

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Great Ledge Cove Seafood, LLC

Standard Aquaculture Lease Application
Suspended Culture of Marine Algae
Casco Bay, Long Island, Maine

CAS LCI3

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Great Ledge Cove Seafood, LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 8.99-acres¹ located south of Little Chebeague Island, Long Island, Cumberland County, Maine. The proposal is 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*), dulse (*Palmaria palmata*), nori/laver (*Porphyra* spp), red seaweed (*Gracilaria tikvahiae*), Irish moss (*Chondrus crispus*), and sea lettuce (*Ulva lactuca*). The applicant currently operates the 3.73-acre² experimental lease CAS LCI3x within the footprint of the standard lease proposal.

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on May 31, 2022, and a scoping session was held on January 5, 2023. DMR accepted the final application as complete on May 4, 2023. Notice of the completed application and public hearing was provided to state agencies, the Town of Long Island, and subscribers to DMR's aquaculture email listserv³. A Harbormaster Questionnaire was sent to the Harbormaster, 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 was received by DMR. Notice of the hearing was published in the *Portland Press Herald* on April 17, 2025. 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 deadline for registration and for requesting intervenor status was May 5, 2025. No applications for

¹ Applicant originally requested 9.03 acres. DMR calculations indicate the area is 8.99 acres.

² CAS LCI3x decision dated November 4, 2019, page 1

³ At the time the application was accepted as complete, available mapping indicated there were no riparian landowners within 1,000 feet of the proposed site. A subsequent update to nautical charts show Little Chebeague Island is located 982.9 feet from the proposed lease boundary. Therefore, the State of Maine, as owner of the Island, was notified of the public hearing by a notice sent to the Department of Agriculture, Conservation, and Forestry.

intervenor status were received by DMR and no one registered to participate in the hearing. A public hearing on this application was held on May 20, 2025.

Sworn testimony was given at the hearing by Justin Papkee, a managing member of Great Ledge Cove Seafood, LLC. Additional DMR staff and a member of the public attended the hearing but did not offer testimony. The Hearing Officer was Maria Eggett. The record was closed on May 20, 2025. 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.⁴

LIST OF EXHIBITS

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

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The applicant proposes to culture sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), shotgun kelp (*Agarum clathratum*), dulse (*Palmaria palmata*), nori/laver (*Porphyra* spp), red seaweed (*Gracilaria tikvahiae*), Irish moss (*Chondrus crispus*), and sea lettuce (*Ulva lactuca*) using suspended culture techniques (App 1-3). The applicant proposes to use thirty 1,000 linear foot culture lines as well as moorings, depth control weights, buoys, PVC pipe, and chains/lines (App 5, 6).

The applicant anticipates seeding algae from October to December. The applicant expects to tend the site weekly during the growing season (App 9). Marine algae will be harvested from April to June using the hydraulics on the applicant's boat to raise the lines. The algae will then be removed from the lines by hand (App 9). The culture lines, depth control weights, PVC pipes, and depth control buoys will be removed from the site from June 1 to October 1 each year. The application states mooring components and corner marker buoys will remain on-site year-round (App 10).

⁴ Exhibits 1, 2, 3 are cited below as: Case file – “CF”, Application – “App”, site report – “SR”.

