

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Standard Aquaculture Lease Application
Suspended culture of marine algae & shellfish
Casco Bay, Chebeague Island

Stewart Hunt
CAS CI2

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Stewart Hunt applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 13.78¹ acres located northeast of Seal Ledge within Casco Bay, Town of Chebeague Island, in Cumberland County. The application is for the suspended culture of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), dulse (*Palmaria palmata*), winged kelp (*Alaria esculenta*), sea scallops (*Placopecten magellanicus*), and green sea urchins (*Strongylocentrotus droebachiensis*).

1. THE PROCEEDINGS

The applicant submitted a draft application to DMR on August 27, 2020 and a scoping session was held on February 21, 2021. The final application was deemed complete by DMR on May 7, 2021. Notice of the completed application was provided to state agencies, the Town of Chebeague Island and its Harbormaster, and others on DMR's mailing list. DMR's site report was issued on June 15, 2023.

The public hearing on this application occurred on August 15, 2023. Public notice of the hearing was published in *The Forecaster* on July 13, 2023, and July 27, 2023. Notice of the hearing was also provided to the Town of Chebeague Island, other state agencies, and subscribers of DMR's aquaculture email list-serve².

As indicated on all notices of the hearing, persons who wished to ask questions of the parties or offer testimony were required to register. Two individuals registered to provide testimony. Persons who registered to participate in the hearing, including the applicant, were also sent information about participation in the proceeding, hearing agenda and testimony time limits. During the hearing, both registered individuals declined to provide testimony. Only the applicant provided testimony.

The hearing was recorded by DMR. The Hearing Officer was Hannah Brazier.

¹ Applicant originally requested 13.75 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 13.78 acres.

² Based on the location of the proposed site, there are no riparian landowners within 1,000 feet of the proposed lease site.

The evidentiary record before DMR regarding this lease application includes 3 exhibits (see exhibit list below), and the record of testimony at the hearing itself. The evidence from these sources is summarized below.

LIST OF EXHIBITS³

1. Case file
2. Application
3. DMR site report

2. DESCRIPTION OF THE PROJECT

A. Site History

On August 19, 2019, DMR granted, CAS CI2x, an experimental lease to Stewart Hunt. The experimental lease is located between Cousins and Chebeague Islands, Casco Bay, in the Town of Yarmouth. The experimental lease is 3.85 acres and is for the suspended cultivation of sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), and laver (*Porphyra sp.*).

The experimental lease expired on September 14, 2022. However, 12 M.R.S.A §6072-A(20), allows the holder of an experimental lease to continue operating the site while DMR considers the standard lease proposal, so long as the standard lease proposal overlaps a portion or all of the existing experimental lease. In this case, the boundaries of the experimental and standard lease do not overlap (see Figure 1). During the scoping session for the standard lease, Mr. Hunt received feedback from the Towns of Yarmouth and Chebeague and local lobstermen suggesting that the location of the experimental lease be moved to minimize impacts to local navigation and boating traffic (CF).

³ Exhibits 1, 2, and 3 are cited below as: Case file – “CF”; Application – “App”, site report – “SR”. Other exhibits are cited by number.



Figure 1. Stewart Hunt’s proposed standard lease location in relation to Mr. Hunt’s existing experimental lease, CAS CI2x. Image from DMR site report.

Based on the feedback, Mr. Hunt requested an exception to certain provisions of 12 M.R.S.A §6072-A(20), so that he could continue to operate CAS CI2x while a more suitable location for the standard lease was entertained. On May 6, 2021, the Commissioner of DMR granted the exception, allowing Mr. Hunt to continue to operate his existing experimental lease, while DMR processed the standard proposal in a new location.

If the standard lease is granted, CAS CI2x would be terminated. No aquaculture activities can occur on leases until they are fully executed. Mr. Hunt would have 30 days from the date the standard lease is fully executed to remove all product, gear, and moorings from CAS CI2x.

