

**STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES**

Jason Brewer

Experimental Aquaculture Lease Application
Suspended Culture of Shellfish
Damariscotta River, Boothbay

DAM CIX

Findings of Fact, Conclusions of Law, and Decision

Jason Brewer applied to the Department of Marine Resources (DMR) for a three-year experimental aquaculture lease on 2.43¹ acres located northwest of Carlisle Island in the Damariscotta River, Boothbay, Lincoln County. The proposal is for the suspended culture of American oysters (*Crassostrea virginica*). The proposal is for commercial research and development.

1. Proceedings

DMR accepted the final application as complete on March 28, 2024. Notice of the completed application and the 30-day public comment period was provided to state agencies, the Town of Boothbay, riparian landowners within 1,000 feet of the proposed site, and subscribers to DMR's aquaculture email listserv. On April 23, 2024, DMR sent a Harbormaster Questionnaire to the Harbormaster for the Town of Boothbay, requesting information about designated or traditional storm anchorages, navigation, riparian ingress and egress, fishing or other uses of the area, among other considerations. DMR did not receive a response from the Harbormaster. Notice of the complete application and comment period was published in the *Boothbay Register* on April 25, 2024. The version of 12 M.R.S.A. § 6072-A(6) that was in effect when this application was deemed complete provided that the Commissioner may hold a public hearing, and he shall hold a public hearing if five or more persons request a public hearing within the 30-day comment period. The comment period ended on May 25, 2024. No requests for a public hearing were received during the comment period, and no hearing was conducted.

The evidentiary record regarding this lease application includes the application, DMR's site report dated June 5, 2025, and the case file. The evidence from each of these sources is summarized below.

A. List of Exhibits

1. Case file (CF)
2. Application (App)
3. DMR site report, issued on June 5, 2025 (SR)

¹ Applicant originally requested 2.5 acres. DMR calculations indicate the area is 2.43 acres.

The case file, application and site report are referred to in the decision with their designated abbreviations.

2. Description of the Project

A. Site History

Based on DMR records, no prior aquaculture activities have occurred in the area of this proposed lease site.

B. Proposed Operations

The purpose of the proposed experimental lease site is to determine the viability of culturing oysters at this site (App 4). The applicant is proposing to culture American oysters using 300 36-inch by 42-inch by 24-inch oyster 4-bag cages, with up to 1,200 33-inch by 19-inch by 3.75-inch mesh bags inside the cages. Also proposed are helix anchors, lines, and buoys and a 20-foot long by 20-foot wide by 12-foot high work float with a canopy (App 13, 21-22). The gear will remain on-site year-round, but some may be submerged due to weather (App 5, 13).

The applicant proposes to use a lobster boat and two skiffs at the lease site (App 14). Seeding would be done from May 15-August 15, 1-3 days per week and harvesting would occur year-round, 1-3 days per week. Routine maintenance would also occur 1-3 days per week, from April 1 to December 1 (App 4).

Table 1. Power equipment proposed for the lease site

Equipment	Description	Frequency of Use
Pot haulers	Gas and electric powered	1-3 days per week, 1-3 hours per day
Pressure washer	Gas powered	1 day per week, 1-6 hours per day, April to December
Generator	Gas powered	1-2 days per week, 1-6 hours per day, April to December
Sorter/tumbler	Powered by generator	1-2 days per week, 1-6 hours per day, April to December

C. Site Characteristics

Description. On June 12, 2024, DMR scientists assessed the proposed lease site. The coastline of the surrounding area was rock ledges leading to mixed forest uplands. Correcting for tidal variation derives water depths at the corners of the proposal at mean low water (MLW, 0.0 feet) to be from 7.5 to 37.7 feet.

DMR scientists observed the bottom characteristics of the proposed lease site via a remotely operated vehicle (ROV). The bottom of the proposed lease site is composed of mud with an overlay of sheet algal beds.

