

Application for Change in Species and Gear Authorization
Elmer's Pound, Black Duck Cove, Beals

EAST EPx

10/19/21

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Downeast Institute (DEI) applied to the Department of Marine Resources (DMR) to change the species and gear authorization on experimental lease EAST EPx, located in Elmer's Pound, Black Duck Cove, Eastern Bay, Beals, Washington County, Maine (the "site"). DEI is seeking authorization to cultivate sea scallops (*Placopecten magellanicus*) and to deploy lantern nets and bottom cages on the site.

1. THE PROCEEDINGS

The amendment application was submitted to DMR on June 22, 2021 and was deemed complete by DMR on July 29, 2021. Notice of the application and the 14-day public comment period were provided to other state and federal agencies, riparian landowners, the Town of Beals and its Harbormaster, and others on DMR's mailing list. The evidentiary record before DMR regarding this lease amendment application includes five exhibits (see exhibit list below).

A. List of Exhibits^{1,2}

1. Application for a change of gear and species authorization
2. Case file
3. Executed lease document for EAST EPx signed May 18, 2021
4. Original lease decision signed February 23, 2021
5. Original lease application, deemed complete August 21, 2020

2. STATUTORY CRITERIA & FINDINGS OF FACT

Approval of experimental aquaculture lease amendments is governed by 12 M.R.S.A. § 6072-A (8) and Chapter 2.44 of DMR regulations. The statute and regulations provide that the Commissioner may grant amendments for the use of specific gear, species, and/or operational modifications on an existing lease site provided the proposed changes are consistent with the findings for the underlying lease application, do not materially alter the findings of the original decision, and would not result in a change to the original lease conditions.

A. Original Lease Decision

¹ Exhibits 1-5 are cited below as: Amendment Application – "App", Case File – "CF", Executed lease document for EAST EPx – "Exhibit 3", DMR Decision on Lease EAST EPx – "Exhibit 4", and Original Experimental Lease Application for EAST EPx – "Exhibit 5".

² Page numbers are cited using the PDF page number, which may not always match the page number written on documents.

On February 23, 2021 DMR granted lease EAST EPx to DEI (Exhibit 4, page 7). DMR's Findings of Fact, Conclusions of Law, and Decision, henceforth referred to as "the decision", found that the evidence in the record supported the conclusion that the aquaculture activities proposed by DEI met the requirements for granting an experimental aquaculture lease as set forth in 12 M.R.S.A. § 6072-A (Exhibit 4, pages 6-7).

The decision provided authorization to cultivate soft-shell clams (*Mya arenaria*), arctic surf clams (*Macromeris polynyma*), American/eastern oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), razor clams (*Ensis leei*), and northern quahogs (*Mercenaria mercenaria*) using suspended culture techniques (Exhibit 5, page 7). A compartment float (12.5' x 23.5' x 4', with associated trays and wire baskets), ADPI bags (18" x 32" x 3"), and floating wooden trays (36" x 48" x 3"), comprise the gear authorized for the suspended culture of shellfish on the site (Exhibit 5, page 13 & Exhibit 4, page 2). ADPI bags and floating wooden trays are permitted to be deployed along longlines that run northwest-southeast and the compartment float is permitted to be deployed in the southwest corner of the site (Exhibit 5, page 26). During the winter months, the floating wooden trays are removed from the site and some ADPI bags are submerged on site in the midwater column, although most species are brought to DEI's hatchery for overwintering (Exhibit 5, pages 13 & 41 & Exhibit 4, page 2). Compartment floats remain in place throughout the year (Exhibit 5, page 14).

In the original lease decision, the Commissioner did not establish conditions governing the use of the site, as is allowed pursuant to 12 M.R.S.A § 6072-A (15). In the executed lease document, the lease term was set for three years, beginning on April 1, 2021 and ending on March 31, 2024 (Exhibit 3, page 1).

B. Proposed Gear Changes and Findings

DEI is requesting the authorization to add gear for the cultivation of sea scallops (*P. magellanicus*). Specifically, DEI is proposing to deploy up to 10 lantern nets (which measure 6' in length and 20" in diameter) and 10 bottom cages (36" x 18" x 9") (App, page 4). Lantern nets would be deployed along horizontal longlines running roughly parallel to existing lines of ADPI and floating wooden trays and would be located in the southwest portion of the site (App, pages 9 & 10). 40-feet of longline and (12) 12" buoys would support the proposed lantern nets, if all 10 were to be deployed (App, page 10). Longlines holding lantern nets would be secured with cement-filled cinder blocks (App, page 10). Bottom cages, which are proposed to be deployed in the southwest portion of the site and run roughly parallel to existing lines of ADPI and floating wooden trays, would be weighted, and would be marked at the surface with a single buoy (App, page 10). If this amendment is granted, bottom cages would be deployed on the site throughout the year, and lantern nets would be deployed from May to October, annually (App, page 4).

As DEI is already permitted to deploy longlines on the site to hold floating wooden trays and ADPI bags, the longlines proposed in this amendment application to hold lantern nets are similar in type to the gear already authorized. Instead of floating cages at the surface, these longlines would be attached to surface buoys (App, page 10). Additionally, as the applicant suspends ADPI bags in the middle of the water column during the winter months, lantern nets, which would be suspended in the midwater column, would be deployed in a similar style to existing gear. The proposed bottom cages are also akin in style and purpose to gear already permitted on the site. Specifically, the proposed bottom cages are similar to floating wooden

trays, ADPI bags, and wire trays enclosed in the compartment floats. The major difference between the proposed bottom cages and the existing gear is that they would be deployed on the bottom of the site, as opposed to on the surface or in the midwater column.

When considering the impact of proposed gear change on other users of the area, the main difference between the two proposals is that less space would be available within the site for other uses. However, the proposed gear amendment would not prevent other users from operating within the experimental lease area, if granted. Furthermore, DMR did not receive public comments regarding this amendment application. Lastly, as stated on page 4 of Exhibit 4, “[b]ecause the location of the proposed lease is surrounded by property owned by the applicant, and there is no public access to the impoundment... the public already does not have access to [the location of the proposed lease]”. As result, other uses within the area are likely already limited. Therefore, it appears that the proposed gear modifications would not materially alter the findings in the original decision.

As the proposed lantern nets and bottom cages are similar to the gear already permitted, the proposed gear change would not cause a material deviation from the currently permitted operations. Furthermore, it appears that the proposed gear change is unlikely to unreasonably alter the behavior of other users of the area, beyond the impact already imposed by the site.

C. Proposed Species Changes and Findings

DEI is seeking authorization to cultivate sea scallops (*Placopecten magellanicus*) on the site. This species is proposed to be cultured on gear discussed in Section 2.B of this decision (App, pages 3 & 4). DEI has demonstrated that there is an available source of sea scallop (*P. magellanicus*) for cultivation, as it proposes to provide its own seed stock (App, page 2). Sea scallops (*P. magellanicus*) are also proposed to be sourced from LPA licenses held by Alex de Koning from Trenton, Maine, and Nate Perry from Cape Elizabeth, Maine (App, page 2). All proposed sources are approved by DMR so long as the sources listed above maintain the appropriate authority for scallop spat collection.

As the proposed sources of stock are all approved by DMR, and because Section 2.B of this decision found that the proposed gear change required for the culture of sea scallop (*P. magellanicus*) on the site is consistent with the findings on the underlying lease application and would not materially alter the findings of the original decision, the presence of this species on the site are also consistent with these findings. Furthermore, the proposed species change would not result in a change to the original lease conditions. However, biotoxin testing under a Memorandum of Understanding (MOU), and at DEI’s expense, will be required for the harvest of whole or roe-on sea scallops (*P. magellanicus*)³. If sea scallop (*P. magellanicus*) harvest will consist only of the adductor muscle (and therefore will not result in whole or roe-on scallop products), no MOU would be required.⁴

3. DECISION

³ Harvest for both commercial and non-commercial human consumption requires a MOU.

⁴ The leaseholder should contact DMR’s Bureau of Public Health for more information on establishing this MOU. A list of certified biotoxin labs can be found on the DMR website.

Based on the foregoing, the Commissioner grants the requests from Downeast Institute for the authorization to cultivate sea scallops (*Placopecten magellanicus*) on EAST EPx, and for the authorization to deploy lantern nets and bottom cages on the experimental lease.

Dated: 10/19/21



Patrick C. Keliher, Commissioner
Department of Marine Resources

**STATE OF MAINE
DEPARTMENT OF MARINE
RESOURCES**

**Downeast Institute
EAST EPx**

Experimental Aquaculture Lease Application
Suspended Culture of soft-shell clams, Arctic
surf clams, American/eastern oysters,
European oysters, razor clams, Atlantic surf
clams and northern quahogs.
Elmer's Pound, Black Duck Cove, Eastern
Bay, Beals, Washington County

February 23, 2021

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

The Downeast Institute (DEI) applied to the Department of Marine Resources ("DMR") for a three-year experimental aquaculture lease located in Elmer's Pound, a tidal impoundment on Black Duck Cove in Eastern Bay, Beals, Washington County, Maine. The proposed lease is 1.08¹ acres and is for the suspended culture of soft-shell clams (*Mya arenaria*), Arctic Surf Clams (*Mactromeris polynyma*), American/eastern oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), razor clams (*Ensis leei*), Atlantic surf clam (*Spisula solidissima*), and northern quahogs (*Mercenaria mercenaria*). DMR accepted the application as complete on August 21, 2020.

1. THE PROCEEDINGS

Notice of the application and the 30-day public comment period were provided to state and federal agencies, the Town of Beals and its Harbormaster, and others on DMR's mailing list. Notice of the application and comment period was published in the September 2, 2020 edition of *The Machias Valley News Observer*. During the comment period, DMR did not receive any requests for a public hearing, and no hearing was held. The evidentiary record regarding this lease application includes the application, DMR's site report dated February 1, 2021, and the case file. The evidence from each of these sources is summarized below.²

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

¹ Applicant requested 1.14 acres. DMR calculations indicate the area is 1.08 acres.

² These sources are cited, with page references, as CF (case file), App (Application), SR (site report).

Shellfish would be cultured using floating trays and mesh bags, and a compartment float that contains stacks of plastic trays (App 13). Wooden trays and bags will be deployed on the surface between May-November. Some oysters bags will be submerged for the winter, while most species will be brought to DEI's hatchery for overwintering (App 5). The wooden compartment float measuring 12.5' x 23', which the applicant has described as being similar to a wood raft, will also be deployed on top of a 4' deep metal enclosure made from lobster trap mesh. The raft's enclosure is designed to hold stacks of plastic trays (App 6). In addition to the compartment float, the applicant proposes to deploy a maximum of 3,234 mesh bags, or 400 floating trays, or a combination of both gear types. According to clarifying information provided by the applicant, the overhead view provided in the application shows one example of how trays and bags might be deployed on the site but does not show the potential maximum gear layout should only mesh bags or trays be deployed.³ If the maximum amount of either bags or trays were deployed, mesh bags would be attached to a total of 44 longlines that are 264 feet in length and 1 longline that is 66 feet in length, while floating trays would be deployed to a maximum of 20 longlines that are 267 feet long. In addition, the overhead view in the application shows a maximum of 636 floating trays on the site, but the applicant later clarified that they intend to use only 400 trays.⁴

According to the application, the proposed site will be used as a nursery site for juvenile oysters, clams and other species. The site may be used to grow oysters to maturity, primarily to conduct growth trials on American and European oysters (App 4). Should the site not be used exclusively as a nursery, the applicant will need to obtain a Memorandum of Understanding from the DMR Bureau of Public Health and may be responsible for covering all costs associated with any biotoxin testing that may be required.

