STATE OF MAINE DEPARTMENT OF MARINE RESOURCES

Standard Aquaculture Lease Application Suspended Culture of blue mussel (*Mytilus edulis*) Damariscotta River, South Bristol, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Dewey' Shellfish LLC applied to the Department of Marine Resources (DMR) for a twenty-year standard aquaculture lease on 0.58 acres northwest of Peters Island in the Damariscotta River, in South Bristol, Lincoln County, Maine. The proposal is for the suspended culture of blue mussel (*Mytilus edulis*).

1. THE PROCEEDINGS

The pre-application meeting on this proposal was held on September 24, 2019, and a scoping session was held on November 19, 2020. DMR accepted the final application as complete on March 29, 2021. Notice of the completed application and public hearing was provided to state agencies, the Town of South Bristol, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listsery. DMR sent a Harbormaster Questionnaire to the Harbormaster for the Town of South Bristol, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations and received a response from the Harbormaster on September 13, 2021. Notice of the hearing was published in the *Lincoln County News* on August 22, 2024. The hearing was noticed for September 23, 2024, with a backup date of September 25, 2024. The public notice for the hearing stated that the proceeding would be conducted in-person and directed interested persons to register to provide testimony or ask questions during the proceeding. Eight individuals registered to participate in the hearing, all indicating an intention to provide testimony. DMR did not receive any applications for intervenor status.

Heidi Sproul contacted DMR on September 11, 2024, stating that she and Robert Sproul, who had both previously registered to participate in the hearing, would be unable to attend the September 23, 2024 hearing date due to unforeseen circumstances. Due to the nature of the unforeseen circumstance, DMR continued the hearing, adding an additional hearing day on September 25, 2024, to allow both Heidi Sproul and Robert Sproul to cross examine the applicant and provide testimony.

Retired South Bristol Harbormaster, Cecil Burnham, attended the hearing on September 23, 2024, and asked to cross examine the applicant and provide personal testimony. Because Mr. Burnham had not registered to participate in the hearing as a member of the public, and was no longer a municipal

official, he was denied the opportunity to cross examine and testify. Mr. Burnham told DMR that he thought he had been registered for the proceedings by a town staff member. On September 24, 2024, a town staff member contacted DMR requesting that Mr. Burnham be registered to testify at the September 25, 2024, hearing. DMR allowed Mr. Burnham to attend the hearing on September 25, 2025, in order to provide testimony and cross examine witnesses. Mr. Burnham was the Harbormaster for South Bristol when the Harbormaster Questionnaire was sent out by the Department and he completed and returned the questionnaire at that time.

Sworn testimony was given at the hearing on September 23, 2024, by the following witnesses¹:

Name	Affiliation
Dillon Shaw	Applicant
Crystal Ready, Joy Vaughan, Jeff Poole, Susan	Members of the public
Lamia, Thomas Lamia	

Sworn testimony was given at the hearing on September 25, 2024, by the following witnesses:

Name	Affiliation
Heidi Sproul, Robert Sproul, Cecil Burnham	Members of the public

Additional DMR staff and members of the public attended the hearing but did not offer testimony. The Hearing Officer was Joshua Rozov. The record closed at the end of the hearing on September 25, 2025.

The evidentiary record before DMR regarding this lease application includes the application, four exhibits introduced at the hearing, the record of testimony, the DMR site report, and other records included in DMR's case file. The evidence from these sources is summarized below.^{2,3}

LIST OF EXHIBITS

- 1. Case file
- 2. Application

¹ At the hearing on September 23, C. Ready gave testimony that purported to address how this proposal would impact fishing and navigation within Seal Cove. However, this proposal is located in Long Cove, not Seal Cove. On September 23, 2024, after Ready testified at the hearing, she sent DMR an email requesting information about a hearing for Blackstone Oyster Co., a pending application for an unrelated proposal located within Seal Cove, approximately 1 mile from this proposal. This proposal could not interfere with fishing or navigation in Seal Cove. Therefore, it appears that Ready mistakenly provided testimony that does not relate to this proposal, and for this reason, it has not been considered.

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

³ In references to testimony, "Smith/Jones" means testimony of Smith, questioned by Jones.

