STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

Thomas Henninger

Standard Aquaculture Lease Application
Suspended culture of American/eastern oysters,
sea scallops, and hard clams
Broad Cove, Yarmouth, Maine

CAS BC3
June 9, 2022

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Thomas Henninger applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 5.99¹ acres on the east side of Broad Cove in Casco Bay, Yarmouth, Cumberland County, Maine. The proposal is for the suspended culture of American/eastern oysters (*Crassostrea virginica*), sea scallops (*Placopecten magellanicus*), and hard clams (*Mercenaria mercenaria*).

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on September 6, 2019 and a scoping session was held on February 6, 2020. DMR accepted the final application as complete on July 1, 2020. A public hearing on this application was scheduled for March 8, 2022. Notice of the completed application and public hearing was provided to riparian landowners within 1,000 feet of the proposed site, state and federal agencies, the Town of Yarmouth, and subscribers to DMR's aquaculture email listsery. Notice of the hearing was published in *The Forecaster* on February 3, and February 17, 2022. Colin Greenan of the United States Army Corps of Engineers (USACOE) attended the hearing and asked questions of the applicant but did not offer testimony. The Chair of the Cumberland Coastal Waters Commission (CWC) asked questions of the applicant and provided testimony. Members of the public asked questions of the applicant but did not provide testimony. The hearing was recorded by DMR. The Hearing Officer was Amanda Ellis.

Sworn testimony was given at the March 8, 2022 hearing by the following witnesses:

Name	Affiliation
Thomas Henninger	Applicant
Cheyenne Adams	Aquaculture Scientist, DMR Aquaculture Division
David Witherill	Town of Cumberland Coastal Waters Commission Chair

¹ Applicant originally requested 5.9 acres. DMR calculations in the site report, based on the provided coordinates, indicate the area is 5.99 acres.

² In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

The evidentiary record before DMR regarding this lease application includes the exhibits introduced at the hearing and the record of testimony at the hearing. The evidence from these sources is summarized below.³

LIST OF EXHIBITS

- 1. Case file
- 2. Application
- 3. DMR site report
- 4. DMR PowerPoint Presentation Shared During Hearing

2. DESCRIPTION OF THE PROJECT

A. Site Characteristics

DMR staff initially assessed the proposed lease site and the surrounding area in consideration of the criteria for granting a standard aquaculture lease on October 2, 2020 (SR, 2). The proposed lease occupies subtidal waters on the east side of the mouth of Broad Cove, Casco Bay, in the Town of Yarmouth, Maine (SR, 2). The nearby shorelines are composed of rock, sand and mud, with areas of extensive mudflats exposed near the head of Broad Cove at low water (SR, 2). Surrounding uplands are composed of a mixed forest and residential buildings. A municipally owned dock and mooring field are located in Broad Cove, to the northwest of the proposal (SR, 2). During DMR's visit to the site on October 2, 2020, depths at the corners of the proposed site ranged from 16 to 21.3 feet (SR, 6). Correcting for tidal variation results in depths at the site between 15 and 21 feet at mean low water (SR, 6). The bottom of the proposed site is composed primarily of soft mud (SR, 6).

B. Proposed Operations

The applicant proposes to culture American/eastern oysters (*Crassostrea virginica*), sea scallops (*Placopecten magellanicus*), and hard clams (*Mercenaria mercenaria*) on the proposed lease site using suspended culture techniques (App, 1). The applicant proposes to use 6-bag OysterGro®-style cages (36" W x 60.2" L x 22" D)⁴ and bottom cages (36" W x 48" L x 48" H) for the cultivation of all three species, and lantern nets (30" diameter x 7' L)⁵ for the cultivation of sea scallops only (App, 9). According to page 14 of the application, floating cages, lantern nets, and bottom cages would be deployed in lines, each composed of (3) 12-cage segments. These lines of gear would run northwest-southeast within the lease site, and would be separated by 15 feet (App, 14). Page 14 of the application displays 14 such lines of

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

⁴ The application listed several dimensions for this gear type. During the public hearing, Cheyenne Adams questioned the applicant to clarify the proposed length and width. However, the applicant did indicate the manufacturer had changed dimensions slightly since the application was submitted. Therefore, it is reasonable to assume that similar dimension adjustments could occur throughout the proposed 20-year lease term.

