

**STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES**

Maine Fresh Sea Farms, LLC

Standard Aquaculture Lease Application
Suspended Culture of Marine Algae
Damariscotta River, South Bristol, Maine

DAM CC3

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Maine Fresh Sea Farms, LLC applied to the Department of Marine Resources (DMR) for a ten-year standard aquaculture lease on 3.58¹ acres in Clark Cove, Damariscotta River, South Bristol, Maine. The proposal is for the suspended culture of marine algae (*Saccharina latissima*, *Laminaria angustissima*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra umbilicalis*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella tenera*, *Desmarestia viridis*, *Scytosiphon lomentaria*, and *Petalonia fascia*).

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on January 21, 2020, and a scoping session was held on November 9, 2020. DMR accepted the final application as complete on March 18, 2021. Notice of the completed application and public hearing was provided to state and federal agencies, the Town of South Bristol, riparian landowners² within 1,000 feet of the proposed site, and subscribers to DMR’s aquaculture email listserv. The hearing was scheduled for March 21, 2023. Notice of the hearing was published in the *Lincoln County News* on February 16, 2023, and March 2, 2023. The public notice for the hearing indicated that the proceeding would be conducted both in-person and remotely and directed interested persons to contact DMR to sign up to participate in the proceeding. No individuals registered to participate or intervene in the hearing.

Sworn testimony was given at the March 21, 2023, hearing by the following witnesses:

Name	Affiliation
Peter Fischer	Maine Fresh Sea Farms, applicant
Dirk Brunner	Interested person

¹ The existing lease DAM CC3x is 3.62 acres, but the coordinates provided in the application encompass 3.58 acres, according to DMR calculations.

² The Department defines “riparian owner” as a shorefront property owner.

South Bristol municipal officials in attendance included Cecil Burnham, South Bristol Harbormaster, and Bruce Farrin, Jr., South Bristol Selectboard member. Messrs. Burnham and Farrin did not offer testimony. No other State or Federal agencies attended. Acting as Counsel for DMR was Katherine Tierney, Assistant Attorney General. Additional DMR staff and members of the public attended the hearing but did not offer testimony. The hearing was recorded by DMR. The Hearing Officer was Lisa White.

The evidentiary record before DMR regarding this lease application includes three exhibits introduced at the hearing and the testimony at the hearing. The evidence from these sources is summarized below.^{3,4}

LIST OF EXHIBITS

1. Case file
2. Application
3. DMR site report, issued on April 12, 2022

2. DESCRIPTION OF THE PROJECT

A. Site Characteristics

The applicant currently holds a 3.62 acres experimental lease site, DAM CC3x. The experimental lease was granted on September 6, 2017. The purpose is to explore the commercial feasibility of cultivating various species of marine algae (DAM CC3x Final Decision 2017). The primary production method involves deploying 10 longlines that are approximately 450 feet in length, spaced 30 feet apart, and submerged 3 to 10 feet below the water's surface. The experimental lease expired on September 5, 2020. However, a provision of law, 12 M.R.S.A §6072-A(20), allows the holder of an experimental lease to continue operating the site while the Department considers the standard lease proposal, so long as the standard lease proposal overlaps a portion or all of the existing experimental lease. In this case, the standard lease proposal encompasses the entirety of the experimental lease.

On July 6, 2021, DMR staff assessed the proposed lease site and the surrounding area in consideration of the criteria for granting a standard aquaculture lease (SR 2). The proposed lease site occupies subtidal waters in Clark Cove in South Bristol. The shoreline surrounding the proposal is mostly rocky leading to mixed forest and grassy fields. Multiple houses are present along the shoreline of Clark Cove, within 1,000 feet of the proposed lease site, and others located at greater distances are visible from the proposed site (SR 2).

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

⁴ In references to testimony, “Smith/Jones” means testimony of Smith, questioned by Jones.

Water depth was not measured at the proposed lease site during the July 6, 2021 site visit. However, depth measurements were collected previously with a transom mounted depth sounder on August 4, 2016 during the site assessment for the applicant’s existing experimental lease, DAM CC3x. At the time of DMR’s site assessment on August 4, water depths at the proposed lease corners ranged from 27 feet to 52 feet. Therefore, correcting for tidal variation, water depths at the proposed lease corners are approximately 21 feet to 46 feet at mean low water (MLW, 0.0’) (SR 6). The bottom of the proposed lease area is composed of soft mud (SR 7).

