

**STATE OF MAINE**  
**DEPARTMENT OF MARINE RESOURCES**

**Levi DiMauro**

Experimental Aquaculture Lease Application  
Suspended Culture of sugar kelp (*Laminaria sacharina*)  
Casco Bay, Freeport, Maine

**FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION**

Levi DiMauro applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located west of Little French Island, in Casco Bay, Freeport, Cumberland County. The proposed lease is 3.92-acres and is for the suspended cultivation of sugar kelp (*Laminaria sacharina*) for commercial research and development purposes. DMR accepted the application as complete on December 29, 2022.

**1. THE PROCEEDINGS**

Notice of the application and the 30-day public comment period was provided to state agencies, the Town of Freeport and its Harbormaster, and others on DMR's mailing list. The application identified no known riparian landowners within 1,000 of the proposed lease site. Notice to the Town of Freeport also included a Harbormaster Questionnaire, which requests information about existing uses of the area including navigation, fishing, and other considerations relevant to the criteria for evaluating leases. Freeport's Harbormaster responded to the questionnaire via email. Notice of the complete application and comment period was published in the January 12, 2023, edition of *The Northern Forecaster*. Title 12 M.R.S.A. §6072-A(6) provides that the Commissioner shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. Three requests for a public hearing were received during the comment period and DMR elected not to hold a hearing. The evidentiary record regarding this lease application includes the application, DMR's site report dated January 29, 2024, and the case file. The evidence from each of these sources is summarized below.<sup>1</sup>

**LIST OF EXHIBITS**

1. Case file
2. Application
3. DMR site report, issued on January 29, 2024

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<sup>1</sup> These sources are cited, with page references, as App (Application), CF (case file), and SR (site report).

