For Office Use Only	ADNR File No: _____	DATE STAMP:
	ADF&G No: _____	

Alaska Aquatic Farm Program
Joint Agency Application – Part II

You are encouraged to submit a completed application as early in the filing period as possible. The current 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 ADNR and ADF&G to discuss your project. The original application including attachments and all required fees must be delivered and present in the Alaska Department of Natural Resources office no later than April 30th.

The project location is in: ☐ **Southeast Alaska** ☐ **Southcentral Alaska**

☐ **Kodiak** ☐ **Alaska Peninsula** ☐ **Other**

This project is: ☐ **First Time Application** ☐ **Renewal Application**

A. APPLICANT INFORMATION

_____ Name

_____ Business Name (If Applicable)

_____ Mailing Address (PO Box or Street Address)

_____ City State Zip

_____ Email Address

_____ Home/Office Phone Cell Phone

_____ Contact Name

_____ Contact Phone Number

_____ Business Partner Name (If applicable)

_____ Business Partner Email Address (If applicable)

_____ Business Partner Phone (If applicable)

B. PROJECT DESCRIPTION

In the space provided below, 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. If additional space is necessary, **please attach a separate document labeled "PROJECT DESCRIPTION". Example information for project narrative can be found in Attachment I.**

PROJECT DESCRIPTION

DATE SUBMITTED: _____

Company Name

Site Location [*Include water body, distance from nearest community, any landmarks, general region of Alaska, and whether on state tidal and/or submerged lands or private. Provide enough information to understand where it is located.*]

Site Dimensions, Acres for Each Parcel

Total Acres of All Parcels

Species You Intend to Farm [*Include scientific and common species name*]

Culture Method [*Describe operation activities to be done onsite such as outplanting of seedstock, husbandry techniques to be used (culling, sorting, washing, etc.), maintenance and monitoring activities, management of fouling organisms and incidental species, predator control measures, and schedule of activities such as timing of outplanting seeded lines or adding seedstock into trays, etc. Describe what methods you plan to use based on the definition in **5 AAC 41.400(6)**. "Culture" means to use or the use of methods to manipulate the biology and the physical habitat of a desired species to optimize survival, density, growth rates, uniformity of size, and use of the available habitat, and to efficiently produce a product suitable for a commercial market.*]

Culture Gear and Equipment (Type, Size, Number, Configuration, Material, and Anchoring System) [*If more than one parcel, indicate what parcel specific gear will be located on. If more than one species, indicate gear to be used for each. Gear includes any structure that holds or protects the organism like trays, tiers of lantern nets, Vexar bags, OysterGro system, grow-out submerged longlines, predator netting, longlines, buoys, depth control systems, etc. Include approximate installation schedule, or if and what gear will remain installed year-round etc.*]

Seed Acquisition Plan (Commercially produced and/or wildstock) [*Commercially produced juveniles or seed stock must be obtained from an approved seed source. Do you intend to collect wildstock juveniles or natural set organisms for direct culture on your proposed site? Yes/No. If yes, describe collection methods (applicable for indigenous species: i.e. mussels, scallops, abalone, natural set aquatic plants, etc. This does not refer to broodstock collection on behalf of hatcheries for propagation. If increasing number of acquisitions per year, indicate projected amounts per year. Aquatic plant species can be combined into total feet of line per year.]*

Harvest Equipment and Method [*Describe harvest equipment and methods to be used, activities to be done onsite, and schedule of harvest of aquatic farm product. If more than one species, include harvest information for each species or group of species like macroalgae if the harvest information is the same.*]

Support Facilities (Type, Size, Number, Configuration, Material, and Anchoring) [*Support facilities include caretaker facility, storage rafts, work rafts, processing rafts, etc.*]

Access to and from Site [*Include nearest community, transportation type used and how many times traversing back and forth*]

Storage Location of Equipment and Gear When Not in Use [*Include whether on private lands and nearest community*]

C. PROJECT OPERATION PLAN

1. **How will support facilities, culture gear and anchoring systems be maintained?**
   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) **Off months** _____ (days/month)
   b. How will you keep the gear and shellfish free of fouling organisms (hot-dip, air dry, pressure washing, etc.)?

   c. How will you manage reduction of competing species over the course of operations (relocate sea stars, grow-out cages, or other possible protection from competing species)?

   d. If you intend to use predator netting, how long will you keep netting over your product?

      _____ (months)
   e. If using predator netting, how will you minimize impacts on non-target species, including seabirds, seals, sealions, walrus and whales?

      _____

2. **Projected Harvest Rotation Consistent with Life History**
   a. How often do you intend to harvest your product by species?

      _____
   b. Do you plan on utilizing density manipulation by culling or redistribution?

c. What techniques will be used to optimize growth or condition of product?

