

**STATE OF MAINE  
DEPARTMENT OF MARINE RESOURCES**

**Amanda Moeser**

**CAS L12**

Standard Aquaculture Lease Application  
Suspended and bottom culture of shellfish and  
sea urchins  
Casco Bay, Yarmouth, Maine

October 8, 2021

**FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION**

Amanda Moeser applied to the Department of Marine Resources (DMR) for a 20-year standard aquaculture lease on 8.62<sup>1</sup> acres south of Lanes Island in Casco Bay, Town of Yarmouth, Cumberland County, Maine. The proposal is for the suspended and bottom culture of American/eastern oysters (*Crassostrea virginica*), quahogs/hard clams (*Mercenaria mercenaria*), and green sea urchins (*Strongylocentrotus droebachiensis*).<sup>2</sup>

**1. THE PROCEEDINGS**

The pre-application meeting on this proposal was held on October 2, 2018 and a scoping session was held on January 28, 2019. DMR accepted the final application as complete on September 26, 2019. A public hearing was scheduled for July 12, 2021. Due to the COVID-19 pandemic, and to limit any potential public health risks associated with gathering in groups, DMR elected to conduct the public hearing on this application remotely, using a virtual meeting platform.<sup>3</sup> Notice of the hearing was published in the June 10 and July 1, 2021 editions of the *Northern Forecaster*. The notices specified that the proceeding would be conducted remotely and directed interested persons to contact DMR to sign up to participate in the proceeding. Interested persons were required to sign up no later than 5:00 p.m. on June 27, 2021. Notice was also sent to riparian landowners, the Town of Yarmouth and its Harbormaster, state and federal agencies, and subscribers of DMR's aquaculture listserv.

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<sup>1</sup> The applicant originally requested 9 acres. However, DMR calculations based on the provided coordinates indicate the proposed site is 8.62 acres.

<sup>2</sup> The applicant also originally requested to cultivate sea scallops (*Placopecten magellanicus*) but indicated at the hearing she no longer intends to culture them. Therefore, scallops are not referenced in the decision though they were listed in the application.

<sup>3</sup> The Department of Marine Resources uses Microsoft Teams for all virtual conferencing, so this was the platform used for the Amanda Moeser remote hearing.

Eight individuals registered to participate in the proceeding by the specified deadline. Of the eight registered participants Robert Earnest, Todd Jaqoutz, and Jefferson Oranellas indicated that they intended to provide testimony. On July 1, 2021, DMR sent an email to all registered participants and the applicant. The email included information about how to participate in the remote proceeding and specified that the deadline to file any documents or other materials for consideration as evidence was 12:00 p.m. on July 8, 2021. After that initial email was sent, the applicant inquired about designating witnesses, the deadline for pre-filing testimony and how to request changes to their application. DMR clarified that a list of witnesses, testimony, and any proposed changes to the application would need to be filed no later than 12:00 p.m. on July 8, 2021.<sup>4</sup> DMR specified that the testimony of any witness would need to be pre-filed.

On July 2, 2021, the applicant emailed the Hearings Officer asking for an extension to the July 8, 2021 filing deadline, so they could submit photos of the proposed lease site at a 0.0 tide, which would not occur until the morning of July 12, 2021 [the day of the scheduled hearing]. Portions of the proposed lease site were depicted as intertidal on NOAA nautical charts, which were included in DMR's site report. DMR cannot grant a lease site in the intertidal zone unless the applicant has provided the requisite permissions to DMR or demonstrates that the site is subtidal.

On July 7, 2021, DMR granted the extension, but noted that the applicant needed to provide a photograph of the waterline at a negative or 0.0 tide from corners 6, 2, and 3 of the proposed site. These specific corners, as displayed in Figures 1 and 2 of the site report, were depicted as being intertidal on the NOAA chart. DMR clarified that the photographs needed to include the time each photo was taken and the associated coordinates. This information needed to be emailed to DMR no later than 1:30 p.m. on July 12, 2021, but all other evidence, witness lists, and associated testimony needed to be received by 12:00 p.m. on July 8, 2021. In compliance with the July 8<sup>th</sup> filing deadline, the applicant submitted a variety of materials including a list of witnesses and their testimony. The proposed witnesses included Chad Coffin, Mike Brown, and Emily Selinger.

Prior to scheduling a hearing for this proposal, on March 16, 2021, DMR held a remote public hearing for a 3.48-acre standard lease proposal, which was submitted by Maine Source Seafood.<sup>5</sup> Jefferson Oranellas and Todd Jagoutz own Maine Source Seafood and they registered to provide testimony at the public hearing on Ms. Moeser's proposal. There is ~525 feet between the boundaries of the Maine Source Seafood site and Ms. Moeser's proposal. During the hearing on the Maine Source Seafood proposal, Ms. Moeser, and Messrs. Coffin and Brown testified about commercial shellfish

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<sup>4</sup> CF: Email exchange between A. Moeser and A. Ellis-2:55 p.m. on July 1, 2021

<sup>5</sup> Erin Wilkinson, DMR, Resource Management Coordinator, adjudicated the Maine Source Seafood proposal.

harvesting, navigation, and other aquaculture uses in the area. Testimony provided by Ms. Moeser and Messrs. Coffin and Brown suggested that the proposal submitted by Maine Source Seafood may adversely impact their respective uses of the area. Specifically, Messrs. Coffin and Brown testified that the proposed lease site and surrounding area are important to the commercial wild harvest of European oysters (*Ostrea edulis*), which they both are licensed to harvest. Emily Selinger attended the Maine Source Seafood hearing but did not offer testimony.

On May 26, 2021, DMR granted the 3.47-acre lease site to Maine Source Seafood for a 15-year term that authorized the culture of American oysters using suspended culture techniques. Based on the testimony provided by Messrs. Coffin and Brown, conditions were imposed on the Maine Source Seafood lease that were intended to preserve that European oyster resource for commercial shellfish harvesters and to provide for the harvest of the resource within the boundaries of that site without interfering with the permitted aquaculture activities.

On March 11, 2021, Mr. Brown and his daughter, Jennifer Brown applied for Limited Purpose Aquaculture (LPA) licenses in the general vicinity of the lease proposals submitted by Maine Source Seafood and Ms. Moeser. The LPA applications included the culture of European oysters, which would be collected from the wild and placed on the LPA sites. The LPA applications were proposed for areas, identified by Mr. Brown during the Maine Source Seafood hearing, in the general vicinity of where European oysters are commercially harvested. As part of the LPA application process and in consideration of the testimony Mr. Brown provided during the Maine Source Seafood hearing, DMR had Mr. Brown further clarify the location of observed commercial European oyster harvesting in relationship to the LPA applications. The LPAs were granted on May 28, 2021 and were assigned the acronyms: MBRO121, 221 and JBRO121 and 221.

In this instance, the pre-filed testimony of Messrs. Coffin and Brown suggested that Ms. Moeser's proposal would not have any impacts to their respective uses of the area, including the harvest of European oysters. The pre-filed testimony also suggested that Messrs. Brown and Coffin had assisted Ms. Moeser with her LPA sites, which are within the boundaries of the proposed lease. DMR also noted that Mr. Coffin was listed as a source of stock in Ms. Moeser's application.

Given the location of Ms. Moeser's proposed lease site in relationship to the Maine Source Seafood lease and the similarity of issues between both cases regarding the European oyster resource, DMR took official notice of the record in the Maine Source Seafood proceeding, including the hearing recording associated with that proceeding and the decision. DMR also took notice of all documents and materials associated with the processing and issuance of the LPAs issued to the Browns.

The remote public hearing was held as scheduled on July 12, 2021. No one intervened in this case. Sworn testimony was given at the hearing by the following witnesses:

Name	Affiliation
Amanda Moeser	Applicant
Chad Coffin, Mike Brown, and Emily Selinger	Applicant's Witnesses
Cheyenne Adams and Flora Drury	DMR, Marine Scientists
Robert Earnest	Member of the Public

Ms. Moeser presented her proposed lease and list of associated changes. The applicant's witnesses read their pre-filed testimony into the record. Ms. Adams and Drury presented DMR's site report and answered questions about the site visit. Mr. Earnest offered testimony in general support of the applicant. Colin Greenan, with the United States Army Corps of Engineers (ACOE) attended the hearing but did not offer testimony. Mr. Greenan asked clarifying questions about certain schematics submitted by the applicant. 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 Amanda Ellis.

DMR accepted the pre-filed materials submitted by Ms. Moeser as exhibits. During the hearing, Ms. Moeser presented a list of proposed changes to the proposed lease site, which DMR also accepted as an exhibit. The evidentiary record before DMR regarding this lease application is summarized below.<sup>6</sup>

**LIST OF EXHIBITS**

1. Case file
2. Application
3. DMR site report and associated addendum, which was published on May 28, 2021
4. A list of witnesses and pre-filed testimony
5. Map of the proposed lease site
6. Notes and photos from a snorkel survey that occurred on July 26, 2020
7. Document titled "Pre-filed Applicant Evidence"
8. Three videos of the proposed lease site
9. Notes that accompany the three videos

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<sup>6</sup> Exhibits 1, 2, and 3 are cited below as: Case file – "CF", Application – "App", site report – "SR". The site report addendum is cited as SRA.

10. Photos and notes from a site visit that occurred on July 11 and 12, 2021
11. A list of changes to the proposed lease site

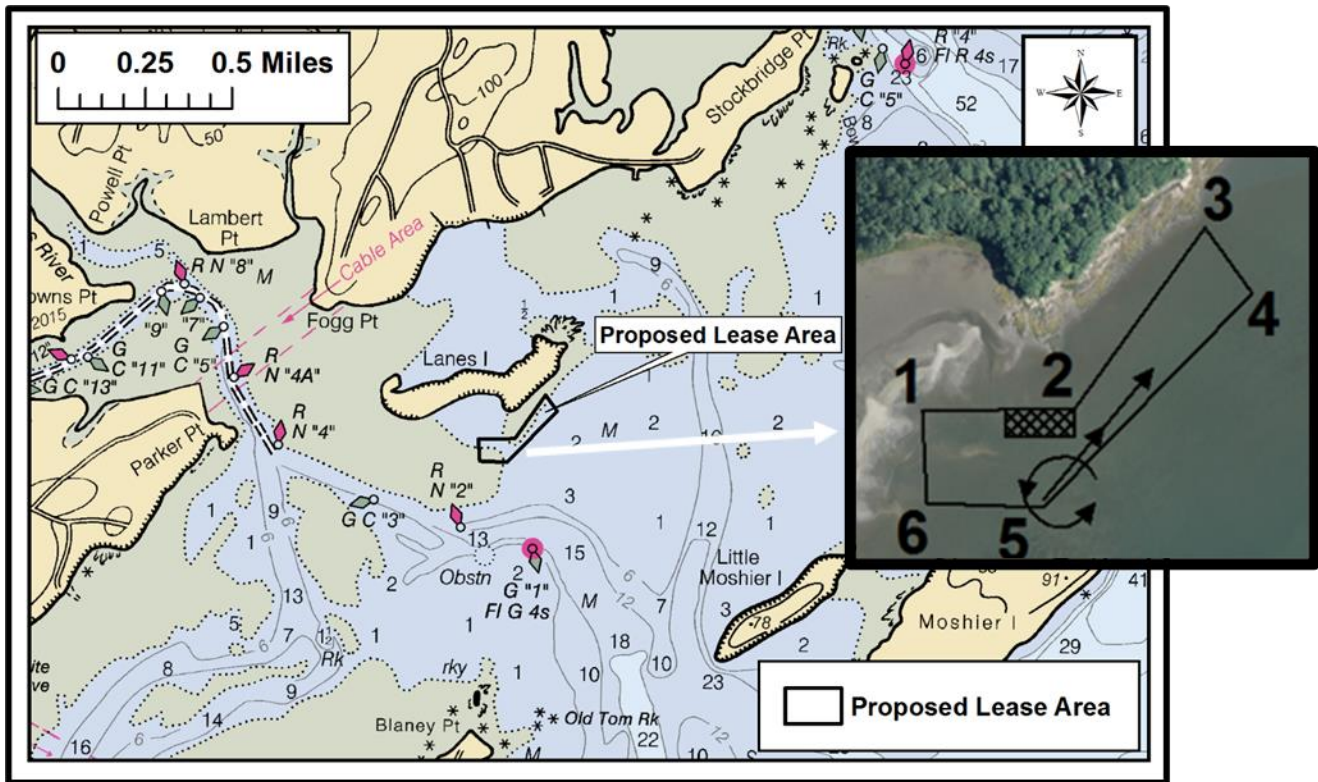
## **2. DESCRIPTION OF THE PROJECT**

### **A. Site Characteristics**

DMR scientists conducted a site assessment on October 8, 2019 and the site report was published on May 8, 2020 (SR 1 and 2). DMR visited the proposed lease site a second and third time on May 18 and 26, 2021 to assess the extent of live European oysters within the boundaries of the site (SRA 1). The proposed lease is located south of Lanes Island, in Casco Bay, Yarmouth. Lanes Island is an undeveloped preserve that is held in private conservation by Maine Coast Heritage Trust (SR 2 and 17). The uplands of the island are characterized by mature forest and a mixed rocky and marsh grass intertidal zone (SR 2). The island is also partially surrounded by tidally exposed mudflats (SR 2). To the east of the proposed site are open shoal waters and a small channel that leads to the boat ramp at Winslow Park and Campground (SR 2). Moshier and Little Moshier Islands are to the southeast of the proposal and Cousins Island is to the south (SR 2). A marked navigational channel that leads to the Royal River is to the south and west (SR 2).

Correcting for tidal variation, depths at mean low water ranged from 1.36 to 1.86 feet within the boundaries of the proposed site (SR 6). During DMR's initial site assessment, the proposed site remained subtidal during low water (SR 6). However, tidal height on October 8, 2019 was predicted to be 1.64 feet above mean low water (SR 6). Depth calculations and aerial imagery taken near mean low water suggest that the proposed lease area remains subtidal at a 0.0 tide (SR 6). NOAA charting indicates that portions of the proposed site are exposed at mean low water. Ms. Adams testified that DMR scientists visited the site at a 0.0 tide on July 12, 2021 [the morning of the hearing] and confirmed that all portions of the proposed lease site are subtidal. Aerial photography indicates that the proposed site has exposed flats during negative tidal stages (SR 6).

Figure 1 depicts the boundaries of the proposed lease site on a NOAA chart and aerial imagery taken near mean low water. In the aerial image, the corners of the proposed lease site are numbered, and the area proposed for suspended gear is depicted (see cross hatched rectangle near corner 2). At mean low water, corner 3 of the proposed lease site is ~45 feet to the northwest of the Lanes Island shoreline (SR 9). The boundary of the proposed lease site that spans from corner 1 to 6 is ~35 feet, at mean low water, to the west of tidally exposed mud flats (SR 9).



**Figure 1:** Vicinity of map of the proposed lease site as depicted on the NOAA chart. Also included is an aerial image of the proposed lease site with the corners labeled. The images for this figure were taken from Figures 1 and 2 in the site report.

## **B. Proposed Operations**<sup>7</sup>

The applicant is proposing to culture American/eastern oysters (*Crassostrea virginica*), green sea urchins (*Strongylocentrotus droebachiensis*), and quahogs/hard clams (*Mercenaria mercenaria*) using a combination of suspended and bottom culture techniques. American oysters and quahogs would be free planted on the bottom of the proposed site and cultured using the floating and bottom cages.<sup>8</sup> Green sea urchins would be cultured using floating and bottom cages (App 7).

<sup>7</sup> The applicant presented several changes to their proposal during the public hearing and clarified several elements of the application. The proposed operations section is written to describe what would be authorized if the proposal is granted. Any additional changes or clarifications provided by the applicant during the public hearing are documented in Exhibit 11.

<sup>8</sup> The bottom cages are of varying sizes. See page 7 of the completed application for dimensions of the gear and the maximum amount of each gear type. Quahogs are not listed in the gear table, but the applicant clarified that quahogs would be cultured using these gear types.

Approximately .58 acres of the proposed site would contain floating and bottom gear.<sup>9</sup> The remainder of the proposed site (~8.04 acres) would be for bottom planting only. The section of the proposed lease site that would contain gear is divided into two plots that measure 100' x 120' with a 50-foot gear-free corridor separating the two plots (App 10, SR 2). Ten longlines, measuring 100-feet in length would be deployed on each plot and would be utilized to secure gear (App 10). Tending and maintenance activities on the proposed site would include flipping bags and cages and sorting product (App 18). Product would be harvested by hand or oyster rake (App 18). Except for vessels to access the site, no power equipment is proposed (App 20, Moeser testimony).

The applicant testified about how operations may change during the winter months, which Ms. Moeser clarified was the period from December through March. During this period, some gear may be removed from the proposed site and stored at the applicant's home (App 19). American oysters from suspended gear may be removed from the site during the winter months and kept in a cold storage facility (Moeser, testimony). Any gear not removed from the proposed site, would be overwintered on the bottom of the site in the sections proposed for gear.

### **3. STATUTORY CRITERIA & FINDINGS OF FACT**

Approval of standard aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides 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; with navigation; with fishing or other uses of the area, taking into consideration other aquaculture uses of 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, 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 lights at the boundaries of the lease site; and that the lease will comply with visual impact criteria adopted by the Commissioner.

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<sup>9</sup> Coordinates for the area where suspended gear is proposed (coordinates for D are also corner 2 of the proposed site):

A	-70.124591	43.789436
B	-70.125541	43.789417
C	-70.125539	43.789693
D	-70.124596	43.789714

### **A. Riparian Access**

Maine Coast Heritage Trust is the only riparian landowner within 1,000 feet of the proposed lease site (App 27). Maine Coast Heritage Trust owns Lanes Island, which it maintains as an undeveloped preserve (SR 10). There is a gravel beach on the southeastern shoreline and campsite landings at a sand beach on the western shoreline (SR 10). The western landing is more than 1,500 feet from the boundaries of the proposed lease site (SR 10). The southeastern landing is ~300 feet from the closest lease boundary but is over 1,000 feet from the area of the proposed site that would contain floating gear (SR 10).<sup>10</sup> No docks or moorings were observed in the general area during DMR's site assessment. During the hearing, Ms. Moeser indicated she had discussed her proposed lease with Maine Coast Heritage Trust, and they did not have any concerns.

DMR provided notice of the completed application and hearing to Maine Coast Heritage Trust. No testimony was provided by representatives from the organization, or anyone else, indicating that riparian ingress or egress was a concern. Given the evidence, it appears that riparian access will not be precluded or unduly affected by the proposed lease.

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

### **B. Navigation**

The Royal River channel is ~750 feet to the south of the closest lease boundary and ~990 feet from the area that would contain gear (SR 10). The site report indicates that the channel likely experiences heavy boat traffic as there are several boatyards in the Royal River (SR 10). An additional channel, ~2000 feet to the east of the proposed lease site, leads to the Winslow Park and Campground boat ramp (SR 10). The applicant testified that these channels are frequently used in the summer months, but less so in winter. Given the surrounding shoal water, the proximity of the proposed site to Lanes Island, and that the footprint for suspended gear would be limited in size, it is unlikely that vessel traffic in the vicinity would be substantively affected by the proposed lease (SR 10). No one offered testimony to suggest there was any concern about navigation if the proposal were to be approved.

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

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

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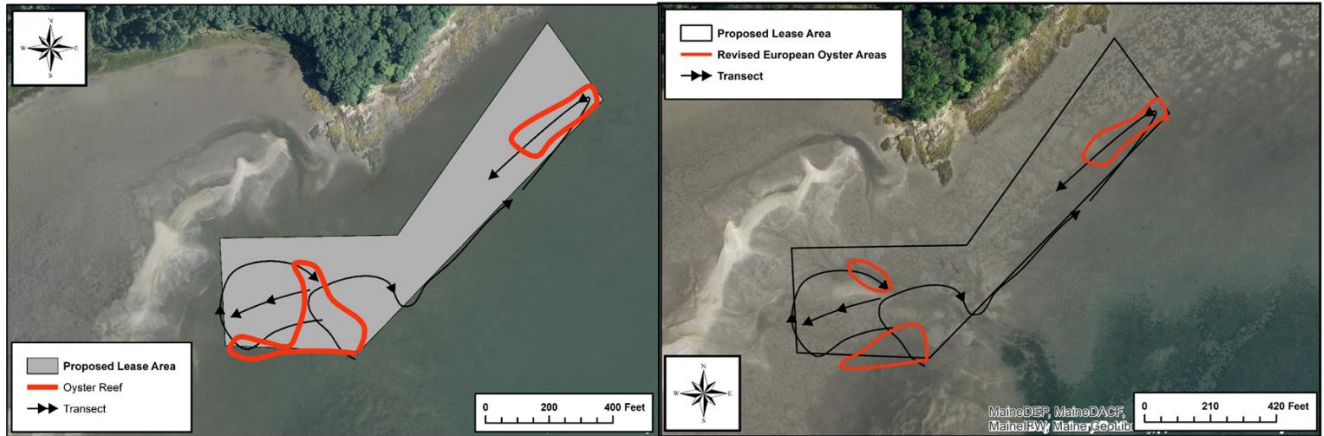
<sup>10</sup> Listed as the eastern landing in the site report but confirmed with DMR staff that it is the southeastern landing.



**Fishing.** During DMR's site assessment on October 8, 2019, 15 lobster buoys were observed to the south and east of the proposed lease site (SR 10). No buoys were observed within the boundaries of the proposed lease area (SR 10). The site report indicates that Maine's nearshore lobster fishery follows the annual migration and molt cycles of lobsters (*Homarus americanus*), so lobster fishing activity may be closer to the proposed site, or more prevalent at other times of the year (SR 10). DMR staff did not observe any recreational fishing, but the site report notes that it may be more prevalent in the area during summer months (SR 10).

Most of the proposal, if granted, would be for bottom planting only. This would allow for access to the nearby mudflats, and shellfish and worm harvesting within all gear free areas of the proposal (SR 10). However, harvesters may generally avoid the area due the presence of marker buoys that delineate the boundaries of the site (SR 10). During the site assessment, European oysters were observed in abundance within the boundaries of the proposed lease and could be harvested by rake, small drag, or hand at low tidal stages (SR 10). While the site is subtidal at mean low water, it partially drains at extreme low water (SR 10). The harvest of shellfish and worms would likely be precluded in the section of the site proposed for gear (SR 11).

DMR staff visited the proposed lease site on May 18 and 26, 2021, to assess the presence of live European oysters using drop-cameras and snorkel transects (SRA 1). DMR staff observed two separate dense beds, or reefs, of live European oysters near the northeast and southwest corners of the site (SRA 1). Live European oysters were also observed scattered in smaller sections throughout the proposed site (SRA 1). Several European oysters were actively filtering water for feeding (SRA 1). The addendum included a figure depicting the approximate location of observed high-density beds. During the public hearing, Ms. Adams presented a revised figure of the observed high-density areas. Ms. Adams noted that in the each of the areas there were harvestable quantities of European oysters. The two figures are included below.



**Figure 2:** Image on the left is the figure from the site report addendum and the image on the right was presented at the public hearing by DMR. Images generated by DMR staff.

In accordance with 12 M.R.S.A. §6671, municipalities with approved shellfish conservation programs have the authority to manage shellfish harvest to the extreme low water line (Adams, testimony). The Town of Yarmouth has an approved shellfish conservation program, which includes European oysters. Therefore, the harvest of that resource (or other shellfish contemplated as part of the program) above extreme low water, would require a license from the Town of Yarmouth. The harvest of any shellfish below the extreme low water line would require a shellfish license from DMR. Ms. Adams indicated that the highest densities of observed European oysters appeared to be below extreme low water as depicted in the 2018 aerial image of a negative tide (See Figure 2).<sup>11</sup> The majority of the site and the areas where DMR staff observed European oysters at the highest densities are proposed for bottom planting only.

The applicant, who operates LPAs within the boundaries of the proposed lease site, testified that they have not observed any commercial or recreational fishing within the boundaries of the proposed lease area. The applicant requested that the harvest of free-planted species (i.e. American oysters and quahogs) be prohibited but specified that other uses of the proposed site would be permitted, including the harvest of European oysters (App 25). During the proceeding, the applicant testified that persons could harvest European oysters within the boundaries of the lease site via hand, rake, or drag. The applicant noted that drag harvesting does occur in the area, but not within the boundaries of the proposed lease site. Ms. Moeser felt that harvesters would not utilize a drag within the boundaries of the lease, if it were granted, because there are not a lot of European oysters present. Ms. Moeser testified that she

<sup>11</sup> Ms. Adams noted that municipalities determine the exact location of the extreme low water line.

designed her proposal in consideration of future fisheries, so she felt that drag harvesting within the boundaries of the proposed site would be compatible with her operations.

Mr. Coffin testified that he felt that the proposed site would not interfere with existing fisheries like clamming. Mr. Coffin testified that he had not observed anyone harvesting shellfish within the boundaries of the proposed lease site and that he does not harvest European oysters within the boundary of the proposed site. Mr. Coffin is listed as a source of stock on Ms. Moeser's application and noted that he had occasionally provided Ms. Moeser with transportation to her LPAs.<sup>12</sup> Mr. Brown felt that the proposed site would not impact his fishery, which he identified as being European and American oysters. Mr. Brown testified that he had worked with Ms. Moeser on her LPAs for the past three seasons and he also helped with transportation to those sites and with gear deployment. Emily Selinger, an assistant on Ms. Moeser's LPAs, testified that she had not observed commercial harvesting or fishing when working in the area.

On March 16, 2021, Messrs. Coffin and Brown testified at the public hearing on the Maine Source Seafood lease proposal. That lease was granted on May 26, 2021 and is ~525 feet, at the nearest point, from Ms. Moeser's standard lease proposal. In that case, DMR's site report identified that European oysters were observed in abundance throughout the lease area, and that given the shallow nature of the site, the area would support shellfish harvest by hand, rake, or small drag.<sup>13</sup> Messrs. Coffin and Brown testified at that proceeding about the harvest of European oysters in the general area and within the boundaries of the site. The decision for CAS LI, which DMR took notice of for the purposes of this case, notes the following:

Mr. Coffin indicated that the area within and around the proposed lease site is vital to his activities as a shellfish harvester (C. Coffin, testimony). Mr. Coffin indicated that he harvests by hand as well as with a small drag...Similarly, Mr. Mike Brown testified that he is a shellfish harvester in the area, and between 2015-2018 made 144 trips to the area around the proposed lease and losing access to any of the beds would be a concern (Brown, testimony). Mr. Brown testified that he typically harvests by drag from a 32-foot boat, but that he also uses a small skiff if the tide is right to go into shallower water to hand harvest (Brown, testimony).

During the March 16, 2021 hearing, to get a better sense of the areas described by Mr. Brown, he was asked to identify their locations. Mr. Brown, with assistance from DMR staff, marked the

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<sup>12</sup> According to DMR records, Bailey Coffin, is an assistant on Amanda Moeser's LPAs. Bailey Coffin is related to Chad Coffin.

<sup>13</sup> Maine Source Seafood decision, pg. 7

areas where he harvested on a NOAA chart, which depicted the Maine Source Seafood proposed lease site, Lanes Island, and surrounding areas.

The boundaries of Ms. Moeser's proposed site were not depicted on the NOAA chart, but the area where her proposal was located was included. Although the boundaries were not displayed, it is likely that Mr. Brown would have known where her proposed lease was located given the testimony he provided during the hearing on her application and his involvement with her LPAs.<sup>14</sup> The areas Mr. Brown identified during the Maine Source Seafood hearing indicated that he had harvested from European oyster beds located to the north of the Maine Source Seafood site and within the boundaries of their proposed lease area. None of the harvest areas identified by Mr. Brown were within the boundaries of Ms. Moeser's lease proposal.

Based on the evidence provided, the decision on the Maine Source Seafood proposal found the following regarding the European oyster resource:

Because there are established European oyster beds within the proposed lease site, and testimony from fishermen indicate this is an important area for the wild harvest of this species, the culture of European oysters will not be allowed on this lease site. However, because testimony indicated that much of the wild harvest of European oysters could likely co-exist with the proposed lease site, the proposed lease does not appear to interfere with the commercial harvest of this species, especially because most gear will be removed from the site when testimony indicates the majority of the European harvest occurs.<sup>15</sup>

Although the decision found that the site proposed by Maine Source Seafood would not unreasonably interfere with commercial fishing, it did place conditions on the site specific to the harvest of the European oysters. Conditions govern the use of a leased area and place limits on permitted aquaculture activities.

One condition prohibits the culture of European oysters on the lease site and the other requires that all gear and moorings, except for a single longline and the moorings associated with that line, are removed from the site from December 15<sup>th</sup> through April 15<sup>th</sup>.<sup>16</sup> The decision found that these conditions were necessary, so that the area leased to Maine Source Seafood would remain accessible to those wishing to harvest European oysters via drag or other harvest

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<sup>14</sup> Mr. Brown testified in the Moeser hearing that he had been helping her with her LPAs for the past three seasons. The LPAs are within the boundaries of Ms. Moeser's lease proposal.

<sup>15</sup> Maine Source Seafood decision, pg. 9.

<sup>16</sup> Maine Source Seafood decision, pg. 14; Per DMR regulations (see Chapter 14.10), the harvest of wild European oysters is permitted from September 16 through June 14. The decision notes: *While the harvest of European oysters is allowed outside of the December-April timeframe [the timeframe listed in the lease condition], the spacing between the lines of gear should accommodate anyone who wants to access the area to hand harvest.*

methods. The decision reasoned that prohibiting the culture of European oysters on the site, would ensure that the resource remains available for commercial shellfish harvesters.

Just prior to the Maine Source Seafood lease hearing, on March 11, 2021, Mr. Brown and his daughter, Jennifer Brown submitted LPA applications to DMR. The LPA applications were for sites to the northeast of Lanes Island and included the culture of European oysters, which would be sourced from the wild and placed on the LPAs for grow out. Based on a review of the LPA applications, they were proposed for an area Mr. Brown had identified during the Maine Source Seafood hearing as in the general vicinity of an area where there are European oyster beds.

On March 24, and May 10, 2021, DMR followed up with the Browns about the extent of shellfish harvesting, including European oysters within the boundaries of the proposed LPA sites and vicinity. Mr. Brown clarified that the European oyster beds in the area are “U” and “S” shaped and not limited to a single, concentrated area.<sup>17</sup> Mr. Brown further clarified that the nearest harvestable European oyster beds are 700 feet from the LPA sites.<sup>18</sup> On May 11, 2021, copies of the LPA applications were sent to Jefferson Oranellas and Todd Jagoutz [owners of Maine Source Seafood] for their review and comment as the LPAs were near the lease site. DMR did not receive any comments from Messrs. Oranellas or Jagoutz about the proposed LPA applications. DMR found that the LPAs met the criteria for issuance, and they were authorized on May 28, 2021.

**Discussion:**

In reviewing the record associated with Maine Source Seafood, the LPAs MBRO121-221 and JBRO121-221, and this case, there are some differences between the testimony and evidence provided regarding the commercial harvest of European oysters and the extent of the resource in each of the respective cases. Testimony provided by Messrs. Brown and Coffin suggested that the site proposed by Maine Source Seafood would impact their ability to harvest European oysters from beds within the boundaries of that proposed site, while Ms. Moeser’s site did not present the same concerns even though the sites are only ~525 feet apart and both contained harvestable quantities of European oysters.

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<sup>17</sup> MBRO121-221 CF: March 24, 2021 email from Erin Wilkinson to Cheyenne Adams summarizing a phone call E. Wilkinson had with Mr. Brown.

<sup>18</sup> MBRO121-221 CF: Email from Cheyenne Adams to Mike Brown dated May 10, 2021 and Mr. Brown’s associated response on May 21, 2021. The 700 feet from the LPA applications and nearest harvestable European oyster beds were not consistent with the locations of European oyster beds that Mr. Brown identified on the map at the Maine Source Seafood hearing. Although the LPAs were granted, they did not authorize the culture of European oysters as the Browns had originally requested.

The difference in testimony between the two cases may reflect the distribution or density of European oyster beds within the general area and between the lease issued to Maine Source Seafood and the application submitted by Ms. Moeser. For example, as Mr. Brown clarified in his LPA application, European oyster beds appear to be distributed sporadically throughout the general area, and, as DMR staff noted, the density of observed European oyster beds can also vary. In addition, the cultivation techniques and operations varied between the proposal submitted by Maine Source Seafood and Ms. Moeser. These differences could impact someone's ability to harvest European oysters within the respective site.

Whatever factors may have contributed to the differences between the evidence and testimony provided in the respective cases concerning the European oyster resource, a review of the record in each proceeding indicates a similar fact pattern. For example, European oysters exist within the general area at harvestable quantities. In addition, there are harvestable quantities within the boundaries of Ms. Moeser's proposal and the Maine Source Seafood lease. Messrs. Coffin and Brown, who participated in both proceedings, testified that European oysters are harvested in the general area via drag and hand. In the Maine Source Seafood case, conditions were placed on that site to ensure the operations would be compatible with the existing European oyster fishery and viability of the resource.

In this case, although European oysters exist within the boundaries of Ms. Moeser's proposed lease at harvestable quantities, no harvesting has been observed within the site. Although testimony indicates that European oysters and other shellfish are not harvested within the boundaries of the proposed site, Ms. Moeser testified that she would permit the commercial harvest of European oysters via hand and drag. Ms. Moeser indicated that she had taken possible future uses of the site into consideration in developing her proposal. She did not want to preclude the harvest of European oysters via drag. However, Ms. Moeser requested that the harvest of American oysters and quahogs be prohibited.

The Commissioner may impose conditions on a site, which govern the use of the lease area and establish limitations on the aquaculture activities. Prohibiting the harvest of American oysters and quahogs while simultaneously permitting the drag harvest of European oysters could create a potential enforcement issue. When drag harvesting an operator would have limited ability to control the marine organisms collected. Therefore, dragging for European oysters could

result in the incidental take of American oysters and quahogs, which would violate a potential lease condition allowing harvest of Europeans, but not American oysters or quahogs.<sup>19</sup>

Furthermore, lease conditions are intended to apply to the aquaculture activities and must be followed by the lease holder. They are generally not applied to non-lease holders or enforced against non-lease holders. In accordance with 12 M.R.S.A. §6073, it is unlawful for any person to interfere with the rights provided by a lease. If the lease is granted, it would give Ms. Moeser the exclusive right to grow and harvest American oysters, quahogs and sea urchins from the site. Other stakeholders, including those authorized to take European oysters would be able to harvest them from the boundaries of the lease site, so long as it does not interfere with the operation of the site.

However, it is unclear if dragging or the hand harvest of European oysters would be compatible with the lease operations should the lease be granted, and those activities were to start occurring on the site. It is probable that dragging for European oysters would result in some damage to freely planted American oysters and quahogs. Hand harvesting may also damage free planted product as persons would be walking through the site, although likely to a lesser extent than dragging. During the Maine Source Seafood hearing, Messrs. Brown and Coffin also indicated that harvest activities vary within the general area each year. For example, Messrs. Brown and Coffin may harvest from a certain bed one year, but not the next while returning in subsequent years.

Based on the evidence in the record, it appears that the proposed site would not interfere with commercial or recreational fishing activities. However, testimony provided by commercial fisherman indicate that the area in the immediate vicinity of the proposed site supports a wild European oyster fishery, and nearby beds have been identified as critical by commercial harvesters. If the lease is granted, the term of the lease will be for 15 years instead of the requested 20-year term. Although the record indicates that site would not unreasonably interfere with existing fisheries, it is unclear whether the wild harvest of European oysters, via hand or drag, would be compatible with the lease operations. If the lease is granted, a shorter term provides an opportunity for DMR to review this issue at the time of renewal should harvesters start to utilize the lease area. Chapter 2.45(2)(B) of DMR's regulations provide that DMR may consider possible conflicts with new or existing uses of the lease area during the renewal.

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<sup>19</sup> In accordance with 12 M.R.S.A. §6001(48), take means to remove or attempt to remove a marine organism from its natural habitat.

**Other aquaculture uses:** When the site report was published there were 14 LPAs within a mile of the proposed site (SR 11). At the time the hearing was held, there were 29 LPAs within a mile of the proposed lease site (Drury, testimony). Of the 29 LPAs within a mile of the proposed site, four are operated by the lease applicant and are located within the boundaries of the proposed site (SR 12). According to the application these LPAs: AMOE318, AMOE418, AMOE518, and AMOE618 would be relinquished if the site is granted (App 21). Therefore, if this proposal is granted, DMR will not renew the LPAs listed. The closest lease site to the proposal is CAS LI, which is ~525 feet to the east of this proposal. As previously noted, this lease is held by Maine Source Seafood, which is owned by Todd Jagoutz and Jefferson Oranellas. Messrs. Jagoutz and Oranellas signed up to provide testimony in this case, but they never attended the hearing. DMR did not receive any testimony or evidence to suggest this site would interfere with other existing aquaculture operations.

Based on this evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture activities in the area.

**Other water-related uses.** DMR did not receive any testimony or evidence to suggest that the proposed site would interfere with other water related uses of the area.

**Therefore,** the aquaculture activities proposed for this site will not unreasonably interfere with fishing, existing aquaculture operations, or other water related uses of the area.

#### **D. Flora & Fauna**

**Site observations.** DMR scientists conducted a visual survey and two drop camera transects of the proposed site on October 8, 2019 (SR 13). DMR also revisited the site on May 18 and 26, 2021. The bottom of the proposed site is composed of firm mud and sand with shell hash and rubble (SR 13). European oysters were observed in abundance (SR 14). A great blue heron (*Ardea herodias*) was observed during the October 8, 2019 site assessment (SR 16).

**Eelgrass (*Zostera Marina*).** In 2018, the closest mapped eelgrass bed was ~118 feet to the southeast of the proposed lease site (SR 15). In 1992 and 2013, surveys of the area were also conducted, and eelgrass was not present within the boundaries of the proposed site (SR 15). During the October 8, 2019, site visit DMR staff observed dead, unattached eel grass drifting through the proposed lease site (SR 13). No live eelgrass was observed within the boundaries of the proposed lease area during any of the site visits.

**Wildlife.** Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposal is partially within tidal waterfowl and wading bird habitat and approximately 7,500 feet to the



southeast of shorebird habitat (SR 16). Data of bald eagle (*Haliaeetus leucocephalus*) nests maintained by the U.S. Fish and Wildlife Service (USFWS) indicate that the proposed lease site is immediately outside the 660-foot buffer surrounding a bald eagle nest (SR 16). Bald eagles are protected by the federal Bald and Golden Eagle Protection Act (SR 16). DMR sent a copy of the completed lease application to MDIFW for their review and comment and MDIFW indicated that “minimal impacts to wildlife are anticipated for this project.”<sup>20</sup>

Based on this evidence, it appears that the proposed lease site 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.

**E. Public Use & Enjoyment**

There are no beaches, parks, docking facilities, or conserved lands owned by the federal, state, or municipal governments within 1,000 feet of the proposed site (SR 17).

**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.

**F. Source of Organisms**

The applicant intends to use the following sources of stock for each species:

Species	Source(s)
American oysters ( <i>Crassostrea virginica</i> )	<b>Hatcheries:</b> Muscongus Bay Aquaculture and Mook Sea Farm
	<b>Individuals:</b> Mark Green (Basket Island), Chad Coffin, and Morgan Cuthbert (Yarmouth Middle School)
Quahogs/hard clams ( <i>Mercenaria mercenaria</i> )	<b>Hatcheries:</b> Downeast Institute and Muscongus Bay Aquaculture
	<b>Individual:</b> Morgan Cuthbert (Yarmouth Middle School)
Green sea urchins ( <i>Strongylocentrotus droebachiensis</i> )	<b>Hatchery:</b> Center for Cooperative Aquaculture Research

<sup>20</sup> CF: Email to C. Burke from R. Settele dated October 28, 2019.

The hatcheries listed are all approved sources of stock for the species noted. According to DMR records, Mark Green and Mr. Coffin either hold aquaculture sites, or are stakeholders in companies that hold aquaculture leases. If the lease is granted, Ms. Moeser would be able to obtain stock from those individuals. However, those individuals would need to comply with any applicable laws governing the transfer of seed and Ms. Moeser would need to adhere to any applicable provisions governing the deployment of seed on the lease site if the proposal is granted.

The applicant listed Morgan Cuthbert, Yarmouth Middle School as a source of stock for quahogs and American oysters. Mr. Cuthbert does not hold an LPA or lease site. According to DMR records, the Yarmouth Shellfish Nursery holds a land-based aquaculture license and Mr. Cuthbert is listed as the point of contact. The land-based license authorizes the culture of quahogs and American oysters in an upweller that is located at the Yarmouth Town Landing. According to the license, the upweller is using water sourced from a growing area classified as prohibited.<sup>21</sup>

DMR recently amended the aquaculture regulations, so that seed from prohibited growing areas must be moved to approved, conditionally approved, restricted, or conditionally restricted growing areas before it exceeds the maximum size listed in Chapter 2.95(A)(4) of DMR's regulations. The applicant can source stock from this permitted site, but American oyster and quahog seed from prohibited areas cannot exceed the maximum seed size contemplated in regulation. If the seed exceeded the regulatory limit and was deployed on the site, then the lease would be closed to the harvest of American oysters and quahogs (regardless of size) for 120 days. If the lease is granted, the holder would be expected to comply with all applicable provisions of DMR's regulations and laws.

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

#### **G. Light**

During the public hearing, the applicant clarified that work beyond daylight hours would likely occur three times per week from December through April. The applicant requested the use of four headlamps but noted that no other lights would be used. The use of personal headlamps is reasonable to ensure that any work beyond daylight hours can safely occur. There was no testimony provided at the hearing to indicate there was concern with this type of lighting.

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<sup>21</sup> CF: Land based permit number MELBA0010 issued on January 5, 2021. The land-based permit was issued before the regulatory change, so some of the permit conditions will be updated upon renewal to reflect the change.

**Therefore,** the proposed aquaculture activities will not result in an unreasonable impact from light at the boundaries of the lease site.

#### **H. Noise**

No power equipment would be used on the site (App 19; Moeser, testimony). The applicant intends to access and service the site via 11- and 16-foot Carolina skiffs powered by a 6-horsepower motor (App 20, Moeser, testimony). Per the site report the type of vessel and the specified motors are consistent with those typically used for commercial and recreational purposes along the Maine coast.

**Therefore,** the aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease.

#### **I. Visual Impact**

No support structures are proposed for the site. The gear proposed by the applicant complies with DMR's height and visual impact limitations (SR 18).

**Therefore,** the equipment utilized on the proposed lease site will comply with the DMR's visual impact criteria.

#### **4. CONCLUSIONS OF LAW**

Based on the above findings, I conclude 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 will not unreasonably interfere with navigation.
- c. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other water-related uses of the area, taking into consideration other aquaculture uses in the area.
- d. 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.
- e. 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.

- f. The applicant has demonstrated that there is an available source of American/eastern oysters (*Crassostrea virginica*), quahogs/hard clams (*Mercenaria mercenaria*), and green sea urchins (*Strongylocentrotus droebachiensis*) seed to be cultured for the lease site.
- g. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site 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 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 the requested lease to Amanda Moeser for 8.62 acres, for 15 years for the cultivation of American/eastern oysters (*Crassostrea virginica*), quahogs/hard clams (*Mercenaria mercenaria*), and green sea urchins (*Strongylocentrotus droebachiensis*) using suspended and bottom 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).<sup>22</sup> 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. No conditions have been imposed on this lease.

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<sup>22</sup> 12 M.R.S.A §6072 (7-B) states: “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.”

**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 within the preceding year, that the lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

Dated: 10/8/2021



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