

Standard Aquaculture Lease Application  
Suspended Culture of shellfish  
Quahog Bay, Harpswell

QHB SI

### **Findings of Fact, Conclusions of Law, and Decision**

Quahog Bay Conservancy applied to the Department of Marine Resources (DMR or Department) for a twenty-year standard aquaculture lease on 1.37 acres located east of Snow Island, Quahog Bay, Harpswell, Cumberland County. The proposal is for the suspended culture of American oysters (*Crassostrea virginica*).

#### **1. Proceedings**

DMR held a pre-application meeting on this proposal on June 27, 2022, and a scoping session was held on December 5, 2022. DMR accepted the final application as complete on May 12, 2023. Notice of the completed application and public hearing was provided to state agencies, the Town of Harpswell, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. DMR sent a Harbormaster Questionnaire to the Harbormaster for the Town of Harpswell, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations, but did not receive a response from the Harbormaster. Notice of the hearing was published in the Portland Press Herald on May 22, 2025, and provided to state agencies, the Town of Harpswell, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. The public notice for the hearing stated that the proceeding would be conducted in-person and remotely and directed interested persons to register to provide testimony or ask questions during the proceeding. The registration deadline was June 10, 2025. The deadline for requesting intervenor status was June 10, 2025. No applications for intervenor status were received by DMR. One individual registered to participate in the hearing. DMR held a public hearing on this application on June 25, 2025. At the close of the hearing, the record was held open in order for the Department to receive comments from Maine Department of Agriculture, Conservation and Forestry (DACF) regarding the ownership and usage of two islands located near the proposal. The Department received a comment from DACF on July 8, 2025. The Department forwarded the comment from DACF to the applicant and granted the applicant until August 22, 2025, to reply to the comment from DACF. The Department did not receive a reply from the applicant.

The Hearing Officer reopened the record on September 26, 2025, to ask the applicant for clarification regarding noise and visual impacts at the boundaries of the proposed lease site. The Department received a reply from the applicant on September 29, 2025, and the record was then closed.

**Table 1.** Individuals who provided sworn testimony at the hearing.

Name	Affiliation
David Hunter	Quahog Bay Conservancy, Applicant

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 Joshua Rozov.

The evidentiary record before DMR regarding this lease application includes the record of testimony at the hearing. The evidence from all sources is summarized below.

**A. List of Exhibits**

1. Case file (CF)
2. Application deemed complete on May 12, 2023 (App)
3. DMR site report, issued on November 5, 2025 (SR)

The case file, application and site report are referred to in the decision with their designated abbreviations.

**2. Description of the Project**

**A. Site History**

QHB SIx is a 2.98-acre experimental lease granted to Quahog Bay Conservancy. Quahog Bay Conservancy is also the applicant for this proposal. This proposal covers approximately half the area of current experimental lease QHB SIx and does not exceed any of the boundaries of QHB SIx.

QHB SIx was granted on September 10, 2019, for a term of three years.<sup>1</sup> The lease was granted for the purpose of the cultivation of American oysters using suspended culture techniques. Quahog Bay Conservancy separated QHB SIx into five different sections, section A through E, running north to south. Section A consists of 9 200-foot long lines with 30 OysterGro cages on each line and each line 10 feet apart from the next. Section C consists of 10 270-foot long lines with 40 OysterGro cages on each line and each

<sup>1</sup> The Experimental lease was set to expire on October 9, 2022. On September 7, 2022, Quahog Bay Conservancy submitted this application. 12 M.R.S.A. §6072-A(20) provides that if the lease holder applies for a Standard lease under 12 M.R.S.A. § 6072 prior to the expiration of the Experimental lease and that application encompasses all or a portion of the Experimental lease area, then the holder may continue to operate the site while DMR considers the Standard lease application.

line 10 feet apart from the next. Section D consists of 8 102-foot long lines with 15 OysterGro cages on each line and each line 10 feet apart from the next. Section E consists of 10 240-foot long lines with 36 OysterGro cages on each line and each line 10 feet apart from the next. All long lines in a single section are connected on each end to a main line spanning the length of the entire section. The main line has helix anchors on either end, with mushroom anchors spaced every 75 feet. Section B only has a 20-foot by 30-foot work float on it with a shed placed on top. The shed is 12 feet by 16 feet and has a height of 9 feet.

This proposal would replace QHB Six.

## **B. Proposed Operations**

The applicant proposes to culture American oysters using suspended culture techniques (App 1-2). The applicant does not intend to possess, transport, or sell whole or roe-on scallops (App 2).

The applicant proposes to use 240 OysterGro cages, 1440 ADPI bags, 24 helix anchors, 12 150lb mushroom anchors, 12 1/2-inch system lines, 4 5/8-inch main lines, a work float with a shed placed on top, and 4 corner marker buoys (App 4). The applicant proposes to have two sets of six rows of oyster cages (App 29). Each set would have six 1/2-inch system lines running from north to south (App 29). Each line would have 20 OysterGro cages, with each cage spaced one foot apart from the next (App 29). Each line would be spaced 10 feet apart from the next (Hunter/Rozov). All system lines in a section would be connected on both ends to a 5/8-inch main line (App 28). The main line would have three helix anchors on each end and a 150lb mushroom anchor every 75 feet (App 28).

Between the two sections would be a 20 foot by 30 foot work float with a shed placed on top (App 5, 29). The shed would be 12 feet by 16 feet and has a height of 9 feet (App 5). The work float would be moored using two 1,000lb mooring blocks and 5/8-inch chain (App 5).

