

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Standard Aquaculture Lease Application
Eastern Side of Calf Island, Jonesport, Maine
Net-pen culture of finfish

Cooke Aquaculture USA, Inc.
Lease EASTW CALF
Docket # 2015-11
March 15, 2016

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

1. PROCEDURAL HISTORY

Cooke Aquaculture USA Inc., a Maine corporation, applied to the Department of Marine Resources (“DMR”) for a standard aquaculture lease on 28 acres located in the coastal waters of the State of Maine, off the eastern side of Calf Island, located between Hardwood and Hall Islands, in the Town of Jonesport in Washington County, for the purpose of cultivating Atlantic Salmon (*Salmo salar*), using net-pen and suspended culture techniques, as well as a feed barge. DMR accepted the application as complete on June 8, 2015. There were no intervenors. A public hearing on this application was held on February 22, 2016, in Jonesport, Maine.

A. THE PROCEEDINGS

Notices of the hearing and copies of the application and DMR site report were provided to state and federal agencies for review, as well as to a number of educational institutions, aquaculture and environmental organizations, the Town of Jonesport and the Jonesport Harbormaster, members of the Legislature, representatives of the press, riparian landowners, and other private individuals. They were also posted on DMR’s web site. Notice of the hearing was published in the *Bangor Daily News* on February 3, 2016; the February issue of the *Commercial Fisheries News*; and the *Machias Valley News Observer* on January 20, 2016, February 3, 2016, and February 17, 2016.¹

Sworn testimony was given at the hearing by the applicant, represented by Jennifer Robinson, Compliance Officer for Cooke Aquaculture USA, Inc.; and by DMR’s Aquaculture Environmental Coordinator, Jon Lewis. Ms. Robinson described the proposed project and provided a power point presentation as well as Exhibits 4-6 (See below). Mr. Lewis presented his site report, including a video presentation showing the sea bottom on the site. Each witness was

¹ DMR Chapter 2.15.

available for questioning by the Department, the applicant, town officials of Jonesport (Selectman Harry S. Fish Junior), federal agency members present (US Army Corps representative Shawn Mahaney), and members of the public (Kevin L. Beal, Commercial Fisherman). Additional representatives from Cooke Aquaculture USA, Inc. included David Morang (Marine Production Manager), Andrew Hamilton (Legal Counsel, Eaton Peabody), Frank Lank (Saltwater Area Manager), Michael Szemerda (Vice President, Saltwater Operations North America). Additional DMR Representatives included Marcy Nelson. The hearing was recorded by DMR. The Hearing Officer was Hannah Dean.

The evidentiary record before the Department regarding this lease application includes 6 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.

B. LIST OF EXHIBITS

1. Case file, (cited below as “CF”).
2. Application signed and dated June 5, 2015 (cited below as “A” with page number).
3. DMR site report dated January 19, 2016 (cited below as “SR” with page number).
4. Paper copy of Cooke Aquaculture USA Inc. Schematics of New Feeding Barge (cited below as “A Amendment”)
5. Break Down of how the Application Meets DMR Standards (cited below as “AS”)
6. Paper copy of Cooke Aquaculture presentation materials dated February 22, 2016 (cited below as “PP” with page number).

2. DESCRIPTION OF THE PROJECT

A. Site History

Cooke Aquaculture modeled the layout and mooring of the Calf Island Site on its experiences with finfish lease sites in the area of Machias and Eastern Bay, as well as a mooring analysis done at Stone Island. The Stone Island site provided an example of extremes that can be encountered when siting salmon cages and provided environmental data that were used to prepare the application for the Calf Island Site. The Company’s experience at Stone Island provided a model approach to the mooring system, dimensions, and placement detailed in the Calf Island Application (A 5). Cooke Aquaculture and affiliated companies have been raising fish in Eastern bay for over 10 years (A 6), and the Company and affiliates have been in the aquaculture business for over 20 years. The divers who assist with mooring work, net inspection, and other operational upkeep have multiple years of experience (A 8).

B. Site Characteristics

The proposed lease site is located east of Calf Island, in Eastern Bay, Jonesport, Washington County, Maine.

On November 8, 2015, DMR biologists visited the proposed lease site and assessed it and the surrounding area in light of the criteria for granting a standard aquaculture lease, as described in the site report (SR 1). The proposed lease area is dominated by soft silt sediments interspersed with large rocks and areas of exposed bedrock. DMR biologists visiting the site were able to insert arms 2 feet into the mud without meeting significant resistance. During his testimony at the hearing and in the Site Review Report, Mr. Lewis noted that the bottom type is somewhat unusual for Maine salmon net-pen farm siting in that the rocky outcrops will likely create small current eddies and could serve as traps for uneaten feed reaching the bottom. The heterogeneous nature of the site will likely make for variable and localized impacts due to organic loading (SR 2).

The applicant provided a baseline environmental report recording that the mean current velocity at the bottom is 14.9 cm/sec – a velocity considered adequate for aiding the dispersal of organics derived from farm operations (SR 3). However, outcroppings of rocks on the bottom will likely create micro eddies and changes in current velocity at different locations beneath the site. Therefore, DMR biologists noted that monitoring of farm operations will be critical to ensure that organic build up is not resulting from farm operations (SR 3).

C. Proposed Operations²

The applicant proposes to raise Atlantic salmon from smolts to market size over an 18-36 month period. Calf Island will be a single year class site. The site crew will travel from the dock on Great Wass Island to the site on a daily basis. Fish will be fed two/three times daily as weather permits. Automatic feeders will be in place along with cameras to monitor feed consumption, which should eliminate over feeding. Some hand feeding will occur as necessary. Feed will be transported to the site by boat on a regular basis. Various vessels will service the site, including a 40 ft lobster style dive boat, a 78 ft. barge style feeding boat, and a 60 ft. barge style feed delivery boat (A 5, A Amendment). Divers will be sent to survey the lease area and clean up gear that may have been lost. Predator nets and bird nets will be placed as needed around the primary nets that contain the fish. Nets will be changed 1-2 times during the life of the fish depending on harvest schedule and will be taken to the shore to be cleaned, disinfected, and repaired as necessary. Divers may also do repairs as necessary (A 6).

The site will be stocked with approximately 30,000 fish per cage; 540,000 fish per site. The target density of 1.13 lbs./ft.³, with a potential maximum of 1.87 lbs./ft.³. The estimated kilograms of feed fed per pen system for the first twelve months is 1630 tonne and 4600 tonne for the next twelve months. Fish will be vaccinated prior to leaving the hatchery and antibiotics

² This description of the proposed operations summarizes information contained in the application and presented at the hearing. DMR relies on this information as indicative of how the applicant intends to operate the project on the lease site.

approved by the U.S. Food and Drug Administration may be used for disease control. Prescriptions will be obtained through a veterinary service when necessary. Once they reach market size, fish will be pumped aboard a vessel where they will be stunned and bled into the hold and taken to a processing plant on shore. Blood water will be treated at the processing facility. After harvest all gear on site will be cleaned and disinfected as necessary prior to receiving the next year class of fish (A 6, PP 17). The site will be monitored by Cooke employees as well as the use of underwater cameras, in order to track fish behavior and determine appropriate times to supply or halt supply of feed to the fish (PP 18).

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.” Cages on the site will be 100 meter high density polyethylene pipe polar circles, which have been used throughout the industry. All gear and equipment will adhere to industry standards and will undergo routine maintenance. Cages will be black, nets will be red, bird coverings will be black, and feeding system barge will be almond or gray in color (A 5-6).

The Applicant will also use a feeding barge 31 ft. wide, 78 ft. in length, and 25 ft. in total height (PP 12, A Amendment). The feeding barge will be 18 feet above the water line, which is below the height of a structure allowed under DMR regulations Chapter 2.37(10), describing visual impacts which the department must consider when making a decision on a lease application (PP 12, A Amendment).

The layout of the 28 acre site will include a grid space, containing the fish pens where no lobster gear can be placed, which will be 9.3 acres within the site (PP 10). The fin fish will be placed in 18, 100 meter diameter circular floating pens using a 6 space by 3 space grid system. The floating area of the grid system will measure 900 feet by 450 feet (PP 11). Based on the Harbormaster’s concerns about the initial layout of the proposed site in terms of the width of the available navigational channel (SR 6), the Applicant amended the layout of the site after the application was deemed complete and provided details of the amendment at the public hearing (PP 27).

Applicant anticipates that 6-8 full time positions will be created to manage the site (including a site manager and aquaculture technicians). In addition, support positions will be expanded, including barge operators, divers, harvesters, and mechanics (A 6). Daily activities at the site will involve feeding and net changes as needed (PP 21).

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 is the southeast corner of Calf Island (SR 4). During the site visit by DMR on November 9, 2015, no docks or moorings were observed within the general vicinity of the proposed lease site. Little Hardwood Island is an undeveloped island owned by the Nature Conservancy and located more than 500 feet to the north of the proposed lease. No docks or moorings were sited along the south shore of the island. Hall Island to the south of the proposed lease is surrounded by extensive intertidal ledges; there were no docks or moorings with which the proposed activities would interfere. The nearest points of land other than the above-named islands were Crow Point and Calf Island, which were both greater than 1,000 feet from the proposed lease site (SR 5).

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 proposed lease site is located in a channel between Calf Island to the west, Hall Island to the southeast, and Little Hardwood Island to the north. The main navigational channel through Eastern Bay is located between Calf and Hall Islands and is marked by Green Cans (GC "1" and GC "3") which a vessel travelling northward would keep to its port side before heading to the west of Little Hardwood Island. Currently, 615 feet of navigable water lies south of the proposed lease site boundary. In his questionnaire included in the CF, the Harbormaster expressed an opinion that the proposed site would be too close to the northeast side of the main channel way (SR 6).

At the public hearing, the Applicant revised the site location by moving the western boundary of the lease site and the cage placement as far to the east as possible. With these changes, the portion of the navigable channel from the closest cage to the western lease boundary is 159 feet, the distance from the western lease boundary to the travel line of the channel is 250 feet, and the distance from the travel line west to the green navigation can east of Calf Island is 391 feet (PP 27). In total, therefore, the navigational channel will be 800 feet from the green can across to the closest cage (PP 27). At the hearing, Ms. Robinson noted that this channel width is

comparable to that of the navigational channel between Knight Island and Steele Harbor Island, which is approximately 525 feet in width (PP 28). Furthermore, following the amendment to the lease boundaries, Cooke Aquaculture representative Jennifer Robinson spoke with US Army Corps (USACE) representatives, who determined the change was adequate to account for navigational needs and indicated that USACE would move ahead on permitting the project (CF).³

The evidence shows that the proposed operations at this site will not interfere unreasonably with navigation. Following the revision of the lease boundaries to create a wider navigational channel between the edge of the grid system and Calf Island, there is clearly ample room for vessels to move around the site in its open location in the bay. The proposed lease will not interfere with navigation in the area, or with the use of moorings or storm anchorages (CF). There are no docks or moorings within the general vicinity of the site (SR 5).

The applicant is required to obtain a permit from the U.S. Army Corps of Engineers and to consult the U.S. Coast Guard, Boston, Office of Private Aids to Navigation, for marking requirements. 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.

C. Fishing & Other Uses

The majority of boat traffic is commercial fishermen. Commercial vessels in the area are typically 20-40 ft. in length and are engaged in seasonal lobster fishing. Recreational boat activity is minimal during the summer months, with occasional boating (16-24 ft. vessels) and kayaking (A 8). Mr. Lewis testified that during the site visit, 30 traps were observed in the immediate vicinity (SR 6). According to Russel Batson, Harbormaster for the town of Jonesport, commercial fishing for lobsters is prevalent in the area (CF, Harbormaster Questionnaire, July 22, 2015) (SR 6).