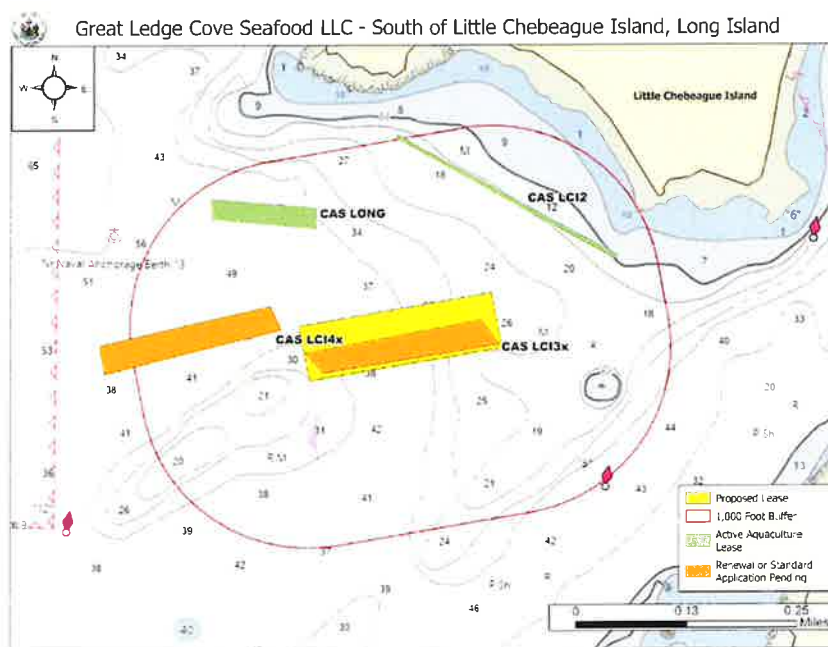


Figure 1: Aquaculture leases and LPA licenses in the vicinity of the proposed lease area⁵.

B. Site Characteristics

On June 11, 2024, DMR scientists assessed the proposed lease site. The proposal is situated to the south of Little Chebeague Island and to the west of Long Island. The surrounding shoreline consisted of a mixture of sandy beaches and rocky ledges that led to mixed forested uplands. Depths were determined to be between 26.4 to 45.5 feet at mean low water (MLW). The bottom of the proposed lease site is primarily composed of mud (SR 2). The proposed lease is currently located within an area classified as Approved by the DMR Bureau of Public Health and Aquaculture (SR 10).

C. Experimental Lease Operations

On November 4, 2019, Great Ledge Cove Seafood, LLC was granted the 3.73-acre experimental lease, CAS LC13x in accordance with 12 M.R.S.A. §6072-A. The experimental lease was issued for a three-year term and authorized the suspended culture of sugar kelp, winged kelp, and horsetail kelp using fifteen 1,000 foot longlines suspended below the surface of the water. The applicant had originally proposed to remove the longlines and associated depth control lines, buoys, and concrete weights by mid-June, but proposed to leave 30 helix anchors, lines, and buoys in place year-round. The experimental lease decision

⁵ All of the images in this decision were obtained from the DMR site report. Unless otherwise noted, all figures 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.

found that leaving the moorings and associated tackle on the site year-round could have adverse impacts on navigation and commercial fishing.

Therefore, pursuant to 12 M.R.S.A. §6072-A(15), DMR conditioned CAS LCI3x to require that all gear, except the helix anchors, be removed from the water between June 15 and September 15 each year. Great Ledge Cove Seafood, LLC executed the lease agreement on December 2, 2019 with the term of the lease beginning on December 1, 2019 and continuing through November 30, 2022.⁶ The lease expired on November 30, 2022, but 12 M.R.S.A. §6072-A(20) provides that if the experimental lease holder applies for a standard lease under 12 M.R.S.A. § 6072 before the expiration date of the experimental lease, and that application encompasses all or a portion of the experimental lease area then the holder of the experimental lease may continue to operate the site while DMR considers the standard lease application. On September 20, 2022, Great Ledge Cove Seafood, LLC submitted a standard lease application for an area that encompasses the entirety of the CAS LCI3x lease, which was two months prior to the expiration of CAS LCI3x. Therefore, Great Ledge Cove Seafood, LLC has been authorized to continue operating the experimental lease pending the Commissioner's action on this application.

3. STATUTORY CRITERIA & 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 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 Access

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

⁶ Experimental leases have a maximum 3-year term. Chapter 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 term begins, and the lease agreement is signed." In this case, the applicant chose to start the term of the lease on December 1, 2019, but could not deploy gear or otherwise conduct aquaculture activities on the site until the lease agreement was signed on December 2, 2019.

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).

The applicant has operated 3.73-acre experimental lease CAS LCI3x within the boundaries of this proposal for over five years. During that time, no issues concerning riparian access have been reported to DMR.

During the site visit, DMR scientists did not observe any docks or moorings within the vicinity of the proposal (Figure 2). The nearest land is Little Chebeague Island at approximately 983 feet to the northeast. Little Chebeague Island is owned by the State of Maine (SR 4).



Figure 2. Proposed lease area with site visit observations.

No testimony or evidence was offered at the hearing concerning riparian ingress and egress. Given the distance from the proposed lease to any riparian land and/or structures, the proposed lease activities will not impede riparian access.

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

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 applicant has operated 3.73-acre experimental lease CAS LC13x within the boundaries of this proposal for over five years. During that time, no issues concerning navigation have been reported.

