## STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

# Ocean Resources, Inc JORD TL2

Standard Aquaculture Lease Application Suspended culture of shellfish Jordan River, Trenton & Lamoine

# FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Ocean Resources, LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 2.941 acres located in Jordan River, in the Towns of Trenton and Lamoine, Hancock County, Maine. The application submitted to DMR was for the suspended culture of American/eastern oyster (*Crassostrea virginica*) and green sea urchins (*Strongylocentrotus droebachiensis*). A public hearing on this application was held on August 24, 2022 at the Trenton Town Office in Trenton, Maine. No one intervened in this case.

## 1. THE PROCEEDINGS

DMR deemed the application complete on November 18, 2020. A public hearing was scheduled, and notice of the hearing, and copies of the application and DMR site report, were provided to state and federal agencies for their review, the Town of Trenton, the Town of Lamoine, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. Notice of the hearing was published in *The Ellsworth American* on July 21, 2022 and August 4, 2022.

Sworn testimony was given at the August 24, 2022 hearing by the following witnesses:

Name	Affiliation
Ocean Resources, Inc	Applicant
James David Quinby &	
Kip Quinby	
Marcy Nelson	Aquaculture Scientist & Division Director, DMR Aquaculture Division
Cheyenne Adams	Marine Scientist, DMR Aquaculture Division
Stephen Grant, Carrol	Riparian Landowners
Leland, Kathleen Stanley	

Members of the public, and Assistant Attorney General Mark Randlett, asked general questions of the applicant and DMR.

The hearing was recorded by DMR. The Hearing Officer was Hannah Brazier. The evidentiary record before DMR regarding this lease application includes three exhibits introduced at the hearing (see exhibit list below), and the record of testimony at the hearing itself. The evidence from these sources is summarized below.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Applicant originally requested 2.96 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 2.94 acres.

<sup>&</sup>lt;sup>2</sup> In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

#### LIST OF EXHIBITS3

- 1. Case file
- 2. Application
- 3. DMR site report

## 2. DESCRIPTION OF THE PROJECT

## A. Site Characteristics

DMR staff assessed the proposed lease site and the surrounding area on May 27, 2021 and September 1, 2021, in consideration of the criteria for granting a standard aquaculture lease. The proposed lease area occupies subtidal waters in the middle of the Jordan River, in both Lamoine and Trenton (SR, 2). According to the site report, the proposal is located approximately 20 and 130 feet from the eastern and western shorelines of Jordan River respectively, at mean low water from their nearest points (SR, 10). The surrounding shoreline features salt marshes and scattered boulders (SR, 2). The upland is comprised of forested uplands hosting at least 5 residential buildings in the immediate vicinity (SR, 2). The site report characterized the bottom of the proposed lease site as hard substrate composed primarily of pebble, shell rubble and sparse exposed bedrock (SR, 8). Correcting for tidal variations, depths within the site range are between 1.9 to 4.9 feet at mean low water (SR, 7). Immediately north of the proposed lease area is a Seed Mussel Conservation Area (DMR Regulations Chapter 12.06(B), SR, 11). The proposed site area also contains an existing Limited Purpose Aquaculture (LPA) license, JQUI119, which is to be relinquished if the proposed lease is granted (App, 15).

## **B.** Proposed Operations

The applicant proposes to culture American/eastern oyster (*Crassostrea virginica*) and green sea urchins (*Strongylocentrotus droebachiensis*) using bottom gear placed on the proposed lease site (App 1, 2). Gear proposed to be deployed on the lease includes use of a maximum of 1,000 mesh-lined lobster traps (36" L x 21.5" W x 13.5" H), deployed on the bottom of the lease site year-round (SR, 2). The traps would be deployed in approximately 300 sets of 3 traps, with 3 feet between each trap, accommodating approximately 900 traps (App, 9; SR, 2). During the hearing, the applicant was asked to provide details on the time frame as to when he would anticipate having production up to 900 traps, to which Mr. Quinby responded that no time frame is expected as the amount of sea urchin seed available is limited (Quinby, Brazier). The applicant was also asked to clarify if they were proposing 900 traps or 1,000 traps, as there were different listings within the application. Mr. Quinby stated that with the current configuration, 900 traps will fit within the grid. However, there will be extra space around the edges allowing for the placement of additional traps, so 1,000 traps was put in the application as a placeholder for the maximum number of

<sup>3</sup> Exhibits 1, 2, and 3 are cited below as: Case file – "CF"; Application – "App", site report – "SR". Other exhibits are cited by number.

