

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Standard Aquaculture Lease Application
Bottom culture of shellfish, Damariscotta River

Dodge Cove Marine Farm, LLC
Lease DAM HI5
Docket # 2018-01
July 31, 2018

HEARING OFFICER'S REPORT
PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Dodge Cove Marine Farm, LLC, applied to the Department of Marine Resources (“DMR”) for a standard, 20-year aquaculture lease¹ on 3.55 acres² of the coastal waters and sea bottom of the State of Maine, located south of Hog Island in the upper Damariscotta River in Damariscotta, Lincoln County, for the purpose of cultivating American oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), bay scallops (*Argopecten irradians*), and northern quahogs (*Mercenaria mercenaria*) using bottom culture techniques. DMR accepted the application as complete on January 11, 2018. No one intervened in this case. A public hearing on this application was held on July 10, 2018, in Damariscotta.

1. THE PROCEEDINGS

Notices of the hearing and copies of the application and DMR site report were provided to numerous state and federal agencies for their review, as well as to various educational institutions, aquaculture and environmental organizations, the Town of Damariscotta and the Damariscotta Harbormaster, members of the Legislature, representatives of the press, riparian landowners, and other private individuals. Notice of the hearing was published in the *Lincoln County News* on June 7 and June 28, 2018, and in the *Commercial Fisheries News* July, 2018 edition.

Sworn testimony was given at the hearing by the applicant, by Jon Lewis, Director of the DMR Aquaculture Division; and by two members of the public, Steve Guttenplan and Brendan Parsons. Antonina Simmons, managing member of the applicant corporation, described the proposed project. Mr. Lewis described the site visit and presented a video of the bottom. Mr. Guttenplan and Mr. Parsons commented briefly about the application.

Each witness was subject to questioning by the Department, the applicant, the intervenors, and members of the public. No representatives of federal, state, and local government agencies attended the hearing.

The hearing was recorded by DMR. The hearing officer was Diantha Robinson.

¹ Legislation effective Nov. 1, 2017 allows the Department to issue standard leases for terms of up to twenty years (12 MRS §6072 (2A)).

² Although the application lists the acreage as 3.56 acres, the DMR site report calculated it as 3.55 acres.

The evidentiary record before the Department regarding this lease application includes three exhibits introduced at the hearing (see exhibit list below) and the record of testimony at the hearing itself. The evidence from all of these sources is summarized below.³

LIST OF EXHIBITS⁴

1. Case file #2018-01
2. Application signed and dated 12-08-2017
3. DMR site report dated 5-29-18

2. DESCRIPTION OF THE PROJECT

A. Site History

Since 2014, Dodge Cove Marine Farm, LLC, has held an experimental lease, DAM HI5x, for bottom culture of American oysters on the same site that is the subject of this application.⁵ Maine law provides that an experimental lease, which cannot be renewed after its term expires, can continue in use pending a decision on a standard lease application to replace it, provided the application is submitted before the expiration date of the lease, which was done in this case (12 MRS sec. 6072-A (20)). This application proposes to continue the bottom culture of oysters on the site, with the only changes being the addition of three other shellfish species.

B. Site Characteristics

The proposed lease site is located in the upper Damariscotta River, approximately 400 feet east of the main navigational channel and 400 feet south of the nearest upland (Hog Island) (App 4). Extensive intertidal mud flats lie over 1,000 feet east of the site, along the eastern shore of the river (SR 5).

The site itself is roughly rectangular, approximately 200 feet by 800 feet, with its longer axis running north-south, parallel to the river's channel. Two of the applicant's other lease sites, DAM HI (suspended and bottom culture of shellfish) and DAM HI2 (bottom culture of shellfish), abut the proposed site on the east (App 5). A third site, DAM HI3 (suspended and bottom culture of shellfish), held by the applicant's parent company, Muscongus Bay Aquaculture, Inc., lies a short distance to the east of the three contiguous sites (SR 8).

The application describes the bottom of the site as flat, somewhat deeper on the east side and becoming shallower to the west, composed of silty mud in the west and rocks and shell

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

⁴ Exhibits 1, 2, and 3 are cited below as: Case file – "CF"; Application – "App", site report – "SR". Other exhibits are cited by number.