Seeding would start in June of each year and would occur over the course of two days (App 7). Seed would be distributed into mesh bags and placed inside the OysterGro cages (App 7).

Tending and maintenance would occur from April through December, with a maximum of five days a week between 7:00AM and 5:00PM (App 7). During this time, the applicant would flip cages for defouling, and oysters would be sorted and tumbled (App 7).

Harvesting would occur a maximum of two days a week from April through December (App 8). Harvesting would be done by hand from a 28 foot Carolina Skiff or a 38 foot Landing Craft (App 8).

For overwintering, the applicant would monitor the weather and sink all floating cages if there was a risk of ice forming in the water (Hunter/Rozov). If there is no threat of ice formation, the floating cages would not be sunk during the winter (Hunter/Rozov). If the cages are sunk, they would remain on the seabed all winter and be brought up in March (Hunter/Rozov).

**Table 2.** Power equipment proposed for the lease site

<b>Equipment</b>	<b>Frequency of Use</b>
Electric tumbler/sorter	April - December
Submersible Water Pump	April – December
Craftsman 3300 generator	April - December

### **C. Site Characteristics**

**Description.** The proposal is located east of Snow Island, Quahog Bay, Harpswell. DMR scientists conducted a site visit of the proposed site on June 26, 2024.

The proposal is located in subtidal waters (SR 5). The proposal is located among a group of small islands in Quahog Bay with Snow Island approximately 25 feet to the west, Ben Island approximately 984 feet to the northeast, Mouse Island approximately 459 feet to the east, and Little Snow Island approximately 595 feet to the southeast at mean low water (MLW) (SR 2). The shoreline of the surrounding islands consists of rocky coastlines with forested uplands (SR 2).

DMR scientists began collecting depths at the proposed site at approximately 12:36 PM (SR 2). The tide was flooding with the next high tide predicted at 3:25 PM (SR 2). Depths were determined to be between 11.2-19.2 feet (SR 2). Correcting for tidal variations derives depths at mean low water (MLW, 0.0 feet) to be between 7.3-15.3 feet (SR 2).

DMR scientists observed the bottom characteristics of the proposed lease site via a remotely operated vehicle (ROV) (SR 3). Sediment information was determined based on visual analysis of the video (SR 3). The bottom of the proposed lease site is primarily composed of mud with areas of shell rubble (SR 3).

**Growing Area Classification.** Growing Area Classifications for bivalve shellfish are reviewed on an annual basis and subject to change. Classifications can also be updated at any time in response to changing environmental conditions, emergency situations, or other factors that impact water quality. If the lease is granted, it is the responsibility of the leaseholder to stay informed of and comply with harvest requirements applicable to the respective growing area. The proposed lease is located within an area that is

currently classified as Open/Approved for the harvest of shellfish by the DMR Bureau of Public Health and Aquaculture (SR 10).

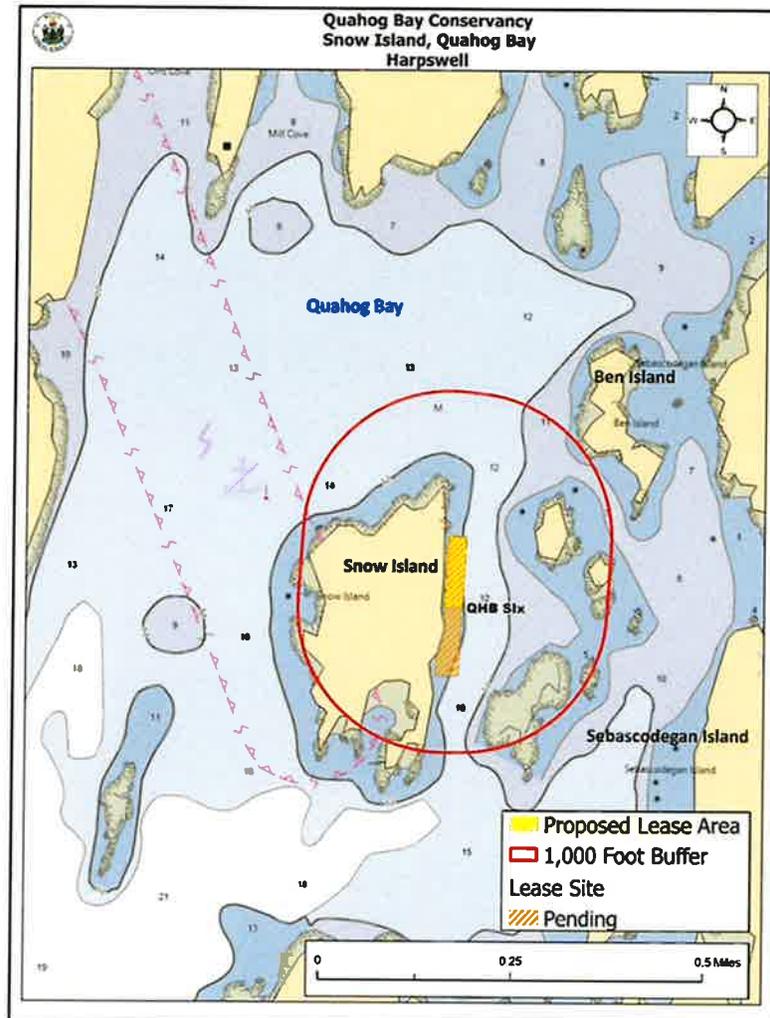


Figure 1. Proposed lease site and surrounding area<sup>2</sup>

### 3. Legal Criteria and Findings of Fact

Approval of Standard aquaculture leases is governed by 12 M.R.S.A. §6072 and DMR Regulations, Chapter 2.37. The statute and regulations provide 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; other aquaculture uses of the area; the ability of the lease site

<sup>2</sup> Unless otherwise noted, all maps and measurements in this report were created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or aerial imagery provided by ESRI (Firefly World Imagery).

and surrounding areas to support existing ecologically significant flora and fauna; and 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 light at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

#### **A. Riparian Owners Ingress and Egress**

When examining riparian access, the Commissioner considers whether the proposed lease will unreasonably interfere with the ingress and egress of riparian owners. 12 M.R.S.A. § 6072(7-A)(A). The Commissioner shall examine whether the riparian owners can safely navigate to their shore and consider the type of shore, the type of vessel that can reasonably land on that shore and the types of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures. Chapter 2.37(1)(A)(1).

DMR scientists observed a pier with a dock on Snow Island approximately 526 feet to the northwest of the proposal (SR 4). A pier with a dock was also observed beyond 1,000 feet on the southern end of Snow Island, as well as on the western shore of Ben Island (SR 4). DMR scientists observed six moorings within 1,000 feet of the proposal, with the nearest located approximately 297 feet to the east (SR 4).

The application states there are two private docks on Snow Island, both of which are owned by Patrick Scanlan (App 14). Patrick Scanlan is the president of the applicant, Quahog Bay Conservancy (App 14).

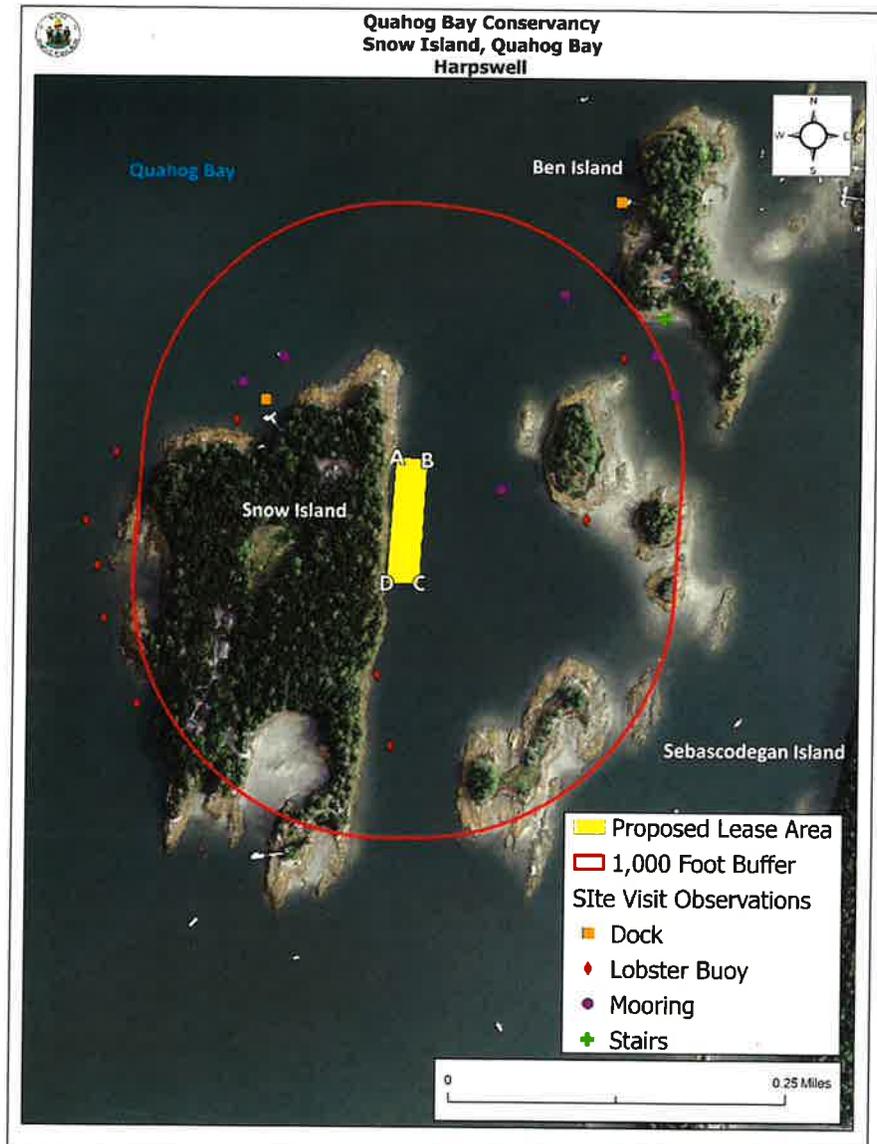
The Harpswell Harbormaster was sent a questionnaire asking about potential impacts to riparian ingress and egress from the proposal. DMR did not receive a reply.

The applicant testified that he has observed the mooring to the east of the proposal, near Mouse Island, to be occupied approximately once a week (Hunter/Rozov). This mooring appears to be the closest mooring that DMR staff observed during their site visit (Fig. 1). This mooring is approximately 297 feet from the proposal.

The proposal is located on the eastern side of Snow Island. Both observed docks associated with Snow Island are on the north and south side of the island. A vessel approaching the docks associated with Snow Island would still be able to approach them freely from the north or south. To the east of the proposal, the mooring associated with Mouse Island is approximately 297 feet from the proposal. The distance of 297 feet would allow vessels to navigate safely between the mooring and the proposal, either to access the mooring itself or to access the docks to the north and the south without the risk of navigating too close to the gear present in the proposal. Additionally, the applicant currently operates an experimental lease in the

footprint of the proposed lease area. The Department has not received any notice of the current experimental lease site causing unreasonable interference to the usage of the mooring. The proposed lease site does not expand the existing footprint of the experimental lease (in fact, the proposed lease site is approximately half of the existing footprint).

**Therefore,** the aquaculture activities as proposed will not unreasonably interfere with riparian owner ingress and egress.



**Figure 2.** Proposed lease area and observed moorings, docks, and buoys

**B. Navigation**

When examining navigation, the Commissioner considers whether the proposed lease will interfere with navigation. 12 M.R.S.A. § 6072(7-A)(B). The Commissioner shall examine whether any lease activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area and consider the current uses of the navigational channels in the area. Chapter 2.37(1)(A)(2).

The proposal is located approximately 25 feet to the east of Snow Island (SR 5). There is approximately 261 feet of navigable waters between the proposal area and Mouse Island to the east (SR 5). There is also approximately 1,700 feet of navigable water between the western shore of Snow Island and Sebascodegan Island to the west that provides access into Quahog Bay (SR 5).

No testimony regarding navigation was given at the hearing.

The presence of 261 feet of navigable water between the proposal area and Mouse Island would allow vessels to navigate safely between the proposal and Mouse Island without unreasonable interference caused by the proposed lease site. A vessel could utilize the approximate 1,700 feet of navigable waters between the western shore of Snow Island and Sebascodegan Island to access Quahog Bay to the north. Additionally, the applicant currently operates an experimental lease in the footprint of the proposed lease area. The Department has not received any notice of the current experimental lease site causing unreasonable interference to navigation in the area.

**Therefore**, the aquaculture activities as proposed will not unreasonably interfere with navigation.

### **C. Fishing and Other Uses**

When examining fishing and other uses, the Commissioner considers whether the proposed lease activities will unreasonably interfere with fishing or other uses of the area. 12 M.R.S.A. § 6072(7-A)(C). The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Chapter 2.37(1)(A)(3).

**Fishing.** DMR scientists observed five lobster buoys within 1,000 feet of the proposal with the nearest one observed approximately 361 feet to the south (SR 6). DMR scientists also observed a powerboat recreationally fishing to the north of the proposal (SR 6).

The application states that seasonal subtidal harvesting of European oysters occurs in the surrounding areas of Quahog Bay (App 13). The applicant has also observed lobstering and recreational seasonal fishing for striped bass (App 13).

While recreational and commercial fishing has been observed to occur around the proposed lease site, both commercial and recreational fishing appear to occur at a low frequency. The nearest lobster buoy observed was approximately 361 feet from the proposed boundary. This distance would allow a lobster boat to access the buoy without unreasonable interference from the proposed lease site.

**Other Uses.** Kayaking has been observed in and around the proposed lease site (App 14). The application states that kayakers have visited the current experimental lease that exists in the footprint of the proposal, and kayakers have paddled through the lease at times (App 14). No testimony regarding other uses in the area was given during the hearing.

While kayaking does occur in Quahog Bay, around the proposed lease site, the proposal would not interfere with the activity. Experimental lease QHB SIx currently exists in the footprint of the proposed lease site, and QHB SIx is larger than the current proposal. Observations from the applicant show that kayaking is still able to occur in and around the proposed lease site.

**Therefore,** the aquaculture activities as proposed will not unreasonably interfere with fishing or other uses, including water-related uses of the area.

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

Pursuant to 12 M.R.S.A. § 6072(7-A), in evaluating the proposed lease, the Commissioner shall take into consideration the number and density of aquaculture leases in the area. The Commissioner shall consider any evidence submitted concerning other aquaculture uses of the area, the intensity and frequency of such uses, the degree of exclusivity required for each use as well as the number, size, location, and type of other aquaculture leases. Chapter 2.37(1)(A)(4).

Experimental lease QHB SIx is located within the same area of the proposal and is operated by the applicant, Quahog Bay Conservancy (SR 6). The standard lease proposal intends to occupy an area just under half the size of QHB SIx (SR 6). There is no other aquaculture within 1,000 feet (SR 6). This proposal would replace QHB SIx.

**Therefore,** the aquaculture activities as proposed will not unreasonably interfere with other aquaculture uses in the area.

#### **E. Existing System Support**

When examining the existing system support, the Commissioner considers whether the proposed lease activities will unreasonably interfere with significant wildlife and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support existing ecologically significant flora and fauna. 12 M.R.S.A. § 6072(7-A)(D). 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 2.37(1)(A)(5).

**Site Observations.** DMR scientists observed the bottom characteristics in the vicinity of the proposed lease site via ROV (SR 7).

**Table 1.** Species observed on underwater video footage.

Species Observed	Abundance
American oysters ( <i>Crassostrea virginica</i> )	Common
Green crabs ( <i>Carcinus maenas</i> )	Common
Rock crabs ( <i>Cancer irroratus</i> )	Common
Hermit crabs ( <i>Paguroidea</i> spp.)	Common
European oysters ( <i>Ostrea edulis</i> )	Occasional
Blue mussels ( <i>Mytilus edulis</i> )	Occasional
Wine glass hydroid ( <i>Obelia</i> spp.)	Occasional
Rockweed ( <i>Ascophyllum nodosum</i> )	Rare
Sugar kelp ( <i>Saccharina latissima</i> )	Rare

**Marine Vegetation.** Seagrass data collected in 2022 indicates that there is not mapped eelgrass within 1,000 feet of the proposal (SR 7). The nearest mapped eelgrass is approximately 2,857 feet to the southwest of the proposal (SR 7). During DMR’s site assessment, scientists did not observe any eelgrass (SR 7). No eelgrass was observed on underwater footage (SR 7).

**Wildlife.** During DMR’s site assessment, scientists observed double-crested cormorants (*Nannopterum auritum*), osprey (*Pandion haliaetus*), common terns (*Sterna hirundo*), black terns (*Chlidonias niger*), American crows (*Corvus brachyrhynchos*), mallard ducks (*Anas platyrhynchos*), bald eagles (*Haliaeetus leucocephalus*), as well as several great blue herons (*Ardea herodias*) in the vicinity of the proposal (SR 9).

According to Geographic Information System data maintained by the Maine Department of Inland Fisheries and Wildlife (IFW) and available through the Maine Office of GIS, there is no mapped Tidal Waterfowl and Wading Bird Habitat (TWWH) within 1,000 feet of the proposal (SR 8). The nearest mapped TWWH is located approximately 0.8 miles to the southeast of the proposal (SR 8). On June 17, 2023, a Wildlife Biologist with IFW responded by email to a “Request for Agency Review and Comment” stating minimal impacts to wildlife are anticipated for this project (CF –IFW Request for Comment).

Given the absence of observed eelgrass, the distances between the proposal and the nearest mapped eelgrass location and nearest TWWH, and IFW’s assessment that minimal impacts to wildlife are anticipated from the proposal, the proposed aquaculture activities would not cause unreasonable interference to flora and fauna in the area.

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

#### **F. Source of Organisms to be Cultured**

Pursuant to 12 M.R.S.A. §6072(7-A)(E), in evaluating the proposed lease, the commissioner shall determine that the applicant has demonstrated there is an available source of organisms to be cultured for the lease site. The Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. Chapter 2.37(1)(A)(6).

The applicant proposes to source American oysters (*Crassostrea virginica*) from Muscongus Bay Aquaculture (App 2). Muscongus Bay Aquaculture is currently on DMR's approved hatcheries list for American oysters.

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

#### **G. Interference with Public Facilities**

When examining interference with public facilities, the Commissioner considers whether the proposed lease will unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved lands owned by the Federal Government, the State Government or a municipal governmental agency. 12 M.R.S.A. § 6072(7-A)(F). In determining interference with the public use or enjoyment of conserved lands, the Commissioner shall consider the purpose(s) for which the land was acquired. Chapter 2.37(1)(A)(7)).

The site report states that both Mouse Island and Little Snow Island are owned by the Maine Bureau of Parks and Lands (BPL) (SR 10). In a comment received from BPL on July 8, 2025, BPL clarified that Mouse Island is not State-owned, and according to the Coastal Island Registry is privately owned, which is corroborated by data from the town of Harpswell (CF – Bureau of Parks and Land Comment).

BPL does own Little Snow Island, which is managed by the Maine Island Trail Association on behalf of BPL (CF – Bureau of Parks and Land Comment). The proposed lease site is located approximately 595 feet northwest of Little Snow Island (SR 10). BPL stated that it does not have any concerns regarding the use and enjoyment of Little Snow Island given the distance between the proposal and the island, and that this proposal will be replacing an existing lease but on a smaller footprint (CF – Bureau of Parks and Land Comment).

This distance of 595 feet between Little Snow Island and the proposal would allow water vessels to continue to access Little Snow Island. No docks were observed to be associated with Little Snow Island.

(SR 10). Therefore, only smaller vessels that draw minimal water could access the shoreline of Little Snow Island, and these types of vessels need less room to navigate to the shoreline. Additionally, a larger experimental lease site has been located in the footprint of the proposal for the past three years, and no concerns regarding Little Snow Island have been raised by BPL, the owner of the conserved land, or by Maine Island Trail Association, the manager of the conserved land.

**Therefore**, the aquaculture activities as proposed 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 federal, state, or municipal government.

## **H. Light**

When examining light, the Commissioner considers whether the proposed lease will cause an unreasonable impact from light at the boundaries of the lease site. 12 M.R.S.A. §6072(7-A)(G). Compliance with the lighting criteria in the Department's regulations is evaluated, including the requirement that the applicant demonstrate that all reasonable measures will be taken to mitigate light impacts from the lease activities. Chapter 2.37(1)(A)(8).

The application states that no lights will be used at the lease site (App 10). The applicant testified that lights would be used inside the work shed proposed for the lease site (Hunter/Rozov).

Chapter 2.37(1)(A)(8) states that the rules regarding lighting "apply to all exterior lighting used on buildings, equipment, and vessels permanently moored or routinely used at all aquaculture facilities, with the exception of lighting for navigation, emergencies, and construction of a temporary nature." The lighting proposed for this lease site are all interior lights, located inside the work shed. Therefore, the rules in Chapter 2 regarding lighting are not applicable to the lights located on the proposal.

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

## **I. Noise**

When examining noise, the Commissioner considers whether the proposed lease will cause an unreasonable impact from noise at the boundaries of the lease site. 12 M.R.S.A. §6072(7-A)(G). Compliance with the noise criteria in the Department's regulations is evaluated, including the requirement that the applicant demonstrate that all reasonable measures will be taken to mitigate noise impacts from the lease activities. Chapter 2.37(1)(A)(9).

The applicant proposed to use an electric tumbler/sorter powered by a Craftsman 3300 generator (App 10). The applicant would use the tumbler inside of the work shed (Hunter/Rozov). The applicant stated the generator would be placed in a 2" insulated box to reduce noise when in use (CF – Quahog Bay

Conservancy Questionnaire). The applicant clarified that the generator is designed to be a low sound-producing generator (CF – Quahog Bay Conservancy Questionnaire).

Chapter 2.37(1)(A)(9) states “all motorized equipment used during routine operation at an aquaculture facility must be designed or mitigated to reduce the sound level produced to the maximum extent practical.” Using the tumbler inside the proposed work shed is a mitigation technique recognized by DMR and would mitigate noise produced by the equipped as to not to create an unreasonable impact.

The applicant has given both design and mitigation techniques to be used within the proposed lease site for the proposed generator. The applicant would place the generator in a 2” insulated box to reduce the noise being produced. In addition to the insulated box, the applicant is utilizing a generator designed for low noise production (CF – Quahog Bay Conservancy Questionnaire).

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

## **J. Visual Impact**

When examining visual impact, the Commissioner must determine that the proposed lease is in compliance with visual impact criteria relating to color, height, shape and mass. 12 M.R.S.A. § 6072(7-A)(H). Compliance with visual impact criteria set out in DMR’s regulations, including building profiles, height limitations, roof and siding materials, and color are evaluated. Chapter 2.37(1)(A)(10).

The applicant proposes a 20-foot by 30-foot work float with a shed placed on top (App 5, 29). The shed would be 12 feet by 16 feet and have a height of 9 feet (App 5). The work float would be moored using two 1,000lb mooring blocks and 5/8-inch chain (App 5).

The work float would be unpainted pressure treated lumber and the sorting shed would have natural wood siding with a green metal roof (App 6). The roof would be constructed with a dull metal which is neither reflector nor glossy (CF – Quahog Bay Conservancy Questionnaire). The OysterGro cages would be black (App 6).

Chapter 2.37(1)(A)(10) requires any building to be no more than 20 feet in height from the water line. The shed as proposed would have a height of 9 feet from the water line.

Chapter 2.37(1)(A)(10) requires the colors used to “be of, a color that does not contrast with the surrounding area. Acceptable hues are grays, blacks, browns, blues, and greens that have a sufficiently low value, or darkness, so as to blend in with the surrounding area. Colors shall be flat, not reflective, in appearance.” The colors proposed for the lease site are natural wood, green, and black. All of these colors fall into the acceptable visual impact standards set by Chapter 2.

Chapter 2.37(1)(A)(10) requires the roof and siding materials to not be reflective or glossy in appearance. The siding of the building would be natural wood siding, which is not reflective or glossy. The roof of the building would be a dull green metal.

**Therefore**, the aquaculture activities proposed for this lease site will comply with DMR's visual impact criteria.

#### **4. Conclusions of Law**

Based on the above findings, DMR concludes that:

- a. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of riparian owners.
- 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 uses, including water-related uses of the area.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses of the area.
- e. 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.
- f. 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 federal, state, or municipal government.
- g. The applicant has demonstrated that there is an available source of stock to be cultured for the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- j. The aquaculture activities proposed for this site will comply with the visual impact criteria.

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities do 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 a Standard lease to Quahog Bay Conservancy for 1.37 acres for twenty years for the cultivation of American Oysters using suspended culture techniques.

The granted lease coordinates are contained in Appendix A to this decision. 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 Chapter 2.40(2)(A) in the amount of \$1,500, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

#### **6. Lease Conditions**

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) and Chapter 2.37(B). 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. No conditions have been imposed on this lease.

#### **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 over the course of the lease, that the lease activities are substantially injurious to marine organisms or public health, or that any condition of the lease or any minimum lease maintenance standard has been violated.

Dated: 2-6-20

  
Carl J. Wilson, Commissioner  
Department of Marine Resources

## Appendix

### **Granted Lease Coordinates**

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>
A	43.817242°	-69.908072° then 119.3 feet at 96° True to
B	43.817211°	-69.907622° then 483.5 feet at 182° True to
C	43.815886°	-69.907703° then 125.4 feet at 269° True to
D	43.815881°	-69.908178° then 496.9 feet at 003° True to A

**STATE OF MAINE  
DEPARTMENT OF MARINE RESOURCES**

**Quahog Bay Conservancy**

**QHB SIx**

Experimental Aquaculture Lease Application  
Suspended culture of American/Eastern oysters  
Quahog Bay, Harpswell

September 10, 2019

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

Quahog Bay Conservancy applied to the Department of Marine Resources (DMR) for an experimental aquaculture lease totaling 2.98 acres<sup>1</sup> and located east of Snow Island, in Quahog Bay, Harpswell, Cumberland County, Maine, for the cultivation of American/eastern oysters (*Crassostrea virginica*) using suspended culture techniques. DMR accepted the application as complete on February 28, 2019. No requests for a public hearing were received during the comment period and no hearing was held. Two public comments were received during the open comment period.

**1. THE PROCEEDINGS**

Notice of the application and the 30-day public comment period were provided to state and federal agencies, riparian landowners, the Town of Harpswell, and others on DMR's mailing list. Notice of the application and comment period was published in the *Times Record* on March 14, 2019. After the close of the comment period DMR received a petition requesting the lease for Quahog Bay Conservancy be revoked<sup>2</sup>. While the petition was received after the comment period ended, it did indicate that one riparian landowner, the owner of Ben Island, was within 1,000 feet of the proposed site and had not been included in the initial notification and public comment period. After reviewing this claim, DMR confirmed that Ben Island is within 1,000 feet of the proposed lease site and the owner had not been notified. As a result, a second 30-day notice period, ending August 25, 2018 was extended to this riparian landowner. On August 8, 2019 the owner of Ben Island waived the comment period.<sup>3</sup>

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<sup>1</sup> Applicant originally requested 2.99 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 2.98 acres.

<sup>2</sup> CF: petition titled 'Save Quahog Bay Petition' submitted by Barry Catlin on July 8, 2019. The petition requested the pending application be revoked. DMR responded to D. Catlin on July 16, 2019 and notified him that the lease had not yet been granted and the proposal was still under review.

<sup>3</sup> CF: Email from G. Vincent to [DMRAquaculture@Maine.gov](mailto:DMRAquaculture@Maine.gov) dated August 8, 2019

The evidentiary record before the Department regarding this lease application includes the application, the Department's site report dated July 2, 2019, and the case file. The evidence from these sources is summarized below.<sup>4</sup>

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

### **A. Proposed Operations**

The purpose of the proposed lease is to explore the feasibility of a commercial scale oyster farm on the east side of Snow Island (App 3). Quahog Bay Conservancy plans to test different types of floating rack-n-bags systems, including OysterGro™ and Flow N Grow™ (App 2). The applicant plans to deploy up to 1,210 floating cages, and 7,260 mesh bags (App 12). If approved, the lease would be split into 5 sections, each one containing varying lengths and numbers of horizontal lines and cages (SR 2).

### **B. Site Characteristics**

On May 31, 2019 DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting an experimental aquaculture lease. The proposed site is in Quahog Bay, east of Snow Island in the Town of Harpswell (SR 2). The eastern shoreline of Snow Island is undeveloped and characterized by a steep rocky intertidal that leads to mature forests. There are buildings present on the interior of Snow Island, and along the northern and southern shorelines (SR 2).

DMR assessed water depths at the site at approximately 9:30am; high tide was predicted to occur at 9:39am. During DMR's assessment, depths at the proposed site ranged from 14 to 24 feet. When correcting for tidal variation, depths at mean low water are approximately 5.52 to 15.52 feet (SR 7).

## **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 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

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<sup>4</sup> These sources are cited below, with page references, as CF (case file), App (application), and SR (site report).

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. Riparian Access**

Access points for Snow Island, located on the northwestern and southern shores, are owned by the President of Quahog Bay Conservancy. Shoreline to the west of the proposed lease site is undeveloped. If the proposed lease is granted, it will not interfere with riparian access to Snow Island (SR 9).

Potato, Woodsy, Burbank and Mouse<sup>5</sup> Islands are located to the east of the proposed site. Potato, Woodsy, and Burbank Islands are privately owned, while Mouse/Little Snow Island is owned by the Maine Bureau of Park and Lands (SR 9). Access to these islands is likely limited to vessels landing directly on the island shorelines (SR 9), and if approved, the proposed lease will be at least 250 feet to the west and will not impede access to these islands (SR 9).

During the review period, the Department received one public comment from a riparian owner expressing support for the proposed lease.<sup>6</sup> Based on the public comment, and the information provided in the site report, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on riparian ingress and egress. It appears from this evidence that the riparian ingress and egress will not be unduly affected by the proposed application.

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

#### **B. Navigation**

The proposed lease is situated in subtidal waters and borders the eastern shore of Snow Island. Because the site goes right up to the shore of the island, navigating between the western boundary of the proposed lease and the island would require moving among floating oyster bags and cages (SR 10). At least 200 feet of navigable waters would remain to the east of the proposed site (SR 10).

Recreational boating occurs between Snow, Potato, Woodsy, Burbank, and Mouse Islands (SR 10). Mouse Island, which is managed by the Maine Island Trail Association, is state-

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<sup>5</sup> The town of Harpswell refers to this island as “Mouse Island”, whereas the Maine Bureau of Parks and Lands refers to it as “Little Snow Island”. This document will continue to refer to this island as “Mouse Island”.

<sup>6</sup> CF: Letter from A. Burbank to C. Burke, dated March 20, 2019.

owned and open for public use. There are no docking facilities on the island, but smaller vessels land directly on the island and deep-draft vessels may anchor between Mouse Island and the proposed lease (SR 10). Access points (docks) for Snow Island are located on the northwestern and southern shores and are owned by the President of Quahog Bay (SR 9). The location of the lease will not interfere with riparian access to snow island (SR (9)). The applicant noted that kayaking is common in Quahog Bay, and that they welcome kayakers to paddle through their lease (App 14).

During the review period, the Department did not receive any public comments regarding navigation. Based on the absence of public comments, and the information provided in the site report and application, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on navigation. It appears from this evidence that navigation around Snow Island will not be affected by the proposed lease application.

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

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

**Fishing.** During DMR's site visit on May 31, 2019, 2 trap buoys were observed in the area around the proposed lease (SR 11). It is likely that recreational and commercial fishing activities are more common during the summer months, and likely occur near the proposed site (SR11). The applicant indicated that the closest lobster fishing is to the west and south of Snow Island, and outside the proposed lease area (App 12). The applicant also indicated that some harvesting of Eastern oysters occurs in the subtidal waters of Quahog bay, and that there is some lobster fishing in the spring and fall (App 12).

