

**STATE OF MAINE  
DEPARTMENT OF MARINE RESOURCES**

**Brian Harvey  
BHB GC5**

Standard Aquaculture Lease Application  
Suspended culture of shellfish  
Goose Cove, Trenton

June 10, 2022

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

Brian Harvey applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 5.93<sup>1</sup> acres located in Goose Cove, Western Bay, in the Town of Trenton, Hancock County, Maine. The original application submitted to DMR was for the suspended culture of American/eastern oyster (*Crassostrea virginica*)<sup>2</sup>. A public hearing on this application was held on April 12, 2022 at the Trenton Town Office in Trenton, Maine. No one intervened in this case.

**1. THE PROCEEDINGS**

DMR deemed the application complete on March 19, 2020. A public hearing was scheduled, and 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 Trenton, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR’s aquaculture email listserv. After this notice was provided, it came to DMR’s attention that several pages, including part of the riparian landowner list, were inadvertently omitted from the complete application. As result of this error, some of the riparian landowners were not notified of the complete application and hearing. Therefore, the original hearing date (February 23, 2022) was postponed.

The missing information was then incorporated into the application, and the application was deemed complete for a second time, on March 7, 2022. A hearing was rescheduled for April 12, 2022, and 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 Trenton, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR’s aquaculture email listserv. Notice of the hearing was published in *The Ellsworth American* on March 10, 2022 and March 24, 2022. Notice was also published in the Maine Lobstermen’s Association *E-Weekly* on various dates in March and April.

Sworn testimony was given at the April 12, 2022 hearing by the following witnesses:

<b>Name</b>	<b>Affiliation</b>
Brian Harvey	Applicant
Cheyenne Adams	Aquaculture Scientist, DMR Aquaculture Division
Denis-Marc Nault	Shellfish Management Program Supervisor, DMR Bureau of Public Health

<sup>1</sup> Applicant originally requested 6 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 5.93 acres.

<sup>2</sup> During the public hearing, due to a contradiction in the application, the applicant confirmed they only propose to culture American oysters (Harvey/Adams).

Edward Johnston, Gary Cutting, Bill LaBelle	Riparian Landowners
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Members of the public, and Assistant Attorney General Mark Randlett, asked general questions of the applicant and DMR.

The hearing was recorded by DMR. The Hearing Officer was Amanda Ellis. The evidentiary record before DMR regarding this lease application includes four 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.<sup>3</sup>

**LIST OF EXHIBITS<sup>4</sup>**

- 1. Case file
- 2. Application
- 3. DMR site report
- 4. Decision for Joe Porada’s three experimental lease applications in Goose Cove, dated June 22, 2007<sup>5</sup>

**2. DESCRIPTION OF THE PROJECT**

**A. Site Characteristics**

DMR staff assessed the proposed lease site and the surrounding area on September 3, 2020 and October 22, 2020, in consideration of the criteria for granting a standard aquaculture lease. The proposed lease site occupies subtidal waters at the head of Goose Cove in Trenton, Maine (SR 2). According to the site report, the proposal is located approximately 520 and 430 feet from the eastern and western shorelines of Goose Cove respectively, at mean low water (SR, 7). The surrounding shoreline is rocky with a few gravel beaches (SR 2). The upland is comprised of mixed forest and residential development; according to the site report, approximately 20 houses are located on the shoreline in the vicinity of the proposal (SR 2). The site report characterized the bottom of the proposed lease site as mud (SR 5). Correcting for tidal variations, depths within the site range between 1.5-2.1 feet at mean low water (SR 5). The 2007 decision for three inactive experimental leases in the same location as the proposed lease provides additional evidence that the proposed lease area is subtidal (Exhibit 4). This decision describes a site visit conducted by DMR staff in 2006 at a 0.0-foot tide, where DMR staff walked the shoreline and determined the proposed area to be subtidal (Exhibit 4, 4).

