

ORIGINAL

APPLICATION COVER SHEET FOR BOTTOM CULTURE

Name: Pemaquid Oyster Company, Inc. (Chris Davis, contact)
Address: PO Box 302
City: Waldoboro
County: Lincoln
State, zip: Maine, 04572
Telephone: business 207-832-1075 home 207-832-1075 cell 207-832-1075
Email address: cdavis@midcoast.com

RECEIVED
AUG 30 2017

Maine Department of
Marine Resources

REVISED
APPLICATION

10-30-17

Date of Pre-application meeting: March 9, 2017

Date of Scoping Session: April 13, 2017

Deemed Complete
11-1-17

town county waterbody
Location of lease site: Newcastle & Damariscotta Lincoln Damariscotta River

Additional description: Adjacent to existing leases DAM GL2 and DAM GL3, near Goose Ledges, Damariscotta River, ME

Total acreage requested: 8.33 acres
(100-acre maximum)

Lease Term requested: ten years (twenty years if 128th Legislative changes are enacted by DMR)

Name of species to be cultivated, common and scientific names:

Eastern oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), hard clams (*Mercenaria mercenaria*), Atlantic surfclams (*Spisula solidissima*) and razor clams (*Ensis directus*)

Name, address and phone number of the source of seed stock, juveniles, smolts, etc., to be cultivated:

Muscongus Bay Aquaculture, 24 Seal Ledge Lane, Bremen, ME 04551; 207-529-4100, or

Mook Sea Farm, Inc., 321 ME Route 129, Walpole, ME 04573; 207-563-1456

\$1,500 application fee enclosed:

I hereby state that the information included in this application is true and correct and that I have read and understand the requirements of the Department's rules governing aquaculture.

Signature: Chris Davis Date: August 28, 2017

APPLICATION FOR A BOTTOM AQUACULTURE LEASE

Name and Address:

August 28, 2017

Pemaquid Oyster Company, Inc.

Christopher V. Davis

P.O. Box 302

Waldoboro, ME 04572

207-832-1075 (home and business)

cdavis@midcoast.com

Pemaquid Oyster Company, Inc. is located in Lincoln county

Fee:

The \$1500 application fee is enclosed.

Species to be cultivated:

Eastern oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), hard clams (*Mercenaria mercenaria*), Atlantic surfclams (*Spisula solidissima*) and razor clams (*Ensis directus*)

Source of seed:

Seed stock will come from either Muscongus Bay Aquaculture or Mook Sea Farms in Bremen and Walpole, Maine, respectively

Duration:

A ten (or twenty if possible) year lease term is requested.

Total Acreage:

8.33 acres requested. The proposed tract #1 (6.56 ac) is an eleven-sided polygon partially circumscribed around DAM GL3. The proposed tract #2 (1.77 ac) is a four-sided polygon appended to the southern end of the northern tract of the DAM GL2 lease. See Section 7b for the boundary description.

1. Site Location of Proposed Lease:

a. Vicinity Map

The proposed bottom lease is located in the upper Damariscotta River, Towns of Damariscotta and Newcastle, Lincoln county (Figure 1a).

