

**STATE OF MAINE**

**DEPARTMENT OF MARINE RESOURCES**

**IN THE MATTER OF THE APPLICATION OF )  
EVAN YOUNG FOR AN AQUACULTURE ) FINDINGS OF FACT,  
LEASE LOCATED EAST OF HARDWOOD ) CONCLUSIONS OF LAW  
ISLAND, TREMONT, HANCOCK COUNTY, ) AND DECISION  
MAINE )**

On December 7, 2004 Evan Young of Hancock, Maine applied for an aquaculture lease totaling 2.3 acres in the coastal waters of the State of Maine, located east of Hardwood Island in Blue Hill Bay, Tremont, 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 suspended culture techniques. The application was accepted as complete on December 30, 2004. A public hearing on this application was held on June 20, 2005 at 6:30 p.m. in Tremont.

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 June 20, 2005 public hearing. One member of the public attended the hearing and asked questions of the applicant regarding seed source.

According to the application, the proposed lease is sought to raise blue mussels on a lease site totaling 2.3 acres, for a lease term of ten (10) years. The applicant testified that he currently operates mussel rafts on a lease site located adjacent to the proposed site held by Trumpet Island Salmon Farm. The proposed lease activities would be conducted in the same manner as on the adjacent lease and would consist of growing mussels on dropper ropes suspended from a maximum of six 40' x 40' rafts. According to the application, the site would be monitored by boat two to seven days per week. Seeding takes place May to June and October to December and consists of using the raft as a work platform upon which to feed seed through the seeding machine. The lease would be harvested year round in response to market demand. The mussels are harvested from a 24' Carolina skiff, using a 12" wide conveyor belt that is powered by a 5.5 Hp Honda power pack. The mussels are pulled onto the boat and taken to the processing barge located off-site, in Great Cove. The Carolina skiff, which has a 115 Hp Suzuki four stroke outboard, is used for both seeding and harvesting. The 5.5 Hp Honda power pack runs the conveyor belt and seeding machine and has a factory-installed muffler. It usually operates at idle. Harvesting occurs 2-3 days per week, 2 hours per day. Seeding occurs 3-4 times per week, 3 hours per day in the spring and fall. The applicant does not plan to use lighting at the lease site other than required navigational lighting. According to the application, the floats of the rafts are black and partially submerged and the galvanized frame is gray. All seed mussels would be obtained from Tighrope Seafarms in Hancock, Maine.

In accordance with Department regulations, 2.10(3), the applicant provided an environmental characterization of the proposed lease area. According to this environmental characterization, the bottom of the proposed lease site consists of a mixed bottom. Fauna consists of crabs and star fish and flora is rare. The depths are estimated to be between 40 and 70 feet. The current is estimated to be approximately 7 cm per second and flows north to south. Additionally, the proposed lease site is located outside of the Essential Habitat zone on the north end of Hardwood Island.

According to the application, the only riparian landowners within 1,000 feet of the proposed lease are the owners of Hardwood Island. The applicant will not be using the island to access the lease, nor is the lease area used by the landowners to access the island. According to the application, the proposed lease site is located between Hardwood Island to the west and the Trumpet Island Salmon Farm lease to the east. There is very little boat traffic in the proposed lease area. There are 2 to 4 kayak tours that pass the site daily. There is limited lobster and crab fishing close to shore, which would be permitted on the open areas of the lease site. Additionally, the lease holder of the adjacent lease site, Trumpet Island Salmon Farm, submitted a letter with the application in support of the proposed lease.

The Department's Aquaculture Environmental Coordinator (AEC) conducted a site visit at the proposed lease area on April 19, 2005. During the site visit, an underwater Remote Operated Vehicle (ROV) was used to collect video footage of the proposed lease area. The AEC created a site report summarizing the information obtained during the site visit. According to the AEC's report, the proposed lease is located east of Hardwood Island in water depths of approximately 85 feet at mean low water (MLW), with shallower depths toward shore to the west. The bottom of the proposed site is comprised of a thin mud layer over firmer bottom covered with cobble and shell hash. Currents are tidally driven in a north/south direction and are estimated to be approximately 12 to 16 cm/s. Local flora and fauna observed at the proposed lease site include an abundance of mysid shrimp, sand shrimp, sea stars, and crabs; a common occurrence of burrowing anemones, frilled anemones, and cockle shells; and

occasional fronds of kelp, juvenile sculpin, stalked sea squirt, and sponge. According to the AEC's report, due to the dominance of opportunistic species such as crabs and sea stars taking advantage of the mussel drop-off from the adjacent lease site, the proposed lease is not expected to interfere with the ability of the area to support existing flora and fauna. Ecological change that includes a continued hardening of the bottom due to mussel drop-off and a dominance of opportunistic species should be expected.

According to the AEC, the proposed activities will not interfere with navigation or riparian ingress and egress. According to the AEC's report, no moorings or docks were observed within the boundaries of the proposed lease site. Moorings associated with the adjacent lease area are located to the north of the proposed site. The nearest dock is located 900 feet south of the proposed site. Little vessel traffic traverses between the existing lease site and Hardwood Island. The majority of traffic passes to the east of the existing lease site.

According to the AEC's report, no fishing activity was observed within the boundary of the proposed lease site during the site visit. The AEC does recognize in his report that the majority of fishing in the area occurs during the warmer months of the year. Based upon previous visits to the proposed lease area, the AEC indicated that few lobster traps are expected within the area of the proposed lease site. The majority of lobster fishing in the area occurs to the north, south and east of the proposed site. The nearest aquaculture lease (TISF HT) is located 100 feet to the east of the proposed lease site. 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.

The AEC also addressed the potential noise and light impacts of the proposed site in his report. According to the AEC, the 4 stroke outboard motor used by the applicant is significantly less audible than the traditional 2-stroke models. Additionally, the 5.5 Hp Honda power pack used for seeding and harvesting creates a sound equivalent to a small Honda push-style lawnmower. The AEC noted that the only lights on the lease site will be those necessary for

navigational aids. According to the AEC, the Department has not received any complaints regarding the applicant's activities on the adjacent lease site.

Bruce MacQuaid, the Tremont Harbormaster, provided written comments. Mr. MacQuaid indicated that the proposed lease site would not interfere with navigation or riparian access; that there are no permitted moorings within the lease boundaries; that there are no storm anchorages within the proposed lease area; that there is seasonal lobster and crab fishing and limited fishing for mackerel, herring and pollock in the area of the proposed lease; that the proposed moorings appear adequate for the conditions; and that there are no local, state or federally owned beaches, parks or docking facilities within 1,000 feet of the proposed lease site. Mr. MacQuaid indicated that he has no problems with the lease application being approved.

#### **Findings of Fact**

The proposed lease site is located between Hardwood Island to the west and an aquaculture lease (TISF HT) to the east in water depths of approximately 85 feet at mean low water (MLW), with shallower depths toward shore. There are no moorings or docks located in the area of the proposed lease. The proposed lease area is not used by the owners of Hardwood Island to access the island. Their dock is located 900 feet south of the proposed site. Due to its location between the island and an existing lease, very little vessel traffic is expected in the proposed lease area. Based on this evidence, I find that the lease will not unreasonably interfere with navigation or the ingress and egress of riparian owners.

Limited lobster and crab fishing is expected within the area of the proposed lease site. The majority of lobster fishing in the area occurs to the north, south and east of the proposed site. Fishing would be permitted on the open areas of the lease site. The nearest existing aquaculture lease is located 100 feet east of the proposed lease site. The adjacent leaseholder supports the proposed lease. The area of the proposed lease is classified as "open" for the harvest of shellfish. Based on this evidence, I find that the proposed lease will not unreasonably interfere with fishing or other uses of the area.

The bottom of the proposed site is comprised of a thin mud layer over firmer bottom covered with cobble and shell hash. Currents are tidally driven in a north/south direction and are estimated to be approximately 12 to 16 cm/s. Local flora and fauna include mysid shrimp, sand shrimp, sea stars, crabs, burrowing anemones, frilled anemones, cockle shells, kelp, juvenile sculpin, stalked sea squirt, and sponge. The proposed site is expected to attract opportunistic species, such as crabs and sea stars, which will take advantage of the mussel drop-off from the rafts. The proposed lease site is not located within an Essential or Significant Wildlife 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 mussels will be obtained from Tighrtrope Seafarms in Hancock, Maine. Based on this evidence, I find that there is an available source of blue mussels.

The proposed lease site is not located within 1,000 feet of any public beaches, parks, docking facilities, or conserved land. Based on this evidence, I find that the proposed lease site activities will not unreasonably interfere with 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.

A Carolina skiff with a 115 Hp Suzuki four stroke outboard is used for both seeding and harvesting. The 4 stroke outboard motor is significantly less audible than the traditional 2-stroke models. A 5.5 Hp Honda power pack with a factory-installed muffler is used to run the conveyor belt and seeding machine. The power pack has a noise level equivalent to a small Honda push-style lawnmower. The equipment would be used 2-3 days per week, 2 hours per day for harvesting, and 3-4 times per week, 3 hours per day in the spring and fall for seeding. The applicant does not plan to use lighting at the lease site other than required navigational lighting. 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 colors of the proposed gear, black and gray, will allow the gear to blend in with the surrounding area. All equipment on the lease site will be less than 20 feet in height. I find that the proposed lease will comply with visual impact criteria.

### **Conclusions of Law**

Based on the above findings, taking into consideration the number and density of aquaculture leases in the area, 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;
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 a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency;
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 applicant's requested aquaculture lease of 2.3 acres from the date of this decision for the purpose of cultivating blue mussels (Mytilus edulis) using suspended 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 \$5,000 conditioned upon his 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 fishing and recreational boating and fishing shall be allowed on the open areas of the lease; and
- (2) the lease area shall be marked in accordance with U.S. Coast Guard and Department of Marine Resources regulations Chapter 2.80.

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:** \_\_\_\_\_

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**George D. Lapointe (Commissioner)**  
**Department of Marine Resources**