B. Site Characteristics

On July 28, 2021, DMR staff assessed the proposed lease site and the surrounding area in consideration of the criteria for granting a standard aquaculture lease. The proposed lease area occupies subtidal waters northeast of Seal Ledge, in Chebeague Island (SR, 2). According to the

site report, the proposal is located approximately 600 feet from Seal Ledge and approximately 1,550 feet from Chebeague Island, at mean low water from their nearest points (SR, 3). The surrounding shoreline is mostly rocky and the upland features predominately mixed forest (SR, 2). The bottom of the proposed lease site is characterized by soft mud (SR, 3). Correcting for tidal variations, depths within the site range are between 30.3 to 46 feet at mean low water (SR, 2).

C. Proposed Operations

The applicant is proposing to culture sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina latissimi forma*), dulse (*Palmaria palmata*), and winged kelp (*Alaria esculenta*) using longlines on the northern most section of the proposed lease (approximately 12.35 acres) and is proposing to culture sea scallops (*Placopecten magellanicus*), and green sea urchins (*Strongylocentrotus droebachiensis*) on the southernmost portion of the lease (approximately 1.43 acres), for a total of 13.78 acres. Marine algae will be grown on up to 15 longlines approximately 1,200 feet in length, 600 feet apart, that are oriented northeast to southwest. The longlines will be deployed seven feet below the surface of the water (SR, 2). Sea scallops and green sea urchins will be cultivated in the southern portion of the proposed lease site, closest to Seal Ledge, using up to 500 lantern nets. The lantern nets are strung from up to 10 longlines that measure 200 feet in length and are suspended 15-20 feet below the surface of the water during the summer months (SR, 2).

During the winter months, there will be approximately 45 yellow mooring balls and 150 depth control lobster style buoys on the northern kelp section of the site (App, 11). All associated marine algae gear, excluding six lobster-style buoys and the required lease site boundary markers, will be removed from the water from May 16 to November (SR, 2). During the summer months, up to 20 yellow mooring balls and 100 depth control lobster style buoys will remain on the southern sea scallop and green sea urchin portion of the site (App, 10). During the winter months, sea scallops and green sea urchins will be sunk to the seafloor utilizing wire cages and mesh bags (SR, 2).

3. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner upon determining that the project will not unreasonably interfere with: the ingress and egress of riparian owners; navigation; fishing or other uses of the area, taking into consideration other aquaculture uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or the public use or enjoyment within 1,000 feet of beaches, parks, docking facilities, or conserved lands owned by municipal, state, or federal governments. The Commissioner must also

determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

A. Riparian Access

The proposed lease is located over 1,000 feet from the Chebeague Island shoreline at MLW (SR, 4). During the site visit on July 28, 2021, one pier was observed within the vicinity of the proposal, and approximately 10 houses were observed along the western shoreline of Chebeague Island (SR, 4). A total of six moorings were observed to the east of the proposal, three were occupied and three were unoccupied at the time of the site visit (SR, 4).

