



# ALASKA'S AQUATIC FARM PROGRAM

Application Opening Period  
January 1, 2011 through May 2, 2011



## PART II INSTRUCTIONS AND APPLICATION



1. Answer ALL questions using the blanks provided or include additional pages.
2. If additional pages are included, write the corresponding question number from the application on the appropriate page(s).
3. Type or print answers clearly in black ink.
4. An agent cannot sign the application form for the applicant; the applicant must submit the application with an original signature.
5. **STATE AGENCY FEES:** Mail the applicable fees with the completed application packet to:

Department of Natural Resources  
Aquatic Farm Application  
550 W. 7<sup>th</sup> Avenue, Suite 1260  
Anchorage, AK 99501-3557

**Application Fee:** A non-refundable application fee paid to Department of Natural Resources (ADNR) is currently set at \$100 for individuals or \$200 for corporations.

**Survey Fee:** If your proposed project involves on-bottom clam farming techniques, Alaska Department of Fish and Game (ADF&G) will need to conduct a survey to determine the abundance of wild stock shellfish at the proposed site. The fee for the survey is \$2,000\*\* for an intertidal on-bottom site and \$5,000\*\* for a subtidal on-bottom site. Mail a separate check for this survey, made out to ADF&G, and submit it along with the completed application packet. \*\*Note: The actual cost may vary by site, please refer to Part I.

**Other Fees:** A summary of all state fees applicable to aquatic farms sites can be found in Part I.

6. **The original application including attachments and all required fees must be delivered and physically present in the Alaska Department of Natural Resources office listed above by 5:00 p.m., Monday, May 2, 2011.**
7. If you are applying for more than one site and the boundaries of any additional sites are more than three nautical miles apart, you must submit a separate application for these sites. Alternate sites with a distance of more than three nautical miles apart will not be accepted on the same application.
8. Please Note: The aquatic farm review is for the specific project that you identify in your application. If you decide to change the location or increase the footprint of your operation during the review period, processing of your application will stop, and you will need to re-apply during a subsequent filing period.

For assistance completing the application, please call John S. Thiede (ADNR) at (907) 269-8543, Cynthia Pring-Ham (ADF&G) at (907) 465-6150, Lorraine Vercessi (ADF&G) at (907) 465-6423, or David Petree (ADF&G) at (907) 465-6122.



## AQUATIC FARM APPLICATION CHECKLIST

Check off (✓) each item after you have completed the task.  
By following this checklist you should have a complete application, ready to be processed.

- \_\_\_\_\_ Detailed Project Description (Page 1, Section B)
- \_\_\_\_\_ General Location Map using USGS topographical map (Page 4, Section C-3a)
- \_\_\_\_\_ Detailed Location Map using a NOAA Nautical chart (Page 4, Section C-3b)
- \_\_\_\_\_ Site plan map (Pages 4, Section C-3c)
- \_\_\_\_\_ Cross-section Diagram(s) of all facilities, equipment, gear, and anchor systems (Page 5, Section C-3d)
- \_\_\_\_\_ Detailed Drawing(s) of all facilities equipment, gear, and anchor systems (Page 5, Section C-3e)
- \_\_\_\_\_ Abbreviated Coastal Consistency Evaluation (Pages 8 -10, Section H)
- \_\_\_\_\_ Signature for the Aquatic Farm Program Application and the Alaska Coastal Management Program Certification Statement (Page 11, Section J)
- \_\_\_\_\_ Aquatic Farm Operation and Development Plan – Part A (Pages 12, Section K)
- \_\_\_\_\_ Aquatic Farm Operation and Development Plan – Part B (Pages 13 –14, Section K)
- \_\_\_\_\_ Check or money order for the ADNR application filing fee (\$100 individuals/\$200 corporations), made payable to ADNR.
- \_\_\_\_\_ If applicable, Ownership Deed or lease document for any upland facility use not on state lands, (Page 7, Section F-2c)
- \_\_\_\_\_ If applicable, Authorization from City or Borough Planning Departments if site is within a City or Borough Planning area (Page 7, Section F-3)
- \_\_\_\_\_ If applicable and you are proposing to farm clams (geoducks, littleneck clams, etc.) utilizing on-bottom culture methods, a fee of \$2,000 for an intertidal survey or \$5,000 for a subtidal survey, made payable to ADF&G.

**For Office Use Only**

ADNR File No: \_\_\_\_\_

ADF&G No: \_\_\_\_\_

ADNR/DCOM No: \_\_\_\_\_

DATE STAMP: \_\_\_\_\_



## 2011 AQUATIC FARM PROGRAM APPLICATION

You are encouraged to submit a completed application as early in the filing period as possible. The 2011 application form must be used and properly completed before state agencies can process your project. **An incomplete application will not be processed.** A checklist is included on page ii of this application to assist you in meeting this requirement. The best way to facilitate the review of your application is to schedule a pre-application meeting with DNR and ADF&G to discuss your project. The original application including attachments and all required fees must be delivered and physically present in the Alaska Department of Natural Resources office listed on page i, by 5:00 p.m., Monday, May 2, 2011.

**The project is proposed in:** (Check one)  Southeast Alaska  Southcentral Alaska

NOTE: Southeast = Projects south of or in the Yakutat area / Southcentral = Projects north of Yakutat

### A. APPLICANT INFORMATION

\_\_\_\_\_  
Name

If you live in a remote area please provide a contact person (name, phone & email address) who can be easily reached.

\_\_\_\_\_  
Business Name (If Applicable)

\_\_\_\_\_  
Contact Name

\_\_\_\_\_  
Mailing Address (PO Box or Street Address)

\_\_\_\_\_  
Contact Phone Number

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Contact Email Address

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Business Partner Name (If applicable)

\_\_\_\_\_  
Phone

\_\_\_\_\_  
Cell Phone

\_\_\_\_\_  
Business Partner Phone Number (If applicable)

### B. PROJECT DESCRIPTION

**On a separate piece of paper**, please provide a general description of your proposed aquatic farm site and operations. This should be a narrative of your proposal that includes where your project will be located, overall size including any hardening area, all species you intend to culture, proposed farm gear, equipment, support facilities, and associated housing. Include the size, number, type, and construction materials of all gear, equipment, and support facilities you want to use in your operations. Your narrative should match the information you provide throughout the rest of the application. It will be used by state and federal agencies and the public for comment and review. **Be sure to label your narrative, "PROJECT DESCRIPTION".**

**You may wish to use the following check-off list to assure all items are covered in your project description.**

- Site Location
- Dimensions and calculated acres for each parcel and total acres of proposed farm including any hardening area
- Species you intend to farm – e.g. Pacific oysters, littleneck clams, geoducks, blue mussels, aquatic plants, etc.
- Culture Method – e.g. subtidal suspended culture, intertidal near-bottom culture, intertidal on-bottom culture, or subtidal on-bottom culture
- Gear (type, size, number, configuration, material, mesh size) - e.g. floating bags, trays (plastic), cages (metal), lantern nets (5 or 10 tiers), flip-flop bags, vexar bags, PVC tubes, predator netting or any other predator exclusion devices
- Equipment – e.g. grow-out rafts, longlines, buoys, etc.
- If on-bottom culture, harvest equipment and method
- Support Facilities – caretaker, storage or processing facilities, work rafts, etc.
- Construction materials of Support Facilities and Equipment – note: all floating raft structures should use non-treated wood supported by closed cell (extruded) expanded polystyrene or equivalent material
- Access to and from site
- Storage location of equipment and gear when not in use

**PROJECT DESCRIPTION EXAMPLE:**

The proposed aquatic farm is located about 24.7 nautical miles south-southwest of Wrangell near Rocky Bay, a small bay near the mouth of Mosman Inlet on Etolin Island in southeastern Alaska. Upland facilities and support structures are located on National Forest Service lands adjacent to the farm site. Access to the site is by skiff from the adjacent uplands. Equipment and gear storage will be located on the permitted uplands or in Ketchikan. (Attachments 1-2)

The aquatic farm site is composed of three separate parcels located on state-owned tidal and submerged lands, totaling about 4.07 acres. Parcels include a 292 ft x 546 ft (3.66 acres) growing area for subtidal suspended culture of Pacific oysters using raft and cage systems (Parcel 1), a 60 ft x 154 ft (0.21 acre) intertidal hardening and defouling area (Parcel 2), and a 46 ft x 190 ft (0.20 acre) dock and storage area (Parcel 3). (Attachments 3 - 5)

Parcel 1 will include eight (8) 16 ft by 20 ft oyster grow out rafts. Each grow out raft will have 20 cross pieces, or fingers, measuring 2 ft by 8 ft secured along the length of the raft to be used for hanging between 100 and 300 Aquamesh cages stacked 10-high. Each cage measures 22 inches wide by 22 inches long by 6 inches deep, manufactured of 1 inch by 1 inch PVC coated wire mesh. To hold smaller spat, the cages require a smaller mesh Vexar liner inserted on the bottom. The 6 ft stacks of cages would hang 8 ft under the water's surface. In addition, in the southwestern portion of the parcel, a 40 ft x 40 ft processing float with one 16 ft x 16 ft work shed, a covered area, and two 20 ft x 4 ft work platforms on each side will be used to accommodate oyster grow-out rafts during processing. The anchor system for all rafts would consist of floating anchor lines from each corner secured using 300 lb concrete anchors in water 60 ft deep. All rafts are constructed of untreated local wood with floatation made of closed cell (extruded) expanded polystyrene. (Attachments 6 – 10)

Parcel 2 will be used for hardening and defouling of Pacific oysters, using Aquamesh trays measuring 22 inches wide by 22 inches long by 6 inches deep (Attachment 11).