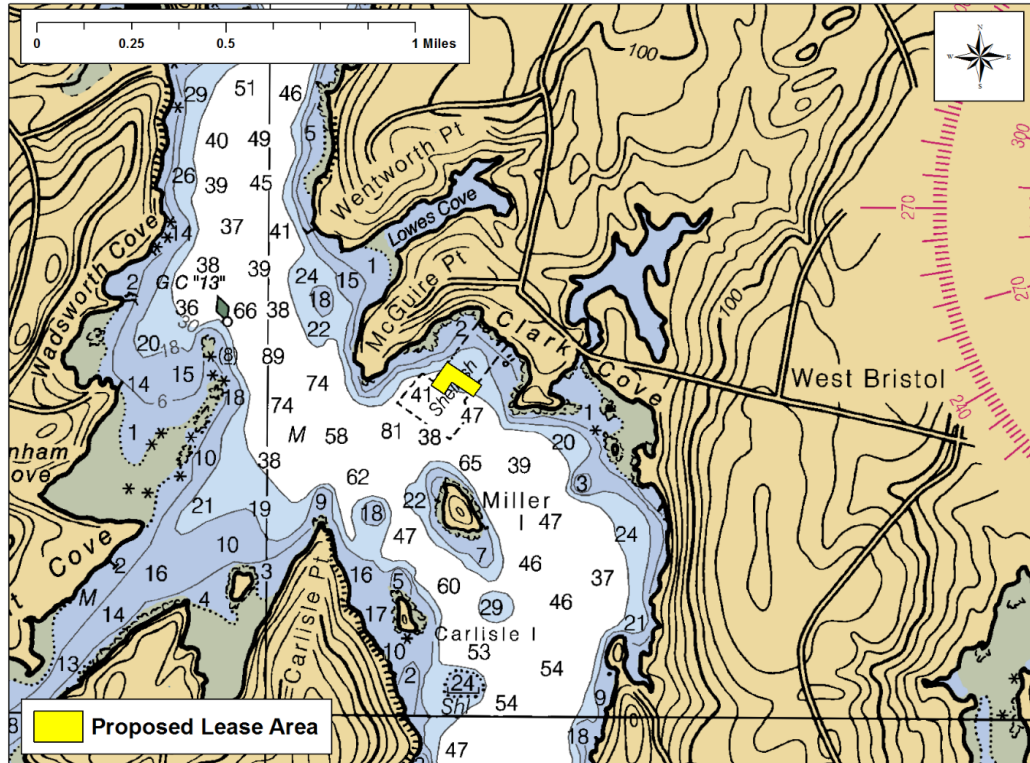


Figure 1: Proposed lease site and surrounding area. Image taken from DMR’s site report.

Application Coordinates (NAD83) – 3.58 acres

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>
1	43.928941° N	69.572417° W then 359.89 feet at 303.40° True to
2	43.929479° N	69.573563° W then 200.36 feet at 214.18° True to
3	43.929022° N	69.573986° W then 217.63 feet at 304.29° True to
4	43.929355° N	69.574672° W then 394.38 feet at 34.70° True to
5	43.930249° N	69.573828° W then 575.44 feet at 123.57° True to
6	43.929385° N	69.571999° W then 195.69 feet at 214.63° True to Corner 1.

B. Proposed Operations

The proposed site is currently operated by the applicant through an existing experimental lease, DAM CC3x. The applicant proposes to culture marine algae on the proposed lease site using suspended culture techniques (App 1). During the public hearing, the applicant clarified that sugar kelp is currently the only species cultivated on the site (Fischer/Ellis). A total of 10 horizontal longlines measuring up to 450 feet in length would be deployed 3-6 feet below the surface of the water (App 4).

The applicant anticipates that sugar kelp will be seeded from mid-September to November over a maximum of five days anticipated for seeding activities. At the hearing, the applicant stated that sugar kelp would be the primary species grown (Fisher/White). Dulse will be seeded from June to September over two days. Other marine algae species will be seeded throughout the year in small quantities. Species other than kelp (*Agarum cribrosum*, *Porphyra umbilicalis*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella tenera*, *Desmarestia viridis*, *Scytosiphon lomentaria*, and *Petalonia fascia*) will require a maximum of one day per species for anticipated seeding activities of non-kelp species.

Gear preparation will begin in June for dulse and August for all other species and go through September. Longlines are left in the water throughout the year. On-site tending activities will include cleaning buoys and mooring balls by hand and cleaning ropes by hand with a loop of rope or with tidal currents. Hardware will also be inspected and replaced, as needed. After seeding, lines will be checked every few weeks and monthly at a minimum during mid-winter.

Product will be harvested from lines by lifting them from the water in sections by hand or using electric winches, washing, if needed, and cutting the product off the line by hand. Harvested marine algae will be brought to the dock in totes. If product needs to be cleaned before harvesting, then it will be washed at the site using a gasoline powered deck pump, deck hose, and a two-inch nozzle. Sugar kelp harvesting will take place from April 1 to June 15 (Fischer/White). A maximum of five days of continuous daylight harvesting would take place to fill the largest possible order. Species other than kelp will be harvested throughout the year in limited quantities, depending on the market (Fischer/Tierney).

The proposed lease site will contain suspended surface gear. The power equipment proposed for the site includes the following:

Equipment	Description	Months of Operation/Frequency of Use
Deck Pump	Moves large volumes of water to clean seaweed. Powered by gas engine.	Year-round. Transported to the site and utilized as needed (up to 20

		days kelp harvest in spring for 5-10 min periods)
Electric Winch	Installed on 19 ft skiff to haul lines during harvest periods	April through May, primarily, and occasionally at other times of the year

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; navigation; fishing or other uses of the area, taking into consideration other aquaculture uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or 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

DMR’s Chapter 2 regulations require the Commissioner to examine whether riparian owners can safely navigate to their shore. 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, § 2.37.

At the time of DMR’s site assessment on July 6, 2021, a total of two docks and one larger pier and float infrastructure were observed (SR 8). Multiple residential buildings were observed along the shoreline of Clark Cove. The nearest observed mooring was approximately 90 feet to the west of the proposal. Staff conducting the site review reported that depending on the size and type of vessel that uses the mooring, if the lease were granted, accessing the mooring may be difficult in close proximity to suspended gear (SR 9). During the hearing, the applicant stated that the mooring just outside the lease site is owned by Pemaquid Oyster Farm and he is working with that owner to move the mooring further away from the site (Fischer/Ellis). No one from Pemaquid Oyster Farm attended the hearing. In addition, the applicant is currently operating an experimental lease, DAM CC3x, in the same footprint with the same gear type as the proposed standard lease. DMR’s site assessment stated that if granted, the proposed lease would not

result in additional interference to riparian access, rather it would be a long-term continuation of existing interference, if any. No testimony concerning riparian ingress and egress was given at the hearing.

The Department finds that while customary routes of ingress and egress may be affected, and some course adjustments may be necessary to avoid the project, sufficient area remains for reasonable ingress and egress by riparian owners.