The proposal is located approximately 1,708 feet to the northeast of the United States Coast Guard (USCG) red nun buoy “12” marking the western navigational channel, and approximately 1,034 feet to the northwest of the USCG red nun buoy “8” marking the southern navigational channel (Figure 3).

During the site assessment, DMR scientists observed five power vessels, two sailboats under power, and the Chebeague Island ferry all transiting in the southern navigation channel. One power vessel transited through the boundaries of the proposed lease (SR 5).

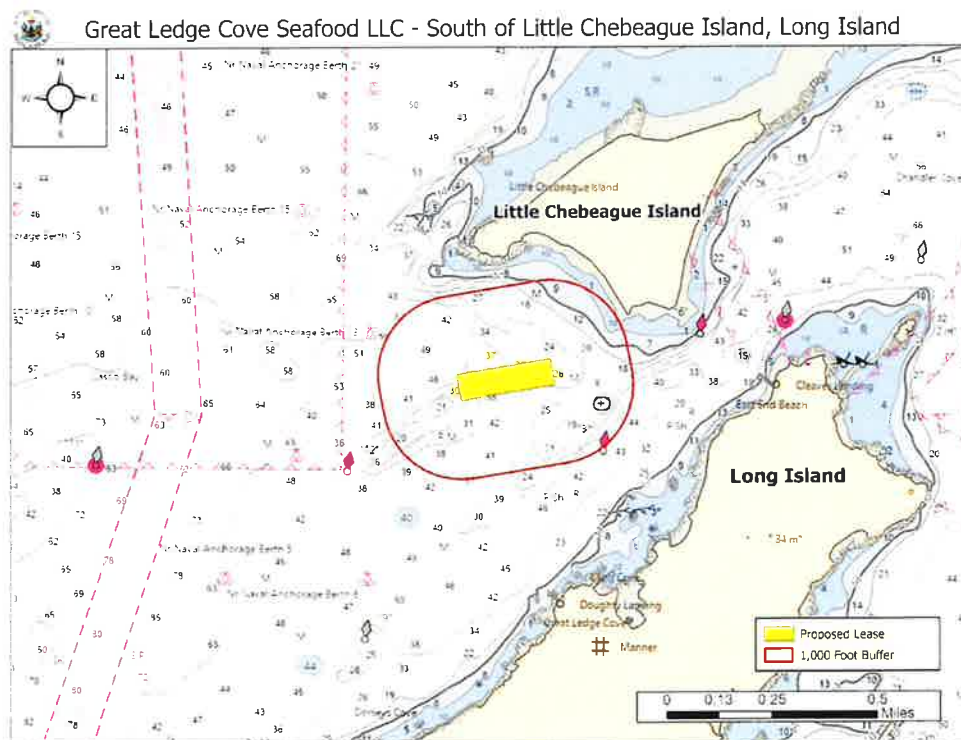


Figure 3. Navigational channels in the vicinity of the proposed lease area.

During the public hearing, no testimony or evidence was offered regarding potential impacts to navigation. The experimental lease decision found that leaving the moorings and associated tackle on the site year-round could have adverse impacts on navigation and commercial fishing. Therefore, pursuant to

12 M.R.S.A. §6072-A(15), DMR conditioned CAS LCI3x to require that all gear, except the helix anchors, be removed from the water between June 15 and September 15 each year.

This lease as proposed would increase the number of surface buoys to 62. According to the experimental lease decision, the experimental lease lies outside of any marked navigational channel but is located in a heavily used area and vessels navigating into Chandler Cove from the north and west have been observed to cut through the area (CF). During the site visit, DMR staff observed commercial and recreational vessels in the area around the proposed lease, one of which navigated through the proposed lease area (SR 5). Given the use of the area by mariners, and the popularity of the area for recreational uses in the summer months, DMR will condition the lease to require that all gear, except for mooring bottom components (screw anchors, pyramid anchors, helix anchors, and/or concrete/ granite blocks and chains) be removed from the water between June 1 and October 1 of each year.

Therefore, given the condition for gear removal between June 1 and October 1 of each year, 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 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).

The applicant has operated the 3.73-acre experimental lease CAS LCI3x within the boundaries of this proposal for over five years. During that time, no issues concerning interference with fishing or other uses have been reported.