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## **C. PROJECT LOCATION**

### **1. Legal Description**

Please provide latitude and longitude coordinates for each corner of each parcel at the proposed farm site. Separate parcels must be identified. For example, Parcel 1- growing area, Parcel 2 - hardening area, etc. Start with the northeast corner of each separate parcel identified as Corner Number 1. Next, identify the remaining corners in a clockwise direction. Latitude and longitude coordinates must be in **NAD83 datum using degrees and decimal minutes format to the nearest .001 minute (Example: Longitude -133° 17.345)**, obtained using a Global Positioning System (GPS). ADF&G can provide a handheld GPS unit, with a \$100 security fee. Contact the Juneau ADF&G office at (907) 465-6150 for details.

**Parcel 1:** NE Corner No. 1: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SE Corner No. 2: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SW Corner No. 3: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 (e.g. Grow-out Area) NW Corner No. 4: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**Parcel 2:** NE Corner No. 1: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SE Corner No. 2: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SW Corner No. 3: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 (e.g. Hardening Area) NW Corner No. 4: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**Parcel 3:** NE Corner No. 1: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SE Corner No. 2: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 SW Corner No. 3: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
 (e.g. Support Facility Area) NW Corner No. 4: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

**2. Site Size (please use the following formula to compute area)**

1. To compute the total area (sq. ft), multiply the width (ft) by the length (ft) of site Parcel 1. The outside length and width of the Parcel **must include your anchors and anchoring system plus any scope.**
2. Divide the area (sq. ft) of Parcel 1 by 43,560, to convert the area from sq. ft to acres.
3. Repeat for each separate Parcel of your proposed farm site.
4. Add the acres of each Parcel to get the total tideland acres for your proposed farm site.
5. Write the amount of Total Acres on the line where indicated.
6. Note that the number of acres must correspond to your farm site maps and drawings.

**Parcel 1:** \_\_\_\_\_ feet (x) \_\_\_\_\_ feet = \_\_\_\_\_ square feet (÷) 43,560 = \_\_\_\_\_  
 (Width of Parcel 1) (Length of Parcel 1) (Area) (Acres)

**Parcel 2:** \_\_\_\_\_ feet (x) \_\_\_\_\_ feet = \_\_\_\_\_ square feet (÷) 43,560 = \_\_\_\_\_  
 (Width of Parcel 2) (Length of Parcel 2) (Area) (Acres)

**Parcel 3:** \_\_\_\_\_ feet (x) \_\_\_\_\_ feet = \_\_\_\_\_ square feet (÷) 43,560 = \_\_\_\_\_  
 (Width of Parcel 3) (Length of Parcel 3) (Area) (Acres)

**How many total acres of state-owned tidelands are you applying for (add all parcel acres):** \_\_\_\_\_  
 (Total Acres)

If you are **also** applying for **state owned uplands for support facilities**, how many total upland acres are you applying for? \_\_\_\_\_  
 (Total Upland Acres)

**3. Maps and Diagrams**

USGS Topographic quadrangle maps can be obtained from State of Alaska Land Records website at: <http://mapper.landrecords.info> or from the U.S. Geological Survey, 4230 University Drive, Room 101, Anchorage, AK 99508, or phone (907) 786-7011. NOAA nautical charts can be downloaded at: [www.charts.noaa.gov](http://www.charts.noaa.gov). You may also find a list of NOAA map suppliers at: [www.naco.faa.gov/agents\\_acc.asp](http://www.naco.faa.gov/agents_acc.asp). Topographic maps may be found using the State of Alaska Land Records website at: <http://mapper.landrecords.info>. Additional maps are available through specialized versions at: <http://tidelands.landrecords.info>. The ShoreZone mapping system can be accessed at: <http://alaskafisheries.noaa.gov/habitat/shorezone/szintro.htm>

Provide copies of the following maps showing the general and detailed location of the proposed aquatic farm site project. If the project has multiple parcels, you must provide maps of each location. Copies of the maps and drawings should be no larger than 8½” x 11” (standard letter size).

**Be sure to include the following legend box on all maps and diagrams you provide with your application:**

Figure No. and Title
Applicant Name (Business Name)
Waterbody
Area/Region
Today's Date

**a. General Location Map** - Label and include the following information on a USGS Topographic quadrangle map (scale: 1" = one mile (1:63,360)). This map is a larger scaled map showing larger surrounding area with less detail. **An example is provided in Figure 1.**

- USGS Map Name (e.g. Craig B-4) \_\_\_\_\_.
- The general location and distance (in nautical miles), and direction of the site from the nearest community identified by a dot and/or arrow on the map.
- A directional arrow identifying North.
- Scale on map.
- Legend box (example above).

**b. Detailed Location Map** – Label and include the following information on a National Oceanic and Atmospheric Administration (NOAA) navigational chart. This map is a smaller scaled map showing more detail. **An example is provided in Figure 2.**

- NOAA Chart No. \_\_\_\_\_.
- Indicate the boundaries of each farm area parcel and label the NE, SE, SW, and NW corners.
- Directional arrow identifying North.
- Scale on map.
- Legend box (example above).
- If your proposal involves use of the uplands, show location and type of use (e.g. housing, storage shed, etc.).

**c. Site Plan Map** – **Draw an overhead view** of the farm area parcel(s) and surrounding area showing the following information. **Examples are provided in Figures 3 and 4.**

- Draw the boundaries of each parcel and clearly label all corners (NE, SE, SW, and NW). Indicate in feet, the distance between corners of each parcel and all in-water structures and anchoring systems. Be sure that all anchoring systems and anchor scope are inside the farm boundary.
- Indicate acres of each parcel. The total area should correspond to the total acreage you are proposing to use for your farm.
- Indicate and label all equipment and support facilities including dimensions in feet that you propose to use within the farm area boundaries (i.e. grow-out rafts, longlines, buoys, work rafts, docks, processing rafts, caretaker facilities, etc.).
- Indicate areas of eelgrass beds (intertidal culture or hardening), and kelp beds (subtidal zone).
- If applicable, indicate fuel and chemical storage.
- Draw in nearby anadromous (i.e. salmon) streams. A Catalog of Anadromous Streams can be obtained from a local Fish and Game, Division of Habitat and Restoration office or via the web at: <http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.interactive>.
- Indicate major natural and man-made features on or proposed for the site.
- Indicate the bottom characteristics (sand, mud, silt, clay, bedrock, cobble, shells, rockweed, algae/seaweed).
- Indicate locations of all known existing uses, as provided in Section E of this application.



**d. Cross-Sectional Diagram(s)** - Provide Cross-Sectional Diagram(s) to scale (with scale indicated) of all support facilities, equipment, and gear showing their placement and anchoring systems. Support facilities include caretaker, storage, or processing facilities, work rafts, etc. Equipment includes grow-out rafts, longlines, buoys, etc. Gear includes trays, tiers of lantern nets, predator netting, or other predator exclusion devices. Note that more than one diagram may be required. **An example is provided in Figure 5.**

- Indicate the distances between all facilities, gear or equipment on the proposed farm site.
- Indicate distance from bottom of gear to ocean bottom at mean lower low tide.
- If suspended or on-bottom culture, indicate water depth at low tide and major on-bottom physical features (e.g. bottom contours).
- Indicate dimensions of the anchoring configuration and poundage.
- Indicate dimensions of the marker buoy configuration.

