

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Stuart Ryan

Experimental Aquaculture Lease Application
Suspended Culture of Marine Algae, Eastern Oyster, and Sea Scallop
Casco Bay, Freeport, Maine

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Stuart Ryan applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease located on the southwest side of Williams Island, in Casco Bay, Freeport, Cumberland County. The proposed lease is 2.35 acres¹ and is for the suspended cultivation of marine algae (*Saccharina latissima*), eastern oysters (*Crassostrea virginica*), and sea scallops (*Placopecten magellanicus*) for commercial aquaculture research and development.

1. PROCEDURAL HISTORY

DMR accepted the application as complete on January 27, 2022. Notice of the application and the 30-day public comment period and opportunity to request a hearing was provided to state agencies, the Town of Freeport and its harbormaster, riparian owners with property boundaries within 1,000 feet of the proposed site, and others on DMR's email listserv. A Harbormaster Questionnaire was also included with the municipal notice requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, and other information. Notice of the complete application, comment period and opportunity to request a hearing was also published in the February 10, 2022, edition of the *Northern Forecaster*.

Title 12 M.R.S.A. §6072-A (6) provides that the Commissioner shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. Only three requests for a public hearing were received during the comment period, however, a hearing was held at the Commissioner's discretion, as allowed by Title 12 M.R.S.A. §6072-A. Notice of the public hearing was provided to state agencies, the Town of Freeport, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's email listserv. Notice of the hearing was published in the *Northern Forecaster* on November 23 and December 7, 2023. The public notice for the hearing indicated that the proceeding would be conducted in-person and directed interested persons to register to participate in the

¹ Applicant originally requested 2.4 acres. DMR calculations indicate the area is 2.35 acres.

proceeding. Four individuals registered to participate in the hearing, and all indicated an intention to provide testimony. After the registration deadline passed, DMR was contacted by Nathan Chapnick, president of the Freeport Kayak Club, who had been traveling internationally and was unable to access the application online². On December 28, 2023, Mr. Chapnick submitted a request for an exception to the registration requirements to DMR. DMR granted a one-time exception and Mr. Chapnick was registered to participate and offer testimony. Mr. Chapnick subsequently determined he could not arrange travel in time to attend the hearing and DMR permitted him to designate an alternate person to testify and ask questions on behalf of the Freeport Kayak Club. Mr. Chapnick designated Vlade Sherrill to participate on behalf of the Club.

Diane Partridge applied to be an intervenor in the proceeding. On January 3, 2024, DMR issued a decision denying Ms. Partridge’s request for intervention as her application failed to demonstrate how the proposal would directly and substantially affect her if the lease were granted. However, Ms. Partridge had also registered to participate in the proceeding as a member of the public, so she was able to provide testimony and ask questions of the applicant.

Sworn testimony was given at the January 11, 2024, hearing by the following witnesses:

Name	Affiliation
Stuart Ryan	Applicant
Corey Walker	Member of the public
Benjamin King	Riparian owner
Diane Partridge	Riparian owner
Vlade Sherrill	Member of the public

Additional DMR staff and members of the public attended the hearing. The hearing was recorded by DMR. The Hearing Officer was Maria Eggett. The evidentiary record regarding this lease includes the application, DMR’s site report dated November 20, 2023, the case file, and a map provided by the applicant at the hearing. The evidence from each of these sources is summarized below.³

LIST OF EXHIBITS

1. Case file
2. Application

² Security protocols (not a technical issue) restricted Mr. Chapnick from accessing DMR’s website.
³ Exhibits 1, 2, and 3 are cited below as: Case file – “CF”, Application – “App”, site report – “SR”.