Fishing. During DMR's site assessment, no commercial fishing activity was observed within the boundaries of the proposed lease. One lobster buoy was observed within 1,000 feet of the proposed lease approximately 95 feet to the west (Figure 2). There was recreational hook and line fishing observed to the north-northwest of the proposal near the Little Chebeague Island shoreline (SR 5).

According to the application, light lobstering activity occurs in the general area, however, most is in deeper water during the months that all gear, with the exception of the corner marker buoys and moorings, will be removed from the site (App 15). No recreational fishing has been observed at the site by the applicant (App 15).

The placement of 62 surface buoys plus lines year-round could potential hinder fishing activities in the lease area. However, as discussed above in the navigation section, if approved, the lease will be conditioned that all gear, except for mooring bottom components (screw anchors, pyramid anchors, helix

anchors, and/or concrete/ granite blocks and chains) be removed from the water between June 1 and October 1 of each year. This condition will also reduce the likelihood of adverse impacts to fishing activities in the lease area during those months in which fishing is more likely to occur.

No testimony was given at the public hearing concerning impacts to commercial or recreational fisheries.

Other uses. The application states there is occasional kayaking in the project vicinity, however, the lease as conditioned would not affect this activity (App 16). No evidence or testimony was provided at the hearing concerning other uses in the area.

Therefore, given the lease condition imposed, the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other 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 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).

The applicant currently operates experimental lease CAS LCI3x within the boundaries of this proposal. This standard lease proposal is intended to replace CAS LCI3x. There are three aquaculture leases within 1,000 feet of the proposal and no limited purpose aquaculture (LPA) sites. CAS LONG is approximately 591 feet to the north of the proposal, is held by Wild Ocean Aquaculture LLC, and is licensed to culture blue mussels (*Mytilus edulis*). CAS LCI2 is approximately 570 feet to the north of the proposal, is also held by Wild Ocean Aquaculture LLC, and is licensed to culture marine algae. CAS LCI4x is located approximately 102 feet to the west of the proposal, is held by Stephen Train, and is licensed to culture marine algae (Figure 1, SR 6).

No evidence or testimony was given at the public hearing concerning other aquaculture uses of the area. CAS LONG and CAS LCI2 were both operational prior to the commencement of the CAS LCI3x lease term and CAS LCI4x lease has been operational since 2020. During that time no issues or operational conflicts between these leases have been identified. Therefore, DMR concludes that the proposed operation will not interfere with the operations of the existing leases.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with existing aquaculture operations in the area.

E. Flora & Fauna

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).

The applicant has operated the 3.73-acre experimental lease CAS LCI3x within the boundaries of this proposal for over five years. During that time, no issues concerning flora and fauna have been reported to DMR.

Site observations. DMR utilized a remotely-operated vehicle (ROV) to assess the epibenthic ecology of the proposed lease. Sand shrimp (*Crangon septemspinosa*) and red seaweed (*Dasysiphonia japonica*) were common in the proposed lease footprint (SR 7).

Eelgrass. Records of seagrass collected by Maine Department of Environmental Protection (MDEP) in 2022⁷ indicate mapped eelgrass approximately 774 feet to the northeast of the proposal.

During the site assessment, DMR scientists observed sporadic blades of eelgrass attached to the seafloor within the proposal boundaries. Eelgrass blades were short and did not appear to be healthy or flourishing. The water depth in this general area is approximately 26 to 45 feet at MLW.

Eelgrass is typically found in shallower water depths in subtidal to low intertidal area 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 October through the end of May (SR 7).

Wildlife. According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS (MEGIS), the proposed lease is located approximately 731 feet to the southwest of mapped Tidal Waterfowl and Wading Bird Habitat (TWWH). Data collected by the United States Fish and Wildlife Service in 2023 by aerial nest survey shows no mapped bald eagle nesting sites to be in vicinity of the proposal.

During the site assessment, DMR scientists observed double-crested cormorant (*Nannopterum auritum*), herring gull (*Larus argentatus*), gray seal (*Halichoerus grypus*), common eider (*Gavia immer*), and an osprey (*Pandion haliaetus*) in the vicinity of the proposal (SR 9).

⁷ Data obtained from The Maine Office of GIS “GISVIEW.MEDEP.Seagrass2022”. Widgeon grass was observed only in the New Meadows River area off Old Brunswick Road near shore. 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.

