

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

TUMBLE TIDE LLC

Experimental Aquaculture Lease Application
Suspended Aquaculture of Marine Algae
Northwest of Little Whaleboat Island, Casco Bay,
Harpswell

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Findings of Fact, Conclusions of Law, and Decision

Tumble Tide LLC applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease on 3.94 acres located northwest of Little Whaleboat Island, Casco Bay, Harpswell, Cumberland County. The proposal is for the suspended culture of sugar kelp (*Saccharina latissima*) and skinny kelp (*Saccharina angustissima*). The proposal is for commercial research and development.

1. Proceedings

On February 5, 2024, DMR accepted the final application as complete. Notice of the completed application and the 30-day public comment period was provided to state agencies, the Town of Harpswell, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv, and it was published in the *Coastal Journal* on March 1, 2024. On February 27, 2024, DMR sent a Municipal Questionnaire to the Town of Harpswell, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations and received a response from the Harbormaster on April 25, 2024.

The version of 12 M.R.S.A. § 6072-A(6) that was in effect when this application was deemed complete provided that the Commissioner may hold a public hearing, and that they shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. On March 31, 2024, the comment period ended. No requests for a public hearing were received during the comment period, so a public hearing was not required, but the Commissioner exercised their discretion to hold a public hearing. Notice of the public hearing was provided to owners of riparian land within 1,000 feet of the proposed location of the lease and to the Town, and was published in the *Portland Press Herald* on March 13, 2026.¹ The public notice for the hearing stated that the proceeding would be conducted in-person and remotely and directed interested persons to register to provide testimony or ask questions during the proceeding. The registration deadline was March 30, 2026. The deadline for requesting intervenor status was March 30, 2026. No applications for intervenor status were received by DMR. One individual registered to participate in the hearing. On April 14, 2026, DMR held a public hearing on this application.

¹ The hearing notice was not published in the *Coastal Journal* due to it no longer being in print when the hearing notice was published.

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

Name	Affiliation
Stuart Ryan	Applicant
Matt Gilley	Selectman for the town of Harpswell

Additional DMR staff and members of the public attended the hearing but did not offer testimony. The hearing was recorded by DMR. The Hearing Officer was Joshua Rozov. On April 14, 2026, the record was closed.

The evidentiary record regarding this lease application includes the application, DMR's site report dated April 30, 2025, the record of testimony at the hearing, and the case file. The evidence from each of these sources is summarized below.

A. List of Exhibits

1. Case file (CF)
2. Application (App)
3. DMR site report, issued on April 30, 2025 (SR)

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

2. Description of the Project

A. Site History

During the August 30, 2024, site visit, DMR scientists observed three Limited Purpose Aquaculture (LPA) license sites within 1,000 feet of the proposal, SRYA122, SRYA222, and SRYA322 (SR 2). SRYA222 is located within the boundaries of the proposal, SRYA122 is located approximately 4.9 feet to the east, and SRYA322 is located 191.3 feet to the west (SR 2). The LPA licenses SRYA 122, SRYA222, and SRYA322 are held by Stuart Ryan, who owns Tumble Tide LLC.

All three LPAs have been in this location since 2022, and all three LPAs culture sugar kelp and skinny kelp using 400' longlines suspended with support buoys.

B. Proposed Operations

The applicant proposes to culture sugar kelp and skinny kelp using suspended culture techniques (App 1-2).

The applicant proposes a maximum of 21 long lines (Ryan/Rozov). Each long line would be approximately 600 feet long (App 19). Long lines will either be attached to moorings individually or a spreader bar would be attached to a mooring, and each spreader bar would have three long lines attached to it (Ryan/Rozov). All moorings used would be drag embedment anchors (Ryan Testimony).

Seeding would occur from November 1 to December 1 (App 5). During seeding, the applicant would be at the site up to five days a week (App 5). During seeding, the applicant proposes to be at the lease site for up to 8 hours a day (App 5). Tending and maintenance would occur from November 1 to June 1 (App 5). Tending and maintenance would occur on site approximately once a week (App 5). During tending and maintenance, the applicant proposes to be on site for approximately two hours during each visit (App 5).

Harvesting would occur from April 1 to June 1 (App 5). During harvesting, the applicant would be at the lease site up to five days a week for eight hours each day (App 5). The applicant would harvest by bringing the grow lines onboard their vessel using davits or rollers (App 6).

The site would only be active from November 1 to June 1 (App 5). During the off season, from June 2 to October 31, only the anchoring system would be left on site (App 6). All other gear would be stored at the applicants home (App 6).

Table 1. Power equipment proposed for the lease site

Equipment	Frequency of Use
Hydraulic Generator	One week per year

C. Site Characteristics

Description. DMR scientists conducted a site visit of the proposed lease site on August 30, 2024 (SR 2). The proposed lease site is northwest of Little Whaleboat Island, in Casco Bay, Harpswell. The proposal is in subtidal waters (SR 2).

During the site visit, depths were determined to be between 44-45 feet (SR 2). Correcting for tidal variations derives depths at mean low water (MLW, 0.0 feet) to be between 36-37 feet (SR 2). The proposal is located approximately 1,155 feet northwest of Little Whaleboat Island at MLW (SR 2). The area in the vicinity of the proposal was observed to consist of several small islands with rock ledges and patchy gravel beaches with mixed forest uplands (SR 2). The bottom of the proposed lease site is composed of mud with a sheet algal bed overlay (SR 2).

Growing Area Classification. Growing Area Classifications are pertinent to bivalve shellfish species cultured and harvested for human consumption. The proposal does not include the cultivation or harvest of any bivalve shellfish species, so Growing Area Classifications do not apply.

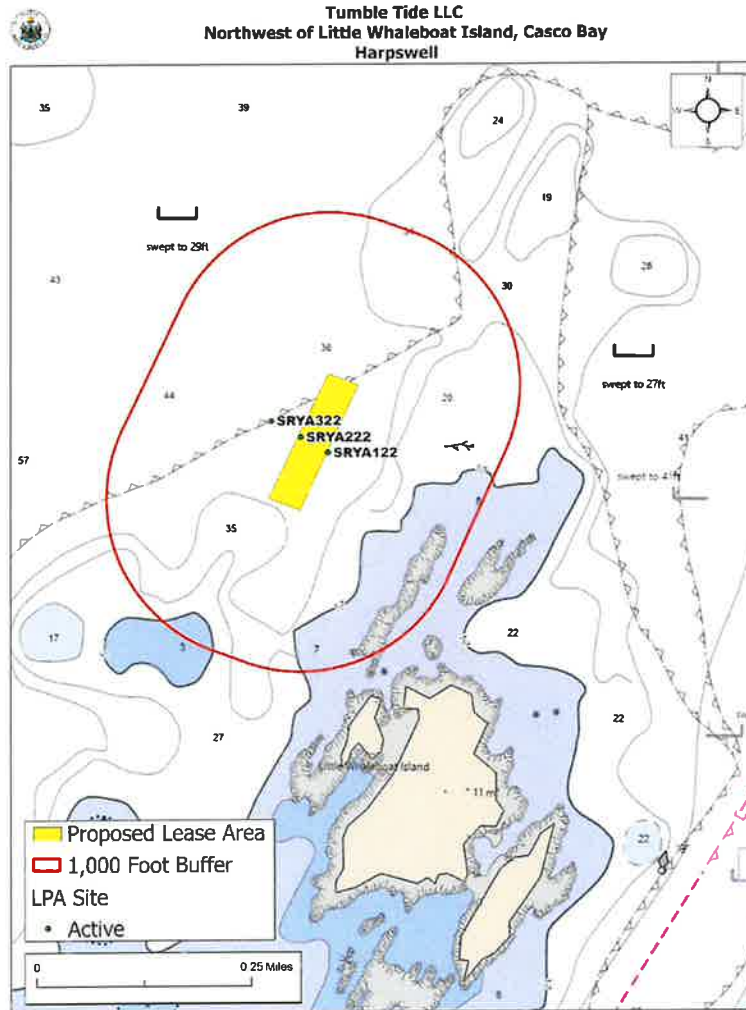


Image 1. Proposed lease site and surrounding area.

3. Legal Criteria and Findings of Fact

Approval of Experimental aquaculture leases is governed by 12 M.R.S.A. § 6072-A and DMR Regulations, Chapter 2.37 and 2.64.² The statute and regulations provide that a lease for commercial aquaculture research and development or for scientific research may be granted by the Commissioner upon

² Chapter 2 of DMR Regulations is published at 13-188 C.M.R. ch. 2 and may be found at <https://www.maine.gov/dmr/rules-enforcement/regulations-rules>.

determining that the project will not unreasonably interfere with: the ingress and egress of riparian owners; navigation; fishing or other uses of the area; other aquaculture uses in the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; and public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site.

A. Riparian Owners Ingress and Egress

When examining riparian access, the Commissioner considers whether the proposed lease will unreasonably interfere with the ingress and egress of riparian owners. 12 M.R.S.A. § 6072-A(13)(A). The Commissioner shall examine whether the riparian owners can safely navigate to their shore and consider the type of shore, the type of vessel that can reasonably land on that shore and the types of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures. Chapter 2.37(1)(A)(1).

