

**STATE OF MAINE  
DEPARTMENT OF MARINE  
RESOURCES**

**Brent Nappi**

**CAS SI3x**

Experimental Aquaculture Lease Application  
Suspended Culture of Kelp  
Cumberland, 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 east of Sturdivant Island, in Casco Bay, Cumberland, Cumberland County. The proposed lease is 3.96 acres<sup>1</sup> 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 site<sup>2</sup>, the Town of Cumberland 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 a public hearing within the 30-day comment period. DMR did not receive any requests for a public hearing, and no hearing was conducted.

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

**LIST OF EXHIBITS**

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

**2. DESCRIPTION OF THE PROJECT**

**A. Proposed Operations**

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<sup>1</sup> The applicant originally requested 4.00 acres. Department calculations indicate the area is 3.96 acres.

<sup>2</sup> 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.

<sup>3</sup> Exhibits 1, 2, and 3 are cited below as: Case file – "CF," Application – "App," Site Report – "SR."

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 1<sup>st</sup> to November 1<sup>st</sup>, only the moorings, lines attached to moorings, and mooring markers would remain within the boundaries of the site (App 5).

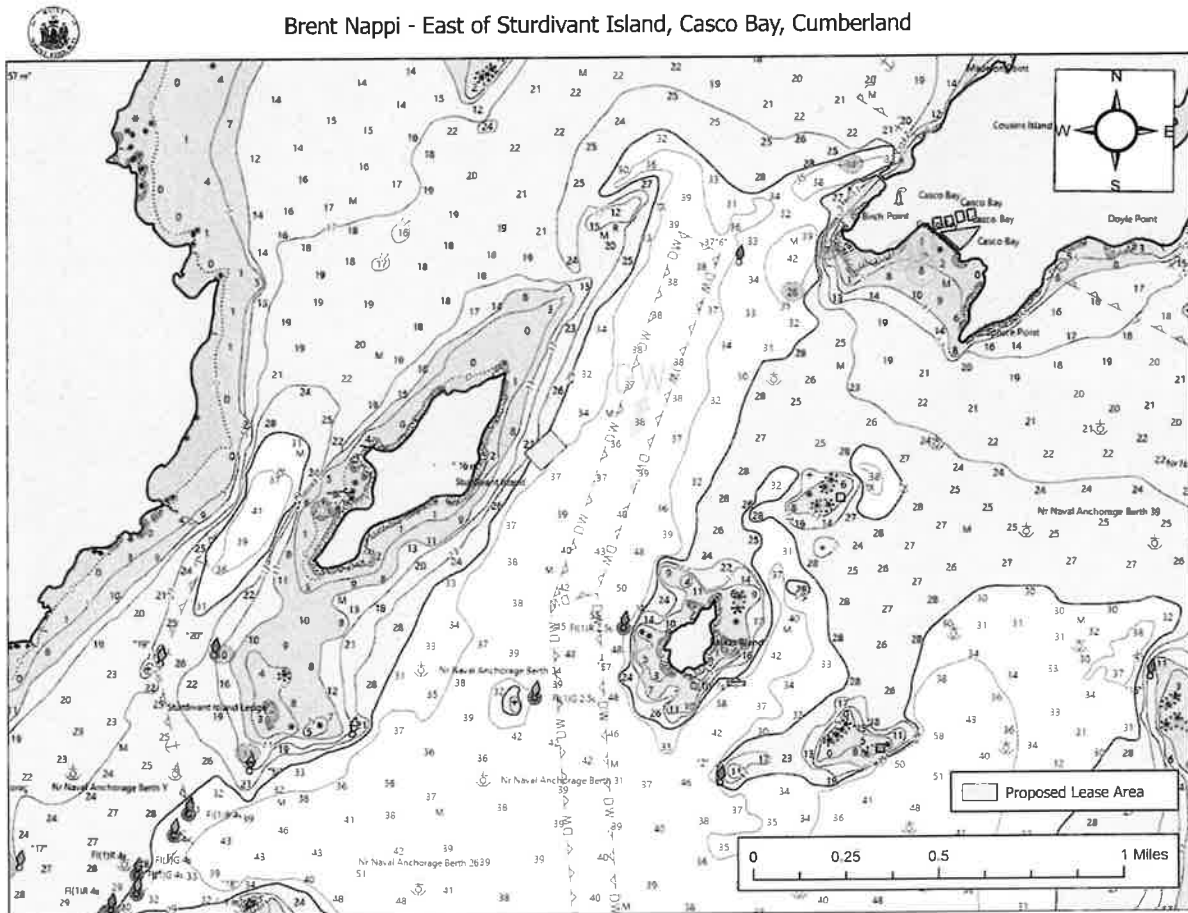


Figure 1: Vicinity map<sup>4</sup>

### B. Site Characteristics

On April 25, 2022, DMR staff visited the proposed experimental aquaculture lease site. The proposed lease occupies 3.96 acres to the east of Sturdivant Island in Casco Bay (Figure 1). The

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

southwest corner of the proposed lease site is closest to Sturdivant Island, being approximately 500 feet to the east of the nearest shoreline at mean low water (MLW) (SR 3). The shoreline of Sturdivant Island is predominantly rocky and sandy with deciduous forested uplands. The island has several residential houses (SR 2).

### **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 regulations<sup>5</sup> ("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).<sup>6</sup> 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 500 feet east of Sturdivant Island at MLW. During DMR's site assessment, scientists observed two houses within 1000 feet of the proposed lease, one located west of the proposal, and one located southwest of the proposal. Both houses had stair access to the shoreline, but no docks were observed to be associated with either house. DMR scientists observed a house with a pier approximately 1,100 feet southwest of the proposal. Three moorings were observed in the general vicinity, one approximately 330 feet to the west of the proposal, and the other two located 950 and 960 feet southwest of the proposal (SR 4).

A completed Harbormaster Questionnaire from the Cumberland Harbormaster was received on May 13, 2022. The Questionnaire noted that this proposed site would have no effect on the ability of

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<sup>5</sup> 13-188 C.M.R. ch. 2.

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

riparian owners located within 1,000 feet of the proposed lease to get to and from their property. During the comment period, DMR did not receive any comments regarding riparian access. Additionally, both houses within a 1000 feet boundary of the proposed site did not have docks to indicate water 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 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 proposal is located approximately 830 feet to the west of the center of the designated deep water navigation route that leads to/from Cousins Island. During DMR's site assessment, scientists did not observe any boats in transit in the vicinity of the proposal (SR 5). The Harbormaster Questionnaire stated that this proposal would have minimal impacts to navigation within the area if the gear is removed over the summer months. The completed application states that from June 1<sup>st</sup>-November 1<sup>st</sup> only corner markers, and mooring blocks, lines, and balls would be present on site (App 5). Notice of the completed application was also sent with the Harbormaster Questionnaire. During the comment period, DMR did not receive any comments regarding navigation.

The proposal area is located far enough away from the designated deep water navigational route that it will not impede navigation in the area. The applicant states that the majority of the gear used will be removed from June 1<sup>st</sup> to November 1<sup>st</sup>, corresponding with the Harbormaster's statement that there would be minimal impacts to navigation if the gear is removed over the summer months.

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

#### **C. Fishing & Other Uses**

When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. 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.** At the time of the site assessment, DMR scientists observed two lobster buoys located approximately 320 feet and 400 feet from the proposed site (SR 6). The application indicates that lobster fishing occurs infrequently within the boundaries of the proposed lease site during late spring through summer (App 6). The application also notes that hook fishing occurs, infrequently, within the boundaries of the proposed site during the summer months. In response to the Harbormaster Questionnaire, the Cumberland Harbormaster indicated that there is a large amount of both recreational and commercial fishing in the area of the proposed lease.

During the comment period, DMR did not receive any comments regarding commercial or recreational fishing.

The applicant stated that they would remove their gear in the off season, between June 1<sup>st</sup> and November 1<sup>st</sup> (App 5). The removal of this gear would allow lobstering and fishing in the area from June 1<sup>st</sup> to October 31<sup>st</sup> of each year, coinciding with times of year when lobstering and fishing would be more frequent. Once the gear is removed by June 1<sup>st</sup>, fishing could resume within the boundaries of the site. This would not unreasonably interfere with fishing in the area.

**Therefore,** the aquaculture activities proposed for this site will not unreasonably interfere with commercial or recreational fishing activities.

**Other aquaculture uses.** There is one standard aquaculture lease, CAS SI, located approximately 665 feet south of the proposal. Additionally, three Limited Purpose Aquaculture (LPA) sites, PSTO1117, PSTO1217, and PSTO1317, are located approximately 515 feet south of the proposed lease area (SR 6). DMR did not receive any comments from the holders of the standard lease or the LPAs.

Given the distances between the proposed lease site and the existing aquaculture sites, and the lack of comments from other aquaculturists in the area, the proposed lease site will not unreasonably interfere with the usage of the existing lease and LPA 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). DMR's site report makes no note of any observed kayaking or other recreational water activities at the time of the site report. No comments concerning other water-related uses around the proposed lease area were received by DMR.

The applicant stated that they would remove their gear in their off season, between June 1<sup>st</sup> and November 1<sup>st</sup> (App 5). 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.

**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, DMR staff observed occasional rockweed (*Ascophyllum nodosum*) near the proposed lease area (SR 7). Data collected in 2022 indicates eelgrass located approximately 430 feet to the west of the southwestern corner and approximately 660 feet from the northwest corner. There was no eelgrass observed within the proposed boundaries during the site assessment (SR 7).

**Fisheries and Wildlife.** DMR received a comment from the Maine Department of Inland Fisheries and Wildlife (MDIFW) stating that “as this proposed aquaculture would be within Tidal Waterfowl Wading Bird Habitat (TWWH), we recommend activities in the coastal wetland be minimized to the extent practicable.” However, according to Geographic Information System (GIS) data maintained by MDIFW, and available through the Maine Office of GIS (MEGIS), the proposal is located approximately 6 feet to the east of tidal waterfowl and wading bird habitat (SR 8). Furthermore, the aquaculture activities would be occurring in subtidal waters (not a wetland area) between November 1- June 1.

Based on the evidence that the proposed lease does not interfere with the recorded locations of eelgrass in the area and that the lease location is not located in any TWWH, 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.

#### **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 DMR 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**

Based on the above findings, 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.

## **5. DECISION**

Based on the foregoing, the Commissioner grants the requested experimental lease of 3.96 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 lessee<sup>7</sup>; 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.

## **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-A(15)<sup>8</sup> and Chapter 2.64(11)(B).

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<sup>7</sup> 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.”

<sup>8</sup> 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



Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive right of the lessee to the extent necessary to carry out the purpose of the lease. No conditions will be imposed on the lease.

7. **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**

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may grant the lease on a conditional basis until the lessee has acquired all the necessary federal, state, and local permits.”