Marine Patrol Specialist Mark Murry was able to confirm the extent of lobster fishing and the Department acknowledges that in order to avoid gear entanglement, the lease site will require some displacement of commercial fishing within the boundaries of the proposed lease site (SR 6). In addition to lobstering, there may be limited fishing for green sea urchins in the general area. DMR biologists observed urchins attached to bedrock within the lease site boundaries. Mr. Lewis also testified that during the site review, no commercially exploitable quantities of marine organisms (e.g. scallops, urchins, mussels) were observed within the proposed lease boundaries (SR 6).

The evidence indicates that some lobster and urchin fishing may be displaced by the presence of the lease gear. Given the availability of all but one-third of the proposed lease site for

³ Email Exchange with Jennifer Robinson, Compliance Officer, Cooke Aquaculture USA Inc. (February 25, 2016).

commercial fishing, it appears that the degree of interference with fishing by the lease activities will not be unreasonable.

Exclusivity. The applicants have requested that dragging be prohibited on the site to avoid entanglement with the moorings. However, outside of the shadow of the grid, the Applicant will welcome other compatible uses of the area, including lobster fishing (PP 9). While they have no objection to other forms of fishing on the site outside of the pens, they stress that, for biosecurity reasons, there must be no physical contact with or access to the fish pens without prior authorization from the lessees.

Other aquaculture leases. According to the site report, there are currently two other aquaculture leases in the vicinity, both held by Cooke Aquaculture USA, Inc. for the net-pen culture of Atlantic salmon in Eastern Bay. EASTW SCN is 10 acres in size and located 5,680 feet to the west of the new lease site; EASTW SI is 10 acres in size and 5,413 feet to the northwest of the proposal. There are no other aquaculture leases or licenses in Eastern Bay (SR 6).

The evidence, including site visits by the Department plus the Harbormaster's statement, as well as information in the application, shows an absence of significant commercial fishing activity in the area of the site. Other aquaculture leases in the area are all over a mile distant and will not be affected by this project.

The Applicant's requests to exclude dragging and to prohibit physical contact with or access to the fish pens are reasonable, given the nature of the project, and these will be included as conditions in the lease.⁴ In addition to the exclusion of dragging, the use of mobile fishing gear, including, but not limited to, dredges, trawls, and seines will also be prohibited to protect the mooring grid. While navigation and other forms of fishing will not be restricted on the lease site, outside the mooring grid, no person or gear will be 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 Cooke Aquaculture USA, Inc. or its authorized representatives.

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. On November 9, 2015, Maine Department of Marine Resources (MDMR) staff documented the benthic ecology within the proposed lease area using SCUBA observations and a hand-held digital video recorder contained within an underwater housing. Divers entered the water at the northeastern corner of the proposed lease, followed a course of 180° magnetic for the first sixteen minutes of the SCUBA transect, adjusted to 210° magnetic for the remaining 15 minutes, and surfaced beyond the southwestern boundary (SR 7).

The proposed lease area is dominated by soft silt sediments interspersed with large rocks and areas of ledge outcroppings. Observed species abundance and diversity was greatest on and around exposed bedrock.

The relative abundance of epibenthic macro- flora and fauna observed throughout the video transect is described below (SR 7-8):

American lobster (*Homarus americanus*) - common
Athenarian burrowing Anemone – occasional
Barnacle (*Balanus sp.*) – abundant on rocks/ledge
Blue mussel (*Mytilus edulis*) - common
Benthic diatoms – abundant
Burrows, lobster and crab – common to abundant
Encrusting bryozoans – abundant on rocks/ledge
Finger sponge (*Haliclona oculata*) – occasional
Frisled anemone (*Metridium senile*) – common on rocks/ledge
Green sea urchin (*Strongylocentrotus droebachiensis*) – common on rocks/ledge
Hermit Crab (*Pagurus sp.*) - occasional
Kelp (*Laminaria sp.*) – abundant in areas with rocks/ledge
Mysid Shrimp – common
Periwinkle (*Littorina sp.*) – common
Red seaweeds – common to abundant on rocks/ledge
Rock/Jonah Crab (*Cancer sp.*) - common
Rock weed (*Fucus sp.*) – occasional
Sea Colander (*Agarum cribrosum*) – common on rocks/ledge
Sea cucumber (*Cucumaria frondosa*) – occasional on rocks/ledge
Slipper shell (*Crepidula sp.*) – common on rocks/ledge
Unidentified anemone – occasional
Waved whelk (*Buccinum undatum*) – occasional

During their independent site review, the Applicant identified the following in the area of the proposed lease site:

- Flora was generally sparse over the soft bottom of the site, including diatom mats, drifting rockweed and kelps
- Occasional to Common: bryozoans, mussels, scallops, barnacles, amphipods, mysid shrimp, Jonah and rock crab, lobsters, common sea stars, northern sea cucumbers, frilled anemone, and bulbous sponge; winter flounder, sculpin, unidentified
- Two lobster traps, one with a lobster inside (PP 40).

The applicant also supplied data on baseline benthic infauna total species (38) and total families (34), as well as finer scale information from 5 sampling site locations within the boundaries of the lease site, including abundance, species richness, family richness, and relative diversity (PP 43).

No eelgrass (*Zostera marina*), or other rooted vegetation, was observed within the boundaries of the proposed lease site. Historical records suggest the presence of eelgrass beds in the shallows surrounding Green, Knight, and Hall Islands to the south; Black Island to the east; Middle Hardwood Island to the northeast; and between Spectacle and Hardwood Islands to the northwest. The proposed lease activities would, if approved, occur more than 470 feet from any documented eelgrass (SR 8).

Fisheries and Wildlife. According to GIS (Geographic Information System) data maintained by The Maine Department of Inland Fisheries and Wildlife (MDIF&W) there are bald eagle (*Haliaeetus leucocephalus*) nests on Little Hardwood Island, Mink Island, and Green Island. The bald eagle is listed as a species of concern in Maine. If granted, the lease would be situated beyond the buffer zone suggested by US Fish and Wildlife guidelines for avoiding disturbing the nest (SR 9).⁵

Several islands within Eastern Bay, including nearby Mink, Green, and Hall Islands, are listed as habitat for the purple sandpiper (*Calidris maritima*), a species of concern. The shallows and flats surrounding Steele Harbor Island are listed as habitat for the threatened Harlequin Duck (*Histrionicus histrionicus*) (SR 9).

In a letter from the Maine Department of Inland Fisheries and Wildlife dated January 20, 2015, and submitted with the application (A 101), John Perry, Environmental Review Coordinator and Regional Biologist stated that “given the distance of the proposed project from purple sandpiper and harlequin feeding habitat we anticipate minimal impacts to these species” (SR 9). In addition, Mr. Perry stated that his department has not mapped any essential or significant wildlife habitats or freshwater habitats that would be directly affected by the proposed project (PP 34).

The evidence shows that there are no species of flora or fauna on the site or in its vicinity that will be adversely affected to any significant degree by the proposed aquaculture operation.

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.

⁵ See, Bald Eagle Management Guidelines and Conservation Measures, U.S. Fish and Wildlife Service, Ecological Services, available at <http://www.fws.gov/northeast/ecologicalservices/eagleguidelines/visactivitystep3.html> (last visited 3/1/2016). Guidelines suggest maintaining a buffer of at least 660 feet between the project and the nest. All eagles nests documented are over 1,000 feet from the lease boundaries.

E. Public Use & Enjoyment

There are no publicly-owned beaches, parks, conserved lands, or docking facilities within 1000 feet of the proposed lease (SR 10). The Nature Conservancy has a private preserve on Little Hardwood Island which is approximately 500 feet to the north of the proposal. Additional Nature Conservancy preserves and easements are located on several islands to the southeast, including Black, Knight, Head Harbor, and Steele Harbor Islands (SR 5). With the exception of Little Hardwood Island, all listed preserves and easements are more than 1,000 feet from the proposed lease site (SR 5).

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 for this proposed lease site are as follows: Gardner Lake Hatchery, East Machias, ME 04630; Bingham Hatchery, Bingham, ME 04920; and Oquossoc Hatchery, Oquossoc, ME 04964 (A 1).

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

According to the application, work beyond daylight hours would be limited to extended harvesting operations and emergency situations such as storm events. No permanently installed surface lighting is proposed for use at the lease, if granted. The applicant has listed the employment of 100 and 400 watt submerged lighting as a possibility. The use of submerged lights to prevent early maturation at salmonid net-pen facilities is considered a standardized practice. The proposed lights, if used, would be deployed underwater; they would not be directed toward any shorefront properties (SR 10).

DMR Rule 2.37 (1) (A) (8) requires applicant to demonstrate that all reasonable measures will be taken to mitigate light impacts from the lease activities. Any lighting required for navigation by the U.S. Coast Guard will clearly be a reasonable use of light. Underwater husbandry lights would have minimal impact on the surrounding area.

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

Noise-producing equipment proposed for use at the lease site includes: a feed barge and work barges which will run daily for approximately eight hours in winter months and up to fourteen hours in summer months. A net roller barge will run for a month in late fall and for a

month in the spring, pending on net change schedules. Outboard motored vessels will run daily April through November and weather permitting December through March. Welders will be in operation up to 14 days or so throughout the year for equipment repair and upgrade. Pressure washers will be used approximately 20 to 30 days per year. If submerged lights are used, a generator will power the lights from November through May. All equipment will be equipped with mufflers (A 6).

Noise sources would include feed and work barges powered by diesel motors, a net roller, inboard and outboard support vessels, a welder/generator, and a pressure washer. Noise characteristics of this proposed salmon farm would be similar to other farms currently operating in Eastern Bay and elsewhere along the Maine coast and could be characterized as typical of a working waterfront (SR 10).

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.” Noise generated by operations on the site is unlikely to have a significant effect at the boundaries of the lease; nevertheless, the Department encourages the Applicant to maintain awareness of the surrounding circumstances when using especially noisy equipment (SR 10).

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 proposed net-pens are constructed of high density plastic and are black in color. They would extend a maximum of 6 feet above-water. The nets draped over the tops of the net-pens, to prevent bird predation, are also black in color. A feed barge, measuring 78 feet in length by 31 feet wide by 25 feet high and protruding a maximum of 18 feet above the surface of the water, will be moored at the north end of the lease site (A Amendment). The dimensions of all proposed equipment meet the visual impact standards outlined in MDMR Regulations Chapter 2.37(10) (SR 10).

The cages and netting are black and red, and the low profile of the pens, as well as their dark color, and the grey/almond color of the feeding barge will reduce their visual impact (A 5). Compensator buoys used in the mooring grid will be yellow (A 5). 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 will be permitted on the lease site, outside the mooring grid. 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, trawl, and seines will be prohibited. Fishing and navigation will be prohibited within the mooring grid. Physical contact with equipment or gear and access to the fish pens without prior authorization from Cooke Aquaculture will be prohibited. These restrictions will be included as conditions in the lease.
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 salmon (*Salmo salar*) 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 28 acres to Cooke Aquaculture USA Inc., a Maine corporation, for ten years for the purpose of cultivating Atlantic salmon (*Salmo salar*) using net pen and suspended culture techniques. 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 \$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)⁶ 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 and fishing are prohibited within the mooring grid on the lease site .

⁶ 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."

3. The use of mobile fishing gear, including, but not limited to, drags, dredges, trawls, and seines is prohibited on the lease site.

4. No person or gear is permitted to make physical contact with any equipment or gear on the lease site or to gain access to the fish on the site without prior authorization from Cooke Aquaculture USA, Inc. or its authorized representatives.

5. Other public uses that are not inconsistent with the purposes of the lease are permitted within the lease boundaries.

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

Dated: _____

March 15, 2016



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