

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES

Standard Aquaculture Lease Application
Net-pen culture of finfish
West of Stave Island, Frenchman Bay

GreatBay Aquaculture
of Maine, LLC

Lease FREN STA
Docket # 2011-09
June 6, 2012

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

GreatBay Aquaculture of Maine, LLC, a Maine corporation, applied to the Department of Marine Resources (“DMR”) for a standard aquaculture lease on 20 acres located in the coastal waters of the State of Maine, west of Stave Island in Frenchman Bay, in the Town of Gouldsboro in Hancock County, for the purpose of cultivating Atlantic cod (*Gadus morhua*) and Atlantic halibut (*Hippoglossus hippoglossus*) using net-pen culture techniques. DMR accepted the application as complete on February 25, 2011. There were no intervenors. A public hearing on this application was held on November 15, 2011 in Gouldsboro, Maine.

1. THE PROCEEDINGS

Notices of the hearing and copies of the application and DMR site report were sent to numerous state and federal agencies for their review, as well as to a number of educational institutions, aquaculture and environmental organizations, the Town of Gouldsboro and the Gouldsboro Harbormaster, members of the Legislature, representatives of the press, riparian landowners, and other private individuals. They were also posted on the Department’s web site. Notice of the hearing was published in the *Ellsworth American* on October 13 and November 3, 2011 and in the *Commercial Fisheries News* November, 2011 edition.

Sworn testimony was given at the hearing by the applicant, represented by Morey Levovitz, owner of the company, and Clayton Coffin, the site manager at the company’s existing lease site, FREN PI4. Testimony was also given by DMR’s Aquaculture Environmental Coordinator, Jon Lewis, and by Sebastian Belle, James West, and Chris Heinig. Mr. Levovitz and Mr. Coffin described the proposed project. Mr. Lewis presented his site report, including a video presentation showing the sea bottom on the site. Mr. Belle and Mr. Heinig testified in support of the project. Mr. West testified about lobster fishing in the vicinity of the site. Each witness was available for questioning by the Department, the applicant, and members of the public. The hearing was recorded by DMR. The Hearing Officer was Diantha Robinson.

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.¹

LIST OF EXHIBITS²

1. Case file, 2011-09
- 2 A. Application signed and dated 1-25-11
- 2 B. Baseline Site Survey Report, dated Jan. 20, 2011, prepared by MER Assessment Corporation
3. DMR site report dated 9-13-11

2. DESCRIPTION OF THE PROJECT

A. Proposed Operations

GreatBay Aquaculture of Maine currently holds lease FREN PI4 to grow cod and halibut, as well as blue mussels, scallops, and seaweed, at a 35-acre site in Frenchman Bay near Preble Island, approximately two miles northwest of the proposed lease site. The project proposed in this application is a continuation of the development of cod culture pioneered at the existing site. According to the application,

The commercial culture of cod is relatively new and not all of the parameters for the efficient and sustainable rearing of cod are as clearly known or as well-defined as other species currently being reared. This project will build upon existing knowledge and experience gained from other commercial species in addition to the two-year history of the Preble Island site. GBAM will continue to investigate and seek to adapt new technologies and methods specific to the rearing of cod (A2).

GreatBay proposes to grow cod and halibut on the proposed lease site using twelve 70-meter polar circle cages arrayed in two rows of six cages each (A2). Six cages will be deployed in the summer of the first year of operation. Initially, two pens will be stocked with 150,000 5-gram codlings. As the fish grow, they will be apportioned into other pens. Six more cages will be deployed in the late spring of the second year of operation, stocked with 150,000 more fish. The stocking density will be approximately 0.93 lbs per cubic foot, which is described as “cautious and reasonable” by the applicant (A 7). Mr. Levovitz testified that all fish farms need more than a single site, to allow each site to lie fallow for a period of time (Levovitz/West).

¹ In references to testimony, “Smith/Jones” means testimony of Smith, questioned by Jones.

² Cited as CF, App, SR, with page numbers or item numbers indicated. Other exhibits are cited by exhibit number.

The equipment to be used on the site, according to the application, has been commonly used in aquaculture for raising salmon and has “proven reliable to withstanding the weather and sea conditions anticipated at this location” (A7). The applicant may also “trial new netting material for the polar circle cages” (A2). It may upgrade the cages from 70 meters to 100-meter polar circles, to allow for greater volume (A2). The application states that halibut will be reared in a manner similar to cod, but that “some gear modifications increasing substrate availability will be explored” (A 11).

At the hearing, Mr. Levovitz testified that although GreatBay tested a submersible “Aquapod” fish cage at the Preble Island site, “it did not pan out” and in his opinion, “offshore aquaculture is quite a ways from here.” Mr. Levovitz said that the Preble Island cod farm is working well, and his company has no plans to operate offshore in the immediate future (Levovitz/West).

The fish pens will be moored to a grid of moorings and lines as illustrated on pages 40-42 of the application. The moorings themselves will be 3,000-lb Danforth anchors; the mooring lines will be 1 5/8” polysteel, connected with heavy duty shackles and thimbles. Bridle lines of 1” polysteel will connect the cages to grid plates that are connected in turn to the anchors (A3).

Predator nets and bird nets will be coated with an antifouling material, inspected weekly, and changed yearly. The applicant may conduct a trial of an uplift net system:

At some point, GBAM would like to trial an uplift net system that would function to collect all uneaten feed, feces and mortalities into a collection pipe in the bottom of the net. The collected substances would be pumped to the attending vessel and disposed of in an appropriate manner onshore (A5).

The fish will be fed daily at varying frequencies, depending on water temperature and weather. Feeding will done by hand or with blowers and will be monitored with underwater cameras to limit uneaten feed and potential build-up (A5). Divers will remove mortalities at least once each week, composting the dead fish. A veterinarian will inspect the fish. Antibiotics would be used only “as required to maintain fish health and by the direction and under the supervision of the veterinarian” (A6).

According to the application, fish will be harvested approximately once per week, either 2.5-lb. fish for the live market or 6-lb. fish for the fresh-slaughter market (A6). All the company’s harvest at its existing Preble Island site at the time of the application was for the live market, although once the proposed lease is in operation, it is possible that some fresh-slaughtered fish will also be marketed. Fish will be slaughtered on the site and transported to shore in iced tanks for further processing. Live harvested fish will also be processed on shore (A6).

Shore facilities include office space and feed and equipment storage at the old fire hall in Sorrento and at Sorrento Lobster Pound. Vessels are moored in Sorrento harbor with access

through the town dock and boat landing (A9). Other area facilities are used for loading, transferring fish stocks, construction of cages, and offloading harvested fish (A9).

Vessels used at the site will include 20' and 37' boats, a 40' x 15' steel barge, and a 15' x 53' steel landing craft (A5).

Other aspects of the proposed operations are discussed below.

B. Site Characteristics

On July 29, 2011, Department biologists visited the proposed lease site, using a remotely-operated vehicle "to document bottom characteristics and local flora and fauna" (SR2). According to the site report, "The information garnered from the Department's epi-benthic survey is intended to supplement that provided in the 'Baseline Site Survey Report'", which is part of the application and contains highly detailed information about the biological and hydrographic nature of the proposed lease site (SR2).³

The site report describes the site as follows:

The area of the proposed lease consists of a silt bottom with no rocky outcrops or substantial variation in topography. A gradual decrease in water depths occurs to the east (nearer Stave Island). Currents run primarily in a north/south direction depending upon tidal stage. Page "12 of 28" in the Baseline Site Survey Report submitted by the applicant indicates mean currents of approximately 10.5 cm/sec or approximately 1,240 feet per hour.

The proposed lease is more than 1,000 feet from the western shore of Stave Island. The upland is dominated by a steep rocky shoreline leading to mature undeveloped forest (SR3).

Water depths at the site range from 81 ft. in the eastern portion to as much as 109 ft. elsewhere on the site. According to the site report, depths in the area where the fish pens will be moored are approximately 100 ft. deep at mean low water. The reports notes that this depth is "more than adequate for fish pens that will be constructed with nets falling 30 feet into the water column (see page 40 of the application)" (SR3).

The 20-acre site is laid out as a rectangle measuring 870' x 1,000', with the longer axis running east-west, perpendicular to the west shore of Stave Island. The southeast corner of the proposed lease site is located 1,138 ft. from the nearest intertidal shore of Stave Island; the northeast corner is 1,216 ft. from that shore (SR3). At least four miles of open sea lie to the west of Stave Island.

Other information about the site is discussed below.

³ The Baseline Site Survey Report is Exhibit 2B in these proceedings.

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.

A. Riparian Access

According to both the application and the site report, the nearest land to the site, Stave Island, is well over 1,000 feet away. According to the site report, "The western shore of Stave Island is undeveloped; no houses, docks or moorings were visible on July 29, 2011" (SR4). The report also notes that between the eastern boundary of the site and the shore of Stave Island lie more than 850 feet of navigable water thirty feet or more in depth at mean low water (SR4).

This evidence indicates that there is ample navigable water between the proposed aquaculture site and the shore of Stave Island and that access to and from the shore will not be hindered by the activities of the fish farm.

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 describes the location of the site with respect to navigation as follows:

The proposed lease would occupy approximately 1,000 feet of navigable waters (on an east-west orientation) along the western shore of Stave Island. Approximately 885 feet of navigable water would remain between the 30-foot depth contour along the western shore of Stave Island and the eastern boundary of the proposed lease.

Vessels transiting Frenchman Bay would be unimpeded by the proposed lease location. Only vessels transiting between the southern end of Stave Island and to the east of Calf Island and to the east of navigational can "1" would be affected. Those vessels would need to travel a course that is approximately 1,000 feet more to the west than might ordinarily be expected under current conditions. Total transit distance would increase approximately 650 feet if a vessel was required to travel around the proposed lease site instead of through it (SR4).

With 885 ft. of open water over 30 ft. deep to the east of the proposed lease site and approximately four miles of open water to the west, there is clearly ample room for vessels of all types to move around the site in its open location in the bay. There is also space within the lease boundaries for vessels to navigate, provided they do not interfere with the aquaculture operations.

The evidence shows that the proposed operations at this site will not interfere with navigation. The mandatory application for marking requirements will ensure that the site is marked as the Coast Guard sees fit to warn mariners of its location.

Therefore, I find that the aquaculture activities proposed for this site will not unreasonably interfere with navigation. The lease site must be marked in accordance with U.S. Coast Guard requirements.

C. Fishing & Other Uses

According to the application, the site “was chosen to accommodate navigational concerns of commercial fishermen between Gouldsboro and the Halibut Hole between Jordan and Ironbound Island. There is commercial fishing in the area” (A14).

The site report observes:

On July 29, 2011 lobster fishing was observed in the general area. Four vessels were noted hauling traps to the northeast and southwest of the proposed farm. The majority of fishing activity and observed trap buoys were scattered outside the western boundary, between Stave Island and Long Porcupine Island (Figure 1). A single vessel was also witnessed fishing between Stave Island and the proposed lease area. Another vessel, reportedly belonging to Mr. James West, transited through the proposed lease site during the Department’s site visit.

Some shrimp harvesting may occur in the area during winter months; northern shrimp dominated the benthic landscape within the area of the proposed lease...” (SR4).

Mr. Lewis testified that he saw no lobster traps on the proposed lease site at the time of the site visit on July 29, 2011. Most traps were located to the west, he said, and a few to the east (Lewis, testimony). James West, a Sorrento lobsterman, testified that about ten lobstermen use the area to fish, but “not all the time, mainly in August and September” (West, testimony).

Mr. Coffin testified that no fishing gear was located on the site two days before the hearing. He said that in managing the existing lease site, he uses discretion, allowing fishing gear to be used on the site, and requesting it be moved if the company needs to work in that location (Coffin/Vassey).

Mr. Levovitz said that monitoring at the existing Preble Island site shows negligible evidence that there are even any fish cages there, with no change to the condition of the sea bottom at the site since the aquaculture operations began. No pesticides will be used on either site, he said; the feed comes from natural feed companies and contains no additives or pesticides.

Sea lice are “not an issue” for cod, he said, and nothing in the water at either site will endanger the surrounding area (Levovitz/Vassey).

It appears from this evidence that while lobstering is conducted from time to time in the vicinity of the site, the site itself is not a significant location for lobstering. No evidence was presented regarding shrimp harvesting or other forms of fishing.

Exclusivity. The application states:

“Operation of the site does not necessarily require exclusive use. However, for the purposes of biosecurity, we would seek to limit physical contact and access to the cages from unauthorized vessels and persons. Fishing within the lease is not a concern other than drag-type fishing which may be come entangled with the mooring that are critical to site security” (A14).

The degree of exclusivity requested by the applicants is reasonable, and the use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines will be prohibited. Other forms of fishing will be permitted on the site outside the mooring grid, but physical contact with or access to the fish pens will be prohibited. These restrictions will be included as conditions in the lease.

Other aquaculture leases. According to the site report, there is one other aquaculture lease in the vicinity, namely the existing 35.66 acre Preble Island lease (FREN PI4) operated by the applicant. This farm is located approximately 1.9 miles to the northwest and is used for raising Atlantic cod (SR4). The proposed site will not interfere with the existing site.

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. The use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines will be prohibited. Other forms of fishing will be permitted on the site outside the mooring grid, but physical contact with or access to the fish pens will be prohibited except with the lessee’s permission. The lease must be marked in accordance with DMR Rule 2.80.⁴

⁴ **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 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.

D. Flora & Fauna

According to the site report, Department biologists observed only a few species of flora and fauna at the proposed lease site. These included northern shrimp, a sculpin, and probable wrymouth eel burrows. Eelgrass is present on the opposite (eastern) side of Stave Island, but not in the vicinity of the proposed lease site. The bottom of the site is soft mud "...with no rocky outcrops or substantial variation in topography. A gradual decrease in water depths occurs to the east (nearer Stave Island)" (SR5). The report also notes that harbor porpoises, harbor seals, and gray seals "should be expected to transit the area of the proposed lease" (SR6).

The report states that:

According to maps available through the Maine Department of Inland Fisheries and Wildlife (MDIF&W) and the Maine Office of GIS, there are no Essential or Significant Wildlife Habitats surrounding the proposal (i.e. seabird nesting islands) (SR6).

The waters around the southern tip of Stave Island have been designated as a "rafting bird area" where coastal waterfowl aggregate in the fall. These data were compiled from seasonal aerial surveys conducted by MDIF&W between 2000 and 2004. The proposed cod farm, if granted, would be located more than 2,000 feet from the designated area. There exists, however, the potential for aggregations of birds to be attracted to the farm. According to information provided in the application, bird nets would be deployed to exclude waterfowl from the fish pens. Top nets or bird nets are a routinely used predator deterrent method in marine aquaculture.

The Department mailed a copy of the application and a "Request for Review and Comment" to the Maine Department of Inland Fisheries & Wildlife on March 3, 2011. No response was received from that Department. It is usual for MDIF&W to respond if they foresee a conflict between the proposed aquaculture lease and a wildlife resource in the area; the absence of a response generally indicates that no conflict is expected.

Testimony by both Jon Lewis and Chris Heinig, a private consulting marine biologist and site evaluator, indicated that the biological nature of the proposed site is very similar to the existing FREN PI4 site. Both witnesses noted that the existing site shows virtually no evidence of any impact from the fish-rearing work that has been conducted there since 2008. Mr. Lewis testified that site monitoring videos are taken of the sea bottom at all Maine fish farms twice a year, and he looks at all of them. The soft mud bottom at the Preble Island site was like a "snow bank", he said, and he feared that uneaten feed might accumulate on the bottom there. On reviewing the monitoring videos, he said he was "stunned" at how clear the site was. The Preble Island site is very clean, Mr. Lewis said, and he assumes that finfish aquaculture will also work

4. Lease sites must be marked in accordance with the United State's Coast Guard's Aids to Private Navigation standards and requirements.

well at the Stave Island site, which has similar physical characteristics and will be under the same management (Lewis, testimony).

Mr. Lewis noted that no toxic substances can be used at the site without a permit from the Maine Department of Environmental Protection. Sea lice affect salmon, not cod, he said, so there will be no need to treat the fish for lice. Monitoring of the bottom is required twice each year by the Department of Environmental Protection, and this will continue, he said. He did not note anything during his survey of the site to indicate any concerns for any marine species in the area of the site (Lewis/Belle). No chemicals will be put in the water that could affect the lobster fishery around Stave Island. If a bacterial problem were to develop at the farm, he said, the company could use medicated feed, but the Department of Marine Resources would test and monitor the area. There has been no problem to date from the use of medicated feed at Maine salmon farms, he said. Mr. Lewis also noted that fish feed is costly, so there is an incentive not to waste it by allowing uneaten feed to accumulate on the bottom. The genetic makeup of the cod to be raised at the proposed site is the same as that of the wild cod stocks in the Gulf of Maine, Mr. Lewis said, so should any cod escape, there would be no problem should they mate with local cod (Lewis/Vassey).

Sebastian Belle, Executive Director of the Maine Aquaculture Association (MAA), a trade association of aquaculturists, endorsed the application, saying that Mr. Levovitz's company "has gone out its way to learn all the right things to do, ask for input, and ensure that things are done properly" at the fish farm at Preble Island. Mr. Coffin "takes care and time to do things right", he said. GreatBay, MAA, and the University of Maine created the Cod Academy, which recently trained a number of commercial fishermen to farm cod, in hopes of diversifying the economic base in the Maine fishing industry, Mr. Belle said (Belle, testimony).

James West, a Sorrento fisherman and co-lessee of the Preble Island lease site with GreatBay, asked if cod might escape from the lease sites and prey on lobsters in the area. Mr. Levovitz said that while one can never make a definite statement regarding the unknown, to his knowledge, there have been no fish escapes from the Preble Island site to date. He said that when seals make holes in the nets surrounding the pens, divers repair them promptly. The existing site has come through the winters without damage, and there were no ill effects at the Preble Island site after the last major storm, he said, noting that he is confident that there is little risk of fish escaping (Levovitz/West).

Chris Heinig, the president of MER Assessment Corporation, testified as "a member of the public and a friend of the proceedings." Mr. Heinig said he has performed baseline and environmental monitoring for fish farms since 1988. He was an instructor at the Cod Academy in 2011. Mr. Heinig noted that the Department of Environmental Protection requires monitoring of all net pen aquaculture sites twice each year with video of the bottom and monitoring of sulfides in the sediments on the sea floor. In October, 2011, he monitored the Preble Island site on the south and north sides and directly beneath the fish pens, and there was no feed buildup at all and

“very little evidence of impact” from the fish farming operations, Mr. Heinig said. The Stave Island site is “remarkably similar” to the Preble Island site, in its depth, its marine life, and in the soft mud bottom with sediments “like a snow bank” (Heinig, testimony).

Based on the monitoring results at the Preble Island site, Mr. Heinig testified, with the same husbandry and management, he expects that environmental impacts will not be appreciably different from those at the Preble Island site and thus will meet the criterion regarding the ability of the lease site and surrounding areas to support existing ecologically significant flora and fauna (Heinig, testimony).

The evidence shows that the proposed aquaculture operation is unlikely to have an adverse effect on any species of flora or fauna on the proposed lease site or in its vicinity.

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 site report (SR7), there are no government-owned beaches, parks, docking facilities, or conserved lands within 1,000 feet of the proposed lease site.

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, or docking facilities or certain conserved lands owned by municipal, state, or federal governments.

F. Source of Organisms

The application indicates that the sources of stock Atlantic cod (*Gadus morhua*) and Atlantic halibut (*Hippoglossus hippoglossus*) for this proposed lease site are: GreatBay Aquaculture, Downeast Institute in Beals, Maine, and the Center for Cooperative Aquaculture Research of the University of Maine in Franklin, Maine.

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

G. Light

The site report states that:

The applicant has proposed that normal work at the site would not occur beyond daylight hours therefore exterior work lighting is not anticipated other than for emergencies.

The U.S. Coast Guard may require navigational lighting on the lease site, however these would be navigational aids not illuminating devices (SR7).

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 site report states that:

The applicant has proposed using diesel powered feed barges and work barges, outboard and inboard powered boats, gas powered feed blowers and an occasional pressure washer. The applicant states that each of these is equipped with a muffler. Each piece of equipment generates noise levels similar to those currently occurring from fishing and other vessel activity in the area. Noise levels would be similar to those produced at the existing Preble Island lease site (SR7).

DMR Rule 2.37 (1) (A) (9) requires applicant 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.”

It appears from this evidence that all motorized equipment will be muffled and that any noise generated by operations on the site is unlikely to 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

The application, as required, contains two photographs of the fish pens now on the FREN PI4 site as seen from the water (A 44, 45). The cages and netting are black, and the low profile of the pens, as well as their dark color, reduces their visual impact. No permanent on-site support structures will be used on the lease (A2).

Compensator buoys used in the mooring grid will be yellow (A4). Marking buoys required by DMR and any navigation lighting required by the U.S. Coast Guard should be visible by their nature.

DMR Rule 2.37 (1) (A) (10) requires that equipment colors blend in with the surrounding area and that buoy colors do not compromise safe navigation or conflict with U.S. Coast Guard requirements. The black pens and nets blend with the surroundings. Navigation markings will be reviewed by the Coast Guard. The lease operations as proposed will meet the requirements of the visual impact criteria in DMR Rule 2.37 (1) (A) (10).

Therefore, I find that the proposed lease 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. Navigation is permitted on the lease site. The lease site must be marked in accordance with U. S. Coast Guard requirements.
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. The lease boundaries must be marked in accordance with the requirements of DMR Rule 2.80. The use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines will be prohibited. Other forms of fishing will be permitted on the site outside the mooring grid, but physical contact with or access to the fish pens will be prohibited except with the lessee's permission.
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 Atlantic cod (*Gadus morhua*) and Atlantic halibut (*Hippoglossus hippoglossus*) 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 20 acres to GreatBay Aquaculture of Maine, LLC, for ten years for the purpose of cultivating Atlantic cod (*Gadus morhua*) and Atlantic halibut (*Hippoglossus hippoglossus*) using net pen 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 account pursuant to DMR Rule 2.40 (2) (A) in the amount of \$ 25,000.00, conditioned upon its 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)⁵ 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 2.80.
2. Navigation is permitted on the lease site.
3. The use of mobile fishing gear on the lease site, including, but not limited to, drags, dredges, trawls, and seines is prohibited. Other forms of fishing are permitted on the lease site, outside the mooring grid. No person or gear is permitted to make physical contact with any equipment or gear on the site or to gain access to the fish on the site without prior authorization from the lessee or its authorized representatives.

7. REVOCATION OF LEASE

The Commissioner may commence revocation procedures if s/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

⁵ 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."

requirements imposed in this decision, in the lease, or in the law is not being observed, the Commissioner may revoke the aquaculture lease.

Dated: June 6, 2012

A handwritten signature in black ink, appearing to read 'P. C. Keliher', written over a horizontal line.

Patrick C. Keliher
Commissioner,
Department of Marine Resources