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 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. DMR's site assessment states that Clark Cove is used for both commercial and recreational purposes (SR 2). The marked navigational channel in the Damariscotta River is located south of the proposal. An existing aquaculture lease, DAM CC2, is located between the proposed lease and the main channel. The site assessment states that if the proposed lease were granted it would not impede vessel flow within the main channel (SR 9).

During DMR's site assessment on July 6, 2021, one commercial lobster vessel was observed entering the eastern shore of Clark Cove from the main navigation channel. DMR's site assessment states that the proposal does not prevent vessel access to Clark Cove. The site assessment states approximately 450 feet and 260 feet would remain between the east and west boundaries of the proposed lease, respectively, and the shoreline. The site report also notes that adequate site markings would be imperative to ensure safe navigation in the area (SR 9). Dirk Brunner asked the applicant about corner markers noting that they are important for safe navigation and communication (Fischer/Brunner). The applicant stated the site will be properly marked, in accordance with the updated regulations. No other testimony regarding interference with navigation was given at the hearing.

The Department finds that based on available information and hearing testimony, the placement of the proposed project will still allow for adequate distances for navigation for typical vessels using Clark Cove. The applicant noted that the site would be marked in accordance with DMR regulations.

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

C. Fishing & Other Water-Related Uses

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. Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area.

Fishing. At the time of the Department's site assessment on July 6, 2021, approximately 6 lobster (*Homarus americanus*) trap buoys were observed in Clark Cove to the west, north, and east of the proposal (SR 10). The nearest lobster trap observed was approximately 130 feet from the proposal. The nearest work raft to the proposal was approximately 440 feet to the north. There appears to be significant activity in the cove associated with commercial fishing. The nearshore lobster fishery in Maine takes place during the summer and fall seasons due to the annual migration and molt cycle of lobsters.

Exclusivity. Commercial fishing, recreational fishing, and motorized vessels will be prohibited within the proposed lease area. When longlines are deployed certain activities such as lobster fishing, trawling, or dragging could damage the proposed gear. In addition, motorized vessels may become entangled in the proposed gear. These restrictions are reasonable to enable the aquaculture project to be carried out while encouraging the greatest number of compatible uses of the area, as provided in 12 M.R.S.A §6072-A (15). Conditions reflecting these restrictions will be included in the lease.

No testimony concerning fishing was given at the hearing. Due to the location of the existing lobster fishing activity and the depths at the project site, it is unlikely that commercial or recreational fishing will be impacted by the proposed activity. The applicant has operated an experimental lease site in the area for over three years. The proposed lease would not result in additional interference as it will occupy the same footprint as the experimental.

Other aquaculture uses: 12 Limited Purpose Aquaculture (LPA) licenses and 4 active leases are located within 1 mile of the proposed lease (SR 10). The proposed lease would replace experimental lease, DAM CC3x, which occupies the same footprint. The nearest lease outside the proposed boundaries is DAM CC2, which is held by the applicant. Access to, and navigation around, the nearby aquaculture sites is unlikely to be impacted by the proposal, if the lease were to be granted.

No testimony was received by other aquaculture lease or license holders in the area to indicate they have concerns regarding the proposed activities. Based on this evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture activities in the area.

Other water-related uses. The application states that occasional kayaking occurs in the cove and that swimming is limited to docks and floats (App 13). The applicant stated that kayaking, swimming, and paddleboarding would be permitted and possible within the boundaries of the site (Fischer/Brunner).

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

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.

Site observations. On July 6, 2021, DMR staff conducted ROV drop camera transects to assess the epibenthic ecology of the area. The observed bottom was soft mud (SR 11). Other organisms were noted occasionally and are listed below:

Species Observed	Abundance
Benthic Diatoms	Abundant
Crab (<i>Cancer sp.</i>)	Rare
Unidentified Macroalgae	Rare
Burrows	Patchily Common
Tracks	Patchily Common

Eelgrass. According to historical data collected by DMR in 2005, no eelgrass (*Zostera marina*) is historically documented in Clark Cove. Additionally, no eelgrass blades were observed during DMR’s limited benthic observation via ROV on July 6, 2021 (SR 13).

Wildlife. No wildlife was observed during DMR’s assessment on July 6, 2021, but a previous site assessment in the area noted herring gulls (*Larus argentatus*), double-crested cormorants (*Phalacrocorax auritus*), and common terns (*Sterna hirundo*) on August 4, 2016 (SR 14).

According to GIS (Geographic Information System) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS, the proposed lease is approximately 870 feet to the west of an area designated as Tidal Waterfowl and Wading Bird Habitat (Figure 6). Tidal Waterfowl and Wading Bird Habitat is defined under Maine's Natural Resources Protection Act (NRPA) as Significant Wildlife Habitat. Additionally, the proposal is over 1,000 feet from the 660-foot protective buffer around a bald eagle nest on Miller Island (SR 14). Furthermore, on May 10, 2021, a MDIFW wildlife biologist responded by email to a “Request for Agency Review and Comment” stating that “minimal impacts to wildlife are anticipated.” No testimony concerning flora and fauna was given at the hearing. Based on this evidence, it appears that the proposed lease site will not interfere will 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

When examining interference with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of beach, park, docking facility, or certain conserved lands owned by the Federal Government, the State Government, or a municipal government.

There are no beaches, parks, docking facilities, or conserved lands owned by federal, state, or municipal government within 1,000 feet of the proposed lease site (SR 15). A conservation easement held by the MDIFW is located approximately 450 feet to the east of the proposed lease (SR 15). No testimony concerning public lands was given at the hearing.

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

The applicant will obtain seed from Spring Tide, LLC, which is an approved source of stock.

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 would be used on the proposed lease site and no work would occur beyond daylight hours, except for an emergency that required immediate attention (App 10). The applicant testified that in the case of an emergency where lighting was necessary, he would use headlamps (Fischer/White). There was no testimony provided at the hearing to indicate there was concern regarding light associated with the proposed activities.