3. DMR site report, issued on November 20, 2023
4. Exhibit 1, map provided by the applicant at the hearing

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

The purpose of the proposed experimental lease site is to determine the efficacy of an oyster cultivation system as well as the potential co-culture of marine algae and scallops on-site (App 4). The applicant is proposing to culture marine algae, eastern oysters, and sea scallops using a maximum of 6,000 Hexacyl baskets (29-inches by 10 5/8 inches by 5 7/16 inches), 2,000 HDPE floating bags (34-inches by 23-inches by 5-inches), four 600-linear foot kelp lines, 200 lantern nets (20-inches by 50-inches), and 40 bottom cages (48-inches by 36-inches by 16-inches) (App 14) as well as mooring gear and marker buoys (App 22-31). The Hexacyl baskets and floating bags will remain on the water surface year-round but may be submerged for storm events (App 5). The marine algae longlines and lantern nets will be deployed below the surface of the water. The applicant intends to tend and harvest year-round, with most activity from April to November (App 4). Seeding, harvesting, and maintenance would occur up to five days per week (App 5). A helix flipper, tumble sorter (with solar panel), pressure washer, and generator are also proposed for on-site use (App 6).

On December 12, 2023, after the public hearing had been noticed, the applicant contacted DMR about modifying the project size/layout in response to feedback they received from a riparian owner. DMR responded that applicants may propose changes at the hearing; this gives participants the opportunity to comment and ask questions. DMR clarified that modifications to project size are limited to reductions in size, so any new coordinates would need to be located within the previously proposed lease footprint. At the hearing, Mr. Ryan proposed a modified project layout. The new proposal, shown on Exhibit 1, increased the distance between the southeast corner of the proposed lease and Williams Island. The new proposed lease totals 2.3 acres in size, a reduction of 0.05 acres from the application. Mr. Ryan indicated the reduction was intended to address the concerns of David Parker. Mr. Parker registered to testify at the hearing but did not attend.

There are limits to the scope of changes that DMR considers after a final application is deemed complete and noticed accordingly. If DMR considered substantial changes that were presented to stakeholders and the public for the first time at the public hearing, it would frustrate the lease notification requirements established in law and rule because hearing participants would be deprived of the opportunity to review the proposed changes in advance and provide meaningful input. Additional members of the public might have decided to participate in the public comment and hearing process if

they had been given advance notice of the proposed changes. Therefore, whether DMR considers such changes in reviewing an application depends upon a variety of factors including the scope and significance of the changes, individually or in aggregate, and the ability of the public and the other stakeholders to understand and engage with those changes throughout the proceeding. In this case and discussed in the sections that follow, some persons who testified indicated that they were not prepared to testify to the proposed reduction due to the short amount of time to consider it.

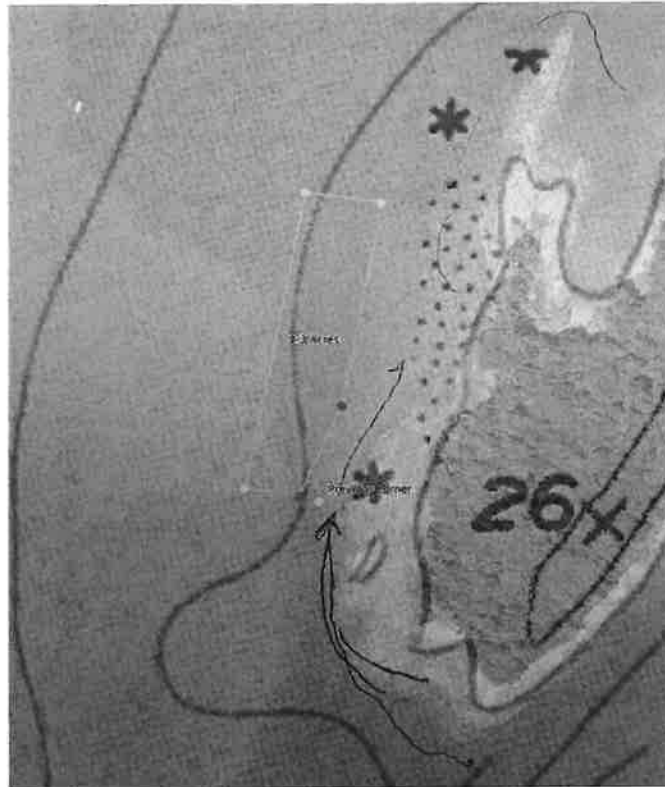


Figure 1: Exhibit 1, with modified project layout⁴

⁴ Exhibit 1 generated by the applicant



Stuart Ryan - Southwest of Williams Island, Freeport

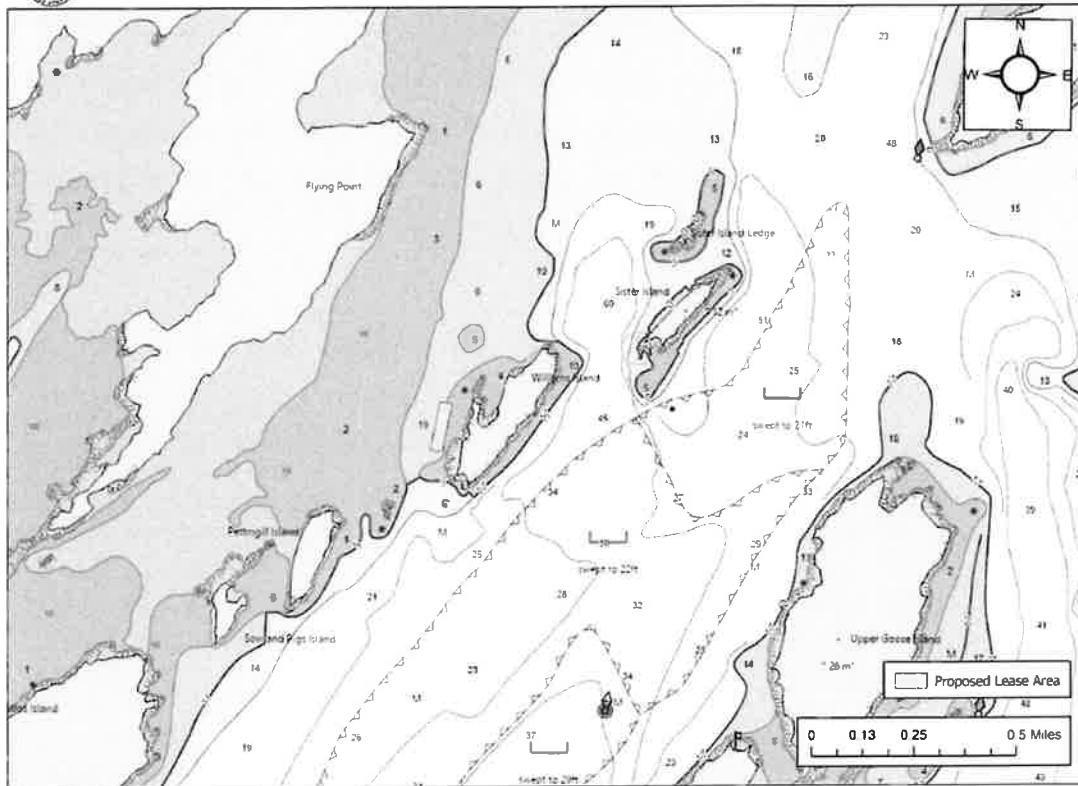


Figure 2: Vicinity map with lease as originally proposed. Image generated by DMR staff.⁵

B. Site Characteristics

On September 9, 2022, DMR assessed the proposed lease site (as proposed in the application). DMR scientists arrived on-site at approximately 9:00 AM. Nearby Williams Island consists of intertidal ledge and rocky outcroppings leading to forested uplands. Williams Island is privately owned. The southern half of the island is protected from development by a conservation easement.⁶

⁵ Unless otherwise noted, all figures in this report were created in ArcGIS Pro version 2.9 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided by The Maine Office of GIS.

⁶ Application page 8

Approximate distances from proposed lease corners to surrounding features

Feature	Distance
NW corner to nearest mooring	~445' to the northwest
NW corner to Flying Point shoreline at MLW	~1,630' to the west
NE corner to Williams Island shoreline at MLW	~230' to the east
NE corner to nearest dock	~640' to the northeast
SE corner to Williams Island shoreline at MLW	~50' to the east
SW corner to Pettingill Island shoreline at MLW	~1,430' to the southwest

3. **STATUTORY CRITERIA & FINDINGS OF FACT**

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. §6072-A. This statute provides that a lease for commercial aquaculture research and development or for scientific research may be granted by the Commissioner of DMR upon determining that the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other uses of the area, taking into consideration other aquaculture uses in 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, or docking facilities 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.

