

Standard Aquaculture Lease Application
Suspended culture of marine algae
Frenchman Bay, Gouldsboro

May 14, 2019

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Springtide Seaweed LLC applied to the Department of Marine Resources (DMR) for a ten-year standard aquaculture lease on 20.02¹ acres located west of Stave Island, Frenchman² Bay, in the Town of Gouldsboro, Hancock County, Maine. The proposal is for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*)³, winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and nori/laver (*Porphyra sp.*). DMR accepted the application as complete on April 20, 2018. A public hearing on this application was held on March 26, 2019⁴ at the Gouldsboro Municipal Building in Prospect Harbor, Maine. No one intervened in this case.

1. THE PROCEEDINGS

Notice of the hearing, and copies of the application and DMR site report, were provided to state and federal agencies for their review, the Town of Gouldsboro, riparian landowners within 1,000 feet of the proposed site, and subscribers of DMR's aquaculture email listserv. Notice of the hearing was published in the *Ellsworth American* on February 21, 2019 and March 14, 2019. Notice was also published in the March 2019 edition of *Commercial Fisheries News*.

Sworn testimony was given at the hearing by the applicant, represented by Sarah Redmond, who described the proposed project. Marcy Nelson, DMR Aquaculture Scientist, described the site visit. Two members of the public asked general questions of the applicant and DMR. The hearing was recorded by DMR. The Hearing Officer was Flora Drury. The evidentiary record before DMR regarding this lease application includes three 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.⁵

¹ Applicant originally requested 20 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 20.02 acres.

² Referred to in application as "Frenchman's Bay"

³ When the application was deemed complete, skinny kelp was considered a *Saccharina latissima* morphotype and was referred to in the original application as such. Skinny kelp is now considered a separate species (*Saccharina angustissima*).

⁴ The Springtide Seaweed LLC hearing was originally scheduled for February 12, 2019, with an alternate date of February 13, 2019. These public hearings were both cancelled due to weather.

⁵ In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

LIST OF EXHIBITS⁶

1. Case file
2. Application
3. DMR site report

2. DESCRIPTION OF THE PROJECT

A. Site Characteristics

On October 29, 2018, DMR staff assessed the proposed lease site and the surrounding area in consideration of the criteria for granting a standard aquaculture lease. The proposed lease site occupies subtidal waters to the west of Stave Island in Frenchman Bay (SR 2). At mean low water, the southeast corner of the proposed site is ~1,110 feet to the northwest of the closest point of land on Stave Island (SR 8). The western shoreline of Stave Island, facing the proposed lease, is composed of steep rocks and pebble beaches (SR 2). The upland is comprised of a mature undeveloped forest (SR 2). The bottom of the proposed lease site is characterized by mud (SR 3). Correcting for tidal variations, depths within the site would range between 81.6 to 113.6 feet at mean low water (SR 2).

B. Proposed Operations

The applicant proposes to culture marine algae on the proposed lease site using suspended culture techniques (App 1 & App 6). Marine algae would be cultured using 1,000-foot longlines suspended 3-6 feet below the surface of the water (App 6 & App 10). Depth control droppers, comprised of a floating buoy, a PVC pipe, and a small weight, would keep the longline positioned below the water's surface (App 9). According to the application, longlines would be deployed during September and October and would remain on site through the winter (App 14-15). Longlines and depth control droppers would be removed from the site in April, May, and/or June (App 15); mooring systems would remain in place year-round (App 15).⁷

The applicant plans to seed and tend the site from a 17-foot outboard skiff and harvest marine algae from the site using a 24-foot pontoon boat (App 14). Additional mechanized equipment proposed for the site include hydraulic or electrical winches and a wash-down pump (App 16).

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner upon determining that the project will not unreasonably

⁶ Exhibits 1, 2, and 3 are cited below as: Case file – “CF”; Application – “App”, site report – “SR”. Other exhibits are cited by number.

⁷ After the close of the evidentiary record, DMR received a comment that raised questions about the applicant's financial capability to conduct the proposed activities. Financial capacity is not a lease decision criterion. Instead, it is a threshold determination that the proposed lease is viable, made by DMR solely on the basis of the information submitted with the application. Here, the information provided to DMR in the application relating to Springtide Seaweed LLC's financial capability and existing infrastructure, including cost estimates for the project, were sufficient for DMR to determine that Springtide Seaweed LLC had sufficient resources to carry out the proposed activities.