During the site visit, DMR scientists did not observe any docks, houses, or moorings located on Little Whaleboat Island (SR 4). The nearest inhabited land is Lower Goose Island located approximately one mile to the north (SR 4).

The Harbormaster Questionnaire received April 25, 2024, states that's this proposal would not impact riparian owners' ingress and egress from their property.

Due to the distance of one mile between the proposal and the nearest inhabited land, this proposal would not cause unreasonable interference with riparian ingress and egress.

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

B. Navigation

When examining navigation, the Commissioner considers whether the proposed lease will unreasonably interfere with navigation. 12 M.R.S.A. § 6072-A(13)(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 and different degrees of use of the navigational channels in the area. Chapter 2.37(1)(A)(2). High tide "short cuts" shall not be considered navigational ways for purposes of this section. Chapter 2.37(1)(A)(2).

The proposal is located in subtidal, navigable waters (SR 5). At MLW, there is approximately 4,156 feet of navigable water between the proposal and French Island to the northwest, and 735 feet of navigable water between the proposal and an intertidal ledge to the southeast near Little Whaleboat Island (SR 5). There are marked navigation channels on either side of Whaleboat Island that provide access to and from northern Casco Bay (SR 5).

During DMR's site visit, scientists observed a powerboat transiting along the Little Whaleboat Island shoreline that then turned west and transited through the proposal area, a lobster boat transiting to the north, two lobster boats transiting to the east through the proposal area, as well as a power yacht transiting to the west of the proposal (SR 5).

The application for this proposal states boating is popular in the area from June to September, but that the farm will not be operational during these times (App 7).

The Harbormaster Questionnaire, received April 25, 2024, stated "The late fall and winter months are less vessel traffic, generally speaking, however we do know that contractors and fishermen are still active in Casco Bay into the late fall and early spring," (CF – Harbormaster Questionnaire).

No testimony regarding navigation was given at the hearing.

With the existence of approximately 4,156 feet of navigable water between the proposal and French Island to the northwest, and 735 feet of navigable water between the proposal and an intertidal ledge to the southeast near Little Whaleboat Island, vessels navigating the area will be able to safely navigate between the proposal and the intertidal ledges to both the northwest and southeast without risk of collision or entanglement. While powerboats and lobster boats were observed navigating through the proposed area, the applicant proposes the site to only be active from November 1 to June 1 of each year, outside the usual season for recreational and commercial navigation. The Harbormaster stated the late fall and winter months experience less vessel traffic. While there is potential for vessels to be more active in the spring months, while the proposed site is active, as discussed above, there is adequate room for vessels to navigate around the proposed lease site without risk of collision or entanglement.

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

C. Fishing and Other Uses

When examining fishing and other uses, the Commissioner considers whether the proposed lease activities will unreasonably interfere with fishing or other uses of the area. 12 M.R.S.A. § 6072-A(13)(C). The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Chapter 2.37(1)(A)(3).

Fishing. With respect to fishing, the Commissioner shall consider such factors as the number of individuals that participate in recreational or commercial fishing, the amount and type of fishing gear utilized, the number of actual fishing days, and the amount of fisheries resources harvested from the area. Chapter 2.37(1)(A)(3).

During DMR's site visit, scientists observed light lobstering activity within the vicinity of the proposal, generally concentrated around the ledges to the east of the proposal (SR 6). There were 17 buoys observed within 1,000 feet of the proposal, with the closest located approximately 66 feet to the east (SR 6). DMR scientists also observed a float with lobster traps stored on it located approximately 1,033 feet southeast of the proposal (SR 6).

The application for this proposal states commercial lobster fishing is common in the area from June to October during the inland lobster season, but that there is little to no commercial fishing activity in the area from November to May (App 7). The Department interprets "inland lobster season" to refer to the nearshore lobster season.

The Harbormaster Questionnaire, received April 25, 2024, stated "Commercial lobstering, recreational lobstering and striped fishing have all been observed in this general location. Commercial fishermen have stated to me that they fish this area into the late fall months," (CF – Harbormaster Questionnaire). Additionally, the Harbormaster raised concerns that, "Commercial fishermen put a strong emphasis on commercial lobster activities that occur in this area. It was mentioned that at [the] very least, no gear, including corner buoys should be left in place during the summer months," (CF - Harbormaster Questionnaire).