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 robust eelgrass and mapped significant wildlife habitats, the proposed lease activities 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.

F. Public Use & Enjoyment

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 proposed lease is approximately 983 feet southwest of Little Chebeague Island. Little Chebeague Island is state owned and is accessible to the public at the discretion of the Maine Bureau of Parks and Lands. The proposed lease is not within 1,000 feet of any other beach, park, docking facility, or conserved lands owned by federal, state, or municipal governments (SR 10).

No evidence or testimony was given at the public hearing concerning impacts to public use or enjoyment of Little Chebeague Island. Given the distance to the island, and the condition that all gear, except for mooring bottom components will be removed from the water between June 1 and October 1 of each year, the lease will not interfere with public access or use of this land.

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.

G. Source of Organisms

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).

According to the application, sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), shotgun kelp (*Agarum clathratum*), dulse (*Palmaria palmata*), nori/laver (*Porphyra* spp), red seaweed (*Gracilaria tikvahiae*), Irish moss (*Chondrus crispus*), and sea lettuce (*Ulva lactuca*) would be sourced from Atlantic Sea Farms in Biddeford, Maine (App 2-3)⁸. This is currently an approved source for sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), sea lettuce (*Ulva fenestrata*)⁹, and shotgun kelp (*Agarum clathratum*), but not for nori/laver (*Porphyra* spp) or red seaweed (*Gracilaria tikvahiae*).

At the public hearing, the applicant stated that he did not currently have an alternate source for these two species, but if an approved source became available, he would seek DMR approval (Papkee testimony).

Therefore, Mr. Papkee has demonstrated an approved source for sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), sea lettuce (*Ulva fenestrata*), and shotgun kelp (*Agarum clathratum*), but has not demonstrated a source of stock for nori/laver (*Porphyra* spp) or red seaweed (*Gracilaria tikvahiae*), so these species would not be authorized if the lease is approved.

Therefore, the applicant has demonstrated an available source of stock for sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), sea lettuce (*Ulva fenestrata*), and shotgun kelp (*Agarum clathratum*) to be cultured for the lease site. The applicant has not, however, demonstrated an available source of stock for nori/laver (*Porphyra* spp) or red seaweed (*Gracilaria tikvahiae*) to be cultured for the lease site.

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 exterior lighting regulations is evaluated along with the requirement that the applicant demonstrate

⁸ At the hearing, Mr. Papkee stated the source of stock was Ocean's Approved. On cross-examination, Mr. Papkee stated that Ocean's Approved is the same company as Atlantic Sea Farms (ASF). Because Ocean's Approved is not currently an approved source of stock, ASF will be considered by DMR as the source of stock for the purposes of this application.

⁹ Atlantic Sea Farms recently modified their land-based aquaculture license to culture *Ulva fenestrata*, a sea lettuce native to the Gulf of Maine, instead of *Ulva lactuca*. In response to a question at the hearing, the applicant confirmed he proposes to culture *Ulva fenestrata* instead of *Ulva lactuca*.

that all reasonable measures will be taken to mitigate light impacts associated with the lease activities. Chapter 2.37(1)(A)(8).

According to the application, no work lights would be used on the site and lights would only be used on the proposed lease site in emergency situations (App 12). The application states that nine LED lights currently installed on the deck of the lobster boat, facing forward, would be used on the proposed site in cases of emergency only. The requirements for the use of exterior lighting in Chapter 2.37(1)(A)(8) requirements do not apply to lighting used for emergencies.

Therefore, the proposed aquaculture activities 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 noise regulations is evaluated along with the requirement that the applicant demonstrate that all reasonable measures will be taken to mitigate noise impacts associated with the lease activities. Chapter 2.37(1)(A)(9).

According to the application, a lobster boat with a hydraulic system and a skiff are the only powered equipment proposed for the lease operations (App 11-12). In response to a question from DMR at the hearing, the applicant stated the vessels would be idling when on-site, but that the noise emitted is typical of a lobster boat (Papkee testimony).

Considering that no other noise generating equipment is proposed, and that the proposed vessels that would be used are consistent with commonly observed commercial watercraft operating in the area, the limited noise generated by vessels would not be an unreasonable impact.

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 regulations including building profiles, height limitations, roof and siding materials and color are evaluated. Chapter 2.37(1)(A)(10).