A. **Fishing & Other Uses**

Fishing. When examining fishing and other uses, the Commissioner considers whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area (12 M.R.S.A. § 6072-A(13)(C); Chapter 2.37(1)(A)(3)⁷. Additionally, the Commissioner considers any evidence concerning other aquaculture uses of the area (Chapter 2.37(1)(A)(4)).

During the site assessment, DMR observed two lobster buoys within the proposal boundaries and seven additional lobster buoys in the vicinity of the proposal. DMR observed additional lobster gear and

⁷ 13-188 C.M.R. ch. 2. The Commissioner considers the applicable criteria contained in Chapter 2.37 pursuant to Chapter 2.64(11)(A).

lobster buoys to the west of the proposal. No lobster (*Homarus americanus*) was observed within the proposal boundaries on DMR's underwater camera footage.



Figure 3. Proposed lease area with site visit observations⁸

A recreational fishing vessel navigated through the proposed lease area during DMR's site assessment.

A harbormaster questionnaire was sent to the Town of Freeport. No response was received.

The application states lobster fishing activity occurs in the area, and three lobster buoys were sighted within the proposed lease boundaries in October 2021 (App 7). The application also states that recreational fishing may occur in the area, but it has not been personally observed by the applicant (App 7). During the comment period, DMR received multiple comments from the public stating both commercial lobster fishing and recreational fishing (especially for striped bass) are common in the proposed lease area.

In evaluating fishing, the commissioner must consider the following pursuant to Chapter 2.37(A)(2):

The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. This examination 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.

⁸ Image from DMR site report

At the hearing, Corey Walker testified that he runs approximately five fishing charters a week (approximately 80 tours a year) in this area in the summer months. Mr. Walker stated that his clients cast in varying directions and the casts extend approximately 50-75 feet from the boat. Mr. Walker testified he had concerns about his ability to anchor and fish in this area if the lease were approved, especially with kayaks and other boats simultaneously transiting the area where his clients are fishing. At DMR's request, Mr. Walker indicated the area he fishes and how he approaches the area on Exhibit 1 in pen. On cross-examination, Mr. Walker clarified that his concerns about the proposal extend along the entire shoreline, not just the southeastern corner where Mr. Ryan had proposed a reduction.

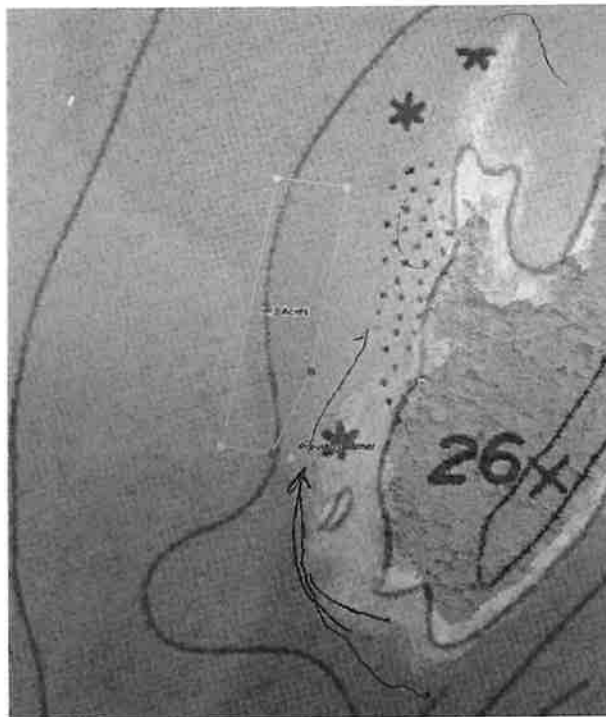


Figure 4: Exhibit 1 with mark-up of Walker fishing grounds

Benjamin King testified that there are many lobster buoys in the area, and he regularly observes lobster boats transiting through the area. Mr. King has observed recreational fishing in the area. Mr. King stated that if approved, the lease will prevent hundreds of recreational and commercial fishermen from using the area.