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

H. Noise

According to the application, a small, gas-powered deck pump will be used during harvest operations and occasionally at other times (App 9). Vessels to be used on site include a 19 ft skiff with 115 hp four stroke engine and a 24 ft pontoon boat with 40 hp four stroke engine. An electric winch will be used aboard the skiff periodically. The deck pump will be housed in a plywood box to reduce noise from the gas engine. The four stroke outboards have standard exhaust. The electric winch will emit very little

noise (App 9). Based on this evidence, it appears that any noise generated by the proposed operations is unlikely to have a significant effect 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 plans to deploy a total of 10 horizontal longlines measuring up to 450 feet in length as described in Section 2B, above. No support structures would be located on site. At the hearing, the applicant acknowledged he is aware of DMR's height and visual impact limitations (Fischer/White).

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, 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 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 stock 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 to Maine Fresh Sea Farms for 3.58 acres for 10 years for the cultivation of marine algae (*Saccharina latissima*, *Laminaria angustissima*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra umbilicalis*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella tenera*, *Desmarestia viridis*, *Scytosiphon lomentaria*, and *Petalonia fascia*) using suspended culture techniques. Final approved coordinates for this lease are provided in Section 2A above. 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).⁵ 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:

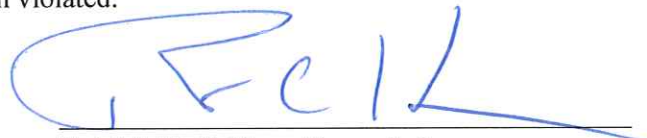
1. Commercial fishing, recreational fishing, and motorized vessels are prohibited except by authorization of the leaseholder.

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 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: _____

 6/26/23



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

⁵ 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.”

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Experimental Aquaculture Lease Application
Suspended culture of marine algae
Clark Cove, Damariscotta River

Maine Fresh Sea Farms, LLC
DAM CC3x
Docket # 2016-02-E
September 6, 2017

PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Maine Fresh Sea Farms LLC, a Maine company, applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease on 3.62 acres¹ located in Clark Cove, Damariscotta River, South Bristol, in Lincoln County, for the purpose of cultivating fourteen species of marine algae (*Laminaria saccharina*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra spp*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tinkalite*, *Chorda tomentosa*, *Gabriella spp*, *Demersal verities*, *Scytosiphon spp*, and *Petalonia spp*.) using suspended culture techniques. DMR accepted the application as complete on February 16, 2016. During the 30-day public comment period, six requests for a public hearing were received by the Department. A public hearing was held on May 17, 2017 at the South Bristol Town Hall in Walpole, Maine. No one intervened in this case.

1. THE PROCEEDINGS

Notice of the application, the DMR site report, the comment period, and the public hearing were sent to state and federal agencies which were requested to review the project, as well as to riparian landowners, the Town of South Bristol and its Harbormaster, members of the Legislature, representatives of the press, aquaculture and environmental organizations, and others on the Department’s mailing list. Notice of the public hearing was published in the *Lincoln County News* on April 13, 2017 and May 11, 2017 and in the May 2017 edition of *Commercial Fisheries News*.

Sworn testimony was given at the hearing by the applicant represented by Seth Barker and Peter Fischer; Jon Lewis, Aquaculture Program Lead, DMR Aquaculture Division; Chester Rice, Selectman, Town of South Bristol, and Zone 8-E Lobster Council member; Cecil Burnham, Harbormaster, Town of South Bristol; and Dirk Brunner a riparian landowner in Walpole. Seth Barker and Peter Fischer described the proposed project. Mr. Lewis described the Department’s site visit. Mr. Rice and Mr. Burnham discussed navigation and commercial fishing activity within Clark Cove. Mr. Brunner described how the proposed lease site would affect his use of Clark Cove. David Rice, Assistant Harbormaster, Town of South Bristol, asked the applicant questions about the proposed operations. Flora Drury, Marine

¹ The applicant originally applied for 3.92 acres, but the acreage was reduced by the Department to accommodate for navigation within Clark Cove.

Scientist, DMR Aquaculture Division, answered questions about Limited Purpose Aquaculture Licenses (LPAs). No representatives from federal, or other state agencies indicated their presence at the hearing.

Each witness was subject to questioning by the Department, the applicant, the intervenors, and members of the public. The hearing was recorded by DMR. The Hearing Officer was Diantha Robinson. The evidentiary record before the Department 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.²

LIST OF EXHIBITS³

1. Case file (CF)
2. Application signed and dated (App).
3. DMR site report dated (SR).

2. DESCRIPTION OF THE PROJECT

A. Site History

The managing partners of Maine Fresh Sea Farms LLC are Seth Barker and Peter Fischer (Barker/Robinson). Mr. Barker holds two LPAs within the proposed lease boundaries.⁴ The LPAs were originally issued in 2015 for the cultivation of marine algae using suspended culture techniques.

Peter Fischer, managing partner of Damariscove Seafood, LLC operates DAMCC2 a standard lease which abuts the proposed lease site to the south. The lease was originally issued on February 5, 1976 to Abandoned Farm, Inc. for a five-year term. The lease was renewed for ten years successively in 1981, 1991, and 2001. It was transferred to Damariscove Seafood, LLC in 2004 for the suspended culture of American oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), blue mussels (*Mytilus edulis*), hard-shell clams/quahogs (*Mercenaria mercenaria*), and soft-shell clams (*Mya arenaria*). In 2008, the lease was reduced in size from 15 acres to 12 acres at the leaseholder's request. On August 25, 2011, the lease was renewed for a ten-year term. The renewal included a species amendment for the cultivation of marine algae (*Saccharina latissima*, *Alaria esculenta*, *Laminaria digitata*, *Agarum clathratum*, *Palmaria palmata*, *Porphyra spp.*, *Chondrus crispus*, and *Ulva lactuca*) and it removed a condition from the original lease that had prohibited storage.⁵

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

³ Exhibits 1, 2, and 3 are cited below, with page references, as CF1 (case file), App2 (application), SR3 (site report). Other exhibits are cited by exhibit number.

⁴ BARK215 and BARK 315

⁵ See Docket#2011-07R, Damariscove Seafood, LLC, Renewal and Species Amendment

In 2012, the Department granted a gear variance for three parallel, 300 foot longlines, placed along the western edge of the lease site.⁶ In 2014, the Department approved a species amendment for marine algae (*Gracilaria tikvahiae*), and a gear amendment for eight longlines organized in two sets of four.⁷ In 2015, the Department authorized a gear variance for the deployment of a porphyra net frame.⁸ In addition to the gear variance, the Department issued a species amendment for Atlantic sea scallops (*P. magellanicus*) and marine algae (*Chorda tomentosa*, *Agardhiella spp*, *Desmerestia viridis*, *Scytosiphon spp*, and *Petalonia spp*).

B. Site Characteristics

On August 4, 2016, DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting an aquaculture lease. The proposed site occupies subtidal waters in the center of Clark Cove (SR 2). The upland is characterized by a rocky shoreline that gives way to mixed forests and grassy fields (SR 2). Several houses are present along the shoreline of Clark Cove (SR 2). Water depths, at mean low water, range from 21 feet at the northeast corner of the proposed site to 46 feet at the southwest corner of the proposed site (SR 4). The nearest distance to shore at mean low water is ~260 feet from the northwest corner of the proposed site (SR 4). The bottom of the proposed site is characterized by a soft mud, and the current varies from 0.5 to 1 knot (App 5).

The proposed lease is in an area currently classified by the Department of Marine Resources Water Quality Classification program as “open/approved for the harvest of shellfish” (SR 10). However, this classification will not affect the harvest of marine algae, because such classifications are currently only relevant to shellfish operations.

C. Proposed Operations

The purpose of the proposed operation is to explore the commercial feasibility of cultivating various species of marine algae (App 3). During the hearing, Mr. Fischer and Mr. Barker testified that the proposed lease site and an adjoining portion of DAM CC2 would be utilized by Maine Fresh Sea Farms, LLC for the cultivation of marine algae (Barker/Robinson). Mr. Barker noted that the proposed lease site in conjunction with a portion of DAM CC2 would create a more uniform growing area and consolidate the layout of longlines (Barker/Robinson).

Mr. Fischer testified that only half of DAM CC2 is being utilized for aquaculture operations. When asked why the entirety of DAM CC2 could not be used for the proposed operations, Mr. Fischer indicated that the portion of DAM CC2, south of the mussel rafts, is used by lobstermen who set their traps within the lease boundaries (Fischer/Robinson). Although Mr. Fischer has never expressly granted permission

⁶ CF variance approval from Diantha Robinson to Peter Fischer dated October 2, 2012.

⁷ CF variance approval from Diantha Robinson to Peter Fischer dated July 29, 2014.

⁸ CF variance approval from Diantha Robinson to Peter Fischer dated September 12, 2015. A porphyra net frame may also be referred to as a “nori rack.”

for lobster fishing activities within the southern portion of DAM CC2, he has no issues with fishermen setting their traps within that section of the lease site (Fischer/Robinson). Mr. Barker also testified that current speeds and depths in the southern portion of DAM CC2 are not conducive for the proposed operations (Barker/Robinson).



Figure 1 depicts the boundaries of the proposed lease site in relation to DAM CC2, and the proposed layout of longlines on both sites. The number of longlines are not displayed to scale. Figure 1 was made by DMR staff after the public hearing.

The applicant plans to deploy 21 longlines that are approximately 530 feet in length (App 15). The longlines would be arranged horizontally, spaced 20 feet apart, and would be submerged 3 to 10 feet below the surface of the water (App 3, 15). Mr. Barker testified that the longlines will remain on the site year-round. According to the application, Maine Fresh Sea Farms, LLC also plans to deploy a porphyra net frame to experiment with seeded netting (App 3-4). The proposed net frame measures 64' L x 6' W and would be exposed ~ 3.5 feet above the water two to three times each week for several hours (SR 2, App 16). At the hearing, the applicant indicated that a total of three porphyra nets may be deployed on the site (Barker/Robinson). The application notes:

The amount of each species will vary, but the primary crops during the winter season (September to June) will be sugar kelp, alaria, and dulse. We will investigate candidate species for the warmer periods, May through October also (App 3).

Harvesting will occur February through June, but may change as the experimental design progresses (App 4). Harvesting will be conducted by hand from small vessels measuring between 18 feet and 24 feet (App 4). The applicant anticipates that harvesting would occur one to two days per week, and may increase to four to five days per week during seasonal peaks (App 4). Eventually the applicant may utilize mechanized equipment, which would be powered by hydraulics (App 4). Access to the proposed site will be from a dock located in Clark Cove (Barker/Robinson).

DAM CC2 is authorized for the cultivation of the same species of marine algae as the proposed site, is permitted to deploy one porphyra net, and is permitted to deploy eight longlines. Since operations on the proposed lease site will overlap with DAM CC2, the Department will require Maine Fresh Sea Farms, LLC to submit renderings of how their gear will be deployed on the DAM CC2 site. A condition reflecting this requirement will be included in the lease.

D. Site Markings

During the Department site visit on August 4, 2016, it was difficult for staff to differentiate the boundaries of the proposed lease site from gear associated with Mr. Barker's LPAs (SR 6). Staff observed the following:

The current level of marking at the applicant's LPA sites (BARK215 and BARK315) does not adequately notify mariners of aquaculture activity. On August 4, 2016 MDMR staff could not readily differentiate boundary markers from other gear. There were no buoys present with the words "Sea Farm" or the LPA identifier per MDMR Chapter 2 regulations (SR 6).⁹

The lack of appropriate markings, observed during the site visit, did not "adequately notify mariners of aquaculture activity" (SR 6).