In response to a question from DMR at the hearing, the applicant confirmed that if the project is approved, all surface gear, excepting corner marker buoys, will comply with the approved colors so anything that is currently proposed as orange, white, or “various colored” will either be gray, black, brown, blue, or green (Papkee testimony). Lease sites must be marked in accordance with Chapter 2.80 of DMR’s regulations, which specify that marker buoys must be yellow in color. If the lease is granted, the holder would be responsible for complying with these marking requirements.

At the hearing, the applicant stated the lobster boat that will be used on-site is approximately 10-12 feet in height from the waterline (Papkee testimony), well within the 20-foot limit in Chapter 2.37(1)(A)(10).

Therefore, the lease site as proposed 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 any riparian owner.
- b. The aquaculture activities proposed for this site, as conditioned, will not unreasonably interfere with navigation.
- c. The aquaculture activities proposed for this site, as conditioned, will not unreasonably interfere with fishing or other uses of the area, including water-related uses.
- 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 municipal, state, or federal governments.
- g. The applicant has demonstrated that there is an available source for sugar kelp (*Saccharina latissima*), skinny kelp (*Saccharina angustissima*), winged kelp (*Alaria esculenta*), horsetail/fingered kelp (*Laminaria digitata*), dulse (*Palmaria palmata*), Irish moss (*Chondrus crispus*), sea lettuce (*Ulva fenestrata*), and shotgun kelp (*Agarum clathratum*) to be cultured for the lease site. The applicant has failed to demonstrate an available source of stock for nori/laver (*Porphyra* spp) or red seaweed (*Gracilaria tikvahiae*) 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, as modified, 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, as conditioned, 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 lease to Great Ledge Cove Seafood, LLC for 8.99 acres for twenty years for the 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*) 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) 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. The following condition shall be imposed on this lease:

- 1. All gear, except for mooring bottom components (screw anchors, pyramid anchors, helix anchors, and/or concrete/ granite blocks and chains) shall be removed from the water between June 1 and October 1 of each year,

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 of the conditions of the lease or any applicable laws or regulations have been violated.

Dated: 10.7.2025



**Carl J. Wilson, Commissioner
Department of Marine Resources**

**STATE OF MAINE
DEPARTMENT OF MARINE
RESOURCES**

**Great Ledge Cove Seafood, LLC
CAS LCI3x**

Experimental Aquaculture Lease Application
Suspended Culture of marine algae
Long Island, Maine

November 4, 2019

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Great Ledge Cove Seafood, LLC applied to the Department of Marine Resources (“DMR”) for a three-year experimental aquaculture lease located south of Little Chebeague Island, northwest of Channel Rocks in Long Island, Cumberland County. The proposed lease is 3.73¹ acres and is for the suspended cultivation of sugar kelp (*Saccharina latissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*). DMR accepted the application as complete on April 19, 2019. Two requests for a public hearing were received during the comment period; no hearing was held.

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 Long Island and its Harbormaster, and others on DMR’s mailing list. Notice of the application and comment period was published in the May 2, 2019 edition of the *Forecaster*. The evidentiary record regarding this lease application includes the application, DMR’s site report dated September 4, 2019, and the case file. The evidence from each of these sources is summarized below.²

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine whether the proposed site is a suitable location to commercially grow kelp (App 6). The applicant is proposing to culture marine algae from September 15th to June 15th, annually, and intends to culture kelp on 1,000-foot horizontal lines suspended 7 feet below the surface of the water.

¹ Applicant requested 3.8 acres. DMR calculations indicate the area is 3.73 acres

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

There would be 15 longlines in total, spaced 10 feet apart (App 15). Longlines, depth control lines and buoys, and concrete weights would be removed by mid-June, while 30 helix anchors and associated mooring lines and buoys are proposed to remain onsite through the year (App 17, SR 2). The applicant has proposed to have a significant amount of gear (anchors, and associated lines and buoys) remaining on site year-round so the impact of these activities could be felt all year, not just during the months when growing occurs.

B. Site Characteristics

The proposed lease occupies subtidal waters south of Little Chebeague Island and west of Long Island in Casco Bay (SR 2). Shorelines of Little Chebeague and Long Islands are comprised of rock and sand. While Little Chebeague Island is undeveloped, the shoreline facing the proposed lease on Long Island is lined with residential buildings, docks and moorings (SR 2). During DMR's site visit on July 9, 2019, depths at the corners of the proposed site ranged from 28 feet to 43.1 feet. When correcting for tidal variation, depths are approximately 0.9 feet lower at mean low water (SR 5).