**B. Proposed Operations**

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<sup>3</sup> In references to testimony, “Smith/Jones” means testimony of Smith, questioned by Jones.  
<sup>4</sup> Exhibits 1, 2, and 3 are cited below as: Case file – “CF”; Application – “App”, site report – “SR”. Other exhibits are cited by number.  
<sup>5</sup> Official notice of this decision was taken in accordance with 5 M.R.S.A. § 9058.

The applicant proposes to culture American/eastern oyster (*Crassostrea virginica*) using suspended culture techniques on the proposed lease site (App 1). Gear proposed to be deployed on the lease includes ADPI bags with and without floatation, and predator netting. Up to 2,000 ADPI bags with floatation (36" x 22" x 8") are proposed, and up to 2,000 ADPI bags without floatation (36" x 22" x 5") are proposed. During the hearing, the applicant indicated that the ADPI bags without floatation may not be used, but when questioned by Mr. Randlett, he confirmed that a total of 4,000 ADPI bags are proposed to be deployed, as was originally outlined in the application (Harvey/Randlett). The applicant proposes to place oyster seed in ADPI bags. ADPI bags with floatation would be suspended up to two feet<sup>6</sup> above the sediment to protect the oyster seed from predation (App, 7). ADPI bags without floating would also be deployed in rows but would always sit on the bottom of the ocean<sup>7</sup> (Harvey/Drury). At a maximum, the applicant is proposing to deploy 30 rows of ADPI bags on the lease site (Harvey/Randlett). ADPI bags would be secured with cement blocks; these anchors are proposed to remain on site throughout the year (Harvey/Adams). Larger oysters would be deployed on the bottom under predator netting, which would be 1" x 1" mesh, and would be deployed in 7' x 100' sections<sup>8</sup> (App, 7). Up to 500 sections of 7' x 100' predator netting were proposed in the application, however, during the hearing the applicant clarified that he would only need about 30 of these predator nets (App, 4 & Harvey/Adams). Predator nets would be secured with bamboo shoots (Harvey/Drury). Gear would be deployed in rows, which would be separated by ~10 feet and would run north-south through the lease (App, 31). ADPI bags and predator netting would not be contained within the same rows (Harvey/Drury).

Oysters and gear would be removed in the winter months and stored in an overwintering facility on shore or on Limited Purpose Aquaculture (LPA) license sites used for overwintering that would be located elsewhere (App, 7). Only anchoring would remain in place over the winter months (App, 9).

The site would be visited "generally daily or as needed during larger draining low tide cycles", and oysters would be harvested by hand (App, 7). The applicant proposes to tend the site by walking in the rows between gear types at low tides of -0.8 feet or greater (Harvey/Randlett). According to the application, the site would be serviced by vessels less than 25 feet in length and powered by outboard motors under 100 horsepower (App 9). No other powered equipment is proposed (App 10).

During the public hearing, the applicant provided testimony indicating that he might not use the entirety of the proposed lease area. However, when questioned about this statement, the applicant described a system of rotational, or alternating, management, where certain gear types would be moved around the entirety lease, although not always deployed across the entirety of the lease (Harvey/Ellis). The applicant also confirmed that the proposed gear would occupy the entirety of the proposed lease

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<sup>6</sup> Page 7 of the application indicated the bags would be suspended several inches above the bottom, but the applicant indicated the bags may be "a couple feet" above the sediment in the hearing.

<sup>7</sup> During the public hearing the applicant indicated he would not need the bags without floatation but went on to describe a few use cases where he would use the ADPI bags without floating (Harvey/Adams). Due to this, DMR is considering the proposal to include the deployment of ADPI bags without floatation.

<sup>8</sup> The application lists several dimensions for the predator netting was provided in the application. During the hearing, the applicant clarified these dimensions as 7' x 100'.

(Harvey/Randlett). Given this testimony, if granted, the 5.93-acre lease would not be for speculative purposes.