⁵ Conflicting dimensions were provided in the application; clarified by Henninger/Adams.

floating cages or lantern nets, and 2 such lines of bottom cages. At the hearing, the applicant clarified that more lines of floating cages or lantern nets might be deployed if bottom cages were not deployed (Henninger/Ellis). If no bottom cages were deployed, it appears that up to 16 lines of floating cages or lantern nets could be deployed on the lease at maximum capacity. If this were the case, a total of 576 floating cages or lantern nets would be deployed.⁶

A single buoy would mark each bottom cage and support each lantern net deployed (App, 17 & 18). In the winter months all cages may be sunk to the bottom of the proposed lease site, and depending on winter weather conditions, scallops might be transferred to bottom cages, and lantern nets might be removed (App, 23, Henninger/Adams, & Henninger/Smith). A 15' x 30' work float, which would be located in the center of the northwestern third of the lease, is proposed. If granted, this work float might remain in place throughout the year (Henninger/Smith).⁷

The application states that individuals servicing the lease would be on site at least 4-5 days per week from June through November, and weekly during the winter months (App, 22). The application goes on to state that cages would be flipped once or twice a week, and that tumbling, sorting, and splitting bags would occur on-site, or on a float located approximately 7,000 feet from the site when the application was submitted, weekly from June through November (App, 22). Harvesting would occur throughout the year (App, 23). The applicant plans to service the site using a 24' skiff powered by a 115hp four-stroke outboard motor; smaller vessels with smaller engines may also be used (App, 23). The applicant also proposes to use a tumbler/sorter on site, which would be powered with a Honda 3000 generator (App, 24). No other power equipment or lights are proposed for the site, nor does the applicant anticipate needing to be on site to work beyond daylight hours (App, 24). According to the application, no activities are requested to be prohibited on the lease site (SR, 29).

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.

3

⁶ Page 9 of the application indicates a maximum of 675 floating cages or lantern nets may be deployed, but given the information in the application, and the testimony provided by the applicant during the hearing, this appears to be an error. If the lease is granted in full, a maximum of 576 floating cages or lantern nets would be permitted.

⁷ Allision Smith, member of the public

A. Riparian Access

The proposed lease is located west of Sunset Point, at the Mouth of Broad Cove, in Casco Bay (SR, 8). During MDMR's October 2, 2020 site visit, houses were observed along the Broad Cove shoreline, and docks and moorings were observed associated with some of these houses (SR, 8). The closest dock to the proposal observed by MDMR staff was located over 1,300 feet to the northeast, and the proposal is located slightly over 1,000 feet from the Broad Cove shoreline to the northeast at mean low water (SR, 8). A buoy, located 785 feet to the northeast of the proposal, was also observed (SR, 8). When asked if he knew the purpose of this buoy, the applicant stated that he believed the buoy described by DMR marks a mooring used to stage floats when they are being installed (Henninger/Ellis).

No testimony was provided at the hearing to indicate there is concern about the proposed lease's impact to riparian ingress and egress. Given the distance between the proposed lease area and the surrounding shorelines, docks, and mooring used to stage floats during seasonal installation, it appears that adequate room is available for riparian owners to navigate to and from their shorelines and that riparian access would 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

According to DMR's site report, Broad Cove is bisected by a deep channel (SR, 8). The proposed lease is located ~1,100 feet to the east of the 6-foot contour line on the western side of this channel, and between the 12-foot and 6-foot contour lines on the eastern side of the channel (SR, 8). A public-access pier⁸ and associated mooring field are owned by the Town of Cumberland and located within Broad Cove to the northwest of the proposal (SR, 8). During the public hearing, the Chair of the Cumberland CWC testified that currently, recreational vessels, including sailboats, utilize the mooring field and/or pier. The Chair went on to state that most vessels he has observed there have been under 30 feet in length (Witherill/Drury). The pier is located ~2,375 feet⁹ from the proposal. During DMR's site visit, the nearest marker delineating the channel leading to the pier was approximately 800 feet from the proposal, and approximately 750 feet separated the proposal and the nearest mooring within the mooring field (Adams, testimony). Per page 8 of the site report "Due to this distance, and the expected vessel flow along the deep water of the channel and within the channel markers leading to and from the town dock, the proposal is unlikely to hinder the use of these features." However, page 13 of the site report goes on to state that "it is possible that the proposal will have some impact to users of this public pier, as the location of the proposed lease will decrease the navigable area for mariners traveling between the pier and Casco Bay

⁸ The record refers to this pier in multiple ways. In this decision, the pier will be referred to as the "Cumberland public-access pier".

⁹ Pages 8 and 14 of the application show conflicting locations of this public access pier. Page 8 indicates the correct location. Therefore, the Town of Cumberland's public-access pier off of Broad Cove Reserve is located ~2,375 feet from the proposal, instead of 3,745 feet, as stated on page 13.

proper." Due to the distance between both the public-access pier and the marked channel that leads to it, and because no testimony was provided that indicated the proposal would impact navigation to the public pier, navigation to and from the pier itself, is unlikely to be unreasonably impacted by the proposal.

Testimony was provided, however, regarding the proposal's impact on the planned expansion of the municipally owned mooring field. Although in their site report and testimony, DMR noted that the closest mooring in the mooring field was approximately 750 feet from the proposal, testimony was provided by the Chair of the Cumberland CWC indicating that the mooring field's extent will change in the future (Witherill/Ellis). The Chair testified that there will be three additional moorings installed this year, for a total of 38 moorings in the field (Witherill/Ellis). The Chair went on to state that the extent of the mooring field "will all depend on the [Cumberland Town Dock] because we are limited by the number of dinghies that can tie up how many moorings we can put in" (Witherill/Ellis). The Chair of the Cumberland CWC went on to state that the field has been approved for "quite a few more moorings" and could expand to the Cumberland-Yarmouth line in the future (Witherill/Ellis). According to testimony provided by Cheyenne Adams, the Cumberland-Yarmouth line is located ~250 feet to the west of the proposed lease, at the nearest point. The Chair testified that the Cumberland CWC "request[s] that the aquaculture be placed as far from the mooring field as is practical and possible". Questioning between Ms. Adams and the Chair established that the nearest permitted mooring, which has yet to be installed, is ~400 feet from the proposal. The Chair of the Cumberland CWC stated that "400 feet should be...adequate" distance between the nearest permitted mooring and the proposed lease, however, he went on to state that "if there is any extra distance you could put in and still have an...adequate farm...we would request that be considered".

The record shows that the Town of Cumberland has established, and is in the process of expanding, a mooring field in Broad Cove, within Cumberland waters. The proposed lease is approximately 250 feet from, and runs roughly parallel to, the town line that separates Cumberland and Yarmouth waters. According to the applicant, the proposed lease location was picked so that vessels leaving the Cumberland Town Dock and/or the mooring field would be able to navigate via straight line out of the cove without altering path to avoid the proposed lease area (Henninger/Adams). If moorings within the Cumberland mooring field were to be deployed along the Yarmouth-Cumberland town line however, as was described by the Chair of the Cumberland CWC, a straight line drawn out of the cove to the east from the Yarmouth-Cumberland line north of the site (in locations east of, and therefore deeper than, the 12-foot contour line) would intersect with the proposed lease area. Additionally, the proposed lease operations, which would run roughly parallel to this town line, would decrease the navigable area available for motorized and/or sailing vessels, to access these moorings. Furthermore, as the mooring field expands, Broad Cove is likely to experience increased boat traffic, and therefore, additional navigable space would be needed to accommodate this elevated activity. Lastly, testimony was provided from Cumberland's CWC requesting that aquaculture be placed as far from the mooring field as possible. This evidence indicates that at maximum gear deployment and public mooring installation, the proposal could unreasonably interfere with the navigation in the area.