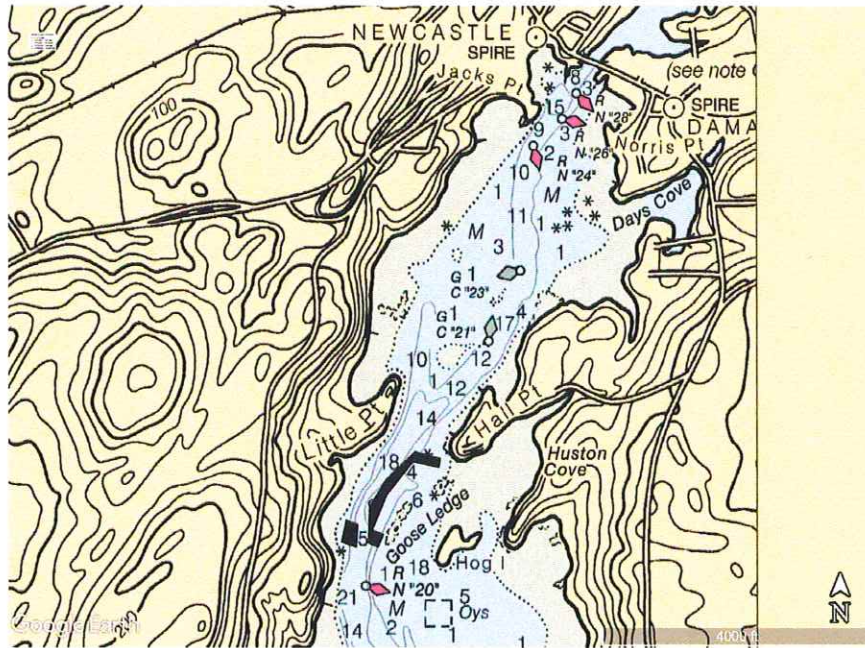


Figure 1a. General vicinity map of proposed bottom lease adjacent to the Goose Ledges, Damariscotta, Maine. Shaded area indicates proposed bottom lease tracts. High and low water marks are indicated on the chart. From NOAA chart 13293. Scale bar indicates 4000 feet. North arrow indicates true north.

b. Plan View

The proposed bottom site (tracts 1 & 2) is adjacent to the existing POC bottom leases (DAM GL2 and DAM GL3) (Figures 1b, c, d and 6). The proposed lease will consolidate the boundaries as well as provide additional bottom ground for shellfish cultivation and improved farm management.

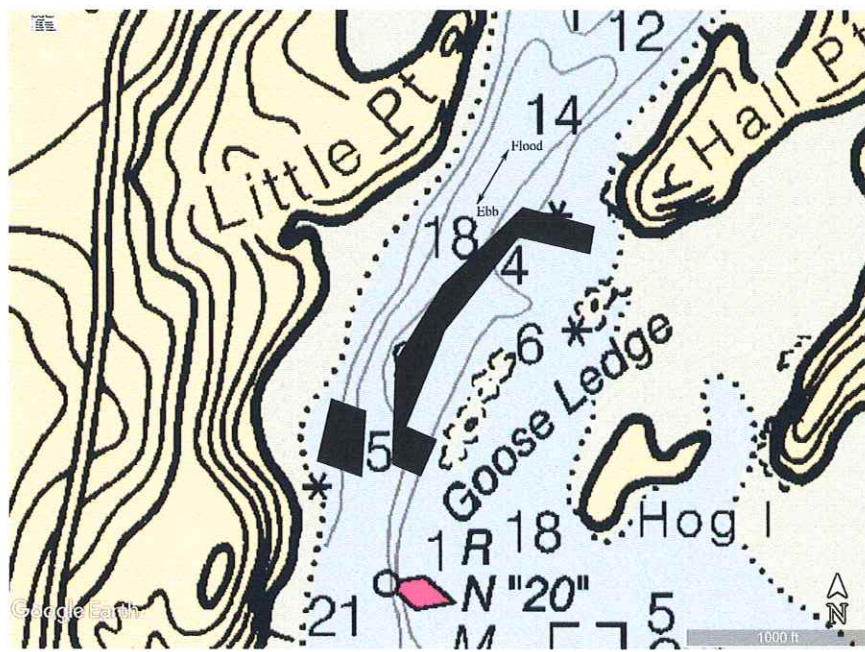


Figure 1b. Site map of proposed bottom lease adjacent to the Goose Ledges, Damariscotta, Maine. Shaded area indicates proposed bottom lease tracts. High and low water marks are indicated on the chart. From NOAA chart 13293. Scale bar indicates 1000 feet. North arrow indicates true north. Ebb and flood tides indicated by the arrow.

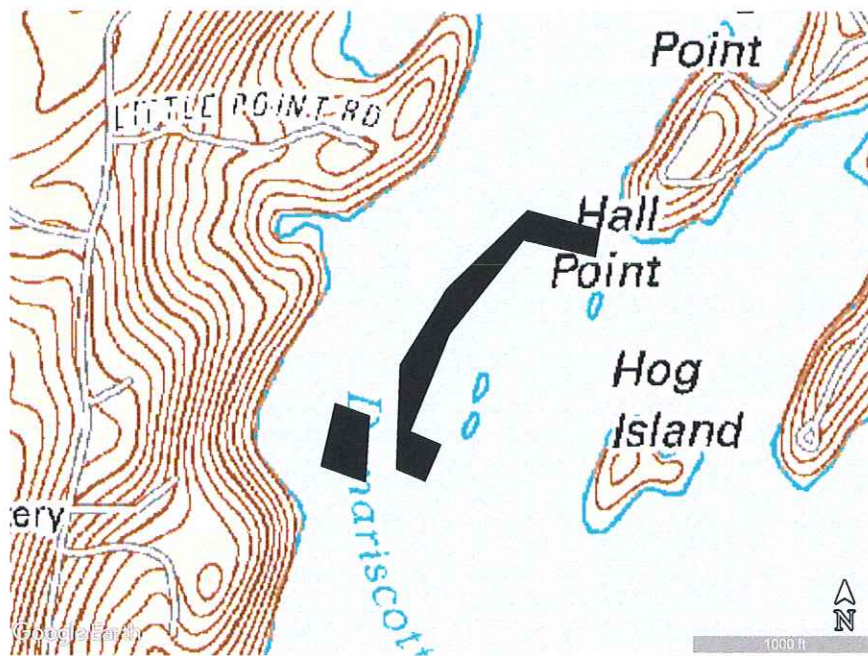


Figure 1c. USGS topographic map (Bristol, Maine Quadrangle, 2011) indicating the proposed bottom lease site (shaded area) in the upper Damariscotta River, Maine. Scale bar indicates 1000 feet.



Figure 1d. Aerial photo of the Goose Ledges vicinity near low tide with the proposed bottom lease site (shaded). Scale bar indicates 1000 feet. North arrow indicates true north. (photo source: Google Earth, June 23, 2014)

Boundary Description

The proposed bottom lease consists of two tracts: tract #1 is an eleven-sided polygon (6.56 acres), four sides of which border the existing POC bottom lease DAM GL3; tract #2, a four-sided polygon (1.77 acres) lies between the two tracts forming DAM GL2 (Figure 6).

Geographic coordinates of each corner within the proposed bottom lease are provided in Table 1 and Figure 2 below (derived from Google Earth mapping software using the WGS-84 datum). The proposed tract #1 is approximately 169 feet from Hall Point, 838 feet from Hog Island, 530 feet from the Newcastle shoreline and 154 feet from the Goose Ledges (see Figure 5). Tract #2 is approximately 230 feet from the Newcastle shoreline. Distances to shore were determined by scaling geographic coordinates using Google Earth mapping software (WGS-84 datum).

TABLE 1. Geographic coordinates of the corner boundaries of the proposed bottom lease

Corner	Latitude (N)	Longitude (W)
Tract #1 (6.56 acres)		
Point 1	44° 01' 01.58"N	69° 32' 33.85"W
Point 2	44° 01' 02.60"N	69° 32' 39.21"W
Point 3	44° 00' 58.45"N	69° 32' 45.28"W
Point 4	44° 00' 54.48"N	69° 32' 48.70"W
Point 5	44° 00' 49.03"N	69° 32' 48.97"W
Point 6	44° 00' 48.39"N	69° 32' 46.85"W
Point 7	44° 00' 50.33"N	69° 32' 45.67"W
Point 8	44° 00' 51.03"N	69° 32' 47.94"W

Point 9	44° 00' 56.13"N	69° 32' 45.02"W
Point 10	44° 01' 01.06"N	69° 32' 39.51"W
Point 11	44° 01' 00.20"N	69° 32' 34.19"W

Tract #2 (1.77 acres)

Point 12	44° 00' 52.50"N	69° 32' 53.53"W
Point 13	44° 00' 51.85"N	69° 32' 50.95"W
Point 14	44° 00' 48.38"N	69° 32' 51.26"W
Point 15	44° 00' 49.21"N	69° 32' 54.58"W



Figure 2. Boundary corners of the proposed 8.33 acre bottom lease (Tracts 1 and 2 shaded areas).

2. Operations:

a. Production Activities

The proposed shellfish bottom lease are an extension of the tracts currently leased by POC (See Figure 6). This expansion will reduce the irregular nature of the current lease boundaries and provide additional growing bottom to improve the management of our shellfish production. Culturing and harvesting activities will be identical to those employed during the past thirty-one years. Seed oysters (30 - 50 mm shell height) coming from nearby POC nurseries will be planted on the bottom, generally in the late fall of the year when crab predation is low. Oysters will be left undisturbed until they attain market size (65 – 90 mm shell height) in 1 to 2 years. At this

time, harvesting will be done using a chain-sweep drag towed by the 25 foot lobster boat (*F/V Oyster Girl*). Harvesting will take place generally twice weekly from April through December, but due to the rotational nature of the crop plantings, harvesting will occur one out of every two to three years on any given sector of the proposed lease. Oysters harvested will be transferred to POC wet storage rafts in Clarks Cove (6 miles downriver) for purging prior to sale.

Nursery operations will continue on the DAM GL2 lease site consisting of stocking, grading cleaning oysters and cages similar to our activities these past three decades.