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

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

The proposed site is located in shallow subtidal waters in upper Goose Cove, in Western Bay. During MDMR's visit to the site on September 3, 2020, seven sets of stairs leading from the uplands to the shoreline were observed in the general vicinity of the proposed lease. Canoes and kayaks were observed hauled out on surrounding shorelines, and two kayaks were launched from the northwest shore of Goose Cove during the site visit (SR, 7). Per page 7 of the site report:

*According to the NOAA chart, water within the proposal, and the water that separates the proposal from the low water line on either shoreline is less than 1 foot deep, while depth measurements taken during the site visit indicate the area is between 1 and 2 feet at mean low water. Given the distance between the proposal and the surrounding shorelines, it is unlikely that the proposal will interfere with riparian access to nearby shorelines, as riparian access is likely to be hindered more by tidal stage and shallow water depths.*

A single mooring was observed over 800 feet to the southeast of the proposal (App, 7). During the public hearing, the applicant testified that he believed the mooring observed by DMR was used by the Harbormaster. During the public hearing, Edward Johnston, a riparian landowner in Goose Cove, testified that he owns a mooring approximately 1,000 feet to the north of the proposed site, where he keeps a sailboat, and that he also launches kayaks and canoes from his property at the north end of Goose Cove (Johnston, testimony & Johnston/Adams). Mr. Johnston stated that after talking with the applicant and reviewing the proposed site, he believes the proposal will "not be a problem for [his] boating needs". No other testimony was provided indicating the proposal would unreasonably interfere with riparian access.

Based on this evidence, it appears that riparian access will not be prevented or unduly affected by the proposed lease.

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

## **B. Navigation**

During DMR's visits in September 2020 and October 2020, kayakers and a paddleboarder were observed navigating in the area (SR, 8). According to page 8 of the site report "As a result of the location, and because surrounding water depths decrease to a few feet or less at low water, vessel traffic within the area is likely restricted to higher tidal stages or to shallow draft vessels." During the public hearing, the applicant clarified that the gear proposed for deployment would be deployed on the bottom of the proposed lease, or would float a couple feet above the sediment; gear would not float at the surface at higher tide stages, which was discussed incorrectly in the site report (Harvey, testimony).

As described in Section 3(A), a riparian landowner testified that the proposal would not unreasonably interfere with his navigational uses of the area. The riparian landowner indicated he believed he would be able to navigate over the proposed lease operations (Johnston, testimony). No other testimony was provided indicating the proposal would unreasonably interfere with navigation. 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**

**Fishing.** During the September 3 and October 22, 2020 site visits, no commercial fishing was observed within the proposed lease site. However, according to the site report:

*"during the dive transect conducted on October 22, 2020, hard clams (*Mercenaria mercenaria*) were observed in abundance within the proposed lease area. The abundance of hard clams is likely a result of seeding that occurred in this area when it was leased by another individual. Due to the abundance of hard clams, and due to the shallow depth of the proposal at lower tidal stages, it is possible that shellfish harvesting occurs in the area".*

During the public hearing, the applicant confirmed that the previous lease holder had seeded the site, but the applicant wasn't sure which species the previous leaseholder had seeded (Harvey/Drury). In DMR's testimony, DMR confirmed that hard clams (*M. mercenaria*) were permitted to be planted on the previous leases in the area via bottom culture techniques (Adams, testimony). DMR testified that although the hard clams observed during the dive transect were likely partially due to the seeding conducted by the previous leaseholder, that hard clams were also observed during the 2006 site visit conducted prior to the issuance of the previous leases in area, indicating that there was a wild shellfish resource prior to any aquaculture activity (Adams, testimony). Despite their origin, these hard clams are a resource available to commercial shellfish harvesters, and the proposed lease operations would likely prevent the harvest of this resource, if granted (Adams, testimony). The applicant testified that wild shellfish are harvested in the

general area (Harvey/Drury), and Ms. Adams testified that according to DMR's Shellfish Management Program, shellfish harvesting occurs in Goose Cove to a limited extent due to market limitations in the area.