- 3. DMR site report, issued on January 2, 2024
- 4. Susan Lamia Exhibit A and Exhibit B
- 5. Heidi Sproul Exhibit A and Exhibit B

2. DESCRIPTION OF THE PROJECT

A. Site History

Dillon Shaw, owner of Dewey's Shellfish LLC, applied for and was granted two Limited Purpose Aquaculture (LPA) licenses, SHAW114 and SHAW214, in 2014. The LPAs were authorized for the culture of blue mussel (*Mytilus edulis*) using a 20' x 40' shellfish raft. These LPAs were located within the footprint of the current proposed lease site. Mr. Shaw operated the two LPAs from 2014 through 2023. In 2023, Mr. Shaw applied for a renewal for both LPAs but later withdrew his application. LPAs SHAW114 and SHAW214 expired on December 31, 2023. After the LPAs expired, Mr. Shaw stopped conducting aquaculture activities but kept the raft in the boundaries of the former LPAs. Because the raft was no longer being used for aquaculture, Mr. Shaw was responsible for obtaining any necessary local, state, and federal permits for the raft. At the time of the hearing in September 2024, the raft was still present within the boundaries of the former LPAs and testimony at the public hearing refers to the former LPAs and associated raft.

B. Site Characteristics

On September 17, 2021, and September 30, 2021, 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, northwest of Peters Island, Damariscotta River, in South Bristol (SR 2). The shoreline surrounding the proposal is a mixture of rock ledges and mud with mixed forest uplands (SR 2). The proposal is located outside of the primary navigational channel for the Damariscotta River and no houses or inhabited properties were observed within 1,000 feet of the proposal (SR 2).

The area around the site is currently classified by the DMR Bureau of Public Health and Aquaculture's Water Quality Classification program as "open/approved for the harvest of shellfish." (SR 10). At the time of the DMR's site assessment in 2021, water depths within the proposed lease site ranged from 52 feet to 64 feet (SR 2). DMR staff observed the depths of the proposed lease site on September 30, 2021, at approximately 12:33 PM (SR 2). Correcting for tidal variation derives water depths to be a range from 48.6 - 60.6 feet at mean low water (MLW) and from 56.1 - 68.1 feet at high tide (SR 2). The bottom of the proposed lease area is composed of mud and clam rubble (SR 3).

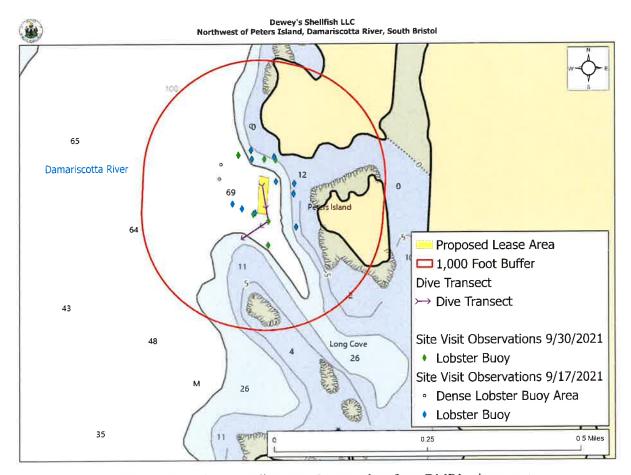


Figure 1: Proposed lease site and surrounding area. Image taken from DMR's site report.

C. Proposed Operations

The applicant proposes to culture blue mussels (*Mytilus edulis*) on the proposed lease site using suspended culture techniques (App 1-2). A total of six 40'x20' rafts, ten 30'x60' nets to surround all rafts, and 2,600 30' mussel ropes are proposed for the site (App 4).

The six rafts would be lined up one by one, each raft connecting to the next along the 40' side of the raft (App 22). Rafts would be attached to each other with cable, with tires in between each raft (Shaw/Rozov). Each raft would have 30' mussel ropes, seeded with mussel seed, attached to the bottom of the raft (App 23). Each corner of the row of rafts would have six 10,000-pound mooring blocks and four helix anchors (Shaw/Rozov). The moorings would be attached to the end raft with 80' of 1 3/4' chain (App 23).

Seeding within the proposal will occur year-round, seven days a week (App 36). The application states the mussel seed would come from the predator nets surrounding the raft or from the mussel ropes during harvest (App 36). The seed from the predator nets would be processed in the late fall and early winter (App 36).

Harvesting would occur seven days a week, year-round, not exceeding 70 hours per week (App 36). The mussel ropes would be pulled up on a small conveyer housed on the harvesting boat (App 36). The harvesting boat would be 32' (App 8). The mussels would be stripped from the rope and placed into totes on the harvesting boat (SR 36). The mussels would then be moved to a barge located in Clarks Cove for sorting and cleaning (App 36). Mussels that are not yet ready to be harvested would be placed into bags and hung onto the rafts in the proposal (App 36).

Rafts and moorings would be monitored weekly to ensure structural integrity (App 36). Diving would occur once a month to monitor the mooring lines, blocks, and ropes (App 36). The predator nets would be cleaned every three months with a power washer attached to the harvesting boat (App 36).

A harvest barge would be used to house all the powered equipment (App 9). The barge would be moored off site in Clarks Cove and towed to the proposed lease site as needed, at a maximum three times a week (Shaw/Rozov).

The power equipment proposed for the site includes the following:

Equipment	Description	Months of Operation/Frequency of Use
16' boat	Used for monitoring lease site	Year-round
32' boat	Used for harvesting product from lease site	Year-round
Gasoline generator	Used to power all equipment	Year-round
Power Washers	Will be used during gear maintenance	Year-round
Declumper	Separates mussels from each other	Year-round
Seed grader	Sorts mussels by size	Year-round
Inspection belt	Used when harvesting mussels	Year-round
Debysser	Cleans product	Year-round
Net reel	Used during the harvesting process	Year-round

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, § 2.37(1)(A)(1)⁴.

During the site visits, DMR staff did not observe any docks or moorings within 1,000 feet of the proposal (SR 4). The nearest docks are on the east side of Peters Island and on the mainland shore directly to the east of Peters Island, approximately 1,000 feet and 1,350 feet away, respectively (SR 4).

The proposal is located near the northern entrance of Long Cove (SR 4). There is approximately 675 feet of navigable waters between the southern boundary of the proposal and an intertidal ledge located at the northern entrance to Long Cove at MLW (SR 4). During the September 17, 2021, site visit, DMR staff observed approximately seven piers and docks in Long Cove to the southeast of the proposal, the nearest dock being approximately 1,660 feet to the southeast (SR 5).

The application states that the applicant has not observed any riparian landowners coming or going from shorefront property within 1000' feet of the proposal (App 13).

The South Bristol Harbormaster supplied a completed Harbormaster Questionnaire form, dated September 13, 2021. The questionnaire asks how this proposal might affect the ability of any riparian

^{4 13-188} C.M.R. ch. 2.

owners located within 1,000 feet of the proposed lease to get to and from their property. The South Bristol Harbormaster stated this proposal would not affect riparian owners (CF – Harbormaster Questionnaire).

The proposed lease site is located to the west of Peters Island. The nearest docks are located on the eastern side of Peters Island. If the proposal were granted, there would be approximately 675 feet of navigable waters between the southern boundary of the proposal and the nearest observed intertidal area to the south. The remaining 675 feet of navigable waters would be adequate to allow vessels of varying sizes to enter Long Cove and navigate around Peters Island to access the docks on the eastern side of the island, or to access the docks and piers to the southeast of the proposal.

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 proposal is located near the northern entrance to Long Cove (SR 5). There is approximately 600 feet between the western boundary of the proposal and the primary navigational route in the Damariscotta River (SR 5). There is approximately 625 feet to the south between the southern boundary of the proposal and an intertidal ledge in the entrance to Long Cove (SR 5). There is approximately 370 feet from the nearest point of the proposal to Peters Island (SR 4). At the time of the site visit, DMR staff observed a boat operating in the main river channel to the west of the proposal (SR 5).

At the hearing, a member of the public testified that at low tide, a 20-foot boat would still be able to navigate between the eastern boundary of the proposal and the western ledge of Peters Island (T. Lamia/Rozov). The member of the public also testified that boats navigating the Damariscotta River would still be able to enter Long Cove by navigating between the southern boundary of the proposal and the intertidal ledge to the south of the proposal (T. Lamia/Rozov).

The proposal is located approximately 600 feet to the east of the main navigational route in the Damariscotta River. This distance would allow water vessels to utilize the navigational route of the Damariscotta River without risk of the rafts and gear within the proposal becoming a navigational hazard.

