

STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

**IN THE MATTER OF THE APPLICATION OF GREAT)
EASTERN MUSSEL FARMS FOR AN AQUACULTURE) FINDINGS OF FACT,
LEASE LOCATED OFF OF HADLEY POINT IN THE) CONCLUSIONS OF LAW
MOUNT DESERT NARROWS, BAR HARBOR,) AND DECISION
HANCOCK COUNTY, MAINE)**

On January 31, 2005, Great Eastern Mussel Farms (hereafter referred to as GEMF) of Tenants Harbor, Maine applied for an aquaculture lease totaling 47.16 acres in the coastal waters of the State of Maine, located off of Hadley Point in the Mount Desert Narrows in Bar Harbor, Hancock County, Maine. The applicant requested the lease for a term of ten (10) years for the purpose of cultivating blue mussels (*Mytilus edulis*) using bottom culture techniques. The application was accepted as complete on February 23, 2005. A public hearing on this application was held on September 29, 2005 at 6:00 p.m. in Bar Harbor.

Approval of aquaculture leases is governed by 12 M.R.S.A. §6072. This statute provides that a lease may be granted by the Commissioner of the Department of Marine Resources (DMR) if it is determined that, taking into consideration the number and density of aquaculture leases in an area, the project will not unreasonably interfere with the ingress and egress of riparian owners; navigation; fishing or other uses of the area; significant wildlife habitat and marine habitat or the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna; or the public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency. 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.

**Evidence Introduced Concerning the Nature
and Impact of the Proposed Lease**

The evidentiary record before the Department regarding this lease application includes the Department file (Exhibit 1), including the application (Exhibit 2) and the Department site report (Exhibit 3), and the record of the September 29, 2005 public hearing. At the public hearing, testimony was given by the applicant, represented by Theo de Koenig and Carter Newell, the Department's Aquaculture Environmental Coordinator, Jon Lewis, and several members of the public.

Theo de Koning and Carter Newell of GEMF provided testimony at the hearing regarding the application and proposed lease activities. According to the application and the applicants' testimony, the proposed lease is sought to raise blue mussels on a lease site totaling 47.16 acres, for a lease term of ten (10) years. The proposed lease activities would consist of growing mussels on the bottom of the lease area. Mr. de Koning testified that surplus wild mussel seed would be taken by drag from wild beds in the intertidal zone and planted on the bottom of the lease site in November. He explained that the seed is referred to as surplus because it is very small seed that would otherwise die off in the winter. According to Mr. de Koning, they take approximately 75% of the small seed mussels, leaving the remainder of the mussels with a better chance of survival. He stated that the goal is no net depletion of mussel seed with proper management. When the seed mussels reach 2 inches, approximately one year later, they would be harvested from the lease site by dragging. Depending on demand, harvesting would take place approximately 1-3 days per week, 3-4 hours per day at high water. According to the application, the applicant does not plan to use lighting at the lease site. The only power equipment that would be used on the site is a 60-foot mussel dragger that would be used for seeding and harvesting. According to the application,

the vessel sounds similar to a lobster boat. Mr. de Koning testified that the dragger has recently been outfitted with new water-cooled exhausts and extra sound insulation in the engine compartment. The vessel would be on the site for approximately 3-4 weeks per year for seeding and 3-4 weeks for harvesting. According to the application, all seed shellfish would be obtained from wild beds located in Maine waters, caught on mussel ropes or purchased from a mussel seed supplier such as Tight Rope Seafarm.

In accordance with Department regulations, Chapter 2.10(3), the applicant provided an environmental characterization of the proposed lease area. According to the application, the bottom of the lease site varies from mud to sandy cobble substrate. The depths at mean low water are estimated to be between 1 and 18 feet. Local flora and fauna include a common occurrence of periwinkles and mud shrimp and a rare occurrence of rock crabs. No eelgrass was observed at the proposed lease site. Mr. Newell testified that he dove in the proposed lease area and he observed eelgrass outside of the proposed lease area in deeper water. According to the application, the current flow is estimated to be less than 30 cm/sec. and flows in an east/west direction. Additionally, the proposed lease is not located within an Essential Habitat.

