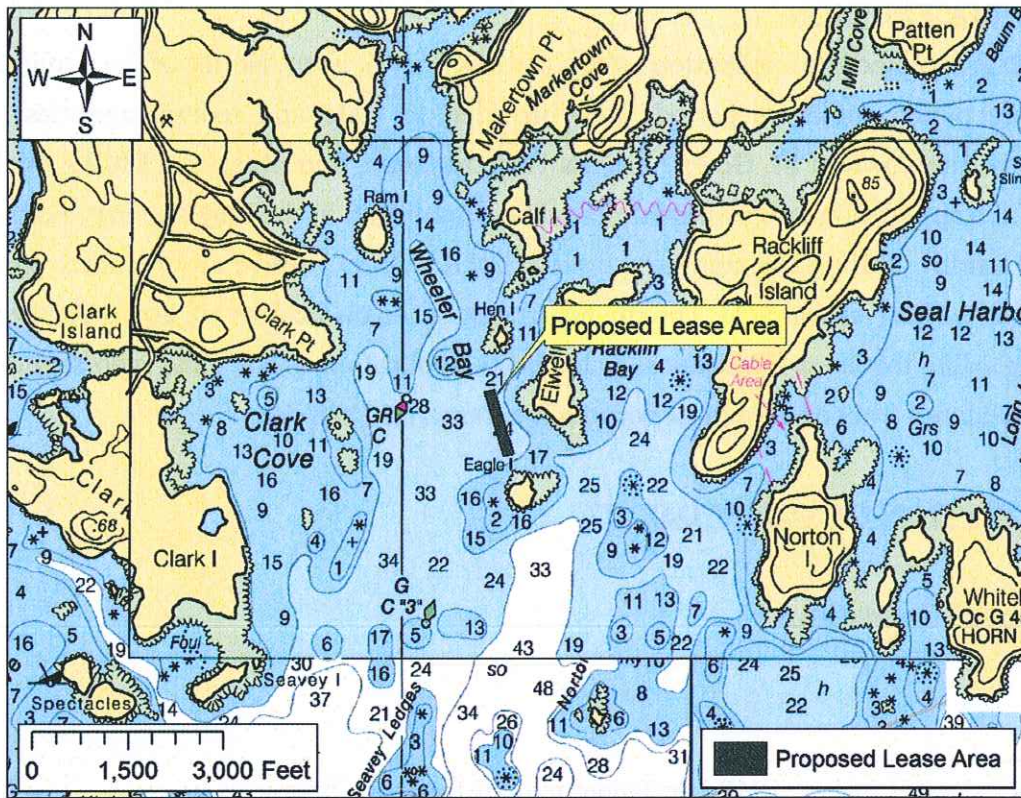


Figure 1: Vicinity Map

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that a lease may be granted by the Commissioner of DMR upon determining that the project will 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

Per the site report, the proposed lease occupies subtidal waters between Eagle, Elwell, and Hen Islands in eastern Wheeler Bay, and is located more than 2,000 feet from parcels located on the north and west sides of Wheeler Bay. Given that distance, the proposed lease should not interfere with riparian access to and from those shorelines (SR 7).

Eagle, Elwell, and Hen Islands are located to the south, northeast, and north of the proposed lease, respectively. When DMR scientists visited the site on September 5, 2019, a dock and mooring were observed along the western shore of Elwell Island, and an outhaul and mooring was observed on the northern side of Hen Island (SR 7). The proposed lease is more than 900 feet away from these points and is unlikely to interfere with their use (SR 7). Due to shallow water and ledges present to the north of Hen Island, riparian landowners likely access these outhauls, docks, and moorings by navigating around the south end of Hen Island. Because of the location of the proposed lease, traditional routes to and from these points may be altered but access would not be prevented (SR 7).

Eagle Island is approximately 250 feet to the south of the proposed lease (SR 7). During their site visit, DMR staff observed moorings off the northern shore of Eagle Island. The proposed aquaculture lease would not prohibit access to the northern shore of Eagle Island from the east. However, if riparian landowners typically access this shoreline from the north and west, their route may be impeded (SR 7).

