

**REVISED
APPLICATION**
[12/3/2015]

APPLICATION COVER SHEET FOR SUSPENDED CULTURE

Initial app received 8/21/15
Revised app received 11/25/15
Revised app received 12/3/15
Deemed complete 12/3/15

Name: The Maine Mariculture Company, LLC.

Business Address: 32 Merchant's Landing

City: Spruce Head

County: Knox

State, zip Maine, 04859

Mailing Address: 17 Silano Dr.
Oxford, CT 06478

Telephone: business 203.650.3458 home 203.650.3458 cell 203.650.3458

Email address: BrendanAtwood@gmail.com

Date of Pre-application meeting: March 9, 2015

Date of Scoping Session: August 13, 2015

town county waterbody

Location of lease site: Pleasant Island (Unorganized Territories), Knox County, Muscle Ridge Channel

Additional description Home Harbor, Northeast of Pleasant Island
(e.g. south of B Island)

Total acreage requested: 3.62 Acres
(100-acre maximum)

Lease Term requested: 10 years
(10-year maximum)

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

American or eastern oyster (*Crassostrea virginica*); Sea scallop (*Placopecten magellanicus*);

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

Oyster seed will be obtained from the following sources:

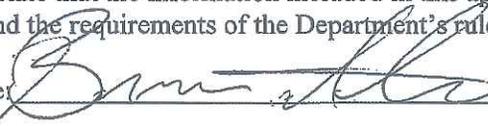
Muscongus Bay Aquaculture,
Seal Ledge Ln , Bremen, ME 04551, 04551
Phone: (207) 529-4100

Mook Sea Farms
321 ME-129, Walpole, ME 04573
Phone:(207) 563-1456

Scallop spat wild caught under per Special License ME 2015-28-04, of which Brendan Atwood and Darrald Atwood are listed. This license will be renewed for 2016, according to Dana Morse, per DMR correspondence. A law change effective January 1, 2016 authorizes DMR to issue licenses to collect wild scallop spat, and spat will be either caught by the applicant under the auspices of that license once available, or will be purchased from a licensed source.

\$1,500 application fee enclosed: PAID

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: 

Date: 11/19/15

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

D. APPLICATION INFORMATION REQUIREMENTS

Answer all questions under each Section as completely as possible.

This application includes questions on general information, site location, site development, operation, environmental characterization, area resources, surrounding area use, technical capabilities, financial capabilities, and a list of certifications, licenses, etc.

Definitions from the MDMR Aquaculture Lease Regulations:

Aquaculture: The culture or husbandry of marine organisms by any person. Storage or any other form of impounding or holding wild marine organisms, without more, shall not qualify as aquaculture. In order to qualify as aquaculture, a project must involve affirmative action by the lessee to improve the growth rate or quality of the marine organism.

Culture or Husbandry: The production, development or improvement of a marine organism.

Riparian Owner: A shorefront property owner whose property boundaries are within 1000 feet of the proposed lease boundaries.

Existing or Potential Uses: All water-related activities and resources including, but not limited to, commercial and recreation fisheries, marine transportation, aquaculture, and boating.

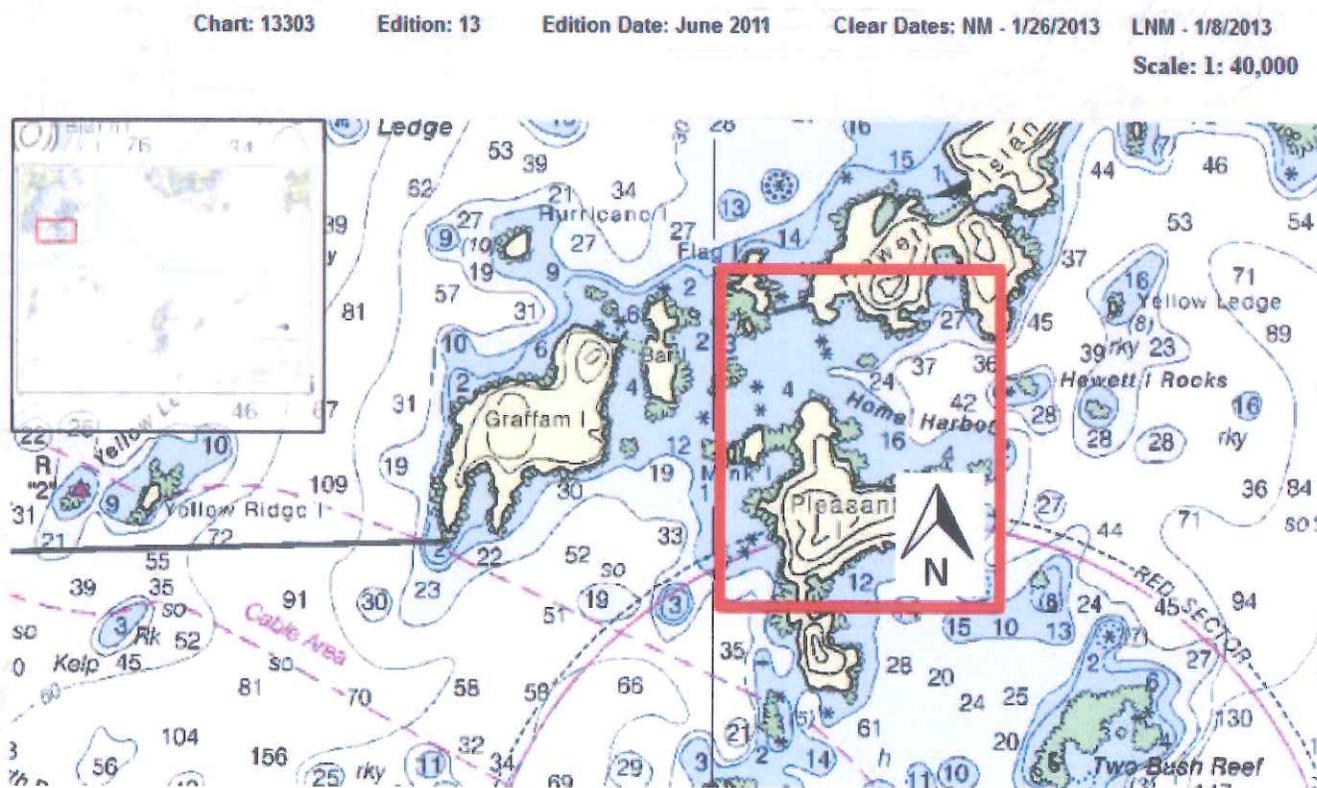
Adverse Effects: Impediments to water-related activities or unreasonable interference with natural processes supporting those activities. This includes, but is not limited to, floating or submerged obstruction, habitat destruction, natural flora and fauna displacement, current flow alteration, and lowered water quality.

Please read all instructions before completing. Applications must be typed and **reproducible**. Please use 8 1/2" x 11" paper with a 3/4" margin at the top; use the **numbering system** listed for each item requested. All drawings, charts and plans must adequately show the proposed project. It is recommended that any plans, drafts, charts, etc., be certified by a professional engineer.

1. SITE LOCATION

a. Vicinity Map

Use a NOAA chart or USGS Topographic map to show the waters and shorelands within the general vicinity of the lease tracts depicting the lease area.



b. Plan View

An enlargement of a NOAA chart or USGS Topographic map is suggested to provide this information. Exact location of lease described as follows:

1. Mark entire lease boundary.
2. Show depth contours and indicate mean low water and mean high water on all land adjacent or nearest site.

3. Show primary ebb and flood directions.
4. Mark true north with arrow.
5. Include scale used.
6. Label the location of Federal projects, navigational channels, any structures, weirs, existing aquaculture leases within 2000 feet or state or federal beaches, parks, conserved lands or docking facilities within 1000 feet.
7. Provide the latitude, longitude and State Plane Coordinates for each corner of the entire lease or the metes and bounds of the lease with coordinates for one starting point.

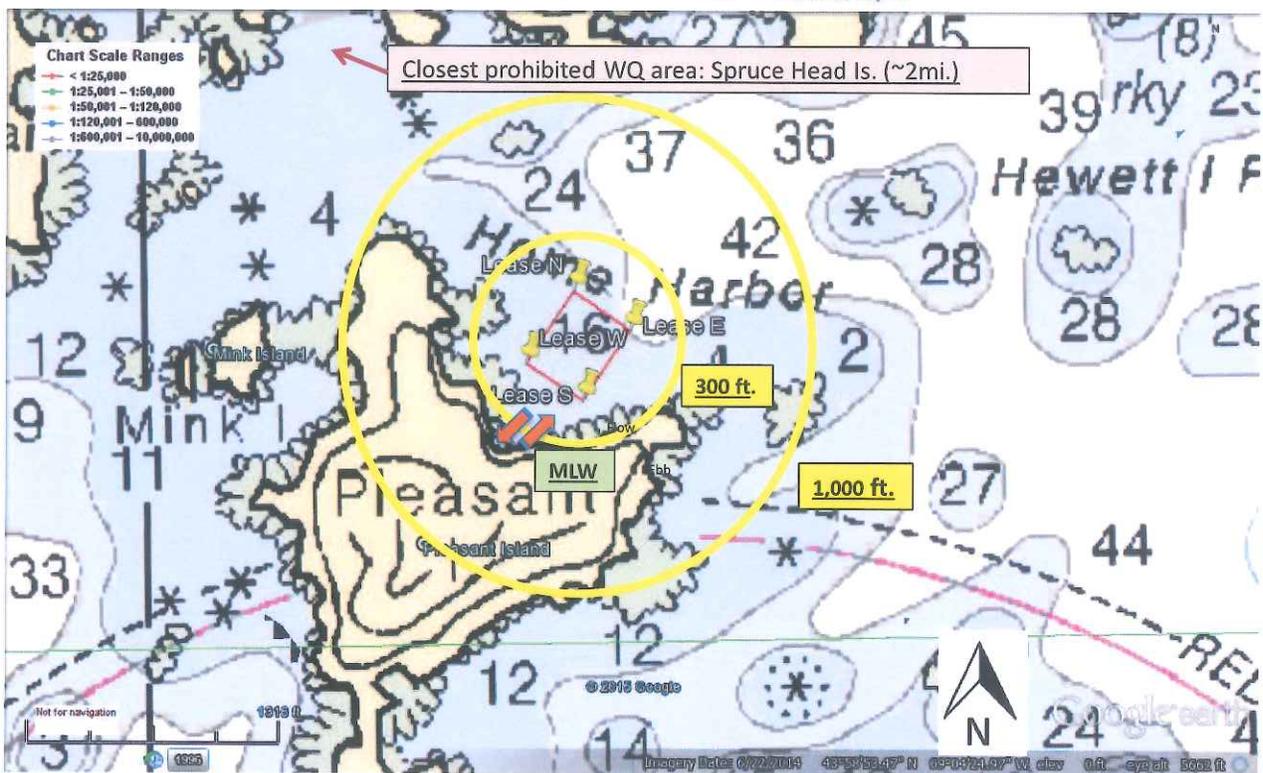
Vicinity Map (close up)