Diane Partridge testified that the proposed lease area is used for lobster fishing, although some of the traps may have been removed for the year by the time of the DMR site visit, which occurred on September 9, 2022. By her observations, there were approximately 20-30 lobster buoys near Williams Island or in the channel between Williams Island and Pettingill Island. Ms. Partridge stated during last summer, she observed 8-10 boats at a time fishing near Williams Island. Ms. Partridge also stated that

there are clam flats within 1,000 feet of the project site that are used both commercially and recreationally.

Vlade Sherrill testified that this area is frequently used by kayak fishermen.

Discussion. Although the applicant stated that he has not observed recreational fishing in the proposed lease area, testimony was provided at the hearing by Mr. Walker and riparian owners to demonstrate that the area near Williams Island is used regularly both by recreational fishermen and commercial charters. While not all methods of fishing in this area were discussed, cast fishing from one or more boats in a 50-230 foot corridor between the lease site and Williams Island would be challenging, and unfeasible if paddlesport traffic or more than one boat was attempting to fish simultaneously. Therefore, the lease, if approved, would unreasonably reduce or even eliminate the area for fishing adjacent to the island. Although DMR did not receive feedback from lobstermen that fish in the area, it is reasonable to assume, based on testimony from persons who recreate and own property on Williams Island, available waters that are used for trap placement would be reduced by the proposed lease. Mr. Ryan's proposed reduction would not address any of the concerns raised.

Other uses. At the hearing, Mr. King and Ms. Partridge testified that in addition to fishing boats, kayaks regularly transit the area, often very close to Williams Island. Vlade Sherrill testified on behalf of the Freeport Kayak Club. Mr. Sherrill testified the waters in and near the proposed lease site are the most frequently used waters in Maine for paddlesports. Mr. Sherrill testified that area hosts hundreds of paddlesport events each year and in addition to being used by the Kayak Club, this area is used by L.L. Bean excursions and others. Mr. Sherrill stated the proposed lease site is located directly in the path of the most popular kayak route in Maine, namely from the L.L. Bean Kayak Center to Sisters Ledge, Sisters Island, Williams Island, Pettingill Island, Sow and Pigs, and Bustins Island. Mr. Sherrill stated that, for safety, kayakers often paddle close to shore and the proposed lease could force the kayakers further into open water where the possibility of a boat collision or being capsized by turbulent waters is higher. These risks are elevated with novice kayakers (such is often the case with the L.L. Bean excursions). Mr. Sherrill acknowledged that the application stated that kayakers would be allowed to utilize the lease site, but Mr. Sherrill stated that safety is a concern when paddling near a lease site due to the risk of entanglement in the gear. Mr. Sherrill stated the Freeport Kayak Club advises against traveling through aquaculture lease sites.

On cross-examination by DMR, Mr. Sherrill stated that members of the Freeport Kayak Club currently paddle through the proposed lease boundaries and utilize this area multiple days per week in the summer. Mr. Sherrill stated that kayakers do not necessarily paddle side by side and could potentially be dispersed over a larger area. Mr. Sherrill also stated that while each kayak may only need approximately 6-8 feet to maneuver, there may be multiple kayakers in a group. Additionally, they try to stay 20 or more

feet away from any motorized vessels. In response to a DMR question, testimony by Mr. King, Ms. Partridge, and Mr. Ryan stated that they have observed between 10 to 27 kayaks per L.L. Bean excursion.

Discussion. During the hearing, DMR heard testimony given by the riparians and the Freeport Kayak Club concerning the use of this area by kayakers. In his application and hearing testimony, Mr. Ryan also confirmed the use of the area by kayakers. Mr. Ryan stated that, should the lease be granted, kayakers may continue to use the area within the lease boundaries.

The area is clearly a popular location for paddlesports, and the record demonstrates that groups of considerable size transit the area in and around the lease boundaries. While Mr. Ryan does not intend to restrict that activity from occurring within the lease site if granted, Mr. Sherrill's testimony stated that many kayakers do not feel it is safe to traverse a lease site, as demonstrated by the Freeport Kayak Club advisory to avoid paddling in aquaculture lease sites. Given the volume of watersports, the frequency of use of the area, and the manner in which the waters have been historically utilized by kayakers, the proposed lease would eliminate the use of those waters for paddlesports. Given the volume of vessel traffic in the area, if the lease were granted kayaking and other activities would be limited to a narrow stretch of water between Williams Island and the lease site, which creates unsafe conditions for kayakers and others. The reduction proposed at the hearing by Mr. Ryan at one corner of the lease site would not address these concerns.