⁵ Although the Articles of Incorporation attached to the application list the corporate name as "DCMF LLC," review of corporate records held by the Maine Secretary of State indicate that the corporate name was changed in 2009 to its present form.

fragments in the east (App 4). The application lists water depths at mean high water (MHW) as 13 feet at the north side and 11 feet at the south side and at mean low water (MLW) as 3 feet on the north side and 1.5 feet on the south (App 4). The site report notes that the site is subtidal, with approximately 13 to 14 feet of water at high tide on April 5, 2018 (SR3). Current speeds are approximately 3-4 knots, running north on the flood tide and south on the ebb (App 4).

Mr. Lewis testified that the lease site is shallow but the bottom is never exposed at low tide. Ms Simmons testified that the site is too shallow to use aquaculture gear such as floating oyster bags or cages.

The waters on and around the proposed lease site are designated as Area No. 23A and currently classified by the Department's Water Quality Classification program as "open/approved for the harvest of shellfish" (App 5).

C. Proposed Operations

The applicant proposes to grow four species of shellfish on the proposed lease site by planting them directly on the bottom, using no gear other than corner markers for the lease site. At present, the site is planted with American oysters, as it has been for the duration of the experimental lease. The application states, "We expect approximately 2 million oysters will be cultivated on this site inclusive of three year-classes at any one time" (App 4). The application notes that the proposed lease abuts two other Dodge Cove leases and "would function as an extension of the applicant's existing operations in the shallows south of Hog Island" (App 5).

Ms Simmons testified that the lease site is particularly valuable, both as good oyster habitat and as a grow-out site for the disease-resistant oysters she breeds in her hatchery, both for her own use and for sale to other growers. She said that seed is grown in the adjacent lease sites in summer and planted on the proposed site in the fall.

According to the application, oysters are harvested between March and December. Two boats, a 24-foot Carolina skiff and a 22-foot drag boat, will be on the lease site from Monday to Friday between 6:00 a.m. and 4:00 p.m. Shellfish will be harvested daily by diver or by boat using a small drag and will be hand-sorted on a nearby raft. A wash-down pump for cleaning harvested shellfish is located on one of the abutting lease sites; it has "an integrated muffler to reduce noise" (App 4).

No lights will be used on the site, as no work will be done beyond daylight hours, except in an emergency. Marking buoys will be removed during ice season between December and March.

The applicant will gain access to the proposed lease site from its commercial pier on the river to the south, in Edgecomb.

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 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 the number and density of aquaculture leases in an area; with the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna; or with the public use or enjoyment within 1,000 feet of beaches, parks, docking facilities, or conserved lands owned by municipal, state, or federal governments. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will be in compliance with visual impact criteria adopted by the Commissioner relating to color, height, shape, and mass.

On April 5, 2018, DMR biologists visited the proposed lease site and assessed it and the surrounding area in light of the criteria for granting an aquaculture lease, as described in the site report.

A. Riparian Access

The site report indicates that the nearest dock lies at the south end of Hog Island, about 400 feet north of the proposed lease site. There will be no fixed gear on the lease site that could hamper access between the dock and the open water of the river. The report notes, however, that when vessels are working on the site, other mariners crossing the site may need to alter course (SR 6). With two small work boats operating in a site of 3.5 acres, this would not create an unusual burden on vessels traveling to or from the dock.

Brendan Parsons testified that he and his father own Hog Island and thus are the sole riparian landowners within 1,000 feet of the proposed lease. He said he supports Ms Simmons's application. He is an oyster grower himself and plans to apply for a lease to grow oysters closer to Hog Island.

The evidence indicates that the proposed lease activities, like the experimental lease operated since 2014, will not contain any fixed or surface gear and will not hamper access to and from Hog Island.

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

B. Navigation

The site report states that since no gear will be deployed on the proposed lease site, navigation through the site will be unobstructed except when vessels are on-site conducting seeding and harvesting, as noted above; such interference would be minimal in any event and

consistent with conditions normally encountered on the river. The site is more than 400 feet east of the main navigational channel, so the aquaculture activities will not interfere with vessel traffic in the channel. There is 400 feet of open water north of the proposed lease site of the same depth as that on the site, so navigation between the site and Hog Island will not be hampered (SR 6).