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

C. Fishing & Other Uses

When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other uses, including water-related uses, of the area (12 M.R.S.A. § 6072(7-A)(C); Chapter 2.37(1)(A)(3)).

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. This section provides additional context about Limited Purpose Aquaculture (LPA) licenses and Mr. Shaw's operation of his LPA sites as they relate to lobster fishing activity in the area. LPAs are annual licenses that are processed and evaluated in accordance with 12 M.R.S.A. § 6072-C and Chapter 2.90. Except for moorings, an LPA cannot exceed 400 sq ft in size and an individual can hold a maximum of four LPAs (12 M.R.S.A. § 6072-C(2-A)). For an LPA to be granted, the Commissioner must find that the proposed LPA would satisfy the provisions of 12 M.R.S.A. § 6072-C(2-A), which includes no unreasonable interference with fishing. LPAs expire on December 31 each year but may be renewed provided they continue to meet applicable criteria. Chapter 2.90(1)(A), 2(G).

According to DMR records, Mr. Shaw applied for two LPAs in the area where the lease is proposed on April 18, 2014. The LPAs proposed to culture blue mussel (*Mytilus edulis*) using a 20' x 40' shellfish raft, kept in place by a mooring. The LPA applications stated that there was some lobstering activity on and around the proposed license sites. With the application submission and in accordance with Chapter 2.90(2)(D), Cecil Burnham, who was Harbormaster at the time, certified that he reviewed the LPA applications and determined that the activities as proposed would not unreasonably interfere with fishing among other criteria. On June 26, 2014, Mr. Shaw was issued two LPA licenses, SHAW114 and SHAW214. Mr. Shaw renewed the LPAs each year from 2015 through 2023.

Around October 17, 2018, Mr. Burnham, who was still serving as Harbormaster, called staff within the Aquaculture Division to let them know that Mr. Shaw's shellfish raft had detached from the mooring and drifted upriver (CF-Email to South Bristol, October 17, 2018). After the call, DMR staff sent Mr. Burnham an email, with an attached image, showing the permitted location of the LPA sites in

relationship to the location where the raft had drifted (CF-Email to South Bristol, October 17, 2018).⁵ On October 25, 2018, Mr. Burnham sent the Department a letter reiterating that the raft had detached from the moorings and moved upriver by approximately 800 feet (CF-Burnham Letter to DMR, October 18, 2018). Mr. Burnham stated that the town was very concerned about the detached raft because the area may contain thousands of lobster traps during the summer months (CF-Burnham Letter to DMR, October 18, 2018).⁶ Mr. Burham also stated that the area is not suitable for Mr. Shaw's LPAs and they should be discontinued (CF-Burnham Letter to DMR, October 18, 2018).

On December 16, 2018, Mr. Burnham sent another letter to the Department indicating that Mr. Shaw took measures to move the raft back to the permitted location (CF-Burnham Letter to DMR, December 16, 2018). In the letter, Mr. Burnham also suggested that Mr. Shaw place markers at the surface of the water to denote the location of the moorings, because they extended approximately 100 feet beyond the footprint of the raft to the north and south (CF-Burnham Letter to DMR, December 16, 2018). Mr. Burnham made this suggestion so that lobstermen would be able to avoid tangling their traps in the mooring tackle (CF-Burnham Letter to DMR, December 16, 2018). Mr. Burnham also stated that he felt the LPAs could be renewed for another year (CF-Burnham Letter to DMR, December 16, 2018).

On December 17, 2021, South Bristol Town Clerk sent the Department a letter requesting that Mr. Shaw's LPAs not be renewed for 2022 (CF-Town Letter to DMR, December 17, 2021). The town stated that gear on the site had not been secured properly and Mr. Shaw was not following Chapter 2.90 requirements (CF-Town Letter to DMR, December 17, 2021). On December 21, 2021, Mr. Burnham submitted a separate letter reiterating the town's concerns and referenced the dislodged raft issue from 2018 (CF-Burnham Letter to DMR, December 21, 2021). DMR renewed the LPAs for 2022, stating in its decision that Mr. Shaw had responded to and rectified complaints of errant gear and according to routine DMR inspections gear was properly located in 2020 and 2021 (CF-2022 LPA Renewal Decision). However, DMR also stated that based on routine inspections, the LPAs consistently lacked proper marking as required by chapter 2 § 2.90(6)(C) throughout their licensing term despite repeated follow-up from DMR staff (CF-2022 LPA Renewal Decision). Therefore, the 2022 renewal was conditioned upon Mr. Shaw submitting and following a marking plan. DMR stated it would periodically inspect the sites to ensure compliance with the plan and that failure to keep the sites marked may result in revocation (CF-2022 LPA Renewal Decision). Mr. Shaw applied to renew the LPAs in 2023 and DMR did not receive

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⁵ Based on the record, Mr. Burnham communicated with DMR via phone or handwritten letters. Mr. Burnham did not have a dedicated email address, so email messages from DMR to Mr. Burnham were sent to sbristol@tidewater.net, which appears to be a municipal email account. Based on the content of the email message sent to sbristol@tidewater.net, it is clear that a portion of the call was specific to the detached rafts and that waypoints for the errant gear had been collected by either Marine Patrol or Mr. Burnham.

⁶ The LPAs were subsequently renewed. It does not appear that DMR required the moorings be marked. It is unknown if Mr. Shaw voluntarily took measures to mark the moorings.

any comments from the town or other stakeholders. The LPAs were renewed for 2023. After Mr. Shaw withdrew his renewal application for 2024, the LPAs expired on December 31, 2023. Mr. Shaw was required to remove all gear and his raft by April 15, 2024. Mr. Shaw did not remove the raft from within the boundaries of the former LPAs.

Lease Application. During the September 17, 2021, site visit DMR staff observed 10 lobster buoys in the vicinity of the lease proposal and observed substantial lobstering activity in the Damariscotta River to the west of the lease proposal (SR 4, 6). During the September 30, 2021, site visit, DMR staff observed 6 lobster buoys in the vicinity of the lease proposal and substantial lobstering activity in the Damariscotta River to the west of the lease proposal (SR 4, 6). Two lobster boats were observed operating in the vicinity of the lease proposal, one boat to the south and one boat to the north (SR 6). During the dive transect, discussed further in section E, DMR staff observed occasional American lobster (*Homarus americanus*) within the boundaries of the lease proposal (SR 6).

DMR received a completed Harbormaster Questionnaire form, dated September 13, 2021, from Mr. Burnham, who then served as the South Bristol Harbormaster. The form stated that the area is used for lobstering, but that some lobstermen are "shy about setting up the traps near [the applicant's current] LPA because of the past history of Mr. Shaw's growth floats moving a lot," (CF – Harbormaster Questionnaire).

The applicant testified that he had observed lobster buoys about ten feet away from his proposed lease site (Shaw/Rozov).

At the hearing, a member of the public, J. Poole, testified that before the LPAs operated by Shaw were put in Long Cove there were approximately 200 lobster traps in the area (Poole Testimony). Poole further testified that the current LPAs have displaced a large number of lobster fisherman, and that the area was a productive lobster fishing location (Poole Testimony). On cross examination, Poole stated that there used to be approximately 25 lobstermen who would place traps in the vicinity of the current proposal (Poole/Ellis). At the September 23, 2024, hearing, a member of the public estimated that there used to be around 50 lobstermen in the area (Burnham/Ellis). Another member of the public testified that now they only observe about 10 lobster traps in the area around the proposal (T. Lamia/Rozov). A member of the public testified that the lobstering would most likely return if there were no structures in that area (Poole/Ellis). Poole also testified to the presence of recreational fishing in the area from June through October (Poole/Ellis).

Discussion. In 2014, Mr. Shaw applied for LPAs to culture blue mussels using a 20' x 40' raft in an area 800 sq ft in size in the footprint of the proposed lease site. The LPA applications confirmed that there was some lobstering activity on and around the proposed license sites. The Harbormaster signed the applications stating that the activities as proposed would not unreasonably interfere with fishing. DMR

subsequently approved the LPAs in 2014. In 2018 when the rafts on the LPAs detached and moved upriver, the Harbormaster stated that the areas around the LPAs were heavily utilized by lobstermen. The Harbormaster also recommended that the moorings for the raft, which were 100 feet to the north and south of the raft be marked so as not to interfere with lobstering activity.

During both site visits in 2021, DMR staff observed lobster buoys in the vicinity of the proposal and heavy lobstering activity to the west of the proposal. According to multiple members of the public, before the LPAs were permitted in this location there were over 200 lobster buoys in this area and between 25 to 50 lobstermen utilizing this area for commercial lobstering. Multiple members of the public testified that since the placement of LPAs SHAW114 and SHAW214 the amount of lobstering in the area has drastically declined. During the site visits, a maximum of 10 lobster buoys were observed in the vicinity of the proposal. T. Lamia also testified to currently only observing approximately 10 lobster buoys in the vicinity of the proposal. Testimony from the public further established members of the public believed lobstering would return to the area if the current structures ,the rafts, were removed. The Harbormaster Questionnaire further stated that some lobstermen avoided setting traps in the area because of concerns of entanglement due to the past failure of Mr. Shaw to adequately secure the raft located within the proposal. (CF – Harbormaster Questionnaire). The testimony and site observations support a conclusion that the prior amount of aquaculture activity in the area, permitted through the LPA previously held by Mr. Shaw within the boundaries of this proposal, has adversely impacted commercial lobstering.

According to the testimony provided during the lease hearing, the previous aquaculture activities in this area, which were much smaller in terms of the area occupied and equipment utilized than the current proposed lease, unreasonably interfered with commercial fishing activities. Based on the record evidence, an expansion of aquaculture activities as proposed here would unreasonably interfere with fishing in the area. An LPA granted by DMR is limited to the size of 400 square feet, meaning the two LPAs that were used for aquaculture in the vicinity of this proposal during 2014 through 2023 occupied no more than 800 square feet. The LPAs contained one 20' x 40' shellfish raft. The applicant has requested a lease site of .58 acres, or approximately 25,265 square feet. If the lease were granted, that would increase the footprint of aquaculture in the area, from that previously permitted by the LPAs, by 24,464.8 square feet. The proposed lease would also contain six floats that each measure 20' x 40' as well as ten 30'x60' nets, and 2,600 30' mussel ropes.

While the record evidence reveals that the operation of the LPAs previously owned by Mr. Shaw caused a decrease in the amount of lobstering activity in the area, DMR staff observed lobstering still occurring in the surrounding area. During both site visits in 2021, DMR staff observed lobster buoys in the vicinity of the proposal and a significant amount of lobstering activity in the main river to the west of the proposal. The remaining lobstering use was heavy enough that when Mr. Shaw failed to keep the raft

secured in the area or properly mark the site, it raised significant concerns about impacts to the lobster fishery from the Town of South Bristol. According to information provided by the Town Harbormaster at the time the detachment occurred, the area around the then-operating LPAs could contain thousands of lobster traps during the summer months. (CF-Burnham Letter to DMR, October 18, 2018).

While lobstering does still exist in the surrounding area of the proposal, the existence of aquaculture activities in the proposal location has caused an observable decrease in lobstering in that direct area. An increase from 400 square feet of aquaculture activities to 25,265 square feet of aquaculture activities in the area would further interfere and decrease existing lobstering in the area. Due to the amount of existing lobster fishing activity in the area, and the negative impacts to lobster fishing caused by aquaculture leases within the boundaries of this proposed lease site that were smaller in scope and area, DMR finds that the proposal would unreasonably interfere with commercial lobster activity in the area.

Other uses. The application states that kayaking has been observed in the area of the proposal but only occurs once or twice a month from spring to fall, and that the kayakers stay about 500 feet from the proposal site (App 13).

A member of the public testified to recreationally navigating around Peters Island in a kayak and voiced concern about losing the ability to do so if the proposal was to be granted (Sproul/Ellis). Another member of the public testified to the occurrence of swimming around the area of Peters Island (S. Lamia Testimony).

As stated in section 3(B), there is approximately 370 feet between the eastern boundary of the proposal and the western shoreline of Peters Island. 370 feet would provide adequate room for both kayakers and swimmers to participate in these activities around this island without risk of interference from the proposal.

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

At the time of the site visits, there were two Limited Purpose Aquaculture (LPA) licenses, SHAW114 and SHAW214, within 1,000 feet of the proposed lease site (SR 6). These LPAs were owned by Dillon Shaw, owner of Dewey's Shellfish LLC. As discussed earlier in this decision, these LPAs were not renewed and expired on December 31, 2023.

There is one existing aquaculture lease site, DAM PI2, within 1,000 feet of the proposal (SR 6). DAM PI2 is held by Mook Sea Farms and consists of three tracts, one of which is within 1,000 feet of the proposal (SR 6-7). DMR did not receive any comments from the holder of DAM PI2 regarding this proposal.

The Harbormaster Questionnaire received from the South Bristol Harbormaster, dated September 13, 2021, states that the proposal would interfere with DAM PI2 by impeding that lease holder's navigation to and from their lease when moving their oysters for winter storage (CF – Harbormaster Questionnaire). Mr. Burnham, the Harbormaster who completed the questionnaire, confirmed through testimony at the hearing that he never talked to the owner of Mook Sea Farms about the proposed lease (Burnham/Shaw). The applicant testified that he had spoken to the owner of DAM PI2 about the proposed lease and that the owner had stated the proposal would not cause interference, and they would still be able to access their lease site (Shaw/Burnham). Mook Sea Farms did not submit any comments concerning this proposed lease to DMR or offer any testimony. DAM PI2 is located on the eastern side of Peters Island, while this proposal is located on the western side of Peters Island (SR 7).

At the hearing, the applicant testified that he had spoken to the owner of DAM PI2 and that the owner had stated the proposal would not cause interference, and they would still be able to access their lease site (Shaw/Burnham). While the Harbormaster Questionnaire raised concern regarding the owners of DAM PI2 navigating to and from the DAM PI2 lease site, Mr. Burnham confirmed that he had not spoken with the owner of DAM PI2 before raising these concerns. The applicant testified that he had talked to the owners of DAM PI2 and no concerns were raised. Additionally, testimony was provided during the hearing that boats would still be able to navigate around Peters Island, even at low tide. This would allow the holder of DAM PI2 to still reach their lease site if this proposal were to be granted. DMR concludes that Mr. Shaw's testimony regarding his conversations with the owner of DAM PI2 is credible, and that the record evidence reveals the proposed lease would not interfere with the use of other aquaculture leases.

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. On September 30, 2021, DMR staff conducted a dive using SCUBA to assess the epibenthic ecology of the area (SR 7). The observed bottom within the boundaries of the proposal was primarily soft mud with sporadic shell rubble (SR7). DMR staff observed lobster burrows within the boundaries of the proposal (SR 7).

Species Observed	Abundance	
American lobster (Homarus americanus)	Occasional	
Horseshoe crab (Limulus polyphemus)	Occasional	

The application states that the area has an abundant amount of lobsters, crabs, and blue mussels (App 11).

Eelgrass. Historical records of eelgrass collected by DMR in 2010 indicated mapped eelgrass (*Zostera marina*) located within 1,000 feet of the proposal, on the intertidal ledge south of the proposal (SR 8). DMR staff observed no eelgrass during the SCUBA dive they conducted on September 30, 2021 (SR 8).

Wildlife. According to Geographic Information System (GIS) data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and available through the Maine Office of GIS (MEGIS), the proposal is not located within Tidal Waterfowl and Wading Bird Habitat (TWWH) (SR 8). There is TWWH within 1,000 feet of the proposal, along the shoreline of Peters Island and on the intertidal ledge to the south of the proposal (SR 8).

During the September 30, 2021, site visit, DMR staff observed cormorants (*Phalacrocoracidea spp.*) within the vicinity of the proposal (SR 9).

A member of the public provided testimony that there is currently an osprey nest on Peters Island, as well as seals within the cove and on the island (Vaughn Testimony).

Due to there being no observed eelgrass within the vicinity of the proposal, the existing level of activity in the area, the nature and scope of the proposal, and the proposal not being located within any TWWH, the proposal would not cause unreasonable interference to flora and fauna in the area.

Additionally, due to the proposed equipment being suspended gear, the gear would not interfere with bottom dwelling animals like the ones observed.

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 proposal is not within 1,000 feet of any local, state, or federally owned lands or facilities (SR 9).

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 plans to get blue mussel seed from wild settlement within the boundaries of the proposed lease site (App 2).