3. Acquisition of hatchery or wild seed

a. Will you use a certified or approved shellfish seed source(s)? **Yes** ☐ **No** ☐

b. Will you use an Alaska kelp hatchery? **Yes** ☐ **No** ☐

c. How do you intend to collect wild seed? (Applicable for indigenous species: i.e. clams, natural set kelp, invertebrates, etc.)

_____

4. Describe how operation of the aquatic farm will improve the productivity of species intended for culture not covered by the previous questions (examples: predator exclusion, reduction of competing species, density manipulation by culling/redistribution, importing natural or hatchery seed, program harvest to optimize growth/condition and habitat improvement)?

D. 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). If you are applying for more than three parcels or your proposed parcels have other than four corners, please provide those coordinates in your project description or on a separate sheet.

Parcel 1:	NE Corner	No. 1: Latitude _____	Longitude _____
_____	SE Corner	No. 2: Latitude _____	Longitude _____
(e.g. Grow-out Area)	SW Corner	No. 3: Latitude _____	Longitude _____
	NW Corner	No. 4: Latitude _____	Longitude _____
Parcel 2:	NE Corner	No. 1: Latitude _____	Longitude _____
_____	SE Corner	No. 2: Latitude _____	Longitude _____
(e.g. Hardening Area	SW Corner	No. 3: Latitude _____	Longitude _____
	NW Corner	No. 4: Latitude _____	Longitude _____
Parcel 3:	NE Corner	No. 1: Latitude _____	Longitude _____
_____	SE Corner	No. 2: Latitude _____	Longitude _____
(e.g. Support Facility Area)	SW Corner	No. 3: Latitude _____	Longitude _____
	NW Corner	No. 4: Latitude _____	Longitude _____

2. Site Size

Please use the following formula to compute area. For more complex parcel shapes, you may wish to use the Measure Area tool in Alaska Mapper found at https://mapper.dnr.alaska.gov/. If you are applying for more than three parcels or your parcels are not rectangular, you may provide this information in the project description or on a separate sheet.

1. To compute the total area (sq. ft), multiply the width (ft) by the length (ft) of 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 acreage of each Parcel to get the total tideland acreage for your proposed farm site.
5. Write the Total Acreage 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 Acreage)

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

3. Maps and Diagrams

Provide copies of maps and diagrams including general and detailed location maps, site plan map (an overview), cross-sectional diagram and detailed drawings. If the project has multiple parcels, you must provide maps of each parcel. 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 mapping resources is provided below:

Alaska Mapper	https://mapper.dnr.alaska.gov/
Alaska Ocean Observing System Mariculture Map	https://mariculture.portal.aoos.org/
NOAA Nautical Charts	www.charts.noaa.gov
ShoreZone Mapping System	https://www.fisheries.noaa.gov/alaska/habitat-conservation/alaska-shorezone
Catalog of Anadromous Streams	https://www.adfg.alaska.gov/sf/sarr/awc/

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

FORMATTING	LEGEND BOX EXAMPLE
Figure No. and Title	Figure 1 Detailed Location Map
Applicant Name (Business Name)	Alaska's Best Oysters
Waterbody	Jerryton Bay
Area/Region	East of Prince of Wales Island, Southeast AK
Today's Date	March 30, 2012

a. **General Location Map** - This map is a larger scaled map showing larger surrounding area with less detail (See Attachment 2, 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 on previous page)

b. **Detailed Location Map** - This map is a smaller scaled map showing more detail (See Attachment 2, 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)
- ☐ Directional arrow identifying North
- ☐ Scale on map
- ☐ Legend box (example on previous page)

  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 Attachment 2, Figures 3 and 4). Label it "Figure 3" and show the following information:

- ☐ All in-water structures and anchoring systems (All anchoring systems and anchor scope have to be <u>inside</u> the farm parcel boundary)
- ☐ 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 (fish)
- ☐ Distance between all facilities, gear or equipment on the proposed farm site
- ☐ 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 Attachment 2, Figure 5). Note that more than one diagram may be required. Label it "Figure 5" (and so on) and show the following information:

- ☐ 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 (sand, mud, silt, clay, bedrock, cobble, shells, rockweed, algae/seaweed) and contours
- ☐ Dimensions of the anchoring configuration and poundage
- ☐ Scale
- ☐ Legend box (example on previous page)

e. **Detailed Drawing(s)** - Provide Detailed Drawing(s) of all support facilities, equipment, and gear (See Attachment 2, 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
- ☐ Legend box (example on previous page)