Plot Coordinates (by corner):

MAINE EAST ZONE FIPSZONE: 1801 ADSZONE: 4076 UTM ZONE: 19

Chart: 13303 Edition: 13 Edition Date: June 2011 Clear Dates: NM - 1/26/2013 LNM - 1/8/2013
 Scale: 1: 40,000

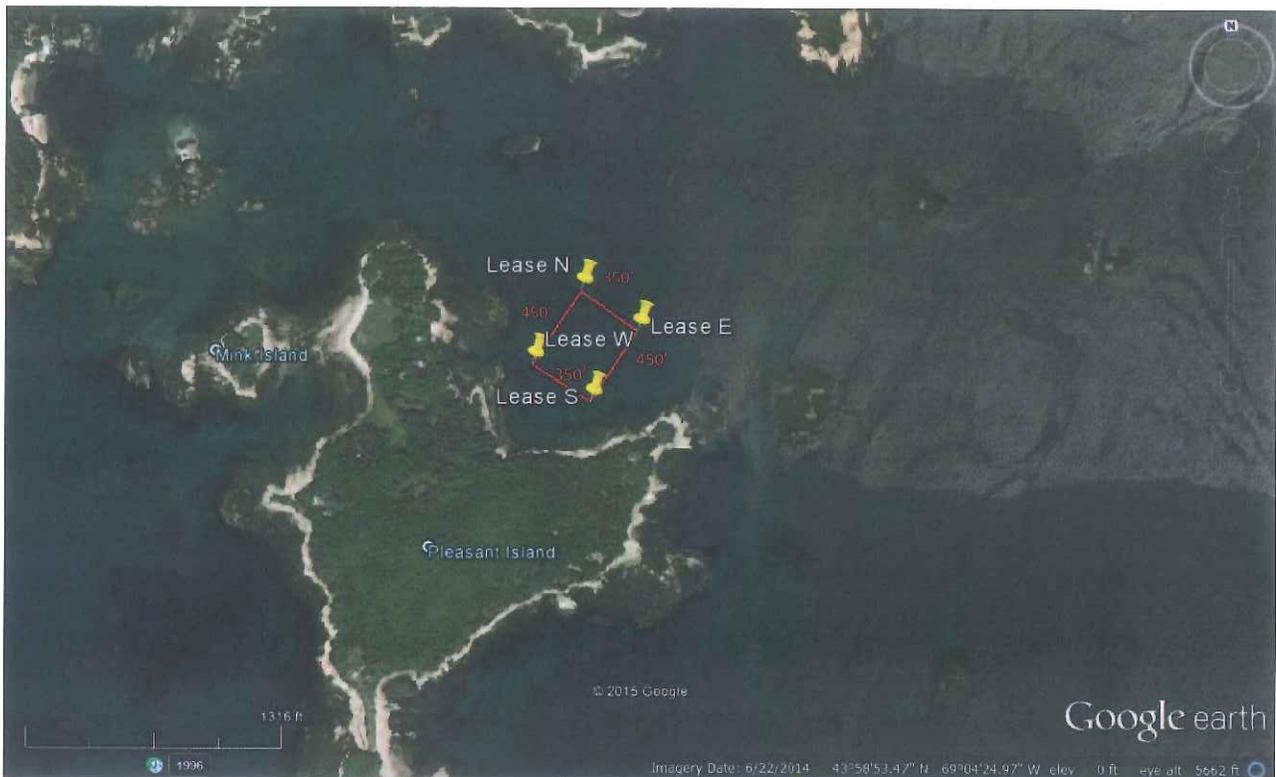
- N: 43°58'58.70"N; 69° 4'29.20"W
- E: 43°58'56.58"N; 69° 4'25.23"W
- S: 43°58'53.05"N; 69° 4'28.68"W
- W: 43°58'55.00"N; 69° 4'32.70"W



- Proposed Lease Site Corner Coordinates:
 - N: 43°58'58.70"N; 69° 4'29.20"W
 - E: 43°58'56.58"N; 69° 4'25.23"W
 - S: 43°58'53.05"N; 69° 4'28.68"W
 - W: 43°58'55.00"N; 69° 4'32.70"W

c. Aerial photo

If available, please provide an aerial photograph of the proposed lease area. Mark the boundary of the lease area with dimensions and true north arrow. The photo must have been taken during the twelve-month period prior to the filing of the application, preferably between July 1 and September 1, and the date on which it was taken must be noted. Note: this requirement is for the USACOE permit only.



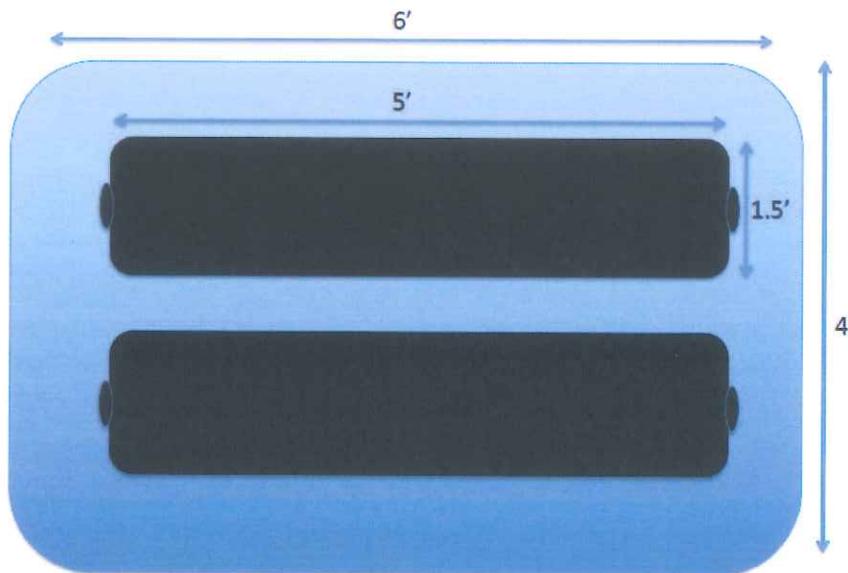
5

2. SITE DEVELOPMENT

This section is intended to provide accurate plans depicting the physical structures to be placed on the proposed operation.

- a. Single Structure Schematic - Top View
Provide dimensions, materials, etc.

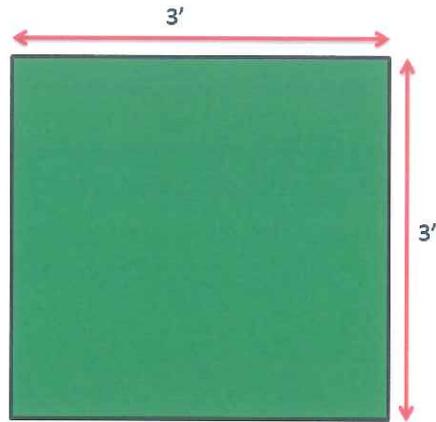
2. (a)(1) Single Structure Schematic: Oyster Cage - Top View (Not to scale)



Oystergro cages composed of 12" gauge vinyl-coated wire mesh. Two plastic floats 5' x 1.5' sit atop, adjoined with vinyl-coated wire mesh.

6

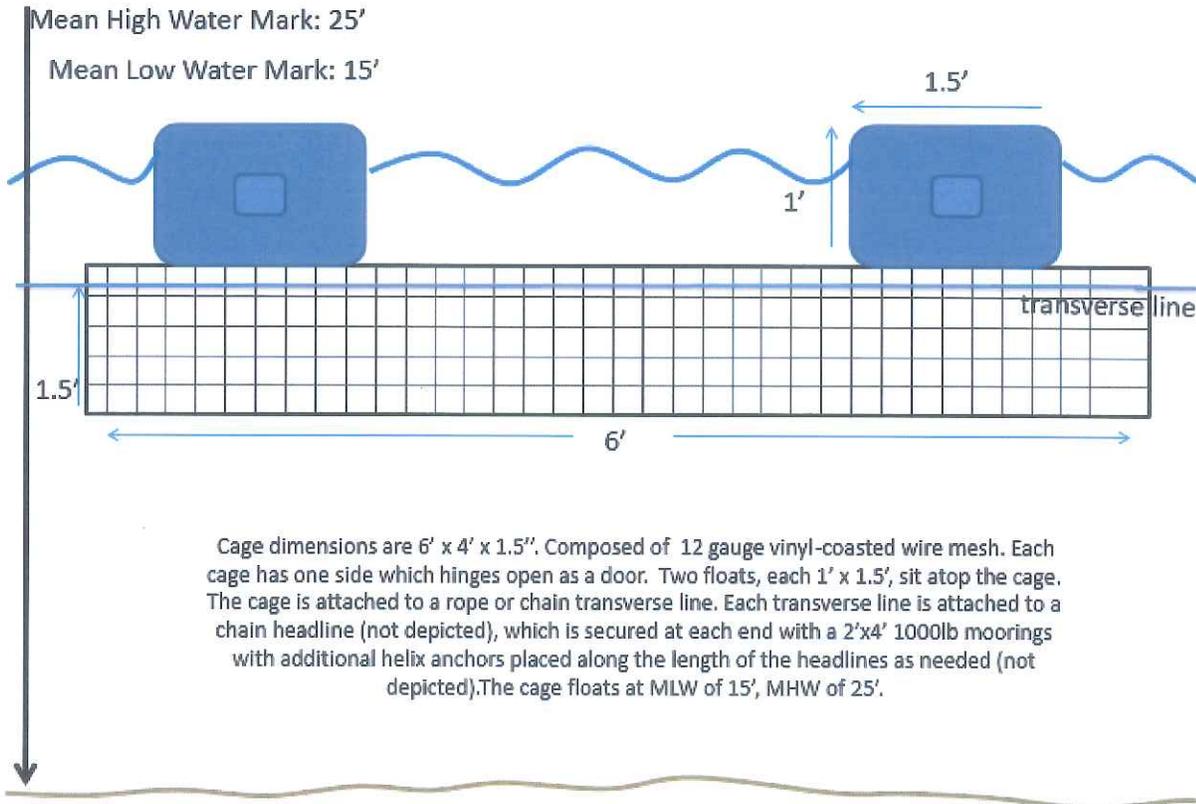
2. (a)(2) Single Structure Schematic: Aquatray – Top View (Not to scale)



