STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Lauren and Joshua Gray
CL PL
December 13, 2019

Standard Aquaculture Lease Application
Suspended Culture of American Oysters
The Pool, Cranberry Isles

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Lauren and Joshua Gray applied to the Department of Marine Resources (DMR) for a 20-year standard aquaculture lease on 5.07 acres.1 The proposed site is located on the east side of The Pool, Town of Cranberry Isles, Hancock County, Maine, for the cultivation of American/Eastern oysters (*Crassostrea virginica*) using suspended culture techniques.

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on April 12, 2018, and the scoping session was held on February 19, 2019. The application was deemed complete on April 4, 2019. Notice of the completed application was provided to riparian landowners within 1,000 feet of the proposed site, the Town of Cranberry Isles, and other state and federal agencies. The public hearing on the application was held on September 24, 2019. Notice of the public hearing and copies of the application and DMR site report were provided to state and federal agencies for their review, the Town of Cranberry Isles, and riparian landowners within 1,000 feet of the proposed site. Notice of the hearing was published in the *Mount Desert Islander* on August 22 and September 12, 2019. Notice was also published in the September 2019 edition of *Landings*.

Sworn testimony was given at the public hearing by the following witnesses:

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<th>Name</th>
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<tr>
<td>Lauren and Joshua Gray</td>
<td>Applicant</td>
</tr>
<tr>
<td>Flora Drury</td>
<td>Marine Scientist, DMR Aquaculture Division</td>
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The applicants, Mr. and Mrs. Gray, described aspects of their lease application and answered questions about the proposal. Ms. Drury testified about DMR’s site visit and answered questions related to

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1 Applicants originally requested 5.25 acres. Based on the provided coordinates, DMR calculated the area at 5.07 acres.
Maine’s aquaculture program and regulations. Members of the public in attendance asked questions of the applicant and DMR but did not offer any testimony. The hearing was recorded by DMR. The Hearing Officer was Amanda Ellis.

B. Exhibits

The evidentiary record before DMR regarding this lease application includes the following:

1. Case file (CF)
2. Application (App)
3. Site Report (SR)

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

At maximum capacity, the applicants are proposing to deploy up to 344 wire mesh cages with plastic floats (App 6). However, the cages would be deployed incrementally beginning with 100 cages (App 6). The cages would be secured to longlines that measure up to 160 feet in length (App 7). A maximum of 37 longlines are proposed for the site (App 7). The applicants are also proposing to moor a 20’x20’ work float on the eastern portion of the site (App 7). The work float would contain a tray table for sorting oysters, a solar powered oyster tumbler, and a saltwater pump (App 9). A portable “whisper-quiet” generator would be used to power the tumbler and saltwater pump (App 9).

The cages would remain on the site between April and December (App 6). To avoid biofouling, the applicants intend to flip the cages every seven to 14 days (App 11). During the growing season, the applicants intend to check the proposed site daily and would work at the site during daylight hours (App 11 & 12). The applicants would access the site using a 17’ Carolina Skiff (App 12). During the winter months, some of the cages would be kept on the bottom of the proposed site, while others would be removed from the site and overwintered on the bottom of Limited Purpose Aquaculture (LPA) licenses located outside The Pool² (App 11).

DMR’s Bureau of Public Health (BPH) reviewed the application and noted that the proposal is in an area where biotoxin is a concern.³ BPH indicated that, if the lease was granted, they would require a

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² The application originally indicated that the LPAs used for overwintering would be those located in Preble Cove. However, the applicant clarified, during the review of the proposed decision, that the Preble Cove LPAs would not be renewed, and overwintering would occur on the following LPAs, which are also located outside The Pool: LGRA 116, 216, 316, and 416.

³ CF: Email from K. Kanwit to C. Burke dated May 16, 2019.
Memorandum of Understanding (MOU) governing site-specific testing for biotoxin monitoring. The Grays would also be responsible for transporting samples off Great Cranberry Islands and other associated expenses. The Grays were notified of this requirement on August 22, 2019. If the lease is granted, it will be conditioned accordingly.

B. Site Characteristics

On May 3, 2019, DMR scientists visited the proposed lease site and assessed it and the surrounding area in consideration of the criteria for granting a standard aquaculture lease. The proposed site occupies subtidal waters on the east side of The Pool on Great Cranberry Island (SR 2). A narrow rocky entrance limits tidal exchange between The Pool and Cranberry Harbor (SR 2). Figure 1 depicts the location of the proposed site within The Pool.

![Map of Great Cranberry Island](image)

**Figure 1:** Location of the proposed lease area within The Pool. Image adapted from Figure 1 in the site report.
The shoreline near the proposed site is characterized by rock and cobble interspersed with areas of saltmarsh grass (*Spartina alterniflora*) (SR 2). The western uplands contain houses and a boatyard, while other upland areas around the proposed site are characterized by coniferous forest (SR 2).

The bottom characteristics of the proposed site vary based on depth and proximity to the nearby shoreline (SR 5 & 6). For example, deeper sections of the proposed site are comprised of soft mud, whereas firmer mud, sand, and pebble characterize sections of the bottom that are located closer to shore (SR 5). Depths at the proposed lease site ranged from 14.2 feet at Corner A to 10.5 feet at Corner F (SR 5). Figure 2 depicts the labeled corners of the proposed lease site. Given the narrow constriction at the entrance of the Pool, it is unlikely that tidal ranges within the Pool are equal to those outside the area (SR 5). However, low tide aerial imagery indicates that the proposed lease site is completely subtidal (SR 5).

![Figure 2: Labeled corners of the proposed lease site. Image taken from site report.](image_url)

At mean low water, Corners B and E are both ~80 feet from the eastern shoreline of The Pool (SR 8). Corners B and E represent the closest distances from the proposed lease site to the nearest shoreline (SR 8).
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 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 the number and density of aquaculture leases in an 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.

A. Navigation

Navigation to and from The Pool is constrained by a narrow, rocky entrance that connects The Pool to Cranberry Harbor (SR 8). The Pool is shallow, which limits the type of vessel that can operate within the area at any tidal stage (SR 8). It is likely that navigation within The Pool is more common during high tide; rocks and ledges further limit navigation in The Pool (SR 8). The proposed site is located on the eastern side of The Pool in a small cove (SR 8). The proposed lease is more than 700 feet from the mean low water line on the western side of The Pool (SR 8). Water depths are greatest to the west of the proposed lease area (SR 8). Given the location of the proposed site, it is unlikely that it will unreasonably interfere with navigation from the north-south within The Pool (SR 8).

The location of the lease site may impede navigation to the shoreline to the immediate east of the proposed site (SR 9). Per the site report, it is likely that depth appropriate vessels would still be able to navigate into the small cove in which the proposed site is located at all tidal stages, if the site were granted (SR 9). The applicants indicated that mariners were welcome to navigate through the proposed lease site and they intentionally allowed for larger than recommended spacing between the longlines, so that kayaks, paddleboards, and other vessels could traverse through the area (App 15). The applicants also noted that they offset the corner boundaries of the proposed lease site to accommodate access to the cove and marsh located to the east of the area (App 15).
DMR did not receive any comments from the municipality about what effects, if any, this proposal may have on navigation. Members of the public who attended the hearing did not offer any testimony about navigation. Based on the absence of comments and testimony it is reasonable to conclude that stakeholders do not have significant concerns about possible impacts the proposed site may have on navigation.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with navigation. The lease site must be marked in accordance with U.S. Coast Guard requirements.

B. Riparian Access

The proposed lease site is closest to the eastern shoreline of The Pool (SR 8). During the site assessment no docks or moorings were observed to the east of the proposal (SR 8). Houses and a boatyard were observed to the west of proposed lease and some houses were observed along the northern and southern shorelines of The Pool (SR 8). The proposed lease is more than 1,000 feet from the northern, southern, and western shorelines of The Pool, so it is unlikely that the site would unreasonably interfere with riparian access to these shorelines (SR 8).

The proposed lease site could preclude shoreline access, to some vessels, in the cove to the east, during certain tidal stages (SR 8). However, The Pool is shallow which further limits the size of vessel that can operate within the area (SR 8). The site report indicates that if the proposal is granted, depth appropriate vessels would still be able to navigate into the small cove at all tidal stages (SR 8).

DMR did not receive any comments from the municipality about riparian ingress and egress. Members of the public who attended the hearing did not offer any testimony about riparian ingress and egress. Based on the absence of comments and testimony it is reasonable to conclude that stakeholders do not have significant concerns about potential impacts the proposed site may have on riparian access.

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

C. Fishing & Other Water Related Uses

During the site assessment on May 3, 2019, DMR staff did not observe any commercial or recreational fishing activity within the proposed lease site (SR 9). However, there was a float moored near the proposed lease site that contained lobster traps (SR 9). During the SCUBA transect of the proposed lease site, staff observed various marine organisms that are commercially and recreationally harvested, including green sea urchins (*Strongylocentrotus droebachiensis*) and American lobsters.
(Homarus americanus) (SR 9). The site report indicates that commercial and recreational fishing activity is more prevalent during the summer months, so the timing of the site assessment may not have been representative of the fishing activity within the area.

The application indicates that there are no recreational or commercial lobstersmen who deploy traps within the boundaries of the proposed lease site (App 16). DMR did not receive any comments from the municipality about commercial or recreational fishing activity. Members of the public who attended the hearing did not offer any testimony about commercial or recreational fishing activity. Based on the absence of comments and testimony it is reasonable to conclude that stakeholders do not have significant concerns about the impacts the proposed site may have on fishing activity in the area.

For the reasons described above, it is reasonable to assume that the proposal will not unreasonably interfere with commercial or recreational fishing in the area.

Other aquaculture uses. There are nine LPA licenses within one mile of the proposed lease site, seven of the LPAs are held by the applicant (SR 9). The two LPAs not held by the applicant are ASM116 and SMIT116, which are both held by the same individual (SR 9). The LPA ASM116 is ~15 feet to the west of the proposal and SMIT116 is ~1,625 to the north (SR 9). According to DMR records, the LPA closest to the proposed site, ASM115, is 6’x 65.’ Given the dimensions of the existing LPA, it is unlikely that the proposed site would unreasonably interfere with the LPA. Furthermore, DMR did not receive any written comments or testimony from the individual who holds these LPAs. The applicants indicated that if the proposal is granted, they would relinquish their LPAs within The Pool (L. Gray/Drury). According to DMR’s records these two LPAs are JGRA116 and JGRA216 (SR 10).

In consideration of the record, it seems reasonable to conclude that the proposed operations will not present an unreasonable interference with other aquaculture leases in the area.

Exclusivity. The applicant is not requesting that other uses of the proposed lease area be excluded or otherwise prohibited (App 15).

Therefore, considering the existing aquaculture activities, the proposed site will not unreasonably interfere with fishing or other water-related uses of the area.

D. Flora & Fauna

DMR Site Observations. Based on historical data, in 2008, eelgrass (Zostera marina) was documented within The Pool and certain portions of the proposed lease site (SR 11). According to this historical data, an eelgrass bed with 0%-10% cover was observed in the southwest portion of the proposed lease site and another bed with 70%-100% cover was observed in the northern section of the
site (SR 11). During the site assessment, DMR staff observed sparse patches of eelgrass near the western boundary (F-A) of the proposed site; some small patches of eelgrass were also observed along the northern boundary (E-F) (SR 11). Given the sparsity of the eelgrass, if the lease is granted, DMR scientists recommend a separation of 25 feet or more between floating or submerged aquaculture gear and observed eelgrass (SR 11). The recommended 25-foot setback is consistent with requirements established by the Army Corps of Engineers, which permits structures on aquaculture lease sites. If the proposal is granted, a condition reflecting the 25-foot gear setback will be included in the lease.