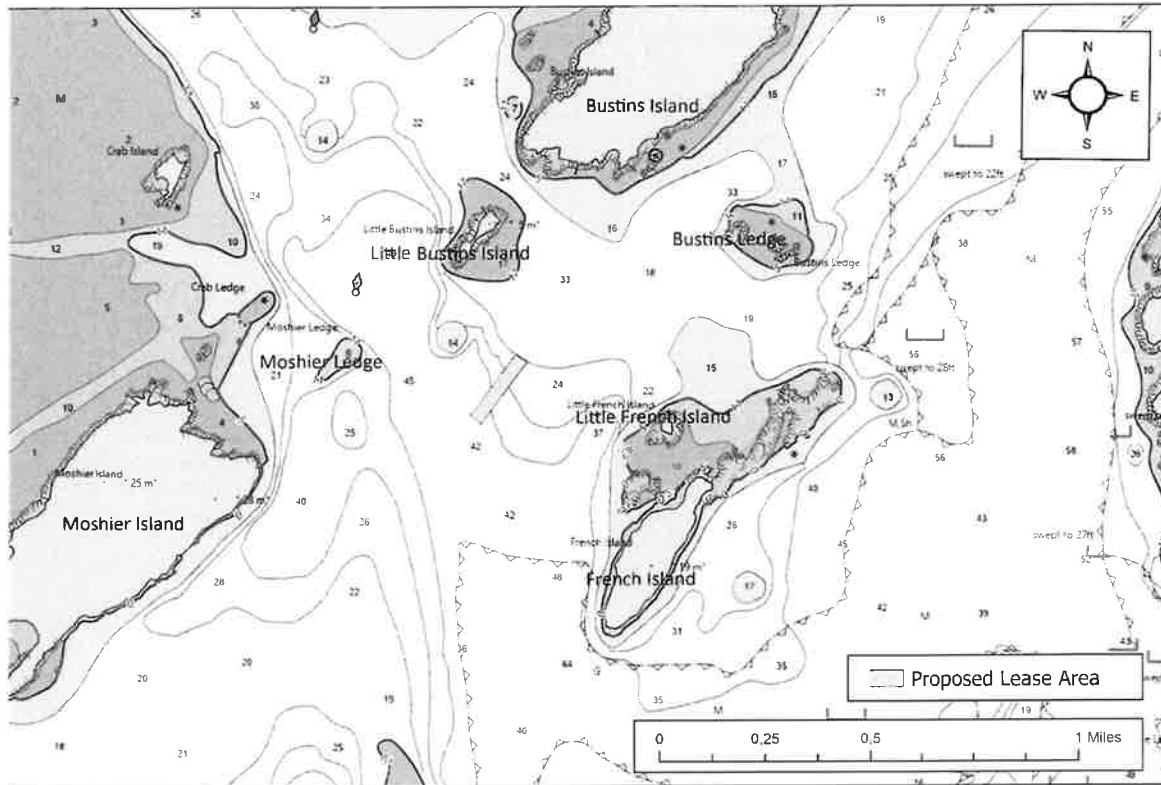
## **2. DESCRIPTION OF THE PROJECT**

### **A. Proposed Operations**

The purpose of the proposed experimental lease site is to assess the viability of a commercial lease for algae in the proposed location (App 6). The applicant is proposing to culture sugar kelp using longlines suspended 7 feet below the water's surface (App 6). The area proposed to be dedicated to sugar kelp cultivation is 975 feet by 175 feet (App 17). The longlines would stay submerged with a depth control buoy attached to the bottom of each 7-foot longline (App 17). At the bottom of the seven foot longlines, the applicant would deploy a separate longline spanning the length of the proposal, which would be used to seed the sugar kelp (App 17). The depth control buoys would be 100 feet apart length wise and 20 feet apart width wise (App 17). This would total 88 depth control buoys within the proposal. The proposal would also have two mushroom anchors attached to mooring buoys every 325 feet on both 975-foot sides of the proposal (App 17). The mushroom anchors would be 150lb and would be attached to the mooring buoys with 3/8" chain and shackles (App 21). The site would be active every year from October 1<sup>st</sup> to May 31<sup>st</sup> (App 6). Seeding would occur in November and harvesting would occur in April (App 6). Seeding and harvesting would take approximately two days each, consisting of 10 hours each day at the site (App 7). The site would be visited once a week for maintenance during the rest of the active period (App 7). From June to September, all buoys and longlines would be removed and the mooring chains would be dropped to the sea floor (App 7,18). The yellow perimeter buoys would stay on site year-round (App 16).



Levi DiMauro  
West of Little French Island, Casco Bay, Freeport



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

**B. Site Characteristics**

On July 19, 2023, DMR scientists assessed the proposed lease area. DMR scientists arrived on site at approximately 12:09 PM (SR 2). The coastline of Little French Island to the east is comprised of rocky shoreline leading to forested uplands (SR 2). Other nearby islands: French Island, Little Bustins Island, and Bustins Island consists of residential uplands (SR 2). The bottom of the proposed lease area was observed via a remotely operated vehicle (SR 2). The bottom of the proposed lease consisted of predominately mud (SR 2).

**3. STATUTORY CRITERIA & FINDINGS OF FACT**

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that a lease for commercial aquaculture research and development may be granted by the Commissioner of DMR upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other water related uses of the area, taking into consideration other aquaculture uses in the area; with the ability of the lease site and surrounding

areas to support existing ecologically significant flora and fauna; or with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments. The Commissioner must also determine that an applicant has demonstrated that there is an available source of organisms to be cultured on the lease site.

#### **A. Riparian Access**

Before granting a lease, the Commissioner must determine that the proposed project “will not unreasonably interfere with the ingress and egress of riparian owners[.]” 12 M.R.S.A. § 6072-A(13)(A). In examining riparian owner ingress and egress, the Commissioner “shall consider the type of structures proposed for the lease [site] and their potential impact on the vessels which would need to maneuver around those structures.” Chapter 2, § 2.37(1)(A)(1).<sup>2</sup>

The proposed lease area is located approximately 1,780 feet to the west of Little French Island, Casco Bay, in Freeport, Maine, and approximately 1,300 feet south of Little Bustins Island, Casco Bay, in Freeport, Maine (SR 4). During the site visit on July 19, 2023, DMR did not observe any moorings or docks within 1,000 feet of the proposal (SR 4).