Denis-Marc Nault, the Shellfish Management Program Supervisor, for DMR's Bureau of Public Health, testified that bottom planted oysters would be competing with the wild hard clam population. However, he went on to state that this was a "lightened concern" due to the limited number of hard clams in the area.

According to the site report, light recreational fishing may occur in the area (SR, 8). During the review period and public hearing, no testimony, other than that provided by Mr. Nault, was provided that indicated the proposed lease may affect commercial and recreational fishing in the area.

Furthermore, Exhibit 4, the 2007 decision written for the previous lease in the area stated:

*"Given that a significant amount of harvestable bottom would remain in the area, even with the leases in place, and that the loss of fishing area is relatively small....the interference with fishing does not appear to be unreasonable."*

Based on this previous finding, and the absence of comments received concerning the proposed lease's impact on wild shellfish harvesting, it is reasonable to conclude that commercial shellfish harvesters do not have concerns about the effects the proposal may have on fishing in the area.

**Exclusivity.** The applicant is requesting that dragging, shellfish harvesting, and disturbing gear and/or shellfish be prohibited on the proposed site (App, 15). If the proposed lease is granted, this request is reasonable, and enforceable under provisions of law (see 12 M.R.S.A. §6073(2)).

**Other aquaculture uses.** There is one active aquaculture leases and sixteen existing Limited Purpose Aquaculture (LPA) licenses within one mile of the proposed lease site (SR 9). The eight LPA licenses closest to the proposed lease are held by the applicant and his wife (SR, 9). According to testimony provided by the application at the hearing, these LPAs would be relinquished if the proposed lease is granted.

No other comments from aquaculture lease and/or license holders were provided, and therefore it is reasonable to conclude that there are no concerns regarding the effects the proposed lease on other aquaculture uses in the area. 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.** During the site visits conducted in the fall of 2020, DMR staff did not observe other water-related uses of the proposed lease area not described elsewhere in this decision. During the review period and public hearing, the Department did not receive any public comments detailing other uses of the area. Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

**Therefore,** 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.** The bottom of the proposed lease, as observed by along the dive transect, was composed of mud and sporadic shell rubble (App, 5). DMR staff characterized hard clams (*Mercenaria mercenaria*) as abundant along the dive transect (SR 10). American oyster, green crab, green fleece, and knotted wrack were characterized as common (SR 10). Additionally, per the site report, “Burrows in the mud were observed in abundance” (SR 13). No eelgrass (*Zostera marina*) was observed within the boundaries of the lease site during the DMR’s site assessment (SR 11).

During the public hearing Ms. Adams was questioned regarding the impact of the proposed operations, specifically the proposal to walk on the sediment between rows of gear, on the ocean floor and the species located there. Ms. Adams testified that she expects the impacts of the operations would be similar to that of wild clam harvesting and that she doesn’t have any particular concerns about the proposal’s impacts (Adams/Randlett).

During his testimony, Denis-Marc Nault, the Shellfish Management Program Supervisor, for DMR’s Bureau of Public Health, testified that bottom planted oysters would be competing with the wild hard clam population and that determining the density of oysters to deploy would have to be a “balancing act”. As described in Section 3 (D), Mr. Nault stated that this was a “lightened concern” due to the limited number of hard clams in the area, and the case file contains no other evidence that the proposal would unreasonably interfere with wild hard clam populations.

**Wildlife.** Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that the proposal overlaps with Tidal Wading Bird and Waterfowl Habitat defined as emergent wetland-mudflat complex (SR, 12). Rebecca Settele (Wildlife Biologist, MDIF&W) responded by email to a “Request for Agency Review and Comment”, recommending that any boats used in the operations do not ground out on reefs, aquatic beds, and mud flats and also that the project footprint be reduced to the minimum size needed to have the least impact on waterfowl and wading bird populations. MDIFW also recommended that all construction and maintenance activity happen outside of the shorebird migration window of July 15th to September 30th. According to the page 12 of the site report, “In a follow-up email on December 21, 2020, Rebecca Settele clarified that MDIF&W anticipates ‘minimal impacts to wildlife’ with the applicant’s proposed activities of accessing and working on the site at low water and harvesting from the site by hand”.

**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 13).

**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**

Seed stock for this proposed lease site would be obtained from Muscongus Bay Aquaculture. The proposed sources are approved sources of seed 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 and the applicant's testimony, work at the site would occur beyond daylight hours when low tide occurs near sunrise or sunset (App, 10 & Harvey testimony). During these times, head lamps would be used on site (Harvey/Adams). During the public hearing the applicant testified that he has applied to the United States Coast Guard (USCG) for, and was permitted to deploy, a light on the site that would help him navigate to the site in the dark or fog. The applicant stated that he was looking into purchasing a light that could be remotely turned on and off, or was considering only leaving the light on for the week of the lowest tides each month. The applicant also suggested that he may not deploy the light at all in response to the feedback he received from riparian landowners prior to the hearing.

During the public hearing, three riparian landowners within 1,000 feet of the site testified that they were concerned about the proposed light shining during the nighttime hours (Johnston, Cutting, and LaBelle testimony). According to one riparian landowner, the applicant's proposed plan to "leave the light on for an entire week every month is not...satisfactory", this landowner also stated the light would disrupt the "peaceful enjoyment of the quiet cove". Another riparian landowner testified that he did not believe that a light on all night was a necessity (LaBelle, testimony). The proposal to purchase a remotely operated light was supported by all riparian landowners who provided testimony (Harvey, Johnston, Cutting, and LaBelle testimony).

Given that sole purpose of the light is to help the applicant navigate to the proposed lease in limited conditions (i.e. the dark or fog), and because riparian landowners who attended the hearing expressed concerns about the impacts of this light, it is unreasonable for the applicant to deploy a light on the proposed lease that would remain illuminated when not needed. Given this, and because testimony indicates that technology exists to address this problem, DMR will condition the lease to ensure that a single light may be deployed on the lease, which may only be illuminated when the applicant is actively navigating to the site. Otherwise, the light must remain off and should never be left on for an entire week.

**Therefore**, considering the condition described above, 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 proposes to service the site from vessels powered by engines less than 100 horsepower (App 10). According to the application, vessels would mainly be used for travel to and from shore, and motors would be shut down when not needed (App 10). Based on this evidence, it appears that



reasonable measures would be taken by the applicant to mitigate noise impacts and 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 is proposing to deploy predator netting on the bottom of the proposed lease, and ADPI bags deployed on the bottom of the lease or floating a few inches above the sediment. Gear is not proposed to float at the surface of the water. Gear, other than the required corner markers, would be black in color (App, 6 & Harvey/Adams). No on-site support structures are proposed (App, 5).

**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 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 American oysters to be cultured for the lease site.
- g. Considering the condition defining the use of permanent lights on the proposed lease, 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 5.93 acres to Brian Harvey for twenty years for the cultivation of American oysters (*Crassostrea virginica*) 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).<sup>9</sup> 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.

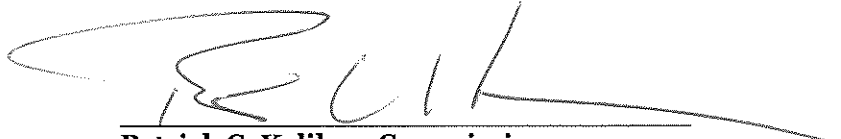
The following conditions shall be incorporated into the lease:

- a. If registered with the U.S. Coast Guard’s Private Aids to Navigation (PATON) program, a single light may be deployed on the lease site. The light may only be used when the applicant is navigating to the site and must be turned off when the applicant reaches the site.

**7. REVOCAION OF LEASE**

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

Dated: 6/16/2022

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

<sup>9</sup> 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.”