Access to docks and moorings is likely heaviest during the summer months, when the applicant has proposed to remove some of the gear from the water (SR 7). However, thirty moorings, mooring lines, and mooring balls are proposed to remain on site year-round. The Harbormaster for the town of St. George indicated that there will be 'minimal to no affect' on the

ability of landowners to get to and from their property, and that riparian landowners would simply need to ‘navigate around the mooring buoys’.⁴

During the comment period, DMR did not receive any comments from riparian landowners. Based on the lack of public comments, and the information contained in the site report and Harbormaster Questionnaire, it is reasonable to conclude that riparian ingress and egress will not be unduly affected by the proposed application.

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

B. Navigation

The proposed lease is in eastern Wheeler Bay. Clark Point, the closet point on the bay’s western shore is approximately 2,270 feet away from the proposed lease. Given this distance, boats should have ample room to navigate west of the proposal and into the head of Wheeler Bay (SR 7). According to the St. George Harbormaster, the proposed aquaculture lease is ‘out of the way of the main channel.’⁵

Near the proposal, and north of Elwell Island is the entrance to a cove (SR 7). The proposed aquaculture lease may impact traditional routes taken to access this area, however, there are approximately 500 feet between the NE corner of the lease and Hen Island, so navigation into and out of the cove would not be prevented should the proposed lease be granted (SR 8). The St. George Harbor master indicated that ‘the only affect that will occur for any vessels would be the need to navigate around the mooring buoys, which is a minor inconvenience.’⁶

While longlines, depth control lines, buoys and weights will be removed from the lease site during summer months when vessel traffic in the area is likely the heaviest, the applicant has proposed to leave thirty moorings, mooring lines, and mooring balls on the site year-round. The presence of this amount of gear year-round may require boaters and riparian landowners to alter their traditional routes. While the presence of this gear is unlikely to prohibit access to any of the surrounding islands, it could make navigating near the lease site difficult. DMR will require that all gear be removed from the site between June 15th and October 15th each year when vessel traffic is likely the heaviest. Conditions reflecting this requirement will be included in the lease.

During the comment period, DMR did not receive any comments regarding navigation in the area of the proposed lease. Based on the evidence, and the condition described above, it appears that navigation will not be unduly affected by the proposed application.

⁴ CF: Harbormaster Questionnaire signed June 5, 2019.

⁵ CF: Harbormaster Questionnaire signed April 1, 2019

⁶ CF: Harbormaster Questionnaire signed April 1, 2019

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

C. Fishing & Other Uses

Fishing. During DMR's site visit on September 5, 2019 six lobster buoys were observed within the boundaries of the proposed lease, and twelve additional buoys were located between the lease and Hen Island (SR 8). Additional buoys were observed between Elwell and Eagle Islands to the south of the proposal (SR 8). The applicant has proposed to deploy longlines on site from October 15th to June 15th annually. The Harbormaster for St. George indicated that "lobstering takes place in the lease area during the summer months- however, during the time period when the site is being utilized little to no lobstering occurs".⁷ The applicant noted that lobstering takes place from June through early October, but that almost no fishing occurs at the site when seaweed would be growing, and that no scalloping occurs at the site. (App 6). The applicant has proposed to have thirty concrete moorings, and associated lines and buoys remain on site year-round. Whether lobstermen might avoid the area due to the year-round moorings is unknown (SR 8). Because lobster fishing is evident in the area during the summer months, and because lobster buoys were observed within the boundaries of the proposed lease site DMR will require that all gear be removed from the site between June 15th and October 15th each year. As described in the navigation section of this document, the lease will be conditioned to reflect this requirement. As such, there should be minimal impact to lobstering.

No other commercial or recreational activities were observed by DMR during their visit to the site in September 2019. The site report notes that because the proposed site is subtidal, intertidal fishing could not be hindered by the proposal, and due to the seasonal nature of the proposed activities, recreational hook and line fishing would not be prevented during summer months (SR 8). The St. George Harbormaster also noted that "no known recreational fishing occurs in the lease site".⁸

During the review period for this application, no public comments were received regarding fishing.

Exclusivity. Due to possible interactions with gear, lobstering and dragging are restricted from the site from October 15th to June 15th, annually.