Other aquaculture uses. There are no aquaculture leases or limited purpose aquaculture (LPA) sites within 1,000 feet of the proposed lease area (SR). DMR did not receive any other comments concerning other aquaculture uses in the area.

In evaluating other aquaculture uses, the commissioner must consider the following pursuant to Chapter 2.37(A)(4):

The Commissioner shall 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 factors 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.

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

B. Navigation

When examining navigation, the Commissioner considers whether the lease activities would interfere with commercial or recreational navigation around the lease area and considers the current uses of the navigational channels in the area. 12 M.R.S.A. § 6072-A(13)(B); Chapter 2.37(1)(A)(2).

At high tide, there is approximately 240 feet of navigable water between Williams Island and the proposal. At mean low water (MLW), there is approximately 50 feet of navigable water between the southeastern corner of the proposal and Williams Island. Additionally, at MLW there is approximately 1,430 feet of navigable water between the proposal and Pettingill Island and approximately 1,630 feet of navigable water between the proposal and Flying Point.

During the site visit on September 9, 2022, DMR observed eight moorings in the vicinity of the proposal. The closest mooring was approximately 445 feet to the northwest. Three moorings were vacant at the time of the site visit. The other five documented moorings had either a small powerboat or a small sailboat present. Additionally, DMR scientists observed four moorings west of the documented moorings (SR 4).

During the site assessment, DMR observed a small powerboat operating to the west of the proposal.

A Harbormaster Questionnaire was sent to the Town of Freeport and no response was received.

During the comment period, the Department received several comments from the public stating that the proposed lease would interfere with a navigational channel.

Mr. Walker expressed concerns about the distance from the proposed lease boundary to Williams Island and noted that several unmarked submerged rocks diminish the usable water in that area. During cross-examination, in response to a question from DMR, Mr. Walker stated that the rocks near the island have 0.5-1.0 feet of water above them at low tide. Mr. Walker stated that boat traffic trying to navigate around a stationary fishing vessel would have difficulties avoiding the hazards and the lease gear. Mr. Walker testified that kayak and other boating traffic in the area would also lead to difficult and potentially dangerous navigation if the lease were granted. Mr. Walker suggested a 200-300 foot buffer area, when measured from the shoreline of Williams Island, may be sufficient area to provide safe navigation and fishing.

In her testimony, Diane Partridge stated that there is a ledge in the channel between Pettingill Island and Williams Island, as well as moorings off Flying Point, that tend to push boat traffic closer to Williams Island. Ms. Partridge stated that the mooring located 445 feet from the proposed lease boundary is used by a 50-foot vessel which may have difficulties accessing the mooring if the proposed lease is approved. Ms.

Partridge also stated that the lease as originally proposed would prevent her family from their tradition of circumnavigating the island to collect debris. At the hearing, Ms. Partridge commented that she was not prepared to comment on Mr. Ryan's proposed modification due to the short amount of time she had to consider it.

Mr. Sherrill also stated he has observed various types of boat traffic in that area.

Discussion. In evaluating navigation, the commissioner must consider the following pursuant to Chapter 2.37(1)(A)(2):

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. The Commissioner 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. High tide "short cuts" shall not be considered navigational ways for the purposes of this section.

During the hearing, DMR heard testimony regarding potential impacts on navigation from the applicant and registered participants. Based on the record, vessels transiting past Williams Island, or accessing moorings near the island, may be required to alter course to avoid the proposed lease site. The navigational ways that would be impacted are not high tide short cuts. Heavier vessel traffic in the summer months, including kayakers (individuals and commercial tours), recreational and commercial fishing (both lobster boats and fishing charters) vessels could result in possible navigational safety concerns, especially when the unmarked, submerged rock hazards between the proposed lease site (which includes submerged gear) and the island are taken into consideration.

DMR finds there is a high degree of vessel use in and around the proposed lease site and that the proposed lease would be a navigational hazard due to the popularity of this route by commercial and recreational users and natural hazards.