Growing Area Classification. Growing Area Classifications for bivalve shellfish are reviewed on an annual basis and subject to change. Classifications can also be updated at any time in response to changing environmental conditions, emergency situations, or other factors that impact water quality. If the lease is granted, it is the responsibility of the leaseholder to stay informed of and comply with harvest requirements applicable to the respective growing area.

The proposed lease is currently located within an area classified as Approved by the DMR Bureau of Public Health and Aquaculture.



Figure 1. Proposed lease site and surrounding area².

² 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.

3. Legal Criteria and Findings of Fact

Approval of experimental aquaculture leases is governed by 12 M.R.S.A. § 6072-A and DMR Regulations, Chapter 2.37 and 2.64³. The statute and regulations provide that a lease for commercial aquaculture research and development or for scientific research 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; other aquaculture uses in the area; the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; and 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. Riparian Owners Ingress and Egress

When examining riparian access, the Commissioner considers whether the proposed lease will unreasonably interfere with the ingress and egress of riparian owners. 12 M.R.S.A. § 6072-A(13)(A). The Commissioner shall examine whether the riparian owners can safely navigate to their shore and consider the type of shore, the type of vessel that can reasonably land on that shore and the types of structures proposed for the lease and their potential impact on the vessels which would need to maneuver around those structures. Chapter 2.37(1)(A)(1).

The land nearest to the proposal is Carlisle Point approximately 45 feet to the west at MLW. During the site visit, DMR scientists observed one mooring approximately 1,444 feet south-southeast of the proposal. This was the closest observed mooring to the proposal. DMR scientists also observed one pier without a float approximately 1,404 feet to the south-southeast of the proposal (Figure 2). There is a residential property on Miller Island as observed by aerial imagery⁴, approximately 1,650 feet northeast of the proposal. The property and associated pier with float is on the eastern shoreline of Miller Island.

A Harbormaster Questionnaire was sent to the Town of Boothbay. DMR did not receive a response (SR 4).

³ Chapter 2 of DMR Regulations is published at 13-188 C.M.R. ch. 2 and may be found at <https://www.maine.gov/dmr/rules-enforcement/regulations-rules>.

⁴ Maine orthoimagery midcoast 2023

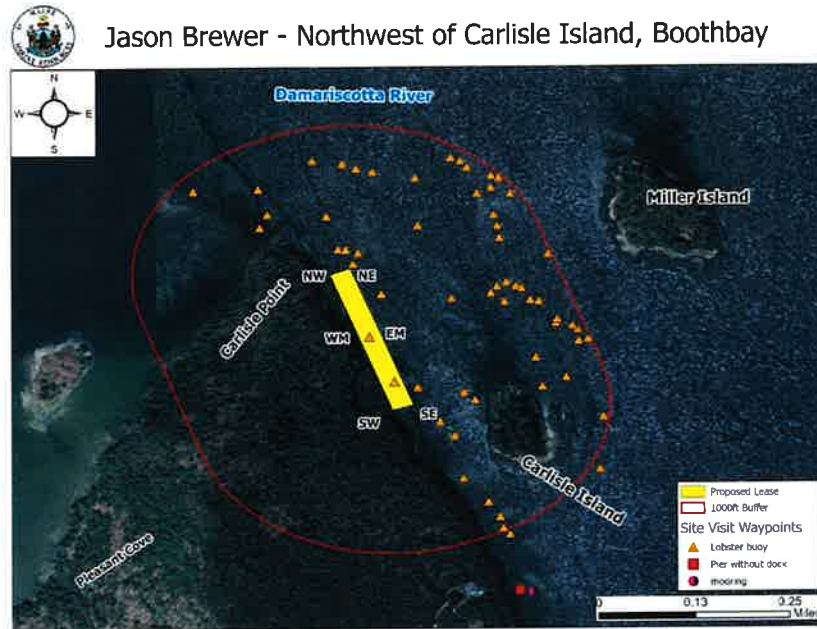


Figure 2. Proposed lease area with site visit observations.

Given the considerable distance to riparian structures, the lease as proposed will not interfere with riparian ingress and egress.

