STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

GREENHEAD LOBSTER, LLC

Experimental Aquaculture Lease Application
Suspended Culture of Shellfish
Penobscot Bay, Stonington

PEN MIx

Findings of Fact, Conclusions of Law, and Decision

Greenhead Lobster, LLC applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease on 3.22[1] acres located in tidal impoundments north of Moose Island, Penobscot Bay, Stonington, Hancock County. The proposal is for the suspended culture of American oyster (*Crassostrea virginica)*. The proposal is for commercial research and development.

1. Proceedings

DMR accepted the final application as complete on September 28, 2023. Notice of the completed application and the 30-day public comment period was provided to state agencies, the Town of Stonington, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. On October 10, 2023, DMR sent a Harbormaster Questionnaire to the Harbormaster for the Town of Stonington, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations. No response from the Harbormaster was received by DMR.

Title 12 M.R.S.A. §6072-A(6) provides that the Commissioner shall hold a public hearing if five or more persons[2] request a public hearing within the 30-day comment period or at the Commissioner's discretion. The comment period ended on November 11, 2023. No requests for a public hearing were received during the comment period, however, DMR received comments from three riparian landowners concerning water quality and riparian access and DMR elected to hold a public hearing for this application. Notice of the hearing was published in *Island Advantages* on July 31, 2025, and provided to state agencies, the Town of Stonington, 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 August 26, 2025. The deadline for requesting intervenor status was August 26, 2025. No applications for intervenor status were received by

[1] Applicant originally requested 3.50 acres. DMR calculations indicate the area is 3.22 acres.
[2] Title 12 M.R.S.A. §6072-A (6) now requires 10 or more hearing requests to be received for the Commissioner to hold a hearing, however, at the time of this comment period, the requirement was five or more.

DMR. Two individuals registered to participate in the hearing, however, one did not provide testimony. DMR held a public hearing on this application on September 10, 2025.

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

Name	Affiliation
Hugh Reynolds	Applicant/Owner of Greenhead Lobster, LLC
Jonny Sonnenfeld	Employee of Greenhead Lobster, LLC
Allison Melvin	Member of the public

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 Maria Eggett.

DMR determined that, due to a clerical error, the notice of the complete application and comment period dated October 10, 2023, was not published in a newspaper. The notice had been distributed through DMR's aquaculture email listserv and posted on the DMR website. Therefore, following the hearing, a notice was published in the *Bangor Daily News* on September 12, 2025. The notice stated DMR was accepting comments during an additional 30-day comment period, ending on October 12, 2025. DMR received no additional comments during that time. The evidentiary record regarding this lease application includes the application, DMR's site report dated July 10, 2025, the record of the testimony at the hearing, and the case file. The record was closed on October 12, 2025. The evidence from all sources is summarized below.

A. List of Exhibits

1. Case file (CF)
2. Application (App)
3. DMR site report, issued on July 10, 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

There are four limited purpose aquaculture (LPA) sites within the boundaries of the proposal. HREY125, HREY225, HREY325, and HREY425 are licensed to Hugh Reynolds, who is the owner of Greenhead Lobster LLC (SR 10).

B. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of culturing oysters in existing lobster pounds (App 11). The applicant is proposing to culture American oysters using up to ten 20-foot by 8-foot by 3-foot floating upwellers, up to 762 five-foot by 3-foot by 2-foot floating racks, moorings, lines, and buoys (App 28). Each floating rack will contain six mesh bags (Sonnenfeld testimony). From November to March each year, the upwellers will be removed from the water and stored in the upland. All other gear, except for the buoys, will be submerged during that period (App 13).

The applicant proposes to use a skiff at the lease site year-round (App 13).

Table 2. Power equipment proposed for the lease site

Equipment	Description	Frequency of Use
Aerators	Located in the upwellers	March to November
Tumbler	Currently used for improving oyster quality	No change in frequency

C. Site Characteristics

Description. On August 29, 2024, DMR scientists assessed the proposed lease site. The surrounding area consists of a mixture of forest, residential buildings, impoundment structures, and a commercial boat yard located outside the tidal impoundments southeast of the proposal.

The proposal is located entirely within two tidal impoundments that are operated and maintained by the applicant. Water depths inside the impoundments are partially a function of local tide stage. According to the application, the impoundments hold water at a minimum depth of 3 feet below mean high water (MHW). The average depth within the impoundments at mean low water (MLW) is 9 feet. The maximum depth is approximately 15 feet, and minimum depth is 3 feet along the shoreline. If the tidal gates were opened, portions of the proposed lease site would be above MLW, and therefore intertidal (SR 2). [3]

DMR scientists observed the bottom characteristics of the proposed lease site via a remotely operated vehicle (ROV). The bottom of the proposed lease site is primarily composed of mud with shell rubble (SR 2).

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

[3] Application page 23

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 two different classifications as determined by the DMR Bureau of Public Health and Aquaculture. Proposal 1A is located in an area classified as Conditionally Approved. The area closes to the harvest of shellfish following a bypass or overflow event at the Stonington Wastewater Treatment Plant. Proposal 1B is located within an area classified as Prohibited. In the prohibited classification, only American oysters up to 0.5-inch in size can be cultured within this area, as required in Chapter 2. The applicant intends to culture seed to 12 millimeter (0.48-inch) in 1B, then move seed to 1A for further grow out (SR 13-14). [4]

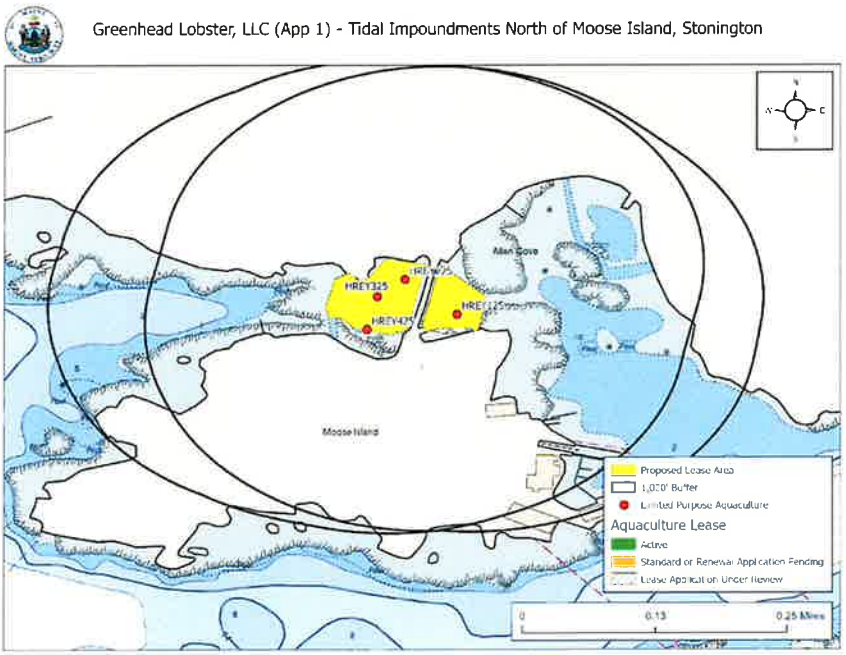

Figure 1. Proposed lease sites and surrounding area.

3. Legal Criteria and Findings of Fact

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A and DMR Regulations[5]. The statute and regulations provide that a lease for commercial aquaculture research and development or for scientific research 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 in the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; and public use or enjoyment within 1,000

[4] Application pages 6-7
[5] 13-188 C.M.R. ch. 2.

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 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-A(13)(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).

During the site visit, DMR scientists observed ten moorings in the vicinity of the proposal. Eight moorings were vacant and two had vessels present; one had a powerboat approximately 20 feet in length and the other had a powerboat approximately 22 feet in length attached. The nearest mooring was approximately 232 feet east of the proposal. All moorings were located outside of the tidal impoundments. DMR recorded waypoint locations for three docks in the vicinity of the proposal. One dock, approximately 240 feet west of the proposal, had a rowboat tied to it. The other two docks, approximately 565 feet and 775 feet southeast of the proposal, had numerous vessels tied up of varying size. Both docks are part of a commercial boat yard, Billings Diesel & Marine (Figure 2) (SR 6).

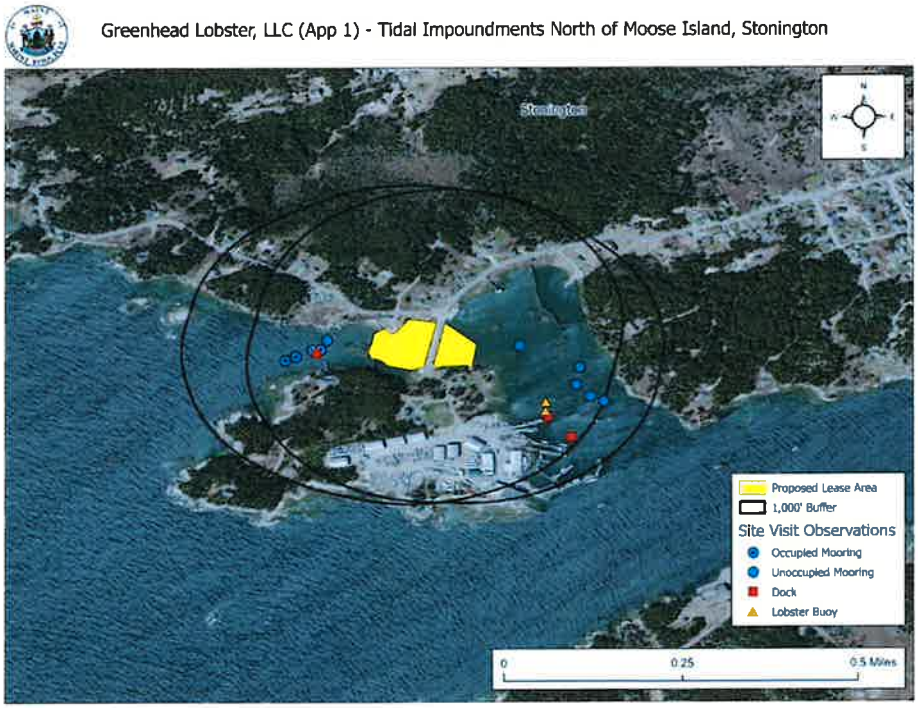

Figure 2. Proposed lease area with site visit observations.

According to aerial imagery[6], there are three additional wharves/piers in the vicinity of the proposal. Approximate distances from the proposal are the following: 180 feet west, 30 feet north, and 350 feet northeast. DMR observed these wharves/piers during the site visit but could not access them to collect a waypoint due to tidal stage (Figure 2).

A Harbormaster Questionnaire was sent to the Town of Stonington. DMR did not receive a response back (SR 7).

Due to the intertidal location of the proposal, under 12 M.R.S.A. §6072-A(8) and §6072(4)(F), the applicant is required to obtain written consent from the owner of the intertidal land. According to the application, both tidal impoundments, including intertidal areas, are owned by Greenhead Holdings LLC. The contact person for the proposed application, Hugh Reynolds, is the owner of the company applying for the lease, Greenhead Lobster, LLC, as well as the owner of Greenhead Holdings LLC.[7] In the application, Greenhead Holdings LLC provided written consent to Greenhead Lobster, LLC to use the intertidal land (SR 7).

The proposal is located in two existing tidal impoundments. The aquaculture activities proposed would occur within the tidal impoundments. During the comment period in 2023, DMR received a letter from a riparian owner expressing concerns about the proposed lease impeding access to their dock, which is located outside of the existing pound (CF: Bartlett letter). According to the application, the lease boundaries will extend to, but not beyond, the property boundaries in the portions of the site that contain the impoundment structure (App 10).

In response to a question from DMR at the hearing, the applicant confirmed that all lease activity will be confined within the property boundaries (Reynolds testimony). Given that the riparian dock is located outside of the property boundaries, the lease will not interfere with access to the structure.

Given that the proposed lease activities will be located within the confines of the existing impoundment, the lease as proposed will not interfere with riparian ingress and egress.

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

B. Navigation

When examining navigation, the Commissioner considers whether the proposed lease will interfere with navigation. 12 M.R.S.A. § 6072-A(13)(B). The Commissioner shall examine whether any lease

[6] Regional\orthoRegional 2020
[7] Application pages 5, 35, 40, 41

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 within two privately owned tidal impoundments (Figure 5). During DMR's site visit, several vessels were observed traveling to and from the commercial boat yard approximately 600 feet southeast of the proposal.

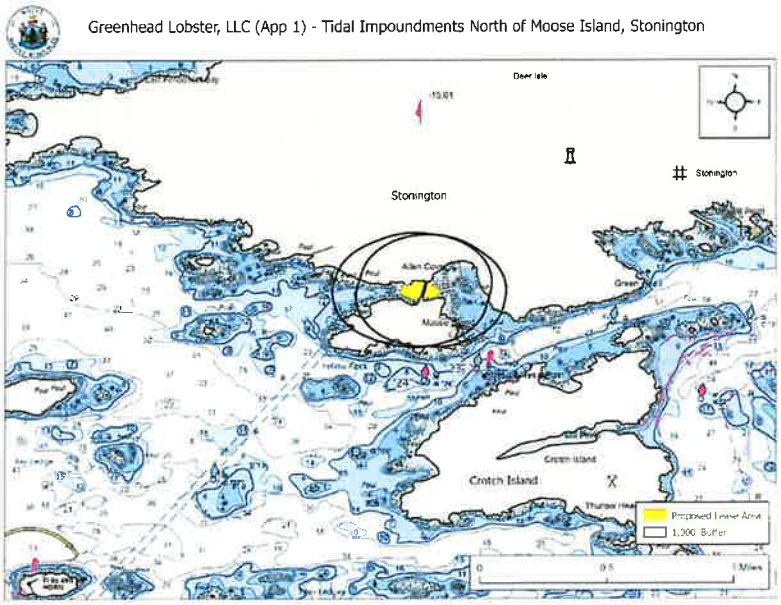

Figure 3. Navigational channels in the vicinity of the proposed lease area.

No testimony or evidence was offered at the hearing concerning navigation. In response to a question from DMR at the hearing, the applicant stated there is no public access to the impoundments, via water (Hughes and Sonnenfeld testimony).

Given that the proposed lease activities are located wholly within an impoundment, and the record evidence is that no navigation occurs in the impoundment, the lease will not interfere with 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-A(13)(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. During the site visit, DMR observed two lobster buoys approximately 475 feet and 515 feet southeast of the proposal (Figure 2). These buoys were located outside of the tidal impoundments. There are no public access points, by land or sea, to the impoundments. Additionally, due to the water quality classification, the harvest of wild shellfish is prohibited within impoundment 1B (SR 9).

The Towns of Deer Isle and Stonington have a shellfish conservation program in accordance with 12 M.R.S.A. § 6671 and because the site is located within the intertidal, the applicant is required to obtain consent from the municipality. The applicant provided this permission with the application.[8]

In response to a question from DMR at the hearing, the applicant stated there is no public access to the impoundments, via land or water (Hughes and Sonnenfeld testimony).

Other Uses. According to the application, there are no other uses of the proposed lease site because it is private property (App 15).

No testimony or evidence was offered at the hearing concerning fishing or other uses of the site.

Given that the proposed lease activities are located wholly within an impoundment, with no public access, the lease will not interfere with fishing or other uses of the area.

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-A(13)(C), in evaluating the proposed lease, the commissioner shall take into consideration the number and density of aquaculture leases in an 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).

There are four limited purpose aquaculture (LPA) sites within the boundaries of the proposal. HREY125, HREY225, HREY325, and HREY425 are licensed to Hugh Reynolds, who is the owner of Greenhead Lobster LLC. In response to a question from DMR at the hearing, the applicants stated that the LPAs will be relinquished if this lease is granted (Reynolds and Sonnefeld testimony). There are no licensed aquaculture leases within 1,000 feet of the proposal (Figure 1).

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

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E. Existing System Support

When examining 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-A(13)(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. On August 29, 2024, DMR scientists utilized a ROV to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed in the video footage is described below in Table 3.

Table 3. Species observed on underwater video footage during August 29, 2024, site visit.

Species Observed	Abundance
Hermit crab (*Pagurus* spp.)	Common
Sand Shrimp (*Crangon septemspinosa)*	Occasional
European green crab (*Carcinus maenas*)	Occasional
Rockweed (*Ascophyllum nodosum*)	Occasional
Mysid Shrimp (*mysis sp.*)	Occasional

Marine Vegetation. Records of eelgrass collected by DMR in 2010[9] indicates the nearest mapped eelgrass is approximately 205 feet west of the proposal. No eelgrass was observed on underwater video footage within the proposal boundaries during DMR's site visit (SR 11).

Wildlife. During DMR's site visit, scientists observed an osprey (*Pandion haliaetus*), great blue heron (*Ardea herodias*), double-crested cormorant (*Nannopterum auritum*), and lesser black backed gulls (*Larus fuscus*) in the general vicinity of the proposal.

According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (IFW) and available through the Maine Office of GIS (MEGIS), there is one mapped habitat type within 1,000 feet of the lease proposal. The proposal is near Tidal Waterfowl and Wading Bird Habitat (TWWH), which is a type of Significant Wildlife Habitat designated and regulated by IFW.[10] Based on data maintained by IFW, the proposal is adjacent to, but not within, mapped TWWH (SR 12).

[9] Data obtained from The Maine Office of GIS "GISVIEW.MEDMR.Eelgrass". This is the most current record of mapped eelgrass within the vicinity of the proposal.
[10] https://www.maine.gov/ifw/programs-resources/environmental-review/significant.html

Data collected by USFWS in 2023 by aerial nest survey shows there is no mapped bald eagle nesting site within the vicinity of the proposal. The nearest mapped bald eagle nest is approximately 2.3 miles southeast of the proposal.

IFW was provided with the opportunity to comment on this proposal. On October 27, 2023, a Resource Biologist with IFW responded by email to a "Request for Agency Review and Comment" stating that minimal impacts to wildlife are anticipated for this project (SR 12). [11]

No evidence or testimony was given at the public hearing concerning significant flora and fauna in the area.

Based on the record, including the absence of eelgrass and mapped significant wildlife habitats in the lease footprint, the proposed lease activities will not interfere with the ecological functioning of 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-A(13)(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).

According to the application, American/eastern oyster (*Crassostrea virginica*) would be sourced from Downeast Research Institute (DEI) in Beals, Maine. This is currently an approved source for American/eastern oyster (*Crassostrea virginica*). The application also lists "a DMR approved hatchery (other than DEI)" as an option for sourcing. As long as the source is currently listed as approved by DMR at the time of acquisition of American oyster seed, this is also an acceptable source.

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

[11] Email correspondence between IFW and DMR

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, or docking facility owned by the Federal Government, the State Government or a municipal governmental agency. 12 M.R.S.A. § 6072-A(13)(F). Chapter 2.37(1)(A)(7) and 2.64(11)(A)).

The proposed lease is not within 1,000 feet of any beach, park, or docking facility owned by federal, state, or municipal governments (SR 13).

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

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 uses of the area, 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, or docking facilities 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.

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 an experimental lease to Greenhead Lobster, LLC, for 3.22 acres for three years, the term of the lease to begin within 12 months of the date of this decision, on a date chosen by the lessee; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed. The granted lease coordinates are contained in the Appendix to this decision.

This lease is granted to the lessee for the cultivation of American oyster (*Crassostrea virginica)* using suspended culture techniques. The lessee shall pay the State of Maine rent at $100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to Chapter 2.64(12)(A) in the amount of $5,000 conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statues 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-A(15) and Chapter 2.64(11)(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 are imposed on this lease.

7. Revocation of Lease

The Commissioner may commence revocation procedures upon determining pursuant to 12 M.R.S.A. §6072-A(22) that no substantial aquaculture or 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 condition of the lease or any applicable laws or regulations have been violated.

Dated: 1·26·26

Carl J. Wilson, Commissioner
Department of Marine Resources

Appendix

Granted Lease Coordinates

1A – 2.10 Acres

Corner	Latitude	Longitude	
1	44.151594°	-68.681457°	then 116 feet at 214° True to
2	44.151328°	-68.681702°	then 35 feet at 252° True to
3	44.151296°	-68.681829°	then 51 feet at 321° True to
4	44.151404°	-68.681953°	then 63 feet at 238° True to
5A	44.151311°	-68.682156°	then 71 feet at 191° True to
5B	44.151118°	-68.682208°	then 75 feet at 197° True to
6	44.150920°	-68.682283°	then 25 feet at 152° True to
7	44.150858°	-68.682241°	then 21 feet at 180° True to
8	44.150799°	-68.682240°	then 23 feet at 92° True to
9	44.150796°	-68.682151°	then 33 feet at 110° True to
10	44.150764°	-68.682034°	then 54 feet at 136° True to
11	44.150656°	-68.681894°	then 25 feet at 107° True to
12	44.150635°	-68.681804°	then 56 feet at 105° True to
13	44.150598°	-68.681597°	then 53 feet at 105° True to
14	44.150558°	-68.681401°	then 72 feet at 67° True to
15	44.150633°	-68.681146°	then 21 feet at 5° True to
16	44.150692°	-68.681139°	then 310 feet at 12° True to
17	44.151524°	-68.680896°	then 149 feet at 280° True to 1

1B – 1.12 Acres

Corner	Latitude	Longitude	
18	44.151508°	-68.680706°	then 121 feet at 192° True to
19	44.151182°	-68.680799°	then 78 feet at 192° True to
20	44.150972°	-68.680856°	then 109 feet at 192° True to
21	44.150680°	-68.680946°	then 35 feet at 156° True to
22	44.150592°	-68.680893°	then 38 feet at 64° True to
23	44.150636°	-68.680760°	then 140 feet at 85° True to
24	44.150654°	-68.680228°	then 27 feet at 190° True to
25	44.150581°	-68.680245°	then 27 feet at 50° True to
26A	44.150630°	-68.680165°	then 86 feet at 9° True to
26B	44.150864°	-68.680113°	then 80 feet at 8° True to
27A	44.151082°	-68.680073°	then 133 feet at 314° True to
27B	44.151334°	-68.680441°	then 94 feet at 313° True to 18