At the hearing, the Department received testimony from Matt Gilley, Selectman for the town of Harpswell. Matt Gilley testified that fishing activity does occur in the area of the proposal, but it is mostly in the summer when the proposal would not be active (Gilley Testimony). Matt Gilley raised concerns that if any gear from the proposal, including moorings and boundary markers, were to be present during the lobster and menhaden season, nets or traps could become snagged, causing potential damage to either the applicant's aquaculture gear or the fishermen's equipment (Gilley Testimony). Matt Gilley stated that if the gear were removed when the proposed lease site was not active, there would be no concern to the location of the proposal (Gilley Testimony).

While some commercial fishing may occur at the beginning and end of the proposed active season for this lease site, it appears that most buoys are placed either in deeper waters or closer to the shoreline of Little Whaleboat Island (Image 2). It is also important to note that the site observations were made by DMR scientists in August, during lobster fishing season, and not during the timeframe in which the proposal would be active. These facts, in addition with the Selectman, Matt Gilley not raising concerns regarding

the location of this site as it relates to late and early season fishing support that it would not unreasonably interfere with fishing from November to June.

The Harbormaster Questionnaire states that there is commercial lobstering in this location during the summer months and that any gear left in place could potentially impact those activities. Additionally, Selectman Matt Gilly testified that menhaden fishing also occurs in this area during the summer. Menhaden fishing can result in seine nets deployed very close to or directly on the sea floor. The menhaden season typically starts in early or mid-June and is a quota-controlled fishery. This activity would be unable to be conducted in the area if moorings and other gear were kept in place during the summer months when the proposed site was not active. Therefore, the presence of aquaculture gear, including moorings and marker buoys from June 2 to October 31 would cause an unreasonable interference with fishing uses of the area.

To mitigate this impact, if the proposal were granted, a condition would be put in place requiring the applicant to remove all aquaculture and boundary marking gear, including moorings, from the lease site between June 1 and October 31.

Other Uses. DMR scientists observed three kayaks to the east in the vicinity of Whaleboat Island during their site visit (SR 5).

Due to the 735 feet of navigable water between the proposal and an intertidal ledge to the southeast near Little Whaleboat Island, hand powered water vessels would have adequate space to navigate without needing to navigate near the proposed lease area. Additionally, this lease would not be active, or have any gear present from June 1 to October 31, during the seasons most commonly used by recreational navigators.

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



Image 2. Proposed lease area with observed lobster buoys.

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 within 1,000 feet of the proposed lease site (SR 6). There are three LPAs within 1,000 feet of the proposal: SRYA122, SRYA222, and SRYA322 (SR 6). The LPAs

are licensed to the contact person for this lease application, Stuart Ryan, who owns Tumble Tide LLC (App 1). The applicant has stated they would relinquish these three LPAs if this lease were granted (App 9).

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

E. Existing System Support

When examining existing system support, the Commissioner considers whether the proposed lease activities will unreasonably interfere with significant wildlife and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support existing ecologically significant flora and fauna. 12 M.R.S.A. § 6072-A(13)(D). Such factors as the degree to which physical displacement of rooted or attached marine vegetation occurs, the amount of alteration of current flow, increased rates of sedimentation or sediment resuspension, and disruption of finfish migration shall be considered by the Commissioner in this determination. Chapter 2.37(1)(A)(5).

Site Observations. DMR scientists utilized a remote operate vehicle (ROV) to assess the epibenthic ecology of the proposed lease site (SR 7). During the site visit, DMR scientists observed a common abundance of sand shrimp (*Crangon septemspinosa*) and a rare abundance of American lobster (*Homarus americanus*) and winter flounder (*Pseudopleuronectes americanus*) (SR 7).

Marine Vegetation. Records of eelgrass collected by the Maine Department of Environmental Protection in 2022, the most recent data available for this area, indicate no mapped eelgrass presence within 1,000 feet of the proposal (SR 8). The nearest mapped eelgrass is approximately 2,340 feet southwest of the proposal (SR 8). During DMR's site visit, eelgrass blades were observed floating on the surface of the water in the vicinity of the proposal (SR 8). No eelgrass was observed on underwater video footage within the proposal boundaries (SR 8).

Wildlife. During DMR's site visit, scientists observed double-crested cormorants (*Nannopterum auritum*), herring gulls (*Larus argentatus*), common eider ducks (*Somateria mollissima*), an osprey (*Pandion haliaetus*), and a harbor seal (*Phoca vitulina*) in the general vicinity of the proposal (SR 9). Based on data maintained by The Department of Inland Fish and Wildlife (IFW), the nearest mapped Tidal Waterfowl and Wading bird Habitat (TWWH) is located approximately 3,462 feet south of the proposal (SR 9). On March 19, 2024, a Resource Biologist with IFW responded by email to a "Request for Agency Review and Comment" stating that minimal impacts to wildlife are anticipated for this project (CF - Request for Agency Review and Comment Response).