Therefore, the aquaculture activities as proposed will not unreasonably interfere with riparian owner ingress and egress.

B. Navigation

When examining navigation, the Commissioner considers whether the proposed lease will unreasonably interfere with navigation. 12 M.R.S.A. § 6072-A(13)(B). 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 consider the current uses and different degrees of use of the navigational channels in the area. Chapter 2.37(1)(A)(2).

The proposal is located approximately 45 feet east of Carlisle Point and 375 feet northwest of Carlisle Island at MLW. Nearby Miller Island splits the navigational channel into two parts. The proposal is approximately 289 feet to the west of the western channel, if a line is drawn between navigational buoy “13” and the northern shore of Carlisle Island at MLW. There is approximately 2,047 feet between the NE corner of the proposal and McGuire point at MLW (Figure 3)(SR 5).

During DMR's site visit, one recreational powerboat was observed transiting through the proposal heading north towards the main navigational channel, and one sailboat under power was observed transiting north in the navigational channel.

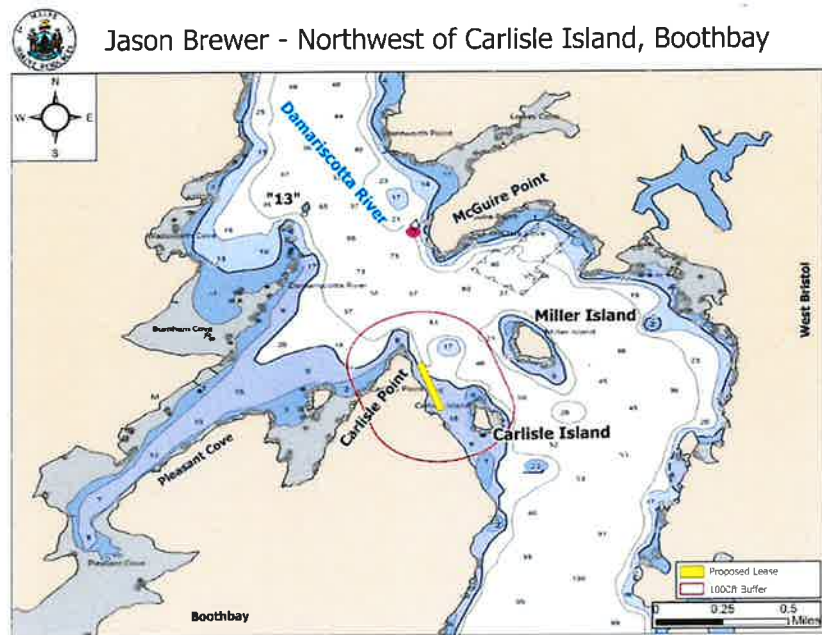


Figure 3. Navigational channels in the vicinity of the proposed lease area.

Because of its location outside of the mapped navigational channels, the lease as proposed will not unreasonably impede navigation.

Therefore, the aquaculture activities as proposed will not unreasonably interfere with navigation.

C. Fishing and Other Uses

When examining fishing and other uses, the Commissioner considers whether the proposed lease activities will unreasonably interfere with fishing or other uses of the area. 12 M.R.S.A. § 6072-A(13)(C). The Commissioner shall examine whether the lease activities would unreasonably interfere with commercial or recreational fishing or other water-related uses of the area. Chapter 2.37(1)(A)(3).

Fishing. During the site visit, DMR scientists observed 62 lobster buoys in the general vicinity of the proposal, two of which were within the boundaries of the proposal (Figure 2). During the site visit, DMR scientists observed a lobster boat actively hauling and setting traps to the east of the proposal (SR 6).

According to the application, moderate to heavy lobster fishing occurs approximately 800 feet from the lease boundaries. The application states that within 600 feet of the proposed lease, 6-14 traps are

typically fished including gear belonging to the applicant. Additionally, the application states that no menhaden fishing has been observed near the lease area and recreational fishing is rare (App 7).

While there is documented lobster fishing in the area, it was largely observed outside of the proposed lease boundaries. Therefore, given the ample space available for commercial and recreational fishing outside of the proposed lease area, the proposed lease activities will not unreasonably interfere with fishing.

Other Uses. According to the application, kayaks have been observed at Carlisle Island, so it is likely the activity occurs in the lease area. However, the application states the lease as proposed will not interfere with the continued use of the area by kayakers because the lines are set 25 feet apart, allowing ample room for maneuvering (App 7).

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

D. Other Aquaculture Uses

Pursuant to 12 M.R.S.A. § 6072-A(13)(C), in evaluating the proposed lease, the commissioner shall take into consideration the number and density of aquaculture leases in an area. The Commissioner shall consider any evidence submitted concerning other aquaculture uses of the area, the intensity and frequency of such uses, the degree of exclusivity required for each use as well as the number, size, location, and type of other aquaculture leases. Chapter 2.37(1)(A)(4).

There are four limited purpose aquaculture (LPA) sites within 1,000 feet of the proposal. MRIT524, MRIT624, MRIT724 and MRIT824 are licensed to Max Ritchie. The LPAs are approximately 832–963 feet southwest of the proposal. There are no licensed aquaculture leases or applications under review by DMR within 1,000 feet of the proposal (Figure 1)(SR 6).

Given the distance to the LPA sites, the lease as proposed will not interfere with existing aquaculture activities.

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

E. Existing System Support

When examining existing system support, the Commissioner considers whether the proposed lease activities will unreasonably interfere with significant wildlife 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-A(13)(D). The Commissioner shall consider 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 in this determination. Chapter 2.37(1)(A)(5).

Site Observations. On June 12, 2024, DMR scientists utilized a ROV to assess the epibenthic ecology of the proposed lease. The relative abundance of epibenthic flora and fauna observed in the video footage is described below in Table 2.

Table 2. Species observed on underwater video footage.

Species Observed	Abundance
Mysid Shrimp (<i>mysis sp.</i>)	Abundant
Sand Shrimp (<i>Crangon septemspinosa</i>)	Common
Winter Flounder (<i>Pseudopleuronectes americanus</i>)	Common
American Lobster (<i>Homarus americanus</i>)	Occasional
Rock Crab (<i>Cancer irroratus</i>)	Occasional
Long clawed hermit crab (<i>Pagurus longicarpus</i>)	Occasional
<i>Dasysiphonia japonica</i>	Occasional
Friiled anemone (<i>Metridium senile</i>)	Occasional
Rock weed (<i>Ascophyllum nodosum</i>)	Rare
Fig Sponge (<i>Suberites ficus</i>)	Rare

Marine Vegetation. Records of seagrass collected by the Maine Department of Environmental Protection (MDEP) in 2023⁵ indicates no mapped eelgrass present in the vicinity of the proposal. The nearest mapped eelgrass is approximately 2,365 feet southeast of the proposal. No eelgrass was observed on underwater video footage within the proposal boundaries during DMR’s site visit.

Wildlife. During DMR’s site visit, scientists observed herring gulls (*Larus argentatus*), common tern (*Sterna hirundo*), a black tern (*Chlidonias niger*), and a harbor seal (*Phoca vitulina*) in the general vicinity of the proposal.

The Maine Department of Inland Fisheries and Wildlife (IFW) has jurisdiction over inland fisheries and wildlife resources of the state. IFW also has the authority to conserve wildlife populations and their ecosystems through applicable state laws and rules. DMR provides IFW with notice and the opportunity to comment on all complete lease applications. In addition, the site report also includes IFW designated and mapped habitat types that are within 1,000 feet of the lease proposal, if applicable. According to Geographic

⁵ Data obtained from The Maine Office of GIS “GISVIEW.MEDEP.Seagrass2023”. This is the most current record of mapped eelgrass within the vicinity of the proposal.

Information System (GIS) data maintained by IFW and available through the Maine Office of GIS (MEGIS), there are no mapped habitat types within 1,000 feet of the lease proposal.