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 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, docking facilities, or conserved lands owned by municipal, state, or federal governments. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

A. Riparian Access

The proposed site is located over 1,100 feet to the west of Stave Island in Frenchman Bay (SR 8). No docks or moorings were observed during the site visit on October 29, 2018 (SR 8). According to the Gouldsboro Harbormaster, there are no permitted moorings within the boundaries of the lease and the proposed lease does not interfere with the ability of riparian owners to access their property.⁸

Per the site report: “More than 850 feet of navigable waters, greater than 30 feet in depth at Mean Low Water (MLW), separate the proposed eastern boundary from the Stave Island shoreline” (SR 9). Given this distance, it appears that adequate room is available for riparian access to the shoreline of Stave Island.

During the review period and public hearing riparian landowners did not raise any concerns about access. Based on the absence of comments and testimony, it is reasonable to conclude that there are no concerns about the effects the proposed site may have on 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

During the site visit, staff observed several fishing vessels in the vicinity of the proposed lease site (SR 9). Two cruise ships anchored off the east side of Mount Desert Island were also observed (SR 9). According to the site report, there is more than 850 feet of navigable water between the proposed lease site and the 30-foot depth contour off the western shore of Stave Island (SR 8). This distance provides adequate room for navigation between the proposed lease and the west side of Stave Island. Additionally, per the site report:

“Greater than 3 miles of unobstructed navigable waters would remain available to the west of the proposed lease, if granted. Vessels transiting Frenchman Bay would be unimpeded by the proposed lease location.”

⁸ CF: Harbormaster Questionnaire dated May 10, 2018.

Given these distances, it also appears that the proposed lease would not unreasonably hinder vessels that may need to “alter course to the east or west around the lease” when navigating between the southern end of Stave Island and Calf Island/Flanders Bay (SR 9).

Longlines proposed for this lease would be submerged 3-6 feet below the surface of the water, and because of this, shallow draft vessels would be able to navigate over the site throughout the year (App 9 & SR 9). During the summer months, when recreational boat traffic is heaviest in Maine, longlines would be removed from the site (App 15).

The Gouldsboro Harbormaster indicated that the proposed site would not interfere with navigation in designated channels.⁹ During the review period and public hearing no one raised concerns about the impact of the proposed lease on navigation in the area. Based on the evidence, it is reasonable to conclude that navigation in the area will not be unduly affected by the presence of the proposed lease site.

Exclusivity. The applicant is requesting that boats with drafts of more than 3 feet be restricted from navigating in the proposed lease area from September 1st to June 29th to prevent interactions with horizontal longlines (App 29 & Redmond/Drury). During the public hearing, the applicant testified that these dates are conservative to ensure that adequate time is available to complete the proposed operations, taking into account seasonal differences between years (Redmond/Drury). To encourage the greatest number of compatible uses of the area, this restriction to navigation will be limited to times when longlines are deployed on the proposed lease. A condition reflecting this restriction will be included in the lease and is reasonable to accommodate multiple uses of the area and the proposed operations.

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

C. Fishing & Other Uses

During the site visit on October 29, 2018, several vessels were observed lobster fishing in the general vicinity of the proposed lease (SR 9). Lobster trap buoys were observed around the proposed lease, with the greatest concentration to the north (SR 9). During the site visit, approximately 15-25 lobster buoys were observed between the eastern boundary of the proposed lease and Stave Island (SR 9).

According to the application, longlines would be removed from the site, at a minimum, during the months of July and August (App 14-15). During the time when the site is devoid of longlines, the area would be available for commercial and recreational fishing (SR 9).

According to the Gouldsboro Harbormaster, lobster fishing in the area is “heavy from June to October” but “local fishermen were at scoping [and] had no objections”.¹⁰ During the following review period and public hearing, no one raised concerns about how the proposed lease may affect commercial and recreational fishing in the area. Based on the absence of comments, it is reasonable to conclude that

⁹ CF: Harbormaster Questionnaire dated May 10, 2018.

¹⁰ CF: Harbormaster Questionnaire dated May 10, 2018.

commercial fishermen, recreational fishermen, and others do not have concerns about the effects the proposal may have on fishing or other water-related uses of the area.

Exclusivity. The applicant is requesting that fishing and dragging be excluded from the lease area from September 1st to June 29 to prevent interactions with horizontal longlines (App 29 & Redmond/Drury). During the public hearing, the applicant testified that these dates are conservative to ensure that adequate time is available to complete the proposed operations, considering seasonal differences between years (Redmond/Drury). To encourage the greatest number of compatible uses of the area, this restriction to fishing and dragging will be limited to times when longlines are deployed on the proposed lease. A condition reflecting this restriction will be included in the lease and is reasonable to accommodate multiple uses of the area and the proposed operations.