As noted in the site report, on September 1, 2016, Marine Patrol Officers inspected DAM CC2 and were unable to determine the lease boundaries.¹⁰ The Officers indicated that buoys in the area were "scattered everywhere."¹¹ The lack of marking at Mr. Barker's LPAs, and DAM CC2 is of concern to local users. Individuals encountered during the Department's site assessment "expressed concern about the confusing nature of the buoys and unlit raft that occupy the existing lease and LPA license in Clark Cove and indicated to MDMR scientists that they give the area a "wide berth" when operating boats" (SR 7).

⁹ Chapter 2.90(6)(B) related to LPA maintenance standards specifies the following:

Each LPA site must be clearly marked at each corner, or at the center, as is appropriate to the gear type deployed, with a marked floating device, such as a buoy or buoys able to support at least two (2) inch high letters spelling "Sea Farm." The license-holder's name, homeport, or home address, and LPA license number must be clearly displayed on every marked floating device and piece of gear or equipment. The marked floating devices shall be readily distinguishable from interior markers and aquaculture gear.

¹⁰ See page six of the Site Report, which references: MPO Kilgore and MPO Tourtelotte. Aquaculture Lease/License Inspection Form 2015: DAMCC2. 9.1.16.

¹¹ See page six of the Site Report, which references: MPO Kilgore and MPO Tourtelotte. Aquaculture Lease/License Inspection Form 2015: DAMCC2. 9.1.16.

Jon Lewis testified that given the confusing layout of multiple buoys on DAM CC2 and on the Barker LPAs at the time of the site visit, he was unable to distinguish where the lease boundaries were or how the longlines were laid out. Mr. Lewis noted his concern with the “lack of orderliness” on the proposed lease site.

The Maine Fresh application indicates deployment of 21 longlines 530 feet long, with line floats 50 feet apart (approximately 210 buoys) and buoys at the ends of the lines (42 buoys), as well as corner markers, for a total of more than 250 buoys on the lease site when the longlines are fully deployed (App 15). The number of surface buoys, if not adequately differentiated and maintained, would create a hazard to mariners attempting to navigate in and around Clark Cove.

Given the lack of adequate marking observed at the existing aquaculture license and lease sites held by Damariscove Seafood, LLC and Mr. Barker, the Department will require a marking plan for the proposed site. This is necessary to ensure that mariners can adequately navigate around the proposed operations and that the Department can determine the location of the boundaries of both the proposed lease site and the existing lease site.

Therefore, the applicant will be required to submit a marking plan for the entire site of the proposed operations, including both the proposed lease site and the portion of DAM CC2 that will be used as part of the project. A condition reflecting this requirement will be added to the lease.

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 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, 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. Navigation

During the site assessment, DMR staff observed four docks, two moored floats, and 13 assumed moorings within 1,000 feet of the proposed lease site (SR 5). One mooring was observed within the boundaries of the proposed lease site (SR 5). The mooring belongs to Pemaquid Mussel Farms, LLC and it will be relocated outside the proposed lease boundaries with the permission of the Harbormaster¹² (Fischer/Robinson). At the time of the hearing, the applicant had not yet asked the Harbormaster to move

¹² Mr. Fischer has an interest in Pemaquid Mussel Farms, LLC, which holds a **PEN STH2** a 1.86-acre standard lease.

the mooring, but planned to do so pending the outcome of the lease decision (Fischer/Robinson). The second closest mooring is 175 feet to the northeast of the proposed site and holds floats owned by Pemaquid Oyster Company. The floats are utilized for the wet storage of shellfish (SR 7).

Mr. Burnham testified that corner 6 located on the northeast side of the proposed lease site is “very close” to the floats owned by Pemaquid Oyster Company (Burnham/Robinson). The close proximity between corner 6 and the moored floats will make navigation along the northeast side of Clark Cove more difficult (Burnham/Robinson). Mr. Burnham stated that in foggy conditions a boat could collide with the aquaculture gear. Mr. Burnham recommended that corners 1 and 6 of the proposed lease be moved 50 to 75 feet to the west, so that there would be a greater distance between corner 6 of the proposed lease and the moored floats (Burnham/Barker).

David Rice, riparian owner of a dock in Clark Cove northwest of the proposed lease site, stated that he can navigate between the Pemaquid Oyster floats and corner 6 of the proposed lease site, but the space is constricted, and mariners unfamiliar with the area may be unable to safely navigate between these two obstacles.

The evidence indicates that if the lease is granted navigation along the northeastern side of the proposed site would become unreasonable, especially during inclement conditions. The Department will require the northeastern boundary of the proposed lease, depicted as corners 1 and 6, to be moved 75 feet to the northwest. This will result in a reduction of acreage from the proposed 3.92 acres to 3.62 acres. Such a reduction is necessary to allow for the proposed aquaculture activities, while also providing a reasonable navigable area between corners 1 and 6 of the proposed site and moored floats.