Our farm bottom plants oysters at approximately 10-12 per square foot or about 500,000 oysters per acre. Over the years, we have found this to be the optimal planting density for this bottom site. Thus, the proposed site may contain up to 1.38 million oysters consisting of single or multiple classes.

b. Noise and Light

The only powered equipment associated with this lease site is the fishing boat used to plant and harvest oysters off the bottom. The vessel has a fully muffled diesel engine and only operates during daylight hours generally on weekdays.

No lights will be used on the bottom lease site nor used for any operations unless emergency conditions mandate that we be out after dark. In the thirty-one years we have operated on this site, we have never worked in the dark.

c. Marking

It is our intent to properly mark the lease site according to DMR and USCG regulations. We currently mark existing leases with cylindrical buoys with reflective tape and "SEA FARM" letters per the requirements.

3. Environmental Characterization:

The bottom environment varies from mud to a sandy cobble substrate. Water depths vary from 3 to 17 feet at MLW. Resident fauna (**A**bandant, **C**ommon, **R**are) primarily consists of rock crabs (C), green crabs (C), horseshoe crabs (C), hermit crabs (C), common starfish (R), oyster drills (C), periwinkles (A), barnacles (C), softshell clams (R), hard-shell clams (R), razor clams (R), Eastern oysters (C), European oysters (R), mud shrimp (C), unidentified sponges (C), unidentified hydroids (A), frilled anemones (C), unidentified colonial tunicates (C), winter flounder (R) and menhaden (R). Principal resident flora consists of rockweed (R) and kelp (R). Currents over this bottom are tidally driven, generally running in a north/south direction (top and bottom) and less than 1 knot in velocity (top and bottom). The mean tidal range in Newcastle is 9.7 feet with a spring tidal range of 10.4 feet. The area is often iced over during January through March. The proposed site is classified as an approved area for the harvest of shellfish.

4. Area Resources:

a. Shellfish Beds, Fish Migration Routes and Submerged Vegetation Beds

The only eelgrass meadows within 0.5 miles were mapped in 1997 and occurred to the SE of the lease south of Hog Island. There is no eelgrass on the proposed lease site. Shellfish resources were mapped by the Maine DMR and are illustrated in Figure 3.



Figure 3. Shellfish resources overlaid on an aerial photo of the Goose Ledges vicinity near low tide with the proposed bottom lease site (shaded). Scale bar indicates 1000 feet. North arrow indicates true north. (photo source: Google Earth, June 23, 2014 and ME OGIS; MEDMR data).

Huston Cove to the east is conditionally approved from September through May. The growing site proposed is in an approved growing area (see Figure 4.)

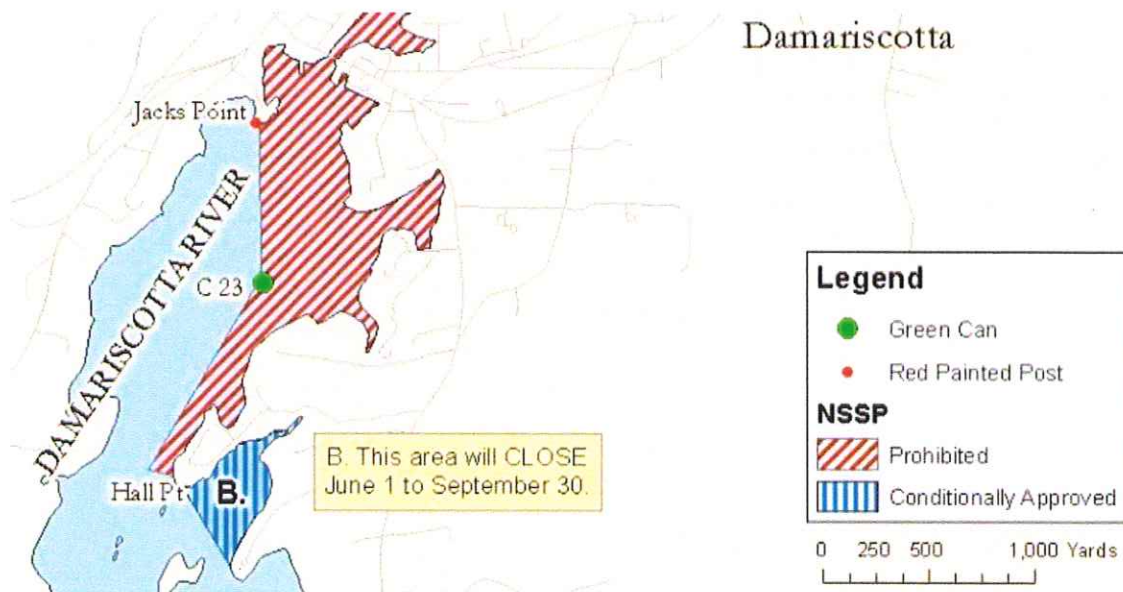


Figure 4. Reproduced Maine DMR growing area map 23A indicating the open growing area classification for the proposed lease site (bottom of map).