Other aquaculture leases. According to the site report, there are no existing aquaculture operations within one mile of the proposed lease (SR 9). The closest existing aquaculture activity to the proposed lease is a 35.62-acre farm for the suspended culture of shellfish and marine algae, located ~1.9 miles to the northwest of the proposed lease. Due to this distance, it is unlikely that the proposed lease would impact other aquaculture leases or licenses in the area.

Based on this evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture activities in the area.

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

D. Flora & Fauna

Site observations. During the site visit, Department staff observed one lobster (*Homarus americanus*), a sea star (*Asterias sp.*), and an occasional shrimp (unidentified species) (SR 11). Unattached sugar kelp (*Saccharina latissima*) was also observed. Per the site report:

The soft mud bottom also had many small holes that likely have been made by wrymouth eels (*Cryptacanthodes maculates*), two of which were encountered with the ROV" (SR 12).

No eelgrass (*Zostera marina*) was observed during DMR's underwater assessment of the site (SR 13).

Fisheries & wildlife. Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that "Stave Island supports a bald eagle (*Haliaeetus leucocephalus*) nest and purple sandpiper (*Calidris maritima*) wintering habitat" (SR 13). The proposed lease is located more than 2,900 feet from the ¼-mile boundary around the documented bald eagle nest and approximately 800 feet to the west of designated purple sandpiper habitat (SR 13). Additionally, the proposed lease is located over 2,000 feet from rafting bird habitat located off the southern tip of Stave Island (SR 14). The Department sent a copy of the lease application to MDIFW for their review and comment. MDIFW indicated: "minimal impacts

are anticipated.”¹¹ Based on this evidence, it appears that the proposed 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

There are no publicly-owned beaches, parks, docking facilities, or conserved lands owned by municipal, state, or federal governments within 1,000 feet of the proposed lease site (SR 14).

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

F. Source of Organisms

According to the application, applicant intends to obtain kelp seed from the Springtide Seaweed Sea Vegetable Nursery, located in Port Clyde, Maine (App 2). During the public hearing, the applicant testified that they have recently relocated to Gouldsboro and are able to cultivate their nursery stock in a facility in South Gouldsboro. All seed would be sourced from Maine (Redmond/Drury).

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

G. Light

According to the application, no lights will be used on the proposed lease site (App 17).¹²

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

H. Noise

The applicant intends to service this site with a 17-foot skiff with a 60-horsepower outboard engine and a 24-foot pontoon boat with a 100-horsepower outboard engine (App 16). Additionally, the applicant intends to utilize a hydraulic or electric winch and a wash-down pump on site (App 16). Visits to the proposed lease site to plant and tend longlines would average approximately 2-3 hours, and would occur an average of two to three days per month (App 16). Harvesting operations would occur in the spring; visits would average approximately 2 hours, and would occur an average of three days per week (App 16). Based on this evidence, it appears that any noise generated by operations on the proposed site is unlikely to have a significant effect at the boundaries of the lease site.

¹¹ CF: Email from J. Perry to C. Burke and A. Ellis dated May 16, 2018.

¹² Although not stated in the application, DMR anticipates that lights may need to be used at the site for emergency purposes. The use of lights in such a manner does not change the finding that the aquaculture activities will not result in an unreasonable impact from light at the boundaries of the lease site.

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

I. Visual Impact

The applicant is proposing to culture marine algae using 1,000-foot longlines suspended 3-6 feet below the surface of the water (App 6 & App 10). Mooring balls, which are proposed to be red in color, and white depth control droppers, are the only gear proposed above the surface of the water (App 9). According to the application, no structures will be located on the site (SR 11). The height of the proposed gear complies with applicable regulations governing the height of structures on lease sites.

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

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

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease of 20.02 acres to Springtide Seaweed LLC for ten years for the cultivation of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and nori/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. 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).¹³ 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. Longlines may only be deployed on the lease site September 1st through June 29th of each year.
- c. Lobster fishing and dragging are prohibited within the boundaries of the lease site during the times when longlines are deployed.
- d. Boats with drafts of more than 3 feet are restricted from navigating in the proposed lease area during the times when longlines are deployed.

7. REVOCAION OF LEASE

The Commissioner may commence revocation procedures upon determining, pursuant to 12 M.R.S.A §6072 (11), that no substantial aquaculture has been conducted within the preceding year, that the lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

Dated: 5/14/19

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

¹³ 12 M.R.S.A §6072 (7-B) states: "The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose."