

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
Standard Aquaculture Lease Application
(December 4, 2007)

Eric Horne &
Valy Steverlynck
Sheepscoot River, E.
of Lehman Island
Docket #2006-29

PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECISION

On December 26, 2006, the Department of Marine Resources (“DMR”) received an application from Eric Horne and Valy Steverlynck for a ten-year aquaculture lease on 1.55 acres located in the upper Sheepscoot River, east of Lehman Island, in the coastal waters of the State of Maine, in the Town of Newcastle in Lincoln County, for the purpose of cultivating American oysters (*Crassostrea virginica*) and European oysters (*Ostrea edulis*) using bottom culture techniques. The application was accepted as complete on December 27, 2006. No one intervened in this case. A public hearing on this application was held on September 24, 2007, in Damariscotta, Maine.

1. THE PROCEEDINGS

The evidentiary record before the Department regarding this lease application includes three exhibits introduced at the hearing (see exhibit list appended) and the record of testimony at the hearing itself. Sworn testimony was given at the hearing by: the applicants, Eric Horne and Valy Steverlynck; DMR’s Aquaculture Environmental Coordinator, Jon Lewis; and Paul Bryant, Harbormaster of Newcastle.

No other government entities testified, although notices and copies of the application and DMR site report were sent to numerous state and federal agencies, including, but not limited to, the U.S. Army Corps of Engineers, the U.S. Coast Guard, the National Marine Fisheries Service, the Maine Department of Inland Fisheries & Wildlife, the U.S. Environmental Protection Agency, and the Maine State Planning Office, as well as to a number of educational institutions, aquaculture and environmental organizations, members of the Legislature, representatives of the press, and private individuals.

At the hearing, the applicants described the proposed project. Mr. Lewis presented his site report, including a video presentation showing the bottom of the site. Selectman Patricia Hudson of Newcastle and her husband, James, who are riparian

landowners, both questioned the applicants and spoke in support of the application. The hearing was recorded by DMR. The evidence from all of these sources is summarized below.¹

2. DESCRIPTION OF THE PROJECT

Proposed Operations

The applicants propose to plant oysters on the bottom of two subtidal tracts separated by a shallow sandbar on the east side of Lehman Island in the upper Sheepscot River. They currently hold a 3-acre bottom lease (SHE LE) for oysters approximately 80 feet to the north of the proposed site; if this lease is granted, they will coordinate planting and harvesting on both leases as if they were a single site (Horne/Robinson). The size of this site (the two tracts combined) was corrected from 1.5 acres in the application to 1.55 acres in the site report (Exhibit 3, p.2).

The applicants propose to plant juvenile oysters on the bottom in the fall and to harvest them some 18 months later, depending on their rate of growth. Harvesting will be conducted by using a small drag drawn by a 22 ft. skiff with a 50 HP outboard motor; the motor is slightly larger than the 40 HP version described in the application (Horne, direct). They will monitor and tend the site 1-2 days a week for approximately 5 hours at a time, harvesting mainly in April and May and less in summer and fall. Oysters will be rinsed and bagged on-site and removed via skiff to take to market. The applicants may apply for a limited-purpose aquaculture license (LPA) at a later time to enable them to hold bagged, harvested oysters on the site for later retrieval (Steverlynck, direct). Maintaining security of such a license site against poachers is a potential problem, the applicants stated, particularly because it must be marked.

The applicants request exclusivity only to the extent of prohibiting dragging or raking within the lease boundaries, other than for their own harvesting activities. Lobstering, crabbing, recreational fishing, boating, and swimming on the lease sites would continue to be permitted (Exhibit 2, p. 2).

Site Characteristics

The two tracts that compose this proposed lease site lie to the west (Tract 1) and east (Tract 2) of a shallow sandbar that bisects a relatively narrow, scoured tidal channel between Lehman Island and Cunningham Island in the upper Sheepscot River. The

¹ [NOTE: The reference (Smith/Jones) means testimony of Smith, being questioned by Jones.]

bottom is flat and consists of small cobble, gravel, and sand (Exhibit 3, p. 3). Water depth at mean low water averages just under six feet, deepening to nearly 10 feet near the northern boundary of Tract 2. Depths become shallower approaching the sandbar that lies between the two tracts and nearing the mudflats to the southeast of Tract 2.

Between Lehman Island and the mainland to the west, the current moves northeast-southwest; between Lehman and Cunningham Islands, its direction is north-south. Current speed is approximately 1 -1.5 knots (Exhibit 2, p. 5; Exhibit 3, p. 3), which both the application and site report note is fast-moving (Exhibit 2, p. 3; Exhibit 3, p. 4).

DMR classifies the water quality in the vicinity of the proposed lease site as “approved” for the harvest of shellfish. Mr. Lewis observed that the site is ideal for growing oysters (Lewis, direct).

The site report notes that the site is expected to ice over in winter and that therefore any marking buoys would need to be removed and re-set in spring (Exhibit 3, p. 7).

3. STATUTORY CRITERIA

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 if s/he determines that, taking into consideration the number and density of aquaculture leases in an area, the project will not unreasonably interfere with the ingress and egress of riparian owners; with navigation; with fishing or other uses of the area; with significant wildlife habitat and marine habitat or with the ability of the site and surrounding marine and upland areas to support ecologically significant flora and fauna; or with the public use or enjoyment within 1,000 feet of a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency. The Commissioner must also determine that the applicant has demonstrated that there is an available source of organisms to be cultured for the lease site; that the lease will not result in an unreasonable impact from noise or lights at the boundaries of the lease site; and that the lease will be in compliance with visual impact criteria adopted by the Commissioner relating to color, height, shape and mass.

A. Riparian Access

According to the site report and the Newcastle Harbormaster, there are no moorings in the vicinity of the proposed site. There is one dock some distance to the north and another to the south, the latter approximately 1,000 feet away, according to the application (Exhibit 2, p. 3). With no gear proposed for the site other than approximately ten marking buoys, the site report concludes, and the harbormaster agrees, that there will be no interference with riparian ingress and egress (Exhibit 3, pp. 6, 8).

Thus it appears that the three riparian owners in the vicinity will not find their water access to their property hampered by this proposed project.

THEREFORE, I FIND that the aquaculture activities proposed for these sites will not unreasonably interfere with the ingress and egress of any riparian owner.

B. Navigation

The application states that boat traffic in the vicinity of the proposed site includes sport fishermen, hunters, recreational boaters, kayakers, and lobstermen; these move in a north-south direction, with the heaviest traffic in daylight hours, and possibly some evening traffic in the warmer months. In over four years of work in the area on the nearby site, the applicants have encountered no problem with boat traffic (Exhibit 2, p. 4), and they do not wish to restrict boating on the proposed lease site.

The site report makes similar observations on nature of boating in the area and concludes that the proposed bottom culture of oysters will not interfere unreasonably with boating. The report does note that because the site is located in a small, shallow channel, diving or dragging could slow or alter the course of boat traffic, especially at lower tidal stages (Exhibit 3, p. 6).

The Newcastle Harbormaster is of the opinion that the aquaculture project will not interfere with navigation or storm anchorages (Ibid).

Thus, the evidence indicates that there is boating activity of various kinds in the vicinity of the proposed lease, and that diving or dragging on the lease site could hamper the passage of vessels to some degree, particularly at the lower stage of the tide. There is no evidence showing that this will be a frequent or regular occurrence or that vessel traffic will be significantly infringed upon by work on the lease site. The site must be marked in accordance with U.S. Coast Guard and DMR requirements.

THEREFORE, I FIND the aquaculture activities proposed for these sites will not unreasonably interfere with navigation.

C. Fishing & Other Uses

The application and site report describe a variety of fishing activities in the vicinity of the proposed site, including recreational fishing, particularly for striped bass in summer; clamming on intertidal beds to the east and west of the site; and worming on these same mudflats (Exhibit 2, pp. 3, 4; Exhibit 3, p. 4). The applicants testified that lobstering, crabbing, and recreational fishing would be allowed on the site, while only diving and dragging would need to be prohibited, except when done by the leaseholders or their agents or employees (Horne, direct).

The site report noted that sedimentation resulting from dragging could conflict with fish behavior and/or fishing activities, but it concluded that in general, given the lack of structures on the lease site, the project should not interfere unreasonably with fishing or with access to the mudflats nearby for clamming or worming (Exhibit 3, p. 4).

Other aquaculture leases in the vicinity include the applicant's neighboring 2.96-acre bottom lease, eighty feet to the north (site SHE LE), and one other shellfish lease approximately four miles to the southwest (site SHE SP).

Thus, the evidence indicates that this proposed project will not disrupt fishing, aquaculture, or other activities in the area.

THEREFORE, I FIND that the aquaculture activities proposed for these sites will not unreasonably interfere with fishing or other uses of the area.

D. Habitat, Flora & Fauna

The upland area surrounding the site is wooded and undeveloped. The application notes that "tidal waterfowl and wading birds frequent the inter-tidal areas to the east and west of the proposed area" (Exhibit 2, p. 3). An e-mail dated December 15, 2006, from Keel Kemper of the Maine Department of Inland Fisheries & Wildlife states that the proposed lease tracts "are associated with a tidal waterfowl and wading bird habitat" but that aquaculture activities would be unlikely to have an "negative impacts to wildlife" and therefore the Department would not oppose the application (Exhibit 2, attachment at ninth page).

At the time of the site visit on July 6, 2007, DMR divers observed occasional green crabs, unidentified flatfish, eel grass, and sea vase on the site. Sea lettuce was

common. Other marine flora were abundant, including brushy red weed, knotted wrack, rockweed, and brown kelp, as well as brown benthic diatoms (Exhibit 3, p. 4).

No issues were raised at the hearing regarding interference with flora and fauna caused by dragging, but in assessing the evidence afterward, the Hearings Officer requested Mr. Lewis and his associate, Ms Nelson, using their familiarity with the site and their experience with marine resources and aquaculture issues, to evaluate the extent to which dragging to harvest oysters might interfere with the marine habitat of the site. The authority for this request is DMR Rule 2.31 (1) which provides, in part, that “...The Department’s experience, technical competence and specialized knowledge may be utilized in the evaluation of all evidence submitted.”

Mr. Lewis’s response, in summary, is as follows: Sedimentation from dragging on the site could prompt fish to (1) find alternate routes; (2) wait to move until conditions improve; and/or (3) take advantage of the disturbance to the bottom to prey on edible species that might be “brought out of the mud into the water.” He states “the site is mostly sandy which is about the best conditions you can get for a drag....fish behavior might be affected but we really don’t know how – might be a negative might be a positive.”²

Ms Nelson’s response, also summarized, is this: Disturbance of fish and fishing caused by dragging is temporary, similar to the potential for boat traffic to be hindered if a diver or a drag is in the water. The applicants’ small, light drag will have limited ability to “dig into” the sediments. Dragging will cause some disturbance, but it is common in Maine, both for wild and cultured species. This site, with its firm sediments and low species diversity, is not “particularly sensitive to harvest by small drag”.³

The applicants have been working the neighboring site for several years without any apparent problems to marine habitat, and work on this new site will be similar in character. The evidence thus evaluated indicates that the proposed project will have limited impact upon the flora and fauna of the site and their habitats.

THEREFORE, I FIND that the aquaculture activities proposed for these sites will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support ecologically significant flora and fauna.

² Jon Lewis, e-mail to Diantha Robinson, Nov. 15, 2007, 11:37 am (copy included in Exhibit 1).

³ Marcy Nelson, e-mail to Diantha Robinson, Nov. 15, 2007, 11:39 am (copy included in Exhibit 1).

E. Public Use & Enjoyment

According to the site report, the Newcastle Harbormaster indicated that he knew of no public beaches, parks, or docking facilities within 1,000 feet of the proposed site. According to the State Planning Office, there are no government-owned conserved lands within 1,000 feet of the site (Exhibit 1, map & e-mail in file).

Thus, the evidence shows that there are no public facilities within the meaning of the statute in the vicinity of the proposed lease site.

THEREFORE, I FIND that the aquaculture activities proposed for these sites will not unreasonably interfere with the public use or enjoyment within 1,000 feet of a beach, park, docking facility, or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency.

F. Source of Organisms

The application lists the source of seed stock for the site as the hatchery of Muscongus Bay Aquaculture, Inc. in Bremen, Maine.

THEREFORE, I FIND that 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.

G. Light

The application indicates that the site will be worked in daylight hours only. No lights are proposed to be used on the lease except in case of possible occasional early or late work at times of limited daylight (Exhibit 2, p. 3).

DMR Rule 2.37 (1) (A) (8) allows spotlights and floodlights to be used beyond daylight hours, provided they are directed only at the work area to be illuminated and are the minimum needed for safe operations. The evidence shows that any such use of lights would be infrequent and minimal. Thus, it appears that the applicants have taken all reasonable measures to mitigate light impacts from the lease activities.

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 only noise generated by motorized equipment on the proposed site will be that of the outboard motor on the applicants' skiff and a 12" electric lobster pot hauler

used for harvesting (Exhibit 2, p. 2). Mr. Horne testified that the outboard will be a 50-horsepower, 4-stroke Honda, which is quieter than a 2-stroke or inboard engine (Horne, direct). The application states that “The motor for our hauler is enclosed in the console of our boat and is inaudible except to those within three or four feet of its operation” (Exhibit 2, p. 2).

Watercraft while under way are exempt from the noise requirements of DMR Rule 2.37 (1) (A) (9). Motorized equipment used during routine operations must be designed or mitigated to reduce, as far as possible, the sound level it produces. Use of this quieter outboard and enclosed hauler demonstrates that the applicants will take all reasonable measures to mitigate noise impacts from the lease activities.

THEREFORE, I FIND that the aquaculture activities proposed for these sites will not result in an unreasonable impact from noise at the boundaries of the lease.

I. Visual Impact

Since this is a bottom lease, there will be no permanent gear visible on the site, other than marker buoys. The site report estimates that marking the site in accordance with DMR requirements will take approximately ten buoys (Exhibit 3, p. 7). These are necessary to delineate the site and will be minimally intrusive in the environment. The color should blend in with the surrounding area, according to DMR Rule 2.37 (1) (A) (10), but it should not compromise safe navigation. Within those parameters, the applicants are free to choose the color.

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, and taking into consideration the number and density of aquaculture leases in the area, I conclude that:

1. The aquaculture activities proposed for this site will not unreasonably interfere with the ingress and egress of any riparian owner.
2. The aquaculture activities proposed for this site will not unreasonably interfere with navigation, provided that the lease site is marked in accordance with U.S. Coast Guard and DMR requirements and that boating is allowed in open areas of the lease.

3. The aquaculture activities proposed for this site will not unreasonably interfere with fishing or other uses of the area, provided that fishing is allowed in open areas of the lease, although dragging, raking, and diving on the lease site by persons other than the leaseholders or their employees or agents are prohibited.

4. The aquaculture activities proposed for this site will not unreasonably interfere with significant wildlife habitat and marine habitat or with the ability of the lease site and surrounding marine and upland areas to support 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 a beach, park, docking facility or certain conserved land owned by the Federal Government, the State Government, or a municipal governmental agency.

6. 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.

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 1.55 acres to the applicants for ten years from the date of this decision for the purpose of cultivating American oysters (*Crassostrea virginica*) and European oysters (*Ostrea edulis*) using bottom culture techniques. The applicants shall pay the State of Maine rent in the amount of \$100.00 per acre per year. The applicants 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 their 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)⁴. 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 shall be marked in accordance with U.S. Coast Guard and DMR requirements; buoys may be removed temporarily during the winter when the site ices over.
2. Boating, fishing, and swimming are allowed in open areas of the lease, although dragging, raking, and diving on the lease site by persons other than the leaseholders or their employees or agents are prohibited.

7. REVOCATION OF LEASE

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

Dated: _____

George D. Lapointe (Commissioner)
Department of Marine Resources

8. LIST OF EXHIBITS

1. Case file
2. Application stamped "Received" December 26, 2006
3. Site Report dated August 8, 2007

⁴ 12 MRSA §6072 (7-B) provides that:

"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."