A completed Harbormaster Questionnaire was received from the Damariscotta Harbormaster, Paul Bryant, who notes that he has “never received complaints regarding DAM HI5x” (the existing lease), and that the site is “well clear of designated channels.” There are no moorings in the area, no storm anchorages, and the nearest riparian on Hog Island is nearly 500 feet to the northeast (Harbormaster Questionnaire, p. 1).

Steve Guttenplan testified that he lives on the shore to the north of Hog Island and sails in the Damariscotta River. In recent years, he said, the proliferation of aquaculture gear north of Cottage Point has made it impossible for him to sail north beyond that point in the river, something he was accustomed to doing. He recognized that no gear is proposed for the lease site in question here, but he wished to alert the Department to this issue.

Based on this evidence, it appears that the proposed lease and its operations will not hamper navigation in the vicinity.

Aquaculture lease sites are required to be marked for navigation purposes in accordance with U. S. Coast Guard requirements.

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

C. Fishing & Other Uses

DMR biologists observed a clam harvester on the intertidal flats on the west shore of the river, across the channel from the proposed lease site. The site report notes that clams and oysters are also harvested on the intertidal flats on the east shore but that the subtidal lease will not impede access for such harvesters. With no gear in the water, the proposed lease will not interfere with recreational fishing, except when boats are working on the site.

The Harbormaster noted that “Some lobstering and crabbing in the vicinity and recreational fishing is done in this area” (Harbormaster Questionnaire, p. 2). The site report observes that “Access to the east shore of the Damariscotta River will be hindered more by tidal stage and the resulting shoal water,” than by the existence of the proposed lease site (SR 6).

The evidence indicates that while some level of commercial and recreational fishing is likely to occur in the vicinity of the lease, it is unlikely that the presence of the aquaculture lease site will interfere significantly with fishing of any kind. The lease must be marked in accordance with DMR Rule 2.80.⁶

⁶**2.80 Marking Procedures for Aquaculture Leases**

1. When required by the Commissioner in the lease, aquaculture leases shall be marked with a floating device, such as a buoy, which displays the lease identifier assigned by the Department and the words

Other aquaculture leases. According to the site report, there are 13 aquaculture lease sites and 16 limited-purpose aquaculture (LPA) license sites within one mile of the proposed lease site (App 7-8). Of these, only the applicant's existing lease sites, DAM HI and DAM HI2, are within 400 feet of the proposed lease site; the others lie more than 400 to 1,000 feet away. From this evidence, it appears that the proposed lease site and its activities are far enough away from other existing, unrelated sites that they are unlikely to interfere with aquaculture activities at those locations.

Exclusivity. The application states that "Boating traffic will not be restricted in boundaries of the proposed lease," but requests exclusive use of the bottom in order to conduct its aquaculture activities, with restrictions on all dragging, diving, and lobster and crab fishing (App 6). These restrictions are reasonable in order to enable the aquaculture project to be carried out while encouraging the greatest number of compatible uses of the area, as provided in 12 MRS §6072 (7-B). Conditions reflecting these restrictions will be included in the lease.

Therefore, considering the number and density of aquaculture leases in the area, I find that the aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area.

D. Flora & Fauna

Site observations. Species of marine flora and fauna observed by Department biologists during the site visit included hermit crabs, American oysters, red and brown filamentous algae, smooth cord weed, sea lettuce, and tunicates (SR 9-10). The application notes that green crabs, horseshoe crabs, and sand shrimp inhabit the site, as well (App 5).

No eelgrass was observed during the Department's underwater site assessment on April 5, 2018. DMR data indicate that the closest historical record of eelgrass to the proposed lease site was in 2005, when the eelgrass was noted more than 1,500 feet south of the site (SR 10).

SEA FARM in letters of at least 2 inches in height in colors contrasting to the background color of the device. The marked floating device shall be readily distinguishable from interior buoys and aquaculture gear.

2. The marked floating devices shall be displayed at each corner of the lease area that is occupied or at the outermost corners. In cases where the boundary line exceeds 100 yards, additional devices shall be displayed so as to clearly show the boundary line of the lease. In situations where the topography or distance of the lease boundary interrupts the line of sight from one marker to the next, additional marked floating devices shall be displayed so as to maintain a continuous line of sight.
3. When such marking requirements are unnecessary or impractical in certain lease locations, such as upwellers located within marina slips, the Commissioner may set forth alternative marking requirements in an individual lease.
4. Lease sites must be marked in accordance with the United State's Coast Guard's Aids to Private Navigation standards and requirements.

Fisheries & wildlife. A copy of the application was provided to the Maine Department of Inland Fisheries and Wildlife (MDIFW) for review. MDIFW advised DMR after reviewing the lease application that “Minimal impacts to wildlife are expected.”⁷

DMR biologists observed bald eagles, herring gulls, and a common loon during the site assessment (SR 10). According to the site report, MDIFW data show that a bald eagle nest on Hog Island is more than 400 feet from the proposed lease site (SR 10-11, Fig. 5).

The application states that the proposed lease site is more than 650 feet from the nest and that “identical activities occurring on the applicant’s adjacent lease sites have not posed any threat to eagles and their habitat” (App 6). The proposed lease site has operated under the experimental lease since 2014 in the same way that it is proposed to be operated if the new lease is granted; no concerns were raised by MDIFW regarding the eagles on Hog Island. Mr. Lewis testified that it appears that the eagles on Hog Island have become accustomed to the aquaculture activities on the existing lease sites and are apparently not disturbed by them.

The site report states that “the intertidal areas to the east and west of the proposed lease are categorized as Tidal Wading Bird and Waterfowl Habitat,” or TWWH. The report notes that TWWH “is defined under Maine’s Natural Resources Protection Act (NRPA) as Significant Wildlife Habitat. The proposed lease is located more than 800 feet from any areas currently mapped as TWWH.”

Title 12 MRS §6072 (7-A) (D), the lease criterion referred to here as “flora and fauna,” and in DMR rules and the DMR site report as “Existing System Support,” provides that the proposed lease operations must:

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.

The Department interprets this language as requiring it to look broadly at the potential effect of proposed lease activities on ecologically significant flora and fauna, both on the proposed lease site and on and in the surrounding lands and waters. In other words, DMR’s review of the potential ecological effects of an aquaculture lease on its surroundings is not limited to the area within the boundaries of the proposed lease site or to effects that would occur in areas designated as “significant wildlife habitat.” The scope of this review also extends to effects on “marine habitat” in general and on “existing ecologically significant flora and fauna” wherever they occur, whether in the water (“surrounding marine...areas”) or on land (“surrounding...upland areas”). Determining which species are ecologically significant depends on the nature and location of the proposed lease site, the land and water around it, and the species that exist there.

⁷ E-mail from John Perry, MDIFW to Cindy Burke, DMR, February 13, 2018

In this case, the area of significant wildlife habitat (that designated as Tidal Wading Bird and Waterfowl Habitat by MDIFW) is more than 800 feet from the proposed lease site. The site itself is covered by water at all tides, and no aquaculture gear will be placed there. MDIFW reviewed the lease application and determined that impacts on wildlife from the proposed lease are expected to be “minimal.” Thus, it appears that the lease will not interfere with the birds’ use of the area. Likewise, the distance of the lease site from the eagle’s nest and the lack of concerns on the part of MDIFW support the conclusion that the proposed lease will not interfere with the eagles that nest on Hog Island.

Therefore, I find that 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

According to the Harbormaster Questionnaire, there are no public parks, docks, or beaches within 1000 feet of the proposed lease.

According to the site report, “Goose Ledges, located more than 800 feet to the northwest of the proposed lease site at mean low water, is classified as a ‘Coastal Island’ and owned by” MDIFW. This property is listed by the State of Maine as Conserved Lands.⁸ Thus, it appears that there are government-owned conserved lands within 1,000 feet of the proposed lease site. The criteria for granting aquaculture leases require that they not unreasonably interfere with such conserved lands.

MDIFW did not comment regarding any potential effect of the proposed lease on Goose Ledges. Considering that there is an existing aquaculture lease site of over 10 acres for bottom culture of oysters (DAM GL3) immediately adjacent to the west side of the Ledges, it appears unlikely that a smaller, similar site more than 800 feet away, with no surface or fixed gear, would interfere with the public use and enjoyment of the Ledges.

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

F. Source of Organisms

The application indicates that the source of stock for this proposed lease site is the parent company of the applicant, Muscongus Bay Aquaculture in Bremen, Maine (App, cover page).

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

⁸ See <https://maine.maps.arcgis.com/apps/webappviewer/index.html?id=b846cf37b1d64c988f89eafa085c8b7a>

G. Light

The application indicates that no lights will be used at the proposed lease site, and that “Only in an emergency would we expect to be onsite beyond daylight hours.” (App 4).

Therefore, I find that the aquaculture activities proposed for these sites will not result in an unreasonable impact from light at the boundaries of the lease site.

H. Noise

The application indicates that the 24-foot skiff and 22-foot drag boat, which are powered by outboard motors, will be used daily at the proposed lease site between March and December (App 4). The site report notes that these vessels are powered by outboard motors and were observed during the site visit (SR 12). The wash-down pump used to clean oysters after harvest is located “on the abutting lease. The pump has an integrated muffler to reduce noise” (App 4). The site report observes that no changes are proposed to the current operations that have been conducted for the past three years on the site under the experimental lease. The Department has not received complaints regarding noise from these operations.

DMR Rule 2.37 (1) (A) (9) requires applicants to “demonstrate that all reasonable measures will be taken to mitigate noise impacts from the lease activities.” It provides that “All 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 pump is muffled, according to the application.

Many similar aquaculture farms grow and harvest oysters in this area of the river using similar vessels and equipment. Recreational and commercial fishing and boating take place in the vicinity, as well. It does not appear that such noise as is generated by operations on the site would be different from similar sounds in that part of the river or that it would have a significant effect at the boundaries of the lease.

Therefore, I find that the aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease.

I. Visual Impact

Since the proposal is for bottom planting only, no structures will be placed on the proposed lease site, other than marker buoys, which will be similar to many other buoys marking lease sites in this part of the river. The Department’s visual impact rule requires structures and gear on lease sites to blend with the surroundings as much as possible. The evidence shows that this will be the case on the proposed lease site.

Therefore, I find that the equipment, buildings, and watercraft to be used at the proposed lease 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, 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 are available sources of the stock to be cultured for the lease site.
7. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
8. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
9. The aquaculture activities proposed for this site will comply with the visual impact criteria contained in DMR Regulation 2.37(1)(A)(10).

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

5. DECISION

Based on the foregoing, the Commissioner grants the requested lease of 3.55 acres to Dodge Cove Marine Farm, LLC for twenty years for the purpose of cultivating American oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), bay scallops (*Argopecten irradians*), and northern quahogs (*Mercenaria mercenaria*), using bottom culture. The lessee shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The lessee shall post a bond or establish an escrow account pursuant to DMR Rule 2.40 (2) (A) in the amount of \$500.00, 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 MRSA §6072 (7-B)⁹ 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.

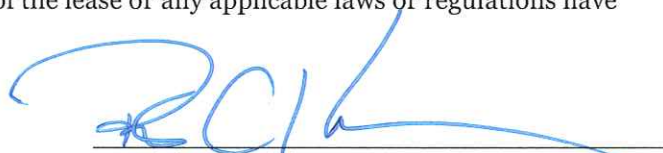
The following conditions shall be incorporated into the lease:

1. The lease site must be marked in accordance with both U.S. Coast Guard requirements and DMR Rule 2.8o.
2. Dragging, diving, shellfish harvesting, and lobster and crab fishing, except by the leaseholder or its authorized agents, are prohibited on the lease site.
3. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

7. REVOCAION OF LEASE

The Commissioner may commence revocation procedures upon determining pursuant to 12 MRSA §6072 (11) and DMR Rule Chapter 2.42 that no substantial aquaculture has been conducted within the preceding year, that the lease activities are substantially injurious to marine organisms, or that any of the conditions of the lease or any applicable laws or regulations have been violated.

Dated: 7/31/18



**Patrick C. Keliher, Commissioner
Department of Marine Resources**

⁹ 12 MRSA §6072 (7-B) states: "The commissioner may establish conditions that govern the use of the leased area and limitations on the aquaculture activities. These conditions must encourage the greatest multiple, compatible uses of the leased area, but must also address the ability of the lease site and surrounding area to support ecologically significant flora and fauna and preserve the exclusive rights of the lessee to the extent necessary to carry out the lease purpose."