Other aquaculture uses. There are two active leases, and twelve Limited Purpose Aquaculture (LPA) licenses within one mile of the proposed lease (SR 8). The applicants, Ben

⁷ CF: Harbormaster Questionnaire signed April 1, 2019

⁸ CF: Harbormaster Questionnaire signed April 1, 2019

Stendel and Keith Miller, hold eight of the twelve LPAs, all for the suspended culture of marine algae. The LPAs held by Ben Stendel⁹ will not be renewed for 2020, while the LPAs held by Keith Miller¹⁰ will be terminated if the proposed lease is granted (App 7). Lease PEN RIx is the closest aquaculture lease to the proposal that is held by an individual other than the applicants (SR 8). PEN RIx is permitted for the suspended culture of shellfish and would not be impacted by this proposal (SR 8). The applicants hold lease PEN RBx, for the suspended culture of marine algae, located on the eastern side of Elwell Island. Keith Miller and Ryan Miller submitted an application that is currently under review for a lease off the western shore of Norton Island.

Other water-related uses. During the review period, DMR did not receive any comments detailing other water-related uses that are not already contemplated in other sections of this decision. Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

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

D. Flora & Fauna

Historical eelgrass data collected by DMR indicated that, in 2003 and 2005, the nearest eelgrass to the proposed lease was approximately 430 feet east of the proposed site. The proposed aquaculture activities for this site will not result in physical disturbance or shading of this eelgrass bed (SR 10).

Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that the proposed lease is located approximately 300 feet to the south of Tidal Wading Bird and Waterfowl Habitat, which is defined under Maine's Natural Resource Protection Act as Significant Wildlife Habitat (SR 9). DMR sent a copy of the application to MDIFW for their review and comment. MDIFW indicated that "minimal impacts are anticipated to wildlife for the Miller and Stendel aquaculture lease off Elwell Island."¹¹

Based on the evidence that the proposed lease does not interact with historical eelgrass beds or mapped wildlife habitat, and because DMR's site report does not contain concerns regarding the impact of the proposed lease on the surrounding ecosystem, it is reasonable to

⁹ BSTE117, BSTE217, BSTE317, BSTE417

¹⁰ KMIL117, KMIL217, KMIL317, KMIL417

¹¹ CF: Email from R. Settele to C. Burke on May 22, 2019

conclude that there are no concerns regarding the effects the proposed lease may have on the ecological function of the area.

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

E. Public Use & Enjoyment

Per the site report, “there are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site” (SR 15).

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

F. Source of Organisms

The applicant intends to source sugar kelp, skinny kelp, winged kelp, horsetail kelp, dulse, Irish moss, and laver from Atlantic Sea Farms.¹² This source is approved by DMR.

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

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
2. Given the condition related to gear deployment, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.
3. Given the condition related to gear deployment the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area.
4. The aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

¹² When the applicant applied, Atlantic Sea Farms was known as Ocean Approved. Ocean Approved has since changed their name to Atlantic Sea Farms.

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 3.92 acres to Keith Miller & Ben Stendel, for three years, the term of the lease to begin within twelve months of the date of this decision, on a date chosen by the lessee¹³; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

This lease is granted to the lessee for the cultivation of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and laver (*Porphyra sp.*) 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) (s) in the amount of \$5,000.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 MSRA §6072-A (15).¹⁴ Conditions are

¹³ DMR Rule 2.64 (14) provides:

“The term of the lease shall begin within 12 months of the Commissioner’s decision, on a date chosen by the applicant. No aquaculture rights shall accrue in the lease area until the lease term begins and the lease is signed.”

¹⁴ 12 MRSA §6072-A (15) provides that:

“The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the

designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purpose of the lease. The following conditions shall be incorporated into the lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Except for required marker buoys, all gear, including moorings, lines, and buoys, must be removed from the water between June 15th and October 15th each year.
3. Due to possible interactions with gear, lobstering and dragging are restricted from the site from October 15th to June 15th annually.

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: _____

01/28/2020



Patrick C. Keliher, Commissioner
Department of Marine Resources

_____ 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.”