Trays are made of molded mesh plastic, and stacked inside an aluminum frame for stability.

- b. Single Structure Schematic - Cross Section
Provide dimensions, materials, etc.

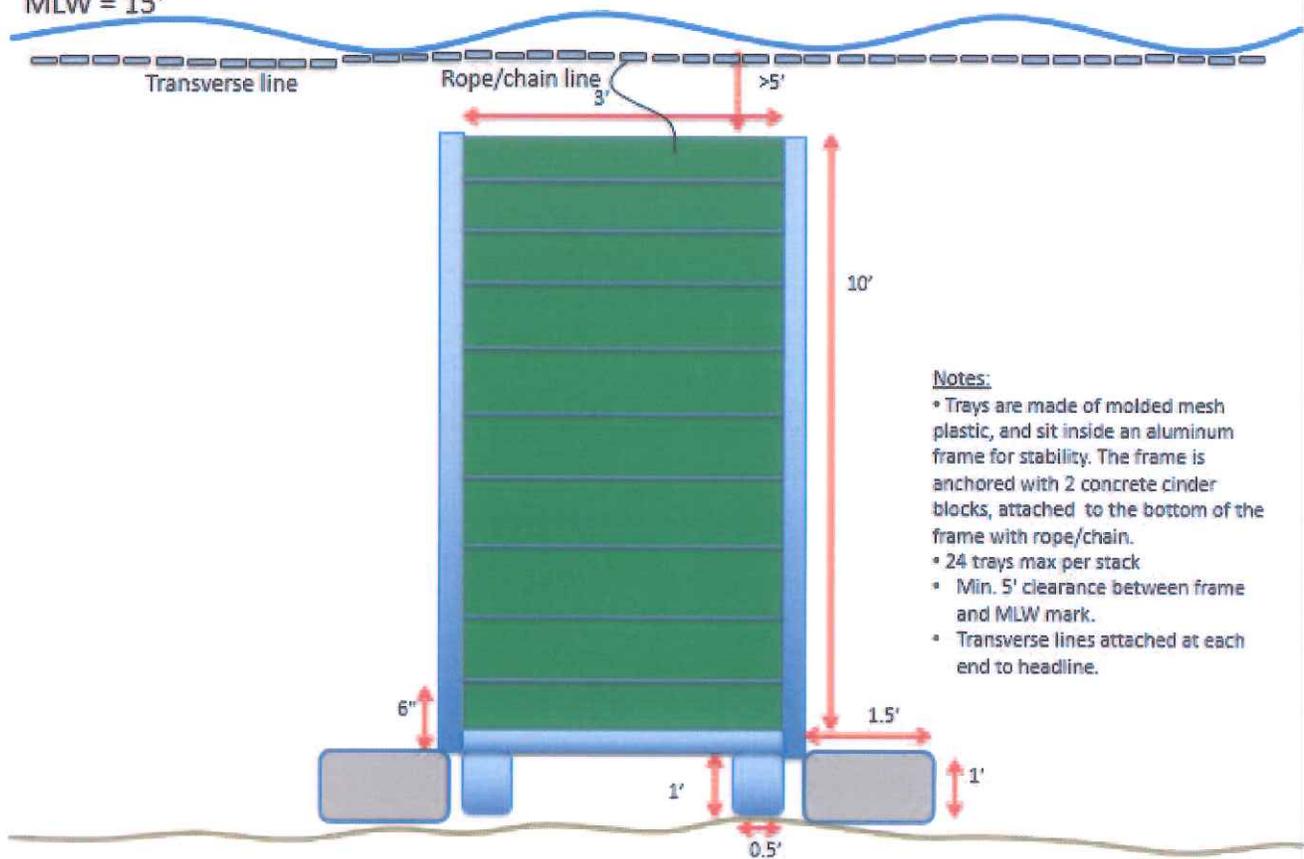
2. (b)(1) Single Structure Schematic: Oyster Cage - Cross Section (Not to scale)



2. (b)(2) Single Structure Schematic: Aquatray- Cross Section (Not to scale)

MHW = 25'

MLW = 15'



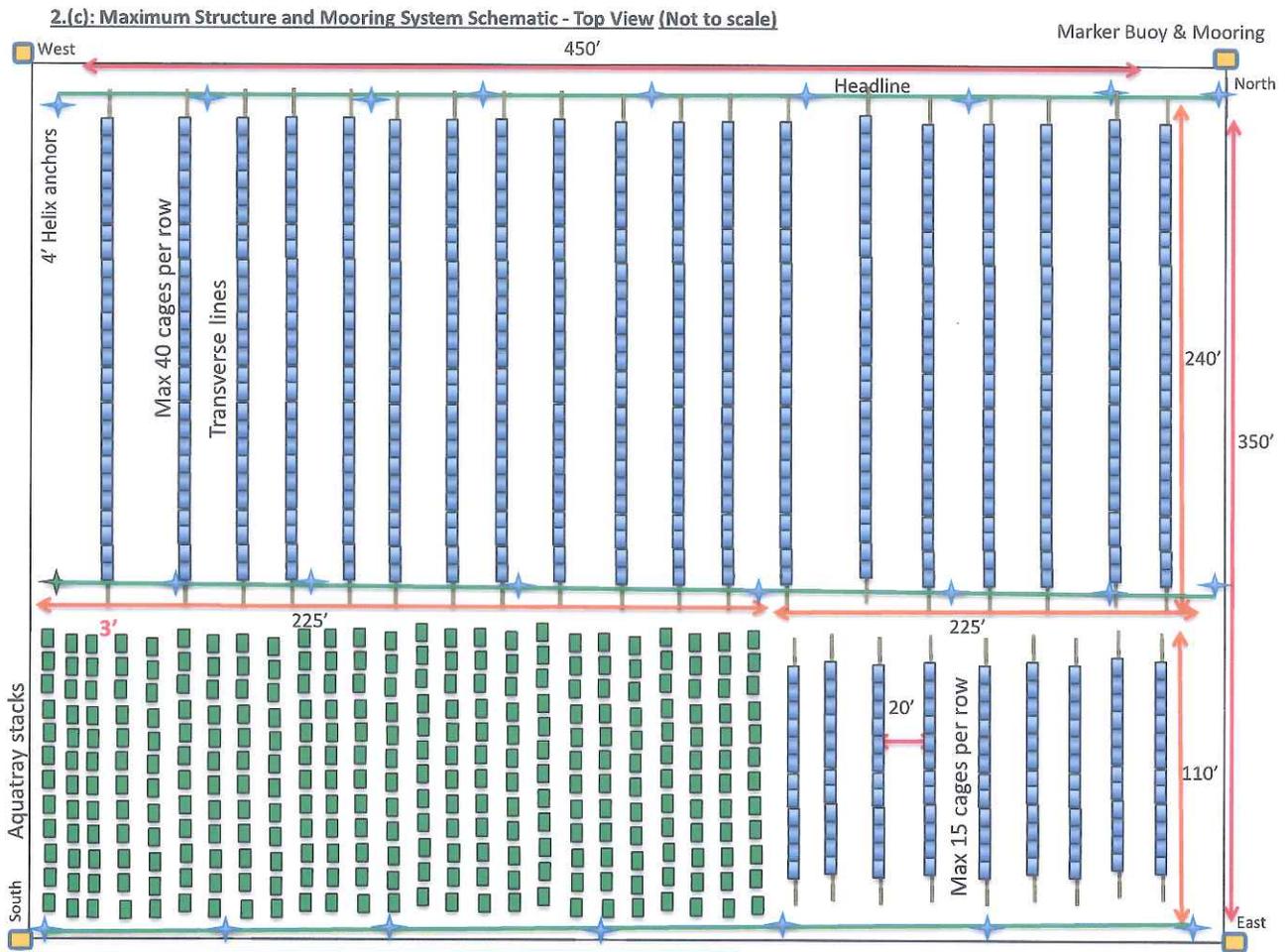
Notes:

- Trays are made of molded mesh plastic, and sit inside an aluminum frame for stability. The frame is anchored with 2 concrete cinder blocks, attached to the bottom of the frame with rope/chain.
- 24 trays max per stack
- Min. 5' clearance between frame and MLW mark.
- Transverse lines attached at each end to headline.

c.

Maximum Structure and Mooring System Schematic - Top View

Provide a schematic of the maximum structures to be used on site, as well as the mooring system to be use. Provide dimensions, materials, etc. Please note that all moorings must be contained within the lease site.