b. Essential Habitat/Endangered Species

The proposed lease site lies with .25 mile of a bald eagle nest on Hog Island. Bald eagles are regarded as a species of special concern. This eagle's nest has been active for at least a decade and the birds have never shown signs of avoidance due to POC activities. No endangered species are found at this site.

5. Surrounding Area Use:

a. Riparian Property

1 & 2 Within the Town of Damariscotta, Lincoln County, see the attached tax map (Figure 5 and 5a) and lists of riparian landowners within 1000 feet of the proposed bottom lease on Hall Point and Hog Island (Appendix 1). Within the Town of Newcastle, Lincoln County, see the attached tax map (Figure 5) and list of riparian landowners within 1000 feet of the proposed experimental lease (Appendix 1). Figure 5 indicates the riparian zone within 1000 feet of the proposed bottom lease.

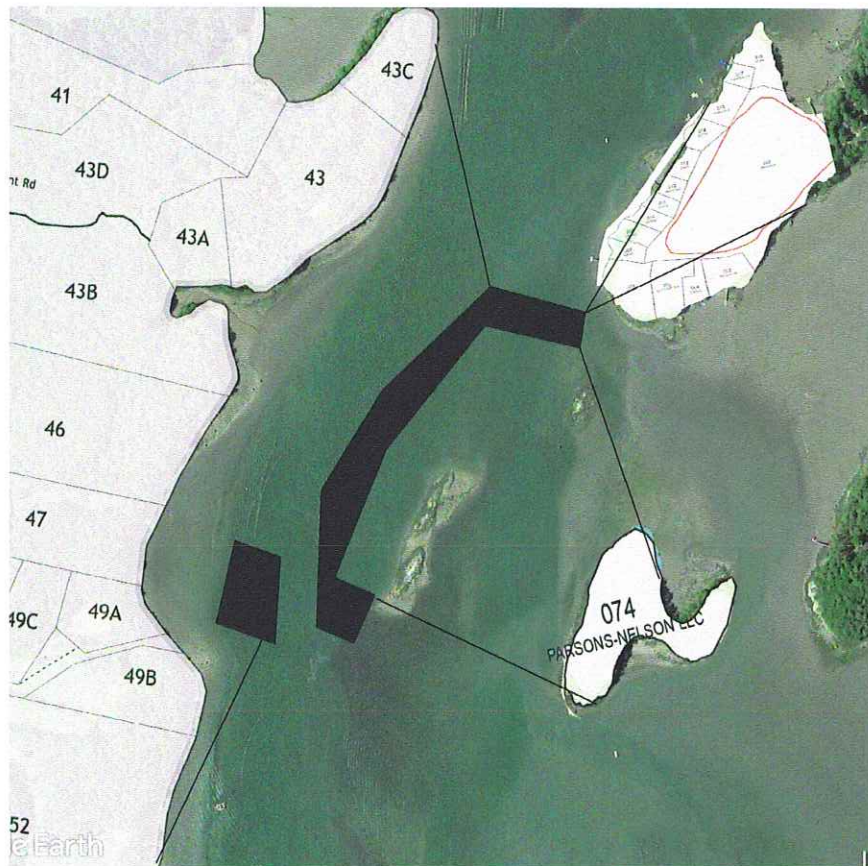


Figure 5. Shoreland zone within 1000 feet of the proposed bottom lease (darkly shaded polygons). Lines emanating from the proposed lease tracts indicate 1000 feet.