traps that could be on site, even they may not necessarily use that many (Quinby/Nelson). The applicant proposes to have 18 feet between each set in an east-west direction, and 5 feet between each set in a north-south direction (SR, 2). During the hearing, the applicant stated that they intend to place urchin and oyster seed in the cages and once the sea urchins are big enough, they will be freely planted on the sea floor within the site. The purpose of this project is to grow sea urchins for commercial and educational purposes, as well as keep biofouling of the oysters down (Quinby, testimony). Free planting the urchins on the sea floor was not expressly written the application. However, when brought to the attention of DMR staff and the public during the hearing, there was no interest expressed by the public in the applicant's intentions to bottom plant. The traps would be secured to ½ cinder blocks (App, 10). Oysters, sea urchins, and gear would remain on-site year-round (App, 6). All components will be submerged year-round and only mooring buoys will be visible on the surface. (App, 11). The site would be visited "bi-monthly to monitor... the urchins should keep the fouling down", and oysters and urchins would be harvested by hand by a diver (App, 12). According to the application, the site would be serviced by a vessel of 23 feet in length and powered by an inboard/outboard 250 horsepower motor (Quinby/Brazier). No other powered equipment is proposed (App 14).

## 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.

## A. Riparian Access

The proposed site is in shallow subtidal waters in Jordan River, immediately south of a Seed Mussel Conservation Area. During MDMR's visit to the site on May 27, 2021, at least 5 residential buildings with beach access were observed in the general vicinity of the proposed lease. Most of the houses had kayaks and other hand-powered paddle craft stored on the uplands near the shoreline, and many also had shoreline stairs for water access (SR, 10). Additionally, one dock was observed northeast of the proposed NE corner of the lease area (SR, 10). Per page 11 of the site report:

Although it appears that nearby landowners regularly access the Jordan River via shore launching and landing, it is unlikely the proposal will impede these activities since only bottom gear is proposed to be deployed on the lease site. Additionally, the proposed

bottom cages are 13.5" in height and the site is approximately 22.8" deep at MLW at the most shoal proposed corner. Therefore, assuming the corners are the most shoal section of the proposal, a minimum of approximately 9.3" of water would remain over the proposed bottom cages at MLW, which is likely sufficient for the observed paddle craft to transit to and from riparian shorelines.

A single mooring was observed approximately 215 feet to the south of the proposal (SR, 10). During the public hearing, Kathleen Stanley, a riparian landowner on Jordan River, testified that she and her family also have a mooring south of the proposed site, parallel to the observed mooring (Stanley, testimony). Mrs. Stanley stated that during the time of observation, her mooring was not in the water as her lobstering vessel is in Casco Bay being stored (Stanley, testimony). Mrs. Stanley drew the estimated location of her mooring on a DMR aerial image, used as a visual aid by staff during the hearing for better viewing purposes. Mrs. Stanley stated that she "doesn't believe that this will interfere" with her mooring. No other testimony was provided indicating the proposal would unreasonably interfere with riparian access.

Based on this evidence, it appears that riparian access will not be prevented 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 any riparian owner.

## B. Navigation

During DMR's visit on May 27, 2021, one small, motorized vessel was observed navigating south of the proposed lease area and on September 1, 2021, a small, motorized vessel was observed transiting through the proposed lease area (SR, 11). As described in Section 3(A), there will be a minimum of approximately 9.3" of water over the proposed bottom cages at MLW [at] the most shoal section of the proposal (SR, 11). Additionally, most of the site, with the exception of the immediate eastern boundary of the proposal, would have a minimum of nearly 3 feet of water over the proposed bottom cages at MLW, whereas in the shallower areas, there is potential for 1-2 feet of water over the traps. During the public hearing, Marcy Nelson asked the applicant if there had been any thought to placing marker buoys over the areas that have 1-2 feet of water above the traps to prevent any vessel traffic from fouling the traps in the area. Mr. Quinby stated that there has been a marker buoy placed there in the past to signal shallow water and that if the lease is granted, he would be willing to place marker buoys in areas where there is less than 3 feet of water over traps (Quinby, testimony). Therefore, if the lease is granted, the applicant should take care and mark parts of lease area where traps will have less than 3-feet of water above them during MLW.

Carrol Leland, a riparian landowner, testified that he is concerned regarding larger motorized vessels' ability to navigate the area. He stated that heaviest boating traffic occurs during June and July of a given year and that these vessels range from 16- to 28-feet (Leland, testimony). Earlier in the applicant's testimony, Mr. Quinby stated that "The Stewardship" accesses the Mussel Seed Conservation Area to the north of the proposed site at high tide, and after speaking with the operators of "The Stewardship", they

believe that they will still be able to access the Mussel Seed Conservation Site without problem (Quinby, testimony). Marcy Nelson questioned Mr. Quinby on the estimated size of "The Stewardship", to which Mr. Quinby responded "65-feet" (Quinby/Nelson). No other testimony was provided indicating the proposal would unreasonably interfere with navigation. Based on the evidence, it is reasonable to conclude that navigation in the area will not be unduly affected by the presence of the proposed lease site.

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

## C. Fishing & Other Uses

**Fishing.** During the May 27 and September 1, 2021, site visits, no commercial fishing was observed within the proposed lease site. Light lobster (*Homarus americanus*) fishing activity was observed to the south of the proposed lease site, near the mouth of the Jordan River (SR, 12). During the September 1<sup>st</sup> site visit, one recreational fishing vessel was observed fishing north of the proposed site. As noted within the site report, the only commercially valuable species observed in abundance during the underwater assessment was sugar kelp (*Saccharina latissima*).

During the public hearing, Mrs. Stanley stated that she and her family own a lobster boat and her daughter has intentions of placing traps within the area in the future (Stanley, testimony). Mrs. Stanley expressed concern over the potential for fouled traps within the lease site and the liability that her family may face if this were to happen. Her concern stemmed from the presence of draggers to the north of the proposed site, harvesting mussel seed from the Seed Mussel Conservation Area. During her testimony, Mr. Quinby stated he had no problem with Mrs. Stanley's daughter placing traps within the site and that if fouling were to happen, he would work with her to retrieve her gear from the site (Quinby, testimony). Additionally, Mrs. Stanley stated that there have been fishermen using the banks on both sides of the river for striper fishing, accessing the Lamoine side through her property (Stanley, testimony). When asked approximately where these fishermen tend to fish, using the visual aid map she drew an "X" on the shoreline where she has seen them, but also indicated that they traverse north and south from that marking (Stanley/Randlett, testimony). Mrs. Stanley also expressed concern with potential of fouling between recreational hook and line fishing and the proposed gear on the site. The applicant has not requested exclusive use of the site that would restrict commercial or recreational fishing, and while gear entanglement could occur if hook and line fishing is attempted within the proposed boundaries, the activity is unlikely to be hindered by the proposal, as much of Jordan River would remain open and accessible for recreational hook and line fishing.

No additional testimony concerning fishing was given at the hearing. Due to the limited presence of recreational fishing and commercial lobstering activity at the project site, it is unlikely that commercial or recreational fishing will be impacted by the proposed activity.

**Exclusivity.** The applicant is requesting that dragging be prohibited on the proposed site (App, 18 & Quinby, testimony). If the proposed lease is granted, this request is reasonable, and enforceable under provisions of law (see 12 M.R.S.A. §6073(2)).

Other aquaculture uses. A Limited Purpose Aquaculture (LPA) license held by the applicant is the only existing aquaculture site within 1 mile of the proposal (SR, 12). According to the application, this LPA would be relinquished if the proposed lease is granted (App, 15). The nearest active aquaculture site is located approximately 1.6 miles to the southeast.) (SR, 12). To the immediate north of the proposed site is the Seed Mussel Conservation Area. There is no evidence in the record that the proposed lease site will interfere with the aquaculture lease or the Seed Mussel Conservation Area.

No other comments from aquaculture lease and/or license holders were provided, and therefore it is reasonable to conclude that there are no concerns regarding the effects the proposed lease on other aquaculture uses in the area. Based on the evidence, it appears that the proposed lease will not unreasonably interfere with other aquaculture activities in the area.

Other water-related uses. During the site visits conducted in May and September of 2021, DMR staff did not observe other water-related uses of the proposed lease area not described elsewhere in this decision. During the review period and public hearing, the Department did not receive any testimony detailing other uses of the area. Based on the absence of such testimony it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

**Therefore**, based on the above, 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. The bottom of the proposed lease, as observed by along the dive transect, was composed of pebble and shell rubble (SR, 13). DMR staff characterized Sugar kelp (Saccharina latissima) and Colonial tunicate (Didemnum sp.) as abundant along the dive transect (SR 14). Coralline algae (Lithothamnion sp.) and Irish moss (Chondrus crispus) were characterized as common (SR 14). Historically, based on data collected by the Maine Department of Marine Resources in 2008, eelgrass beds were located within the boundaries of the proposed lease (SR, 15). During the May 27, 2021 underwater assessment, the SCUBA transects did not overlap with the historically mapped eelgrass beds; therefore, another site visit was conducted on September 1, 2021 (SR, 15 & 16). DMR staff conducted two drop-camera transects near the eastern and western boundaries of the proposal, through the areas with historical mapped eelgrass beds (SR 16). Although no eelgrass beds were observed, a few scattered eelgrass blades were present along the western drop-camera transect, and from the video footage, it is not clear whether these are rooted or drifting (SR, 16). MDMR science staff recommend that, if the lease is granted, the applicant make observations for eelgrass before placing any gear on the bottom and maintain a separation of 25 feet or more between submerged gear and any identified patches of eelgrass within the site (SR, 16).

Within the application and in testimony given during the hearing, the applicant stated that sugar kelp (Saccharina latissima) covers approximately 50% of the northern half of site, and the presence of sugar kelp within the lease site was confirmed during DMR's site visits. Sugar kelp is generally recognized as an ecologically significant species in cold-water rocky marine environments (SR, 13). Kelp forests likely

play a major role in the global ocean carbon cycle, are important primary producers, provide habitat, export detrital food subsidies, and enhance biodiversity and secondary production (SR, 13). The applicant is proposing bottom gear, which may cause physical damage if placed atop sugar kelp (SR, 13). During the public hearing Mr. Quinby was questioned by DMR if he or others placing the cages would be willing to place the cages in a manner that doesn't smother the sugar kelp, to which Mr. Quinby agreed, as the sugar kelp is a valuable food source for the sea urchins (Quinby/Nelson). Therefore, if the lease is granted, the applicant should make observations for sugar kelp beds and not place cages directly on top of observed beds.

Wildlife. Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIF&W) indicate that the proposal overlaps with Tidal Wading Bird and Waterfowl Habitat defined as Significant Wildlife Habitat (SR, 12). During the hearing, Marcy Nelson testified that most areas that are classified as tidal mudflats or historically mapped eelgrass areas are also classified as Tidal Waterfowl and Wading Bird Habitat (Nelson, testimony). As standard with all applications, DMR reached out to MDIF&W for comment pertaining to the proposal. Rebecca Settele (Wildlife Biologist, MDIF&W) responded by email to a "Request for Agency Review and Comment", recommending that the project footprint be reduced to the minimum size needed to have the least impact on waterfowl and wading bird populations. In response to a follow-up email by DMR Science staff requesting further clarification on any recommendations for depth on this proposal to assist in assessing potential reductions of the proposed lease footprint, Ms. Settele stated, "MDIFW does not have any recommendations for depth of this proposal at this location," (CF, MDIFW Response). During her testimony, Marcy stated that these comments are generic and don't express significant concern for the proposed project and its location, as Tidal Waterfowl and Wading Bird habitat is not considered an essential habitat, which is a designation saved for threatened or endangered species (Nelson, testimony). During the hearing, Carrol Leland expressed concerns over potential impacts that the proposed lease will have on birds and wildlife, specifically birds known to frequent the area. However, when questioned, Mr. Leland was unable to elaborate further on his concerns on how this proposed lease would impact the wildlife in the area if the proposed lease were to be granted.

**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 publicly owned beaches, parks, docking facilities, or conserved lands owned by municipal, state, or federal governments within 1,000 feet of the proposed lease 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

Seed stock for this proposed lease site would be obtained from the Center for Cooperative Aquaculture Research and Bagaduce River Oyster Company. The proposed sources are approved sources of seed stock.

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

# G. Light

According to the application, there is no proposed light fixtures or any proposed work that would exceed daylight hours (App, 14).

**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 applicant proposes to service the site with a 23-foot-long vessel with a 250-horse powered inboard/outboard motor (App, 13 & Quinby/Brazier). According to the application, vessels would mainly visit the site approximately one day per week, and motors would be shut down when not needed (App 13, K. Quinby testimony). Based on this evidence, it appears that reasonable measures would be taken by the applicant to mitigate noise impacts and that any noise generated by the proposed operations is unlikely to have a significant effect at the boundaries of the lease site.

**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

The applicant is proposing to deploy mesh lined lobster traps on the bottom of the lease. Gear is not proposed to float at the surface of the water. No on-site support structures are proposed (App, 8).

**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 oysters 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 of 2.94 acres to Ocean Resources, Inc for twenty years for the cultivation of American/eastern oyster (*Crassostrea virginica*) and green sea urchins (*Strongylocentrotus droebachiensis*) 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).4 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.

## 7. REVOCATION OF LEASE

<sup>4 12</sup> 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."

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.

Patrick C. Keliher, Commissioner Department of Marine Resources