A Harbormaster Questionnaire was sent to the Freeport Harbormaster, and DMR received an email reply. Riparian ingress and egress were not mentioned in the Harbormaster’s email to DMR (CF – Harbormaster Email). DMR received public comments about the location of the proposal, but they did not include any discussion of impacts to 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**

When examining navigation, the Commissioner considers whether the lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2). DMR’s Chapter 2 regulations require the Commissioner to examine whether any lease activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area. In examining navigation, the Commissioner “shall consider the current uses and different degrees of use of the navigational channels in the area in determining the impact of the lease operation.” Chapter 2, § 2.37(1)(A)(2).

The proposed lease site is situated within the navigation channel between Little Bustins Island and Little French Island (SR 5). The proposal is approximately 2,125 feet southeast of a green navigational

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<sup>2</sup> The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

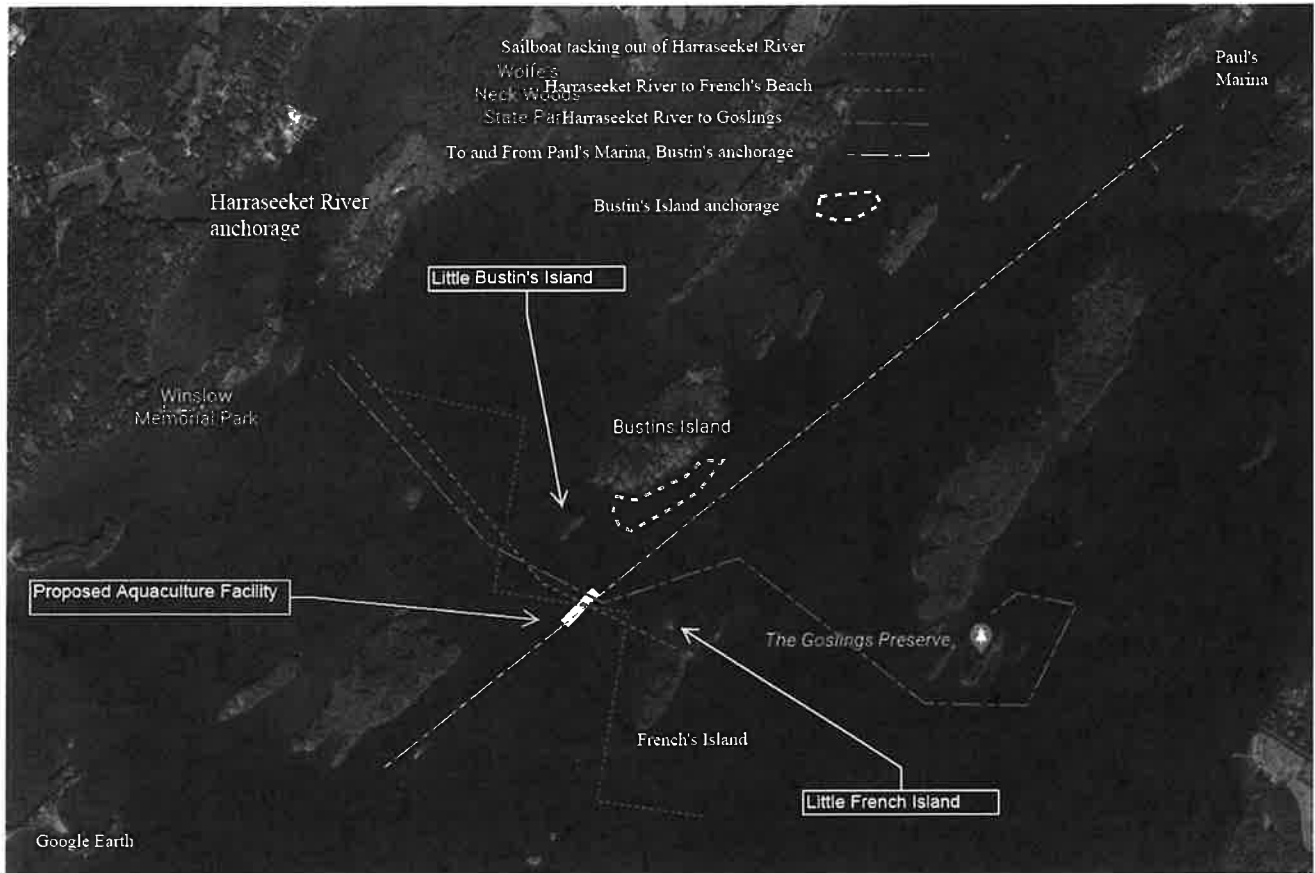
buoy marking the navigational channel between Moshier Island and Little Bustins Island (SR 5). During the site visit, DMR observed one sailboat approximately 1,000 feet north of the proposal traveling east (SR 5). DMR also observed one sailboat and two recreational power boats operating within the vicinity of the proposal (SR 5). During the site visit, three lobster buoys were observed (SR 6). One buoy was within the proposal boundaries, and the next nearest buoy was approximately 188 feet south of the proposal (SR 6).

