STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

Experimental Aquaculture Lease Application Suspended Culture of Marine Algae St. George River, St. George, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Albatross Fisheries applied to the Department of Marine Resources (DMR) for a 2.9-acre experimental lease located east of Caldwell Island, St. George River, in the town of St. George, Knox County, for the suspended culture of sugar kelp (Saccharina latissima), skinny kelp (Saccharina angustissima), winged kelp (Alaria esculenta), horsetail/fingered kelp (Laminaria digitata), shotgun kelp (Agarum clathratum)¹, dulse (Palmaria palmata), Irish moss (Chondrus crispus), and sea lettuce (Ulva lactuca) for commercial aquaculture research and development.

1. PROCEEDINGS

DMR accepted an application for a 4.0-acre lease as complete on June 27, 2023. Notice of the complete 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 subscribers to DMR's aquaculture email listsery. Notice to the municipality included a Harbormaster Questionnaire requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, and fishing or other uses of the area, among other considerations. No response was received from the Harbormaster. Notice of the complete application and comment period was published in the July 13, 2023, edition of *The Courier-Gazette*. The comment period ended on August 12, 2023.

During the initial 30-day public comment period, DMR received correspondence from legal counsel for one of the riparian landowners, Caldwell-Stone Islands Properties, LLC (CSIP). According to the letter received by DMR, the riparian owner has two moorings that are located within the proposed lease boundaries. The letter stated that if the lease were approved, it would prohibit use of the moorings and limit access to the riparian's dock and float (Exhibit 5).

In response to these comments, the applicant elected to modify the boundaries of the proposal and resubmit a request for a 2.9 acre lease, instead of the previously requested 4.0-acre lease proposal. The new application was deemed complete on October 16, 2023. Notice of the complete application and the 30-day public comment period was provided to state agencies, riparian landowners within 1,000 feet of the

¹ Application states the scientific name as *Agarum cribosum*, however, the current accepted scientific name is *Agarum clathratum*.

proposed site, the Town of St. George, and subscribers to DMR's aquaculture DMR's email listsery. Notice to the municipality included a Harbormaster Questionnaire requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, and fishing or other uses of the area, among other considerations. No response was received from the Harbormaster. Notice of the complete application and comment period was published in the December 21, 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 persons² request a public hearing within the 30-day comment period. The comment deadline ended on January 20, 2024. No requests for a public hearing were received during the comment period, and no hearing was conducted. The evidentiary record regarding this lease application includes the application, DMR's site report dated June 14, 2024, the case file, and the correspondence from Preti Flaherty on behalf of Caldwell-Stone Islands Properties, LLC. The evidence from each of these sources is summarized below.

LIST OF EXHIBITS

- 1. Case file (CF)
- 2. Application deemed complete on October 16, 2023 (App)
- 3. DMR site report, issued on June 14, 2024 (SR)
- 4. Letter from Preti Flaherty on behalf of CSIP, dated August 11, 2023 (Exhibit 4)

The case file, application and site report are referred to in the decision with their designated abbreviations. Additional exhibits are referred to in the decision by their number as indicated in the list of exhibits.

2. DESCRIPTION OF THE PROJECT

A. Site History

No historic aquaculture activities have occurred in the area of this proposal.

B. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of culturing marine algae at this location (App 5). The applicant is proposing to culture sugar kelp (Saccharina latissima), skinny kelp (Saccharina angustissima), winged kelp (Alaria esculenta), horsetail/fingered kelp (Laminaria digitata), shotgun kelp (Agarum clathratum)³, dulse (Palmaria palmata), Irish moss (Chondrus

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.

³ Application states the scientific name as *Agarum cribosum*, however, the current accepted scientific name is *Agarum clathratum*.

crispus), and sea lettuce (*Ulva lactuca*) using seventeen 700-foot longlines. The applicant also proposes eight cross-lines, counterweights, moorings with lines and chains, and buoys (App 13-14).

According to the application, moorings (with the buoys removed so that the lines/chain sink to the ocean floor) and marker buoys will remain on-site year-round. All other gear will be removed from June 16 to September 30 every year (App 6). The applicant intends to seed the site from November to December and to harvest the marine algae in May and June (App 8).