**e. Detailed Drawing(s)** - Provide Detailed Drawing(s) of all support facilities, equipment, and gear. Note that: more than one diagram may be required. **An example is provided in Figure 5.**

- Draw and label the dimensions (length/width/height) of all proposed gear and equipment.
- If suspended, indicate water depth at low tide in relation to structures and gear.
- Identify the construction materials used for all support facilities, equipment, and gear proposed.

#### **D. SITE SUITABILITY - PHYSICAL AND BIOLOGICAL CHARACTERISTICS**

1. Is the proposed location protected from severe storms, winter ice, and away from boat traffic?  
**Yes** \_\_\_ **No** \_\_\_
2. Is the proposed operation support facilities, equipment, gear and anchoring systems built to withstand high strong tidal currents and/or storms? **Yes** \_\_\_ **No** \_\_\_
3. Does your site have good water exchange? **Yes** \_\_\_ **No** \_\_\_
4. Are water temperatures suitable for proposed culture species? **Yes** \_\_\_ **No** \_\_\_ (Note: temperatures above 60° F and below 31° F may pose problems such as Vibrio bacteria contamination or icing.)
5. Is there any significant freshwater influence near the farm? **Yes** \_\_\_ **No** \_\_\_ (Note: freshwater may impact shellfish growth and/or survival or carry fecal coliform or other pollutants to your farm)
6. Is the salinity concentration at your proposed farm site above 28 ppt? **Yes** \_\_\_ **No** \_\_\_
7. Have you monitored the phytoplankton (microalgae) abundance and types during the main grow-out season?  
**Yes** \_\_\_ **No** \_\_\_ (Note: shellfish depend on phytoplankton for food, but harmful phytoplankton can prevent harvest/sales.) **If Yes, findings:** \_\_\_\_\_
8. Have you monitored suspended sediments or turbidity (e.g. water clarity/transparency using a secchi disc) at your proposed farm site? **Yes** \_\_\_ **No** \_\_\_ (Note: This is used as rough check for microalgae densities, runoff, and glacial silt (milky- grey color).) **If Yes, findings:** \_\_\_\_\_
9. For on-bottom culture, are the bottom characteristics suitable for the proposed species? **Yes** \_\_\_ **No** \_\_\_  
**(Circle those that apply)** Sand / Mud / Silt / Clay / Bedrock / Cobble / Shells / Rockweed / Other \_\_\_\_\_
10. Is the bottom contour **(Circle one)** Flat, Steep, or Rough?
11. For suspended culture, is the water depth sufficient to prevent gear from grounding and impacting the benthos under floating structures? **Yes** \_\_\_ **No** \_\_\_ **Depth of Gear** (in ft): \_\_\_ **Depth of water at low tide** (in ft): \_\_\_
12. Have you monitored the presence and extent of possible fouling organism within or around your proposed site (barnacle, mussels, algae, etc.)? **Yes** \_\_\_ **No** \_\_\_ **If Yes, findings:** \_\_\_\_\_
13. Is your proposed site more than 300 ft from an anadromous fish (e.g. salmon) stream? **Yes** \_\_\_ **No** \_\_\_
14. Are you aware of any eelgrass or kelp beds on or near your proposed farm site? **Yes** \_\_\_ **No** \_\_\_ **If Yes, describe:** \_\_\_\_\_

15. For farming using on-bottom culture methods, what is the approximate density of the target species on the proposed farm site? **High** \_\_\_ **Medium** \_\_\_ **Low** \_\_\_
16. What are the shellfish predators and what measures will you take to control, discourage, or eliminate them at your proposed farm site? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
17. Is your proposed farm site in a sensitive area as listed in section C of Part 1 Application Process, Guidelines, Authorizations and Contacts? **Yes** \_\_\_ **No** \_\_\_ **If Yes**, describe how your farm site can be sited without significant impact to the area? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**E. KNOWN EXISTING USES**

Please check the boxes below, to indicate existing human and/or wildlife uses observed or known to exist at or within three miles of the proposed farm site. Indicate the locations of these existing uses on the Site Plan Map (refer to page 4, Section 3c).

- |  |   |
|--|---|
| <input type="checkbox"/> mining                                  | <input type="checkbox"/> other aquatic farm projects                            |
| <input type="checkbox"/> timber harvest or transfer              | <input type="checkbox"/> commercial fishing                                     |
| <input type="checkbox"/> residential use                         | <input type="checkbox"/> sport fishing  |
| <input type="checkbox"/> harbor development                      | <input type="checkbox"/> salmon hatcheries                                      |
| <input type="checkbox"/> sheltered boat anchorage                | <input type="checkbox"/> hunting  |
| <input type="checkbox"/> seaplane landing                        | <input type="checkbox"/> seafood processing plants                              |
| <input type="checkbox"/> commercial lodges                       | <input type="checkbox"/> upland access route(s) areas, bear trails, etc.        |
| <input type="checkbox"/> sightseeing                             | <input type="checkbox"/> wildlife uses, (e.g. shorebirds, sea mammal haul-outs) |
| <input type="checkbox"/> recreation                              | <input type="checkbox"/> subsistence; list species and frequency. _____         |
| <input type="checkbox"/> tourism                                 | _____   |
| <input type="checkbox"/> historical/cultural/archeological sites | _____   |
| <input type="checkbox"/> navigational channels: _____            |   |
| <input type="checkbox"/> other, (list) _____                     |   |

1. Do any of the existing uses checked above impact your project feasibility? **Yes** \_\_\_ **No** \_\_\_ **If Yes**, describe the impact and how you propose to mitigate or eliminate the impacts? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
2. Describe how your project may impact any of the existing uses checked above (consider navigational channels, especially in cases where they may be limited). \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**F. SUPPORT FACILITIES AND CITY AND BOROUGH CONTACTS**

1. Personnel/Caretaker Housing\*

- a. Are you proposing any personnel/caretaker housing? **Yes** \_\_\_ **No** \_\_\_  
**If Yes**, the proposed size will be: \_\_\_ (Width) \_\_\_ (Length) \_\_\_ (Height)  
 Please attach diagrams/drawings with labels clearly showing the Personnel/Caretaker housing.

Note: you may stay a maximum of 14 consecutive days at your site on state-owned uplands or tidelands without applying for personnel/caretaker housing.

What would be the maximum number of people housed per day? \_\_\_\_\_ (Needed for USACE)

**\*Note: a personnel/caretaker facility will add \$425.00 to your Department of Natural Resources annual fee.**

2. Upland Property

- a. Do you currently own or lease upland property adjacent to, or near, the proposed farm site that you plan to use in conjunction with your proposal? **Yes** \_\_\_ **No** \_\_\_ **If Yes**, attach a copy of ownership deed or lease.
- b. If you are the adjacent upland owner, are you applying for a preference right under 11 AAC 63.040(f)? **Yes** \_\_\_ **No** \_\_\_
- c. Please provide the names and addresses of the upland owners within one-half mile on each side of your proposed farm site. **This information may be obtained through borough/city property tax records, state, or federal land records.** Note: all adjacent upland owners within one-half mile on each side of your proposed farm site **must be notified**.

\_\_\_\_\_  
 UPLAND OWNER(S) ADDRESS

\_\_\_\_\_  
 UPLAND OWNER(S) ADDRESS

3. City/Borough Authorization

If you are applying within a recognized first class city or borough, please contact the appropriate Planning Section as additional authorizations may be required from them. Please provide the name, address, and telephone number of the person(s) you contacted and list any required authorizations.

<input checked="" type="checkbox"/> <u>CITY/BOROUGH</u>	<u>PHONE</u>	<u>CONTACTED?</u>
<input type="checkbox"/> Ketchikan Gateway Borough – Planning & Community Development...	228-6625	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> City of Craig – Planning & Zoning.....	826-3275	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> City and Borough of Juneau – Permit Center.....	586-0770	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> City and Borough of Sitka – Planning & Community Development.....	747-1824	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> City of Thorne Bay .....	828-3380	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> City and Borough of Yakutat – Planning & Zoning Commission.....	784-3281	<b>Yes</b> ___ <b>No</b> ___
<input type="checkbox"/> Kenai Peninsula Borough – Land Management Division.....	714-2200	<b>Yes</b> ___ <b>No</b> ___

Type of authorization required by City or Borough: \_\_\_\_\_

**G. WATER QUALITY INFORMATION – Department of Environmental Conservation**

- 1. Do you plan to use a boat on your farm site? **Yes** \_\_\_ **No** \_\_\_

**If Yes**, indicate the type of marine sanitation device. \_\_\_\_\_

2. If you plan to have personnel housing or caretaker facilities:
  - a. Will wastewater be discharged from these facilities? **Yes** \_\_\_ **No** \_\_\_  
**If Yes**, what are the daily maximum and average discharge volumes  
 Maximum \_\_\_\_\_ Average \_\_\_\_\_
  
3. Were there any sources of past pollution at the site, such as a shore-based seafood processor, log transfer facility, industrial facility, oil spill contamination, or town or village? **Yes** \_\_\_ **No** \_\_\_ **Unknown** \_\_\_  
**If Yes**, identify:
  - a. The type of previous use (e.g. mine, village, seafood processor, oil spill).  
 \_\_\_\_\_  
 \_\_\_\_\_
  - b. The last known date of use. \_\_\_\_\_
  - c. The distance from the site previously used to your proposed site. \_\_\_\_\_  
 \_\_\_\_\_
  
4. Are you aware of any current potential sources of human or industrial pollution in the area? (e.g. sewage outfalls, oil contamination, industrial transfer facilities upland operations, boat harbors, etc.)  
**Yes** \_\_\_ **No** \_\_\_ **If Yes**, describe:
  - a. The type of discharge(s). \_\_\_\_\_  
 \_\_\_\_\_
  - b. The location and distance from your site. \_\_\_\_\_  
 \_\_\_\_\_
  - c. The name of the discharger(s), if known. \_\_\_\_\_  
 \_\_\_\_\_
  
5. Are you aware of any other planned development in the general area of your proposed site?  
**Yes** \_\_\_ **No** \_\_\_ **If Yes**, describe the planned development. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
  
6. If applicable to your proposed project site, DEC may request that you provide a map with the following information:
  - a. areas of wastewater disposal systems, including both sewage and grey water discharge points (grey water means domestic wastewater from laundry, kitchen, etc., which does not contain human waste).
  - b. location of drinking water, including drinking water wells or other drinking water system sources (fresh water and salt water), within 200 feet of any proposed or existing wastewater disposal systems.
  - c. location of solid waste storage and disposal sites. (Note: you are encouraged to use existing permitted sites for the disposal of solid wastes. If there are not any existing permitted disposal sites in the area and they are necessary in your operation, you must contact the ADEC for authorization.)
  - d. areas used for fuel and chemical storage.

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## **H. ABBREVIATED COASTAL CONSISTENCY EVALUATION – Division of Coastal and Ocean Management.**

Please answer the following questions for the Alaska Coastal Management Program to evaluate how your proposed project will be consistent with the statewide standards and applicable district enforceable policies. District enforceable policies and statewide standards (11 AAC 112.200 – 11 AAC 112.990) are available on the ACMP website at <http://www.alaskacoast.state.ak.us>.

Questions 1-3 in the Abbreviated Consistency Evaluation are most applicable to mariculture facilities. The Division of Coastal and Ocean Management (DCOM) anticipates that the remaining questions regarding statewide ACMP standards will have a “No” answer. Please contact DCOM if you answer “Yes” to questions 4 through 12.

**1) 11 AAC 112.200 Coastal Development:** How is your project economically or physically dependent on a coastal location? Why are you proposing to place the project at the selected location? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**2) 11 AAC 112.220 Coastal Access:** Please explain how the proposed project will maintain and, where appropriate, increase public access to, from and along coastal water. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**3) 11 AAC 112.300 Habitats:** Does your project involve any work in:  
(a) Offshore areas (*submerged lands and waters seaward of the coastline as measured from mean low tide*)? **Yes** \_\_\_ **No** \_\_\_  
(b) Estuaries (*a semi-closed coastal body of water that has a free connection with the sea and within which seawater is measurably diluted with freshwater derived from land drainage*)? **Yes** \_\_\_ **No** \_\_\_  
(c) Tideflats (*mostly non-vegetated areas that are alternately exposed and inundated by the falling and rising of the tide*)? **Yes** \_\_\_ **No** \_\_\_  
(d) Wetlands (*saltwater wetlands and those freshwater wetlands that have a direct drainage to coastal waters*)? **Yes** \_\_\_ **No** \_\_\_  
(e) Rivers, streams, and lakes and the active floodplains and riparian management areas of those rivers, streams, and lakes? **Yes** \_\_\_ **No** \_\_\_

**Evaluation:**

**(i) If you answered yes to (a), (b), or (c) above,** Explain how you propose to avoid, minimize, or mitigate significant adverse impacts to water flow and natural drainage patterns?  
\_\_\_\_\_  
\_\_\_\_\_

**(ii) If you answered yes to (c) or (d) above,** Explain what the other uses of this area are, such as commercial, recreational, or subsistence uses. Is your proposed use in competition with those uses?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**(iii) If you answered yes to (e) above, address the following:**  
**(A)** How would you propose to avoid, minimize, or mitigate significant adverse impacts to water flow?  
\_\_\_\_\_  
\_\_\_\_\_

**(B)** How do you propose to avoid, minimize, or mitigate significant adverse impacts to active floodplains, the low land and relatively flat areas adjoining rivers, lakes, and streams that are subject to regular inundation by floods?  
\_\_\_\_\_  
\_\_\_\_\_

(C) How do you propose to avoid, minimize, or mitigate significant adverse impacts to natural vegetation within riparian management areas, the area along or around a waterbody within the following distances, measured from the outermost extent of the ordinary high water mark of the waterbody?

- (1) for the braided portions of a river or stream, 500 feet on either side of the waterbody;
  - (2) for split channel portions of a river or stream, 200 feet on either side of the waterbody;
  - (3) for single channel portions of a river or stream, 100 feet on either side of the waterbody;
  - (4) for a lake, 100 feet of the waterbody?
- 
- 

**4) 11 AAC 112.210 Natural hazard areas:**

Is your project located in a designated natural hazard area within a coastal district plan? **Yes** \_\_\_ **No** \_\_\_

**5) 11 AAC 112.230 Energy Facilities:**

Does your project involve an energy (oil and gas) development of more than local concern carried out in, or in close proximity to, the coastal area? **Yes** \_\_\_ **No** \_\_\_

**6) 11 AAC 112.240 Utility Routes & Facilities:**

Does your project involve power transmission lines, mineral slurry lines, oil and gas pipelines, natural transportation routes dictated by geography or oceanography, water and sewage transfer, and facilities required to operate and maintain the route or facility? **Yes** \_\_\_ **No** \_\_\_

**7) 11 AAC 112.250 Timber Harvesting & Processing:**

Does your project involve the harvest or processing of timber? **Yes** \_\_\_ **No** \_\_\_

**8) 11 AAC 112.260 Sand and gravel extraction:**

Does your project involve extracting and using sand and gravel from waters that contain sea water, intertidal areas, barrier islands, or spits? **Yes** \_\_\_ **No** \_\_\_

**9) 11 AAC 112.270 Subsistence:**

Does your project take place in a subsistence area designated in a coastal district plan? **Yes** \_\_\_ **No** \_\_\_

**10) 11 AAC 112.280 Transportation Routes & Facilities:**

Does your project involve the use or construction of natural transportation routes dictated by geography or oceanography, roads, highways, airstrips, railways, air terminals, and facilities required to operate and maintain the route or facility? **Yes** \_\_\_ **No** \_\_\_

**11) 11 AAC 112.320 Historic, prehistoric, and archeological resources:**

Does your project take place in a historic, prehistoric or archaeological resource area designated in a coastal district plan? **Yes** \_\_\_ **No** \_\_\_

**12) Coastal District Enforceable Policies:**

Is the project located in a coastal district with an approved coastal district plan? **Yes** \_\_\_ **No** \_\_\_

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## **I. US ARMY CORPS OF ENGINEERS GENERAL PERMIT EVALUATION**

The US Army Corps of Engineers (USACE) has developed a General Permit (GP) for Aquatic Farm Structures within the State of Alaska. The GP only applies to projects that can meet the specific GP conditions. The Departments of Natural Resources and Fish and Game will evaluate your application and help determine if you can apply for authorization under the GP. If your proposed project does not meet the GP conditions, you will need to apply to the USACE for an Individual Permit using a Department of Army (DA) permit application.

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**J. APPLICATION SIGNATURE BLOCK**

**AQUATIC FARM APPLICATION SIGNATURE AND THE  
ALASKA COASTAL MANAGEMENT PROGRAM CERTIFICATION STATEMENT**

The information contained in this aquatic farm application is true and complete to the best of my knowledge.

I certify that the proposed activity complies with, and will be conducted in a manner consistent with, the Alaska Coastal Management Program. I understand that modifications to the proposed activity may require additional consistency review. I understand that I may need to apply for an Individual Permit with the US Army Corps of Engineers.

This certification statement does not provide authorization necessary to sell my product. I understand I must separately apply for and hold a Growing Area Certification and a Harvesters Permit from the Department of Environmental Conservation.

