

**STATE OF MAINE**

**Jeffrey Schroeder**

**DEPARTMENT OF MARINE RESOURCES**

**SGR TCx**

Experimental Aquaculture Lease Application  
Suspended Culture of American Oysters (*Crassostrea virginica*)  
St. George River, St. George, Maine

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

Jeffrey Schroeder applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located in Turkey Cove, in the St. George River, St. George, Knox County. The proposed lease is .091 acres and is for the suspended cultivation of American Oysters (*Crassostrea virginica*).<sup>1</sup> DMR accepted the application as complete on February 13, 2023.

**1. THE PROCEEDINGS**

Notice of the application and the 30-day public comment period was provided to state agencies, riparian landowners within 1,000 feet of the proposed site, the Town of St. George and its Harbormaster, and others on DMR's mailing list. Notice of the complete application and comment period was published in the February 23, 2023, edition of *The Courier-Gazette*. 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. No requests for a public hearing were received during the comment period, and the Department elected not to hold a hearing. The evidentiary record regarding this lease application includes the application, DMR's site report dated April 2, 2024, and the case file. The evidence from each of these sources is summarized below.<sup>2</sup>

**LIST OF EXHIBITS**

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

**2. DESCRIPTION OF THE PROJECT**

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<sup>1</sup> The applicant originally requested 0.90 acres. MDMR calculations indicate the area is 0.91 acres.

<sup>2</sup> These sources are cited, with page references, as App (Application), CF (case file), and SR (site report).

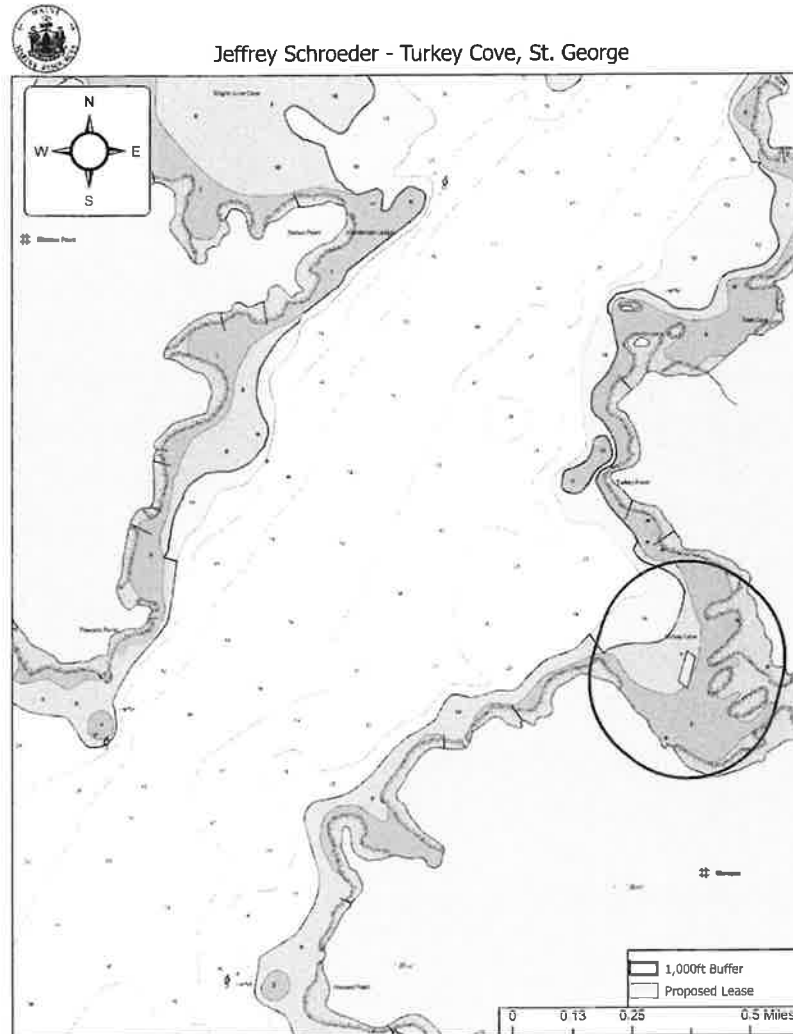
#### **A. Proposed Operations**

The purpose of the proposed experimental lease site is to conduct commercial research to determine if the lease is suitable for long-term oyster cultivation (App 4). The commercial research will measure seasonal temperature changes, turbidity, salinity, tidal flow, tidal variations and potential run off and pollution (App 4). The applicant is proposing to culture shellfish using three long lines, each with up to 200 mesh grow bags attached (App 24). Each row would be 300 feet and would be 40 feet apart from each other (App 24). The rows of longlines would be attached to 40 feet of chain on each end, and each chain would be attached to a 100lb mushroom anchor (App 24). Seeding of oysters would occur between May and June (App 4). The applicant would be on site daily during the seeding process (App 4). After June, the applicant would be on site three to five times a week for general maintenance and flipping of the mesh bags (App 4-5). From October to December, all product on the lease site would either be sold or placed into gro-cages and sunk to the bottom of the lease site (App 4).

When oysters are ready to harvest starting in year two, the applicant would be on site five days week (App 5). The applicant would unclip the mesh bags from the long line, place them into a Carolina skiff, and take them offsite for grading, washing, and bagging (App 5).<sup>3</sup>

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<sup>3</sup> The application includes references to aquaculture related activities that may require separate authorizations not contemplated as part of or authorized by this decision. For example, the application describes the possibility of storing product on land and washing/bagging product off site. If the lease is granted, it would be incumbent upon the lease holder to ensure that aquaculture activities occurring outside the boundaries of the proposed lease are properly licensed and permitted.



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

### **B. Site Characteristics**

On October 18, 2023, DMR scientists assessed the proposed lease area. DMR scientists arrived on site at approximately 8:00 AM. Turkey Cove, which surrounds the proposed site, is comprised of rocky seaweed covered coastline with patches of gravely mud that leads into forested uplands (SR 2). The bottom of the proposed lease area is mud with a mixture of clam, oyster, and mussel rubble (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 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 the applicants have demonstrated that there is 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). 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(1)(A)(1)<sup>4</sup>.

The proposal is located in Turkey Cove, which is located approximately 935.2 feet east of the main navigational channel at MLW (SR 5). During the site visit on October 18, 2023, DMR staff observed five vacant moorings within 1,000 feet of the proposed lease site (SR 4). The nearest mooring was approximately 185 feet to the southwest of the proposal (SR 4). DMR staff observed one pier with a dock and ramp associated with it, located 500 feet to the southwest of the proposed site (SR 4). Two piers without any associated docks or ramps were observed over 1,000 feet to the northwest of the proposed site (SR 4). However, based on the time of year this site visit occurred, it is likely these docks were removed for overwintering and are in use seasonally (SR 4). If the proposal were granted, there would be approximately 824.4 feet of navigable water to the west of the site and 156.6 feet to the east of the site at

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<sup>4</sup> 13-188 C.M.R. ch. 2. The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

MLW (SR 5). Figure 2 depicts the proposed lease area including the location of observed moorings, piers, ramps, etc.

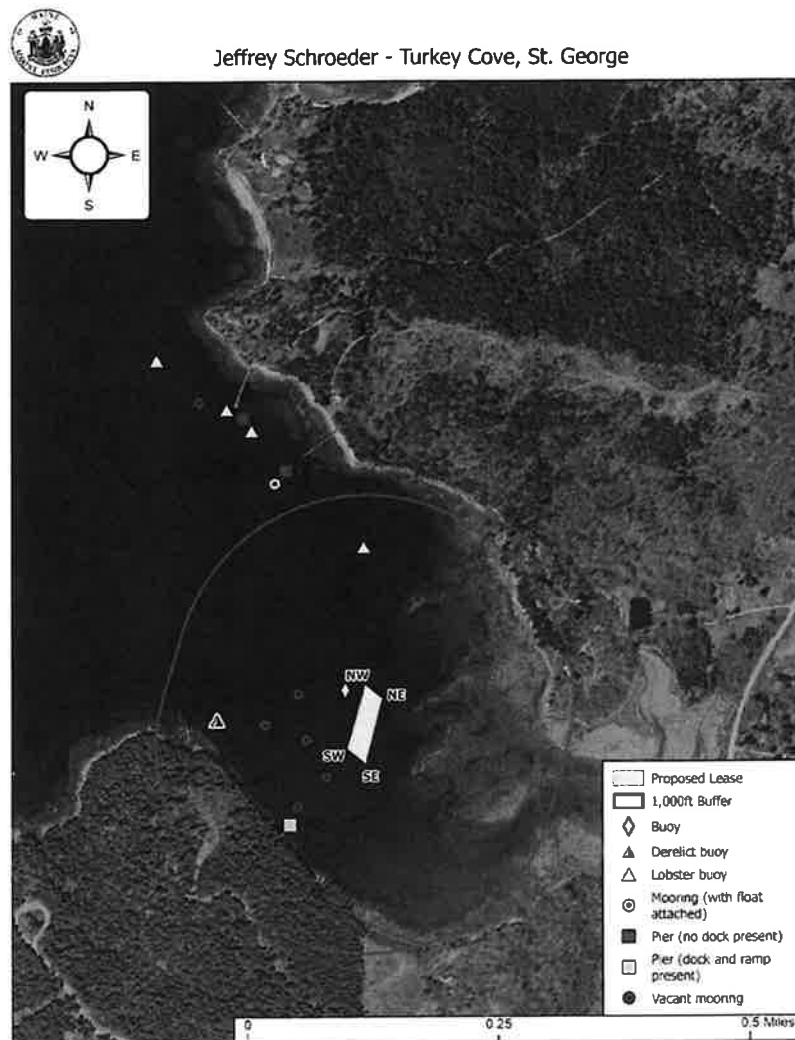


Figure 2. Proposed lease area with site visit observation. Taken from DMR site report.

A Harbormaster Questionnaire was sent to the St. George Harbormaster, but the Department did not receive a response. The Department did not receive any comments from the public regarding this proposal.

Riparian landowners likely navigate to and from their property, within the cove, to access navigational channels and other areas within the vicinity of the proposed site. The nearest mooring is approximately 185 feet to the southwest of the proposal. No moorings or docks were observed to the east of the proposal, so shorefront property owners in the vicinity of the site would not need to navigate

around the proposed lease site to access moorings or docks. If the lease is granted there would be 156.6 feet of navigable area to the east of the site at MLW (SR 5). This remaining navigable area provides access to the shoreline east of the proposed site.

Where the proposal is located within the cove, it would not obstruct riparian access to any observed moorings or docks. If the proposal were granted, there would be approximately 824.4 feet of navigable water to the west of the site at MLW. While there would be 156.6 feet of navigable waters to the east of the proposal at MLW, no moorings or docks were observed along the shoreline to the east. Given the remaining navigable area and distances to observed moorings, piers, and associated ramps/docks, the proposal would not unreasonably interfere with 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**

The Commissioner examines 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); 12 M.R.S.A. § 6072-A(13)(B).

The proposal is located approximately 935.2 feet to the east of the navigational channel at mean low water (MLW) (SR 5). If the proposal were granted, there would be approximately 824.4 feet of navigable water to the west of the site and 156.6 feet of navigable waters to the east of the site at MLW (SR 5). During the site visit, DMR staff did not observe any recreational traffic (SR 5). DMR staff did observe lobster boats to the west of the proposal (SR 6).

The applicant states that the main navigable channel is half a mile from the farm (App 7). Additionally, the applicant has observed kayaks, paddleboards, sailboats, and motorboats in Turkey Cove, but that traffic from these vessels is very sparse (App 7). The applicant states that sailboats can navigate within 150 feet of the farm without issue, and small recreational vessels such as kayaks, rowboats, and paddleboards are able to get to the boundary of the farm without issue (App 7).

A Harbormaster Questionnaire was sent to the St. George Harbormaster, but the Department did not receive a response. The Department did not receive any comments from the public regarding this proposal.

The proposal is not within or in close proximity to a navigational channel. At MLW, there is approximately 156.6 feet of navigable water to the east of the proposal and 824.4 feet of navigable waters

to the west of the proposal. 824.4 feet of navigable waters would be sufficient for vessels to navigate the area without risk. 156.6 feet of navigable waters to the east of the proposal would still allow appropriately sized vessels to navigate the area if they wish. As noted above in section 3(A), there were no docks or access ramps observed to the east of the proposal, meaning any vessel traveling between the east of the proposal and the western shoreline would be navigating the area for recreational purposes. Navigation to the east of the proposal would still be possible and navigation in the rest of the cove would not be interfered with by the proposal.

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

### **C. Fishing & Other Uses**

The Commissioner examines whether the lease activities would unreasonably interfere with commercial or recreational fishing or other uses of the area, including water-related uses. 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); 12 M.R.S.A. § 6072-A(13)(C).

**Fishing.** During the site visit conducted on October 18, 2023, DMR observed one lobster buoy within 1,000 feet of the proposal approximately 729.9 feet to the north. Three additional lobster buoys were observed within Turkey Cove (Figure 2). Moderate lobster fishing was observed to the west of the proposed site (SR 6).

The application states there are a few lobster traps located approximately 600 feet from the proposal, and during the summer pogy fishing<sup>5</sup> occurs in the cove about 400 feet from the proposed lease (App 7). Clam diggers use the innermost portion of the cove at low tide to harvest clams, approximately 1,000 feet from the proposal (App 7). The applicant has not observed recreational fishing in the cove (App 7).

A Harbormaster Questionnaire was sent to the St. George Harbormaster, but the Department did not receive a response. The Department did not receive any comments from the public regarding this proposal.

While lobstering does occur in Turkey Cove, as seen in Figure 2, it appears that most of the lobstering activity occurs nearer to the entrance of the cove, over 1,000 feet from the proposal. Pogy

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<sup>5</sup> Common term for Atlantic menhaden (*Brevoortia tyrannus*).

fishing occurs over 400 feet from the proposal, in the deeper water area of the cove. The proposal is not located in any known commercial fishing locations nor would it prevent access to any known commercial fishing locations.

Therefore, it is reasonable to conclude the proposed lease will not unreasonably interfere with commercial and recreational fishing activities in the area.

**Other uses.** The application states that residents swim within Turkey Cove (SR 7). No other feedback was provided concerning other uses including water-related uses in the area.

At its nearest point, the boundary of the proposal is approximately 156 feet to the shoreline. This would be an adequate area for swimming to occur from the shoreline nearest the proposal without risk of interference.

**Therefore,** the activities proposed for this site will not unreasonably interfere with fishing or other 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); 12 M.R.S.A. § 6072-A(13)(C).

There are four existing Limited Purpose Aquaculture (LPA) sites, JSCH922, JSCH1022, JSCH1122, and TSCH522 within the boundary of the proposal (SR 6). JSCH922, JSCH1022, and JSCH1122 are held by the applicant and would be relinquished if the proposal were granted (App 8-9). A letter from the holder of TSCH522 was also submitted with the application stating that TSCH522 would be relinquished if this proposal were granted (App 28).

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

#### **E. 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. "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); 12 M.R.S.A. § 6072-A(13)(D).

During DMR’s site assessment on October 18, 2023, no eelgrass (*Zostera marina*) was observed within the boundary of the proposal (SR 7). Records of eelgrass collected by the Maine Department of Environmental Protection (MDEP) in 2023 indicate mapped eelgrass presence in the vicinity of the proposal (SR 7). The nearest mapped eelgrass is approximately 36.8 feet east of the proposal (SR 7). In total, there are approximately four patches of eelgrass within 1,000 feet of the proposed lease (SR 7).

During the site visit, DMR observed double-crested cormorants (*Nannopterum auritum*), herring gulls, (*Larus argentatus*), osprey (*Pandion haliaetus*), Canadian goose (*Branta canadensis*), common loon (*Gavia immer*) and scoter (*Melanitta sp.*) in the general vicinity of the proposal (SR 7).

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), the proposed lease is located approximately 177 feet to the west of Tidal Waterfowl and Wading Bird Habitat (TWWH) (SR 8). On February 28, 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 project”.<sup>6</sup>

Based on the evidence, 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 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. Chapter 2, § 2.37(1)(A)(7); 12 M.R.S.A. § 6072-A(13)(F).

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<sup>6</sup> Email correspondence between MDIFW and DMR

There are no beaches, parks, or docking facilities owned by 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. Chapter 2, § 2.37(1)(A)(6); 12 M.R.S.A. § 6072-A(13)(E).

The applicant proposes obtaining stock from Muscongus Bay Aquaculture (App 2). This hatchery is currently listed as an approved source for the proposed stock. If the applicant is unable to obtain stock from this hatchery, then it must come from 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 not unreasonably interfere with navigation.
3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.
4. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses 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 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 of 0.91 acres to Jeffrey Schroeder, 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 lessee<sup>7</sup>; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

This lease is granted to the lessee for the suspended cultivation of American oysters (*Crassostrea virginica*). The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. Since this is an experimental lease with more than 400 square feet of 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(12)(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-A (15) and 2.64(11)(B). Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the

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<sup>7</sup> DMR Rule 2.64 (14) provides:

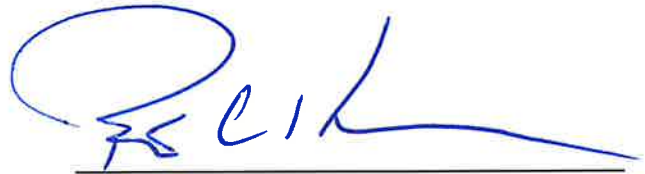
“The term of the lease shall begin within 12 months of the Commissioner’s decision, on a date chosen by the applicant. No aquaculture rights shall accrue in the lease area until the lease term begins and the lease is signed.”

exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease. No conditions are imposed on this lease.

**7. REVOCATION OF EXPERIMENTAL LEASE**

The Commissioner may commence revocation procedures upon determining pursuant to 12 MRSA §6072-A (22) that no substantial research has been conducted on the site over the course of the lease, that aquaculture has been conducted in a manner substantially injurious to marine organisms, or that any conditions of the lease or any applicable laws or regulations have been violated.

Dated: 11/12/2024



Patrick C. Keliher, Commissioner  
Department of Marine Resources