E. SITE SUITABILITY – PHYSICAL AND BIOLOGICAL CHARACTERISTICS

1. Is the proposed location protected from severe storms, strong currents, winter ice, etc. and if not, is the farm designed for extremes?
   Yes ☐ **No** ☐ Additional Information _____
2. Does your site have suitable water exchange for species of culture? **Yes** ☐ **No** ☐
3. Are water temperatures suitable for proposed species of culture? **Yes** ☐ **No** ☐
   (Note: temperatures > 60° and < 31° F may pose problems such as Vibrio bacteria contamination or icing.)
4. 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)
5. Is the salinity concentration at your proposed farm site appropriate for species of culture? **Yes** ☐ **No** ☐
6. 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.)
7. 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).)
8. For on-bottom culture, are the bottom characteristics suitable for the proposed species? **Yes** ☐ **No** ☐
   Substrate and vegetation? _____
9. For on-bottom culture, how will bottom characteristics be made suitable if not already?
   _____
10. For suspended culture, is the water depth sufficient to prevent gear from grounding and impacting the benthos under floating structures? Depth of Gear (in ft): _____ Water depth at low tide (in ft): _____
11. Is your proposed site more than 300 ft from an anadromous fish stream? **Yes** ☐ **No** ☐
12. Are you aware of any eelgrass or kelp beds on or near your proposed farm site? **Yes** ☐ **No** ☐ If yes, describe:

13. For farming using on-bottom culture methods, is there insignificant wild stock of the species to be cultured on the proposed farm site? (Reference 5 AAC 41.235) **Yes** ☐ **No** ☐ Additional information

14. Are there existing uses near your proposed farm site such as boat traffic, existing fisheries or a sensitive area as listed in section C of Part 1, etc. that may be impacted by the farm operation? **Yes** ☐ **No** ☐ If yes, describe how your farm can be sited to mitigate conflicting uses?

F. KNOWN EXISTING USES

Please check the boxes below, to indicate existing human and/or wildlife uses observed or known to exist at or within one mile of the proposed farm site. Indicate the locations of these existing uses on the Site Plan Map if specific locations are known (refer to page 8, Section 3c).

- ☐ mining
- ☐ timber harvest or transfer
- ☐ residential use
- ☐ harbor development
- ☐ sheltered boat anchorage
- ☐ seaplane landing
- ☐ commercial lodges
- ☐ sightseeing
- ☐ recreation
- ☐ tourism
- ☐ historical/cultural/archaeological site
- ☐ other aquatic farm projects
- ☐ commercial fishing
- ☐ sport fishing
- ☐ salmon hatcheries
- ☐ hunting
- ☐ seafood processing plant
- ☐ upland access route(s) areas, bear trails, etc.
- ☐ wildlife use, (e.g. shorebirds, sea mammal haul-outs)
- ☐ subsistence; list species and frequency

_____

☐ navigational channels: _____

☐ other; list _____

G. SUPPORT FACILITIES

1. Personnel/Caretaker Housing (additional annual fees apply)
   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.

2. Enclosed Processing Facility
   Are you proposing any enclosed processing facility? **Yes** ☐ **No** ☐

   If yes, the proposed size will be: _____ (Width) _____ (Length) _____ (Height)
   Please be sure the processing facilities are included in the maps and diagrams described in the Maps and Diagrams section above.

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** ☐

H. CITY AND BOROUGH CONTACTS

1. City/Borough Authorization
   If you are applying within a city or borough, please contact the appropriate authority 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?
☐ City of Cordova	907-424-6220	**Yes** ☐ **No** ☐
☐ City of Klawock	907-755-2261	**Yes** ☐ **No** ☐
☐ City and Borough of Wrangel	907-874-2381	**Yes** ☐ **No** ☐
☐ City of Craig – Planning & Zoning	907-826-3275	**Yes** ☐ **No** ☐
☐ City and Borough of Juneau – Permit Center	907-586-5252	**Yes** ☐ **No** ☐
☐ City and Borough of Sitka – Planning & Community Development	907-747-1814	**Yes** ☐ **No** ☐
☐ City of Thorne Bay	907-828-3380	**Yes** ☐ **No** ☐
☐ City and Borough of Yakutat – Planning & Zoning Commission	907-784-3323	**Yes** ☐ **No** ☐
☐ Kenai Peninsula Borough – Land Management Division	907-714-2205	**Yes** ☐ **No** ☐
☐ Kodiak Island Borough – Community Development	907-486-9363	**Yes** ☐ **No** ☐
☐ Lake and Peninsula Borough – Community Development	907-246-3421	**Yes** ☐ **No** ☐
☐ Aleutians East Borough – Permitting	907-383-2699	**Yes** ☐ **No** ☐
☐ Ketchikan Gateway Borough – Planning & Community Development	907-228-6610	**Yes** ☐ **No** ☐
☐ Haines Borough	907-766-6401	**Yes** ☐ **No** ☐

Type of Authorization required by City or Borough: _____

I. 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:
   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 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, boar 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. ADEC <u>may</u> 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

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 I 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 additional authorizations.

