STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

Ferda Farms LLC

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Standard Aquaculture Lease Application Suspended Culture of American Oysters and Quahogs New Meadows River, Brunswick, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Ferda Farms LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 2.421 acres east of Lower Coombs Island in the New Meadows River, in Brunswick, Maine. The proposal is for the suspended culture of American oysters (*Crassostrea virginica*) and quahogs (*Mercenaria mercenaria*).

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on June 15, 2021, and a scoping session was held on December 6, 2021. DMR accepted the final application as complete on February 9, 2022. Notice of the completed application and public hearing was provided to state and federal agencies, the Town of Brunswick, riparian landowners² within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listsery. Notice of the hearing was published in the *Times Record* on March 8, 2024, and March 22, 2024. The public notice for the hearing indicated that the proceeding would be conducted inperson and directed interested persons to contact DMR to sign up to participate in the proceeding. Eight individuals registered to participate in the hearing, including seven that registered to provide testimony. No applications for intervenor status were received by the Department. A public hearing on this application was held on April 8, 2024.

Sworn testimony was given at the April 8, 2024, hearing by the following witnesses:

Name	Affiliation
Maxwell Burtis	Applicant
Dan Devereaux, Richard Knedler, Susan Knedler,	Members of the public
James Coffin	

¹ Applicant originally requested 2.33 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 2.42 acres.

² For purposes of notice, the Department defines "riparian owner" as a shorefront property owner whose property boundary is within 1,000 feet of the proposed site.

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 Joshua Rozov.

The evidentiary record before DMR regarding this lease application includes three exhibits introduced at the hearing and the record of testimony at the hearing. The evidence from these sources is summarized below.^{3,4,5}

LIST OF EXHIBITS

- 1. Case file
- 2. Application
- 3. DMR site report, issued on February 15, 2024

2. DESCRIPTION OF THE PROJECT

A. Site History

The applicant currently operates four LPAs located within the proposal site: MBUR520, MBUR620, MBUR720, and MBUR820 (App 10). These four LPAs use floating bags and cages to cultivate American oysters and quahogs (App 10). These four LPAs would be relinquished if this proposal is granted (App 10).

B. Site Characteristics

On July 27, 2023, DMR staff assessed the proposed lease site and the surrounding area in consideration of the criteria for granting a standard aquaculture lease (SR 2). The proposed lease site occupies subtidal waters in New Meadows River in Brunswick, to the west of the main navigational channel (SR 2). The proposed lease is comprised of two tracts separated by charted intertidal mudflats, which are a geographic feature (SR 2). The distance between the two tracts is approximately 514 feet. Therefore, the proposed two tracts satisfy the requirements contained in Chapter 2.10(1)(A)(1)(b)(i). The northern tract is 1.20 acres, and the southern tract is 1.22 acres based on DMR's calculations (SR 2). The shoreline of the islands surrounding the proposal is mostly a mixture of seaweed covered rock ledges and marshland leading to mixed forest uplands (SR 2).

There are four small islands within 1,000 feet of the proposal (SR 2). In addition, a larger island, Sebascodegan Island, lies approximately 1,130 feet to the south of the proposal (SR 4). Two of the smaller

³ Exhibits 1, 2, and 3 are cited below as: Case file - "CF", Application - "App", site report - "SR"

⁺In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

⁵ Page numbers are cited using the PDF page number, and not the page number written on the application.

⁶ Distance measure using ArcGIS Pro version 2.9.

islands, Lower Coombs Island to the west and Bombazine Island to the east each have one house with a dock located on them (SR 2).

The area around the site is currently classified by DMR's Water Quality Classification program as "open/approved for the harvest of shellfish" by the DMR Bureau of Public Health and Aquaculture (SR 13). At the time of the DMR's site assessment in 2023, water depths within the proposed lease site ranged from 11.2 to 16 feet for the northern tract and ranged from 8.3 to 17.9 feet for the southern tract (SR 2). DMR staff observed the depths of the proposed northern lease site at approximately 8:04 AM and of the proposed southern lease site at approximately 9:04 AM (SR 2). Correcting for tidal variation derives water depths at mean low water (MLW) to be from 9.9 feet to 14.7 feet on the northern tract and 5.1 to 14.7 feet on the southern tract (SR 2).

DMR staff observed the bottom characteristics of the proposed lease site via SCUBA (SR 3). One dive was conducted within each tract of the proposal (SR 3). The bottom of the proposed lease area is composed primarily of mud (SR 3).

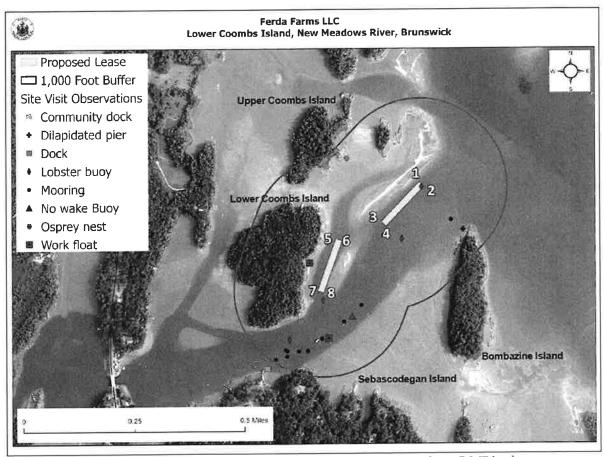


Figure 1. Proposed lease site and surrounding area. Image taken from DMR's site report.

B. Proposed Operations

The applicant proposes to culture American oysters (*Crassostrea virginica*) and quahogs (*Mercenaria mercenaria*) on the proposed lease site using suspended culture techniques (App 1-2). A total of 586 OysterGro Cages, 3516 mesh bags, 8 poly balls, 586 overwintering bottom cages, 586 oyster condos, and 8 winter sticks are proposed for the site (App 4). The applicant would use two boats on the site every day, a 19-foot Carolina Skiff and a 21-foot fiberglass skiff (App 9). The applicant also proposes to deploy two floats, one 20' x 10' and the other 12' x 16' (Burtis/Rozov). These floats would be attached together and located in the southern tract (Burtis/Rozov) The floats attached together would measure 22' x 20' (App 34). The 12' x 16' float would have a 12' x 8' x 8' wooden structure built on it with a solar array placed on the top of the structure (App 41). Under the wooden structure would be a culling table (App 34). The 20' x 10' float would house a solar powered oyster tumbler (App 34). These floats would be moored to the bottom using a nylon mooring line and 200lb mushroom anchors (App 34).

Each tract would have two rows of four longlines, each 200 feet long (App 29). Each longline in a row of four would be approximately 20 feet apart from the next longline (App 29). Each longline would have OysterGro cages attached to it, each cage being approximately three feet apart from the next cage (App 29). The applicant anticipates seeding the site in June and July (App 7). The oyster and quahog seeds would be placed in .2mm mesh bags placed in cages attached to longlines (App 7). During the seeding process, the applicant would be onsite everyday (App 7).

Once the oyster seeds reach approximately 8mm, they would be split and placed in mesh bags on the longlines or bottom cages (App 7). Once the quahog seeds reach 8mm, they would be placed in mesh bags and placed on the ocean floor to begin the grow out stage (App 7). Cages and longlines would be used for the oysters from March to January (App 7). During the winter months, all cages would be sunk to the bottom of the ocean floor (App 7). Quahogs would be bottom cultured for the entire duration of growth (App 7).

For overwintering, the applicant would remove all surface gear from the lease site (App 8). The winter sticks would replace the poly balls, and the cages containing the mesh bags with the oysters would be sunk until spring (App 8). Overwintering cages and oyster condos would be deployed to make room for oysters and quahogs during the winter months (App 8).

The applicant would be on site every day to perform routine maintenance and checkups on the deployed gear (App 7).

The applicant would onsite daily during harvesting periods, which would take place anywhere from February to December (App 8). To harvest, the applicant would bring a boat alongside the oyster cages and slide the oyster bags out onto the boat (App 7). The oysters and quahogs would then be culled and washed off on the float (App 7).

The power equipment proposed for the site includes the following:

Equipment	Description	Months of
	•	Operation/Frequency
		of Use
Two 4-stroke Yamaha	Motor used for 19-foot	Both skiffs will be used
engines	Carolina skiff and 21-	every day to access
	foot fiberglass skiff	proposal as well as
		transport equipment
Oyster Tumbler	Powered by solar panels	February – December,
_	connected to a battery	Five days a week, eight
	pack.	hours a day.
Wash down pump	Powered by solar panels	February - December,
	connected to a battery	Five days a week, eight
	pack.	hours a day.
600-watt tarp motor	Located on top of	February – December,
_	tumbler, to spin the PVC	Five days a week, eight
	located inside the	hours a day.
	tumbler. Powered by	
	solar panels connected	
	to a battery pack.	
Submerged bilge pump	Powered by solar panels	February – December,
	connected to a battery	Five days a week, eight
	pack.	hours a day.

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; navigation; fishing or other uses of the area, taking into consideration other aquaculture uses of the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or 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 Owners Ingress and Egress

Before granting a lease, the Commissioner must determine that the proposed project "will not unreasonably interfere with the ingress and egress of riparian owners." 12 M.R.S.A. § 6072(7-A)(A). In examining riparian owner ingress and egress, the Commissioner "shall consider the type of structures

proposed for the lease site and their potential impact on the vessels which would need to maneuver around those structures." Chapter 2, \S 2.37(1)(A)(1)⁷.

During DMR's site assessment, DMR staff observed a house on the northern tip of Bombazine Island along with a dilapidated pier (SR 5). DMR staff also observed two docks tied to the shore on Lower Coombs Island, adjacent to the southern tract, as well as a pier and a third dock with a lobster style boat on Lower Coombs Island (SR 5). There are approximately ten moorings within 1,000 feet of the proposal (SR 5). A mooring field and community dock were observed to the south on Sebascodegan Island (SR 5). At the time of the site visit, the community dock had several small powerboats tied to it and some of the moorings were observed to be occupied by small powerboats (SR 5). Two private docks were observed directly to the east of the community dock, one of which had kayaks attached to it and the other had a small powerboat tied to it (SR 5).

A Harbormaster Questionnaire was completed by the local harbormaster and submitted to DMR on March 22, 2022. The harbormaster noted that they did not see this proposal causing issues to riparian ingress and egress within 1,000 feet of the proposal (CF – Harbormaster Questionnaire). DMR does not limit its analysis of riparian ingress and egress to those owners located within 1000 feet of the proposal.

The applicant states that there is a dock located on the southern end of Lower Coombs Island which is used by the landowners of the island (App 13). The applicant also states that there are moorings located south of the southern tract used by the property owners of Indian Rest Road, which is located on Sebascodegan Island, to the south of the proposal (App 13). Both docks and moorings are used daily from late spring to early fall (App 13). The northeastern side of Lower Coombs Island has a landing for the Brunswick Topsham Land Trust, which is occasionally used by kayakers (App 13).

At the hearing, a member of the public testified that while there was a dock located east of the proposal, on Bombazine Island, he did not believe that this proposal would interfere with access to and from that dock (Devereaux Testimony). Another member of the public, who owns Lower Coombs Island, stated that the proposal was not located within the path that they usually take when accessing the island (R. Knedler Testimony).

Measurements taken by DMR staff show the southern tract of the proposal is located approximately 160 feet from the eastern side of Lower Coombs Island at the narrowest section (SR 4). Additionally, according to navigational charts, at MLW, there is approximately 155-240 feet of water between Lower Coombs Island and the western boundary of the south tract (SR 5). This space would allow boats to travel between the eastern side of Lower Coombs Island and the western side of the southern tract to access any docks that may be located on that side of the island. Additionally, testimony was provided by the owner of Lower Coombs Island that the proposal is not located within the path usually taken to access the island. Furthermore, four LPAs owned by the applicant are currently located within the area of the southern tract.

⁷ 13-188 C.M.R. ch. 2.

DMR has not received any comments or complaints regarding the existing LPAs in the area interfering with riparian access to Lower Coombs Island. The southern corner of the southern tract is approximately 1,130 feet northeast of the Sebascodegan Island community dock, which would allow for boats of all sizes to pass through the area without interference. The northern tract is not located any closer to moorings or docks in the area as the southern tract.

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

B. Navigation

Before granting a lease, the Commissioner must determine that the proposed project "will not unreasonably interfere with navigation." 12 M.R.S.A. § 6072(7-A)(B). In examining navigation, the Commissioner "shall examine whether any lease activities requiring surface and or subsurface structures would interfere with commercial or recreational navigation around the lease area" and "shall consider the current uses and different degrees of use of the navigational channels in the area in determining the impact of the lease operation." Chapter 2, § 2.37(1)(A)(2).

The northern tract of the proposal is located approximately 550 feet to the west of the primary marked navigation channel in the New Meadows River and approximately 40 feet to the northwest of deeper water associated with an unmarked navigational thorough fare that runs southwest/northeast through the area between Lower Coombs Island and Sebascodegan Island (SR 5). The southern tract is approximately 1,575 feet to the west of the marked navigational channel and approximately 140 feet to the northwest of the same unmarked navigational thorough fare (SR 5). According to navigational charts, at MLW, there is approximately 155-240 feet of water between Lower Coombs Island and the western boundary of the south of the proposal as well as two recreational powerboats transiting in the navigational channel to the east (SR 5).

A Harbormaster Questionnaire was completed by the local harbormaster and submitted to the DMR Aquaculture Division on March 22, 2022. The harbormaster noted that they did not see this proposal causing issues to navigation (CF – Harbormaster Questionnaire).

At the hearing, multiple members of the public testified that they are aware of the marked navigational channel in the area and that the proposal would not interfere with activity taking place in that channel (Devereaux Testimony, J. Coffin Testimony). One member of the public also testified that boats navigating in the area would still have full access to the entire shorelines if the proposal was granted (J. Coffin Testimony).

Both the northern and southern tracts are located outside of the primary marked navigation channel in the New Meadows River and outside of the unmarked navigational throughfare. The northern tract of the

proposal is approximately 737 feet to the southeast of Upper Coombs Island and approximately 973 feet west-northwest of the northern tip of Bombazine Island. These distances would allow for boats to pass between the islands and the proposal without interference. There is approximately 155-240 feet of water between Lower Coombs Island and the western boundary of the south tract at MLW. The Harbormaster and a member of the public both stated that they did not anticipate this proposal interfering with navigation in the area.

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

C. Fishing & Other Water-related Uses

The Commissioner may grant a lease if the lease activities will not unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. 12 M.R.S.A. § 6072(7-A)(C). In examining fishing and other uses, the Commissioner "shall consider such factors as the number of individuals that participate in recreational or commercial fishing, the amount and type of fishing gear utilized, the number of actual fishing days, and the amount of fisheries resources harvested from the area." Chapter 2, § 2.37(1)(A)(3).

Fishing. During DMR's site visit, there were four lobster buoys observed within 1,000 feet of the proposal (SR 6). One of the four observed lobster buoys was located inside the north tract (SR 6). The closest lobster buoy to the south tract was located approximately 87 feet to the south (SR 6). DMR staff observed evidence of light lobster fishing activity to the south and moderate lobster fishing activity to the east with an additional 16-20 lobster buoys observed beyond 1,000 feet (SR 6). Three lobster boats were observed working in the general vicinity of the proposal (SR 6).

The applicant states that there are lobster traps approximately 100 feet to the southeast of the southern tract (App 13). Seining boats have been seen fishing towards the northern end of Bombazine Island (App 13). Both lobstering and seining take place daily from March to November (App 13). The applicant testified that these fishing vessels are observed to be operating approximately 100 feet from both the north and south tracts (Burtis/Rozov).

At the hearing, a member of the public testified that lobster fishing was near nonexistent in the area where the proposal would be located (Devereaux Testimony). Another member of the public testified that lobster fishing in the area takes place predominantly within the marked navigational channel (J. Coffin Testimony).

Recreational fishing occurs in the entire New Meadow River daily, from late spring to early fall (App 13). The applicant states that the proposal will include channels between cage lines and between the cages and floats which would allow access to anyone trying to fish within the proposal boundaries (App 13).

According to the application, the site visit, and testimony provided at the hearing, while lobstering and seining does occur in the area, it is infrequent within 1,000 feet of the proposal. Seining was observed by the northern end of Bombazine Island, which is approximately 973 feet from the proposal, leaving adequate room for both activities to occur in the area. Lobster buoys were seen in closer proximity to the proposals, but only one buoy was directly in the footprint of the proposal. The presence of other buoys outside the proposal footprint shows that there are other areas within this section of the New Meadows River that could still be utilized by lobster fishermen.

Other water-related uses. At the time of the site visit, DMR staff observed two docks being stored on the eastern shoreline of Lower Coombs Island (SR 6). However, no testimony was received regarding other water related uses of the area.

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

D. Other Aquaculture Uses

DMR's Chapter 2 regulations require the Commissioner to consider any evidence submitted concerning other aquaculture uses of the area. "The intensity and frequency of such uses as well as the degree of exclusivity required for each use shall be a factor in the Commissioner's determination of whether any interference is unreasonable. The number, size, location, and type of other aquaculture leases shall be considered by the Commissioner." Chapter 2, § 2.37(1)(A)(4).

There are six LPAs within 1,000 feet of the proposal (SR 7). Max Burtis, who has an ownership stake in the company applying for the lease, currently operates four of these LPAs within the proposal site: MBUR520, MBUR620, MBUR720, and MBUR820. The applicant has stated that if the proposal is granted, these four LPAs will be relinquished (App 10). The other two LPAs within 1,000 feet, PGRA216 and PGRA316, are located approximately 450 feet to the northwest of the northern tract (SR 7). This distance is sufficient to allow continued access to those two LPAs, and the owner of PGRA216 and PGRA316, did not provide any comments or testimony regarding this proposal. There are no aquaculture leases within 1,000 feet of the proposal (SR 7).

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses in the area.

E. Existing System Support

The Commissioner may grant a lease if the lease activities "will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support existing ecologically significant flora and fauna." 12 M.R.S.A. § 6072(7-A)(D).

"Such factors as the degree to which physical displacement of rooted or attached marine vegetation occurs, the amount of alteration of current flow, increased rates of sedimentation or sediment resuspension, and disruption of finfish migration shall be considered by the Commissioner in this determination." Chapter 2, § 2.37(1)(A)(5).

Site observations. DMR staff conducted two dives, one in each tract, using SCUBA to assess the epibenthic ecology of the proposed lease site (SR 9). The species observed were:

Species Observed	Abundance	
Hermit Crab (Paguroidea spp)	Rare	
American/Eastern Oyster (Crassostrea virginica)	Rare	
Sand Shrimp (Crangon septemspinosa)	Occasional	

Eelgrass. Historical records of eelgrass collected in 2022 indicate that there is no mapped eelgrass within 1,000 feet of the proposal (SR 10). The nearest mapped eelgrass is approximately 1,620 feet to the northeast of the north tract (SR 10). During the site visit, DMR staff did not observe any eelgrass from the surface or during the SCUBA footage (SR 10).

Wildlife. According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposed lease is within 1,000 feet of mapped Tidal Waterfowl and Wading Bird Habitat (TWWBH) (SR 11). More than half of the north tract and a small portion of the northern section of the south tract is within the habitat designation (SR 11). On March 14, 2022, a Wildlife Biologist with MDIFW responded by email to a "Request for Agency Review and Comment," stating that a portion of the proposed lease site intersects with Tidal Waterfowl and Wading Bird Habitat and "if total exclusion nets will be used to deter and exclude predatory sea ducks from the facility, MDIFW recommend a maximum mesh size of 6 inches with 3mm twine or larger for excluding eiders, and a maximum mesh size of 4 inches with twine of 3mm or larger for excluding scoters," (CF – MDIFW Comment). The applicant testified that they would not be using predator netting within their proposal (Burtis/Rozov).

There are two bald eagle (*Haliaeetus leucocephalus*) nests located near the lease, one approximately 975 feet to the west of the south tract and the other approximately 1,225 feet to the south of the north tract (SR 11).

