

**STATE OF MAINE
DEPARTMENT OF MARINE
RESOURCES**

**Brent Nappi
CAS CI3x**

Experimental Aquaculture Lease Application
Suspended Culture of Kelp
Falmouth, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Brent Nappi applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located south of Clapboard Island, in Casco Bay, Falmouth, Cumberland County. The proposed lease is 3.92 acres¹ and is for the suspended cultivation of sugar kelp (*Saccharina latissima*) and skinny kelp (*Saccharina angustissima*) for commercial aquaculture research and development.

1. THE PROCEEDINGS

DMR accepted the application as complete on March 21, 2022. Notice of the complete application and the 30-day public comment period was provided to state and federal agencies, riparian landowners within 1,000 feet of the proposal site², the Town of Falmouth and its Harbormaster, and others on DMR's email listserv. Notice of the complete application and comment period was published in the April 14, 2022 edition of the *Forecaster*. Title 12 M.R.S. § 6072-A(6) provides that the Commissioner shall hold a public hearing if five or more persons request and public hearing within the 30-day comment period. DMR received three requests for a public hearing during the 30-day comment period, and no hearing was conducted.

The evidentiary record regarding this lease application includes three exhibits. The evidence from these sources is summarized below.³

LIST OF EXHIBITS

1. Case File
2. Application
3. DMR site report, issued on October 2, 2023.

2. DESCRIPTION OF THE PROJECT

¹ The applicant originally requested 4.00 acres. Department calculations indicate the area is 3.92 acres.

² For purposes of notice, the Department defines "riparian owner" as a shorefront property owner whose property boundaries are within 1,000 feet of the proposed site.

³ Exhibits 1, 2, and 3 are cited below as: Case File – "CF," Application – "App," Site Report – "SR."

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of a grow system with fewer moorings (App 4). The applicant is proposing to culture kelp by seeding onto horizontal long lines in the fall. The applicant proposes 23 rows of 300-foot long lines, each long line being 20 feet apart from the next long line (App 20). Every other long line, starting with the first, would be moored to the sea floor using a 2’x2’x4’ cement block. Each line would have either a float marking the end of the line or a mooring marker (App 24). In the “off season,” from June 1st to November 1st, only the moorings, lines attached to moorings, and mooring markers would remain within the boundaries of the site (App 5).

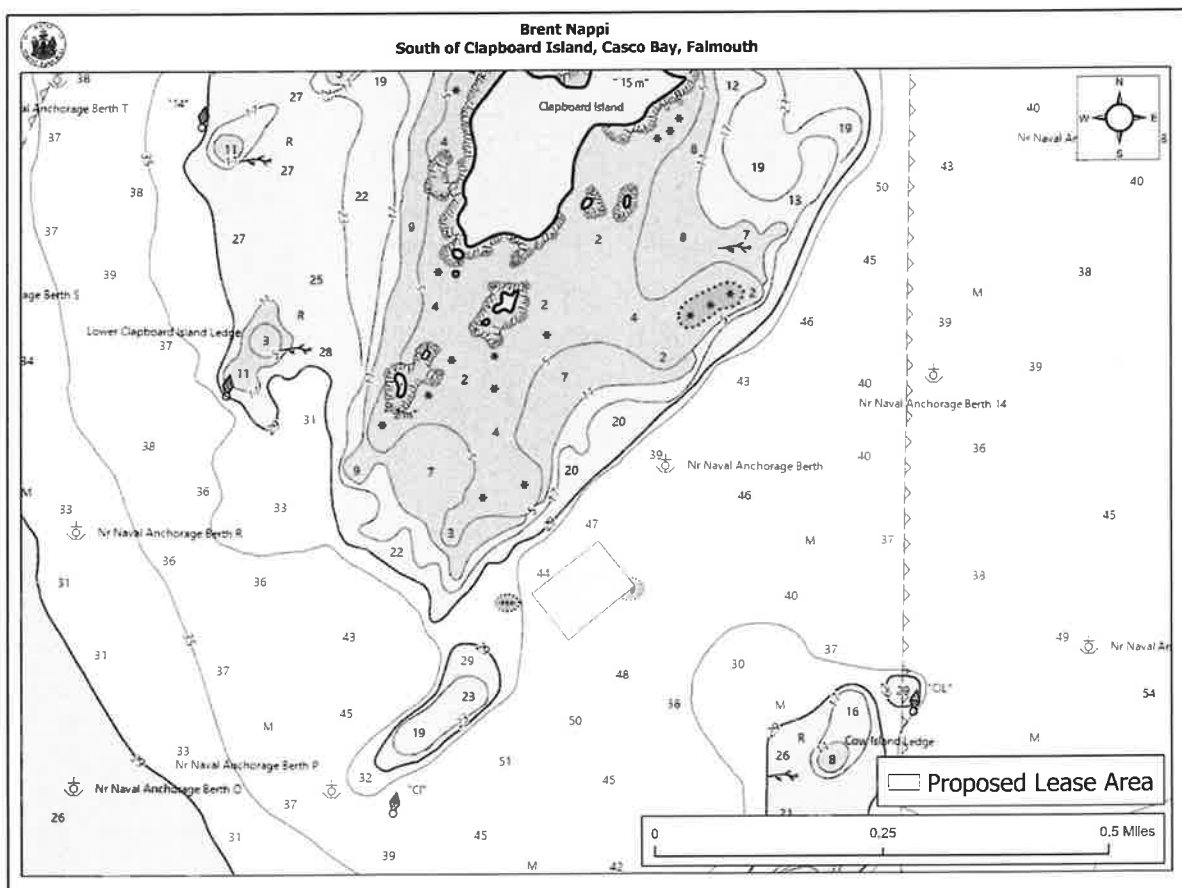


Figure 1. Vicinity map⁴

B. Site Characteristics

⁴ Created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.

On April 25, 2022, DMR staff visited the proposed experimental aquaculture lease site. The proposed lease occupies 3.92 acres south of Clapboard Island in Casco Bay (Figure 1). The northwest corner of the proposed lease site is closest to Clapboard Island, being approximately 1,675 feet to the south of the nearest shoreline at mean low water (MLW) (SR 3). There is no land or intertidal area within 1,000 feet of the proposal.

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 for commercial aquaculture research and development or for scientific research may be granted by the Commissioner of DMR upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; 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

Maine law and DMR's Chapter 2 regulations⁵ ("Chapter 2") require the Commissioner to examine whether riparian owners can safely navigate to their shore. 12 M.R.S.A. § 6072-A(13)(A); Chapter 2.37(1)(A)(1).⁶ In examining riparian owner ingress and egress, the Commissioner "shall consider the type of structures proposed for the lease site and their potential impact on the vessels which would need to maneuver around those structures." Chapter 2.37(1)(A)(1).

The proposed lease site is located approximately 1,675 feet from the southeastern shoreline of Clapboard Island at MLW. There are no houses, docks, or moorings within 1,000 feet of the proposal. The nearest observed pier/dock is approximately .5 miles away on the southwestern shoreline of Clapboard Island.

The Harbormaster for Falmouth was sent a questionnaire, but the Department did not receive a response. Additionally, the Department did not receive any comments related to impacts to riparian access.

⁵ 13-188 C.M.R. ch. 2.

⁶ The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

Due to the distance from the proposed lease area and the nearest pier/dock and the lack of comments from the public, the proposed lease site will not unreasonably interfere with riparian access in the area.

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 lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2).

The location of the proposal is approximately 1,200 feet to the east of the navigational channel that leads to/from Falmouth and one mile to the west of the designated deep water navigation route that leads to/from Cousins Island. The proposal is approximately 589 feet to the southwest of an area that is designated as a “Naval Anchorage Berth” on navigational charts. Department staff observed a ferry transiting the navigational channel to the east (SR 5).

DMR received a public comment stating that the navigation channels adjacent to Clapboard Island are “major thoroughfare” to both power and sail crafts.⁷ Additionally, the comment states there is a crowded, primarily recreational, anchorage to the west of Clapboard Island that uses the navigational channel to/from Falmouth. The anchorage houses a large marina, Portland Yacht Club, and the Town of Falmouth landing and mooring field. The public comment also states that due to the anchorage facility to the west being a recreational facility, activity is to be expected mostly in spring, summer, and fall, and that a June 1st gear removal date would be too late into the season.

The proposal is located approximately 1,200 feet to the east of the navigational channel to/from Falmouth and 589 feet southeast of the popular anchorage housing the yacht club and town landing. This anchorage is active in spring, summer, and fall. The applicant has stated that all equipment except for mooring gear and corner markers will be removed from June 1st to November 1st (App 5). This would allow for boats to navigate within the proposed area during their busier season, but as stated in the public comment, it is likely that the anchorage will already be active by June 1st. To allow ease of navigation to and from the anchorage during the spring, the gear should be removed earlier than the proposed June 1st date. Having all equipment except for mooring gear and corner markers removed by May 1st will allow

⁷ CF – Email from R. Craven to DMR dated May 12, 2022.

for unimpeded navigation during the spring season. If this proposal is granted, a condition would be added requiring the removal of gear from May 1st to October 31st.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with navigation provided applicant's gear is removed from the site from May 1st to October 31st.

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. 12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3). Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area. Chapter 2.37(1)(A)(4).

Fishing. During their site assessment, DMR staff did not observe any lobster buoys within 1,000 feet of the proposal. No other fishing activity was observed during the site assessment (SR 6). The applicant has observed infrequent hook fishing in the area during the summer months (App 6). DMR did not receive any public comments related to fishing in the area.

If this proposal is granted, a condition would be added requiring the removal of gear from May 1st to October 31st. The removal of this gear would allow fishing within the area of the lease from May 1st to October 31st of each year, coinciding with the observed fishing in the proposed lease area.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with fishing in the area provided the applicant's gear is removed from the site from May 1st to October 31st.

Other aquaculture uses. There are no aquaculture leases or LPAs within 1,000 feet of the proposal. Standard lease site CAS CF3 is located approximately 1,200 feet to the northeast of the proposal. Three boats were observed working on CAS CF3 at the time of DMR's site assessment. (SR 6). Experimental lease CAS CIx is located over 1,000 feet to the southeast of the proposal (SR 6).

Due to the distance between the proposed lease site and existing leases and the lack of comments from leaseholders in the area, the proposed lease site will not unreasonably interfere with the usage of the existing lease sites.

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

Other water-related uses. The applicant has observed kayaking in the lease area during the summer months (App 7). During the site assessment, DMR staff observed a beam with multiple lines attached that appeared to be anchored to the bottom of the sea floor. The beam is located approximately

154 feet to the west of the proposal. Navigational charts for the area indicate a wreck in this location (SR 6). It is unknown if this presumed wreck is a site for recreational SCUBA or other activities.

If this proposal is granted, a condition would be added requiring the removal of gear from May 1st to October 31st. This would allow for kayaking to occur in the area during the summer months and into the fall before the applicant's gear is placed back into the water. Additionally, no comments were received related to any potential SCUBA or other diving activities that may take place in the area.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with other water-related activities in the area.

D. Flora & Fauna

When examining existing system support, the Commissioner considers the degree to which the use of the lease site will interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and marine and upland areas to support ecologically significant flora and fauna. 12 M.R.S.A. § 6072-A(13)(D); Chapter 2.37(1)(A)(5).

Site Observations. During the site visit, Department staff observed occasional seaweed (*Ascophyllum sp.*) and sugar kelp. These species were generally covered in a layer of silt and possibly not alive or growing. One green crab (*Carcinus maenas*) and lobster (*Homarus americanus*) burrows, but no lobsters, were observed. According to data collected in 2022, there was eelgrass (*Zostera marina*) located

within 1,000 feet of the proposal, around intertidal ledges approximately 470 feet to the northwest of the proposal. No *Z. marina* was observed during the camera transect conducted by MDMR (SR 7).

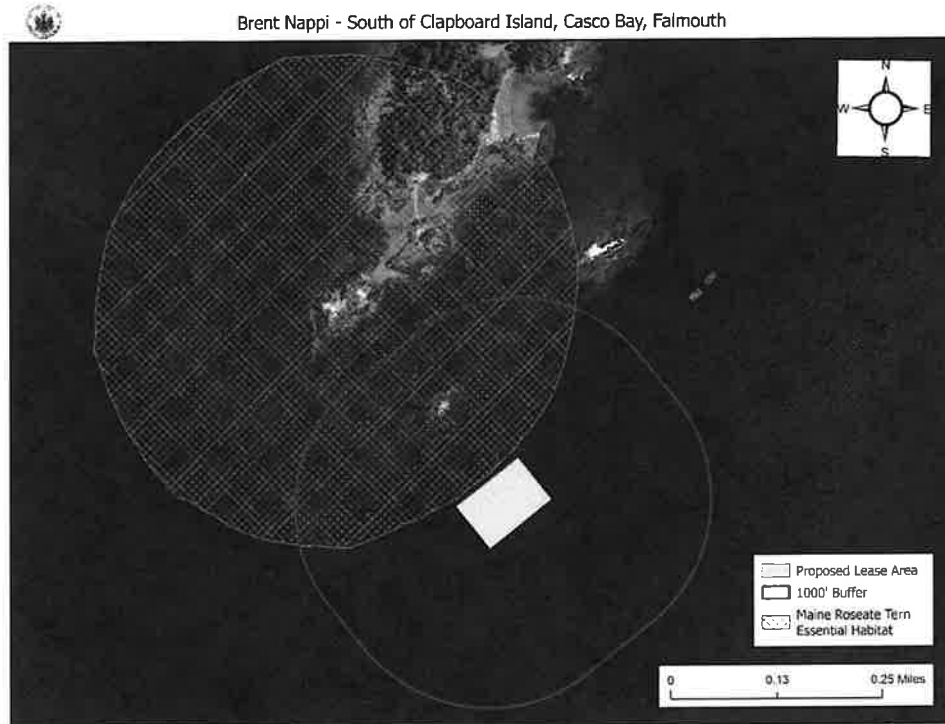


Figure 2. Roseate Tern Essential Habitat near Clapboard Island⁸

Fisheries and Wildlife. DMR received a comment from the Maine Department of Inland Fisheries and Wildlife (MDIFW) stating “This proposed aquaculture would be located on the edge of Roseate Tern Essential Habitat. Based on this minor intersection, this lease does not have to go through a formal Essential Habitat review. We anticipate minimal impacts to wildlife as a result of this lease.” The proposal area does follow along the southeastern edge of the Roseate Tern Essential Habitat but at no point does it intersect (Figure 2).

Based on the evidence that the proposal does not interfere with any observed eelgrass in the proposed lease site and that the lease location does not intersect with local Roseate Tern Essential Habitat, the proposed aquaculture activities for this lease site will not interfere with the ecological functions of the area.

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

⁸ Data obtained from MDIWF maintained SDE Feature Class “Maine_Roseate_Tern_Essential_Habitat”

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 a beach, park, or docking facility owned by the Federal, State, or municipal governments. 12 M.R.S.A. § 6072-A(13)(F); Chapter 2.37(1)(A)(7).

There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease (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, or docking facilities owned by municipal, state, or federal governments.

F. Source of Organisms

When examining the source of organisms, the Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. 12 M.R.S.A. § 6072-A(13)(E); Chapter 2.37(1)(A)(6).

Seed stock for the proposed lease site will be sourced from Summit Point LLC in Falmouth, Maine (App 2). This is a department approved source of seed stock. Any alternate source of stock must comply with DMR's laws and rules.

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

4. CONCLUSIONS OF LAW

Given the lease condition governing gear removal, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with riparian ingress or egress.
2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation.
3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing, other aquaculture uses, and other water-related uses of 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.

7. DECISION

Based on the foregoing, the Commissioner grants the requested experimental lease of 3.92 acres for commercial aquaculture research and development to Brent Nappi, 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 lessee⁹; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

The 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 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(12)(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.

8. 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-A(15)¹⁰ and Chapter 2.64(11)(B). Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while

⁹ DMR Rule 2.34 (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.”

¹⁰ 12 M.R.S.A. § 6072-A(15) provides that:

“The commissioner may establish conditions that govern the use of the lease area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the lease 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.”

preserving the exclusive right 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. No equipment except for mooring gear and corner markers shall be present from May 1st to October 31st of each year.

9. REVOCATION OF EXPERIMENTAL LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 M.R.S.A. § 6072-A(22) that no substantial research has been conducted on the site within the preceding year, that the 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: 2/7/24



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