As noted above, testimony indicated that the commenters did not have an adequate opportunity to evaluate whether the modification proposed by the applicant at the hearing would change their evaluations of the proposed lease's impact on navigation. Even considering the proposed modification, however, there is no evidence to suggest that the proposed reduction in the lease size would address the navigational concerns raised. The site visit determined that for the lease site as stated in the application, at high tide, there is approximately 240 feet of navigable water between Williams Island and the southeastern corner of the proposal and at mean low water (MLW), that distance is 50 feet. The modification proposed at the hearing would have increased these distances to approximately 290 feet at high tide and 100 feet at MLW. The proposed modification would have no effect on the concerns raised about navigability around the western side of the proposed lease.

Therefore, the aquaculture activities proposed for this site will unreasonably interfere with navigation.

C. Riparian Access

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 2.37(1)(A)(1).

During the site visit on September 9, 2022, DMR observed three docks in the vicinity of the proposal. The docks were located approximately 640 feet, 770 feet, and 1,100 feet northeast of the proposal (SR 4).

A Harbormaster Questionnaire was sent to the Town of Freeport and no response was received.

During the comment period, DMR received comments from two riparians stating that access to their docks and moorings would be adversely impacted by the proposal.

Two riparians, Benjamin King and Diane Partridge, testified at the hearing. In his testimony, Mr. King stated that should the lease be approved, access to Williams Island will become extremely limited, especially at low tide. Mr. King stated their 20-foot-long boat is kept in South Freeport and they approach their two docks on the island from the south. Mr. King stated this route would be particularly challenging in the dark and in certain conditions (i.e. fog) if the lease is approved. Mr. King stated that his family also owns a sailboat, kayaks, and paddleboards, which they use in this area.

Ms. Partridge testified she uses a 17-foot boat to access Williams Island. The boat is kept in Brunswick, and she generally approaches the island from the north. However, Ms. Partridge also testified that emergency services to the island are provided by the Town of Freeport and the quickest access route at all tides is between Pettingill Island and Williams Island. In her testimony, Ms. Partridge stated that there is a ledge in the channel between Pettingill Island and Williams Island, as well as moorings off Flying Point.

Mr. Ryan testified that the reduction in the lease size that he proposed during the hearing was intended to address the concerns of a separate riparian landowner, David Parker, about accessing his shoreline on Williams Island. Because Mr. Parker did not provide public comment or testimony, there is nothing in the record indicating what the concerns were and whether the reduction would address them. Furthermore, based on the testimony and evidence, there is

nothing to suggest that the reduction proposed by Mr. Ryan would ameliorate all the other concerns raised.

Discussion. In evaluating riparian ingress and egress, the commissioner must consider the following pursuant to Chapter 2.37(1)(A)(1):

The Commissioner shall examine whether the riparian owners can safely navigate to their shore. The Commissioner shall consider the type of shore involved and the type of vessel that can reasonably land on that shore. The Commissioner shall consider the type of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures.

When determining if a proposed lease will unreasonably interfere with riparian ingress and egress, DMR considers whether the riparian landowners can safely navigate to shore. This includes an assessment of the type of shore and vessels in consideration of the proposed lease activities.

In this case, the applicant is proposing a site that would contain floating gear throughout the year. Williams Island consists of intertidal ledge and rocky outcroppings leading to forested uplands. Docks along the shoreline serve as access points to the island. Two riparians testified that their ability to access the shoreline, including access for emergency services, may be impeded by the proposed lease site. In this instance, several unmarked obstacles exist near Williams Island that must be avoided by vessels transiting. DMR also heard testimony that at low water, the available distance to safely navigate is further diminished. While it is possible that the riparians (and emergency services) could navigate around the proposed lease, it would require they travel further out in the channel where weather and operating conditions may be less favorable. Additionally, Mr. King testified that his family navigates at night and in inclement weather. Under both conditions, the potential to encounter a hazard (such as other boat traffic) is greater out in the channel. Furthermore, there is a lot of vessel traffic and water related uses within the area. If the lease is granted, navigation and use patterns would change, which further diminishes the ability of riparian landowners to safely navigate to their shore.