The site will include a maximum of 19 rows of up to 40 cages, and an additional 9 rows of up to 15 cages, totaling a maximum of 900 cages. Each cage will be adjoined to a transverse line made of rope or chain. The transverse lines, or “rows”, will be attached at each end to a perpendicular chain “headline” (max length 450’). These headlines will be moored at each end with a 1000lb granite mooring, and marked with the requisite buoy. Additional helix anchors may be deployed as needed along the headline for additional security and to minimize drifting.

There will be a maximum of 25 (traverse line) “rows” of aquatray stacks, with a maximum of 12 stacks per row, totaling a maximum of 300 aquatray stacks. Each stack will be connected to a rope or chain transverse line, and the traverse line will be connected at each end to a chain headline

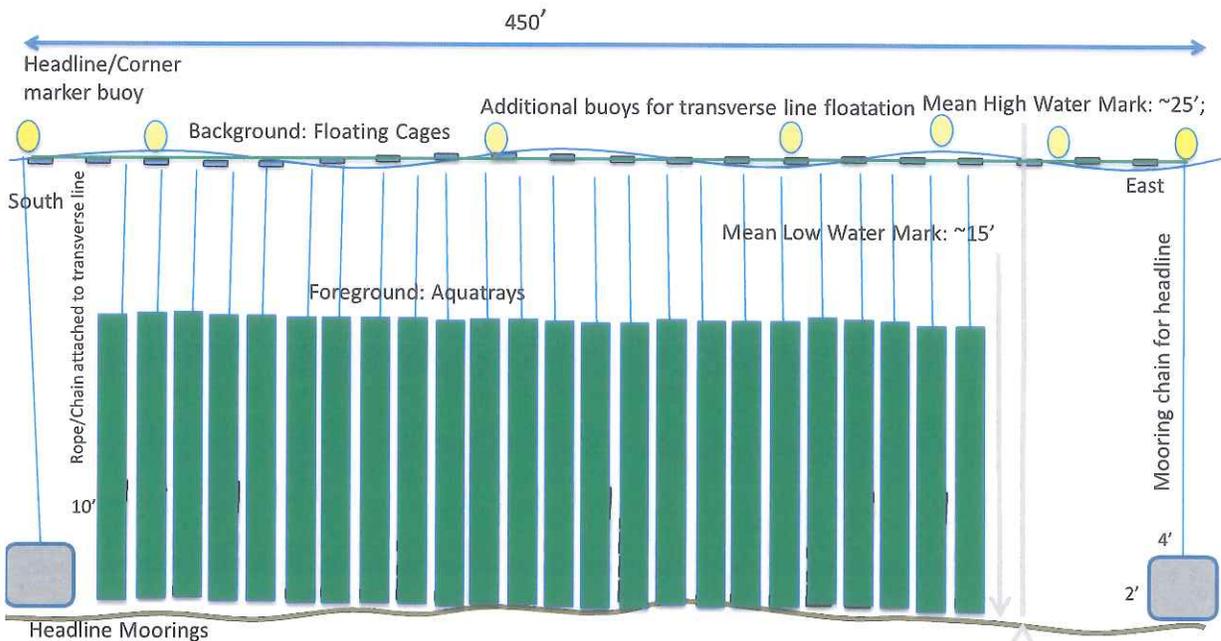
(max length 450'), as described above. Aquatrays will not be visible from the surface, and only the buoys used for floatation of the transverse lines will be visible.

d.

Maximum Structure and Mooring System Schematic - Cross Section

Provide a cross section schematic of the maximum structures to be used on site, as well as the mooring system to be use. Provide dimensions, materials, etc. Include depths from structure(s) to sea-floor relative to MLW and MHW.

2. (d) (Far view) Maximum Structure and Mooring System Schematic - Cross Section (Not to scale)



Foreground: A maximum of 25 transverse line rows of aquatray stacks will sit on the ocean bottom, attached by rope or chain to a traverse line. Each traverse line row is attached at each end to a headline, which is moored at each end by a 1000lb granite block 2' x 4'. Buoys will be used as needed to keep the transverse lines and headlines afloat. Each aquatray stack contains up to 24 aquatrays and sits within an 10' x 3' aluminum or steel frame, with (2) 50lb cinder blocks adjoined by chain at the bottom of each frame. Each stack depicted represents one transverse "row" of stacks.

Background: Cages will float on the surface in a maximum of 19 transverse line rows of a maximum of 40 cages each, and an additional maximum of 9 transverse line rows of a maximum of 15 cages each. Each cage represents one transverse line "row", which is attached at each end to a headline.

Each transverse line will be adjoined at each end to a headline. Each headline will be attached at each end to a 1000lb granite mooring and a marker buoy. Additional helix anchors may be deployed on the headlines as needed for stability and security.

Note: cages and trays do not sit within the same vertical column.

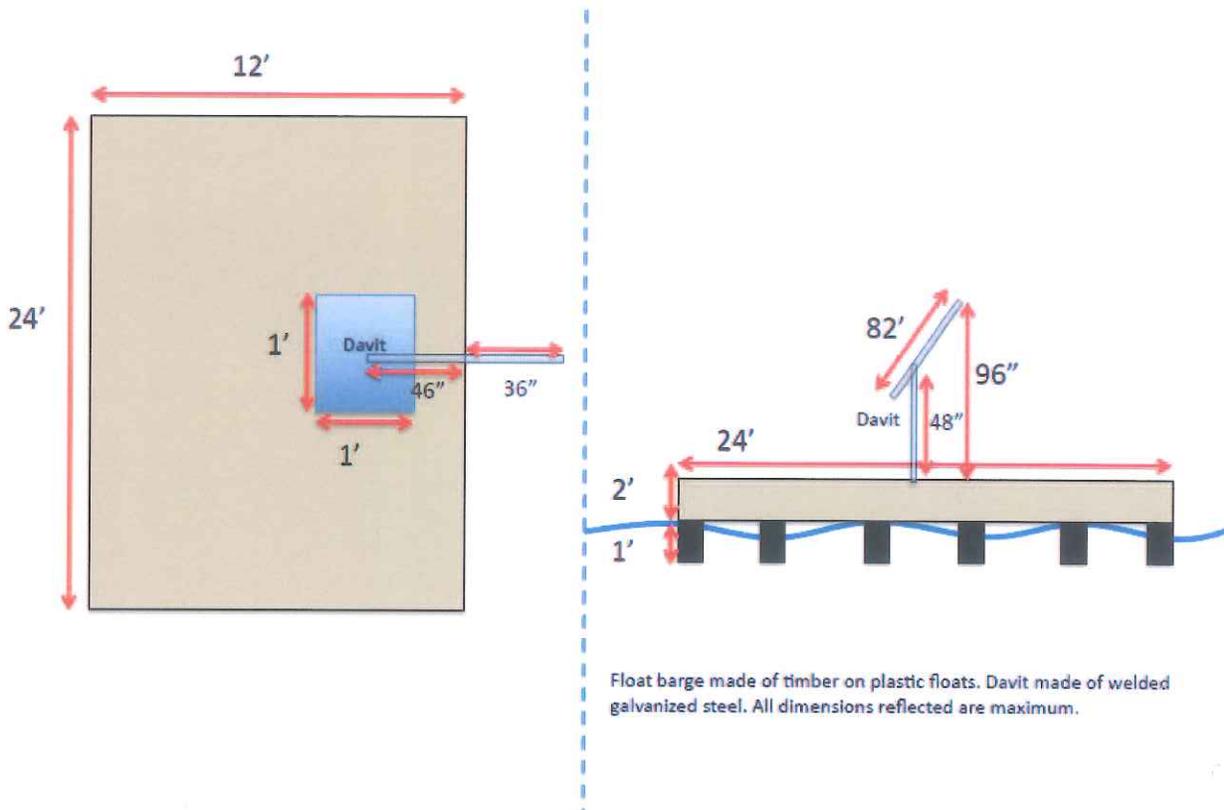
e.

On-Site Support Structures

1. Describe structures such as barges, sheds, etc., to be located on-site. Provide a schematic and indicate the dimensions, including height above sea level, materials, etc.

We will use a float barge with a davit on the site. The davit will be used to lift and lower cages and trays, and the float barge will be used as a work space. The float barge and davit will be stored on site or adjacent to it during the work season (May – November) and will be stored offsite during the winter.

2. (e). On-Site Support Structures: Float - Top View & Cross Section (Not to scale)



2. Describe the storage and use of oil, gasoline or other hazardous material on this facility. If petroleum products are to be used, provide a spill prevention plan.

No fuel, oil, gasoline or hazardous materials will be stored on this facility. In the event that a small generator or motor is used while working on the facility, it will not be stored on the facility, and will be transported to and from the site.

3. Describe the type and location of any sanitary facility.
There is no on-site sanitary facility.

f. Mooring System Adequacy

Provide a description of the mooring system's ability to withstand severe storms, surge, equipment break-up, etc. If the system has been specifically engineered for the site, provide a copy of any engineering analysis that is available.

The moorings and helix anchors we will be using are standard and widely used in the oyster and shellfish aquaculture industry. Moorings are made from 1000lb granite blocks (2' x 4'), and helix anchors will be 4'-6' stainless steel marine helix anchors. Mooring lines will be approximately 30' in length, made of up to ½" rope & chain, and attached to marker buoys at each end of the headlines.

g. Equipment Layout

Provide schematic or photographic renderings of the generalized layout of the equipment as depicted from two vantage points on the water. Provide the locations of the two vantage points



North Corner, Facing East
Home Harbor, Pleasant Island in background
43° 58' 58.70" N
69° 4' 29.20" W



East Corner, facing South-West
Home Harbor, Pleasant Island in background
43°58'56.58"N
69°4'25.23"W



Oystergro cages viewed from parallel view (1st row) and perpendicular view (background rows). Note: Photo is not from current site, but depict similar equipment layout.

- h. Gear Color
Provide the color of the gear and structures proposed to be used at the lease site.

Floats (on cages): black
Cages: black
Scallop trays: black
Tray Frame: aluminum
Buoys: yellow

i. Marking

According to Department rules, all lease sites are to 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 of the device. The marked floating devices shall be displayed at each corner of the lease area that is occupied or at the outermost corners. If such marking requirements are unnecessary or impractical in your proposed location, provide information as to why that is so and suggest alternate markings.

Our current LPAs observe MDMR's and ACOE's marking requirements, and we will continue to comply with marking requirements in the proposed lease site.

3. OPERATIONS

a. Production Activities -

1. List and describe your proposed activities including the number and type of vessels that will service the proposed site, frequency and duration of vessel traffic, cultivation techniques, monitoring schedule, transport schedule, predator control methods, (net) cleaning and maintenance (methods, frequency and location), harvest schedule, harvest technique and processing methods.

The site will be accessed via private vessel, departing from Spruce Head Island, S. Thomaston. The site will be serviced by a 12' x 24' float barge (non-motorized, See Schematic "2 (e) 1" above). Initially it is anticipated that on site production will be roughly 10 days per month between May-October, for a duration of up to 8 hours per day. At maximum, production will occur roughly 5 days per week at a maximum of 10 hours during daylight, during the months of May-November. Some additional operations may be required beyond these proposed time periods, and may include: flipping cages periodically, thinning the number of oysters and scallops in the bags and trays and grading them, harvesting oysters and scallops on the day of shipment, and preparing the cages for winterization.

Oysters will be cultivated in floating "OysterGro" cages. To control fouling, cages will be flipped every 7-21 days on average for up to 24 hours, exposing the cages to the air while resting on the pontoons. In the winter, these pontoons will be filled with water and sunk to the ocean floor. Oysters inside the cages

are secured in mesh shellfish bags. The cages will be deployed in parallel "transverse" strings of no more than 40 cages for the longer strings, and no more than 15 cages for the shorter "transverse" strings (Schematic "2 (c)" above). Cages will be adjoined with a stainless steel clip to reduce drifting. Spacing between the strings will be 20'. Maximum of 900 cages deployed at any one time.

Cages will be attached to the transverse lines (maximum of 250' in length) made of chain or rope. Transverse lines will attach at each end to a perpendicular "headline" (maximum of 450' in length), also made of rope and chain. These headlines will attach at each end to a granite mooring and will be marked with a buoy. Additional helix anchors will be deployed to secure the headlines as needed. All poly/nylon rope up to ½" diameter, chain up to ½" diameter.

Equipment that may be seasonally visible on site will include: OysterGro floats, a 24' x 12' float barge, a dinghy (<10'), and on occasion, a small boat (under 24') with outboard motors. Future plans are to include adding to the float a cylindrical oyster grading machine powered by a small gasoline or electric engine. Plastic mesh bags containing oysters will either be retrieved from the float, or transported to the float by the above-described boat or dinghy in order to be sorted/graded and restocked into mesh bags. The mesh bags are returned to the wire cages. From Nov.-May, only the marker buoys will be visible on site.

Harvesting is done by removing the oyster bags from the cages and onto the float barge. The cages may be flipped upside down in the water until re-stocked. The bags of market-sized oysters are taken by boat to a private wharf and packing facility in Spruce Head. Bags of seed oysters are thinned and graded on the float barge. The bags are re-stocked and replaced in the cages, which are flipped back into the normal growing position. In October-November, the cages will be sunk to the bottom for overwintering, to be brought up in May-April for the new season.

Scallops will be cultivated in plastic "Aqua trays" (see schematics 2.a.2. and 2.b.2.), which will be stacked a maximum of 24 trays high, inside an 8' x 3' x 3' steel frame, which will be placed on the ocean floor with (2) 1' x 1.5' 50lb cinder blocks attached via rope or chain to the bottom of the frame. To control fouling, these trays may be raised periodically via a davit attached to the work float and scrubbed before being returned to the ocean floor. Additional operations will include sorting/grading the scallops, thinning the number of scallops in the trays, and harvesting the scallops. Maximum development is proposed to be up to 24 trays per stack, up to 300 stacks, totaling up to 7,200 trays. Scallops will be overwintered on-site in the same trays.

No predator control methods will be utilized.

16

2. Describe the start-up and projected maximum production on a 12-month basis. Also state the maximum stocking density.

Start up: 150,000 oysters and 15,000 scallops.

Max production: 1.4 million oysters and 360,000 scallops annually.

Stocking density per cage for the final growth phase (before harvest) is 1200-1500. Stocking density will be in accordance with these annual production estimates. It will include annual production, plus the replacement stock of the same quantity that is harvested.

The rate and extent of scale up will be determined by market conditions.

Maximum scallop stocking density is 50 per tray. Again, the rate and extent of scale up will be determined by market conditions and biological conditions

3. Provide documentation that the equipment that will be used on the lease site is the best available technology for the proposed activity.

The gear we are proposing to use is designed specifically for this purpose and is in wide commercial use throughout the state of Maine by licensed aquaculture operations.

4. Describe the anticipated number and type of employment opportunities created by the project at start-up and proposed maximum production. Note: this requirement is for the USACOE permit only.

The exact number of employment opportunities will be determined by the success of our operation, however, we anticipate:

Start up: Maximum of 1-3 seasonal positions, in addition to 1-2 year-round positions. Employees will be responsible for all aspects of business, from research, preparation and coordination, to production to marketing/sales to maintenance and administrative tasks.

Max production: Duties will be the same, but on a larger scale. Maximum employees estimated to be 10 (part time and full time). Market conditions, as well as technological and production efficiencies, will dictate employment.

b. Noise and Light- Work will not occur after dark.

1. Provide the type of powered equipment, if any, that will be used on site, including, but not limited to boats, barges, power washers, generators, upweller motors, harvesting or seeding equipment, and feeding equipment. Vessels moving to and from the site are considered exempt from the noise impact consideration.

17

Currently, we do not use any power equipment on our LPAs. In the future, we may use a low-power electric battery or gasoline engine to power an oyster grading machine and/or a powered winch.

2. Indicate generally when, how often and for how long this equipment will be used (i.e. daily, weekly, only during harvesting).

The grading machine and any other powered equipment will be used infrequently; from May-November, during daylight hours.

3. Specify what will be used to reduce the noise level from the powered equipment, i.e., mufflers, etc. You do not need to provide decibel or frequency ratings unless they are known or provided by the equipment manufacturer.

The grading machine will be operated using a low-power battery or small gasoline engine and will not require noise control.

4. Provide the number, type (whether the fixtures are shielded), wattage and location of lights, other than those used for navigation or marking, that will be used at the proposed lease site.

N/A

5. Indicate under what circumstances you might work at your site beyond daylight hours.

We do not anticipate working on our site beyond daylight hours. Exclusions would include threats from severe weather or poachers during harvest season.

c. Upland Facilities or Holdings

Describe shoreside facilities or holdings to be used for various activities including feed transport, processing, etc.

Our property at 32 Merchants Landing, Spruce Head will be used for gear assembly and processing of products.

d. Current Operations

Describe your existing water-based facilities and operations.

We currently operate two LPAs (ATW-1-13; ATW-2-15) within the proposed lease area, where we cultivate oysters in Oystergro cages, and scallops in stacked bottom trays (the same gear proposed for this lease). We currently have 6 cages deployed containing an estimated 150,000 oysters at various stages of growth. We have one stack of 6 trays containing an estimated 15,000 scallops at various stages of growth.

4. ENVIRONMENTAL CHARACTERIZATION

The MDMR aquaculture lease regulations specify applicants may do more than one site evaluation, but one evaluation must be completed between April 1 and November 15, dates inclusive.

a. Environmental Characterization

The site is located in a shallow (~25' MHW; ~15' MLW), tidal cove situated to the East of Pleasant Island, in Home Harbor in the Muscle Ridge archipelago. The bottom is muddy and rocky, with minimal wrack/rockweed, and no evidence of eelgrass. Resident flora and fauna are typical for mid-coast Maine and include green crabs, starfish, periwinkles, barnacles, sea urchins, kelp and wrack/rockweed. According to commercial fishermen working in that area, the approximate average current speed is ~1 knot, running from east-west.

5. AREA RESOURCES

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

Provide a description of shellfish beds, fish migration routes and other marine resources in the surrounding area. Note the presence and extent of any submerged aquatic vegetation beds, i.e. eelgrass, within the proposed lease area. Provide a map of these resources if available from the local municipality or state agencies.

Based on our own observations and according to a review by the Maine Department of Inland Fisheries and Wildlife (Attached Annex A), "Our information indicates no locations of Endangered, Threatened, or Special Concern species within the project area. Additionally, our Department has not mapped any Essential or Significant Wildlife Habitats or fisheries habitats that would be directly affected by your project." No evidence of shellfish beds, eelgrass beds or fish migration routes are known to exist in this area.

b. Essential Habitats/Endangered Species

Under the Maine Endangered Species Act a state agency or municipal government shall not permit, license, fund, or carry out projects occurring partly or wholly within an **Essential Habitat** without the approval of the Commissioner of MDIFW. Applicants are strongly encouraged to contact the Environmental Coordinator, Maine Inland Fisheries and Wildlife, 284 State Street, State House Station 41, Augusta, Maine 04333; Telephone (207) 287-3286. Applicants are requested to provide a signed statement to confirm the proposed lease **either** does not fall within the boundary of an Essential Habitat or that the applicant has contacted MDIF&W and by preliminary review MDIF&W will grant approval for the MDMR to issue an aquaculture lease within part or all of the boundary of a designated Essential Habitat.

A letter from MDIFW, dated July 2, 2015, acknowledges that the proposed lease site does not interfere with any essential habitats or endangered species. Please see the full letter and Priority Habitats map in Annex A.

6. SURROUNDING AREA USE

a. Riparian Property

1. Provide a tax map, chart, or topographic map showing the location(s) of the lease tract(s), the waters, shorelands and general vicinity of the lease tract(s). Property lines must be clearly marked. Mark the entire lease boundary on the map or chart.

See attached: Annex B

2. List the names and addresses of every riparian owner of land within 1000 feet of the lease tract(s) and the location of their property marked as shown on the map. The map and list of riparian owners must be certified by the tax collector or clerk of the municipality in which the lease tract is located as being an accurate copy of this information as maintained by the municipality.

See attached: Annex C

3. The written permission of every riparian owner whose land to the low mark will actually be used to access the lease site or upon which the lease activities will take place.

N/A

4. A description of riparian owner's current use of lease site for purposes of access to riparian owned land.

A total of 2 riparian owners use the proposed site to access moorings used to access Pleasant Island. Neither of these moorings are located within the proposed site and ingress/egress to these locations will be preserved.

b. Existing Uses

20

1. Describe the navigational or other uses of the area(s) by type (recreational or commercial), volume, time (seasonal patterns of use), duration (in the vicinity), direction of traffic, amount of activity.

Historically, on average, a maximum of 15 lobster traps (usually fewer) are deployed in the vicinity at any one time, owned by fewer than 5 fishermen. In general, these traps are not deployed on the requested lease site, but in proximity. This location was chosen, in large part, based on the historically limited lack of fishing and recreational in the vicinity, and was chosen in consultation with commercial fishermen in that area, as well as riparian owners. The commercial activity here is typically limited to June-October. Seasonally, a very limited number of sail boats may anchor in proximity to, but not within, the proposed lease site. There will be a very limited impact anticipated on these uses.

2. Describe the degree of exclusive use required by the proposed lease and the impact on existing or potential uses of the area.

Exclusive use is required only for the area occupied by gear, and the immediate vicinity where tangles may occur (within 25' of aquaculture gear). Commercial fishing on the site will be preserved and permitted except where aquaculture gear exists, or where tangles may occur: roughly within 25' of aquaculture gear, within the lease boundaries. Any area >25' away from visible aquaculture gear (including buoys) will be open to commercial fishing. It is anticipated that the majority of the site will remain open to commercial fishing for most of the lease duration, based on current growth projections. The site was designed so as to limit interference with current uses for ingress/egress and commercial fishing. There will be limited anticipated impact on these uses.

3. If available, provide the name and address of individuals, ie. mooring owners, fishermen, draggers, etc. who actively use the proposed site. Note: this requirement is for the USACOE permit only.

Gordon Connell (commercial fisherman), PO Box 145, Spruce Head, ME 04859

Paul Johnson (commercial fisherman), PO Box 301, Spruce Head, ME 04859

Jameson Ames (commercial fisherman),

Sally Merchant (mooring owner), PO Box 145, Spruce Head, ME 04859

Katherine Oakes (mooring owner), PO Box 381, South Thomaston, ME 04858

7. TECHNICAL CAPABILITY

Provide information regarding professional expertise such as a resume or documentation of technical expertise and practical experience necessary to accomplish the proposed project.

Brendan Atwood has successfully managed two Limited Purpose Aquaculture permits (LPAs) in Maine, beginning in 2013, growing oyster and scallops. Prior to initiating this enterprise, Mr. Atwood immersed

himself in the research, literature, and operations of shellfish aquaculture while studying at the University of Maryland School of Public Policy, where he received his Masters Degree in Public Policy, with a specialization in Environmental Policy. Mr. Atwood's Master thesis focused on oyster aquaculture, and included a detailed analysis of the industry in the Chesapeake Bay, including the eco-services and economic benefits associated with the practice. His thesis also offered recommendations for how to improve the sustainability and growth in the shellfish aquaculture industry in Maryland. Working closely and cooperatively with local stakeholders from myriad sectors was central to this project's success. Much of the knowledge gained from that academic enterprise has been directly applicable to the current operation in Maine.

Mr. Atwood is also working closely with local industry leaders in Maine to develop a fledgling scallop aquaculture industry in the state, and is currently one of just 7 farms permitted to cultivate scallops for this purpose under a special DMR license. Some notable and effective industry partnerships include Dana Morse, a UMaine extension agent, Marsden Brewer, a Stonington fisherman and spat collection leader, and Gordon Connell, a So. Thomaston fisherman and scallop spat collection pioneer, among others.

Supplementing this extensive academic and applied experience in shellfish aquaculture is a suite of skills and expertise which have been honed in a number of professional settings. Project and business management, marketing, outreach, budgeting, environmental impact analyses, and business planning are among Mr. Atwood's strongest professional attributes.

Finally, Mr. Atwood has been certified as a NAUI Advanced SCUBA Diver for nearly 15 years, maintains a boat operators license, and has been on and around the water his entire life. His comfort and skills have been refined while working on a lobster boat, SCUBA diving, and performing the varied tasks associated with the current LPA operations.

Genevieve Atwood has assisted in the management and operation of two LPAs since 2013. She is involved in nearly every aspect of the oyster and scallop enterprise; from setting lines for spat collection to tracking growth rates of the shellfish to cleaning and sorts cages. Genevieve's interests in aquaculture stem from love of fresh Maine seafood and a passion for sustainable, eco-friendly development.

Genevieve holds a Master's degree in Public Management from the University of Maryland. During her tenure at UMD, Genevieve participated in a project focused on rebuilding natural oyster beds in the Chesapeake Bay. In 2012, Genevieve participated in a USAID-funded project in Sri Lanka where she led a team of students in assisting a community aquaculture enterprise in business planning and conducted capacity building exercises for the management team. Genevieve currently works with the Business Development Unit at Tetra Tech, an international development firm. In this role, she works closely with Tetra Tech's technical sectors, including Environment and Natural Resources, to design internationally-based projects focused on coastal resource management, biodiversity conservation of both marine and terrestrial species, sustainable economic development, and anti-poaching efforts and alternative livelihoods. Genevieve's professional expertise includes project management, grant proposals, RFPs, marketing, stakeholder engagement and outreach, budgeting, detailed planning and qualitative and quantitative analysis.

Wm. "Darrald" Atwood has extensive experience in a number of areas which will support the proposed project. Darrald has owned and operated a number of successful businesses, having senior decision-

making and P & L responsibilities for these companies. The largest of these companies had 60-plus employees. He started this company, running it for 8 very successful years before selling it.

Darrald also worked in a senior management role for an international Marine Terminal Operator, having oversight of his areas or responsibility at marine terminals throughout the US East and Gulf Coast areas. He was a business consultant for business start-up and program development for marine terminal operators throughout the US, including facilities in Alaska. He is intimately familiar with business start-up and operations management of both large and small companies.

He currently is the corporate VP of Environmental, Health & Safety matters for a large international food manufacturer, responsible for his areas at facilities throughout the US and Mexico.

Ryan Atwood provides expertise in areas including finance, analytics, marketing, and business development. Ryan holds a Master of Business Administration degree from New York University's Stern School of Business with specializations in entrepreneurship and accounting, taxation and business law. He currently works as a consultant for a family business where he provides financial and strategic analysis for healthcare providers.

Ryan's previous work experience includes a supervisory role for a stevedoring company with operations in the United States and Canada. He was responsible for cargo optimization and managing a workforce of up to 80 union longshoremen. In addition to developing innovative models that reduced waste and improved the financial success of the organization, Ryan's role was directly client-facing and allowed him to manage day-to-day relations with large international companies serving the forestry, metals, and food industries.

Collectively, the members of The Maine Mariculture Company have significant education and experience in marine operations, aquaculture, and business management, with a demonstrated history of successful business development and operations.

8. FINANCIAL CAPABILITY

- a. Financial Capability
Provide documentation to prove the applicant has the necessary financial resources for the proposed project. For example, the applicant may provide copies of bank statements or other evidence indicating availability of the unencumbered funds or other proof that equipment and seed stock are available to the applicant. See MDMR Aquaculture Regulations chapter 2.10(3)(9).

The Maine Mariculture Company, LLC, owns much of the gear needed for the incipient start up and to expand our operation considerably (float barge, davit, boat, cages, trays, mooring). Additional investments will be based on, and funded through, revenues from the operation.

A statement indicating availability of assets is in Annex D.

- b. Cost Estimates

Provide documentation of accurate and complete cost estimates of the proposed aquaculture activities.

- Oystergro cage = \$165
- Aquatray Frame = \$500
- Trays = \$30/each
- Rope = \$1.80/ft
- Chain = \$5/ft
- Buoys = \$30
- Moorings = \$500
- Helix Anchors = \$65
- Oyster Spat = \$12- \$34/1,000
- Cinder blocks = \$10
- Grow bags = \$2

c. Other Lease Interests and Multiple Ownership

List all other aquaculture leases held by the applicant or in which the applicant has a financial interest.

None

A. Corporate Applicants

1. The date and State in which Incorporated and a copy of the Articles of Incorporation;

Incorporated in Maine on 12/22/2014; Certificate of Formation attached in Annex E.

2. The names, addresses, and titles of all officers;

Wm. Darrald Atwood – 17 Silano Drive, Oxford, CT (Member)
Ryan Atwood – 25 Forest St. Unit 12A, Stamford, CT 06901 (Member)
Brendan Atwood – 340 Weaver St., Winooski, VT 05404 (Managing Member)
Genevieve Atwood – 340 Weaver St., Winooski, VT 05404 (Member)

3. The names and addresses of all directors;

Same as above.

4. Whether the corporation, or any stockholder, director, or officer had applied for an aquaculture lease for Maine lands in the past, and the outcome or current status of that application or lease;

None. Darrald Atwood holds two LPA Licenses (not leases), ATW-3-15 and ATW-4-15.

5. The names and addresses of all stockholders who own or control at least 5% of the outstanding stock and the percentage of outstanding stock currently owned or controlled by each such stockholder;

Brendan Atwood – 26%
Genevieve Atwood - 26%
Wm. Darrald Atwood - 24%
Ryan Atwood – 24%

6. The names and addresses of stockholders, directors, or officers owning an interest, either directly or beneficially, in any other Maine aquaculture leases, as well as the quantity of acreage from existing aquaculture leases attributed to each such person under MDMR Aquaculture Regulations chapter 2.12(3);

None

7. Whether the corporation or any officer, director, or shareholder listed in item 5 above has ever been arrested, indicted, convicted of, or adjudicated to be responsible for any violation of any marine resources or environmental protection law, whether state or federal.