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 the proposed lease will result in an unreasonable impact from lighting at the boundaries of the lease site 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 application states that there would be no lights located within the proposal (App 9). The 32-foot harvesting barge would have two 252 watt 39-inch LED light bars attached to it (App 9). The applicant would be on site beyond daylight hours during the shorter days of fall, winter, and spring (App 9). During these times, the applicant would use the LED lights attached to the harvesting barge outside of daylight hours (App 9).

Chapter 2, § 2.37(1)(A)(8) applies 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." The applicant would be using the harvest barge to access the site, meaning it would be used regularly, and would be using the lights on the barge to work on the site beyond daylight hours, meaning they would not be used just for navigation. Therefore, this section will apply to the LED light bars proposed by the applicant.

Chapter 2 further states "All exterior lighting shall be mounted in cutoff fixtures. A cutoff fixture is one that projects no more than 2.5% of light above the horizontal plane of the light fixture's lowest part. This does not include spotlights or floodlights, which are addressed below." The proposed lighting fixtures are two long LED light bars that appear to be designed to illuminate the working site solely while work hours extended past daylight and therefore would not be classified as flood lights and would be classified as exterior lighting. The application does not state if the LED light bars would be mounted in cutoff fixtures. Therefore if this proposal is granted, the applicant must use cutoff fixtures that projects no more than 2.5% of light above the horizontal plane of the light fixture's lowest part.

When using exterior lighting, Chapter 2 limits the lighting to be no more than 250 watts per fixture. The applicant has stated that the lights proposed to be used are 252 watts.

If this lease were to be granted, the applicant must use cutoff fixtures that projects no more than 2.5% of light above the horizontal plane of the light fixture's lowest part and would need to alter the lights used on their barge to comply with the 250-watt limit set forth in Chapter 2, § 2.37(1)(A)(8).

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

I. Noise

The Commissioner considers whether the proposed lease will result in an unreasonable impact from noise at the boundaries of the lease site 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 application states the power equipment used would be: a gasoline power washer, gasoline generator, gasoline power pack, declumper, seed grader, inspection belt, debysser, and net reel (App 9). The powered equipment would be located on a nonpowered harvest barge that would be stored in Clarks Cove and towed to the lease site as needed. The application states that any motor used would be placed in insulated housing and the applicant would use a sound-reducing exhaust system (App 9).

Chapter 2, § 2.37(1)(A)(9) states "[a]Il 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 application provides two methods for mitigating noise: insulated housing and a sound-reducing exhaust system to be placed on noise generating equipment. Based on DMR's experience in aquaculture management, this equipment is a mitigation measure commonly used within the aquaculture industry and is an acceptable means to mitigate noise produced by the powered equipment. Because the applicant proposes to use insulated housing and sound-reducing exhaust systems, equipment that is commonly used within the aquaculture industry as acceptable sound mitigation, the applicant has demonstrated that all reasonable measures will be taken to mitigate noise from the lease activities.

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).

The application states that the gear would be gray, brown, and black (App 5). Applicant also proposes a total of six 40'x20' rafts within the proposal, all made from wood.

Chapter 2, § 2.37(1)(A)(10) states "equipment and structures shall be painted, or be of, a color that does not contrast with the surrounding area. Acceptable hues are grays, blacks, browns, blues, and greens that have a sufficiently low value, or darkness, so as to blend in with the surrounding area. Colors shall be flat, not reflective, in appearance."

The application states that all gear and structures used would be gray, brown, and black. These are all acceptable hues listed in Chapter 2, § 2.37(1)(A)(10), and therefore would comply with this rule.

Chapter 2, § 2.37(1)(A)(10) further states "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 rafts are made of wood and do not have any erected walls or a roof present on them. This height is acceptable as it does not go more than 20 feet in height.

Therefore, the aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

4. CONCLUSIONS OF LAW

Based on the above findings, the Department concludes 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 unreasonably interfere with fishing or other uses of the area, specifically commercial lobster fishing.
- 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, as modified, will not result in an unreasonable impact from light at the boundaries of the lease site.
- 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 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 do not 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 denies the requested lease to Dewey's Shellfish LLC for 0.58 acres for 20 years for the cultivation of blue mussels (*Mytilus edulis*) using suspended culture techniques.

Dated: 7.22-25

Carl J. Wilson, Commissioner Department of Marine Resources