B. Site Characteristics

The proposed lease site is entirely in a tidal impoundment known as Elmer's Pound, which is operated and maintained by the applicant, DEI. The shoreline surrounding the pound is a mixture of ledge, boulder, cobble, and mud with forested uplands (SR 2). Structures associated with DEI are in the vicinity of the pound (SR 2). The bottom of the proposed site is composed primarily of mud and ledge with patches of mussel shell rubble (SR 6).

A DMR Scientist visited the site on October 28, 2020. Depths were not collected during DMR's site visit, but because the proposed site is located entirely within a tidal impoundment, in

³ CF: email correspondence between C. Adams and the applicant. January 25, 2021.

⁴ CF: email correspondence between C. Adams and the applicant. January 25, 2021.

addition to being influenced by the local tidal state, depths within the site are partially a function of the tide gate management. On the completed application, DEI indicated that the proposed lease site is above mean low water (App 1). Therefore, it is expected that if the gate were opened, the pound would drain during lower tidal stages. According to the application, when the gate is closed, water depths in the pound vary from 5 to 12.5 feet (App 9). For intertidal applications, written permission for use of any intertidal lands that will be used by the applicant is required to be given by the intertidal landowner. DEI is the owner of the adjacent parcel surrounding the proposed lease. A letter of consent for the proposed activities from the Town of Beals was also included in DEI's completed application (App 66).

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 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 water related 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 on the lease site.

A. Riparian Access

During DMR's site visit on October 28, 2020, a small wooden barge was observed docked at a cement platform near the proposed southwest corner (SR 8). The barge and platform, as well as surrounding adjacent uplands are owned by the applicant (SR 8). Because the proposed lease site is located entirely within Elmer's Pound, the impoundment is operated by the applicant, and because the applicant owns the entire area surrounding the pound, riparian access to and from the pound is already limited to the applicant (SR 8).

During the comment period, DMR did not receive any comments regarding riparian access. Based on the lack of public comments, and the evidence presented in DMR's site report, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on riparian ingress and egress.

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

B. Navigation

The proposed lease site is entirely enclosed by pound infrastructure operated and maintained by the applicant. The proposal would comprise most of the impounded area, but approximately 10 feet, at a minimum, would remain for navigation between the pound shoreline and the northern, eastern, and both southern boundaries (SR 9). This space would likely facilitate navigation for smaller vessels, such as the barge observed during the site visit (SR 9). Because the proposal is located entirely within the tidal impoundment, there is no public boat access to the waters where the lease is being proposed (SR 7). In addition, the applicant owns the entire upland area surrounding the proposal.

During the review period, DMR did not receive any comments regarding navigation. Based on the lack of public comments, the evidence in the site report, and because the proposal is located within a tidal impoundment operated by the applicant, it is reasonable to conclude that navigation in the area will not be unduly affected by the proposed application.

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

C. Fishing & Other Uses

Fishing. During DMR's site visit on October 28, 2020, no fishing activity was observed within or near the pound (SR 9). In addition, no commercial fishing is expected to occur within Elmer's Pound (SR 7). DMR did observe several mooring and marker buoys within the pound during their site visit, but all were confirmed to belong to the applicant (SR 9). The completed application stated some intertidal harvesting of periwinkles has been observed outside of the pound (App 11). No comments were received regarding fishing in the area.

Based on the lack of public comments, and the evidence in the record, it is reasonable to conclude that the proposed aquaculture activities will not unreasonably interfere with fishing.

Exclusivity. The applicant has requested that all activities not conducted by individuals associated with DEI be prohibited. Because the location of the proposed lease is surrounded by property owned by the applicant, and there is no public access to the impoundment, the lease will not be conditioned to expressly prohibit any uses as the public already does not have access to this space.

Other aquaculture uses. There are no other aquaculture leases within Elmer's Pound, but there are 8 Limited Purpose Aquaculture (LPA) licenses and 1 lease within 1 mile of the proposal. Lease EAST MCHx, is a 3.95 area experimental lease, held by DEI for the

suspended culture of shellfish. The 8 LPAs within 1 mile are held by two different individuals who are associated with the applicant (SR 7).

Other water-related uses. During the review period, DMR did not receive any comments detailing other water-related uses that are not already contemplated in other sections of this decision. Based on the absence of public comments, it is reasonable to conclude that there are no concerns regarding the effects the proposed lease may have on other water-related uses of the area.

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

D. Flora & Fauna

Historical eelgrass (*Zostera marina*) data collected by DMR in 2009 indicate that the closest eelgrass to the proposed site was in Black Duck Cove, approximately 200 feet outside of Elmer's Pound (SR 9). During DMR's visit to the site on October 28, 2020, no eelgrass was observed from the shoreline of the pound (SR 10).

During their visit to the site, DMR staff observed various gulls (*Larus sp.*). According to data maintained by the Maine Department of Inland Fisheries and Wildlife (MDIFW), the proposed lease is located more than 890 feet to the northwest of crowberry blue butterfly (*Plebejus idas empetri*) habitat, which is considered a Species of Greatest Conservation Need, and is more than 1,700 feet to the southwest of Tidal Wading Bird and Waterfowl Habitat (SR 11). During the review period for this application, DMR sent the application to the MDIFW for their review and comment, and they indicated that "minimal impacts to wildlife are anticipated for this project.⁵"

DMR did not conduct an underwater assessment of the proposed lease area but did conduct a walk around the shoreline of the impoundment and observed rockweed, common periwinkles, and mussel shell rubble (SR 10). The applicant reports that periwinkles and green crabs have been observed in the pound (App 10). No public comments were received regarding the flora and fauna in the area.

Based on the evidence that the proposed lease does not interact with historical eelgrass beds, and because no other comments were received regarding the flora and fauna in the area, it appears that the proposed aquaculture activities for this lease site will not interfere with the ecological function of the area.

⁵ CF: Email from R. Settele to C. Burke on September 10, 2020.

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

There are no beaches, parks, or docking facilities owned by municipal, state, or federal 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

The applicant intends to source all species from their hatchery, the Downeast Institute, which is an approved source for all the proposed species.

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

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation.
3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, taking into consideration the number and density of aquaculture leases in 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 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 the requested experimental lease of 1.08 acres to the Downeast Institute for three years, the term of the lease to begin within twelve months of the date of this decision, on a date chosen by the lessee⁶; 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 cultivation of soft-shell clams (*Mya arenaria*), Arctic Surf Clams (*Mactromeris polynyma*), American/eastern oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), razor clams (*Ensis leei*), Atlantic surf clam (*Spisula solidissima*), and northern quahogs (*Mercenaria mercenaria*) using suspended culture techniques. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. Since this is an experimental lease with more than 400 sq. ft. of structures and no discharge, a bond or escrow account is required. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.64 (12)(B) in the amount of \$5,000.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 MSRA §6072-A (15)⁷. Conditions

⁶ DMR Rule 2.64 (14) provides:

“The term of the lease shall begin within 12 months of the Commissioner’s decision, on a date chosen by the applicant. No aquaculture rights shall accrue in the lease area until the lease term begins and the lease is signed.”

⁷ 12 MRS A §6072-A (15) provides that:

“The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site

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 purpose of the lease. No conditions have been incorporated into the lease.

7. REVOCATION OF EXPERIMENTAL LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 MRSA §6072-A (22) and DMR Rule Chapter 2.64 (13) that no substantial research has been conducted on the site within the preceding year, that research has been conducted in a manner injurious to the environment or to marine organisms, or that any conditions of the lease or any applicable laws or regulations have been violated.

Dated: 2/23/21



Patrick C. Keliher, Commissioner

Department of Marine Resources

and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose. The commissioner may grant the lease on a conditional basis until the lessee has acquired all the necessary federal, state and local permits.”