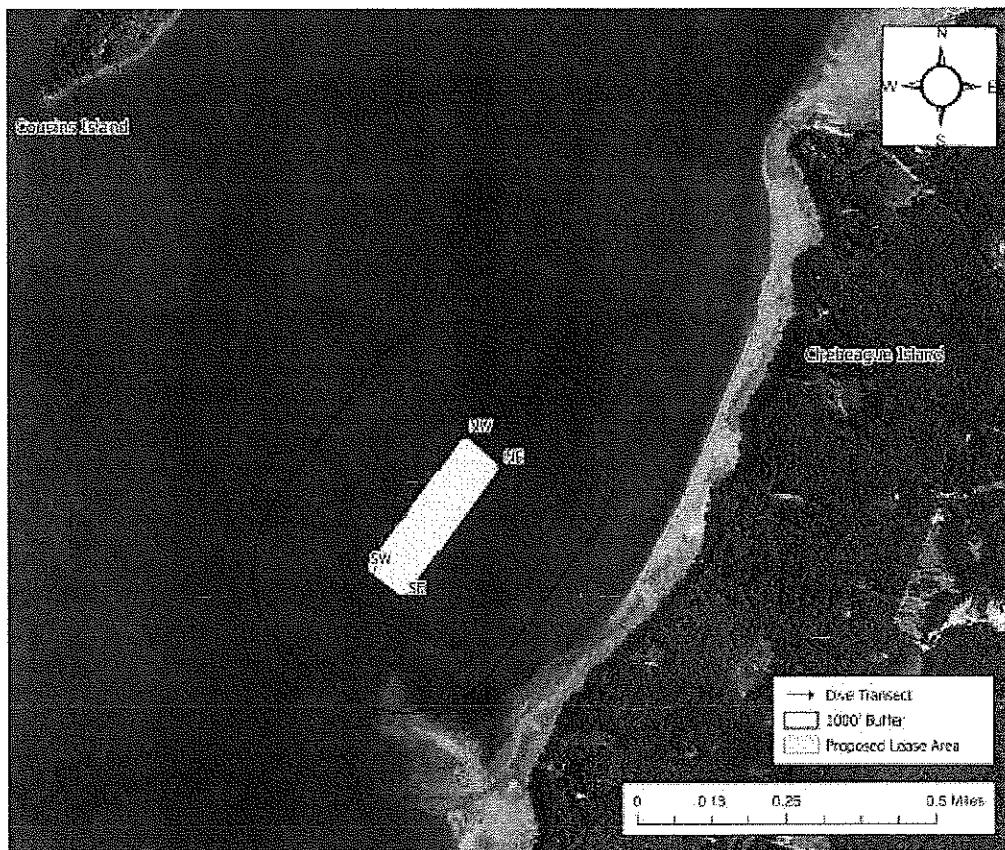


Figure 2. Aerial image depicting house, mooring, and dock locations with 1,000-foot buffer location. Image taken from DMR site report.

According to Figure 2 taken from the site report, it appears that all the existing structures are located over 1,000 feet from the proposed site. A Harbormaster Questionnaire was sent to the Town of Chebeague Island, but no response was received. During the hearing, no testimony was provided regarding riparian ingress and egress.

Given the location of the proposed lease site, the distance to shore and the observed moorings, and the lack of any concerns about riparian access having been raised, little to no interference with navigation to riparian properties is expected. **Therefore**, the aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.

B. Navigation

During the site assessment, a variety of vessels were observed operating in the general vicinity of the proposal, including commercial lobster boats, powerboats, sailboats, and hand powered boats (SR, 5). The site report noted that one vessel was observed transiting through the proposed lease site during DMR's site visit (SR, 6). The proposal is located northeast of Seal Ledge, which is a tidally exposed ledge extending westerly from the shoreline of Chebeague Island (SR, 5, Figure 2). There is an additional rocky outcropping approximately 1 mile northeast of the proposal extending from Chebeague Island northwesterly toward Littlejohn Island (SR, 5). According to the application, the site was chosen during the scoping session and was intentionally set to the east of a rhumb line used to help boaters avoid Seal Ledge (App, 24, Figure 3). The application also states that red nun "18" guides boaters closer to Cousins and Littlejohn Island shorelines to avoid the navigational hazards of Seal Ledge and the rocky outcropping north of the proposed lease site (App, 24).

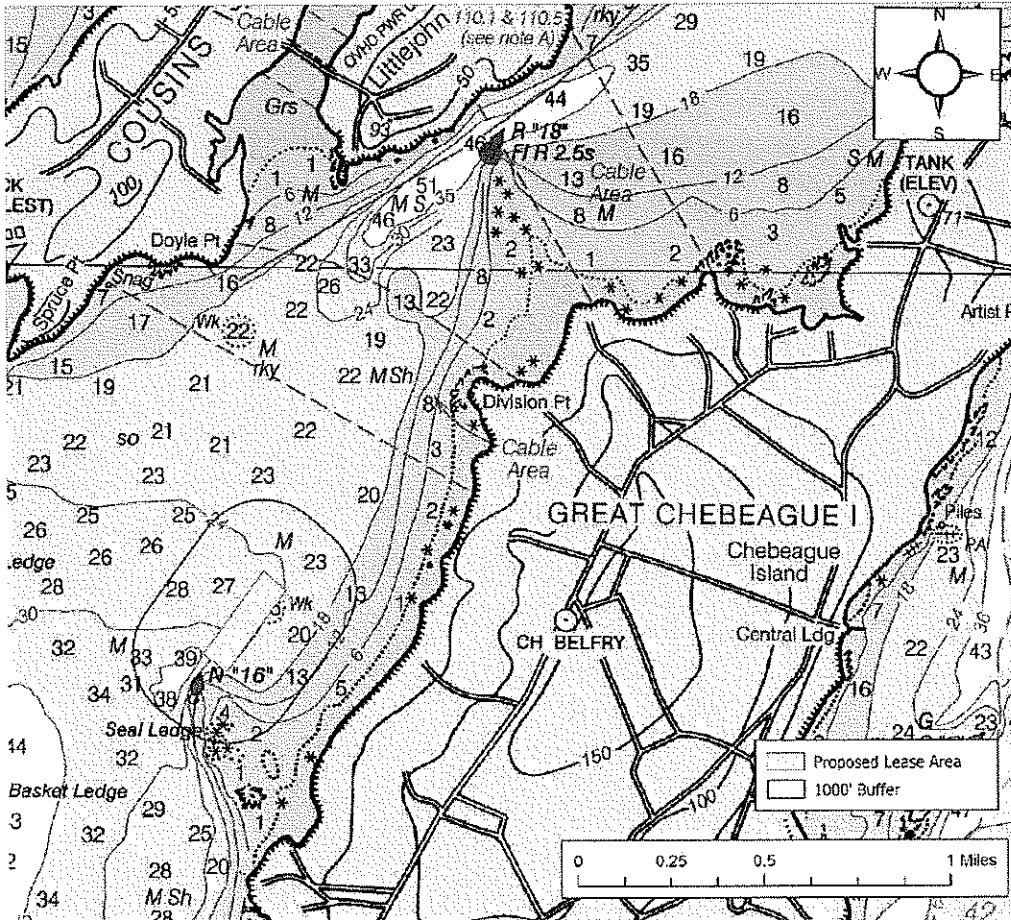


Figure 3. Proposed standard lease area. Image from site report.