DMR received one comment that the proposed lease would interfere with wild shellfish operation.<sup>7</sup> No other comments were received, and DMR did not receive any response from the Harbormaster for the Town of Harpswell. The applicant has indicated they are willing to allow divers to harvest wild European oysters from within the boundaries of the proposed site, if those activities do not interfere with the proposed operations (App 13). If the lease is granted, DMR will place a condition on the lease requiring wild harvesters to obtain permission from the lease holder prior to any proposed harvest activities. The intent of this condition is to provide the lease holder with an opportunity to determine whether the proposed harvest activities would interfere with the lease activities, but to provide opportunity for the wild harvest of European oysters to continue.

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<sup>7</sup> CF: public comment from P. Farmer, received March 12, 2019.

After the close of the comment period, DMR received a petition stating, ‘many lobstermen actively fish the approved leased area<sup>8</sup>.’ During their site visit on May 31, 2019, DMR did observe two trap buoys (SR 11). Both buoys were located outside of the proposed lease area. While the site report indicates that recreational and commercial fishing activities are more common during the summer months no other comments regarding lobster fishing in the area were received during the applicable comment period, and fishable waters remain near the proposed lease site.

It appears from this evidence, as well as the condition described above, that the proposed lease is unlikely to unreasonably affect the commercial and recreational fishing activities in the area.

**Exclusivity.** The applicant did not request any exclusive use and indicated they are open to commercial and recreational fishing within the proposed site as long as those activities don’t interfere with the lease operations.

**Other aquaculture uses.** The Secretary and Director of Operations for Quahog Bay Conservancy holds three Limited Purpose Aquaculture (LPA) licenses within the boundaries of the proposed lease, and one additional LPA adjacent to the north end of Snow Island. There are no other active aquaculture lessees or licensees in Quahog Bay (SR 11). DMR did not receive any comments concerning the impact of the proposal on existing aquaculture operations, and it is unlikely that the proposed activities will negatively impact existing aquaculture licenses in the area. Based on this evidence it appears that the proposed lease will not unreasonably interfere with other aquaculture uses in the area.

**Other water-related uses.** The applicant notes that kayaking is common in Quahog Bay (App 14). During the review period, the Department did not receive comments detailing other uses that are not already contemplated in other sections of this document. Based on the absence of additional comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on water-related uses of the area.

**Therefore,** considering 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. Flora & Fauna**

During DMR’s site visit, eider ducks (*Somateria mollissima*), a bald eagle (*Haliaeetus leucocephalus*), and cormorants (*Phalacrocorax auratus*) were observed in the area around the

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<sup>8</sup> CF: petition titled ‘Save Quahog Bay Petition’ submitted by Barry Catlin on July 8, 2019. The petition requested the pending application be revoked. DMR responded to B. Catlin on July 16, 2019 and notified him that the lease had not yet been granted and the proposal was still under review.

proposed lease (SR 12). According to data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), Snow Island supports two bald eagle nests. Both nests are within ¼ mile of the proposed lease (SR 12). DMR sent a copy of the application to MDIFW for their review and comment. MDIFW indicated that “minimal impacts to wildlife are anticipated for this project.”<sup>9</sup>

No records of eelgrass (*Zostera marina*) exist for the area around the proposed lease (SR 13). According to data collected by DMR and the Maine Department of Environmental Protection, the nearest eelgrass bed (surveyed in 2018), is located more than 1.7 miles to the southeast of the proposed site (SR 13). The proposed aquaculture activities are unlikely to impact eelgrass beds (SR 13).

**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**

Mouse Island is an undeveloped island owned by the Maine Bureau of Parks and Lands and is located about 250 feet from the proposed lease site (SR 14). While the island is open to the public, there are no docking facilities and boaters must land along the shoreline. If granted, the proposed lease would not interfere with access to this island or prevent boats from anchoring in the channel or cove created by the surrounding islands (Potato, Woodsy, Burbank and Mouse) (SR 14). No other public beaches or facilities owned by federal, state, or municipal government are within 1,000 feet of the proposed 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 municipal, state or federal governments.

#### **F. Source of Organisms**

The applicant intends to source American/eastern oyster seed from Mook Sea Farms Inc., in Walpole Maine, and Muscongus Bay Aquaculture in Bremen, Maine. These sources are approved by DMR.

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

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<sup>9</sup> CF: Email from R. Settele (MDIFW) to C. Burke dated May 1, 2019

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

Based on the above findings, I concluded 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, taking into consideration the number and density of aquaculture leases in the area.
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 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 2.98 acres to Quahog Bay Conservancy 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>10</sup>; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

The lease is granted for the suspended culture of American/eastern 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 sq. ft. of structures and no discharge, a bond or escrow is required. The lessee shall post a bond or establish an escrow account pursuant to DMR rule 2.64 (12) (B) in the amount of \$5,000.00, conditioned upon

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<sup>10</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.”

performance of 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 MSRA §6072-A (15).<sup>11</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 purpose of the lease.

The following conditions shall be incorporated into the lease:

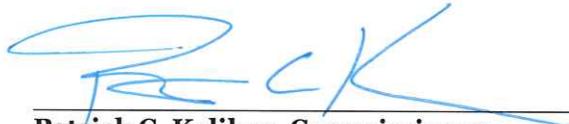
1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. SCUBA harvest of wild European oysters from within the boundaries of the lease will be permitted, provided divers obtain permission from Quahog Bay Conservancy prior to harvesting.

**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: \_\_\_\_\_

9/10/19

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

<sup>11</sup> 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.”