**Printed Name** \_\_\_\_\_

**Signature of Applicant** \_\_\_\_\_ **Date** \_\_\_\_\_

**Printed Name** \_\_\_\_\_

**Signature of Applicant** \_\_\_\_\_ **Date** \_\_\_\_\_

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**K. AQUATIC FARM OPERATION AND DEVELOPMENT PLAN – PARTS A & B**

Please note, your operation and development plan is an important tool for both you and state agencies. Your aquatic farm is a commercial endeavor. Personal use or subsistence is not part of the Aquatic Farm Program. Therefore, your farm must meet a commercial use requirement no later than the end of the fifth year of your lease and sales must be maintained or increased in the remaining years of the lease. Commercial use of the site means annual sales of aquatic farm products, as defined in AS 16.40.199, of at least \$3,000 per acre or fraction of an acre, or \$15,000 per farm, whichever is less. The commercial use requirement applies to the combined total of all species and is not a “per species” requirement and must be maintained or increased in years 6 - 10. The 10-Year Operation and Development Plan should be an accurate reflection of your operations for each year you are farming. Therefore, the estimated amount of sales must correlate to the estimated amount of seed you plan to purchase minus any mortality rates. **Please complete and submit one operation and development plan for each species you propose to culture.**



**\*Complete one operation and development plan for each species**

**AQUATIC FARM OPERATION AND DEVELOPMENT PLAN – PART A**

Part A includes questions regarding your proposed operation. Your proposed aquatic farm or hatchery plans must demonstrate technical and operational feasibility (AS 16.40.105(4)). Please provide any additional information that you consider pertinent to your operating plan on additional sheets of paper as necessary.

Name \_\_\_\_\_ Species \_\_\_\_\_  
ADNR Lease ADL No.: \_\_\_\_\_ ADF&G Permit No. \_\_\_\_\_ - \_\_\_\_\_ -AF - \_\_\_\_\_

**1. Site Monitoring/Maintenance**

- a. How often, in days per month, do you intend to monitor your site for things such as adequate anchoring, disease, exotic species settlement, fouling, gear drift, snow load, wind damage, vandalism, etc.?  
**Growing season** \_\_\_\_\_ (days/month) **Winter months** \_\_\_\_\_ (days/month)
- b. Where will you store any farm gear and/or equipment when not in use? \_\_\_\_\_
- c. How will you keep the gear and shellfish free of fouling organisms (hot-dip, air dry, pressure washing, etc.)? \_\_\_\_\_
- d. How will you manage incidental species over the course of operations (sea urchins, sea cucumbers, butter clams, or other non-targeted species)? \_\_\_\_\_
- e. If you intend to use predator netting, how long will you keep netting over your product? \_\_\_\_\_ (months)

**2. Recordkeeping**

- a. What methods are you going to use to measure the success of your operation (growth, survival or mortality rates, production, etc.)? \_\_\_\_\_
- b. Will you maintain records of aquatic farm product, such as counts and measurements to track survival and growth? **Yes** \_\_\_ **No** \_\_\_ **Describe:** \_\_\_\_\_
- c. Do you plan to record other physical or environmental parameters at your site such as water temperatures and salinity? **Yes** \_\_\_ **No** \_\_\_ **Describe:** \_\_\_\_\_

**3. Harvest**

- a. How often do you intend to harvest your product? \_\_\_\_\_
- b. How do you intend to harvest your product? **Suspended:** Manual \_\_\_\_\_ Other \_\_\_\_\_  
**On-Bottom:** Hand/Digging \_\_\_\_\_ Hydraulic wand \_\_\_\_\_ Manual \_\_\_\_\_ Other \_\_\_\_\_

**4. Sales**

- a. DNR has a commercial use requirement (CUR) of \$3,000 per acre per year or \$15,000 per farm, whichever is less. What is your anticipated CUR by the end of year 5? \$ \_\_\_\_\_

**5. Seed Acquisition**

- a. Which certified shellfish seed source(s) will you use? \_\_\_\_\_
- b. Applicable for indigenous species (mussels, scallops, abalone, etc.), how do you intend to collect wild seed? \_\_\_\_\_

**PART A – SIGNATURE BLOCK**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## AQUATIC FARM OPERATION AND DEVELOPMENT PLAN – PART B

**Complete one operation and development plan for each species** using a reasonable expectation of what you believe is possible for each year of the 10-year lease and operation permit. This is a projection to help you visualize a 10-year farming plan keeping in mind that annual sales at the end of year 5 must meet or exceed the commercial use requirement and sales must then be maintained or increased in the remaining years of the lease. Commercial use equals the annual sum of farm sales from all species combined. The commercial use requirement does not have to be met for each species. Your plan can be amended to reflect any changes as the aquatic farm operations develop.

Name _____ ADL Number _____ ADF&G Permit No. ____ -AF- ____ Species _____								
Calendar Year	Installation Schedule			# of Hatchery-Produced Seed	#of Seed Collected Onsite (Only applies to indigenous sp.)	Aquatic Farm Production Projected Harvest and Sales		
	Support Facilities <sup>1</sup>	Equipment/ Gear Types And Numbers <sup>2</sup>	Anchoring Systems			Projected Sales <sup>3</sup> (\$)	# of Animals	# of Pounds
(Year 1) 2012								
(Year 2) 2013								
(Year 3) 2014								
(Year 4) 2015								
(Year 5) 2016						<sup>4</sup> \$		

<sup>1</sup> Support facilities examples: caretaker, storage, or processing facilities, work rafts, etc. This must correspond to diagrams and drawings.

<sup>2</sup> Equipment examples: grow-out rafts, longlines, buoys, etc. Gear examples: trays, tiers of lantern nets, or predator netting. This must correspond to diagrams and drawings.

<sup>3</sup> Projected sales are based on Farm Gate Income which is defined as the unprocessed value, excluding the cost of packaging or transport of the product to its' first point of sale.

<sup>4</sup> By the end of your 5<sup>th</sup> year, **projected sales for all species combined must meet the commercial use requirement** (CUR) defined as the annual sales of at least \$3,000 per acre or fraction of an acre, or \$15,000 per farm, whichever is less (11 AAC 63.03(b)). The CUR applies to the combined total of all species, is not a "per species" requirement and must be maintained or increased in Years 6 - 10.

**I understand I must improve productivity according to above operation and development plan for this species and that this plan can be amended to reflect any changes as the aquatic farm operations develop.**

**SIGNATURE** \_\_\_\_\_

**DATE** \_\_\_\_\_



(Continued – Page 2)

**AQUATIC FARM OPERATION AND DEVELOPMENT PLAN – PART B**

Name \_\_\_\_\_ ADL Number \_\_\_\_\_ ADF&G Permit No. \_\_\_\_\_ -AF- \_\_\_\_\_ Species \_\_\_\_\_  
(Individual plan required for *each* species)

Calendar Year	Installation Schedule			# of Hatchery-Produced Seed	#of Seed Collected Onsite (Only applies to indigenous sp.)	Aquatic Farm Production Projected Harvest and Sales		
	Support Facilities <sup>1</sup>	Gear Types And Numbers <sup>2</sup>	Anchoring Systems			Projected Sales <sup>3</sup> (\$)	# of Animals	# of Pounds
(Year 6) 2017						\$		
(Year 7) 2018						\$		
(Year 8) 2019						\$		
(Year 9) 2020						\$		
(Year 10) 2021						\$		