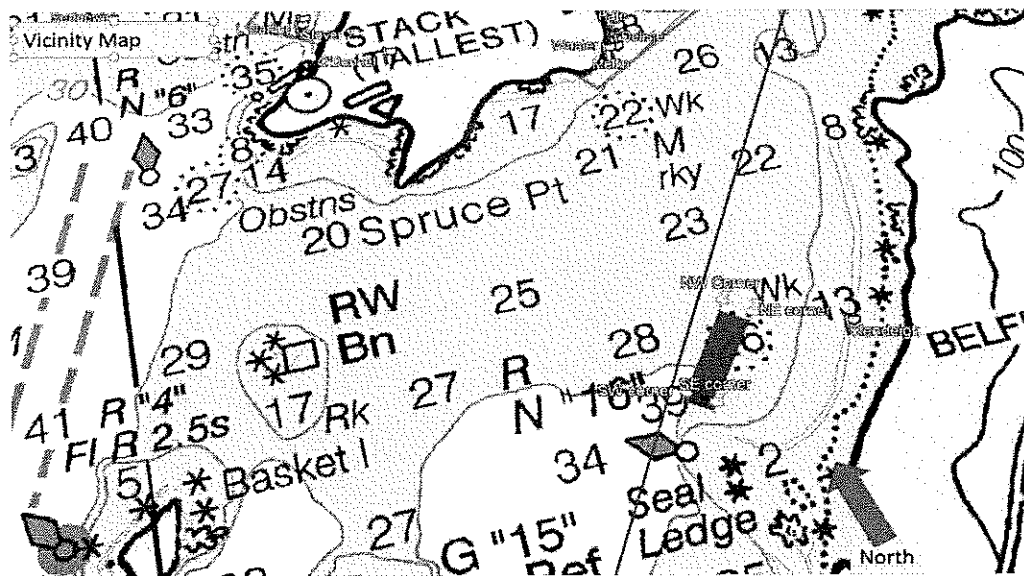


Figure 4. Vicinity map showing the proposed location of the standard lease east of the rhumb line designed to assist boaters in avoiding Seal Ledge.

A Harbormaster Questionnaire was sent to the Town of Chebeague Island, but no response was received. No one offered testimony about navigation at the public hearing. DMR finds that based on information provided and lack of public comment, the proposed project will allow for adequate distances for navigation.

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

C. Fishing & Other Uses

When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area.

Fishing. During DMR's site assessment on July 28, 2021, staff observed approximately five lobster-style trap buoys within the proposed lease boundaries and a lobster trap was observed via underwater camera footage taken during DMR's SCUBA transect (SR, 6). American lobster (*Homarus americanus*) and European green crab (*Carcinus maenas*) were observed on underwater camera footage taken during the site assessment (SR, 7).

During the public hearing, no one in attendance identified themselves as a lobsterman or shellfish harvester and no testimony was provided concerning those uses of the area and no testimony was provided concerning impacts to recreational fisheries.

Based on the information provided, DMR finds that there is adequate space remaining for fishing activities and any potential impacts from the proposed lease site will be minimal. **Therefore**, the aquaculture activities proposed for this site will not unreasonably interfere with commercial or recreational fishing.

Other water-related uses. The application indicates that no kayaking or swimming has been observed near the proposed lease (App, 25). During the hearing, no testimony was provided to indicate that the proposed lease site interferes, or that the proposed operations will interfere with other water related uses of the area.

Other aquaculture leases. There are no active lease sites or LPAs within 1,000 feet of the proposal.

Therefore, considering the number and density of aquaculture leases in the area, the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.

D. Flora & Fauna

DMR observations. During the site assessment, staff observed the following species and recorded their respective abundance:

Species	Abundance
American lobster (<i>Homarus americanus</i>), European Green Crab (<i>Carcinus maenas</i>)	Common

Eelgrass (*Zostera marina*). Data collected by The Maine Department of Environmental Protection (MDEP) and Casco Bay Estuary Partnership (CBEP) in 2022 indicates eelgrass presence approximately 340 feet south of the southeast corner of the proposal (Figure 4/ SR,8). No eelgrass was observed within the proposal boundaries during MDMR’s site assessment on July 28, 2021. (SR, 8)



Figure 5. Historical eelgrass near and within the proposed lease site from historical data. Image taken from DMR site report.

Fisheries & wildlife.

According to data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposed lease site is located approximately 300 feet to the north of mapped Tidal Waterfowl and Wading Bird Habitat (TWWH). 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. Based on the record, the proposed lease site will not interfere with the ecological functioning of the area.

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

E. Public Use & Enjoyment

When examining interference with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of beach, park, docking facility, or certain conserved lands owned by the Federal, State, or municipal governments.

According to the site report, the proposed lease is not within 1,000 feet of any beach, park, docking facility, or conserved lands owned by federal, state, or municipal governments (SR, 9).

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, docking facilities, or certain conserved lands owned by municipal, state, or federal governments.