According to the application, the main thread of the Mount Desert Narrows is located approximately 1500 feet north of the proposed lease site. According to the applicant, the navigational hazards should be minimal because there will be no structures on the lease site. Additionally, according to the application, there are currently no moorings located within the proposed lease area. The applicant would work with adjacent property owners who wish to place a mooring within the proposed lease to find a mutually acceptable location. According to the application, there are no commercially important shellfish beds within the proposed lease site. Historically, wild mussels have been fished inside of the proposed lease area, along the shore. Mr. de Koning testified that the proposed lease area was seeded by the applicant in December of 2004 and there was no wild seed set within the lease site. According to the

application, there is minimal commercial fishing within the proposed lease site, including occasional crab and lobster fishing.

The Department's Aquaculture Environmental Coordinator (AEC) and his assistant conducted a site visit at the proposed lease area on May 20, 2005. During the site visit, a diver survey, utilizing an underwater video camera, was performed. The AEC created a site report summarizing the information obtained during the site visit and provided testimony regarding the site report at the public hearing.

According to the report and the AEC's testimony, the proposed site is located off of Hadley Point, in the Mount Desert Narrows, in water depths ranging from 9-15 feet during an ebb tide, with an estimated minimum depth of 4 feet at mean low water. The topography of the proposed lease site consists of generally flat bottom with soft sediments. Occasional boulders, rock outcrops and ledges were observed. According to the AEC's report, currents are tidally driven in an east/west direction.

According to the AEC's report, local fauna observed at the proposed lease site consists of an abundance of mysid and sand shrimp, blue mussels, common sea stars and periwinkles; a common occurrence of waved whelk; and an occasional hermit crab, burrowing anemone, green sea urchin, moon jellyfish, polychaete worms and nudibranch eggs. According to the AEC's report, the western 1/3 of the proposed lease site contained small patches of mussels, whereas the eastern 2/3 exhibited large dense beds of small mussels. The AEC testified that the high density area appeared to have been seeded and was not a natural set. Flora observed during the site review include knotted wrack, kelp, brushy red weed and patches of eelgrass. The AEC testified that he reviewed the underwater video and concluded that patches of eelgrass covered 2.2% of the lease site surveyed. He stated that it is not an eelgrass bed and is not functioning as a refuge. According to the AEC, there are other places in the bay where eelgrass is denser. He stated that he looked at 1996 aerial photography and that the photography indicated that the western part of the bay, including the proposed lease

site, was covered with eelgrass. He testified that the bay is not nutrient limited and that more mussels would be a good thing for the bay. According to the AEC's report, the proposed lease is located in an area classified as open for the harvest of shellfish by the Department's Water Quality Division. Additionally, there are no Essential or Significant Wildlife Habitats associated with the proposed activities.

According to the AEC, there were 7 vessel moorings observed along the eastern boundary of the proposed lease site. The number of moorings doubles in the summer months. The moorings are associated with the town boat launch/picnic area on Hadley Point, which is less than 600 feet from the proposed lease site. According to the site report, the Town of Bar Harbor is in the process of installing a boat ramp off of Hadley Point, which would be located approximately 687 feet from the proposed lease site. An additional 50 moorings is anticipated in the area of the boat ramp. According to the AEC, the proposed lease activities will not interfere with riparian ingress or egress because the applicant does not intend to use any structures on the lease site. Additionally, according to the AEC, the proposed activities will not interfere with navigation in the area, because the lease site will not contain any aquaculture gear. The proposed site is located a minimum of 100 feet south of the main navigational channel for the Mount Desert Narrows. Several large fishing vessels were observed traversing the area within the channel.

According to the AEC's report, no commercial or recreational fishing was observed within the boundaries of the proposed lease site during the site visit. Several mussel draggers were observed traversing the area to the north of the proposed site, but none were fishing within the boundaries of the proposed lease site. According to the report, a wild set of mussels can be found outside the proposed lease area, toward the shore. The AEC testified that he received phone calls from two mussel draggers stating that they have historically dragged for mussels within the proposed lease site. He stated that the proposed lease site is like any other area in the bay for mussel draggers and is not a hot spot. There are two aquaculture

lease sites located within 1 nautical mile of the proposed site. Both leases are used for the bottom culture of blue mussels. One of the sites is leased to the applicant.

Charlie Phippen, Bar Harbor Harbormaster, provided written comments and testified regarding the proposed lease site. Mr. Phippen stated that he was concerned regarding the proximity of the proposed lease to Hadley Point because the town is going to build a new boat ramp off of the point, approximately 600 feet from the proposed lease. According to Mr. Phippen, Hadley Point is a town-owned beach. He testified that he anticipates an expansion of the mooring field after the boat ramp is installed and that the presence of a lease in close proximity to the ramp would interfere with the town's ability to expand the mooring field. He requested that the eastern boundary of the site be moved approximately 400 feet, so the lease boundary would be 1,000 feet from the boat ramp. In response to Mr. Phippen's concerns, the applicant agreed to move the lease boundary 400 feet, in order to be 1,000 feet from the boat ramp. According to Mr. Phippen's written comments, recreational fishing for clams and mussels occurs in the intertidal zone adjacent to the lease area. There are limited commercial fisheries within the proposed lease and would include hand mussel harvesters and mussel draggers.

Several members of the public testified and provided written comments regarding the proposed activities. Some members of the public expressed concerns regarding the proximity of the proposed lease to the public beach on Hadley Point. Two riparian landowners who reside near two bottom aquaculture leases held by the applicant submitted written comments in support of the applicant, stating that their aquaculture activities have not resulted in any adverse impacts.

A worm harvester testified that he is concerned about dragging for seed in the intertidal areas, because it interferes with worm harvesting. The applicant stated that they would work with area wormers to address the issue. A mussel dragger who holds a 90-acre mussel lease in the bay testified that he has harvested mussels from the proposed lease site for over 25

years on the cycles. He was unable to be specific about how often he dragged in the particular area. He stated, however, that he drags other areas of the bay and the granting of this lease would not put him out of business. He also expressed a concern for the availability of food in the bay to feed all of the mussels.

A riparian landowner testified regarding the importance of eelgrass. He requested that the lease include some retention and restoration of eelgrass. He testified that he supports the proposed lease as long as it meets certain proposed conditions. He stated that the proposed conditions were developed in consultation with the applicant, the Mount Desert Island Water Quality Coalition, and the Bar Harbor Marine Resources Committee (“BHMRC”). He noted that the conditions were in draft form and needed further refinement by the affected parties. The proposed conditions included a detailed site assessment, a monitoring plan, and eelgrass conservation and re-seeding. The Chair of the BHMRC also testified regarding the proposed conditions. She stated that the committee voted to support the proposed conditions.

The parties involved in the negotiations regarding proposed conditions requested more time to further refine the conditions. The Hearing Officer agreed to hold the record open for 2 weeks to allow the parties to consult and submit proposed conditions for the proposed lease. On October 13th, the Department received a list of 4 proposed conditions that require the leaseholder to attend BHMRC meetings, prohibit dragging between the lease area and the intertidal zone south and west of the lease, require the leaseholder to relinquish the lease area within 1,000 feet of the boat ramp at the request of the Town of Bar Harbor, and require that the conditions remain in effect for the life of the lease.

Findings of Fact

The proposed lease is located a minimum of 100 feet south of the navigational channel of the Mount Desert Narrows in water depths ranging from 1-18 feet at mean low water. The proposed lease activities consist of freely planting mussels on the bottom of the lease site. Therefore, there will be no structures on the lease site, other than buoys marking the

boundaries. There are no moorings located in the lease area. No use of riparian land was requested or required. Based on this evidence, I find that the lease will not unreasonably interfere with navigation or the ingress and egress of riparian owners.

Fishing in the area of the proposed lease site consists of lobster and crab fishing and mussel dragging. There are wild patches of mussels located in 1/3 of the proposed lease site and a wild mussel bed is located outside of the lease, toward the shore. At least one mussel dragger has dragged for mussels historically in the area of the proposed lease. The proposed lease area is one of many areas in the bay that is dragged for mussels and is not a hot spot of activity. The area of the proposed lease is classified as open for the harvest of shellfish. There is sufficient feed in the bay to support the addition of more mussels into the bay. I find that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

Existing fauna observed at the proposed site consists of an abundance of mysid and sand shrimp, blue mussels, common sea stars and periwinkles; a common occurrence of waved whelk; and an occasional hermit crab, burrowing anemone, green sea urchin, moon jellyfish, polychaete worms and nudibranch eggs. Local flora includes knotted wrack, kelp, brushy red weed and patches of eelgrass. The patches of eelgrass cover 2.2% of the lease site surveyed. The eelgrass is not an eelgrass bed and is not functioning as a refuge. There is denser coverage of eelgrass elsewhere in the bay. The proposed site is not located within an Essential Habitat. Based on this evidence, I find that the proposed activities will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna.

All seed shellfish will be obtained from wild beds located in Maine waters, caught on mussel ropes or purchased from a mussel seed supplier such as Tight Rope Seafarm. Based on this evidence, I find that there is an available source of blue mussels.

The proposed lease site is located approximately 600 feet from a town beach on Hadley Point. The Town of Bar Harbor is in the process of installing a boat ramp off of the beach area and anticipates an expansion of the mooring field around the ramp. The applicant has agreed to move the boundary of the proposed lease area approximately 400 feet in order to be 1,000 away from the Hadley Point beach and ramp area. Whereas the proposed lease activities involve the bottom planting of mussels and no surface gear will be utilize, the lease will not impede access to and from the beach and future boat ramp. Based on this evidence, I find that the proposed lease site activities, as revised, will not unreasonably interfere with public use or enjoyment within 1,000 feet of any municipally, state, or federally owned beaches, parks, or docking facilities.

The only power equipment used on site will be the vessel used for seeding and harvesting which has recently been equipped with new water-cooled exhausts and extra sound insulation in the engine compartment. Additionally, lighting will not be used at the lease site. I find that the proposed lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site.

The proposed lease activities consist of bottom planting of mussels and therefore no surface gear will be used other than corner marker buoys. Therefore, I find that the proposed lease will comply with visual impact criteria.

Finally, whereas the applicant agreed, at the request of the Town of Bar Harbor, to move the eastern boundary of the lease site so as to be located 1,000 feet from the town ramp, the eastern boundary will be moved. The new coordinates for the eastern boundary are Latitude 44° 26' 34.758"N, Longitude 68° 19' 29.864"W for the northeast corner and Latitude 44° 26' 31.500"N, Longitude 68° 19' 26.100"W for the southeast corner. The total acreage for the lease site is 40.45 acres.

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 significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna;
5. The applicant has demonstrated that there is an available source of blue mussels;
6. The aquaculture activities proposed for this site will not unreasonably interfere with public use or enjoyment within 1,000 feet of municipally, state or federally owned beaches, parks, or docking facilities;
7. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and
8. The aquaculture activities proposed for this site will be in compliance with visual impact criteria.

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

Decision

Based on the foregoing, the Commissioner grants the applicants' requested aquaculture lease of 40.45 acres from the date of this decision for the purpose of cultivating blue mussels (*Mytilus edulis*) using bottom culture techniques. The applicant shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The applicant shall post a bond or establish an escrow in the amount of \$500 conditioned upon their performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

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. 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 aquaculture law.

The following conditions are placed on this lease:

- (1) navigation, lobster and crab fishing, and recreational boating and fishing shall be allowed on the lease;
- (2) dragging in the lease area is prohibited by persons other than the leaseholder;
- (3) the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80; and
- (4) the leaseholder shall not drag in the area between the lease boundaries and the adjacent shoreline to the south and west of the lease site.

The Commissioner may commence revocation procedures if he determines that substantial aquaculture has not been conducted within the preceding year or that the lease activities are substantially injurious to marine organisms. If any of the conditions or requirements imposed in this decision, in the lease, or in the law are not being observed, the Commissioner may revoke the aquaculture lease.

Dated: _____

George D. Lapointe (Commissioner)
Department of Marine Resources