STATE OF MAINE **Saltwind Seafarm, LLC**

DEPARTMENT OF MARINE RESOURCES

Experimental Aquaculture Lease Application

Suspended Culture of Oysters September 3, 2020

Nonesuch River, Scarborough

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Saltwind Seafarm, LLC applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located in the Nonesuch River, Scarborough, Cumberland County, Maine. The proposed lease is 3.15 acres and is for the suspended cultivation of American/Eastern oysters (*Crassostrea virginica*) and European oysters (*Ostrea edulis*).

1. THE PROCEEDINGS

DMR accepted the application as complete on February 20, 2020. Notice of the application and the 30-day public comment period were provided to state and federal agencies, the Town of Scarborough, including the Scarborough Harbormaster, riparian landowners within 1,000 feet of the proposed site, and others on DMR's mailing list. Notice of the application and comment period was published in the March 6, 2020 edition of the *Forecaster.* During the comment period, DMR did not receive any requests for a public hearing, and no hearing was held. The site report was issued on July 13, 2020. The evidentiary record regarding this lease application includes the application, DMR's site report, and the case file. The evidence from each of these sources is summarized below.[1]

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The applicant is proposing to cultivate American and European oysters using up to 900 floating cages that are secured to 30 rows of longlines (App 20).[2] Each longline would support up to 30 cages, and

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

[2] In the application the strings or longline is referred to as "rope kits." The overhead view (pg. 26 of the application) depicts 25 rope kits (5 sets of 5 lines), but written descriptions include 6 sets, or 30 rope kits. DMR's assessment is based on 6 sets (30 rope kits) and up to 900 cages.

be oriented north-south in six sets of five longlines each (App 20).[3] The oysters would be placed in bags kept in the floating cages (App 11). The cages would be deployed from May through December (App 11). During the winter months, the applicant would overwinter product by either removing all gear from the proposed site and keeping the oysters in cold storage or overwintering the cages on the bottom of the proposed site (App 11).[4]

The application indicates that a pressure washer would be used on a monthly basis to clean any fouled bags (App 13). The pressure washer would be kept on a boat that would service the site (App 13). A solar powered electric tumbler would also be used on a monthly basis (App 13). The applicant would be at the site at least three times per week for seeding or harvesting (App 12).

B. Site Characteristics

On June 2, 2020 DMR scientists visited the proposed lease site and assessed the area in consideration of the criteria governing experimental leases. The proposed lease area is in the Nonesuch River in Scarborough, Maine (SR 2). The uplands surrounding the site are characterized by marshland, which is dominated by saltmarsh grass (*Spartina alterniflora*) (SR 2). DMR staff also observed a small camouflaged building along the uplands to the east of the proposal (SR 2). The shoreline near the proposed area is mostly comprised of sand (SR 2). DMR staff observed sections of eroding shoreline; based on historical aerial images of the area, the subtidal, intertidal, and upland substrates are subject to frequent shifting and redistribution (SR 2). Figure 1 depicts the location of the proposed lease site with corners labeled.

The applicant intended for the site to be subtidal and noted in the application that depths, at mean low water, were between 3 and 5 feet (App 16 & 17). During the site visit, DMR staff collected depth measurements at the proposal, which were then approximated for mean low water (SR 2). Based on these measurements, mean low water depths at the two western corners of the proposal were approximately 4 feet deep, while mean low water depths at the NE (labeled as corner 2) and SE (labeled as corner 4) corners were approximately 10 and 14 inches deep, respectively (SR 2). The site is subtidal, but depths within portions of the site are shallower than what is described in the application (SR 3).

Based on points taken by DMR scientists, the area of the Nonesuch River where the proposed lease is located is approximately 360 feet wide at the northern end and 340 feet wide at the southern end

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[3] Ibid.

[4] The heights of the cages are 4 inches and 9 inches not including the height of the floating pontoon (App 23). Floating plastic lobster crates are also proposed for the site and would be used to temporarily store product before market (App 28). The crates are 16 inches in height (App 28). At mean low water, some of the recorded depths were 10 inches and 14 inches.

(SR 9). At 112 feet wide, the proposed site is in the approximate middle of the river (SR 9). Based on mean low water measurements (described above), water depths at the proposed lease site increase from east to west (SR 9). However, as noted in the site report, the increase in depth is not gradual. There is a drop-off from the shallow water on the eastern portion of the lease into the deeper channel in the center of the waterway (SR 3).

At mean low water, the depth of the deeper channel was approximately 4 feet (SR 3). Based on DMR's review, the drop-off into the deeper channel was located roughly in the center of the southern half of the proposed lease site, and along the eastern boundary in the northern third of the proposed lease (SR 3). At the time of the site visit, DMR's measurements of the deeper channel matched the location of the Nonesuch River channel as observed in geo-referenced aerial imagery, which was taken on May 9, 2016 (SR 3; and see Figure 1 below).

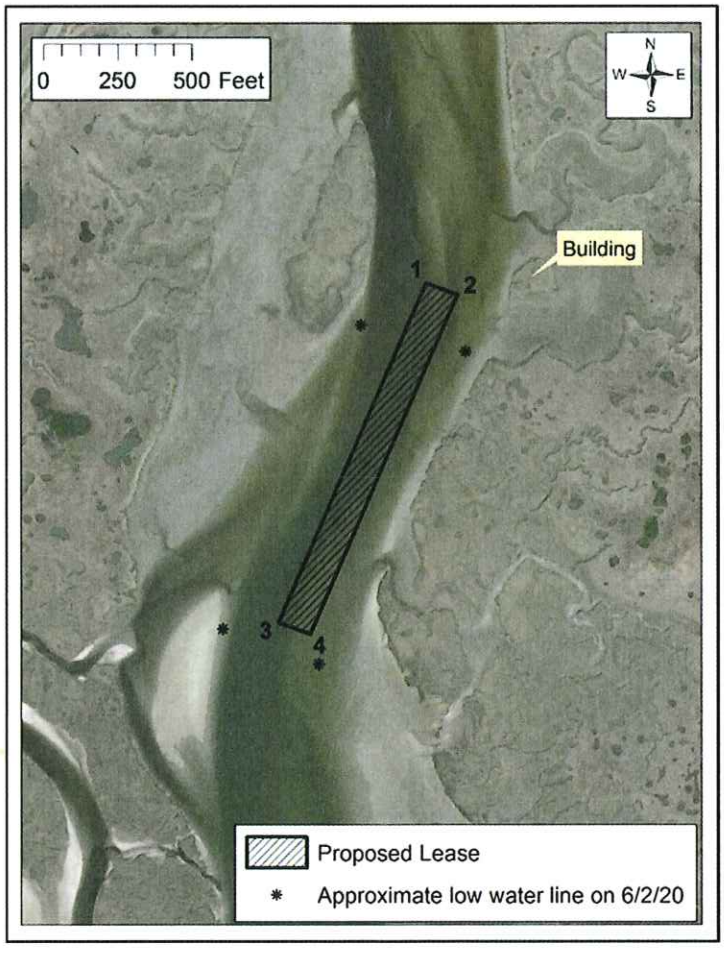

Figure 1: Location of the proposed site in reference to the low water line. Image from site report. Note: The NE corner is labeled as 2 and the SE corner is labeled as 4.

Therefore, water tends to be deeper at the northern end of the site than at the southern end. However,

as described in the site report, the dynamic nature of the area and inherent errors with hand-held GPS units makes it difficult to predict or identify where the "deep water" channel would be located throughout the term of the lease (SR 3).

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 an available source of organisms to be cultured on the lease site.

A. Navigation

The application indicates that small boats use the surrounding river at all tidal stages and that larger vessels (noted as 22' in the application) use the surrounding area at mid to high tidal stages (App 14). The applicant has requested that boaters not create an excessive wake within the site and that they travel to the east of the proposal (App 16). During previous visits to the area, DMR staff have observed motorized vessels and kayaks within the vicinity of the proposed site (SR 9). The shallow nature of the area and surrounding water already limits the type of vessel that can navigate in the area (SR 9). However, at mean low water, the proposed site occupies approximately 1/3 of the waterway and roughly 1/2 of the deeper channel (SR 9).

Kayaks and other vessels with a similar draft may be able to navigate in the shallower waters to the east of the proposal, but this area would be narrow at lower tidal stages, which would limit maneuverability (SR 9). As previously noted, depths at mean low water, at the NE and SE corners of the proposed lease, were 10 and 14 inches deep, respectively. If the proposed lease is granted, it's likely that boaters would more frequently navigate in the deeper waters to the west of the proposal than the shallower waters along the eastern boundary (SR 9). The western boundary is located between 100 and 175 feet from the mean low water line on the western shoreline of the river (SR 9). Approximately 100 feet of channel, at a minimum, would remain available to the west of the proposed lease, if granted (SR 9).

As depicted in Figure 2, the Nonesuch Boat Ramp, a state-owned access point, is located approximately 5,000 feet to the north of the proposed site (SR 10). The proposal is in the center of a narrow and shallow channel that leads to this boat ramp, so it is likely that this section of the river experiences frequent north-south navigation (SR 10). If the lease were granted, it could adversely impact

Figure 2: Location of the proposed lease site in relationship to area landings, boat launches, and beaches. Image from site report.

navigation between the boat ramp and areas south of the proposal, because it would limit the amount of space available for navigation (SR 15). These impacts would likely be exacerbated at lower tidal stages (SR

15). It's unlikely that the proposed site would interfere with the use of the other landings, launches, and beaches displayed in Figure 2 (SR 15). However, given the number of access points near the proposal it is reasonable to assume that boating and other water-related activities are common in this area and some vessel traffic near the site may be from boats traveling to or from these other sites.

In addition, substrate in the area is not static, and could be subject to shifts or redistribution during the term (up to three years) of the experimental lease. Therefore, if the lease were granted, any areas available for navigation, contemplated in this decision, could change in a manner that further limits safe passage through this section of the river.

DMR sent a copy of the completed application to the Scarborough Harbormaster for review and comment. The Harbormaster review is based on the information contained in the applicant's proposal and upon the Harbormaster's local knowledge of the area. The Harbormaster review was completed on February 28, 2020. As part of the review, the Harbormaster indicated that no direct impacts to navigation within the area would be expected, if the proposal were granted. The Harbormaster's feedback differs from information contain in DMR's site report, which indicates that some direct impacts to navigation would be likely if the proposal were granted.

The difference between DMR's review and the Harbormaster's feedback as it's related to navigation is likely due to a variety of factors. For example, the application listed water depths, at mean low water, between 3 feet and 5 feet. The application also describes observed boating activity in the area and suggests that it could continue unencumbered around the boundaries of the site. An assessment based on the information contained in the application would suggest that the proposed operations would have minimal impacts to navigation. However, DMR staff visited the proposed site on June 2, 2020 and had the opportunity to take a variety of measurements, which indicate that at mean low water, depths in certain areas, are 10 to 14 inches. In addition, the area is dynamic and prone to frequent shifting, so it's also possible that the Harbormaster's review reflects conditions in the area that changed prior to the site visit.

In addition, Matthew Hassler, part owner of Saltwind Seafarm, LLC, held four Limited Purpose Aquaculture (LPA) licenses within this immediate area (App 39). The LPA licenses were authorized for the culture of shellfish using suspended culture techniques. These LPA licenses were not renewed by DMR because the area is designed as Essential Habitat by the Maine Department of Inland Fisheries and Wildlife (MDIFW). DMR's rules prohibit LPA licenses within areas designated as Essential Habitat. This prohibition does not apply to leases, so this proposal is intended to replace the LPA licenses that were not renewed (App 15). Essential Habitat designation aside, DMR found that the LPA licenses met all the criteria for

initial issuance. This would have included 12 M.R.S.A. §6072-C(2-A)(C), which specifies, in part, that the gear does not present an unreasonable impediment to safe navigation.

However, LPA licenses expire December 31st each year and the footprint of each site is limited to 400 square feet. In comparison, experimental leases can be up to four acres in size and can be issued for up to three years. Given the scale of LPA license activities and limits on their duration, DMR site visits are not a required part of the LPA license application process. Furthermore, each lease application is evaluated independently based on the applicable decision criteria. Therefore, the prior issuance of an LPA license in or near the same area as a lease proposal does not mean that findings will be made that a proposed lease meets all the statutory criteria for approval or that the lease will be granted.

Summary:

In this case, the proposed 3.15-acre site occupies, at mean low water, approximately 1/3 of the Nonesuch River and roughly 1/2 of the waterway's deeper channel. This section of the river likely has ample boat traffic, given that the Nonesuch Boat Ramp is located 5,000 feet to the north of the proposed site. Water depths along the eastern portion of the site would, at mean low water, preclude vessels with a certain draft from navigating within that section of the river.

If the proposal were granted, it seems highly likely that most vessels' traffic would, by necessity, be forced to use the 100 feet of channel located to the west of the lease. Limiting vessel traffic to this single, 100-foot area could result in multiple vessels attempting to maneuver around each other in a narrow area. These navigational issues could also be worsened as the area shifts and changes throughout the term of the lease. For example, sediment could shift, so that the channel becomes even narrower or shallower. further limiting navigation in the area.

Therefore, the aquaculture activities proposed for this site will unreasonably interfere with navigation.

B. <u>Flora & Fauna</u>

During the site visit, staff observed double-crested cormorants (*Phalacrocorax auritus*), herring gulls (*Larus argentatus*), terns (*Sterna or Sternula sp.*) and shorebirds in the vicinity of the proposed lease site (SR). As previously noted, the proposed site overlaps with Essential Habitat for the least tern (*Sternula antillarum*) and piping plover (*Charadrius melodus*), which are both listed as Endangered under the Maine Endangered Species Act. The area also overlaps with designated habitat for the salt marsh sparrow (*Ammodramus caudacutus*), a Species of Special Concern in Maine, and Tidal Wading Bird and Waterfowl

Habitat, which is defined under Maine's Natural Resources Protection Act (NRPA) as Significant Wildlife Habitat.

DMR sent a copy of the completed application to MDIFW for their review and comment. In response, MDIFW noted, in part:

> All structures and activities be located in subtidal areas with greater than 1 meter (3 feet) of water depth at low tide, and that the lease area must be accessed only from the subtidal... MDIFW acknowledges that intertidal areas within the Scarborough Marsh are sometimes dynamic due to extreme weather events and tidal activity, so as equipment is reinstalled, site conditions need to be observed and structures placed in conformance with this minimum low water depth recommendation each time.[5]

According to DMR's site report, sections of the proposal are less than 3 feet in depth at mean low water. In fact, some sections of the proposal were only 10 to 14 inches deep at mean low water.

Summary:

Essential Habitats are areas, established through rule-making, that have physical or biological features that are essential to the conservation of an endangered or threatened species.[6] The proposed site is in an area essential to the nesting, feeding, and brood rearing for least terns and piping plovers, which are state endangered species. Pursuant to 12 M.R.S.A. §12806 state agencies may not permit, license, fund, or carry out projects that will significantly alter an Essential Habitat or violate protection guidelines that have been adopted for the habitat.

Before DMR can issue a lease in an Essential Habitat area, MDIFW must review and approve DMR's proposed final decision. In their preliminary review of the completed application, MDIFW specified that all structures and activities be in subtidal areas with greater than 3 feet of water depth at low tide. In this instance, the site at low water has depths of 10 to 14 inches in certain areas, which does not meet the feedback provided by MDIFW. Given the importance of the area to state endangered species, and that the operations, as proposed, would be unable to meet MDIFW's guidelines concerning water depth, this site would unreasonably interfere with the ability of the surrounding area to support significant fauna.

Therefore, the aquaculture activities proposed for this site will unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

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[5] CF: Email from J.Perry to C. Burke dated May 7, 2020

[6] See: https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/essential-wildlife-habitat/pplt-nests.html

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will unreasonably interfere with navigation.

2. The aquaculture activities proposed for this site will unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities do not 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 denies the requested experimental lease of 3.15 acres to Saltwind Seafarm, LLC.

Dated: 9/3/2020

Patrick C. Keliher, Commissioner
Department of Marine Resources