F. Source of Organisms

The applicant intends to obtain stock from the following approved sources:

Source	Location	Species
Atlantic SeaFarms	Saco, ME	Sugar Kelp (<i>Saccharina latissima</i>), Skinny Kelp (<i>Saccharina latissimi forma</i>), Dulse (<i>Palmaria palmata</i>), Winged Kelp (<i>Alaria esculenta</i>)
University of Maine Center for Cooperative Aquaculture	Franklin, ME	Green sea urchins (<i>Strongylocentrotus droebachiensis</i>)
Wild Spat Collection	Sourced in ME with a spat collection license	sea scallops (<i>Placopecten magellanicus</i>)

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

G. Light

The application indicates that no lights will be used at the proposed lease site, and no work would be conducted beyond daylight hours (App, 21). During the hearing, Mr. Hunt

clarified that lights would only be used in an emergency, and it would be the spotlights on his boats (Hunt/Brazier).

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

H. Noise

DMR evaluates noise in accordance with 12 M.R.S.A §6072-A(G) and the regulatory standards specified in Chapter 2.37(1)(A)(9). The statutory criterion specifies that a lease must not result in an unreasonable impact from noise at the boundaries of the proposed site. The applicable regulation requires that all motorized equipment be designed or mitigated to reduce the source sound levels to the maximum practical extent and that the applicant has taken reasonable measures to mitigate noise impacts associated with the lease activities.

Powered equipment to be used on site would include a 23-foot Pacific workboat as the primary seeding and maintenance vessel and a 32-foot mooring barge for harvesting activities- (SR, 11). Both boats contain a winch/hauler that is powered by a 15 hp gas generator (SR, 11). The hauler will be used to harvest marine algae in May and for retrieval of the sea scallop cages in early summer and will be powered using the gas generator. The applicant plans to use the gas-powered generator in short bursts of one to two minutes and the generator will cycle on approximately every 15 minutes, so it does not run constantly (App, 20/ SR, 11). No machine-operated washing or grading equipment will be deployed on the lease site; equipment will be returned to shore for power washing (SR, 11). No testimony was given raising concerns about potential noise impacts from the proposed lease.

Based on this evidence, it appears that any noise generated by operations on the site is unlikely to have a significant effect at the boundaries of the lease and the applicant has satisfied the standards specified in Chapter 2.37(1)(A)(9).

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

I. Visual Impact

The applicant is proposing for all mooring buoys and lease boundary markers to be yellow, and depth control buoys to be red, yellow, or white (SR, 11). The applicant is not proposing on-site support structures.

In accordance with DMR Rule 2.80(2)(A)(1), lease holders are required to have yellow boundary markers which must be readily distinguishable from the interior buoys. According to the application, the boundary markers are proposed to be yellow polyform LD-3 buoys, while the interior mooring line buoys are proposed to be yellow polyform LD-2. Based on the varying

sizes between the yellow boundary buoys and the line buoys, the applicant has satisfied DMR's marking requirements.

Therefore, the equipment, buildings, and watercraft to be used at the proposed lease site will comply with the visual impact criteria contained in DMR Regulation 2.37 (1) (A) (10)

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

- a. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
- b. The aquaculture activities proposed for this site, will not unreasonably interfere with navigation.
- c. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in the area.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.
- e. The aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments.
- f. The applicant has demonstrated that there is an available source of marine algae (*Saccharina latissima*, *Saccharina angustissima*, *Palmaria palmata* and *Alaria esculenta*), sea scallops (*Placopecten magellanicus*), and green sea urchins (*Strongylocentrotus droebachiensis*) to be cultured for the lease site.
- g. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease of 13.78 acres for 20 years for the purpose of cultivating marine algae (*Saccharina latissima*, *Saccharina angustissima*, *Palmaria palmata* and *Alaria esculenta*), sea scallops (*Placopecten magellanicus*), and green sea urchins (*Strongylocentrotus droebachiensis*) using suspended culture techniques. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.40 (2)(A) in the amount of \$5,000.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 M.R.S.A §6072(7-B). 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(11) and DMR Rule Chapter 2.42 that no substantial aquaculture has been conducted within the preceding year, that the lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

Dated:

9/25/23



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