

Standard Aquaculture Lease Application
Suspended culture of shellfish and marine algae
Casco Bay, Falmouth

March 15, 2019

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Wild Ocean Aquaculture, LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 11.00¹ acres located east of Clapboard Island, Casco Bay, in the Town of Falmouth, Cumberland County, Maine. The proposal is for the suspended culture of blue mussels (*Mytilus edulis*), sugar kelp (*Saccharina latissima*), oarweed (*Laminaria longicruris*), fingered kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), dulse (*Palmaria palmata*), nori/laver (*Porphyra sp.*), sea lettuce (*Ulva lactuca*), sea scallops (*Placopecten magellanicus*), American oysters (*Crassostrea virginica*), and European oysters (*Ostrea edulis*). The Department accepted the application as complete on May 2, 2018. A public hearing on this application was held on February 28, 2019 at the Falmouth Town Hall in Falmouth, 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 Falmouth, riparian landowners within 1,000 feet of the proposed site, and subscribers of the Department’s aquaculture email listserv. Notice of the hearing was published in *The Forecaster* on January 31, 2019 and February 14, 2019. Notice was also published in the *Portland Press Herald* on January 24, 2019 and in the February 2019 edition of *Commercial Fisheries News*.

Table 1 contains the names of individuals who provided sworn testimony at the public hearing.

Table 1: Public testimony

Name	Affiliation
Matthew Moretti Gary Moretti	Wild Ocean Aquaculture, LLC
Jon Lewis	Aquaculture Division Director, DMR
Peter Rand, Nate Perry, Neal Kolterman, Colleen Francke, Liz Johndrow, James Crimp, Connor Jones, Jon Gorman, Tove Rasmussen	Members of the Public

¹ Applicant originally requested 11.02 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 11.00 acres.

Matthew and Gary Moretti of Wild Ocean Aquaculture, LLC described the proposed project, and Jon Lewis of DMR described the site visit. Members of the public provided testimony on the applicant's operations, the applicant's character, and noise generated from or near the proposed lease site. Alan Twombly, the Harbormaster for the Town of Falmouth attended the hearing, but did not offer testimony. One member of the public asked general questions of the applicant.

The hearing was recorded by DMR. The Hearing Officer was Flora Drury. The evidentiary record before the Department regarding this lease application includes five 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.²

LIST OF EXHIBITS³

1. Case file
2. Application
3. DMR site report
4. Wild Ocean Aquaculture 1 – PowerPoint describing proposal
5. Wild Ocean Aquaculture 2- Video describing company and operations

2. DESCRIPTION OF THE PROJECT

A. Site Characteristics

On July 10, 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 southeast of Clapboard Island in Casco Bay (SR 2). At mean low water, the N-W boundary of the proposed lease is located approximately 1,050 feet to the closest point of land on Clapboard Island (SR 9). Clapboard Island has a rocky shoreline with uplands hosting both mixed vegetation and residential buildings (SR 2). The bottom of the proposed lease site is characterized by soft mud (SR 3). According to the site report, depths within the site range between 40.5 and 48.5 feet at mean low water (SR 2).

B. Proposed Operations

The purpose of the proposed lease is to culture shellfish and marine algae (App 1). Blue mussels would be cultured on 35' dropper ropes suspended from 40' x 40' mussel rafts (App 20- 22). Marine algae and scallops would be cultured using 1,000' longlines suspended below the surface of the water (App 21). Marine algae would be seeded to longlines suspended 7' below the surface of the water at all tides (M. Moretti/Drury). Scallops would be cultured using lantern nets and scallop droppers hung from longlines

² In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

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

(App 7). Scallop longlines would be maintained at a static depth; the longline would never be less than 10 feet below the surface of the water (M. Moretti/Drury). The applicants propose to culture oyster species using lantern nets hung from longlines (M. Moretti/Drury).

Initially, the applicant proposes to deploy ten 40' x 40' mussel rafts on the proposed lease, nineteen 1,000' longlines for kelp and scallop culture, and a single 400' longline for scallop culture (App 26). At maximum layout, the applicant proposes to deploy twenty 40' x 40' mussel rafts, a maximum of fourteen 1,000' longlines for kelp and scallop culture, and a single 400' longline for scallop culture (App 27). Neither the initial nor the maximum layout included a plan for cultivating oysters; at the public hearing the applicant testified that if oysters were to be grown on the proposed site, they would be done so in a manner similar to that of scallop cultivation (M. Moretti/Drury).