To ensure that the proposed lease would not unreasonably interfere with navigation in the area, considering the Cumberland Town Dock and the municipality's planned and permitted expansion of this mooring field, DMR initially proposed shifting the proposal's western boundary 75 feet to the east and reducing the length of the lease term to five years, if the proposal is granted. Based on the record, this boundary reduction would allow for boats to navigate in a straight route from moorings along the Cumberland-Yarmouth line out of Broad Cove to the east (avoiding shoal water and ledges near the Nubbin), as was the intention testified to by the applicant. Furthermore, the size of this reduction was determined considering the space needed for the vessels that have traditionally used this mooring field to navigate to and occupy these moorings. Using a 2:1 scope, and given the depth of the area, which according to NOAA charts is 14 feet at mean low water (and therefore approximately 24 feet at high water), the mooring rode connecting the mooring to the mooring buoy would be approximately 48 feet long. Given this rode, and considering a 30-foot vessel attached to the mooring, the swing radius of the vessel would be less than 100 feet at low water. Therefore, if the Town of Cumberland were to install moorings directly on the town line, this 75-foot reduction would allow a 225-foot space between the swing of a 30-foot vessel and the lease boundary.¹⁰ Given that testimony indicated that most vessels in the area are 30 feet in length or less, it appears that this distance would be adequate to allow vessels that have traditionally utilized the area to navigate on and off moorings, while simultaneously accommodating boat traffic navigating north or south between the mooring field and the proposed lease.

The lease term reduction was proposed to allow the state to reassess the impact of the proposal on navigation in the area after the Town of Cumberland has had additional time to develop of the Cumberland Town Dock and mooring field. During the public hearing, testimony provided by the Chair of the Cumberland CWC indicated that three additional moorings will be added in 2022, and that the Town has "been approved for quite a few more moorings" but did not give an exact timeline for when the build out would be completed because the extent of the field is still undetermined as result of the number of dinghies the Cumberland Town Dock can support. The testimony provided at the hearing indicated that the full extent of the Cumberland Town Dock and mooring field is not yet known, and therefore it is reasonable to assume that the level of use the facilities will experience, and therefore the amount and type of navigation that could occur in the area after further development are also unknown. It would be unreasonable for DMR to grant a lease that would inhibit the development and use of a municipal mooring field, and without knowing what this full extent might be, it is impossible to assess the proposal's impacts on planned and permitted, but not yet entirely established, navigational uses.

During the hearing, Mr. Henninger had the opportunity to cross examine Mr. Witherill and present additional information that may have countered Mr. Witherill's assessment. However, Mr. Henninger elected not to question Mr. Witherill or present additional evidence. Therefore, DMR's assessment and proposed recommendation was based evidence and testimony presented at the public hearing. On April 21, 2022, in accordance with Chapter 2.35(1) of DMR's regulations, a copy of the

-

 $^{^{10}}$ With a 75-foot reduction, the distance between the Yarmouth-Cumberland town line and the proposed lease would be approximately 325 feet.

proposed decision including the reduced lease term and size was sent to the email address listed on the application. That email noted that the applicant had until May 1, 2022 to file any responses, exceptions, or requests to correct misstatements of fact on the proposed decision. On May 3, 2022, Thomas Henninger requested an extension to the filing deadline.¹¹

DMR gave Mr. Henninger until May 12, 2022 to file any responses and he filed his response in accordance with the extended deadline. DMR noted that the response contained additional information that was not introduced or discussed at the public hearing. However, in accordance with Chapter 2.35(3), a copy of the proposed decision and Mr. Henninger's submission was sent to the Commissioner for his final consideration. On May 25, 2022, the Commissioner received the following email from David Witherill:

I have just spoken to Thomas Henninger about his long term lease application for an aquaculture operation in Broad Cove in Yarmouth. I attended via Zoom, his DMR hearing several months ago in Yarmouth, and as chair of the Cumberland Coastal Waters Commission, I expressed reservations about the operations close proximity to the Town of Cumberland's mooring field. I was under the impression at the time that aquaculture site butted up against the Cumberland Yarmouth line where the mooring field was located. In conversation with Mr. Henninger today, he assures me that his proposed site will be no closer than 250 feet from the Cumberland mooring field, and after checking the application map, this appears to be the case. According to Mr. Henninger, DMR has recently increased the distance to the mooring field by another 75 feet, thus reducing the size of his potential aquaculture site. I would like to let you know that this reduction is unnecessary, and the original 250 feet will suffice. I also do not object to the length of his lease being extended to 20 years based on his location and due to the fact he has been a good neighbor in his previous operations. 12

In this instance, Mr. Witherill, who attended the hearing and offered testimony on the proposal indicated that he no longer had any concerns with the proposal and DMR's reduced lease term and acreage was no longer necessary. Because the additional information offered by Mr. Witherill clarified the testimony he gave at the hearing, the Commissioner re-opened the hearing record in accordance with Chapter 2.34(6)(B) to take Mr. Witherill's comments as additional evidence on this specific issue in order to have all the information necessary to make a decision. Accordingly, upon re-evaluation of Mr. Witherill's testimony in light of this new evidence, DMR finds that the lease size and term reductions contained in the proposed lease decision are no longer necessary.