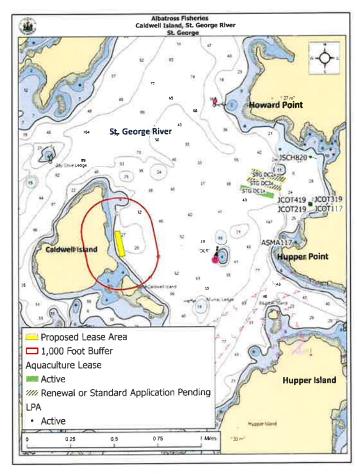


Figure 1: Aquaculture leases and LPA licenses in the vicinity of the proposed lease area. Image generated by DMR staff. ⁴

C. Site Characteristics

On October 18, 2023, DMR scientists assessed the proposed lease site including the area originally included in the 4.0-acre proposal. The proposal is located in subtidal waters in the St. George River approximately 161 feet to the east of Caldwell Island. DMR observed that the shoreline of Caldwell Island

⁴ Unless otherwise noted, all figures in this report were created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.

is rocky with forested uplands. One pier with a dock was observed within 1,000 feet of the proposal. Aerial imagery⁵ indicates the presence of a house within 1,000 feet of the proposal approximately 375 feet to the northwest of the observed dock. The house was not visible from the water when DMR scientists conducted the site visit (Figure 2) (SR 2).

Depths were determined to be between 25.0-35.1 feet⁶ at mean low water (MLW, 0.0 feet). The bottom of the lease site is primarily composed of mud.



Figure 2. Proposed lease area with site visit observations. Image from DMR site report.

3. LEGAL CRITERIA & FINDINGS OF FACT

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A and DMR Regulations, *Aquaculture Lease Regulations* 13-188 C.M.R. ch. 2 (Chapter 2). The statute and regulations provide that a lease for commercial aquaculture research and development or for scientific research 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; navigation; fishing or other uses of the area, other

⁵ Maine Orthoimagery Coastal Midcoast 2023

⁶ Reported depths are based on the original application coordinates. Depths in the northern portion of the reduced lease area are expected to be similar to depths in the original northern extent.

aquaculture uses in the area; with 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 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 DMR's site assessment, scientists observed one dock with a float within 1,000 feet of the proposal located approximately 369 feet to the northwest. At the time of DMR's site assessment, a dinghy was tied to the float. DMR scientists also observed two moorings within 1,000 feet of the proposal located approximately 62 and 192 feet to the north of the proposed lease area. Aerial imagery shows the presence of at least one other pier and dock on Caldwell Island approximately 2,388 feet to the southwest. Imagery also indicates the presence of a house within 1,000 feet of the proposal on Little Caldwell Island. No pier or dock appears to be associated with the house and DMR scientists did not observe a pier, dock, or mooring during the site assessment in the vicinity of Little Caldwell Island within 1,000 feet of the proposal (Figure 2) (SR 5).

In a letter to DMR dated August 11, 2023, Michael Lane of Preti Flaherty, legal representative for Caldwell-Stone Islands Properties, LLC (CSIP), a riparian owner, stated that the lease as proposed in the June 27, 2023, application would adversely impact riparian access. Mr. Lane stated that CSIP owned two moorings that are located within the boundaries proposed for the 4.0-acre lease. Additionally, Mr. Lane stated that access to CSIP's dock and float would be limited by the proximity of the proposed lease. Mr. Lane suggested that the lease boundaries by moved to "150 feet south and 50 feet east at the north end, and 80 feet east at the south end" (Exhibit 5).

In light of these comments, the applicant elected to revise the lease proposal and submit a new application. The revised proposal reduced the overall size from 4.0 acres to 2.9 acres. The reduction is shown in Figure 2, above. The new lease proposal is 783 feet long by 164 feet wide, which is 277 feet shorter than the original proposal (the width is unchanged in the two applications). The new boundaries shift the lease away from CSIP's dock and float and the proposed lease would no longer encompass the

riparian's moorings. According to the application, with the new dimensions, the proposed lease would be 107 feet away from the closest mooring (App 8). The application further states that during the months that the gear is fully deployed, ingress and egress would still be possible from the north and east. During the summer months, when most gear will be removed from the site, access to the dock and moorings is possible from all directions (App 8).

It is likely that the lease as initially proposed would interfere with riparian ingress and egress, specifically to a dock and float and two moorings. The applicant modified the proposal based on the feedback of CSIP, providing approximately 100 feet of separation between the lease boundary and the nearest mooring. This is a similar separation to what is proposed in a graphic in the letter from CSIP's legal representative (Exhibit 4, page 4). The size reduction also places the lease boundaries further away from the dock and float. Therefore, given the distance to riparian structures, the proposed lease will not adversely impact riparian access.

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

B. Navigation

When examining navigation, the Commissioner considers whether the lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2). 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 in subtidal waters approximately 161 feet to the east of Caldwell Island, which is located near the mouth of the St. George River. There is approximately 4,450 feet of navigable water at MLW between the proposed lease area and Hupper Point on the eastern shoreline of the river. An additional marked navigation channel located to the west of Caldwell Island also provides access to and from the St. George River (Figure 3). During DMR's site assessment, scientists observed two lobster boats navigating to the west of the site between the proposal and Caldwell Island (SR 5).

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⁷ No comments from CSIP on the new lease proposal were received by DMR.

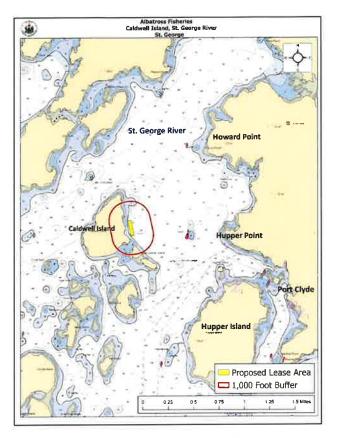


Figure 3. Charted navigational channels in the vicinity of the proposal. Image from DMR site report.

Given the distance to the designated navigation channel, the proposed lease will not unreasonably interfere with navigation.

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

C. Fishing & 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 DMR's site assessment, scientists observed light lobstering activity in the vicinity and to the north of the proposal. DMR observed 16 lobster buoys within 1,000 feet of the proposal with one lobster buoy located within the boundaries of the proposal. The next closest buoy to the proposal was located approximately 92 feet to the west (SR 6).

The application states there is some lobstering in this area, but no recreational fishing. The application states that lobstering occurs from June to September, when the longlines will not be seeded or growing (App 8).

Given the limited level of activity reported and the timing of gear deployment, the proposed lease will not unreasonably interfere with commercial and recreational fishing activities in the area.

Other uses. According to the application, no recreational activities have been observed in the area (App 8). Given the timing of gear deployment and available area surrounding the lease, the lease as proposed would not prevent recreational activities from occurring in the area.

Therefore, the activities proposed for this site 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 no active aquaculture leases or LPAs within 1,000 feet of the proposal (SR 7).

Given the distance to other aquaculture activities, the lease as proposed will not interfere with existing aquaculture in the area.

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

E. Existing Support System

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 October 18, 2023, DMR scientists utilized a ROV (remotely operated vehicle) to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed is described below in Table 1.

Table 1. Species observed on underwater video footage.

Species Observed	Abundance
Rock/Jonah crab (Cancer spp.)	Common
Northern Cerianthids (Pachycerianthus borealis.)	Occasional
Sand shrimp (Crangon septemspinosa)	Common
Tunicates (Didemnum vexillum)	Rare
Sponge (<i>Porifera</i> spp.)	Rare
Sugar kelp (Saccharina latissima)	Rare
Red filamentous algae (Dasysiphonia japonica)	Rare
Longfin squid (Doryteuthis pealeii) egg mass	Rare

Marine Vegetation. Records of seagrass collected in 2023⁸ indicate that there is mapped eelgrass within 1,000 feet of the proposal located approximately 157 feet to the west (Figure 4). During DMR's site assessment, scientists observed very sparse eelgrass rooted to the seafloor in an area approximately 225 feet to the north of the proposal boundaries.⁹ Water depth in this general area is approximately 26 feet at MLW. In addition, DMR scientists observed an approximately eight square foot area of sparse to moderate rooted eelgrass approximately 223 feet to the northwest of the proposal, with additional very sparsely rooted eelgrass in the vicinity (Figure 2). Water depth in that area is approximately four feet at MLW. DMR scientists did not observe any eelgrass within the proposal boundaries.

⁸ Data obtained from The Maine Office of GIS "GISVIEW.MEDEP.Seagrass2023". Widgeon grass was observed only in a tributary to the Great Salt Bay, upstream of a culvert that likely restricts tidal flow. Eelgrass was the dominant vascular species in all other locations. This is the most current record of mapped eelgrass within the vicinity of the proposal.

⁹ At the time of DMR's site assessment, the northern area assessed with the ROV was within the proposal boundaries.

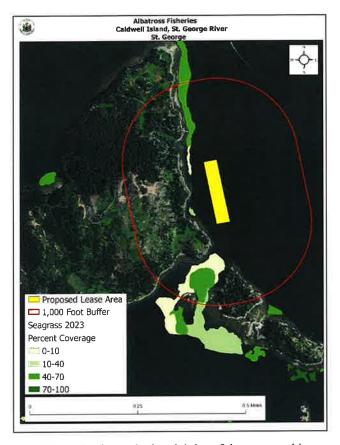


Figure 4. Mapped eelgrass in the vicinity of the proposed lease area.