No.

9. OTHER REQUIREMENTS

The following items must accompany the application:

- a. Performance Bond

We confirm that we have read MDMR aquaculture regulations and upon issuance of the lease The Maine Mariculture Company will obtain a performance bond in the amount of \$5,000.00.

Annex A



STATE OF MAINE
DEPARTMENT OF
INLAND FISHERIES & WILDLIFE
284 STATE STREET
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041

CHANDLER E. WOODCOCK
COMMISSIONER

July 2, 2015

Genevieve Atwood

RE: Information Request – Suspended Aquaculture Lease, Muscle Ridge Township

Dear Genevieve:

Per your request received June 10, 2015, we have reviewed current Maine Department of Inland Fisheries and Wildlife (MDIFW) information for known locations of Endangered, Threatened, and Special Concern species; designated Essential and Significant Wildlife Habitats; and fisheries habitat concerns within the vicinity of the *Suspended Aquaculture Lease Project* in Muscle Ridge Township.

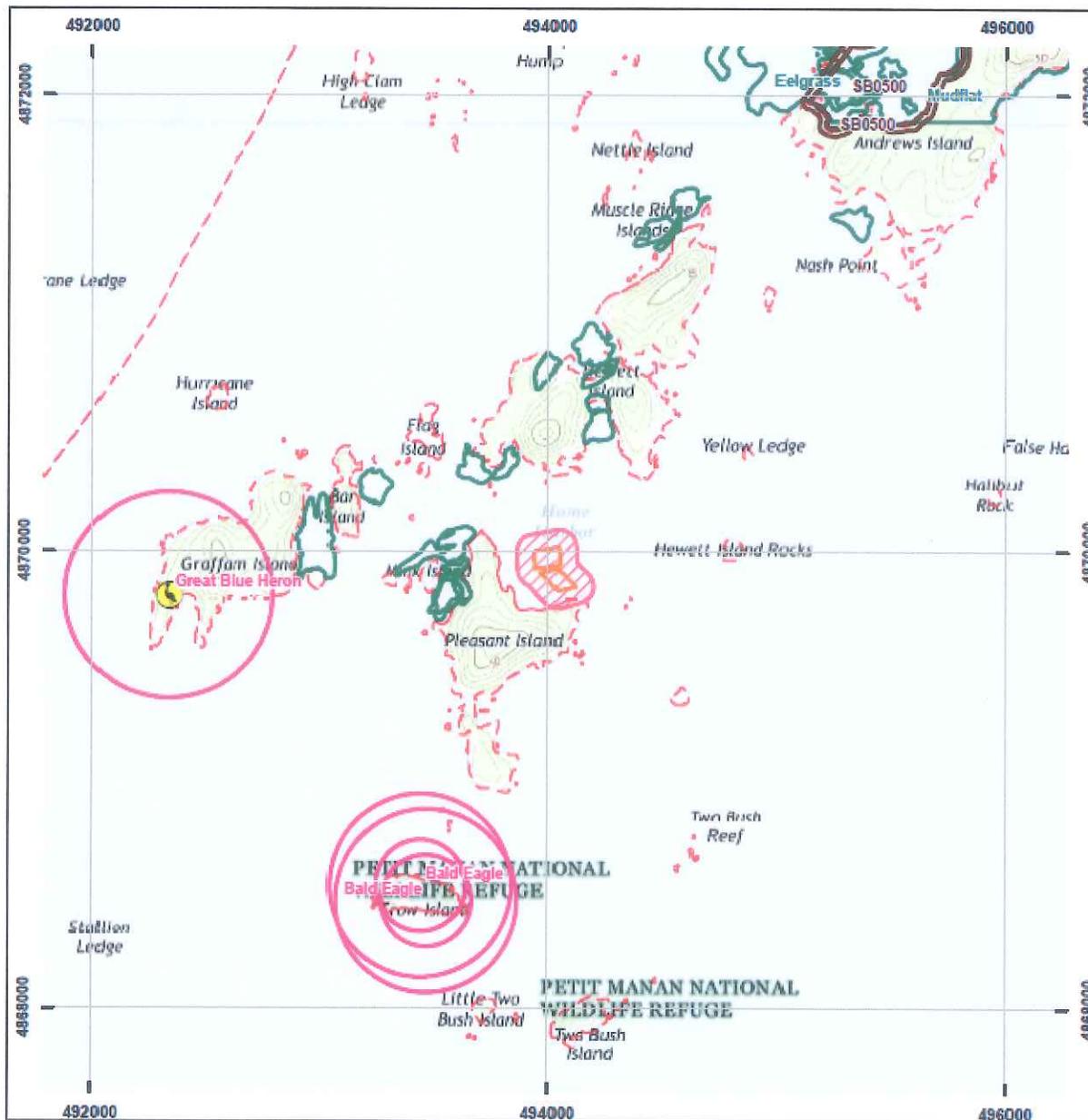
Our information indicates no locations of Endangered, Threatened, or Special Concern species within the project area. Additionally, our Department has not mapped any Essential or Significant Wildlife Habitats or fisheries habitats that would be directly affected by your project.

This consultation review has been conducted specifically for known MDIFW jurisdictional features and should not be interpreted as a comprehensive review for the presence of other regulated features that may occur in this area. Prior to the start of any future site disturbance we recommend additional consultation with the municipality, and other state resource agencies including the Maine Natural Areas Program and Maine Department of Environmental Protection in order to avoid unintended protected resource disturbance.

Please feel free to contact my office if you have any questions regarding this information, or if I can be of any further assistance.

Best regards,

John Perry
Environmental Review Coordinator



Environmental Review of Fish and Wildlife Observations and Priority Habitats

Project Name: Muscle Ridge Township, aquaculture lease (Version 1)



Maine Department of
Inland Fisheries and Wildlife



Projection: UTM, NAD83, Zone 19N

Date: 6/12/2015

Project Points	Dear Winter Area	Roseate Tern
Project Lines	LUIC p.f.w	Piping Plover/Least Tern
Project Polys	Cooperative DWAs	Aquatic ETS (2.5 mi review)
Project Search Areas	Seabird Nesting Islands	Rare Mussels (5 mi review)
	Shorebird Areas	Maine Heritage Fish Waters
	Inland Waterfowl/Wading Bird	Arctic Charr Habitat
	Shoreland Zoning_lwwh	E. Brook Trout Joint Venture Subwatershed Classification
	Tidal Waterfowl/Wading Bird	Redfin Pickerel/Swamp Darter Habitats (buffer 100ft)
	Significant Vernal Pools	Special Concern occupied habitats(100ft buffer)
	Environmental Review Polygons	Wild Lake Trout Habitats



Annex B



STATE OF MAINE
MAINE REVENUE SERVICES
PROPERTY TAX DIVISION
PO BOX 9106
AUGUSTA, MAINE
04332-9106

ADMINISTRATIVE & FINANCIAL SERVICES

RICHARD W. ROSEN
COMMISSIONER

MAINE REVENUE SERVICES

JEROME D. GERARD
EXECUTIVE DIRECTOR

July 16, 2015

Genevieve Atood
The Maine Mariculture Company, LLC
17 Silano Drive
Oxford, CT 06478

Dear Ms. Atwood,

This letter is to confirm the Unorganized Territory, State of Maine does not have tax maps for Pleasant Island in Knox County.

According to our records there are two lots on Pleasant Island. I have attached copies of the valuation book for your record's.

If you have any questions, feel free to contact me.

Sincerely,

Lisa Whynot, Supervisor
Unorganized Territory
207-624-5610
Lisa.m.whynot@maine.gov

Annex C

MAINE REVENUE SERVICES
2015 TAXPAYER VALUATION

page: 1

Property Account # 636470003-18		Percent Ownership:	8.25%
AMES A ROBERTA		55,336.88	Land Value
PO BOX 356	45.00 Acres	0.00	Building Value
VINALHAVEN, ME 04863		0.00	Personal Property Value
OPEN SPACE 25 AC		0	Total Exemptions
Pleasant Island, Knox		55,337	Taxable Value
Map KN063 Plan 01 Lot 647.2		259.53	Tax

Property Account # 636470003-13		Percent Ownership:	6.00%
ATWOOD WILLIAM DARRAL & THERESA J		40,245.00	Land Value
17 SILANO DR	45.00 Acres	0.00	Building Value
OXFORD, CT 06478		0.00	Personal Property Value
OPEN SPACE 25 AC		0	Total Exemptions
Pleasant Island, Knox		40,245	Taxable Value
Map KN063 Plan 01 Lot 647.2		188.75	Tax

Property Account # 636470008-1		Percent Ownership:	100.00%
ATWOOD WILLIAM DARRAL & THERESA J		0.00	Land Value
17 SILANO DR		46,660.00	Building Value
OXFORD, CT 06478		0.00	Personal Property Value
		0	Total Exemptions
Pleasant Island, Knox		46,660	Taxable Value
Map KN063 Plan 01 Lot 647.2		218.84	Tax

Property Account # 636470003-8		Percent Ownership:	17.00%
BENJAMIN RACHEL E		114,027.50	Land Value
93 LINCOLN STREET	45.00 Acres	0.00	Building Value
SOUTH PORTLAND, ME 04106-2614		0.00	Personal Property Value
OPEN SPACE 25 AC		0	Total Exemptions
Pleasant Island, Knox		114,028	Taxable Value
Map KN063 Plan 01 Lot 647.2		534.79	Tax

Property Account # 636470006-1		Percent Ownership:	100.00%
BENJAMIN RACHEL E		0.00	Land Value
93 LINCOLN STREET		11,920.00	Building Value
SOUTH PORTLAND, ME 04106-2614		0.00	Personal Property Value
		0	Total Exemptions
Pleasant Island, Knox		11,920	Taxable Value
Map KN063 Plan 01 Lot 647.2		55.90	Tax

Property Account # 636470011-1	Percent Ownership:	100.00%
	0.00	Land Value
BENJAMIN RACHEL E	27,200.00	Building Value
93 LINCOLN STREET	0.00	Personal Property Value
SOUTH PORTLAND, ME 04106-2614	0	Total Exemptions
	27,200	Taxable Value
	127.57	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470003-3	Percent Ownership:	8.25%
	55,336.88	Land Value
CONNELL ELIZABETH A	0.00	Building Value
67 OLD TOTE ROAD	0.00	Personal Property Value
SOUTH THOMASTON, ME 04858	0	Total Exemptions
OPEN SPACE 25 AC	55,337	Taxable Value
	259.53	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470005-1	Percent Ownership:	100.00%
	0.00	Land Value
CONNELL ELIZABETH A	7,910.00	Building Value
67 OLD TOTE ROAD	0.00	Personal Property Value
SOUTH THOMASTON, ME 04858	0	Total Exemptions
BENJAMIN RACHEL E	7,910	Taxable Value
	37.10	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470003-5	Percent Ownership:	8.25%
	55,336.88	Land Value
CONNELL GORDON C	0.00	Building Value
PO BOX 69	0.00	Personal Property Value
SPRUCE HEAD, ME 04859	0	Total Exemptions
OPEN SPACE 25 AC	55,337	Taxable Value
	259.53	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470003-17	Percent Ownership:	11.00%
	73,782.50	Land Value
CUSHMAN KATHERINE E & SHEA T MASON	0.00	Building Value
20 SHERMAN ROAD	0.00	Personal Property Value
TENANTS HARBOR, ME 04860-6042	0	Total Exemptions
OPEN SPACE 25 AC	73,783	Taxable Value
	346.04	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

30

Property Account # 636470002-2		Percent Ownership:	100.00%
		0.00	Land Value
GRUBBS MILDRED R & DAWN MARIE O'REILLY		14,310.00	Building Value
302 GARNET DRIVE		0.00	Personal Property Value
SOUTH PORTLAND, ME 04106		0	Total Exemptions
CIR 63-8E-647 LEASED LAND		14,310	Taxable Value
Pleasant Island, Knox		67.11	Tax
Map KN063 Plan 01 Lot 647			
<hr/>			
Property Account # 636470003-15		Percent Ownership:	8.00%
		53,660.00	Land Value
HIGGINS ANGELA L	45.00 Acres	0.00	Building Value
12 PUFFIN LANE		0.00	Personal Property Value
NORTH BERWICK, ME 03906		0	Total Exemptions
OPEN SPACE 25 AC		53,660	Taxable Value
Pleasant Island, Knox		251.67	Tax
Map KN063 Plan 01 Lot 647.2			
<hr/>			
Property Account # 636470010-1		Percent Ownership:	100.00%
		0.00	Land Value
HIGGINS ANGELA L		5,940.00	Building Value
12 PUFFIN LANE		0.00	Personal Property Value
NORTH BERWICK, ME 03906		0	Total Exemptions
LAND OF RACHEL BENJAMIN		5,940	Taxable Value
Pleasant Island, Knox		27.86	Tax
Map KN063 Plan 01 Lot 647.2			
<hr/>			
Property Account # 636470003-7		Percent Ownership:	3.00%
		20,122.50	Land Value
JOHNSON PAUL E	45.00 Acres	0.00	Building Value
PO BOX 301		0.00	Personal Property Value
SPRUCE HEAD, ME 04859		0	Total Exemptions
OPEN SPACE 25 AC		20,123	Taxable Value
Pleasant Island, Knox		94.37	Tax
Map KN063 Plan 01 Lot 647.2			
<hr/>			
Property Account # 636470003-2		Percent Ownership:	8.25%
		55,336.88	Land Value
MERCHANT SALLY	45.00 Acres	0.00	Building Value
PO BOX 145		0.00	Personal Property Value
SPRUCE HEAD, ME 04859		0	Total Exemptions
OPEN SPACE 25 AC		55,337	Taxable Value
Pleasant Island, Knox		259.53	Tax
Map KN063 Plan 01 Lot 647.2			

Property Account # 636470007-1	Percent Ownership:	100.00%
	0.00	Land Value
MERCHANT SALLY	15,520.00	Building Value
PO BOX 145	0.00	Personal Property Value
SPRUCE HEAD, ME 04859	0	Total Exemptions
	15,520	Taxable Value
	72.79	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470003-12	Percent Ownership:	11.00%
	73,782.50	Land Value
NELSON LAURA	0.00	Building Value
56 WARREN ST	0.00	Personal Property Value
ROCKLAND, ME 04841-3126	0	Total Exemptions
OPEN SPACE 25 AC	73,783	Taxable Value
	346.04	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470004-1	Percent Ownership:	100.00%
	0.00	Land Value
NELSON LAURA	3,030.00	Building Value
56 WARREN ST	0.00	Personal Property Value
ROCKLAND, ME 04841-3126	0	Total Exemptions
	3,030	Taxable Value
	14.21	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470003-10	Percent Ownership:	11.00%
	73,782.50	Land Value
OAKES KATHERINE	0.00	Building Value
PO BOX 381	0.00	Personal Property Value
SOUTH THOMASTON, ME 04858	0	Total Exemptions
OPEN SPACE 25 AC	73,783	Taxable Value
	346.04	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470009-1	Percent Ownership:	100.00%
	0.00	Land Value
OAKES KATHERINE	17,360.00	Building Value
PO BOX 381	0.00	Personal Property Value
SOUTH THOMASTON, ME 04858	0	Total Exemptions
	17,360	Taxable Value
	81.42	Tax
Pleasant Island, Knox Map KN063 Plan 01 Lot 647.2		

Property Account # 636470001-1		Percent Ownership:	100.00%
		455,000.00	Land Value
PLEASANT ISLAND TRUST THE		52,810.00	Building Value
%JUDITH SMITH 17 VILLAGE CIRCL	35.00 Acres	0.00	Personal Property Value
LYMAN, ME 04002-7374		0	Total Exemptions
SOUTH PART CIR 63-8E-647		507,810	Taxable Value
Pleasant Island, Knox		2,381.63	Tax
Map KN063 Plan 01 Lot 647.1			

Totals for: Pleasant Island, Knox

80.00 acres	1,125,750.02	Land Value
	202,660.00	Building Value
	0.00	Personal Property Value
	0.00	Total Exemptions
	1,328,410.02	Taxable Value
	6,230	Tax

Lisa Whynot 7-16-15

MAINE
LIMITED LIABILITY COMPANY

STATE OF MAINE

CERTIFICATE OF FORMATION

File No. 20152365DC Pages 2
Fee Paid \$ 175
DCN 2143632800063 DLLC
FILED
12/22/2014


Deputy Secretary of State

A True Copy When Attested By Signature


Deputy Secretary of State

Pursuant to 31 MRSA §1531, the undersigned executes and delivers the following Certificate of Formation:

FIRST: The name of the limited liability company is:

The Maine Mariculture Company, LLC

(A limited liability company name must contain the words "limited liability company" or "limited company" or the abbreviation "LLC," "LLC," "L.C.," or "LC" or, in the case of a low-profit limited liability company, "L3C" or "l3c" - see 31 MRSA 1508.)

SECOND: Filing Date: (select one)

- Date of this filing; or
 Later effective date (specified here): _____

THIRD: Designation as a low profit LLC (Check only if applicable):

- This is a low-profit limited liability company pursuant to 31 MRSA §1611 meeting all qualifications set forth here:
- A. The company intends to qualify as a low-profit limited liability company;
 - B. The company must at all times significantly further the accomplishment of one or more of the charitable or educational purposes within the meaning of Section 170(c)(2)(B) of the Internal Revenue Code of 1986, as it may be amended, revised or succeeded, and must list the specific charitable or educational purposes the company will further;
 - C. No significant purpose of the company is the production of income or the appreciation of property. The fact that a person produces significant income or capital appreciation is not, in the absence of other factors, conclusive evidence of a significant purpose involving the production of income or the appreciation of property; and
 - D. No purpose of the company is to accomplish one or more political or legislative purpose within the meaning of Section 170(c)(2)(D) of the Internal Revenue Code of 1986, or its successor.

FOURTH: Designation as a professional LLC (Check only if applicable):

- This is a professional limited liability company* formed pursuant to 13 MRSA Chapter 22-A to provide the following professional services:

(Type of professional services)

FIFTH: The Registered Agent is a: (select either a Commercial or Noncommercial Registered Agent)



Commercial Registered Agent

CRA Public Number: p10139

AAA New England Agents, Inc

(Name of commercial registered agent)



Noncommercial Registered Agent

(Name of noncommercial registered agent)

(physical location, not P.O. Box – street, city, state and zip code)

(mailing address if different from above)

SIXTH: Pursuant to 5 MRSA §105.2, the registered agent listed above has consented to serve as the registered agent for this limited liability company.

SEVENTH: Other matters the members determine to include are set forth in the attached Exhibit _____, and made a part hereof.

**Authorized person(s)

Dated December 19, 2014

Wm. Darrald Atwood
(Signature of authorized person)

Wm. Darrald Atwood
(Type or print name of authorized person)

(Signature of authorized person)

(Type or print name of authorized person)

*Examples of professional service limited liability companies are accountants, attorneys, chiropractors, dentists, registered nurses and veterinarians. (This is not an inclusive list – see 13 MRSA §723.7)

**Pursuant to 31 MRSA §1676.1.A, Certificate of Formation MUST be signed by at least one authorized person.

The execution of this certificate constitutes an oath or affirmation under the penalties of false swearing under 17-A MRSA §453.

Please remit your payment made payable to the Maine Secretary of State.

Submit completed form to:

Secretary of State
Division of Corporations, UCC and Commissions
101 State House Station
Augusta, ME 04333-0101
Telephone Inquiries: (207) 624-7752

Email Inquiries: CEC.Corporations@Maine.gov