Due to the distance of this site from any known eelgrass beds and any TWWH, this proposal would not unreasonably interfere with significant habitat and 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.

F. Source of Organisms to be Cultured

Pursuant to 12 M.R.S.A. § 6072-A(13)(E), in evaluating the proposed lease, the Commissioner shall determine that the applicant has demonstrated there is an available source of organisms to be cultured for the lease site. The Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. Chapter 2.37(1)(A)(6).

The applicant proposes to source stock from Summit Point LLC (App 2). At the hearing, the applicant stated that since the Summit Point LLC facility is currently not an approved source of stock, they would source their stock from Atlantic Sea Farms (Ryan/Rozov). At the time this decision was written, Atlantic Sea Farms is no longer an approved source of stock for marine algae. At the hearing, the applicant testified that if they were unable to source stock from Atlantic Sea Farms, they would source stock from another source approved by DMR.

The original source listed by the applicant, nor the source identified in the hearing are currently approved for skinny kelp and sugar kelp, but other, currently approved sources exist. During the hearing the applicant clarified that they would source from an approved source. The lease will be conditioned to require use of an approved source of stock.

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

G. Interference with Public Facilities

When examining interference with public facilities, the Commissioner considers whether the proposed lease will unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park, or docking facility owned by the Federal Government, the State Government or a municipal governmental agency. 12 M.R.S.A. § 6072-A(13)(F). Chapter 2.37(1)(A)(7) and 2.64(11)(A)).

The proposed lease is not within 1,000 feet of any beach, park, or docking facility owned by federal, state, or municipal governments (SR 10).

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

4. Conclusions of Law

Based on the above findings, DMR concludes that:

- a. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of riparian owners.
- b. The aquaculture activities proposed for this site will not unreasonably interfere with navigation.
- c. The aquaculture activities proposed for this site, as conditioned, will not unreasonably interfere with fishing uses of the area, including water-related uses of the area.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses of the area.
- e. The aquaculture activities proposed will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.
- f. The aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal government.
- g. The applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

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

5. Decision

Based on the foregoing, the Commissioner grants an experimental lease to Tumble Tide LLC, for 3.94 acres for three years, the term of the lease to begin within 12 months of the date of this decision, on a date chosen by the lessee; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

This lease is granted to the lessee for the cultivation of sugar kelp (*Saccharina latissimi*) and skinny kelp (*Saccharina angustissima*) using suspended culture techniques. The lessee shall pay the State of Maine rent at \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant

to Chapter 2.64(12)(A) in the amount of \$5,000 conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. Lease Conditions

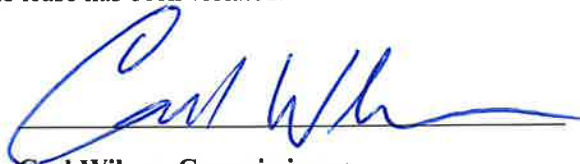
The Commissioner may establish conditions that govern the use of the leased area and impose limitations on aquaculture activities, pursuant to 12 M.R.S.A. § 6072-A(15) and Chapter 2.64(11)(B). Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while addressing the ability of the lease site and surrounding area to support ecologically significant flora and fauna, and preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease. In consideration of these principles, and based on facts in the record, the following conditions shall be incorporated into the lease:

1. The applicant must remove all aquaculture and boundary marking gear, including moorings, from the lease site between June 1 and October 31.
2. The applicant is required to use an approved source of stock.

7. Revocation of Lease

The Commissioner may initiate revocation proceedings and revoke the lease upon determining pursuant to 12 M.R.S.A. § 6072-A(22) that no substantial aquaculture or research has been conducted on the site over the course of the lease, that aquaculture has been conducted in a manner substantially injurious to marine organisms, or that any condition of the lease has been violated.

Dated: 10-7-2026


Carl Wilson, Commissioner
Department of Marine Resources

Appendix

Granted Lease Coordinates (WGS84) – 3.94 Acres

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>	
NW	43.77406°	-70.05887°	then 196.2 feet at 108° True to
NE	43.77388°	-70.05817°	then 853.4 feet at 204° True to
SE	43.77174°	-70.05948°	then 207.4 feet at 289° True to
SW	43.77193°	-70.06022°	then 854.4 feet at 24° True to NW