Though bald eagles are no longer listed on Maine's Endangered and Threatened Species List, the United States Fish and Wildlife Service (USFWS) may also have jurisdiction over the management and conservation of the species based on applicable law and rule. Data collected by USFWS in 2023 by aerial nest survey shows the nearest bald eagle nesting site to be approximately 1,750 feet northeast of the proposal on Miller Island⁶.

IFW was provided with the opportunity to comment on this proposal. On May 9, 2024, a Resource Biologist with IFW responded by email to a "Request for Agency Review and Comment" stating that minimal impacts to wildlife are anticipated for this project⁷ (SR 8-9).

Based on the record, including the absence of eelgrass and mapped significant wildlife habitats in the lease footprint, and IFW's comment, the proposed lease activities will not interfere with the ecological functioning of the area.

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

F. Source of Organisms to be Cultured

Pursuant to 12 M.R.S.A. § 6072-A(13)(E), in evaluating the proposed lease, the commissioner shall determine that the applicant has demonstrated there is an available source of organisms to be cultured for the lease site. The Commissioner shall include but not be limited to, consideration of the source's biosecurity, sanitation, and applicable fish health practices. Chapter 2.37(1)(A)(6).

According to the application, American/eastern oyster (*Crassostrea virginica*) would be sourced from Muscongus Bay Aquaculture in Bremen, Maine. This is currently an approved source for American/eastern oyster (*Crassostrea virginica*).

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

⁶ Data obtained from USFWS "Bald Eagle Nest Sites." This is the most current record of bald eagle nesting sites within the vicinity of the proposal.

⁷ Email correspondence between IFW and DMR

G. Interference with Public Facilities

When examining interference with public facilities, the Commissioner considers whether the proposed lease will unreasonably interfere 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 governmental agency. 12 M.R.S.A. § 6072-A(13)(F). Chapter 2.37(1)(A)(7) and 2.64(11)(A)).

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

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

4. Conclusions of Law

Based on the above findings, DMR concludes that:

- a. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of riparian owners.
- 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 uses of the area, including water-related uses of the area.
- d. The aquaculture activities proposed for this site will not unreasonably interfere with other aquaculture uses of 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, or docking facilities owned by federal, state, or municipal government.
- g. 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 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 Commissioner grants an experimental lease to Jason Brewer, for 2.43 acres for three years, the term of the lease to begin within 12 months of the date of this decision, on a date chosen by the lessee; however, no aquaculture rights shall accrue in the lease area until the lease is fully executed.

This lease is granted to the lessee for the suspended culture of American oysters (*Crassostrea virginica*). The granted lease coordinates are contained in the Appendix to this decision. The lessee shall pay the State of Maine rent at \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to Chapter 2.64(12)(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. Lease Conditions

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-A(15) and Chapter 2.64(11)(B). Conditions are designed to encourage the greatest multiple compatible uses of the lease area, while preserving the exclusive rights of the lessee to the extent necessary to carry out the purposes of the lease. No conditions are imposed on this lease.

7. Revocation of Lease

The Commissioner may initiate revocation proceedings and revoke the lease upon determining pursuant to 12 M.R.S.A. § 6072-A(22) that no substantial aquaculture or research has been conducted on the site over the course of the lease, that aquaculture has been conducted in a manner substantially injurious to marine organisms, or that any condition of the lease has been violated.

Dated: 7.13.2020

A handwritten signature in blue ink, appearing to read "Carl J. Wilson", written over a horizontal line.

**Carl J. Wilson, Commissioner
Department of Marine Resources**

Appendix

Granted Lease Coordinates

<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>	
NW	43.92350°	-69.57940°	then 107 feet at 063° True to
NE	43.92362°	-69.57903°	then 438 feet at 161° True to
EM	43.92248°	-69.57851°	then 560 feet at 162° True to
SE	43.92102°	-69.57785°	then 107 feet at 248° True to
SW	43.92092°	-69.57823°	then 568 feet at 342° True to
WM	43.92240°	-69.57890°	then 422 feet at 342° True to NW