The applicant plans to service the site from a 38-foot lobster boat, a non-powered pontoon barge, and a small skiff (App 6). Additional mechanized equipment proposed for the site include a gas engine to run hydraulic equipment on the pontoon barge⁴, two power washers, and a scallop washing machine (App 4 & App 9). Production activities on the proposed lease would occur throughout the year, except for marine algae culture. Longlines for the culture of marine algae would be removed from the site when not in use; most seaweed species are cultivated from late fall through late spring (App 7).

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; 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 lease is located over 1,050 feet to the southeast of Clapboard Island in Casco Bay (SR 9). The southern shore of the island, which faces the proposed lease, hosts a single private residence; at the time of MDMR's site visit, no docks were observed along this shoreline (SR 9). A single mooring was observed within the boundaries of the proposed lease on July 11, 2018 (SR 9). According to testimony provided by Matthew Moretti, this mooring belongs to the applicant (M. Moretti/Drury).

⁴ Hydraulic equipment to be used on the barge include a declumper, grader, hauler, seeder, net reel, and washing system (App 4).

The distance between Clapboard Island and the proposed lease appears to provide adequate room for riparian access to Clapboard Island shorelines. According to the Falmouth Harbormaster, the proposed lease does not interfere with the ability of riparian owners to access their property.⁵

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, DMR staff observed several motorized and self-propelled recreational vessels in the vicinity of the proposed lease (SR 10). A single lobster boat was observed engaging in commercial fishing activities within the boundary of the proposed lease, and approximately five additional commercial fishing vessels were observed within a 2-mile radius of the proposal (SR 10).

The proposed lease is located between Clapboard Island, to the west, and Chebeague, Little Chebeague, and Long Islands to the east (SR 9). Per the site report:

If granted, more than 1.23 miles would remain available for navigation between the lease and the 36-foot contour line located off the western shoreline of Little Chebeague Island (SR 9).

Additionally, a recommended two-way route for deep draft vessels is located between Clapboard Island and the islands to the east (SR 10). This route is located over 3,500 feet to the east of the proposed lease (SR 10).

Cow Island Ledge is located between the two-way route for deep draft vessels and the proposed lease site (SR 9). According to the site report, if the proposed lease were granted “Vessels transiting between the southeastern shore of Clapboard Island and Cow Island Ledge would have available a minimum of 1,180 feet of water with depths greater than 36 feet” (SR 9).

Navigational hazards limit navigation to the west, between the proposed lease and Clapboard Island (SR 9). According to the site report, “Vessels that can navigate in the shallow waters surrounding Clapboard Island at low water will not be impeded by the lease, if granted” (SR 10).

The Falmouth Harbormaster indicated that the proposed site would not interfere with navigation in designated channels.⁶ Additionally, 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.

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

C. Fishing & Other Uses

⁵ CF: Harbormaster Questionnaire dated May 15, 2018.

⁶ CF: Harbormaster Questionnaire dated May 15, 2018.

During the site visit on July 10, 2018, a lobster boat was observed hauling traps within the proposed lease site (SR 11). Approximately five other lobster boats were observed within two miles of the proposed lease, and lobster buoys were observed both within the proposed lease area, and in the surrounding area (SR 11). According to the site report, both lobsters (*Homarus americanus*) and crabs (*Cancer sp.*) were observed within the proposed lease site by DMR divers (SR 11).

According to the Falmouth Harbormaster, “commercial and recreational lobster as well as occasional striper fishing” occur within the proposed lease area.⁷ During the review period and public hearing, no one raised concerns about how the proposed lease may affect commercial fishing, recreational fishing, or other uses of the area. It is reasonable to conclude from the lack of comments and public testimony that lobster fishermen, striper fishermen, and others do not have concerns about the effects the proposal may have on fishing or other water-related uses of the area.

Given the open water available to the north, east, and west of the proposed lease, it is reasonable to conclude that the proposed lease will not unreasonably interfere with lobster fishing, striper fishing, or other activities that might occur in these directions. Additionally, according to the site report, “room is available for lobstermen to set traps, and hook and line fishermen to fish” between Clapboard Island to the west, and the proposal (SR 11). Based on the evidence, and the lack of public comment, it is reasonable to conclude that commercial and recreational fishing activities, along with other uses of the area, will not be unduly affected by the proposed lease.