The applicant states that boating activities are infrequent except for July and August and that the proposal would not be in active operation during these times (App 9). The application also states that the closest navigational channel is 250 feet away from the proposal and that lobster fishing occurs June-October (App 7, 9).

The response received from the Freeport Harbormaster states that there is boating activity within the area during warmer months. In consideration of the amount of boating activity in the area, the Freeport Harbormaster recommended that gear be removed by April 30<sup>th</sup> instead of May 31<sup>st</sup> as originally proposed (CF – Harbormaster Email).

Two comments concerning navigation were also received by DMR. One comment stated that the proposal is located across the approach to the Harraseeket River and in the channel between Little Bustins Island and French Island (CF – Public Comment: J. Stenzel). The comment raises concerns that even though the proposal would not be active during the summer, there would still be eight yellow buoys marking the boundary of the proposal, and that it is possible that boaters encountering the proposal site during the summer will be unaware that they can pass through the site while it is not active (CF – Public Comment: J. Stenzel). Additionally, the proposal is in an area that is frequently used by the Harraseeket Yacht Club sailing program and Wednesday night racing use, as well as many other boaters (CF – Public Comment: J. Stenzel).

The second comment stated that the proposal is located in the center of one of the busiest passages in Casco Bay, and from May through October the passage is regularly used by boats entering and leaving the Harraseeket River anchorage, Paul's Marina in Brunswick, Bustin's Island anchorage in Freeport, the beach at French's Island, and the Goslings Preserve (CF – Public Comment: T. Schwam). The comment included an image which depicts routes commonly traveled by boaters in the area as well as where the proposal is located in relation to these common routes. This image can be seen in Figure 2 below.



**Figure 2.** Common routes in the area of the proposal (CF – Comment: T. Schwarm)

The second comment also stated that although the proposal will not be active in the warmer months, the eight boundary markers will stay year-round, which may cause confusion to boaters not familiar with the area and cause stress and course changes in an already busy channel (CF – Public Comment: T. Schwarm). Boaters will likely end up treating the inactive proposal as an obstruction instead of an area which can be utilized for navigation (CF – Public Comment: T. Schwarm). The comment suggested requiring the applicant to remove all buoys, including boundary markers, from May 1<sup>st</sup> through October 30<sup>th</sup>. Additionally, during the busier boating months in which the proposal would be active (May and October), the boaters would be diverted into narrow passages around the lease site resulting in inconvenience to those navigating in the area (CF – Public Comment: T. Schwarm). The comment also noted that there are many lobster pots within the area.

In this case, the record evidence shows that the proposal is situated within the navigation channel between Little Bustins Island and Little French Island. This is in an area of Casco Bay which is heavily traveled by recreational and commercial vessels from the end of April through October. As seen in Figure 2, the proposal sits directly in the middle of four different potential navigation paths in the area. The site

would be active during a portion of the active boating season, (May and October) and boundary markers are proposed to remain on site year-round. As stated in both comments received, leaving boundary markers in place would likely interfere with navigation because boaters would be likely to avoid the proposal area even when it was inactive. The boundary markers could not be removed in May and October as one commenter suggested because the site would be active during that time meaning that longlines may be deployed and operations occurring. Accordingly, the site would need to be marked pursuant to Chapter 2.80 of DMR's regulations.