As noted above, testimony indicated that the commenters did not have an adequate opportunity to evaluate whether the modification proposed by the applicant at the hearing would change their evaluations of the proposed lease's impact on riparian access. Even considering the modification proposed at the hearing, based on the testimony and evidence, there is nothing to suggest that the modification would address the concerns raised by the riparian landowners who provided comment and testimony.

Given these considerations, the proposed lease will unreasonably interfere with ingress and egress.

Therefore, the aquaculture activities proposed for this site will unreasonably interfere with the ingress and egress of any riparian owner.

D. Flora & Fauna

When examining existing system support, the Commissioner considers the degree to which the use of the lease site will interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and marine and upland areas to support ecologically significant flora and fauna (12 M.R.S.A. § 6072(7-A)(D); Chapter 2.37(1)(A)(5)).

On September 9, 2022, DMR conducted a drop-camera transect to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed in the video transect is described below:

Species observed using underwater camera footage:

Species Observed	Abundance
horseshoe crab (<i>Limulus polyphemus</i>)	Occasional
rockweed drifting (<i>Ascophyllum nodosum</i>)	Occasional

Eelgrass (*Zostera marina*)

Data collected by the Maine Department of Environmental Protection (MDEP) and Casco Bay Estuary Partnership (CBEP) in 2022 indicates there is no mapped eelgrass presence in the vicinity of the proposal. No eelgrass was observed within the proposal boundaries during DMR’s site assessment (SR 7).

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, the proposed lease is not located within mapped tidal waterfowl and wading bird habitat. Data collected by the United States Fish and Wildlife Service in 2022 by aerial nest survey shows the closest mapped bald eagle nesting site to be approximately 1,400 feet northeast of the proposal.

During DMR’s site assessment, an osprey (*Pandion haliaetus*) nest was observed approximately 150 feet east of the proposal on Williams Island.

On February 11, 2022, a Wildlife Biologist with MDIFW responded by email to a “Request for Agency Review and Comment” stating minimal impacts to wildlife are anticipated for this project.⁹

⁹ Email correspondence between MDIFW and DMR

At the hearing, Benjamin King and Diane Partridge expressed concerns about impacts from the proposed lease on the osprey nest on Williams Island. Benjamin King stated the area is also used by eagles and stated both the eagles and osprey may leave the area if the lease were approved. However, no further information demonstrating that the proposed lease would adversely impact the birds was presented. Additionally, MDIFW reviewed the proposal and did not express any concerns about the lease impacts.

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

When examining interference with public facilities, the Commissioner considers the degree to which the lease interferes with public use or enjoyment within 1,000 feet of a beach, park, or docking facility owned by the Federal Government, the State Government, or a municipal government (12 M.R.S.A. § 6072(7-A)(F); Chapter 2.37(1)(A)(7)).

There are no beaches, parks, or docking facilities owned by federal, state, or municipal government within 1,000 feet of the proposed lease site.

Therefore, the aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by federal, state, or municipal governments.

F. Source of Organisms

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 (12 M.R.S.A. § 6072(7-A)(E); Chapter 2.37(1)(A)(6)).

The applicant proposes to obtain stock at Mook Sea Farm in Walpole, Maine and Atlantic Sea Farms in Saco, Maine. The applicant intends to capture wild spat for the scallops. These facilities and wild capture are approved sources of stock. If the lease were approved, and if the applicant was unable to obtain stock as proposed, then it must come from another DMR approved source.

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

4. **CONCLUSIONS OF LAW**

Based on the above findings, the Department concludes that:

1. The aquaculture activities proposed for this site will unreasonably interfere with the ingress and egress of riparian owners.
2. The aquaculture activities proposed for this site will unreasonably interfere with navigation.
3. The aquaculture activities proposed for this site will unreasonably interfere with fishing or other uses of the area.
4. 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.
5. The aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1,000 feet of beaches, parks, or docking facilities owned by municipal, state, or federal governments.
6. The applicant has demonstrated that there is an available source of stock to be cultured for the lease site.

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-A.

5. **DECISION**

Based on the foregoing, the application of Stuart Ryan for an experimental lease to cultivate marine algae and shellfish using suspended culture techniques southwest of Williams Island in Casco Bay is denied.

Dated: _____

4/29/24



Patrick C. Keliher, Commissioner

Department of Marine Resources