Exclusivity. The applicant is requesting that dragging and lobster fishing be excluded from the lease area (App 12). During the public hearing, the applicant amended this request to allow lobster fishing in sections of the proposed lease site seasonally unoccupied by marine algae longlines (M. Moretti/Drury). A restriction on dragging is reasonable to accommodate the proposed operations because the proposed mooring systems would remain on site year-round. Additionally, a restriction of lobster fishing, with the exception of lobster fishing in areas of the lease seasonally unoccupied by marine algae longlines, is reasonable to accommodate the proposed operations while also encouraging the greatest number of compatible uses of the area. A condition reflecting this restriction will be included in the lease.

Other aquaculture leases. According to the site report, there is one active lease and one pending lease application within one mile of the proposed lease (SR 11).⁸ The closest existing aquaculture activity to the proposed lease is held by the applicant, Wild Ocean Aquaculture, LLC, and is located within the boundaries of the proposed lease (SR 11). The closest aquaculture operation associated with another entity⁹ is located approximately 1,850 feet from the proposed lease for the suspended culture of marine algae; this experimental lease is pending lease execution (SR 11). Due to this distance, it is unlikely that the proposed lease would impact other aquaculture leases or licenses in the area.

⁷ CF: Harbormaster Questionnaire dated May 15, 2018.

⁸ The site report also includes the presence of two Limited Purpose Aquaculture (LPA) licenses within one mile of the proposed lease, however, these LPAs were terminated after the Site Report was published.

⁹ Oceans Balance, Inc

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. Department staff characterized benthic diatoms, sand shrimp (*Crangon septemspinosa*), and mysid shrimp (Family *Mysidae*) as abundant along the dive transect conducted within the proposed lease during the site visit (SR 12). Department staff characterized burrowing anemone (*Cerianthus sp.*) as common, and palmate sponge (*Isodictya sp.*) as rare (SR 12). Lobster (*H. americanus*) and crab (*Cancer sp.*) were also observed within the proposed lease site, and Department staff characterized their abundance as rare (SR 12). No eelgrass was observed during DMR's underwater assessment of the site (SR 14).

Fisheries & wildlife. According to the site report, data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that "Tidal Wading Bird and Waterfowl Habitat encircles Clapboard Island but does not intersect the proposed lease site" (SR 14). Additionally, a bald eagle (*Haliaeetus leucocephalus*) nest is located on the northern end of Clapboard Island; the ¼-mile boundary associated with this nest is located more than 1,600 feet to the north of the proposed lease (SR 15).

Clapboard Island Ledge and Screeching Gull Island, which are located to the south of Clapboard Island and to the west of the proposed lease, are categorized by MDIFW as Sea Bird Nesting Islands (SR 14). These ledges and the surrounding area are further categorized as Essential Habitat for the roseate tern (*Sterna dougallii dougallii*), which is listed as an Endangered Species by both the federal and state government (SR 14-15). The proposed lease is located more than 460 feet to the east¹⁰ of this Essential Habitat (SR 15).

The Department sent a copy of the lease application to MDIFW for their review and comment. MDIFW indicated that "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 16).

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.

¹⁰ The site report incorrectly states that the proposed lease is located to the west of this Essential Habitat.

¹¹ CF: Email from J. Perry to C. Burke and A. Ellis dated May 21, 2018.

F. Source of Organisms

Table 2 displays the source of stock for the species proposed for cultivation. The proposed sources are approved sources of seed stock.

Table 2: Proposed source of stock

Species	Source
Blue mussels (<i>Mytilus edulis</i>)	Wild
Sea scallops (<i>Placopecten magellanicus</i>)	Wild and Pine Point Oysters (Cape Elizabeth, ME)
Oysters: American oysters (<i>Crassostrea virginica</i>) and European oysters (<i>Ostrea edulis</i>)	Pine Point Oysters (Cape Elizabeth, ME)
Marine Algae: sugar kelp (<i>Saccharina latissima</i>), oarweed (<i>Laminaria longicruris</i>), fingered kelp (<i>Laminaria digitata</i>), winged kelp (<i>Alaria esculenta</i>), dulse (<i>Palmaria palmata</i>), nori/laver (<i>Porphyra sp.</i>), sea lettuce (<i>Ulva lactuca</i>)	Sea Green Farms (Biddeford, ME)

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 on a regular basis, other than those for navigational purposes (App 9).