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 Shellfish Harvester or Shellfish Dealer 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 required under 11 AAC 05.230(d)(3)(A)**

In submitting this form, the applicant certifies that he or she has not changed the original text of the form or any attached documents provided by the Division. 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 09.80.010 - 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.

SAMPLE INFORMATION TO INCLUDE IN PROJECT DESCRIPTION OUTLINE

The proposed aquatic farm site is composed of four separate parcels located on state-owned tidal and submerged lands, totaling about 6.82 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);*
- *support facility area measuring 46 ft x 190 ft (0.20 acre) for a dock and storage (Parcel 3);*
- *Seasonal growing area measuring 200 ft x 600 ft (2.75 acres) for submerged growing lines for culture of ribbon and sugar kelp (Parcel 4).*

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. (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).

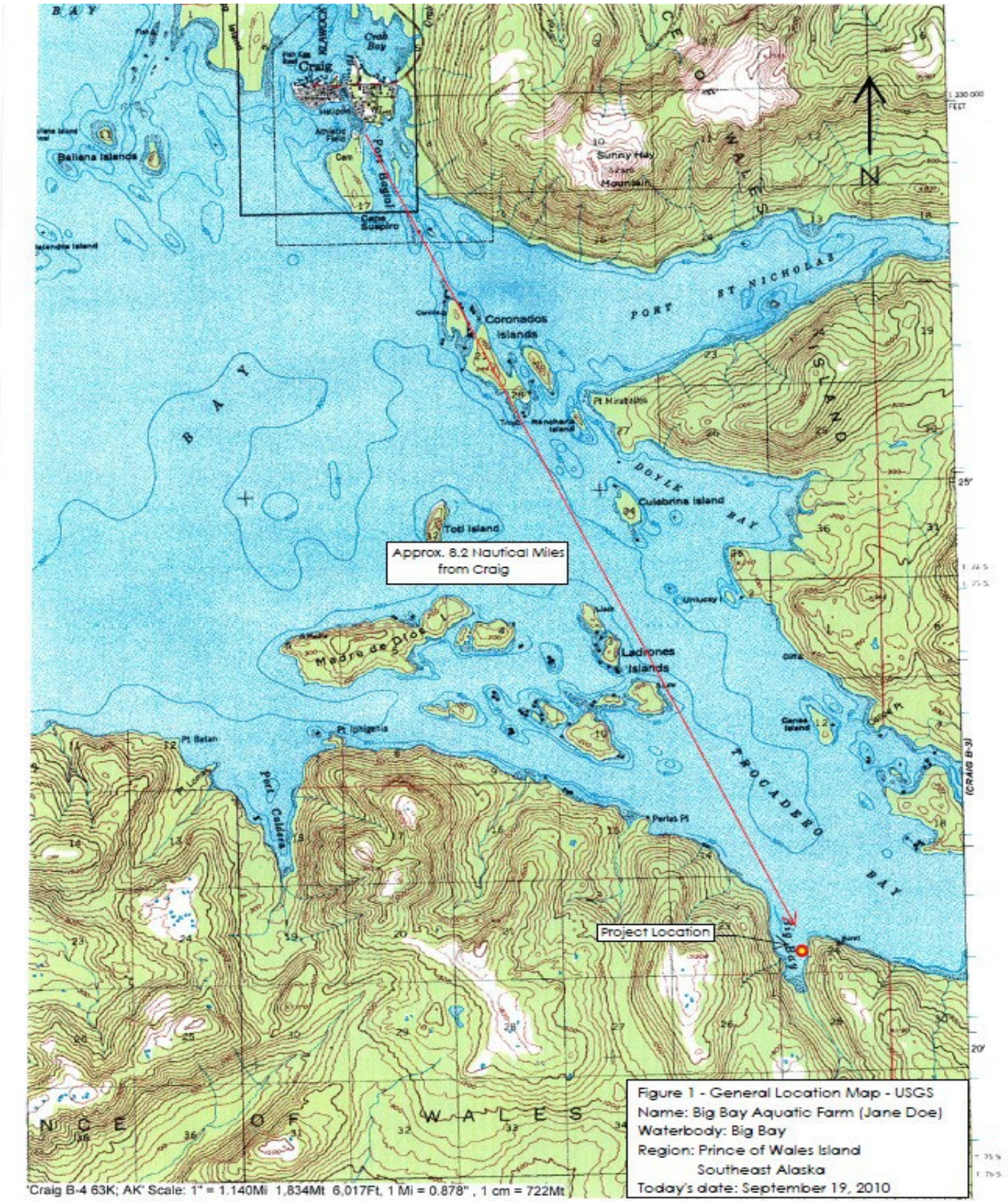
Parcel 2 will be used for hardening and defouling of Pacific oysters, using Aquamesh trays measuring 22 inches wide by 22 inches long by 6 inches deep (Attachment 11).

Parcel 3 will be for support facilities. A dock measuring 20 ft x 30 ft will be anchored on this parcel for storage of gear. Two 100-pound Danforth anchors and chain will be installed on year 2 and remain year-round. (Attachment 12)

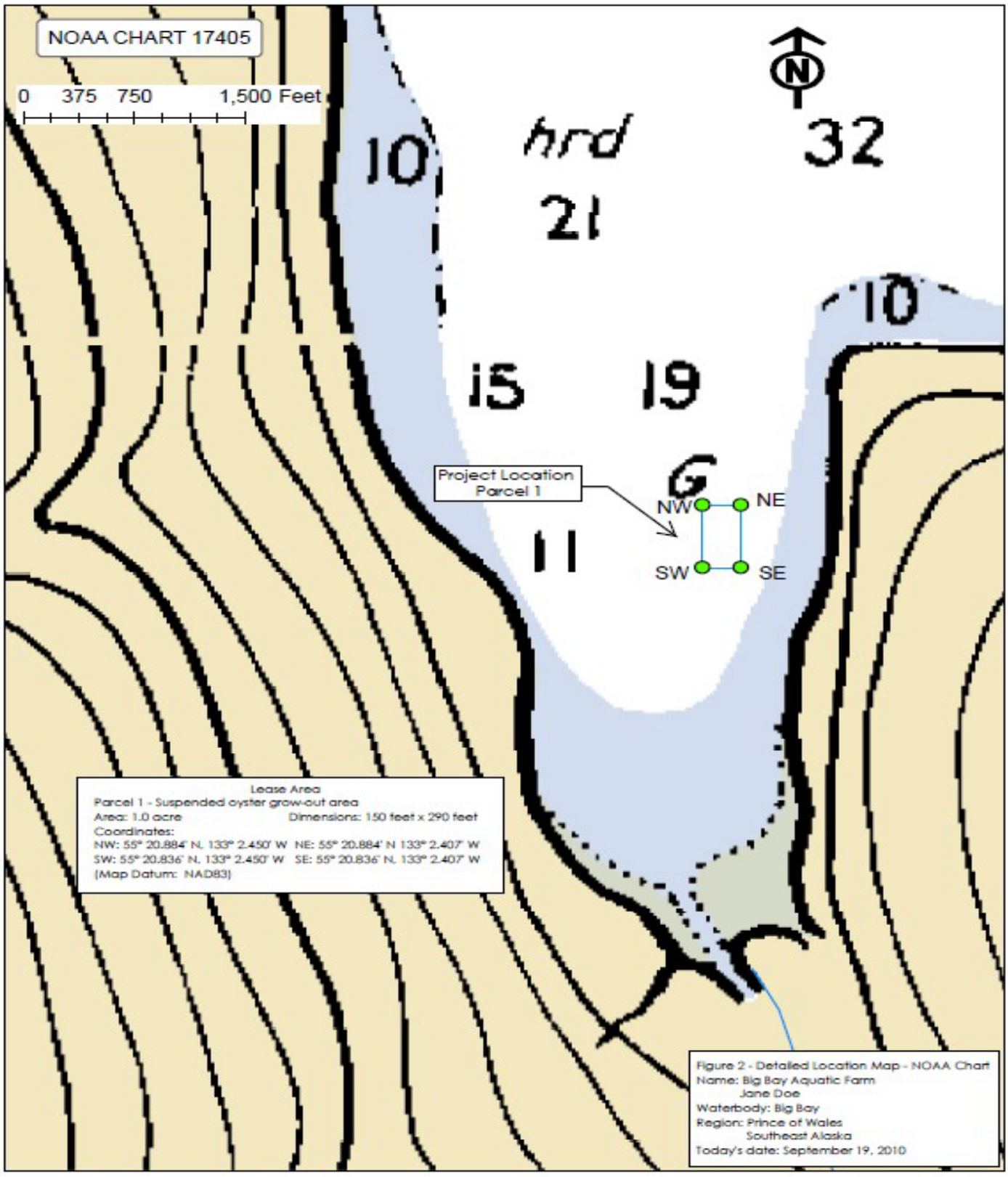
Parcel 4 will contain 20 – 400 ft longlines for culture of aquatic plants. Submerged longlines will be installed seasonally in October. Each line will be suspended 7 feet below the surface with depth-control systems with dropper weights and buoys. Harvest will occur in May and all culture gear removed. Anchors and mooring buoys will remain onsite year-round.

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.

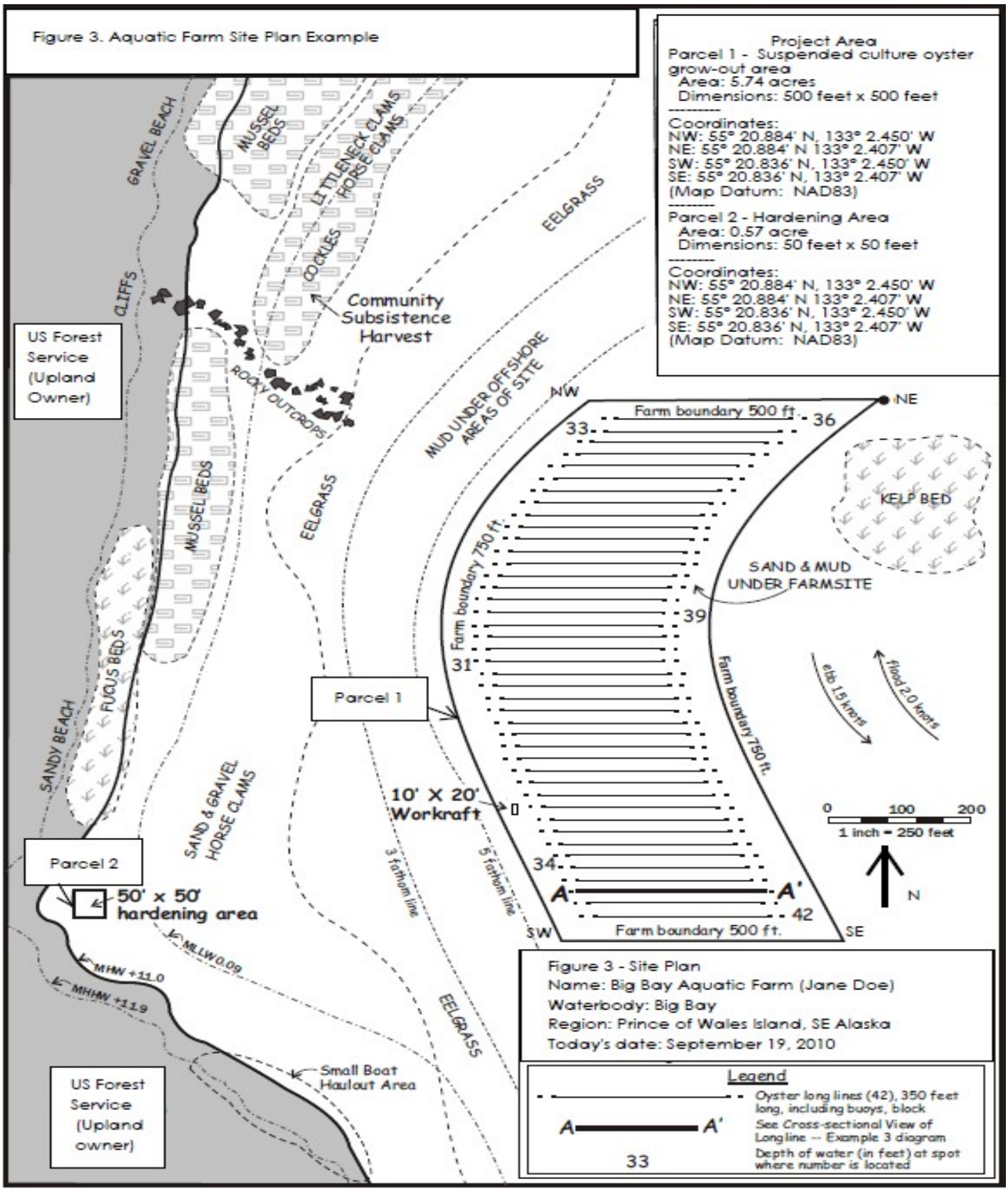
Attachment 2
Figure 1
Example General Location Map



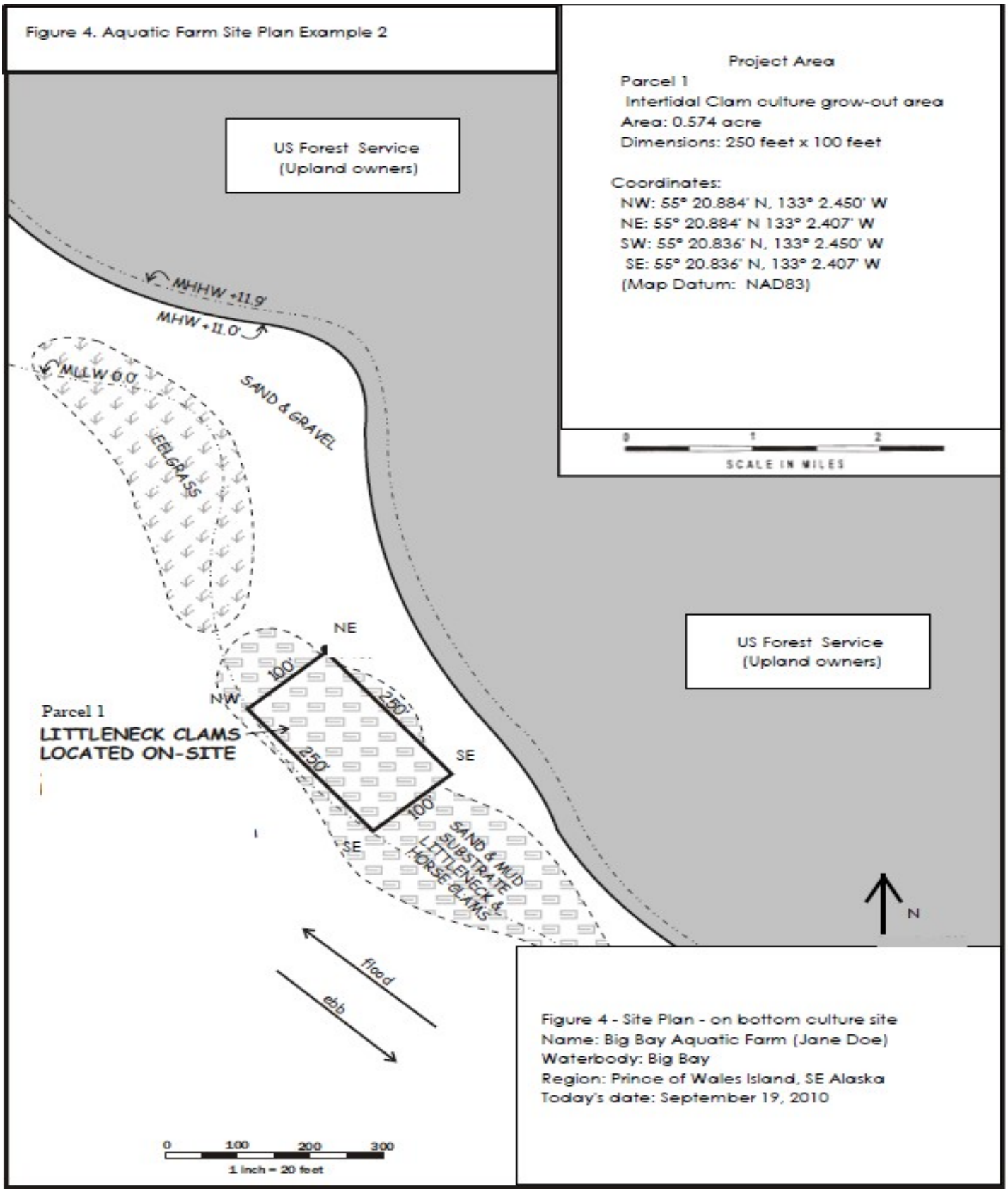
Attachment 2
Figure 2
Example Detailed Location Map



Attachment 2
Figure 3
Example Site Plan Map

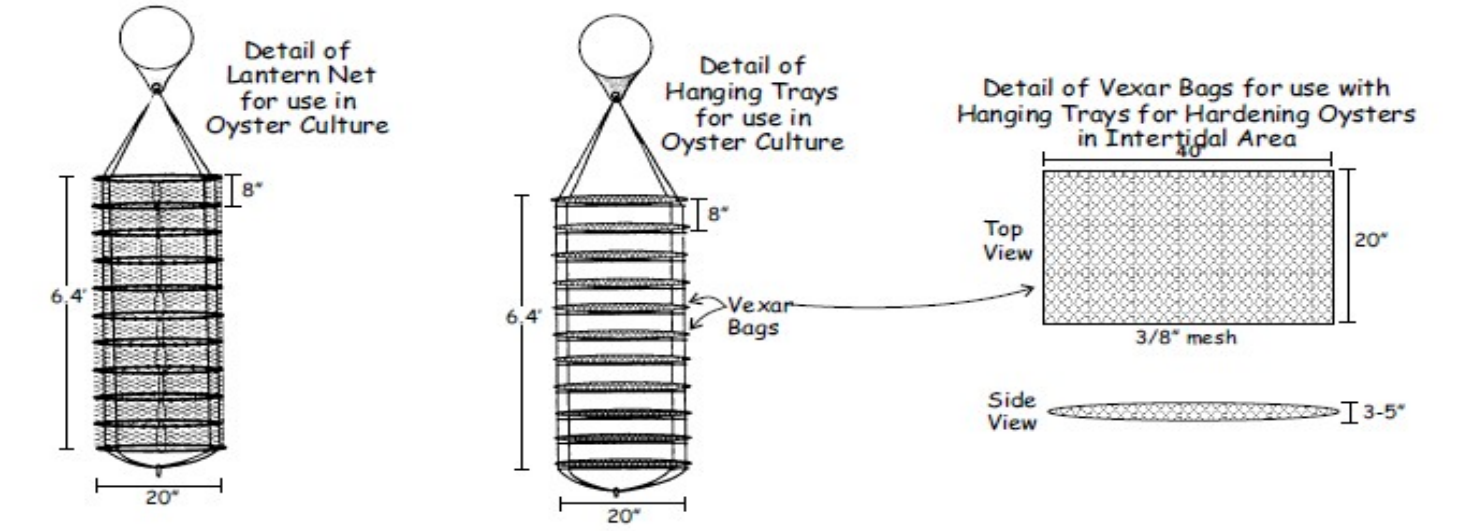


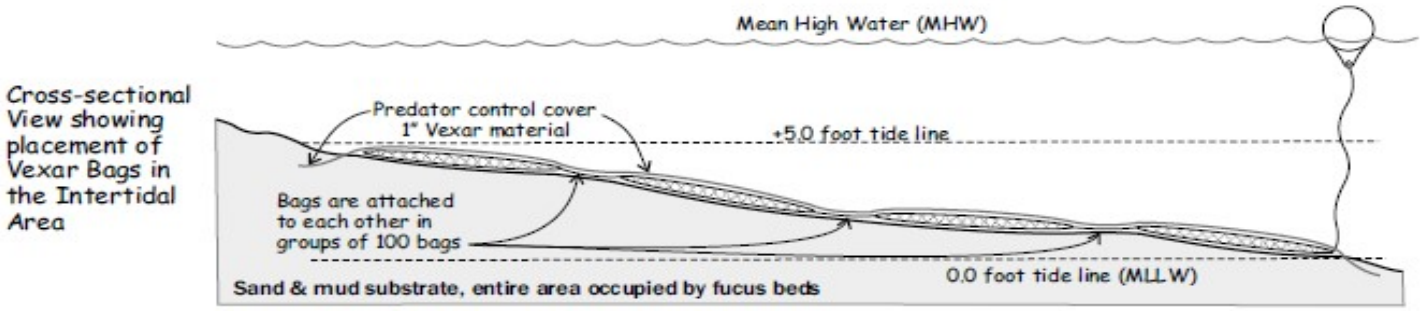
Attachment 2
Figure 4
Example Site Plan Map

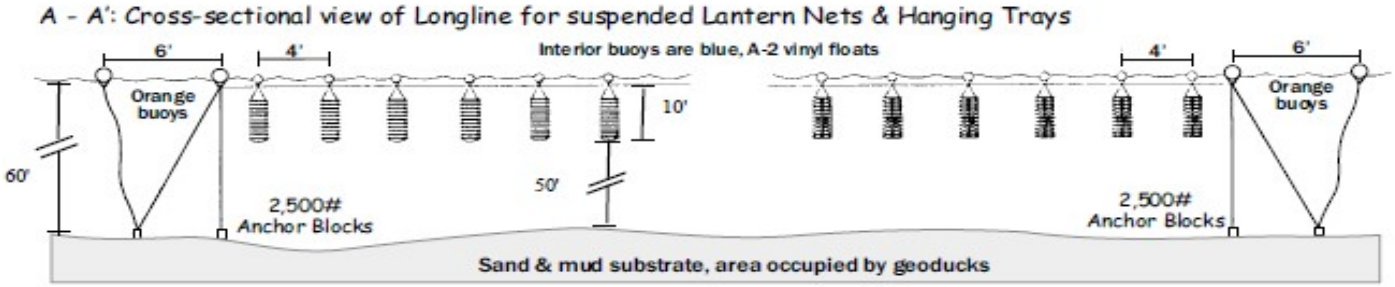


Attachment 2
Figure 5
Example Cross Sectional Diagram and Detailed Drawing

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







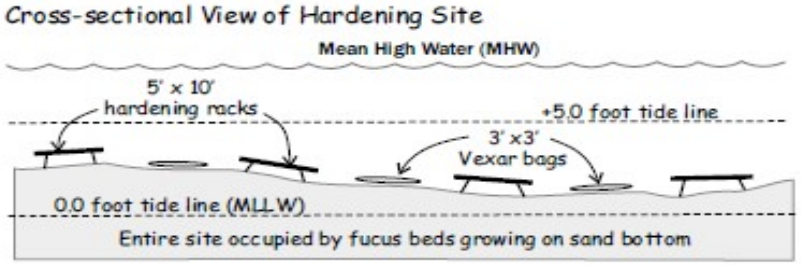


Figure 5 - Detailed Cross-sectional Diagrams and Drawings

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