

# **PERMIT EXAMPLE 2**

## **Aquatic Farming**



## ALASKA'S AQUATIC FARM PROGRAM

Application Opening Period  
January 1<sup>st</sup> through April 30<sup>th</sup>



### 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 either DNR Office:

Department of Natural Resources  
Aquatic Farm Application  
550 W. 7<sup>th</sup> Avenue, Suite 1360  
Anchorage, AK 99501-3557

Department of Natural Resources  
Aquatic Farm Application  
400 Willoughby #400  
P.O. Box 111020  
Juneau, AK 99801

**Application Fee:** A non-refundable application fee paid to Department of Natural Resources (ADNR). See current Director's Order for applicable fees.

**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 either of the Alaska Department of Natural Resources offices listed above by 5:00 p.m., on the last day of April.
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 ADNR at (907) 269-8543 or ADF&G at (907) 465-6150.



## 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 2, 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)
- \_\_\_\_\_ Signature for the Aquatic Farm Program Application (Page 9, Section J)
- \_\_\_\_\_ Aquatic Farm Operation and Development Plan – Part A (Page 10, Section K)
- \_\_\_\_\_ Aquatic Farm Operation and Development Plan – Part B (Pages 11 –12, Section K)
- \_\_\_\_\_ Check or money order for the ADNR application filing fee,  
made payable to ADNR.
- \_\_\_\_\_ If applicable, Ownership Deed or lease document for any upland facility use not on state lands,  
(Page 7, Section F-3)
- \_\_\_\_\_ If applicable, Authorization from City or Borough Planning Departments if site is within a City or  
Borough Planning area (Page 7 - 8, Section F-4)
- \_\_\_\_\_ 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.

## **Aquatic Farm Application Process**

To start an aquatic farm in Alaska, you must first apply for and receive authorizations from the State of Alaska and the U.S. Army Corps of Engineers. The Department of Natural Resources, Division of Mining, Land and Water (DMLW) currently holds an application opening every other year beginning January 1 and ending April 30. The process for aquatic farm applications takes approximately twelve months to complete after the opening ends. The applications are "batch-processed" in order to assess cumulative impacts and carrying capacity within a particular area.

The joint-agency application includes instructions, examples and guidelines to assist you in completing your application form. The application has evolved into a joint-agency application that addresses the concerns of all involved state agencies requiring some type of authorization or certification, and includes this department, the Departments of Fish and Game and Environmental Conservation. Consequently, the applicant does not have to answer the same questions on as many as five separate application forms.

DMLW accepts the applications and prepares a review schedule. Concurrent with the review of the applications for state agency authorizations, a review for consistency with the Alaska Coastal Management Program (ACMP) also begins. The Office of Project Management and Permitting (OPMP), Alaska Coastal Management Program section conducts the ACMP review and sets Day 1. Once the review period ends, OPMP makes a determination whether a proposal is consistent with the standards of the ACMP, including any enforceable policies described within an affected coastal district management plan. This determination is required before DMLW is able to authorize a lease agreement. DMLW is only able to authorize aquatic farm activities if the proposal is found consistent by OPMP.

After the applications are received and found to be complete, the agencies may hold individual application meetings to fully understand the proposal. DMLW gathers information about the area of the proposed site from documents, such as state and/or federal management plans, U.S. Coast Pilots, and coastal district management plans. State and federal agencies may be contacted for specific information. A description of the proposal and everything that is learned is included in a preliminary best interest finding and decision, or "preliminary decisions" (PD). The PDs are noticed and agencies and the public are provided with a 30-day comment period. The PDs recommend approval or denial of the application based only on the information that is known at the time. It is hoped that the review period results in more site-specific information so that the involved agencies can make more informed decisions regarding their respective authorizations.

While OPMP, the Department of Fish and Game (DFG) and the Department of Environmental Conservation (DEC) are reviewing issues that pertain to their respective authorities, DMLW considers such issues as whether there may be conflicts with traditional or existing uses of the site, such as commercial or sport fishing, subsistence activities, use of the site for safe boat anchorage, recreation, or tourism; how public access will be maintained; if the proposed gear or related facilities could pose hazards to navigation; or whether the proposal may impact cultural or historic sites.

Additionally, DMLW manages state owned tide and submerged lands to allow for multiple uses in accordance with the Public Trust Doctrine. The Public Trust Doctrine is applicable whenever navigable waters or the lands beneath are altered, developed, conveyed, or otherwise managed or preserved. It applies whether the trust lands are publicly owned or privately owned. The Public Trust Doctrine provides that these trust lands, waters and living resources in a State, are held by the State in trust for the benefit of all the people, and establishes the right of the public to fully enjoy the trust lands, water and living resources for a wide variety of recognized public uses, such as navigation, commerce, fishing, and other purposes. DMLW evaluates a proposal to ensure those public trust resources are protected. Specific language is included in the lease agreement that subjects it to the principles under the Public Trust Doctrine.

During the 30-day review and comment period of the PDs, both written and oral testimony may be provided. Hearings are held at the request of five or more people wishing to testify. The hearings are generally held by teleconference out of Anchorage, although depending on the number of applications, may be scheduled in a community nearest to the applications, with outlying teleconferenced locations.

With the information received, DMLW prepares and issues the final best interest findings and decisions or "final decisions" (FD). All comments received during this time are considered and addressed in the final decisions. **It is important to note that only those that comment during the 30-day review period, either in writing or by public testimony on a specific proposal, will be eligible to appeal DMLW's final decision on that proposal.** Anyone who provided either written or oral comments will be sent a copy of the final decision, which includes an explanation of the appeal process.

Before a lease is issued, the first year's annual payment is required. Fees for a DMLW lease are based on fair market value. Our division's appraiser has compared the values of tide and submerged lands in similar areas and has developed a fee schedule for aquatic farms. The current fee schedule sets the annual lease fee at \$450 for the first acre, or fraction, and \$125 for each additional acre or fraction. Applicants may choose not to use the fee schedule and have an independent appraisal done, at their own expense. This fee is for the DMLW lease only. There may be other fees required by the other regulatory agencies.

In addition, DMLW requires the applicant to post a performance bond of a minimum of \$2500. DMLW can raise the amount of the bond after considering such items as the remoteness of a proposal and the amount of gear and/or facilities proposed. Generally, bonds for farmsites 5 acres or less are \$2500, and farms with more than 5 acres have a bond of \$5,000 or more. It mainly depends on the amount of improvements proposed and the estimated costs for DMLW to remove the improvements or clean up and restore the site if the lessee fails to do so at lease expiration, termination, or abandonment.

At the end of year five of the ten-year lease, the farmer is required to meet a commercial use or production level set by DMLW regulations. This requirement was implemented in an effort to prevent "hobbyists" from speculating and not using an area for the commercial purposes intended. If the commercial use requirement is not met by year five of the lease and continued each year for the remaining term, the lease will be terminated. The current commercial use

requirement is \$3,000 in sales per acre, or fraction of an acre, up to \$15,000 per farm, whichever is less.

You may visit DFG's and DEC's websites for information related to their respective authorizations at:

DFG: <http://www.cf.adfg.state.ak.us/geninfo/enhance/maricult/maricult.php>

DEC: <http://www.dec.state.ak.us/eh/fss/seafood/seafood.htm>

Receipt Type: 76  
See current Director's Fee Order for applicable fees.

<b>For Office Use Only</b> ADNR File No: _____ DATE STAMP: _____ ADF&G No: _____
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## AQUATIC FARM PROGRAM APPLICATION

You are encouraged to submit a completed application as early in the filing period as possible. The 2012 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 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 no later than 5:00 p.m. on April 30<sup>th</sup>.

The project location is in: (Check one)  Southeast Alaska  Southcentral Alaska  
(Southeast = Projects south of or in the Yakutat area / Southcentral = Projects north of Yakutat)

### A. APPLICANT INFORMATION

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

Name _____			Contact Name _____
Business Name (If Applicable) _____			Contact Phone Number _____
Mailing Address (PO Box or Street Address) _____			Business Partner Name (If applicable) _____
City _____	State _____	Zip _____	Business Partner Email Address (If applicable) _____
Email Address _____		Business Partner Phone (If applicable) _____	
Home/Office Phone _____	Cell Phone _____		

**\*Please Answer (✓) the following questions:**

This project is:  First time application  Amendment  Second time application (years 11-21)

I plan to farm:  Pacific oyster  Pacific littleneck  geoduck  blue mussel  cockle  
 sea urchin  aquatic plant (kelp)  other \_\_\_\_\_

I plan to utilize the following area/culture method:  subtidal suspended  subtidal on-bottom  
 intertidal near-bottom  intertidal on-bottom  other \_\_\_\_\_

I plan to utilize the following gear/equipment:  grow-out rafts and  trays (plastic), or  cages (metal)  
 longlines and lantern nets  flip-flop bags and line  floating shark fin bags  vexar bags  
 tubes (PVC or vexar)  predator netting  other \_\_\_\_\_

My support facilities will include:  work raft  enclosed processing facility  processing raft  
 floating dock(s)  personnel/caretaker housing facility  other \_\_\_\_\_

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## 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, type of farm gear, equipment, support facilities, and associated housing to be used including size, number, and construction materials. Your narrative should match the rest of the application information you provide. Please label your narrative, "PROJECT DESCRIPTION". The following check-off list can be used to assure all items are covered in your project description.

- |   |   |
|---|---|
| ✓ Site location   | ✓ Support Facilities (type, size, number, configuration, material, and anchoring) |
| ✓ Site dimensions, acres for each parcel  | ✓ Access to and from site   |
| ✓ Total acres of all parcels  | ✓ Storage location of equipment and gear when not in use                          |
| ✓ Species you intend to farm  |   |
| ✓ Culture Method  |   |
| ✓ Gear (type, size, number, configuration, material, mesh size, and anchoring system) |   |
| ✓ Equipment (type, size, number, configuration, material, and anchoring system)       |   |
| ✓ Harvest equipment and method  |   |

Note: All floating raft structures should use non-treated wood supported by closed cell (extruded) expanded polystyrene or equivalent material

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### EXAMPLE OF A PROJECT DESCRIPTION:

*The proposed aquatic farm site is composed of three separate parcels located on state-owned tidal and submerged lands, totaling about 4.07 acres. Parcels include:*

- *growing area measuring 292 ft x 546 ft (3.66 acres) for subtidal suspended culture of Pacific oysters using grow-out raft and cage system (Parcel 1);*
- *intertidal area measuring 60 ft x 154 ft (0.21 acre) for hardening and defouling (Parcel 2); and*
- *support facility area measuring 46 ft x 190 ft (0.20 acre) for a dock and dock and storage (Parcel 3).*

*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 Masman Inlet on Etolin Island in southeastern Alaska. (Attachments 1-5)*

*Parcel 1 will hold eight (8) – 16 ft by 20 ft oyster grow-out rafts. Each grow-out raft will use 100 to a maximum of 300 Aquamesh cages stacked 10-high. Each cage will measure 22 inches wide x 22 inches long x 6 inches deep, manufactured of 1-inch by 1-inch PVC coated wire mesh. 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).*

*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.*



**C. PROJECT LOCATION**

**1. Coordinates**

Please provide latitude and longitude coordinates for each corner of each parcel at the proposed farm site. Identify each parcel to be used. For example, Parcel 1 - growing area, Parcel 2 - hardening area, etc. 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). A handheld GPS unit can be provided with a \$100 security fee by contacting the ADF&G at (907) 465-6150.

Parcel 1: <hr/> (e.g. Grow-out Area)	NE Corner No. 1: Latitude _____ SE Corner No. 2: Latitude _____ SW Corner No. 3: Latitude _____ NW Corner No. 4: Latitude _____	Longitude _____ Longitude _____ Longitude _____ Longitude _____
Parcel 2: <hr/> (e.g. Hardening Area)	NE Corner No. 1: Latitude _____ SE Corner No. 2: Latitude _____ SW Corner No. 3: Latitude _____ NW Corner No. 4: Latitude _____	Longitude _____ Longitude _____ Longitude _____ Longitude _____
Parcel 3: <hr/> (e.g. Support Facility Area)	NE Corner No. 1: Latitude _____ SE Corner No. 2: Latitude _____ SW Corner No. 3: Latitude _____ NW Corner No. 4: Latitude _____	Longitude _____ Longitude _____ Longitude _____ 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:  $\frac{\text{_____ feet (x)}}{\text{(Width of Parcel 1)}} \frac{\text{_____ feet}}{\text{(Length of Parcel 1)}} = \frac{\text{_____}}{\text{(Area)}} \text{ square feet (+) } 43,560 = \frac{\text{_____}}{\text{(Acres)}}$

Parcel 2:  $\frac{\text{_____ feet (x)}}{\text{(Width of Parcel 2)}} \frac{\text{_____ feet}}{\text{(Length of Parcel 2)}} = \frac{\text{_____}}{\text{(Area)}} \text{ square feet (+) } 43,560 = \frac{\text{_____}}{\text{(Acres)}}$

Parcel 3:  $\frac{\text{_____ feet (x)}}{\text{(Width of Parcel 3)}} \frac{\text{_____ feet}}{\text{(Length of Parcel 3)}} = \frac{\text{_____}}{\text{(Area)}} \text{ square feet (+) } 43,560 = \frac{\text{_____}}{\text{(Acres)}}$

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**

Provide copies of maps and diagrams including general and detailed location maps, site plan map (an over view), cross-sectional diagram and detailed drawings. 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). Examples are provided at the end of the application.  
 A list of locations to obtain maps is provided below:

USGS Topographic quadrangle maps	State of Alaska Land Records – <a href="http://mapper.landrecords.info">http://mapper.landrecords.info</a>
NOAA nautical charts	NOAA – <a href="http://www.charts.noaa.gov">www.charts.noaa.gov</a>
	Other suppliers – <a href="http://www.naco.faa.gov/agents_acc.asp">www.naco.faa.gov/agents_acc.asp</a>
Other specialized maps	State of Alaska Land Records – <a href="http://tidelands.landrecords.info">http://tidelands.landrecords.info</a>
ShoreZone mapping system	<a href="http://alaska.fisheries.noaa.gov/habitat/shorezone/szintro.htm">http://alaska.fisheries.noaa.gov/habitat/shorezone/szintro.htm</a>
Catalog of Anadromous Streams	<a href="http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.interactive">http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.interactive</a>

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

**FORMATTING**

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

FIGURE 1 Detailed Location Map Alaska's Best Oysters Jerryton Bay East of Prince of Wales Island, Southeast AK March 30, 2012
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a. **General Location Map** – This map is a larger scaled map showing larger surrounding area with less detail (See Figure 1). Use a USGS Topographic quadrangle map (scale: 1" = one mile (1:63,360)) and label it "Figure 1" and show the following information:

- USGS Map Name (e.g. Craig B-4) \_\_\_\_\_
- General location of the farm site
- Distance (in nautical miles), and direction (arrow) of the site from the nearest community
- A directional arrow identifying North
- Scale
- Legend box (example above)

b. **Detailed Location Map** – This map is a smaller scaled map showing more detail (See Figure 2). Use a National Oceanic and Atmospheric Administration (NOAA) navigational chart and label it Figure 2 and show the following information:

- NOAA Chart No. \_\_\_\_\_
- Boundaries of each farm area parcel and clearly label all corners (NE, SE, SW, and NW)
- Coordinates
- Directional arrow identifying North
- Scale on map
- Legend box (example above)
- If uplands area is proposed:
  - 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 (See Figures 3 and 4). Label it "Figure 3" and show the following information:

- Boundaries of each farm area parcel and clearly label all corners (NE, SE, SW, and NW)
- Distance (in feet) between corners of each parcel
- All in-water structures and anchoring systems (All anchoring systems and anchor scope have to be inside the farm parcel boundary)
- Acres of each parcel.
- All equipment and support facilities with dimensions (in feet)
- Areas of eelgrass beds (intertidal zone)

- Areas of kelp beds (subtidal zone)
- Fuel and chemical storage
- Nearby anadromous streams (salmon)
- Major natural and man-made features (on site or nearby)
- Bottom characteristics (sand, mud, silt, clay, bedrock, cobble, shells, rockweed, algae/seaweed)
- Locations of all known existing uses, as provided in Section E of this application
- Legend box (example on previous page)

d. **Cross-Sectional Diagram(s)** - Provide Cross-Sectional Diagram(s) of all support facilities, equipment, and gear showing their placement and anchoring systems (See Figure 5). Note that more than one diagram may be required. Label it "Figure 5" (and so on) and show the following information:

- Distance between all facilities, gear or equipment on the proposed farm site
- Distance from bottom of gear to ocean bottom at mean lower low tide
- If suspended or on-bottom culture:
  - water depth at low tide
  - major on-bottom physical features (e.g. bottom contours)
- Dimensions of the anchoring configuration and poundage
- Dimensions of the marker buoy configuration
- Scale
- Legend box (example on previous page)

e. **Detailed Drawing(s)** - Provide Detailed Drawing(s) of all support facilities, equipment, and gear (See Figure 5). Note that more than one diagram may be required. Label and show the following information:

- 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.
- Legend box (see below\*)

## 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. Are 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 > 60° F and < 31° F may pose problems such as Vibrio bacteria contamination or icing.)
5. Is there any significant freshwater influence near the farm? Yes  No
6. (Note: freshwater may impact shellfish growth and/or survival or carry fecal coliform or other pollutants)
7. Is the salinity concentration at your proposed farm site above 28 ppt? Yes  No
8. Have you monitored the phytoplankton (microalgae) abundance and types during the main grow-out season? Yes  No  If yes, findings: \_\_\_\_\_  
(Note: shellfish depend on phytoplankton for food, but harmful phytoplankton can prevent harvest/sales.)
9. Have you monitored suspended sediments or turbidity (e.g. water clarity/transparency using a secchi disc) at your proposed farm site? Yes  No  If yes, findings: \_\_\_\_\_  
(Note: This is used as rough check for microalgae densities, run-off, and glacial silt (milky- grey color).)
10. For on-bottom culture, are the bottom characteristics suitable for the proposed species? Yes  No   
Sand  Mud  Silt  Clay  Bedrock  Cobble  Shells  Rockweed  Other \_\_\_\_\_
11. What is the bottom contour like? Flat  Steep  or Rough
12. 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): \_\_\_\_\_ Water depth at low tide (in ft): \_\_\_\_\_

13. 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: \_\_\_\_\_
14. Is your proposed site more than 300 ft from an anadromous fish (e.g. salmon) stream? Yes  No
15. Are you aware of any eelgrass or kelp beds on or near your proposed farm site? Yes  No  If yes, describe: \_\_\_\_\_
16. For farming using on-bottom culture methods, what is the approximate density of the target species on the proposed farm site? High  Medium  Low
17. What are the shellfish predators and what measures will you take to control, discourage, or eliminate them at your proposed farm site? \_\_\_\_\_
18. 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"/> commercial fishing                                     |
| <input type="checkbox"/> timber harvest or transfer             | <input type="checkbox"/> sport fishing  |
| <input type="checkbox"/> residential use                        | <input type="checkbox"/> salmon hatcheries                                      |
| <input type="checkbox"/> harbor development                     | <input type="checkbox"/> hunting  |
| <input type="checkbox"/> sheltered boat anchorage               | <input type="checkbox"/> seafood processing plants                              |
| <input type="checkbox"/> seaplane landing                       | <input type="checkbox"/> upland access route(s) areas, bear trails, etc.        |
| <input type="checkbox"/> commercial lodges                      | <input type="checkbox"/> wildlife uses, (e.g. shorebirds, sea mammal haul-outs) |
| <input type="checkbox"/> sightseeing                            | <input type="checkbox"/> subsistence; list species and frequency _____          |
| <input type="checkbox"/> recreation                             | _____   |
| <input type="checkbox"/> tourism                                | _____   |
| <input type="checkbox"/> historical/cultural/archeological site |   |
| <input type="checkbox"/> other aquatic farm projects            |   |
| <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\*

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.

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

\*Note: Annual rent for associated housing facilities will be determined by fee schedule, reviewed every two years by the Department of Natural Resources Appraisals Section to comply with the two-year age provision of AS 38.05.840.

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.

2. Enclosed Processing Facility

a. Are you proposing any enclosed processing facility? Yes  No

If yes, the proposed size will be: \_\_\_\_\_ (Width) \_\_\_\_\_ (Length) \_\_\_\_\_ (Height)

Please attach diagrams/drawings with labels clearly showing the processing facility.

3. Upland Property

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.

If you are the adjacent upland owner, are you applying for a preference right under 11 AAC 63.040(f)?

Yes  No

a. 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

4. 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.

CITY/BOROUGH	PHONE	CONTACTED?	
<input type="checkbox"/> Ketchikan Gateway Borough – Planning & Community Development....	228-6625	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> City of Craig – Planning & Zoning.....	826-3275	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> City and Borough of Juneau – Permit Center.....	586-0770	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> City and Borough of Sitka – Planning & Community Development.....	747-1824	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> City of Thome Bay .....	828-3380	Yes <input type="checkbox"/>	No <input type="checkbox"/>

City and Borough of Yakutat – Planning & Zoning Commission..... 784-3281 Yes  No   
 Kenai Peninsula Borough – Land Management Division..... 714-2200 Yes  No   
 Type of authorization required by City or Borough: \_\_\_\_\_

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

Do you plan to use a boat on your farm site? Yes  No  If yes, indicate the type of marine sanitation device. \_\_\_\_\_

1. If you plan to have personnel housing or caretaker facilities:  
 Will wastewater be discharged from these facilities? Yes  No  If yes, what are the daily maximum and average discharge volumes? Maximum \_\_\_\_\_ Average \_\_\_\_\_
2. 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. \_\_\_\_\_

3. 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. \_\_\_\_\_

4. Are you aware of any other planned development in the general area of your proposed site?  
 Yes  No  If yes, describe the planned development. \_\_\_\_\_

5. The DEC may request that you provide a map for certain projects to show 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

**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 Department of Army (DA) permit application.

**J. APPLICATION SIGNATURE BLOCK**

**AQUATIC FARM APPLICATION SIGNATURE AND PROGRAM CERTIFICATION STATEMENT**

The information contained in this aquatic farm application is true and complete to the best of my knowledge and certify that the proposed activity complies with, and will be conducted in a manner consistent with all State and Federal Agency policies and regulations. I understand that modifications to the proposed activity may require additional review and 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 \_\_\_\_\_

I have enclosed the application fee.

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

Your 10-year operation and development plan (ODP) 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 (CUR) 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 CUR applies to the combined total of all species and is not a "per species" requirement. The 10-Year ODP 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 mortality rates. **\*Note: You must complete one 10-Year Operation and Development Plan for each species you propose to farm.**

AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(8) and confidentiality is requested, AS 43.05.230, or AS 45.48). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210. In submitting this form, the applicant agrees with the Department to use "electronic" means to conduct "transactions" (as those terms are used in the Uniform Electronic Transactions Act, AS 09.00.010 – AS 09.00.195) that relate to this form and that the Department need not retain the original paper form of this record: the department may retain this record as an electronic record and destroy the original.



**\*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. Provide an estimate of the total days and number of people (including yourself) that will be needed to operate your farm site for each year:

Year 1:	Number of Days _____	Number of People _____
Year 2:	Number of Days _____	Number of People _____
Year 3:	Number of Days _____	Number of People _____
Year 4:	Number of Days _____	Number of People _____
Year 5:	Number of Days _____	Number of People _____

2. 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. For on-bottom culture, if you intend to use predator netting, how long will you keep netting over your product? \_\_\_\_\_ (months)

3. 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: \_\_\_\_\_

**4. 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 \_\_\_\_\_

**5. 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 total production using farm gate value by the end of year 5?  
\$ \_\_\_\_\_

**6. 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?  
\_\_\_\_\_  
\_\_\_\_\_

<b><u>PART A – SIGNATURE BLOCK</u></b>	
Signature: _____	Date: _____

AS 38.05.035(a) authorizes the director to decide what information is needed to process an application for the sale or use of state land and resources. This information is made a part of the state public land records and becomes public information under AS 40.25.110 and 40.25.120 (unless the information qualifies for confidentiality under AS 38.05.035(a)(8) and confidentiality is requested, AS 43.03.230, or AS 45.48). Public information is open to inspection by you or any member of the public. A person who is the subject of the information may challenge its accuracy or completeness under AS 44.99.310, by giving a written description of the challenged information, the changes needed to correct it, and a name and address where the person can be reached. False statements made in an application for a benefit are punishable under AS 11.56.210. In submitting this form, the applicant agrees with the Department to use "electronic" means to conduct "transactions" (as those terms are used in the Uniform Electronic Transactions Act, AS 09.80.010 - AS 09.80.195) that relate to this form and that the Department need not retain the original paper form of this record; the department may retain this record as an electronic record and destroy the original.

## 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	
	Support Facilities <sup>1</sup>	Equipment/ Gear Types And Numbers <sup>2</sup>			Anchoring Systems	Projected Sales <sup>3</sup> (\$)
(Year 1) 20__					\$	
(Year 2) 20__					\$	
(Year 3) 20__					\$	
(Year 4) 20__					\$	
(Year 5) 20__					\$	

<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 \$7,000 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**

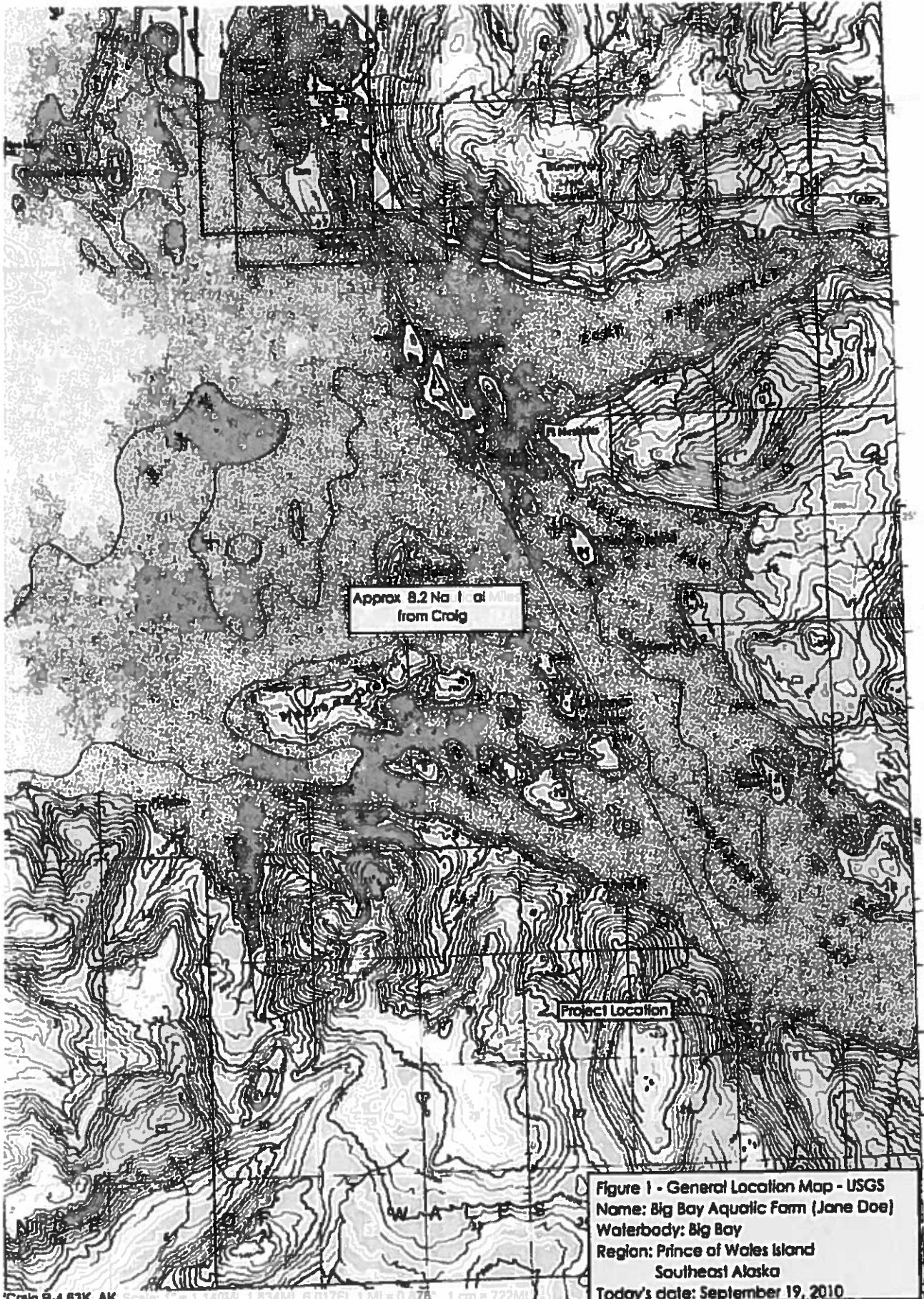
Name \_\_\_\_\_ ADL Number \_\_\_\_\_ ADF&G Permit No. \_\_\_\_\_ -AF- \_\_\_\_\_ Species \_\_\_\_\_  
 (Individual plan required for each species)

Calendar Year	Installation Schedule of New Structures (Corresponds with diagrams and drawings)		# 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 Number <sup>2</sup>			Anchoring Systems	Projected Sales <sup>3</sup> (\$)	# of Animals
(Year 6) 20__					\$		
(Year 7) 20__					\$		
(Year 8) 20__					\$		
(Year 9) 20__					\$		
(Year 10) 20__					\$		

<sup>1</sup> Support facility includes: caretaker, storage, or processing facilities, work rafts, etc.  
<sup>2</sup> Equipment includes: grow-out rafts, longlines, buoys, etc. Gear includes: 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 \_\_\_\_\_



**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

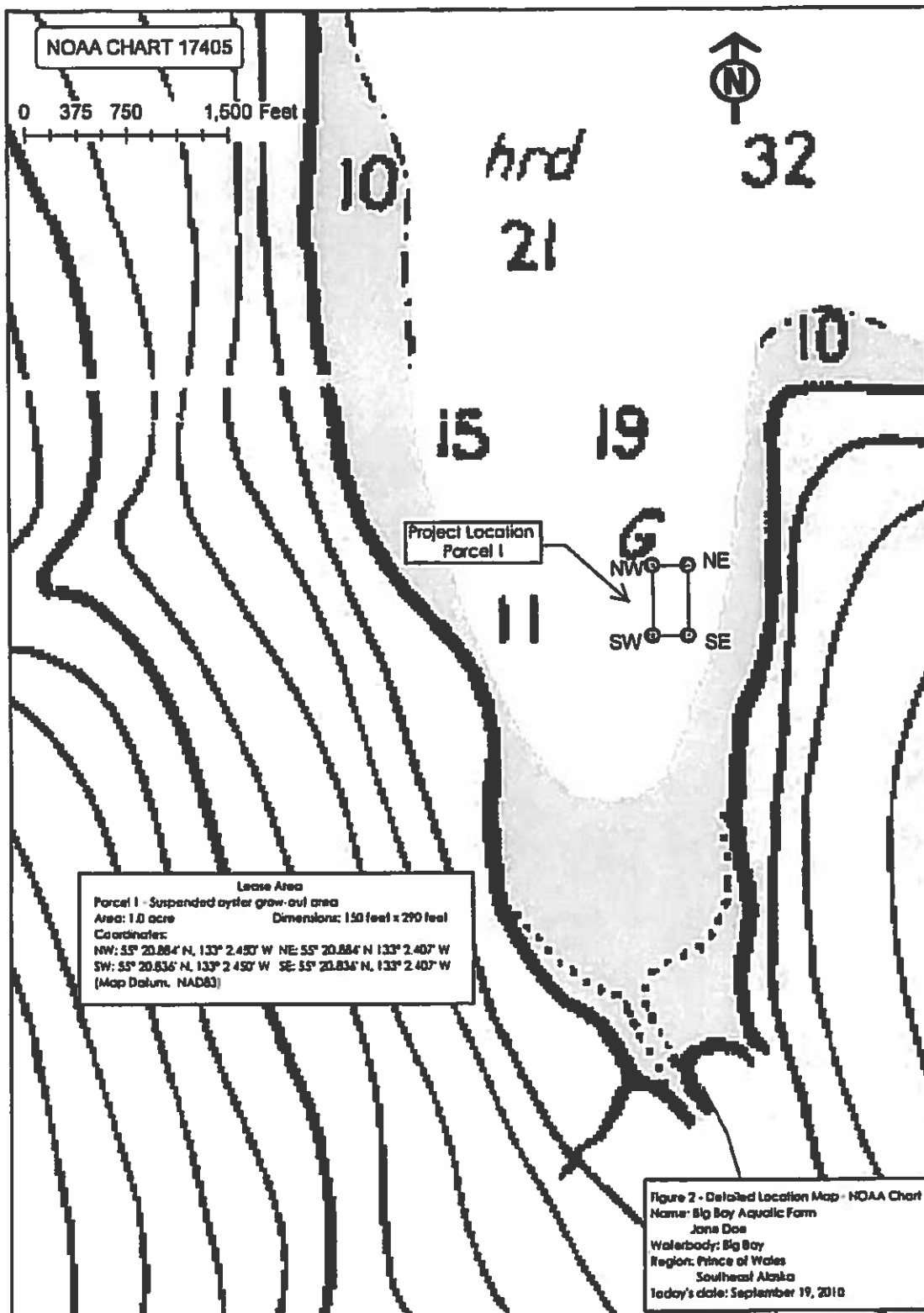
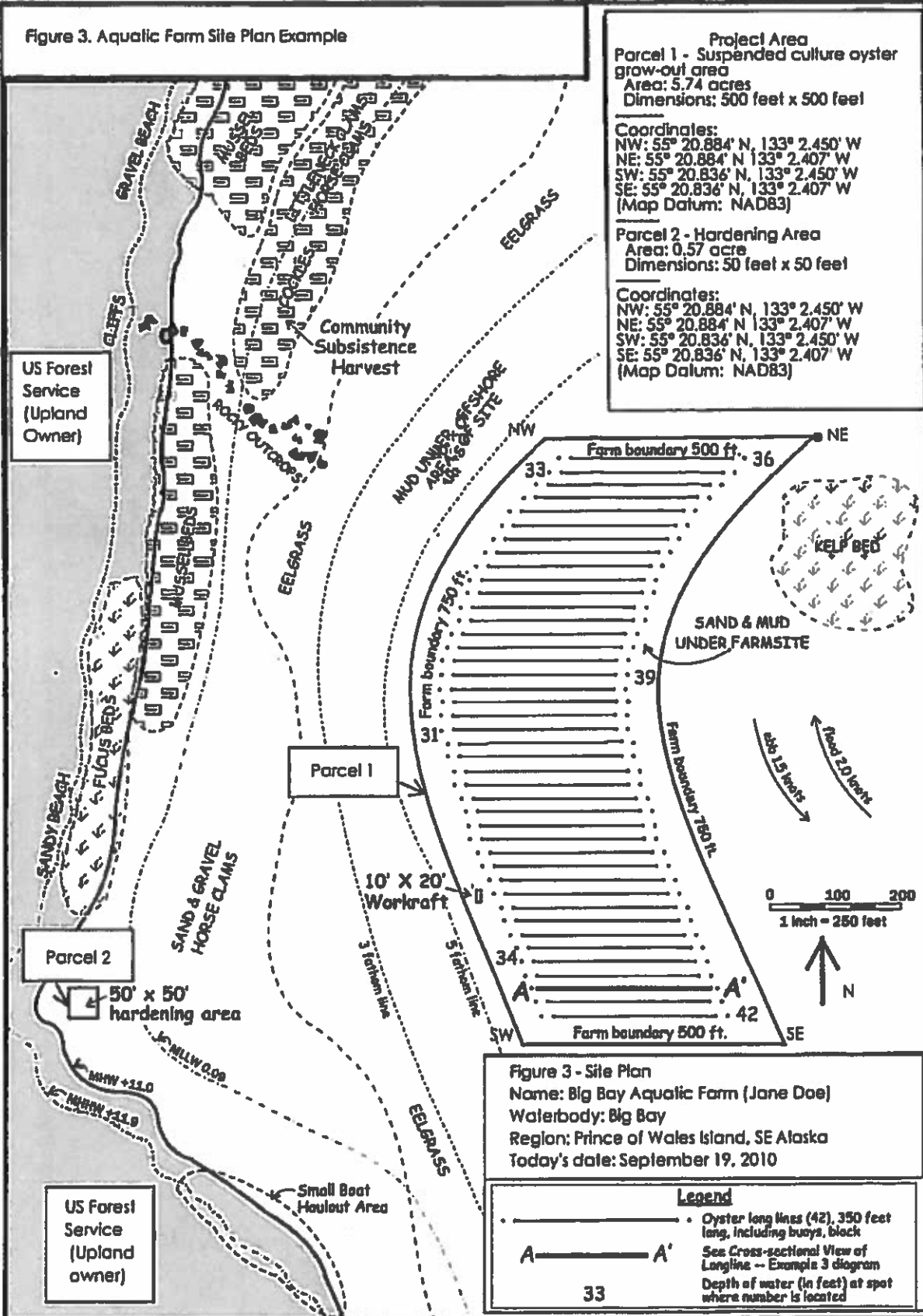


Figure 3. Aquatic Farm Site Plan Example



**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, black
  - See Cross-sectional View of Longline -- Example 3 diagram
  - Depth of water (in feet) at spot where number is located

Figure 4. Aquatic Farm Site Plan Example 2

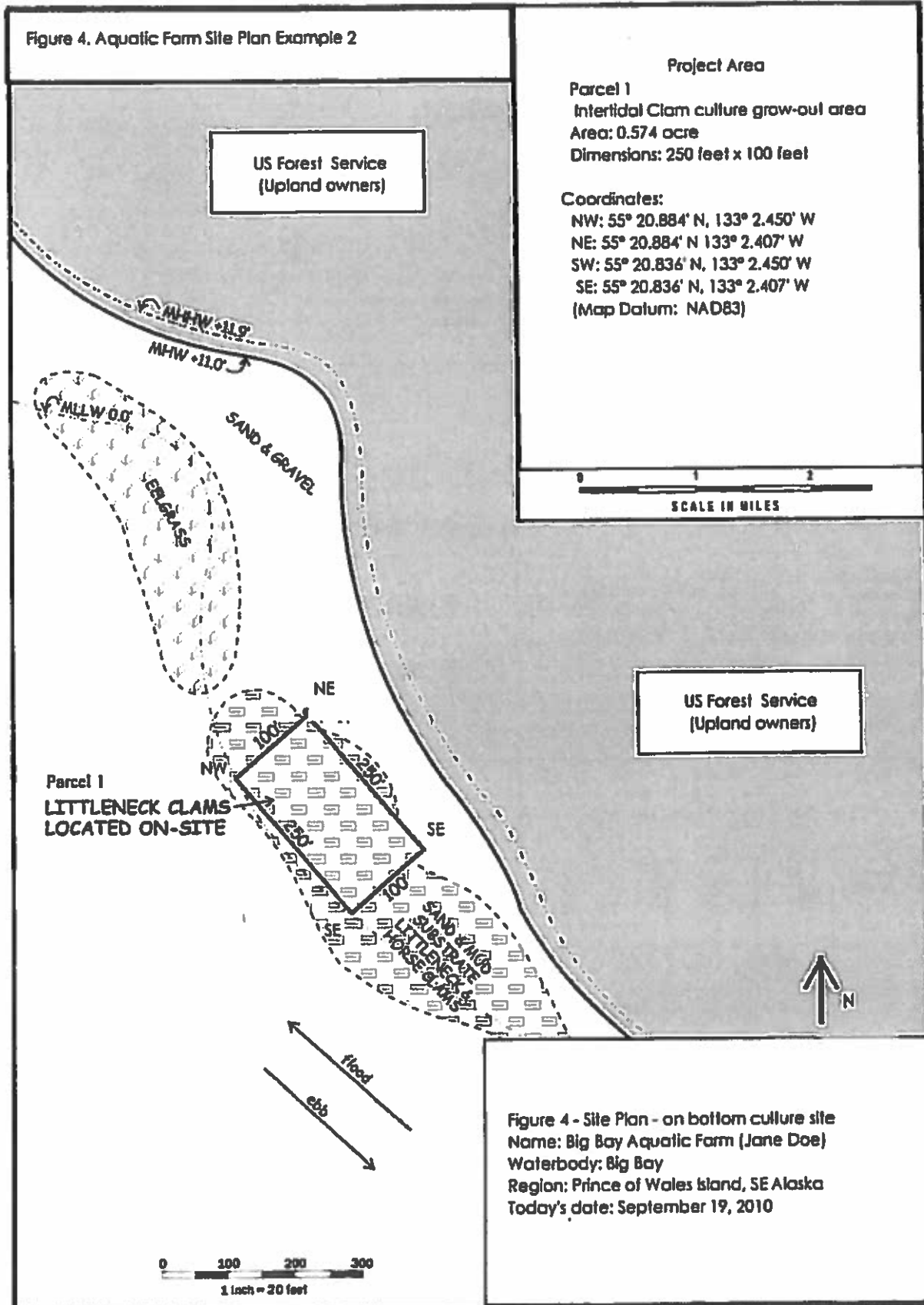
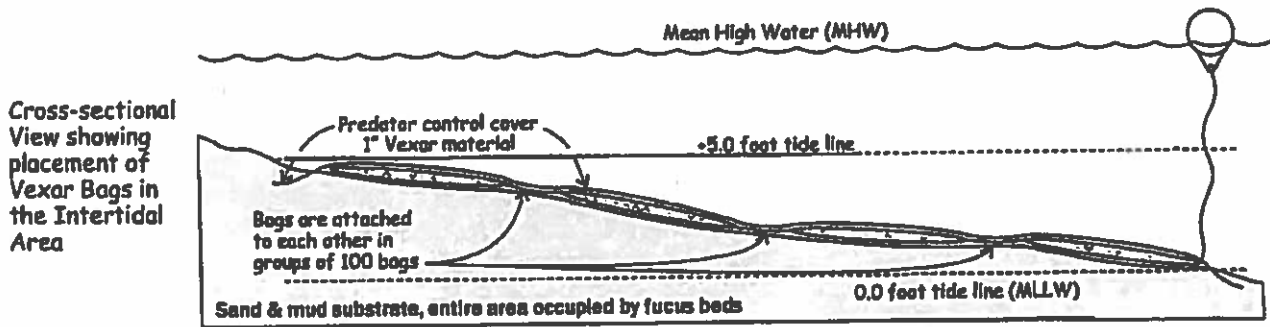
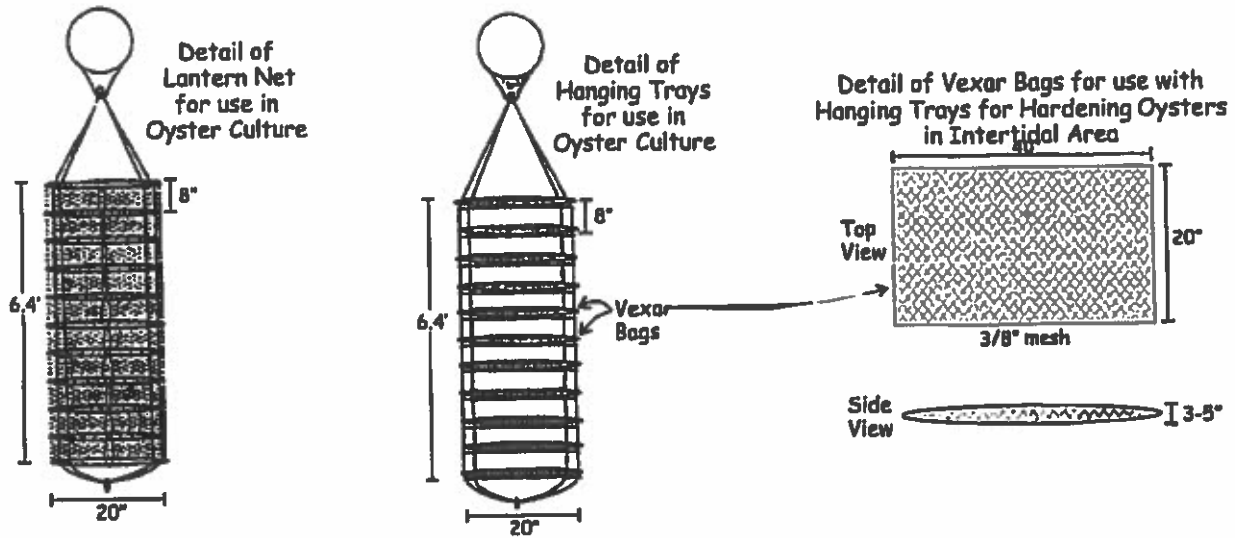
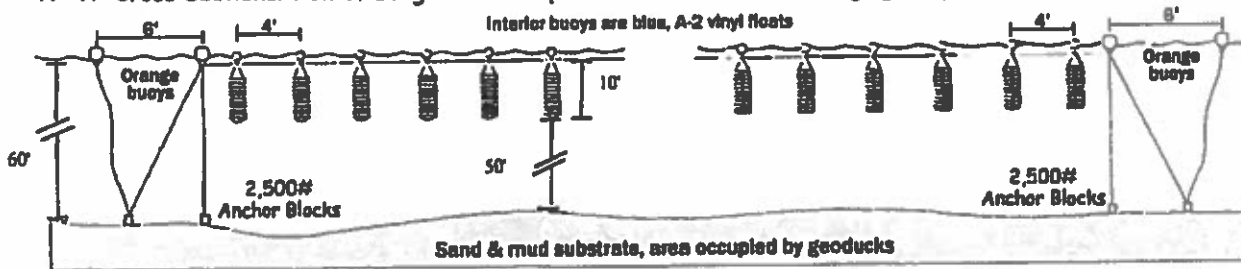


Figure 5. Aquatic Farm Cross-Sectional Diagrams and Drawings Examples



A - A': Cross-sectional view of Longline for suspended Lantern Nets & Hanging Trays



Cross-sectional View of Hardening Site

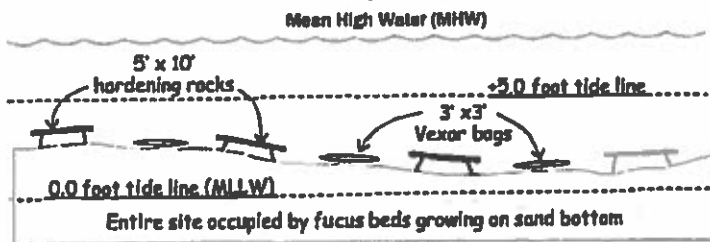


Figure 5 - Detailed Cross-sectional Diagrams and Drawings

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