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 plans to service the site from a 38-foot lobster boat, a non-powered pontoon barge, and a small skiff (App 6). Additional mechanized equipment proposed for the site include a 22-horsepower, 4-stroke gas engine to run hydraulic equipment, including a declumper, grader, hauler, seeder, net reel, and washing system, on the pontoon barge (App 4 and App 9). The applicant also proposes two power washers, which would be powered with 4-stroke, 7-horsepower motors, and a scallop washing machine, which would be powered by a 70-horsepower diesel generator and water pump (App 7). According to the application, all powered equipment would be equipped with a muffler, and “the noisiest machines also have sound dampening housings” (App 9). Production activities on the proposed lease would occur throughout the year, with an average daily service time of approximately six hours (App 6).

Testimony provided at the hearing by Neal Kolterman indicated that noise from Wild Ocean Aquaculture, LLC's current operations can be heard from his home, which is located on the western shore of Clapboard Island. Mr. Kolterman stated that the proposed operations would be "permanently disruptive". Colleen Francke testified at the hearing that, from her time as a commercial lobsterman fishing in the area, she has "not noticed any substantial noise coming from this farm greater than any of the other lobster boats that [she] fish[es] around". According to testimony provided at the public hearing by Matthew Moretti, the noise generated by the proposed lease activities would be no more significant than that produced by a standard lobster boat.

Based on the evidence provided in the application, it appears that reasonable measures will be taken by the applicant to mitigate noise impacts from the proposed lease site. Additionally, based on evidence provided in the public hearing, it appears that noise produced by the proposed operations are not significantly different than that generated by other operations in the area.

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 blue mussels using 40' x 40' mussel rafts, which would be 3' 10" in height and both gray and black in color (App 21-22). Marine algae and scallops would be cultured on longlines suspended 7-10 feet below the surface of the water (App 21). Flotation and mooring buoys are proposed to be yellow in color (App 5).

A 40' x 22' non-powered pontoon barge is proposed to be moored on site (App 4). A house, with a height of 12', is proposed to be located atop this barge (App 4). The height of the proposed gear and on-site support structures 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 shellfish and 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 Regulation 2.37(1)(A)(10).

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

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease of 11.00 acres to Wild Ocean Aquaculture, LLC for twenty years for the cultivation of blue mussels (*Mytilus edulis*), sugar kelp (*Saccharina latissima*), oarweed (*Laminaria longicuris*), fingered kelp (*Laminaria digitata*), winged kelp (*Alaria esculenta*), dulse (*Palmaria palmata*), nori/laver (*Porphyra sp.*), sea lettuce (*Ulva lactuca*), sea scallops (*Placopecten magellanicus*), American oysters (*Crassostrea virginica*), and European oysters (*Ostrea edulis*) 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).¹² 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. Dragging is prohibited within the boundaries of the lease site.

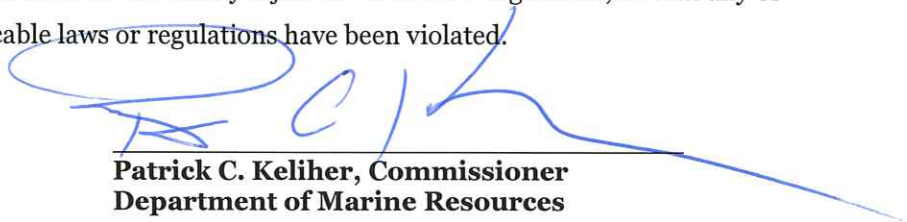
¹² 12 MRSA §6072 (7-B) states: "The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site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

- c. Lobster fishing is prohibited within the boundaries of the lease site, except in those sections of the lease site occupied by marine algae longlines and only during those times of the year when the longlines have been removed and marine algae is not being cultivated.

7. REVOCAION OF LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 M.R.S.A §6072 (11) and DMR Rule Chapter 2.42 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: 3/15/19



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