3. STATUTORY CRITERIA & FINDINGS OF FACT

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

A. Riparian Access

During DMR's site visit, houses, docks and moorings were observed along the Long Island shoreline, facing the proposed lease (SR 7). The proposed lease is located more than 1,000 feet from shore (SR 6). Little Chebeague Island is undeveloped, and no docks or moorings were observed in association with that island (SR 7). During the comment period, DMR did not receive any comments regarding riparian access. Based on the lack of public comments, and because the proposed site is located more than 1,000 feet from all nearby shorelines at mean low water, 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 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 area is in navigable waters to the south of Little Chebeague Island in Casco Bay (SR 7). The proposed lease is nearby the marked channel between Little Chebeague and Long Islands that leads to Chandler Cove (SR 7). Because the proposed lease is located over 1,000 feet from adjacent shorelines, vessels would not be prevented from travelling between the proposed lease and the Little Chebeague or Long Island shorelines (SR 8).

The proposed lease lies outside of any marked navigational channel. However, the proposed lease is in a heavily used area, and vessels navigating into Chandler Cove from the north and west have been observed to cut through the area (SR 7). During the site visit, DMR staff observed commercial and recreational vessels in the area around the proposed lease, one of which navigated through the proposed lease area (SR 8). There are also two other active aquaculture leases close by the proposed site. CAS LCI2 is permitted for the suspended culture of marine algae and is approximately 700 feet to the northeast, and CAS LONG, located 715 north of the proposal, is permitted for the suspended culture of blue mussels (SR 9). Longlines will not be present on the site during summer when vessel traffic is likely heaviest, and mariners would be able to navigate through the proposed lease area. However, due to the presence of thirty year-round moorings and balls, vessels may avoid the area (SR 8). During the review period, DMR did not receive any comments regarding navigation. However, the site report notes that while the area is outside marked navigation channels, mariners travelling to or from Chandler Cove are known to cut through the area where the proposed lease is located (SR 7). Given the use of the area by mariners, and the popularity of the area for recreational uses, DMR will require that all gear, except for helix anchors, be removed from the water between June 15th and September 15th of each year. Conditions reflecting this requirement will be included in the lease.

Based on the evidence, and the condition described above, it appears that the proposed aquaculture activities will not unreasonably interfere with navigation.

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 July 9, 2019 lobstering activity was observed near the proposed lease; one lobster boat was observed to the immediate east of the proposed lease and one lobster buoy was observed on the northern boundary of the proposal (SR 8). DMR scientists did not observe other commercial or recreational fishermen during the visit to the site (SR 8), but it is possible the area is used by both. The applicant noted that there is light lobster fishing in the area during the summer months, which, according to the applicant, would be able to continue (App 9). The applicant proposes to deploy longlines on the site from September through mid-June, while 30 helix anchors and associated mooring lines and buoys would remain on site year-round (App 17). Whether lobstermen might avoid the area in the summer months due to the proposed moorings is unknown. Other fisheries, such as scallop dragging or menhaden fishing, would be excluded from the lease area due to the year-round presence of gear (SR 8). Some recreational fishing may occur near the proposed lease site (App 9). During the review period, no comments were received regarding the impact the proposed lease may have on fishing.

As discussed in the navigation section of this document, DMR will require that all gear, except for helix anchors, must be removed from the water between June 15th and September 15th each year. As such, the proposed aquaculture activities should not interfere with any lobstering or other fishing that may occur in the area during the summer months.

Given the absence of public comments expressing concern regarding interference with fishing, and the condition described above, it is reasonable to conclude that there are no concerns about the effects the proposed site may have on commercial or recreational fishing. It appears from the evidence, and the condition described above, that the proposed lease is unlikely to unreasonably affect commercial and recreational fishing activities in the area.

Exclusivity. Due to possible interactions with gear, dragging and other forms of commercial fishing are prohibited within the boundaries of the proposed lease site from September 15th through June 15th when longlines are present.

Other aquaculture uses. There are 6 aquaculture leases located within one mile of the proposed lease. The closest lease to the proposed site, CAS LCI2, is permitted for the suspended culture of marine algae and is approximately 700 feet to the northeast (SR 9). CAS LONG, located 715 north of the proposal, is permitted for the suspended culture of blue mussels.