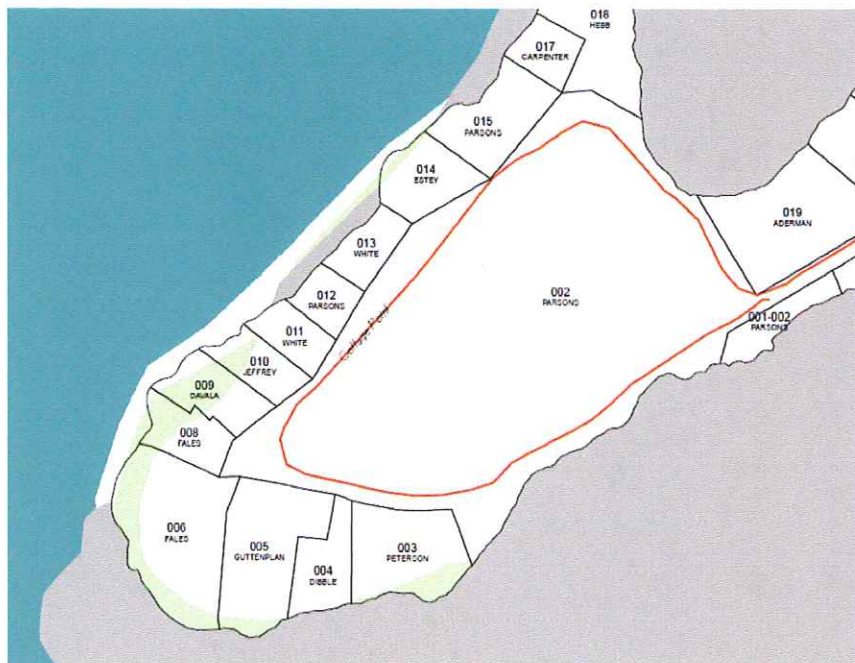


Figure 5a. Close-up tax map of Hall Point lots.

3. Access to the lease site will be made from vessels originating from either Damariscotta Harbor or Clark's Cove, Walpole. Pemaquid Oyster Co owns shorefront property in Damariscotta but does not currently use this as an access point to the farm site.

4. Riparian access to their property will not be affected by this bottom lease application given both the distance from shore and the fact that this is a bottom lease application and no surface gear will be used thus no interference with boats trying to access the shoreline.

b. Existing Uses

1. The main thread of the Damariscotta River lies to the west of the proposed tract #1 bottom lease and to the east of the proposed tract #2 bottom lease. The boundaries of the proposed tracts were specifically located to be out of the main channel (Figure 1b). Water depths within the proposed tract vary from 3 to 17 feet at MLW. Small vessel traffic traverses generally in a north/south direction over or nearby the proposed tract #1 and rarely over the proposed tract #2. During the summer months, perhaps 4-6 boats traverse this site per daylight hour. Nighttime activity is nil. During the past 31 years of commercially cultivating shellfish on the adjacent tracts (DAM GL2 and DAM GL3) there have been no navigational conflicts with POC aquaculture activities. Given that there will be no structures located on this proposed lease, the navigational hazards should be minimal. Several LPA's (MSTE 116, MSTE 216, MSTE 316 and MSTE 416) are currently issued between the two tracts of DAM GL2. In the two years of permitting at this site, no aquaculture activity has ever taken place nor are the LPA's marked by the licensee. POC has been in contact with the licensee and we are both in agreement that POC will assist in identifying an alternate site for these LPA's.

There is minimal commercial fishing within this site. Occasional crab and lobster traps are set during certain times of the year (i.e. 1-2 buoys at any given time in the summer within this area). These activities should not interfere with the proposed POC aquaculture activities. Recreational hook and line fishing (striped bass) is common in July and August with perhaps 2-4 vessels per day fishing over this bottom.

2. POC requests exclusive use of this proposed lease for the bottom cultivation of the shellfish species listed in Section 3. Other uses such as recreational fishing, lobstering, crabbing etc. should have no impact on POC aquaculture activities and should not be limited. There are no moorings in the proposed tracts.

6. Technical Capability:

The three owners of Pemaquid Oyster Company, Inc. have over 100 years of combined experience commercially farming shellfish. The *curriculum vitae* of one of the principals is attached in the Appendix.

7. Financial Capability:

a. Financial Capability The Pemaquid Oyster Company, Inc. has been commercially cultivating oysters since 1986 and has sufficient financial and management resources to continue farming into the foreseeable future. POC is listed by Dun and Bradstreet (DUNS No. 09-073-2934), currently employs six people all with full health benefits. The company's 1.29 ac. waterfront property in Damariscotta is currently assessed (FY18) at \$161,500. Pemaquid Oyster Company, Inc. would not be expanding its leased area if its business model were not profitable.

b. Cost Estimates

The Table 3 below provides an approximate annual cost estimate related to bottom planting oysters on this lease site.

TABLE 3. Approximate annual costs of the proposed aquaculture activities. The asterisk indicates a ten-year amortized cost estimate.

Oyster Seed	\$ 25,000
Farm Labor	\$ 60,000 Planting and harvesting only
All Insurance	\$ 20,000 Planting and harvesting only
Equipment	\$ 5,000*
Vessels	\$ 15,000*
Fuel	\$ 5,000
Administrative	\$ 10,000
Property Taxes	\$ 5,000
Freight/Travel	\$ 10,000

c. Other Lease Interests and Multiple Ownership

Pemaquid Oyster Company, Inc. operates DAM GL2 and DAM GL3 leases in the Damariscotta River (Figure 6). Pemaquid Oyster Company, Inc. has a 9.03% ownership in Pemaquid Mussel Farms, LLC which in turn operates a mussel lease in Stonington, ME (PEN STH2). Furthermore, Carter Newell has a 20.09% ownership in Pemaquid

Mussel Farms, LLC and hence an additional interest in PEN STH2. See Section 7dA6 below.

d. Other Lease Interests and Multiple Ownership Continued

A. Corporate Applicants

1. Pemaquid Oyster Company, Inc. was incorporated in Maine December 11, 1989. The POC charter number is 19901010D. Prior to the incorporation date, POC's legal structure was as a limited partnership. The Articles of Incorporation are attached in the Appendix.
2. Carter R. Newell, President
7 Creek Lane
Damariscotta, ME 04543

Jeffrey McKeen, Vice-President
591 North Ridge Road
Montville, ME 04941

Christopher V. Davis, Treasurer and Secretary
P.O. Box 302
Waldoboro, ME 04572

Christian T. Chandler, Esq., Clerk
Curtis Thaxter LLC
One Canal Plaza, Suite 1000
Portland, ME 04101
3. N/A
4. See section 7c above. Pemaquid Oyster Company applied for and was permitted for the following lease sites:

DAM GL2 (active)
DAM GL3 (active)
STG US2 (terminated)
DAM SL2 (terminated)
5. Carter R. Newell, President 33.33% ownership
7 Creek Lane
Damariscotta, ME 04543

Jeffrey McKeen, Vice-President 33.33% ownership
591 North Ridge Road
Montville, ME 04941

Christopher V. Davis, Treasurer & Secretary 33.33% ownership
P.O. Box 302
Waldoboro, ME 04572

6. Carter R. Newell
7 Creek Lane
Damariscotta, ME 04543
33.33% interest in DAM GL2 equals 0.613 acres
33.33% interest in DAM GL3 equals 3.377 acres
23.10% interest in PEN STH2 equals 0.867 acres

Jeffrey McKeen
591 North Ridge Road
Montville, ME 04941
33.33% interest in DAM GL2 equals 0.613 acres
33.33% interest in DAM GL3 equals 3.377 acres
3.01% interest in PEN STH2 equals 0.113 acres

Christopher V. Davis
P.O. Box 302
Waldoboro, ME 04572
33.33% interest in DAM GL2 equals 0.613 acres
33.33% interest in DAM GL3 equals 3.377 acres
3.01% interest in PEN STH2 equals 0.113 acres

7. No officers, shareholders nor directors have been arrested, indicted or convicted of any marine resources or environmental protection laws in Maine or elsewhere.



Figure 6. Aerial photo of the Goose Ledges vicinity near low tide with the proposed bottom lease site (black) as well as the lightly shaded existing POC leases DAM GL2 and DAM GL3. Scale bar indicates 1000 feet. North arrow indicates true north. (photo source: Google Earth, June 23, 2014).

8. Other Requirements:

POC has read Maine DMR aquaculture regulations chapter 2.40 and is aware of the requirement to post either a performance bond or establish an escrow account in the amount of \$500 once this lease is approved.

POC requests that upon approval, this bottom site be merged with DAM GL3 with the shortened expiration date of August 31, 2026 becoming the effective expiration date. Please note that should the 20 year lease term be enacted prior to this lease issuance, POC will consult with DMR to determine the appropriate expiration date.

POC is aware of the requirement to publish a notice of the anticipated public hear date and location in a local newspaper. A copy of the published public hearing notice will be brought to said hearing to be submitted as evidence.