Therefore, considering Mr. Witherill's May 25, 2022, comment, the aquaculture activities proposed for this site will not unreasonably interfere with navigation.

C. Fishing & Other Uses

_

¹¹ Mr. Henninger requested an extension because there was some confusion with his email, and he wasn't aware that DMR had issued a proposed decision. However, DMR sends all correspondence to the contact listed on the application. DMR sent the decision to the contact person listed on Mr. Henninger's application. In granting the extension, DMR reminded Mr. Henninger that the agency sends communication to the contact person listed on the application.

¹² Based on Mr. Witherill's comments, it is likely Mr. Henninger provided him with a copy of DMR's proposed decision or explained the proposed reductions as proposed decisions are only sent to legal parties to the proceeding. Mr. Witherill was not a legal party to the proceeding.

Fishing. During the October 2, 2020 site visit, DMR observed a few lobster buoys to the northeast and northwest of the proposal. The site report went on to state that "light lobstering activity was observed to the southeast, between the proposal and The Nubbin" (SR, 9). According to the applicant, "there have been a small number of lobster pots observed in the surrounding area" in the summers and "minimal recreational fishing has been observed in the area around the Nubbin" (App, 28). The application goes on to state that no commercial or recreational fishing has been observed within the proposed lease site (App, 28). During the public hearing, the applicant testified that no commercial or recreational fishing has been observed within the proposed lease site since the application was submitted (Ellis/Henninger). Furthermore, no testimony was offered regarding lobster or recreational fishing in the area.

Other aquaculture uses: During the public hearing, Ms. Adams testified that there were 13 Limited Purpose Aquaculture (LPA) licenses, and two leases, within one mile of the proposed lease (SR, 9). The proposal partially overlaps, and is intended to replace, experimental lease CAS BC2x, which is held by the applicant (SR, 9). The closest aquaculture activity to the site held by an individual other than the applicant is a LPA license held by Sean Bergen, which is located 335 feet to the southeast (SR, 9). DMR did not receive any testimony or evidence to suggest that the proposed site would interfere with other aquaculture uses in the area.

Other water-related uses: DMR's site report details a moored float and a fouled buoy (assumed in DMR's site report to be a mooring) to the north of the proposed lease (SR, 8). When asked by DMR staff if he knew the purpose of the buoy, which was located ~785 feet to the northeast of the proposal at the time of the site visit, the applicant stated that he believed the buoy described by DMR marks a mooring used to stage floats during installation (Henninger/Ellis). During the hearing, Ms. Adams asked if the moored float observed to the north of the proposed site during the site visit was associated with the applicant's operations. The applicant testified that although he didn't think the float was present during the DMR site visit, he does have a "live float" in that location which is used to store oysters. This raft would remain outside of the lease site if the proposal were granted (Adams/Henninger). Other water-related uses of the area described in the application included light kayaking and paddle boarding activity (App, 28). During the public hearing, DMR did not receive any testimony or evidence to suggest that the proposed site would interfere with other water-related uses of the area. Furthermore, no testimony was provided to indicate that the proposal would interfere with the use of the mooring described on page 8 of the site report, and as no complaints have been received by DMR regarding impacts to this mooring from the applicant's current operations, which are closer to the mooring than the proposed standard lease, the proposal is unlikely to unreasonably interfere with use of the aforementioned mooring.

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

D. Flora & Fauna

Site observations. DMR scientists conducted a SCUBA transect through the proposed lease area on October 2, 2020. The bottom of the proposed site is composed of soft mud (SR, 10). Brown benthic microalga was observed in abundance and horseshoe crabs and drift eelgrass were commonly observed. A variety of other species were observed with abundances classified as "occasional" or "rare".

Eelgrass. Data collected in 2018 by the Maine Department of Environmental Protection, in cooperation with the Casco Bay Estuary Partnership, indicate that eelgrass beds were located approximately 120 feet to the east of the proposal (SR, 12). No rooted eelgrass was observed in the proposed lease area in the underwater transect conducted by DMR on October 2, 2020, although drift eelgrass was commonly observed (SR, 12). It is worth noting that DMR divers observed rooted eelgrass both to the east and west of the site during the dive transect they conducted in the area (SR 12).

Wildlife. During DMR's visit to the site on October 2, 2020, gulls, a cormorant, and a juvenile bald eagle were observed in the general vicinity of the proposed lease (SR, 11). Data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) indicate that the proposed lease is located 250 feet to the west of tidal waterfowl and wading bird habitat and approximately 445 feet to the northwest of essential habitat for the roseate tern, a species on both state and federal endangered species lists (SR, 12). DMR sent a copy of the lease application to MDIFW for their review and comment, but no comments were received. No testimony was provided at the hearing to indicate there is concern regarding the proposed activities and the flora and fauna in the area.

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

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

E. Public Use & Enjoyment

The proposed site is not within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal government (SR 13). Sunset Point Overlook, owned by the Town of Yarmouth is located approximately 1,360 feet to the east of the proposed site and the Town of Cumberland owns a public-access pier approximately 2,375 feet¹⁴ to the northwest of the proposal (SR 13). A nearby mooring field and marked channel leading to the pier are also maintained by the Town of Cumberland. Impact to navigation to and from this pier, and use of the mooring field is described above, in Section 3 (B).

Therefore, considering the acreage reduction and shortened lease term described above, the aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment

¹³ CF: Email to MDIFW from C. Burke on July 9, 2020.

¹⁴ Pages 8 and 14 of the application show conflicting locations this public access pier. Page 8 indicates the correct location. Therefore, the Town of Cumberland's public-access pier off of Broad Cove Reserve is located ~2,375 feet from the proposal, instead of 3,745 feet, as stated on page 13.

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 lists Mook Sea Farm as the source of stock for American oyster, sea scallop, and hard clam seed (App, 2). This hatchery is approved by DMR.

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, no lighting is proposed for the site (App, 24). The application goes on to state that work on the site after dark would only occur in an emergency situation (App, 24).

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

H. Noise

The boats proposed for use on the site are a 24-foot skiff powered by a 115-horsepower, 4 stroke (or smaller) outboard motor that the applicant anticipates will be used 4-7 days per week during the growing season, and less frequently during the winter months (App, 23). The applicant also proposes to use a Honda 3000 generator, which would power a tumbler/sorter, on a float within the lease site. According to page 23 of the application "the tumbler/sorter is insulated with sound-baffling materials and covered with a plastic housing" and the generator would be located within an "insulated metal box". No testimony was provided to indicate there are any concerns about the proposed activities and noise.

Based on this evidence, it appears that the applicant has taken reasonable measures to minimize noise caused by activities on the lease site 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 plans to use oyster cages on the site that would be gray or black in color (App, 21). Perimeter, or marker, buoys would be yellow in color, as will be required by DMR Rule as of January 1, 2023. During the public hearing, the applicant indicated that buoys used to mark bottom cages and support lantern nets would likely be yellow in color as well. Given that the majority of gear proposed would be dark in coloration, the gear proposed by the applicant complies with DMR's color limitations. However, as DMR regulations only require perimeter buoys to be yellow in color, the applicant has the

 $^{^{15}}$ If granted, the leaseholder should be noted that Chapter 2.DMR's rules require marker buoys to be readily distinguishable from interior buoys and aquaculture gear.

latitude to change the coloration of the buoys used to mark bottom cages and support lantern nets. The gear and work float proposed by the applicant comply with DMR's height limitations.

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 oyster, sea scallop, and hard clam seed to be cultured for the lease site.
- g. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- h. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- i. The aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

Accordingly, the evidence in the record supports the conclusion that the proposed aquaculture activities meet the requirements for the granting of an aquaculture lease set forth in 12 M.R.S.A. §6072.

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease to Thomas Henninger for 5.99 acres, for 20 years for the cultivation of American/eastern oysters (*Crassostrea virginica*), sea scallops (*Placopecten magellanicus*), and hard clams (*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).¹⁶ 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 the proposed 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 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: June 9th 2022

Patrick C. Keliher, Commissioner Department of Marine Resources

¹⁶ 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."