Eelgrass is typically found in shallower water depths in subtidal to low intertidal areas to allow for adequate light penetration. DMR expects seasonal regrowth of eelgrass to occur in April/May and seasonal senescence of eelgrass to occur in October/November. The applicant is proposing to seasonally culture marine algae on longlines from November to June (SR 8).

Wildlife. 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), the proposed lease is within 1,000 feet of Tidal Waterfowl and Wading Bird Habitat (TWWH). There is an area of TWWH located approximately 169 feet to the west of the proposal, as well as another area of TWWH located approximately 275 feet to the south. In addition, there is a bald eagle (*Haliaeetus leucocephalus*) nest mapped approximately 496 feet to the west of the proposal on Caldwell Island (Figure 5).

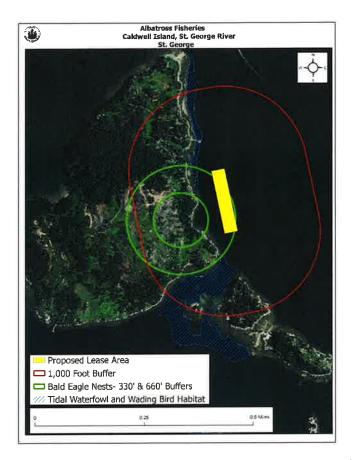


Figure 5. Mapped TWWH and bald eagle nests in the vicinity of the proposed lease area. 10

On August 9, 2023, a Resource Biologist with IFW responded by email to a "Request for Agency Review and Comment", stating that the proposal is adjacent to TWWH. Minimal impacts are anticipated as long as eelgrass or substrate suitable for eelgrass is not present.

During DMR's site assessment, scientists observed herring gulls (*Larus argentatus*), a great blue heron (*Ardea herodias*), a loon (*Gavia immer*), and black guillemots (*Cepphus grylle*) in the vicinity of the proposal (SR 11).

Given IFW's comment, the absence of eelgrass within the lease boundaries, and the seasonal gear deployment, the proposed activities will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

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.

¹⁰ Data obtained from USFWS "Bald_Eagle_Nests_-_Maine_2023" and MDIFW maintained SDE Feature Class "GISVIEW.MEIFW.Twwh"

F. Interference with Public Facilities

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 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).

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

Therefore, the aquaculture activities as proposed 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

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).

The applicant proposes to obtain sugar kelp (Saccharina latissima), skinny kelp (Saccharina angustissima), winged kelp (Alaria esculenta), horsetail/fingered kelp (Laminaria digitata), shotgun kelp (Agarum clathratum), dulse (Palmaria palmata), Irish moss (Chondrus crispus), and sea lettuce (Ulva lactuca) from Atlantic Sea Farms (ASF) (Biddeford, Maine). ASF is an approved source of stock for all of these species except Ulva lactuca. ASF has a land-based aquaculture license for the culture of Ulva fenestrate, a different species of sea lettuce, replacing the previously cultured Ulva lactuca. Due to this change in species of sea lettuce, Ulva fenestrata, not Ulva lactuca will be approved for the lease.

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

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 municipal, state, or federal governments.
- 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. <u>DECISION</u>

Based on the foregoing, the Commissioner grants the application for a proposed experimental lease of 2.9 acres to Albatross Fisheries, LLC, 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 lessee¹¹; 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 sugar kelp (Saccharina latissima), skinny kelp (Saccharina angustissima), winged kelp (Alaria esculenta), horsetail/fingered kelp (Laminaria digitata), shotgun kelp (Agarum clathratum), dulse (Palmaria palmata), Irish moss (Chondrus crispus), and sea lettuce (Ulva fenestrata). The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule Chapter 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 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 2.64(11)(B). Conditions

¹¹ DMR Rule 2.64 (14) provides:

[&]quot;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."

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 EXPERIMENTAL LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 MRSA §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: 10.21.25

carl J. Wilson, Commissioner

Department of Marine Resources

<u>Appendix</u>

Granted Lease Coordinates – 2.90 acres

Corner	Latitude	Longitude	
NW	43.93806°	-69.29180°	then 160.7 feet at 080° True to
NE	43.93 8 14°	-69.29120°	then 779.2 feet at 168° True to
SE	43.93605°	-69.29058°	then 163.3 feet at 260° True to
SW	43.93597°	-69.29119°	then 778.6 feet at 348° True to NW