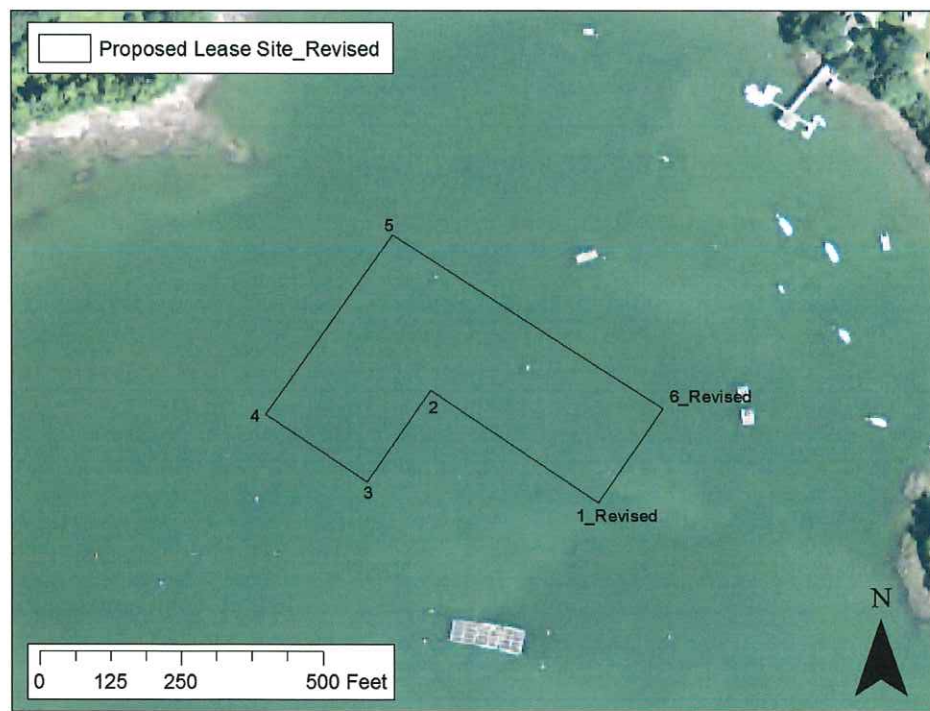


Figure 2 depicts the revised boundary of the proposed lease site after moving corners 1 and 6 75 feet to the northwest. Figure 2 was made by DMR staff after the public hearing.

After moving corners 1 and 6 of the proposed lease site 75 feet to the northwest, it appears that navigation will not be unduly affected by the presence of the proposed lease site. The revised coordinates for corner 1 and 6 are as follows:

	<u>Latitude</u>	<u>Longitude</u>
Corner 1:	43° 55' 43.068" N	69° 34' 20.7408" W
Corner 6:	43° 55' 45.822" N	69° 34' 19.2072" W

Aquaculture lease sites are required to be marked for navigation purposes in accordance with U.S. Coast Guard requirements.

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

B. Riparian Access

As originally proposed, the requested lease area would not preclude "water-borne access to and from riparian property," but it would make it more challenging (SR 6). Specifically, it may "change the route riparian owners have traditionally taken to and from their property and moorings" (SR 6). The issues related to riparian access identified in the site report may be exacerbated during periods of inclement weather. The Harbormaster noted that the proposed lease site would not make riparian access impossible "but it would be some concern in a foggy condition."¹³

Mr. Brunner, a riparian landowner, has a dock and mooring located on the southeast shore of Clark Cove. Mr. Brunner's dock is approximately 387 feet away from corner 6 of the proposed lease site. He regularly sails his 27-foot boat along the eastern portion of Clark Cove within the boundaries of the proposed lease site (Brunner/Robinson). Mr. Brunner indicated that navigating around the proposed lease site, without the use of a motor, would be much more difficult (Brunner/Robinson). Mr. Brunner agreed with Mr. Burnham's assessment that moving the northeast boundary of the proposed lease 50 to 75 to the west could help alleviate some of the navigation concerns along the northeast side of the proposed lease site (Brunner/Robinson).

As described in section 3(A) of this decision, the Department will require corners 1 and 6 of the proposed lease site to be moved 75 feet to the west. After moving corners 1 and 6 of the proposed lease site, it appears that the proposed aquaculture activities will not unreasonably interfere with the ingress or egress of any riparian owner.

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

¹³ CF, Harbormaster Questionnaire dated March 25, 2016

C. Fishing & Other Uses

Clark Cove is primarily utilized for sailing, lobster fishing, and aquaculture activities (App 4). During the site visit, staff observed lobster pot buoys which were owned by at least two different license holders (SR 7). The site report notes the following:

Two of these buoys were located between the west side of the proposed lease and the western shore of Clark Cove and one buoy was set to the north of the proposed lease site further inside Clark Cove. All other active lobster fishing noted on August 4, 2016 occurred in the main navigational channel to the south of the proposed lease area and existing mussel rafts. No lobster pot buoys were observed within the proposed lease area at this time (SR 7).

The harbormaster indicated that there may be some kids who set lobster traps in the area during the summer months.¹⁴

Exclusivity. The applicant is not requesting exclusive use of the area (App 4). However, once the longlines are deployed certain activities such as lobster fishing, trawling, or dragging could damage the proposed gear. In addition, motorized vessels may become entangled in the proposed gear. Therefore, commercial fishing, recreational fishing, and motorized vessels will be prohibited within the proposed lease area. These restrictions are reasonable to enable the aquaculture project to be carried out while encouraging the greatest number of compatible uses of the area, as provided in 12 MRS §6072-A (15). Conditions reflecting these restrictions will be included in the lease.

Other aquaculture leases. Besides the LPAs held by Mr. Barker and the lease held by Damariscove Seafood, LLC, the closest aquaculture sites to the proposed lease are located ~335.7 feet to the northwest of corner four of the proposed lease site, and ~541.3 feet to the west of corner four of the proposed lease site. The sites are LPAs and are issued for the cultivation of sugar kelp (*Laminaria saccharina*).¹⁵ It is reasonable to conclude that the proposed operations are unlikely to negatively affect existing aquaculture activities in the area.