DMR is considering two other pending aquaculture lease applications nearby the proposed lease site. Applicant Steve Train and applicant Chebeague Island Oyster Company, LLC have both applied within one mile of the proposed lease site.

Other water-related uses. During the review period, DMR did not receive any comments detailing other water-related uses that are not already contemplated in other sections of this decision. The applicant noted that kayaking does occur in the area, but that kayaking will remain unaffected (App 10). Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

Therefore, considering the other aquaculture uses of the area, and the condition described above, the activities proposed for this site will not unreasonably interfere with fishing or other water related uses of the area.

D. Flora & Fauna

Historical eelgrass data collected by DMR indicated that, in 2018, the nearest eelgrass to the proposed lease was 880 feet northeast of the site. The proposed aquaculture activities for this site are unlikely to shade or disrupt these eelgrass beds (SR 10).

Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicated that the proposed lease is located approximately 845 feet from Tidal Wading Bird and Waterfowl Habitat, which is defined under Maine's Natural Resource Protection Act as Significant Wildlife Habitat (SR 10). Mapped habitat for the purple sandpiper (*Calidris maritima*), and for an unidentified 'rare animal' is located on the north tip of Long Island, more than 1,000 feet east of the proposed site (SR 10). 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."³

Based on the evidence that the proposed lease does not interact with historical eelgrass beds or mapped wildlife habitat, and because DMR's site report does not contain concerns regarding the impact of the proposed lease on the surrounding ecosystem, it appears that the proposed aquaculture activities for this lease site will not interfere with the ecological function of there are.

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 ecological significant flora and fauna.

E. Public Use & Enjoyment

Little Chebeague Island, which is owned by the Maine Department of Agriculture, Conservation, and Forestry, Bureau of Parks and Lands is located approximately 1,100 feet

³ CF; Email from R. Settele to C. Burke on May 9, 2019

northeast of the proposed site. The island is popular with recreational boaters and beachgoers (SR 11), and access to the island from the water requires landing directly on one of the island's beaches or anchoring offshore in the shallows. Access by foot is possible at low tide via an exposed sandbar (SR 11). As discussed in the navigation section of this document, the proposed lease is located over 1,000 feet from any adjacent shoreline, and vessels would not be prevented from travelling between the proposed lease and Little Chebeague Island.

During the comment period, DMR did not receive any comments regarding public use and enjoyment. Based on the lack of public comments, and because the proposed lease is located over 1,000 feet from adjacent shorelines, it is reasonable to conclude that there are no concerns regarding the effect the proposed lease may have on public use and enjoyment. It appears from this evidence that public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal governments will not be unduly affected by the proposed application.

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

F. Source of Organisms

The applicant intends to source sugar kelp, winged kelp, and horsetail from Ocean Approved in South Portland, Maine. This source is approved by DMR.

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

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
2. Given the condition related to gear deployment, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.
3. Given the condition related to gear deployment, 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 3.73 acres to Great Ledge Cove Seafood, LLC, 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 lessee⁴; 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 cultivation of sugar kelp (*Saccharina latissima*), winged kelp (*Alaria esculenta*), and horsetail kelp (*Laminaria digitata*) using suspended culture techniques. 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 account is required. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.64 (10) (s) 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

⁴ 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.”

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)⁵. 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.

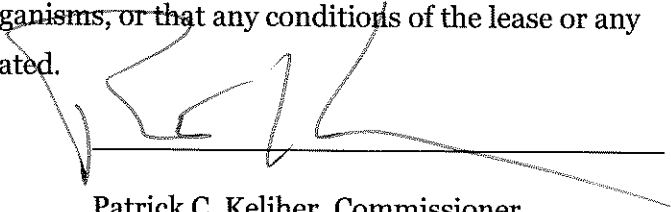
The following conditions shall be incorporated into the lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.
2. All gear, except for helix anchors, must be removed from the water between June 15th and September 15th each year.
3. Due to possible interactions with gear, dragging and other forms of commercial fishing are prohibited within the boundaries of the proposed lease site from September 15th to June 15th when longlines are present on the site.

7. REVOCATION 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: 11/4/19


Patrick C. Keliher, Commissioner

Department of Marine Resources

⁵ 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.”