During DMR's site visit, DMR staff observed double-crested cormorants (Nannopterum auritum), common terns (Sterna hirundo), herring gulls (Larus argentatus), laughing gulls (Leucophaeus atricilla), common eiders (Somateria mollissima) and a grey seal (Halichoerus grypus) in the vicinity of the proposed lease (SR 11). Scientists also observed an osprey (Pandion haliaetus) and osprey nest on Upper Coombs Island approximately 970 feet to the northwest of the north tract (SR 11).

No eelgrass beds are mapped near the proposal and there were no observations of eelgrass at the time of the site visit. A portion of the proposal is located within TWWBH. When asked for comment, MDIFW responded that they recommend the mesh size of exclusion nets to be "a maximum mesh size of 6 inches with 3mm twine or larger for excluding eiders, and a maximum mesh size of 4 inches with twine of 3mm or larger for excluding scoters." However, the applicant testified that they would not use predator netting within their proposal. Because they will not be using predator netting, the applicant is in line with MDIFW recommendations. No testimony was provided concerning flora or fauna within the area.

Therefore, the aquaculture activities proposed will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.

F. Interference with Public Facilities

The Commissioner may grant a lease if the lease activities will not unreasonably interfere with public use or enjoyment within 1,000 feet of a beach, park or docking facility, or certain conserved lands owned by the Federal Government, the State Government, or a municipal government. 12 M.R.S.A. § 6072(7-A)(F). Conserved lands means land in which fee ownership has been acquired by the state, federal, or municipal government in order to protect the important ecological, recreational, scenic, cultural or historic attributions of that property. *Id.* In evaluating interference with the public use or enjoyment of conserved lands, the Commissioner shall consider the degree of any such interference and the purpose(s) for which the land has been acquired. Chapter 2, § 2.37(1)(A)(7).

The proposed lease is not within 1,000 feet of any beach, park, docking facility, or conserved lands owned by federal, state, or municipal governments (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.

G. Source of Organisms to be Cultured

In accordance with 12 M.R.S.A. §6072(7-A)(E), standard lease applicants are required to demonstrate that there is an available source of organisms to be cultured for the lease site. When examining the source of organisms, the Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. Chapter 2, § 2.37(1)(A)(6).

The applicant will obtain American Oyster seed from Mook Sea Farm and Muscongus Bay Aquaculture and quahog seed from Muscongus Bay Aquaculture. These hatcheries are approved by DMR. Any alternate source of stock must comply with DMR's laws and rules.

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

H. Lighting

The Commissioner considers whether there will be an unreasonable impact from lighting in accordance with 12 M.R.S.A § 6072(7-A)(G) and the regulatory standards specified in Chapter 2.37(1)(A)(8). Rules regarding lighting apply to all exterior lighting used on buildings, equipment, and vessels permanently moored or routinely used at all aquaculture facilities, with the exception of lighting for navigation, emergencies, and construction of a temporary nature. Chapter 2, § 2.37(1)(A)(8).

The applicant states that they might work on site before daylight depending on the tide for that day (App 10). In this situation, the applicant and any workers would use headlamps with a 4-watt LED bulb (App 10). There would be a maximum of three lights on at a time within the lease site (App 10).

The lighting proposed to be used are headlamps, not used on buildings, equipment, or vessels nor would they be routinely used. The headlamps would only be used in the occasion when the tide would require. Additionally, the rule states that no light shall exceed 250 watts. The proposed headlamps to be used would be 4-watt LED lights.

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

I. Noise

The Commissioner considers whether there will be an unreasonable impact from noise in accordance with 12 M.R.S.A § 6072(7-A)(G) and the regulatory standards specified in Chapter 2.37(1)(A)(9). Rules regarding noise apply to the routine operation of all aquaculture facilities, including harvesting, feeding, and tending equipment at leases authorized by the Department of Marine Resources, with the exception of: watercraft, harvest or transport barges and maintenance equipment while underway; the unamplified human voice or other sounds of natural origin; bells, whistles, or other navigational aids; emergency maintenance and repair of aquaculture equipment; warning signals and alarms; and events not reasonably within control of the leaseholder. Chapter 2, § 2.37(1)(A)(9).

The applicant proposed to use two skiffs, each with a 4-stroke Yamaha engine to access the proposal site every day (App 9). Additionally, the applicant proposed to use an oyster tumbler, wash down pump, 600-watt tarp motor, and a submerged bilge pump when the oysters are tumbled or culled (App 9). The tumbling and culling would occur five days out of the week, for about 8 hours each day (App 9). The machinery being used would be powered by a battery pack, which would be connected to solar panels (App

9). The tumbling and culling process would occur during the harvesting season, which takes place from February to December (App 7-8).

The applicant states that the machinery being run off battery packs is an effort to mitigate the noise produced, as the battery packs and solar panels produce less noise than a generator (App 9). Additionally, no generators or hydraulics would be present on the vessels, and the only noise the vessels would produce would be from the 4-stroke Yamaha motors (App 9).

At the hearing, a member of the public testified that when the applicant works on the LPAs currently located within the proposal site, the most noise he can hear is boat traffic and the occasional operation of the applicant's oyster tumbler (R. Knedler/Burtis).

Chapter 2, § 2.37(1)(A)(9) states, "All motorized equipment used during routine operation at an aquaculture facility must be designed or mitigated to reduce the sound level produced to the maximum extent practical." The applicant testified that they will be using battery packs to power their machinery due to battery packs producing less noise than generator. This will mitigate the sound produced by machinery and lower the volume of all operations. Additionally, at the hearing, the owner of Lower Coombs Island testified that when the applicant is working the current LPA sites in the area, they can only hear the occasional boat traffic and oyster tumbler, which would still be the main source of noise occurring within the proposal.

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

J. Visual Impact

Before granting a lease, the Commissioner must determine that the proposed lease will be in compliance with visual impact criteria adopted by the Commissioner relating to color, height, shape and mass. 12 M.R.S.A § 6072(7-A)(H). The Commissioner has adopted such regulatory standards in Chapter 2.37(1)(A)(10). Rules regarding visual impact apply to all equipment, buildings, and watercrafts used at an aquaculture facility, excluding watercraft not permanently moored or routinely used at a lease location such as harvest or feed delivery vessels. Other equipment or vessels not moored within the boundaries of a lease, but routinely used or owned by the leaseholder are subject to these requirements. Chapter 2, § 2.37(1)(A)(10).8

The applicant states the color of the oyster gear would be black and the poly balls marking the boundaries would be white (App 6). The float located within the south tract would be 20' x 22' (App 34). One half of the float would have a 12' x 8' x 8' wooden structure built on it with a solar array placed on the

⁸ For full rules regarding visual impact of an aquaculture lease see Chapter 2, § 2.37(A)(10). Any rule applicable to this decision will be fully stated in the decision.

top of the structure (App 41). Both the work float and the structure placed on top of it would be brown (App 6). The proposed structure would be 8' tall (App 41).

Chapter 2, § 2.37(1)(A)(10) states that colors must not contrast with the surrounding area and acceptable colors are "grays, blacks, browns, blues, and greens that have a sufficiently low value, or darkness, so as to blend in with the surrounding area." The applicant proposes gear that is colored black with the float and structure being brown. These hues are acceptable per the rules. Chapter 2, § 2.37(1)(A)(10) also states that "all buildings, vessels, barges, and structures shall be no more than one story and no more than 20 feet in height from the water line." The proposed structure on the work float falls within these limits.

In accordance with a regulatory change that took effect on January 1, 2023, after the application was deemed complete, lease markers are required to be yellow. Therefore, if the lease is granted, the poly balls must be yellow in color, not white as proposed, to comply with Chapter 2.80 marking requirements.

Therefore, the aquaculture activities proposed for this site, with the lease marker color change noted herein, will comply with the 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.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses in the area.
- e. The aquaculture activities proposed will not unreasonably interfere with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna.
- f. 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.
- g. The applicant has demonstrated that there is an available source of stock to be cultured for the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.

j. The aquaculture activities proposed for this site, as modified to comply with Chapter 2.80 marking requirements, 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 Ferda Farms LLC for 2.42 acres for 20 years for the cultivation of American Oysters (*Crassostrea virginica*) and quahogs (*Mercenaria mercenaria*) 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. No conditions have been imposed on this lease.

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 over the course of the lease, that the lease activities are substantially injurious to marine organisms or public health, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

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⁹ 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."