DMR's site assessment, the application, and public feedback all confirm that lobstering occurs in the area. Considerations related to commercial fishing are detailed in the following section, but the evidence in the record shows that commercial vessels are also present in the area, adding navigational obstacles. In addition, there are also lobster buoys present throughout the area which mariners would need to avoid. Adding fixed structures to this area via the proposed lease site would further limit a mariner's ability to safely navigate around other vessels or gear associated with existing fisheries that may be present within the area. The aquaculture activities as proposed in the application would unreasonably interfere with navigation within the area.

In accordance with 12 M.R.S.A. §6072-A(15) and Chapter 2.64(11)(B), the Commissioner may impose conditions on an experimental lease. "The Commissioner ... may establish any reasonable requirement to mitigate interference, including but not limited to those restrictions outlined in Chapter 2.37(1)(B)." Chapter 2.64(11)(B). Chapter 2.37(1)(B)(4) allows DMR to place conditions on a lease restricting the deployment and placement of gear and the timing of project operations to mitigate impacts. Based on the record, and considering the proposed operations, conditions specific to the timing of operations and the deployment of gear would not adequately mitigate interference with navigation in this case. Even if the Commissioner restricted activity at the lease site to occur only from November 1 to April 30 and required all boundary markers and suspended gear to be removed from May 1 to Oct. 31, the lease would nevertheless unreasonably interfere with navigation because of the proposal being located at a major intersection of four frequently used navigational routes as depicted in Figure 2. The location of this proposal is utilized extensively by commercial and recreational watercrafts traveling in all directions and is utilized by watercrafts traveling to the islands and marinas or otherwise transiting this area outside of the peak season of May through October. In this case, siting an aquaculture lease in a location with this degree of boat traffic poses too great a risk of interference with navigation, which cannot be adequately mitigated via lease conditions. Additionally, if circumstances made it impossible to clear the site for safe navigation by the beginning of the busy season, it would pose a significant navigational hazard jeopardizing safe passage for mariners.

The proposal, if granted, would cause unreasonable interference with the boating and navigational activities that occur within this area of Casco Bay.

**Therefore**, the aquaculture activities proposed for this site will 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. 12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3). In examining fishing and other uses, the Commissioner “shall consider such factors as the number of individuals that participate in recreational or commercial fishing, the amount and type of fishing gear utilized, the number of actual fishing days, and the amount of fisheries resources harvested from the area.” Chapter 2, § 2.37(1)(A)(3).

**Fishing.** During the site visit conducted on July 19, 2023, DMR observed three lobster buoys in the vicinity of the proposal and one lobster buoy within the proposal boundaries (App 5). DMR also observed light lobstering activity to the east of the proposal, near Little French Island (App 5).

The application states there is frequent lobstering in the area from June to October, but there has been no observed recreational fishing (App 9). The application also indicates that lobsters are common within the area (App 10). DMR received one comment noting that there are many lobster buoys in the area. The Harbormaster email received by DMR did not mention fishing in the area.

Based on the record, peak lobstering activity occurs when the proposal would be inactive, which would allow lobster traps to be placed within the proposal. The presence of year-round marker buoys may discourage fishermen from deploying traps within the boundaries of the proposed site. In addition, chains, shackles, and mushroom anchors would be present year-round, which may further impact trap deployment. However, DMR did not receive any feedback from fishermen or comments that addressed fishing activity specifically. Other fishing activities would not be impacted as there is no evidence that recreational fishing occurs in this area. Based on the fact that peak-lobstering activity would occur while the proposal is inactive, and the lack of comments regarding fishing impacts, DMR concludes that while there may be some impacts to lobster fishing activity, these impacts would not be unreasonable.

**Other water-related uses.** DMR did not receive any comments regarding other water-related uses that occur within or in the vicinity of the proposal area.

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

### **D. Other Aquaculture Uses**

DMR’s Chapter 2 regulations require the Commissioner to consider any evidence submitted concerning other aquaculture uses of the area. “The intensity and frequency of such uses as well as the degree of exclusivity required for each use shall be a factor in the Commissioner’s determination of



whether any interference is unreasonable. The number, size, location, and type of other aquaculture leases shall be considered by the Commissioner.” Chapter 2, § 2.37(1)(A)(4).

There are no Limited Purpose Aquaculture (LPA) or aquaculture sites within 1000 feet of the proposed lease area (SR 6). The Department did not receive any comments regarding this proposal from other LPA or aquaculture site operators in the area.

**Therefore**, considering the other aquaculture uses of the area, the activities proposed for this site will not unreasonably interfere with other aquaculture uses in the area.

**E. Existing System Support**

When examining existing system support, the Commissioner considers the degree to which the use of the lease site will interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and marine and upland areas to support ecologically significant flora and fauna. 12 M.R.S.A. § 6072-A(13)(D); Chapter 2.37(1)(A)(5). “Such factors as the degree to which physical displacement of rooted or attached marine vegetation occurs, the amount of alteration of current flow, increased rates of sedimentation or sediment resuspension, and disruption of finfish migration shall be considered by the Commissioner in this determination.” Chapter 2, § 2.37(1)(A)(5).

**Site observations.** On July 19, 2023, DMR conducted a video transect utilizing a remotely operated vehicle to assess the epibenthic ecology of the proposed lease (SR 7). DMR observed:

Species Observed	Abundance
Northern Shrimp ( <i>Pandalus borealis</i> )	Occasional
Crab ( <i>Cancer sp.</i> )	Occasional
Juvenile fish (sp. Unclassified)	Occasional

**Eelgrass.** Data collected by the Maine Department of Environmental Protection (MDEP) and Casco Bay Estuary Partnership (CBEP) in 2022 indicates no mapped eelgrass (*Zostera marina*) presence in the vicinity of the proposal (SR 7). During DMR’s site assessment, no eelgrass was observed (SR 7).

**Wildlife.** There are no documented bald eagle nests within 1,000 feet of the proposed lease area (SR 8). According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS (MEGIS), there are no mapped tidal waterfowl and wading bird habitat within 1,000 feet of the proposed lease site (SR 8). On January 13, 2023, a Wildlife Biologist with MDIFW responded by email to a “Request for Agency Review and Comment”, stating that minimal impacts to wildlife are anticipated for this proposal (CF – Email: RE: Notice of Complete Experimental Lease Application and Comment Period – Town of Freeport).

Based on this evidence, it appears that the proposed aquaculture activities for this lease site will not interfere with the ecological function of the area.

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

#### **F. Public Use & Enjoyment**

When examining interference of a proposed experimental lease with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of beach, park, or docking facility owned by the Federal Government, the State Government, or a municipal government. 12 M.R.S.A. § 6072-A(13)(F); Chapter 2, § 2.37(1)(A)(7) and 2.64(11)(A).

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

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

#### **G. Source of Organisms**

When examining the source of organisms, the Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. 12 M.R.S.A. § 6072-A(13)(E); Chapter 2, § 2.37(1)(A)(6).

The applicant proposes to obtain stock from Coleen Franke. According to DMR records, Ms. Franke's company operates a facility, licensed by DMR, that sells marine algae for deployment on aquaculture sites. It appears that the applicant listed the owner of the company instead of the company itself. If the lease is approved, then a condition will be added to clarify that the stock must come from the licensed facility operated by Ms. Franke's company, or another DMR approved source.

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

#### **4. CONCLUSIONS OF LAW**

Based on the above findings, the Department concludes that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
2. The aquaculture activities proposed for this site will unreasonably interfere with navigation.

3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other water-related uses of the area.

4. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture used in the area.

5. 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.

6. 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.

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

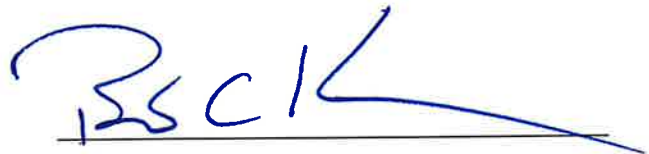
Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities do not meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072-A.

#### **5. DECISION**

Based on the foregoing, the Commissioner denies the requested experimental lease for commercial aquaculture research and development to Levi DiMauro.

Dated: \_\_\_\_\_

7/2/24



Patrick C. Keliher, Commissioner  
Department of Marine Resources