**Fisheries and Wildlife.** Based on data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposed lease area is located within Shorebird Habitat and Tidal Wading Bird and Waterfowl Habitat (SR 12). Pursuant to Maine’s Natural Resources Protection Act (NRPA), these habitat types are defined as Significant Wildlife Habitat (SR 12). The proposed site is also located ~145 feet from a ¼ mile buffer for a bald eagle (*Haliaeetus leucocephalus*) nest (SR 12). DMR sent a copy of the lease application to MDIFW for their review and comment. MDIFW provided the following as part of their review:

> Shorebirds rely on these habitats as they pass through while migrating south in the late summer and early fall (July 15th - September 15th) and they are susceptible to disturbance from human activities within 300-500 feet. To minimize disturbance, it would be ideal if the applicant will remain aware of shorebird use of these areas from July 15th - September 15th and locate the float (tumbling and grading station) as far away as possible from specific sites favored by the birds, if possible/practicable. It is also preferred that loud and disruptive activities be completed before July 15th and after September 15th, the peak shorebird migration window, to the extent practicable and reasonable.

During the public hearing, Ms. Gray indicated that she would remain aware of shorebird activity in area during the times specified by MDIFW and that she would be willing to move the float if it interfered with specific sites favored by shorebirds (L. Gray/Drury). Given the nature of MDIFW’s recommendation and the applicant’s willingness to adhere to those recommendations, it is unlikely that the proposed operations will present an unreasonable interference with possible shorebird use of the area.

Based on this evidence, it appears that the culture of oysters as proposed for this lease site will not interfere with the ecological functioning of the area.

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4 CF: Email from B. Settle, Wildlife Biologist, MDIFW, to C. Burke dated June 26, 2019.
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

Per the site report, “there are no publicly-owned beaches, parks, docking facilities, or conserved lands owned by municipal, state, or federal government within 1,000 feet of the proposed lease site” (SR 13).

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 obtain stock from the following approved source:

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<tr>
<th>Source</th>
<th>Location</th>
<th>Species</th>
</tr>
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<tbody>
<tr>
<td>Muscongus Bay Aquaculture</td>
<td>Bremen, Maine</td>
<td>Eastern/American oysters</td>
</tr>
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Therefore, the applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

G. Light

Per the application, lights would only be used in an emergency (App 12).

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

H. Noise

The proposed lease site would be accessed and serviced by a 17-foot Carolina Skiff, which would be equipped with an electric hauling system (App 11). A solar-powered oyster tumbler and saltwater pump, which would be powered via a “whisper quiet” generator (between 53-59 dBA) is proposed for the site (App 9, 12). The application indicates that any power washing would occur off the proposed site at a land-based facility (App 12). The proposed equipment selected for the site indicates that the applicant has taken reasonable measures to mitigate noise at the boundaries of the proposed site.
Therefore, the aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease.

1. **Visual Impact**

   The applicant intends to cultivate oysters using cages with submersible black-plastic floats. The applicant would also deploy a 20'x20' raft to sort and tumble oysters. The raft would contain a 6-foot tent or umbrella structure that would be "8 feet above the water line. Per the site report "the proposed gear and structures comply with MDMR’s height limitations" (SR 15).

   Therefore, equipment and structures proposed for the lease site will comply with the visual impact criteria contained in DMR Regulation 2.37 (1)(A)(10).

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 uses of the area, taking into consideration the number and density of aquaculture leases 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, or docking facilities owned by municipal, state, or federal governments.

   f. The applicant has demonstrated that there is an available source of American/eastern oysters (*Crassostrea virginica*) 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 proposed lease in the amount of 5.07 acres to Lauren and Joshua Gray for 20 years for the cultivation of American/eastern oysters (Crassostrea virginica) using suspended 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). 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.

The following conditions shall be incorporated into the lease:

a. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.80.

b. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

c. The lease holder must obtain a Memorandum of Understanding (MOU), from DMR’s Bureau of Public Health, governing site-specific testing for biotoxin monitoring. This requirement may be waived, in writing, by the Bureau of Public Health should it be determined that a MOU is no longer necessary.

d. The placement of floating or suspended gear must be 25-feet from any observed eelgrass.

5 12 MRSA §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) and DMR Rule Chapter 2.42 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: 12-13-19

[Signature]

Patrick C. Keliher, Commissioner
Department of Marine Resources