STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

Standard Aquaculture Lease
Bottom Culture of American and European Oysters
Damariscotta River, south of Hog Island,
Damariscotta, Lincoln Count

Norumbega Oysters, Inc. Lease DAM HIS

Docket # 2011-25

August 18, 2015

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

Norumbega Oysters, Inc., a Maine corporation, applied to the Department of Marine Resources ("DMR") for a ten-year standard aquaculture lease on two (2) acres located in the coastal waters of the State of Maine, in the Damariscotta River south of Hog Island, Damariscotta, Lincoln County, for the purpose of cultivating American oysters (*Crassostrea virginica*) and European Oysters (*Ostrea edulis*) using bottom culture techniques. DMR accepted the application as complete on September 15, 2011. Two parties were granted Intervenor status: David Cheney and Brian Dean Curran. A public hearing on this application was held on March 21, 2013 in Damariscotta.

Calculations incorporated into the Site Report (Exhibit 3 in List of Exhibits below) indicate that the site comprises 1.91 acres, therefore the lease application will be treated as a request for a 1.91-acre site.

1. THE PROCEEDINGS

Notices of the hearing and copies of the application and DMR site report were provided to numerous state and federal agencies for their review, as well as to various educational institutions, aquaculture and environmental organizations, the Town of Damariscotta and its Harbormaster, members of the Legislature, representatives of the press, riparian landowners, and other private individuals. Notice of the hearing was published in the *Lincoln County News* on February 14, 2013 and March 7, 2013 and in the *Commercial Fisheries News*, March 2013 edition.

Sworn testimony was given at the hearing by: Eric Peters, President of Norumbega Oysters, Inc., for the applicant; Marcy Nelson, DMR Aquaculture Scientist; Paul Bryant, Harbormaster for the Town of Damariscotta; and Brian Dean Curran, Riparian landowner and Intervenor. Mr. Peters described the proposed project. Ms. Nelson described the site visit and presented a videotape of the bottom. Each witness was subject to 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 four 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

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

List of Exhibits²

- A. Case file, # 2011-25
- B. Application, signed and dated August 23, 2011;
- C. DMR Site Report, dated July 20, 2012;
- D. Copy of Site Report Figure 2, marked by Brian Dean Curran to indicate the location of his dock and mooring.

2. DESCRIPTION OF THE PROJECT

A. Site History

Norumbega Oysters, Inc. ("Norumbega") currently holds an Experimental Lease (DAM HI4) consisting of 1.89 acres south of Hog Island in the Damariscotta River in Damariscotta, Lincoln County. The three-year term began on September 18, 2008, and ended on September 15, 2011. Norumbega through Eric Peters timely filed an application for a 10-year standard lease at the same location on August 24, 2011. The application was deemed complete on September 14, 2011. A scoping session, which was held on June 23, 2011, was attended only by DMR and the applicant.

B. Proposed Operations

The applicant proposes to grow American oysters (*Crassostrea virginica*) and European Oysters (*Ostrea edulis*) using bottom culture techniques on a site slightly under two acres in size, located 200 feet east of the main channel of the Damariscotta River (App 3), with a depth of 3 feet at mean low water and 13 feet at mean high water. The site is shown in relation to riparian owners on the tax map attached to the application. (App 8). Mr. Peters intends to plant approximately 250,000 to 500,000 seed oyster per year on the floor of his lease site to a maximum of 1,000,000 planted oysters. Harvesting, to be conducted by dragging and diving, will occur periodically during daylight hours from March through November with the most intensive activity occurring in June, July, and August. (App 2). No bags, cages, nets or other gear will be used. The site is marked with four corner buoys and occasionally a fifth to indicate a harvest area. (Eric Peters Testimony). The application describes the proposed aquaculture operations in detail (App 2-3), and Mr. Peters summarized the activities in his testimony at the hearing. The standard lease operation will be the same as that conducted during the experimental lease, according to Mr. Peters.

A discrepancy between the application (Section 2 (b) (2) and (3) and hearing testimony is noted. The application indicates that oysters will be washed during the months of March through December with equipment located on boats (App 3). The application continues that "[n]oise level will be reduced with pump covers on the wash equipment." (App 3). Mr. Peters testified during the hearing that no washing would occur on site. Rather, he washes and sorts at a lease site across the river. The issue of washing will be clarified later in the Decision.

² Exhibits are cited below with page references, as CF (case file), App (application), and SR (site report). Other exhibits are cited by exhibit number.

C. Site Characteristics

The proposed lease is located south of Hog Island in the Damariscotta River, as shown in the site report (SR Figures 1, 2).

DMR biologists Marcy Nelson and Jon Lewis conducted a SCUBA dive site visit on June 22, 2013 and took underwater video of the bottom of the proposed lease site.

According to the site report: "The topography of the proposed lease exhibits little variation in depth and composition. Sediments consist primarily of mud and shell hash. A small secondary channel runs through the eastern portion of the lease; sediments are firmer and shell hash more predominant in this area. There is a slight increase in water depth from north to south. Extensive tidally exposed mudflats are located to the north and east. A ledge outcrop known as Sugarloaf Ledges is located approximately 200 feet to the southeast. Currents are tidally driven in a northeast/south direction."

Ms. Nelson's testimony addressed additional features of the site, summarized as follows: a mooring was observed 600 feet to the north, but no vessel has been observed there on any of her multiple visits; the water is shallow (three to thirteen feet); there is a secondary channel of firmer sediment; the area does not have a lot of diversity; no eelgrass is present; crabs and shrimp are the dominant species; some horseshoe crabs were seen; and a fair amount of clam digging occurs to the north and east. The proposed site is subtidal.

The site report supports the applicant's representation that clamming occurs on the mud flats "to the NE, E, and SE of the proposed lease site." (App 4). The applicant asserts that the lease is "strictly bottom culture" and will not interfere with clamming, recreational fishing, boating, or other aquaculture operations in the vicinity. (App 4).

Intervenor/Riparian landowner Brian Dean Curran pointed out that he had installed a seasonal dock and mooring subsequent to Ms. Nelson's visit on June 22, 2012 (see sketch attached as Exhibit 4) but did not suggest that the proposed lease interferes with his dock or mooring.

3. STATUTORY CRITERIA AND FINDINGS OF FACT

Approval of standard aquaculture leases is governed by 12 MRS §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. These criteria will be assessed in light of the evidence presented.

A. Riparian Access

Noting that there will be no structures on this proposed lease other than corner markers that are very similar to lobster trap buoys, the site report concludes "there should be no restriction of shorefront property owner access." Further, the site is adjacent to expansive tidal mud flats and ledges which prohibit the placement of docks in the immediate area. At the time of the site report, the nearest mooring to the proposed lease was approximately 600 feet to the north (SR 5). Ms. Nelson did not observe a vessel there either during the 2013 site visit or during a site inspection conducted in 2008. (Testimony of Marcy Nelson). As noted above, Intervenor/Riparian landowner Brian Dean Curran installed a seasonal dock and mooring subsequent to Ms. Nelson's visit in the location shown on Exhibit 4 but in his testimony did not assert any interference with his dock or mooring.

For the following reasons, I find that the aquaculture activity proposed by Norumbega Oysters, Inc., will not unreasonably interfere with the ingress or egress of any riparian owner:

- The lease site is adjacent to tidal mud flats which are not conducive to placement of docks or moorings by riparian owners
- One mooring is located 600 feet from the site and no vessel has been observed there by DMR scientists during site visits in 2008 and 2013
- The riparian owner of a seasonal dock and mooring who intervened and testified at the hearing did not object to the lease
- The lease is for bottom culture only, with no use of gear, therefore riparian access to moorings, docks and shorefront property would not be precluded (SR 5)
- The harbormaster offered the written comment three years prior, when considering the applicant's experimental lease, that "riparian landowner access would not be blocked" by the lease (SR 4)

B. Navigation

Mr. Peters testified that the traffic on his lease site would consist of boat activity associated with planting oysters in the fall, checking on the oysters, and conducting harvesting. He would install four corner buoys, with a possible additional buoy to indicate where he has harvested.

Ms. Nelson testified that the proposed site is located east of the navigational channel; specifically, the southwest corner of the site is .194 miles from the main navigational channel Due to shallow depths, only vessels intending to access the shoreline would be expected to travel through the area. Shallow depths and limited diversity of species led Ms. Nelson to conclude that other forms of fishing will not occur in the immediate area. (SR 5)

The proposed lease would contain no gear other than corner marker buoys, so no structures would be placed on site. Three vessels will service the lease site. They will be used during harvest activities from March through November, and for seeding the first two weeks in November. (App 2). The size and horsepower are comparable to other commercial and recreational vessels on the Damariscotta River and

along the coast of Maine. (SR 8). When the Harbormaster reviewed the site for use as an experimental lease site in 2008 he wrote that: "the proposed lease should not interfere with navigation, ... no moorings exist within the proposed lease boundaries, [and] there are no storm anchorages...." ³ Fishing in the area will be minimal or nonexistent due to the depth and diversity issues highlighted by Ms. Nelson.

On the basis of:

- The absence of surface gear, other than corner buoys
- Distance from the main navigational channel
- Shallow depths and limited diversity of species limiting if not eliminating other fishing opportunities in the immediate area
- The Harbormaster's opinion in 2008 that he did not anticipate any interference with navigation from the then-experimental lease
- The Harbormaster's observations that there are no moorings or storm anchorages within the lease boundaries

I find that the proposed lease will not unreasonably interfere with navigation.

C. Fishing or other uses

Ms. Nelson's testimony as described in Section B, above, is relevant to the "Fishing" criteria as well, demonstrating that there are virtually no other fishing opportunities within the lease boundaries.

During site reconnaissance, Ms. Nelson noted that no fishing activity was observed within the lease boundaries. (SR5 Section 3). Comments submitted by the Harbormaster in association with Mr. Peters' 2008 experimental lease application stated that only "limited recreational fishing occurs in the area." (SR 4).

In addition, "[c]lam digging occurs on the mid [sic] flats to the NE, E, and SE of the proposed lease site. Recreational fishing during the summer months occurs in the vicinity of the proposed lease area. Pemaquid Oyster stores aquaculture equipment to the east of the lease and periodically runs skiffs to their shorefront property. The proposed lease will not interfere with any of these activities and their access of surrounding mud flats. The lease is strictly bottom culture and will not interfere with traffic at all." (App 4)

According to the site report, the "greatest concentration of shellfish leases in Maine exists in the Damariscotta River region." The Department has granted eleven leases and four LPA's within one mile of the proposed site. (SR 5, Section 4). According to the site report, "the proposed activities will not interfere with access to existing aquaculture sites within the river." (SR 5, Section 4).4

In light of the above evidence, I find that lease activities proposed for this site will not have a significant impact upon fishing or other uses.

³ A "Harbormaster Questionnaire" was mailed to Mr. Paul Bryant, the Town of Damariscotta's Harbormaster, in September 2011 in connection with Norumbega's application for this standard lease. He did not respond. (SR 4). Mr. Bryant attended the hearing on March 21, 2013 and did not limit or rescind any of the statements he had made in 2008, so presumably, he endorsed them.

⁴ During the hearing, Intervenor Mr. Curran inquired whether DMR has criteria to determine if there are too many aquaculture leases in a given area. The Hearing Examiner responded that there are no criteria for density per se, but if density got high, the chances of interfering with another activity would increase and possibly result in unreasonable interference with fishing, other aquaculture, navigation, and the like. Ms. Robinson explained that "unreasonable interference" would be assessed on a case by case basis.

During the public hearing, Mr. Peters was asked by the Hearing Examiner whether he had had any issues during the course of his experimental lease with poachers or with damage to his experimental lease site. He replied that in 2008 one wild harvester inadvertently encroached into his lease area because a marker had been cut by a propeller. This led the Hearing Examiner to inquire whether Mr. Peters maintains a perimeter or buffer around his site. The response was affirmative; the buffer is about 20 feet. The Hearing Examiner further inquired whether Mr. Peters would be satisfied with a lease condition excluding dragging or shellfish harvesting by others on the site. He responded "yes" and that boating and fishing would be "ok."

A lease restriction against dragging and shellfish harvesting within the lease boundaries is reasonable in order to protect the bottom-planted oysters. Such restrictions will be included in the lease.

D. Existing System Support

a. Ecologically Significant Flora and Fauna

The Site investigation found limited rooted or attached vegetation and no eelgrass. (SR 6-7). The Application describes the lease area as flat, in a tidally scoured area that consists of shell hash and patches of mud. Sand shrimp and various crabs (rock crabs, green crabs, and hermit crabs) were observed, but the lease area is not populated with ecologically significant flora and fauna. (App 3). Mr. Peters noted that "There are no submerged aquatic vegetation beds in the proposed lease area. The area of the proposed lease is classified as approved for the harvest of shellfish." (App 3).

I find that the proposed lease will not adversely affect ecologically significant flora and fauna.

b. Interference with Significant Wildlife Habitat and Marine Habitat

Like all tidal mudflats reaching 12.5 acres or more in size, the proposed lease site is in an area that is classified as a "Tidal Waterfowl and Wading Bird Habitat." (SR 7). A questionnaire submitted by the site evaluator to the Department of Inland Fish and Wildlife went unanswered (SR 7), however the Hearing Examiner explained that this is normally indicative of a lack of concern by IF&W. The Applicant's research led him to conclude that the lease area "does not fall within the boundary of an essential habitat." (App 3). With respect to seals' use of Sugarloaf Ledges as a haul-out, DMR's biologist testified that the aquaculture lease was not likely to affect them since the seals are "well adapted" to the level of activity on the River.

I find that the proposed lease will not unreasonably interfere with significant wildlife habitat or marine habitat.

E. Source of Organisms to be Cultured

The application Cover Sheet indicates that the source of stock for this proposed lease is the Muscongus Bay Aquaculture facility in Bremen, Maine.

I find that the applicant has demonstrated that there is an available source of organisms to be cultured for this site.

F. Interference with Public Facilities

The site report indicates that there are no public facilities within 1000 feet of the proposed lease. (SR 7).

I find that the aquaculture activities proposed for this site will not unreasonably interfere with the public use or enjoyment within 1000 feet of beaches, parks, or docking facilities or certain conserved lands owned by municipal, state, or federal governments.

G. Lighting

The applicant indicates that no lighting would be used at the proposed lease site. (App 3; SR 7).

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

H. Noise

The Application states that "The type of equipment used on the lease would include boats and boat motors as listed above and power wash equipment." (App 2). The applicant's testimony confirmed that he will access the site by boat.

As to power wash equipment, the application goes on to explain that "[t]hese boats will be accompanied periodically with equipment to wash the oysters during harvesting periods" and "[n]oise levels will be reduced with pump covers on the wash equipment." (App 3).

Mr. Peters' testimony, however, stated that he will not use power washing equipment on site. When the Hearing Examiner asked Intervenor Mr. Curran if he had questions of Mr. Peters, Mr. Curran said that his primary question had been answered – there would be no washing on site. He asked that the lease include a condition that prohibits washing on site. The Hearing Examiner asked Mr. Peters whether he had any issue with a lease condition precluding washing on site. Mr. Peters stated that such a condition "didn't bother" him, "I don't need it."

Based on this evidence, 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 Department's visual impact rule requires structures and gear on lease sites to blend with the surroundings as much as possible. The record demonstrates that the only visible elements of the aquaculture lease will be four buoys, and possibly one or more additional buoys to indicate harvest areas. As the Site Report states, these buoys would be very similar to lobster buoys that are frequently seen in the surrounding area. (SR 8).

Therefore, I find that the lease installations for the site will comply with the visual impact criteria contained in DMR Regulation 2.37 (1) (A) (10).

4. CONCLUSIONS OF LAW

Based on the above findings, I conclude that:

- A. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
- B. 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. 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. Dragging and shellfish harvesting except by the leaseholder will be prohibited. Power washing within the lease area will be prohibited. The lease tracts must be marked in accordance with DMR Rule 2.80.5
- D. 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. 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.
- F. The applicant has demonstrated that there is an available source of American oysters (*Crassostrea virginica*) and European oysters (*Ostrea edulis*) to be cultured for the lease site.

⁵2.80 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.
- Lease sites must be marked in accordance with the United States Coast Guard's Aids to Private Navigation standards and requirements.

- G. The aquaculture activities proposed for this site will not result in an unreasonable impact from light at the boundaries of the lease site.
- H. The aquaculture activities proposed for this site will not result in an unreasonable impact from noise at the boundaries of the lease site.
- I. 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 1.91 acres to Norumbega Oysters, Inc., for ten years for the purpose of cultivating American oysters (*Crassostrea virginica*) and European oysters (*Ostrea 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 account pursuant to DMR Rule 2.40 (2) (A) in the amount of \$500.00, conditioned upon performance of the obligations contained in the aquaculture lease documents and all applicable statutes and regulations.

6. CONDITIONS TO BE IMPOSED ON LEASE

The Commissioner may establish conditions that govern the use of the lease area and impose limitations on aquaculture activities, pursuant to 12 MRSA §6072 (7-B)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 will be incorporated into the lease:

- A. Navigation and recreational fishing are permitted in the lease area.
- B. Dragging and shellfish harvesting are prohibited within the lease area except by the leaseholder or its authorized agents.
- C. Oyster washing is prohibited within the lease area.
- D. The lease area must be marked in accordance with DMR Rule 2.80 and U. S. Coast Guard requirements.

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."

7. REVOCATION OF LEASE

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

Dated: 405. 62015

Patrick C. Keliher Commissioner,

Department of Marine Resources