Based on this evidence, it appears that the proposed lease will not unreasonably interfere with fishing or other uses of the area. The lease must be marked in accordance with DMR Rule 2.80¹⁶

¹⁴ CF, Harbormaster Questionnaire dated March 25, 2016

¹⁵ MNEW116 is ~335.7 feet to the northwest of corner four of the proposed site, and MNEW216 is ~541.3 feet to the west of corner four of the proposed site. The LPAs were not included in the original site report. CF, email from F. Drury to A. Ellis dated August 22, 2017.

¹⁶ **2.80 Marking Procedures for Aquaculture Leases**

1. When required by the Commissioner in the lease, aquaculture leases shall be marked with a floating device, such as a buoy, which displays the lease identifier assigned by the Department and the words SEA FARM in letters of at least 2 inches in height in colors contrasting to the background color of the device. The marked floating device shall be readily distinguishable from interior buoys and aquaculture gear.
2. The marked floating devices shall be displayed at each corner of the lease area that is occupied or at the outermost corners. In cases where the boundary line exceeds 100 yards, additional devices shall be displayed so as to clearly show the boundary line of the lease. In situations where the topography or distance of the lease boundary interrupts the line of sight from one marker to the next, additional marked floating devices shall be displayed so as to maintain a continuous line of sight.

Therefore, considering the number and density of aquaculture leases in the area, I find that the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.

D. Flora & Fauna

Site Observations. During the site visit, DMR scientists observed herring gulls (*Larus argentatus*), double-crested cormorants (*Phalacrocorax aureus*), and common terns (*Sterna hirundo*) within the vicinity of the proposed lease site (SR 9). The benthos consisted of a soft mud bottom, occasional burrows, and the presence of *Mysida* species was noted (SR 8). Eelgrass was not observed during the site visit and records of eelgrass distribution suggest a lack of historical presence in Clark Cove (SR 9).

Fisheries and Wildlife. DMR sent a copy of the lease application to the Maine Department of Inland Fisheries and Wildlife (MDIF&W) for their review and comment. MDIF&W has not classified Clark Cove as a Tidal Wading Bird and Waterfowl Habitat (SR 9). MDIF&W commented “As there are no apparent direct impacts to resources under MDIFW jurisdiction, we have no comment on this project.”¹⁷

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, I find that 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

According to the site report, there are no government-owned beaches, parks, or docking facilities located within 1,000 ft. of the proposed lease site (SR 9).

Therefore, I find that 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

The application indicates that stock will be sourced from the Maine Fresh Sea Farms nursery, which is located at the Darling Marine Center in Walpole, Maine, and from the Maine Sea Grant nursery, which is located at the Cooperative Center for Aquaculture Research in Franklin, Maine.

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3. When such marking requirements are unnecessary or impractical in certain lease locations, such as upwellers located within marina slips, the Commissioner may set forth alternative marking requirements in an individual lease.
 4. Lease sites must be marked in accordance with the United State’s Coast Guard’s Aids to Private Navigation standards and requirements.

¹⁷ CF, email from J. Maclaine to C. Burke, dated March 4, 2017

Therefore, I find that the applicant has demonstrated that there is an available source of marine algae (*Laminaria saccharina*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra spp*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella spp*, *Desmerestia viridis*, *Scytosiphon spp*, and *Petalonia spp*.) 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, with corners 1 and 6 of the proposed lease site being moved 75 feet to the west, as provided in sections 3.A and 3.B above, will not unreasonably interfere with the ingress and egress of any riparian owner.

2. The aquaculture activities proposed for this site, with corners 1 and 6 of the proposed lease site being moved 75 feet to the west, as provided in sections 3.A and 3.B above, will not unreasonably interfere with navigation. The lease site shall be marked in accordance with U. S. Coast Guard requirements.

3. 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. The lease boundaries must be marked in accordance with the requirements of DMR Rule 2.80.

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 marine algae (*Laminaria saccharina*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra spp*, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella spp*, *Desmerestia viridis*, *Scytosiphon spp*, and *Petalonia spp*.) 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 to Maine Fresh Sea Farm, LLC, reduced to 3.62 acres by the movement of corners 1 and 6 of the proposed lease 75 feet to the west, as provided in sections 3.A and 3.B above, 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 applicant¹⁸; however, no

¹⁸ 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.”

aquaculture rights shall accrue in the lease area until the lease is fully executed. This limited-purpose (experimental) lease is granted to the lessee for the purpose of cultivating marine algae (*Laminaria saccharina*, *Alaria esculenta*, *Laminaria digitata*, *Agarum cribrosum*, *Palmaria palmata*, *Porphyra* spp, *Chondrus crispus*, *Ulva lactuca*, *Gracilaria tikvahiae*, *Chorda tomentosa*, *Agardhiella* spp, *Desmarestia viridis*, *Scytosiphon* spp, and *Petalonia* spp.) using suspended culture techniques. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. As this is an experimental lease with 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.

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)¹⁹. 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:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. Commercial fishing, recreational fishing, and motorized vessels are prohibited except by authorization of the leaseholder.
3. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.
4. Maine Fresh Sea Farms, LLC must submit a marking plan within 90 days of the lease decision date for the entire site of the proposed operations, including both the proposed lease site and the portion of DAM CC2 that will be used as part of the project. The plan must show the location of all buoys and specify their color, size, shape, and markings. The Department must review and approve this plan before markers are set and gear is installed.
5. Maine Fresh Sea Farms, LLC must submit a drawing of how their gear will be deployed on the DAM CC2 site within 90 days of the lease decision date. The drawing submitted by Maine Fresh Sea Farms, LLC must comply with what is currently authorized for DAM CC2.

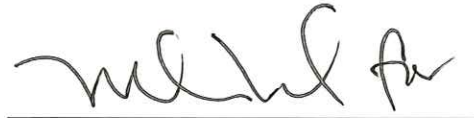
¹⁹ 12 MRSA §6072-A (15) provides that:

“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.”

7. REVOCAION 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: 9.6.17



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