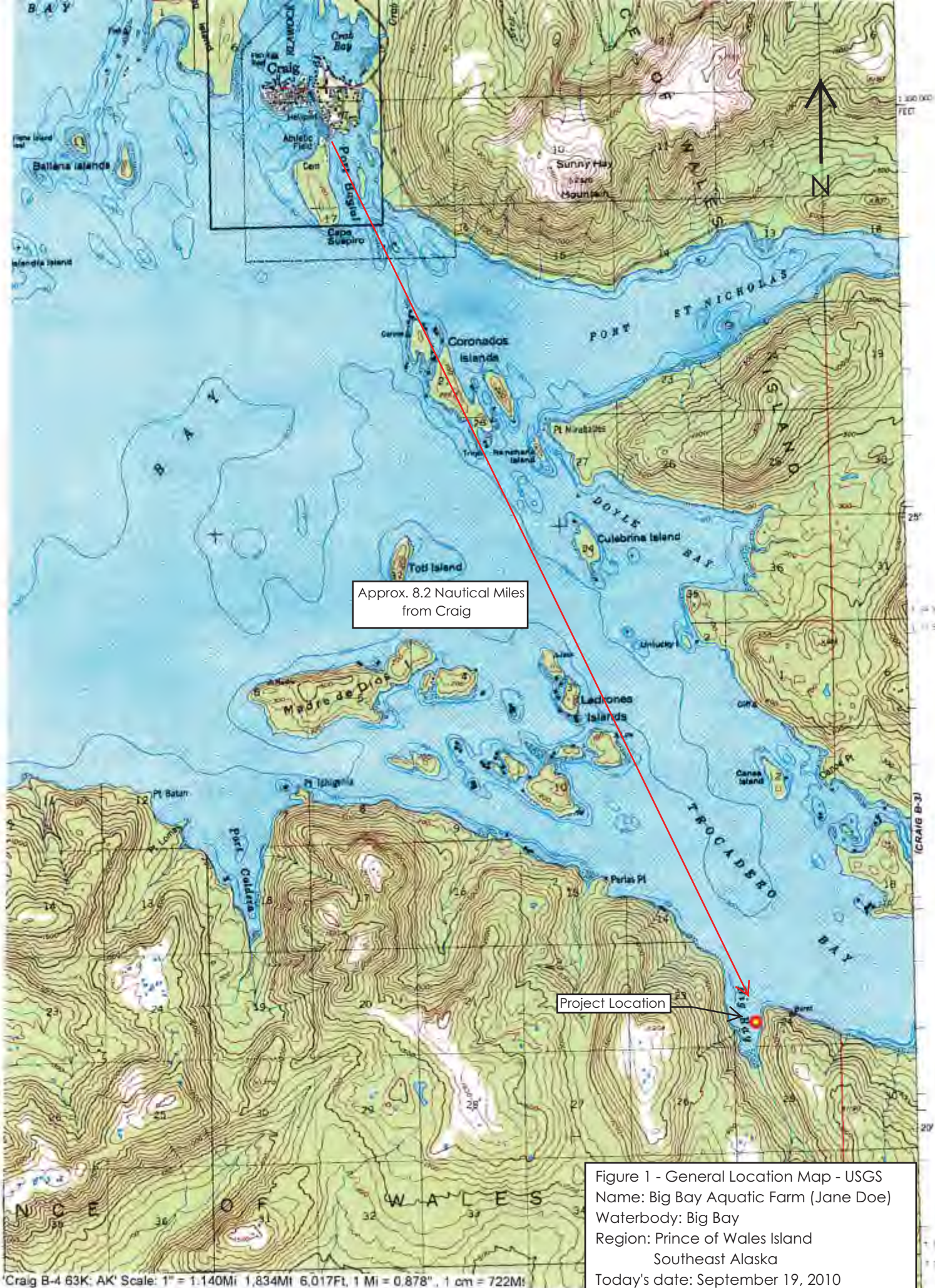
<sup>1</sup> Support facilities examples: caretaker, storage, or processing facilities, work rafts, etc. This must correspond to diagrams and drawings.  
<sup>2</sup> Equipment examples: grow-out rafts, longlines, buoys, etc. Gear examples: trays, tiers of lantern nets, or predator netting. This must correspond to diagrams and drawings.  
<sup>3</sup> Projected sales are based on Farm Gate Income which is defined as the unprocessed value, excluding the cost of packaging or transport of the product to its' first point of sale.

**I understand I must improve productivity according to above operation and development plan for this species and that this plan can be amended to reflect any changes as the aquatic farm operations develop.**

**SIGNATURE** \_\_\_\_\_

**DATE** \_\_\_\_\_





Approx. 8.2 Nautical Miles  
from Craig

Project Location

Figure 1 - General Location Map - USGS  
 Name: Big Bay Aquatic Farm (Jane Doe)  
 Waterbody: Big Bay  
 Region: Prince of Wales Island  
 Southeast Alaska  
 Today's date: September 19, 2010



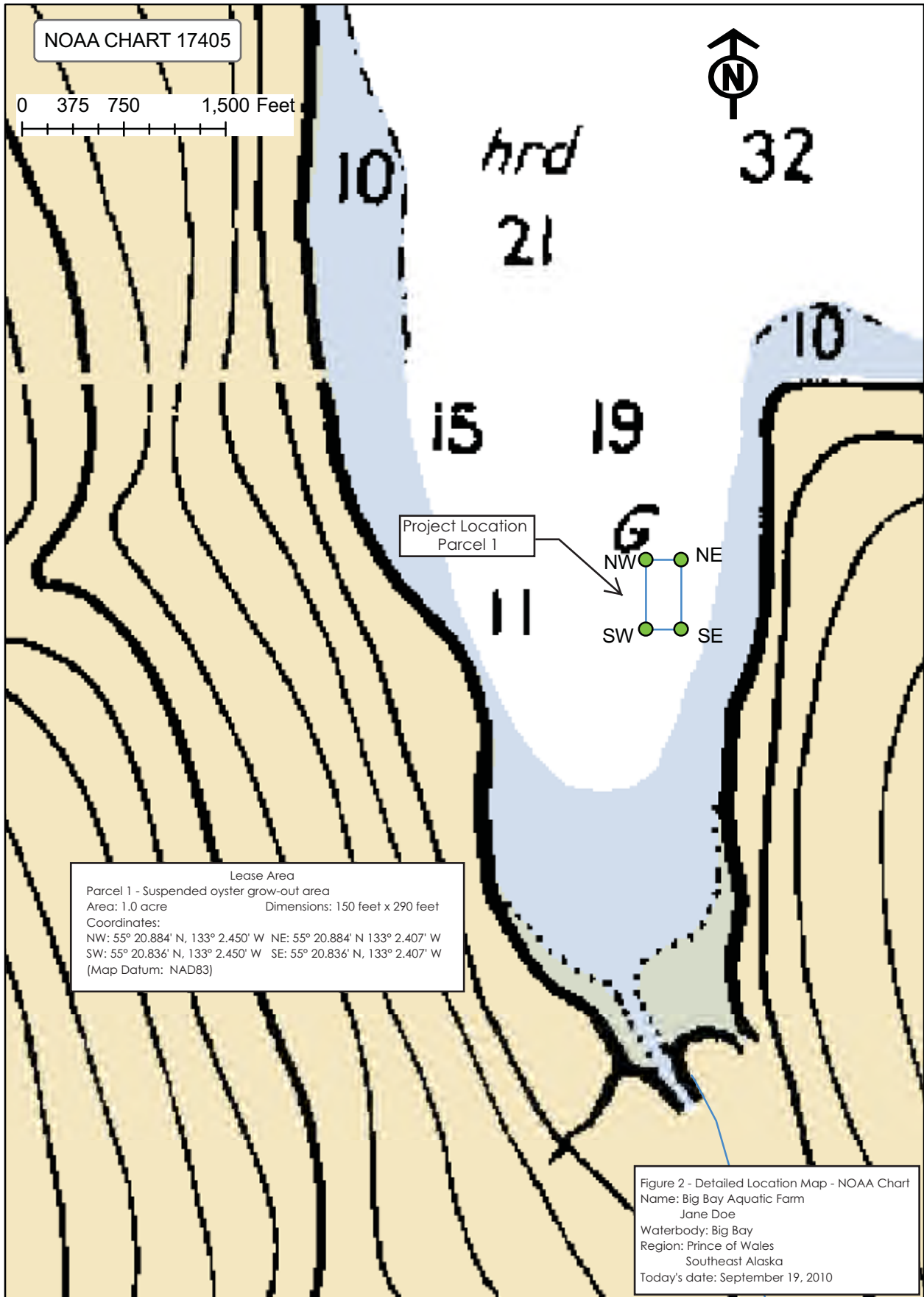
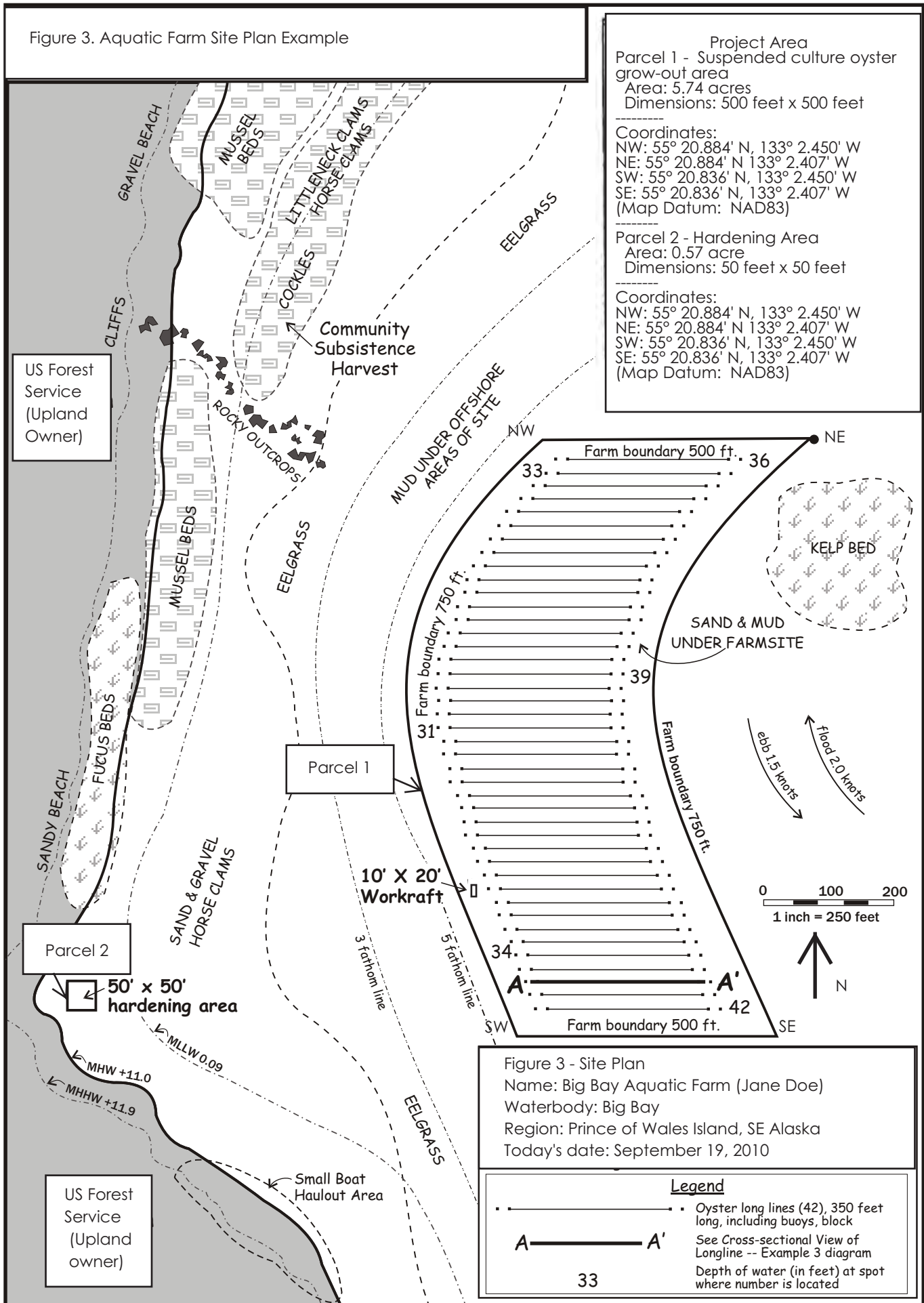


Figure 3. Aquatic Farm Site Plan Example



**Project Area**  
 Parcel 1 - Suspended culture oyster grow-out area  
 Area: 5.74 acres  
 Dimensions: 500 feet x 500 feet

Coordinates:  
 NW: 55° 20.884' N, 133° 2.450' W  
 NE: 55° 20.884' N, 133° 2.407' W  
 SW: 55° 20.836' N, 133° 2.450' W  
 SE: 55° 20.836' N, 133° 2.407' W  
 (Map Datum: NAD83)

Parcel 2 - Hardening Area  
 Area: 0.57 acre  
 Dimensions: 50 feet x 50 feet

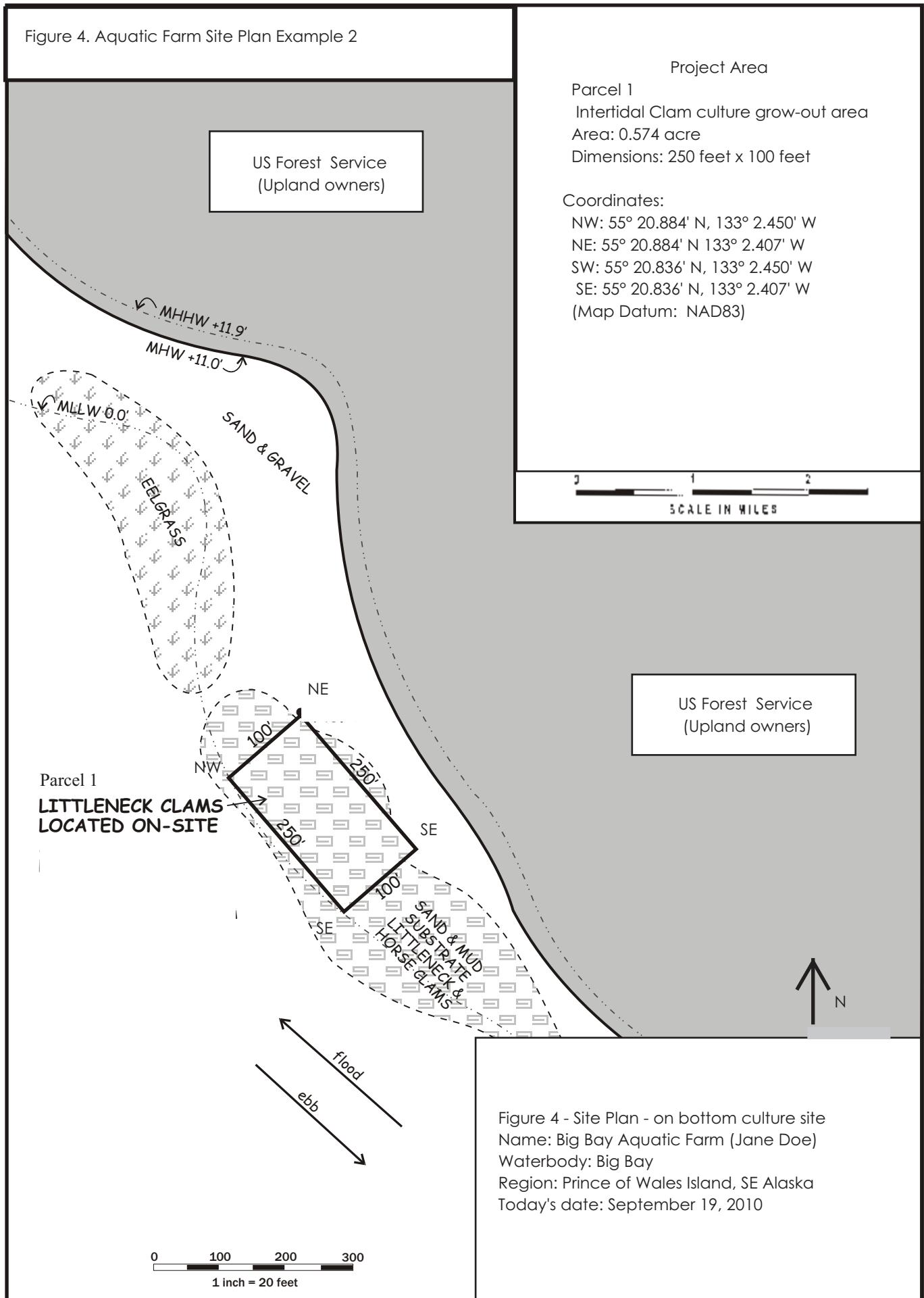
Coordinates:  
 NW: 55° 20.884' N, 133° 2.450' W  
 NE: 55° 20.884' N, 133° 2.407' W  
 SW: 55° 20.836' N, 133° 2.450' W  
 SE: 55° 20.836' N, 133° 2.407' W  
 (Map Datum: NAD83)

Figure 3 - Site Plan  
 Name: Big Bay Aquatic Farm (Jane Doe)  
 Waterbody: Big Bay  
 Region: Prince of Wales Island, SE Alaska  
 Today's date: September 19, 2010

**Legend**

- Oyster long lines (42), 350 feet long, including buoys, block
- A—A' See Cross-sectional View of Longline -- Example 3 diagram
- 33 Depth of water (in feet) at spot where number is located

Figure 4. Aquatic Farm Site Plan Example 2



Project Area  
 Parcel 1  
 Intertidal Clam culture grow-out area  
 Area: 0.574 acre  
 Dimensions: 250 feet x 100 feet

Coordinates:  
 NW: 55° 20.884' N, 133° 2.450' W  
 NE: 55° 20.884' N 133° 2.407' W  
 SW: 55° 20.836' N, 133° 2.450' W  
 SE: 55° 20.836' N, 133° 2.407' W  
 (Map Datum: NAD83)

0 1 2  
 SCALE IN MILES

US Forest Service  
 (Upland owners)

Parcel 1  
**LITTLENECK CLAMS  
 LOCATED ON-SITE**



0 100 200 300  
 1 inch = 20 feet

Figure 4 - Site Plan - on bottom culture site  
 Name: Big Bay Aquatic Farm (Jane Doe)  
 Waterbody: Big Bay  
 Region: Prince of Wales Island, SE Alaska  
 Today's date: September 19, 2010

Figure 5. Aquatic Farm Cross-Sectional Diagrams and Drawings Examples

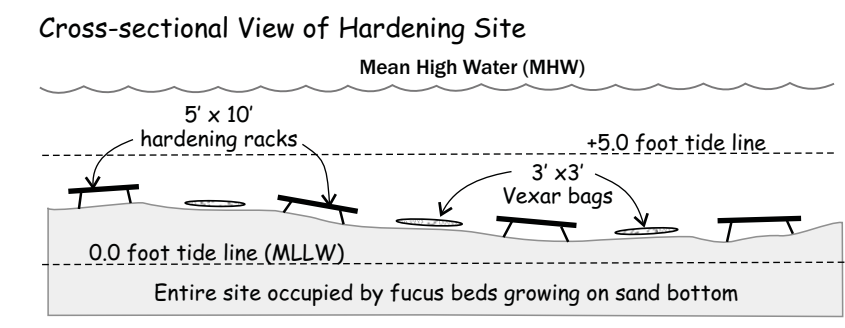
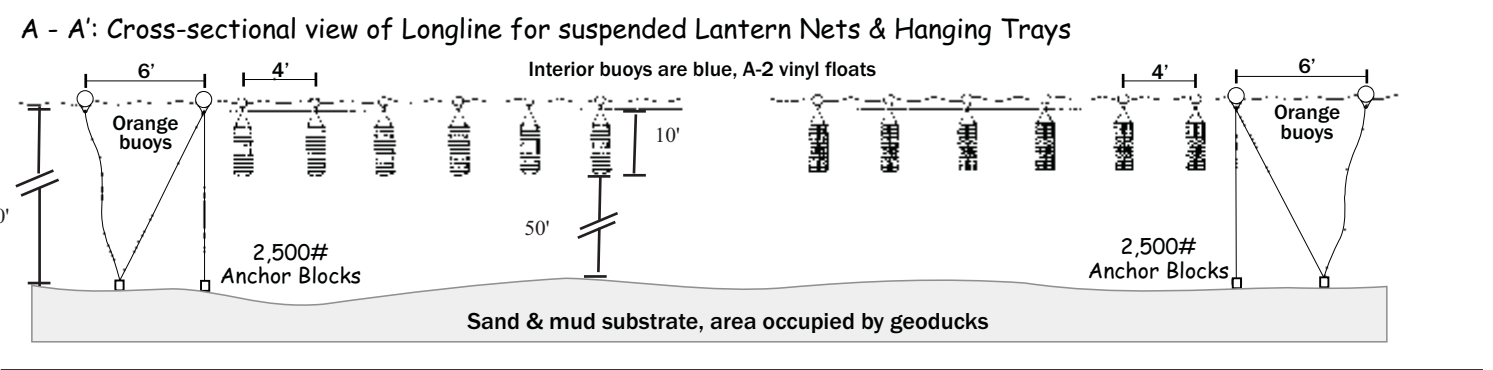
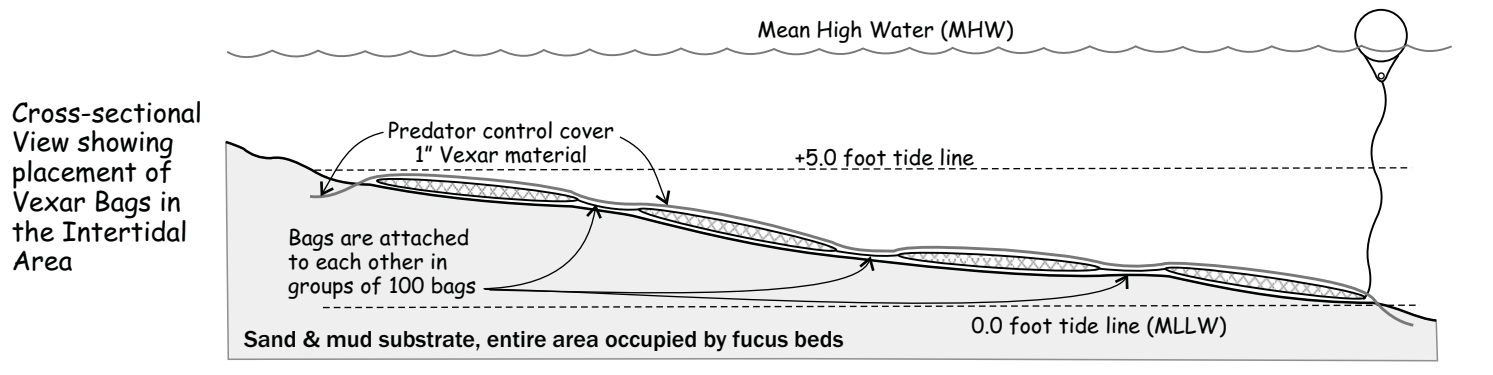
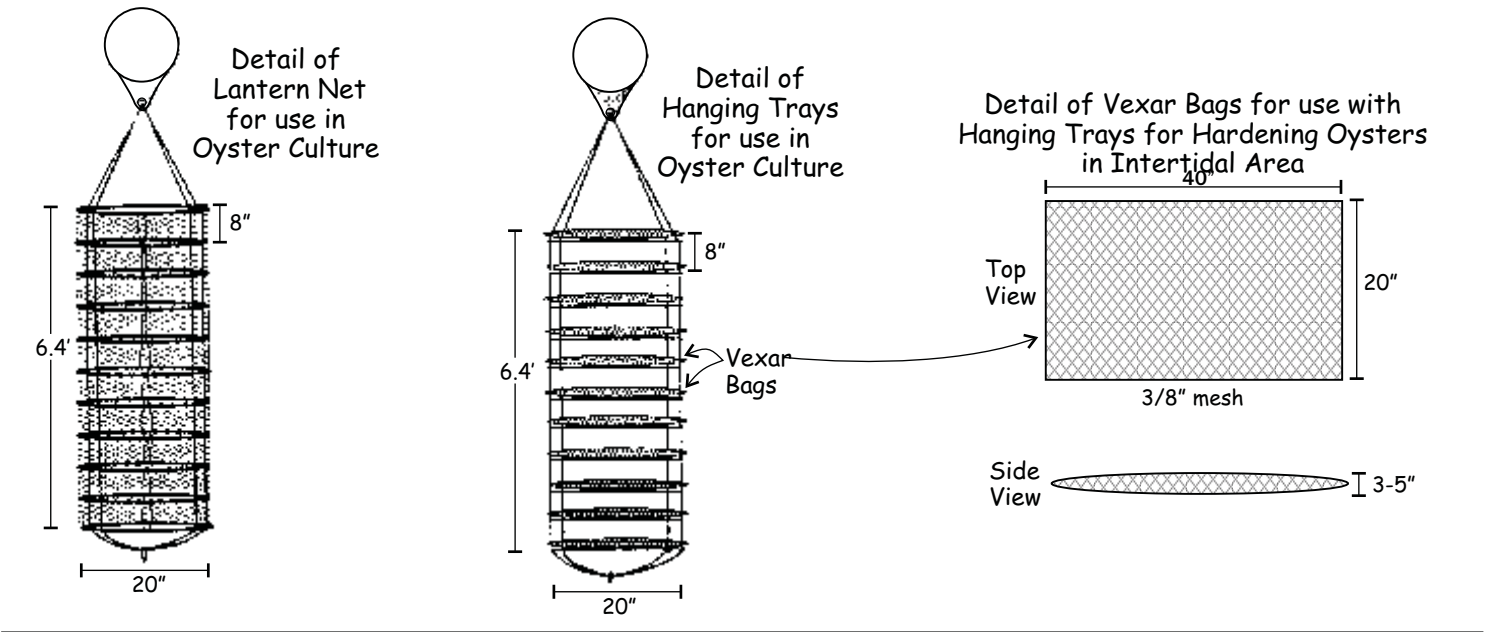


Figure 5 - Detailed Cross-sectional Diagrams and Drawings

Name: Big Bay Aquatic Farm (Jane Doe)  
 Waterbody: Big Bay  
 Region: Prince of Wales Island, SE Alaska  
 Today's date: September 19, 2010