Damariscotta, ME
landowners within 1000' of proposed lease

PARSONS-NELSON LLC
P.O. BOX 762
DAMARISCOTTA ME 04543
HOG ISLAND
Map 001; Lot 074

PARSONS, REBECCA & NEIL L., JR.
P.O. BOX 492
DAMARISCOTTA ME
04543-0472
COTTAGE POINT ROAD
Map 012; Lot 002

PETERSON, MARYANN
P.O. BOX 1406
DAMARISCOTTA ME
04543-0002
179 COTTAGE POINT ROAD
Map 012; Lot 003

DIBBLE, ANN W.
28 COUNCIL ST
CHARLESTON SC 29401
171 COTTAGE POINT ROAD
Map 012; Lot 004

GUTTENPLAN, STEVEN D. & KAREN A.
2246 HARBORVIEW DRIVE
DUNEDIN, FL 34698
167 COTTAGE POINT ROAD
Map 012; Lot 005

FALES, R. E. & P.P., TRUSTEES
FALES LIVING TRUSTS
P O BOX 418
DAMARISCOTTA ME
04543-0418
165 COTTAGE POINT ROAD
Map 012; Lot 006

FALES, R.E. & P.P., TRUSTEES
FALES LIVING TRUSTS
P O BOX 418
DAMARISCOTTA ME
04543-0418
163 COTTAGE POINT ROAD
Map 012; Lot 008

DAVALA, PENELOPE L & BERNARD (JT)
P.O. BOX 308
DAMARISCOTTA ME
04543-0834
161 COTTAGE POINT ROAD
Map 012; Lot 009

JEFFREY, ANDREA T. & BRUCE R.
259 DEACON ST. #40
BOSTON, MA 02116
159 COTTAGE POINT ROAD
Map 012; Lot 010

WHITE, EDWARD & DARIA (JT)
PO BOX 783
DAMARISCOTTA ME 04543
157 COTTAGE POINT ROAD
Map 012; Lot 011

PARSONS, REBECCA & NEIL L., JR.
P.O. BOX 492
DAMARISCOTTA ME
04543-0472
COTTAGE POINT ROAD
Map 012; Lot 012

WHITE, EDWARD R.
P.O. BOX 783
DAMARISCOTTA ME
04543-0783
149 COTTAGE POINT ROAD
Map 012; Lot 013

ESTEY, TERRANCE C. & VALERIE W.
PO BOX 732
DAMARISCOTTA, ME 04543
139 COTTAGE POINT ROAD
Map 012; Lot 014

PARSONS, REBECCA
P.O. BOX 492
DAMARISCOTTA ME
04543-0472
COTTAGE POINT ROAD
Map 012; Lot 015

CERTIFICATION

I, Michelle Cameron, Town Clerk for the Town of Damariscotta, certify that the names and addresses of the property owners listed above, as well as the map and lot numbers, are those listed in the records of this municipality and are current as of this date.

SIGNED: Michelle Cameron DATE: 10/16/17 SEAL:

**Newcastle, ME Landowners List within 1000'
of proposed lease**

GLUECK, CHARLES G.
77 BAY STATE ROAD #6
BOSTON MA 02215
50 LITTLE POINT ROAD
Map 003, Lot 043

GLUECK, PETER J. & SUSAN
PO BOX 291
NEWCASTLE ME
04553-0291
41 LITTLE POINT ROAD
Map 003, Lot 043-00A

GLUECK, CHARLES G. JR; PETER J.
P.O. BOX 22
NEWCASTLE ME
04553-0022
LITTLE POINT ROAD
Map 003, Lot 043-00B

GLUECK, JR., CHARLES G.
77 BAY STATE ROAD # 6
BOSTON MA 02215
58 LITTLE POINT ROAD
Map 003, Lot 043-00C

GLUECK, CHARLES G. JR; PETER J.
P.O. BOX 22
NEWCASTLE ME
04553-0022
RIVER ROAD
003, Lot 046

BARBERA, SUSAN & JOHNSON, DAVID S.
10 CHERRY LANE
NEWCASTLE ME 04553
10 CHERRY LANE
Map 003, Lot 047

MICHAEL, KATHLEEN A. & DANA
30 OYSTER LANE
NEWCASTLE ME 04553
30 OYSTER LANE
Map 003, Lot 049-00A and
Map 003, Lot 049-00B

BALL, CYNTHIA & LANCELOT A.
5 PURITAN ROAD
WENHAM MA 01984
34 KILN ROAD
Map 003, Lot 052

CERTIFICATION

I, DAWN M BURNS, Town Clerk for the Town of NEWCASTLE, certify that the names and addresses of the property owners listed above, as well as the map and lot numbers, are those listed in the records of this municipality and are current as of this date.

SIGNED:  DATE: 10/16/2017 SEAL: