



Alaska Department of Fish and Game
Division of Commercial Fisheries

Aquatic Farm Operation Permit
AMENDMENT REQUEST FORM

(no processing fee is required for these amendments)

Send Application to:
Mariculture Program
Alaska Department of Fish & Game
Division of Commercial Fisheries
P.O. BOX 115526
Juneau, AK 99811-5526
PHONE: (907) 465-6150
FAX: (907) 465-4168
cynthia.pring-ham@alaska.gov

A. PERMITEE INFORMATION

Aquatic Farm Operation Permit Number: DFG - ___ - ___ - AF- ___ DNR ADL Number: _____

Form with fields for Applicant name, Contact name, Company name, Mailing address, City, State, Zip Code, Phone Number, FAX, Mobile, and Email.

B. PROPOSED MODIFICATIONS

CHECK REQUESTED MODIFICATIONS

(may include more than one)

[] Change in Farm Production

[] Change Species for Culture

- [] Add Species
[] Remove Species

[] Change 1,2 to Culture Gear 3 and/or Equipment 4

- [] Increase Amount of Gear
[] New Culture Gear Type
[] Increase Amount of Equipment
[] New Equipment Type

[] Other Changes 2

INFORMATION REQUIRED FOR REVIEW

[] Sections C
[] Section H - Ten-Year Aquatic Farm Operation and
Development Plan: Part B Only

[] Sections C, D, E,
[] Section H - Ten-Year Aquatic Farm Operation and
Development Plan: Parts A & B (one for each species
added)

[] Sections C, E, F, G
[] Section H - Ten-Year Aquatic Farm Operation and
Development Plan: A & B (if change in production)

[] Section C
[] Other - Dependent on Amendment Request

1 Includes changes that are significant from what is currently approved gear and equipment in the operation permit.

2 For changes that increase obstructions to navigation or to other public uses, the permit holder needs to complete a Joint-Agency Amendment Request Form for all agencies to review.

3 Gear examples are floating bags, trays (plastic), cages (metal), lantern nets, flip-flop bags, vexar bags, PVC tubes, predator netting, other predator exclusion devices, etc.

4 Equipment examples are grow-out rafts, longlines, buoys, nursery FLUPSY, etc.

The information provided on this application and any attachments is true and complete to the best of my knowledge.

Print Permit Holder Name _____

Permit Holder Signature: _____

Date: _____

C. **AMENDMENT DESCRIPTION** - On a separate piece of paper, please provide a general description of your proposed modifications to your aquatic farm operation as described below.

Amendment Request	Description Checklist
All	<input type="checkbox"/> How change may impact any fisheries uses and/or fish and wildlife and their habitat at the farm site.
Change in Production	<input type="checkbox"/> Change in production and why
Change in Species for Culture	<input type="checkbox"/> Change in species and why <input type="checkbox"/> Culture method proposed <input type="checkbox"/> Aquatic farm site parcel(s) where change is proposed
Change in Culture Gear and Equipment	<input type="checkbox"/> Change in gear and equipment and why <input type="checkbox"/> Include type, size, dimension, number, mesh size, and construction materials <input type="checkbox"/> Culture method proposed <input type="checkbox"/> Aquatic farm site parcel(s) where change is proposed
Other	<input type="checkbox"/> Explanation of change requested and why <input type="checkbox"/> Aquatic farm parcel(s) where change proposed

D. **SPECIES CHANGE** - Mark any new species you propose to add to your permitted aquatic farm site. List species you no longer want to culture. Answer questions on suitability of location for new proposed species and culture method.

- Pacific oyster (*Crassostrea gigas*)
- Littleneck clam (*Protothaca stamina*)
- Cockles (*Clinocardium nuttalli*)
- Geoducks (*Panopea generosa*)
- Blue mussel (*Mytilus trossolus*)

- Aquatic Plants _____
- Other _____

Species to be removed from operation permit:

- 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.)
- 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 site)
- Is the salinity concentration at your proposed farm site above 28 ppt? Yes No
- What are the predators of the proposed species to be cultured and what measures will you take to control, discourage, or eliminate them at your proposed farm site? _____

- For proposed on-bottom culture methods at permitted intertidal sites:
 - What are the bottom characteristics suitable for the proposed species? Yes No (Mark those that apply) Sand Mud Silt Clay Bedrock Cobble Shells Rockweed Other _____
 - Is the bottom contour (Circle one) Flat, Steep, or Rough?
 - What is the approx. density of the target species on the site? High Medium Low None

E. **CULTURE METHOD CHANGE** - Mark any new culture method you propose to use at your permitted aquatic farm site.

- Subtidal Suspended Culture
- Intertidal Near-bottom Culture
- Intertidal On-bottom Culture

- Subtidal On-bottom Culture
- Other _____

F. GEAR AND EQUIPMENT CHANGE

- 1. Are the proposed modified or new gear and equipment and associated anchoring systems built to withstand high strong tidal currents and/or storms? Yes No
- 2. For proposed suspended culture methods, is the water depth sufficient to prevent new or modified 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) ____.

G. DRAWINGS - Provide drawings (overhead, detailed, and cross-sectional) of the proposed new or modified gear and equipment (**refer to Figures 1 and 2 for examples and checklists below**). Please note more than one drawing may be required.

For cross-sectional drawings include the following:

- New or modified gear and/or equipment and anchoring system
- Indicate the distances between new or modified gear, equipment and current structures on the farm site.
- Placement of new or modified gear in the water column in relation to high water and mean lower low water.
- If suspended, indicate water depth at low tide and major on-bottom physical features.
- Indicate details of the anchoring system (configuration, dimensions, and poundage).
- Indicate dimensions of the marker buoy configuration.

For detailed drawings include the following:

- New or modified gear and/or equipment dimensions, construction materials, and anchoring systems.
- Identify the construction materials that will be used for all gear and equipment proposed.

H. AQUATIC FARM OPERATION AND DEVELOPMENT PLAN - Provide an operation and development plan that reflects the changes to your projected aquatic farm operations for the remaining years of your 10-year ADF&G aquatic farm operation permit. One operation and development plan is required 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. 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? _____

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 ¹	Equipment/ Gear Types And Numbers ²	Anchoring Systems			Projected Sales ³ (\$)	# of Animals	# of Pounds
(Year 1) 20__						\$		
(Year 2) 20__						\$		
(Year 3) 20__						\$		
(Year 4) 20__						\$		
(Year 5) 20__						⁴ \$		

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

² 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.

³ 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.

⁴ By the end of your 5th 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 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 ¹	Gear Types And Numbers ²	Anchoring Systems			Projected Sales ³ (\$)	# of Animals	# of Pounds
(Year 6) 20__						\$		
(Year 7) 20__						\$		
(Year 8) 20__						\$		
(Year 9) 20__						\$		
(Year 10) 20__						\$		

¹Support facility includes: caretaker, storage, or processing facilities, work rafts, etc.

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

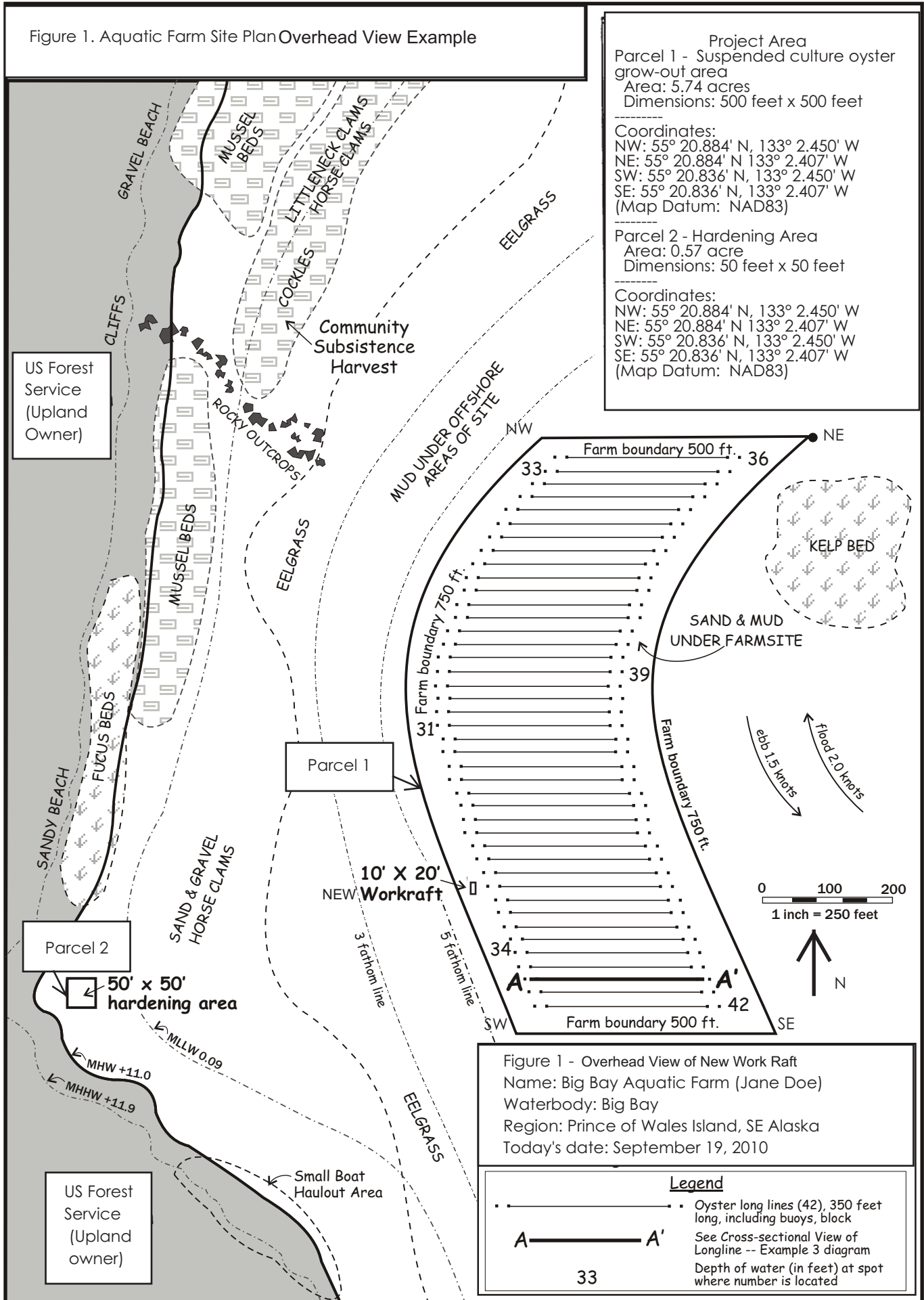
³Projected sales are based on Farm Gate Income which is defined as the unprocessed value, excluding the cost of packaging or transport of the product to its' first point of sale.

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. Aquatic Farm Site Plan Overhead View 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 1 - Overhead View of New Work Raft
 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 2. Aquatic Farm Cross-Sectional Diagrams and Drawings Examples

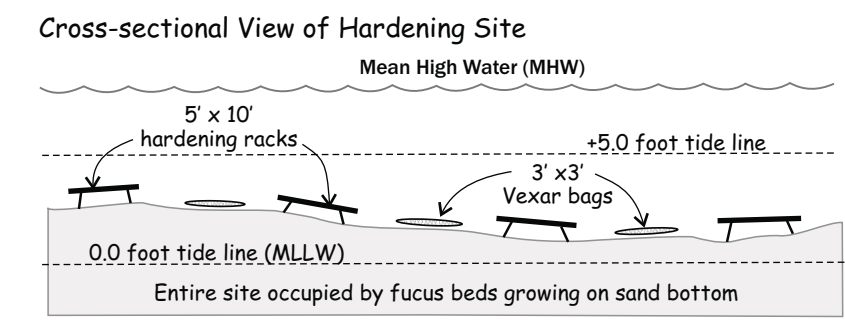
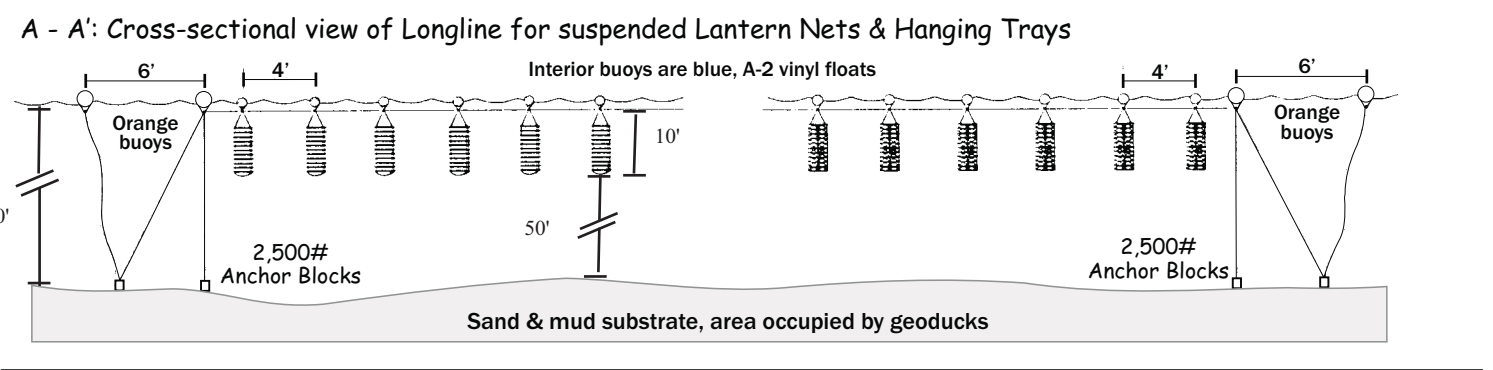
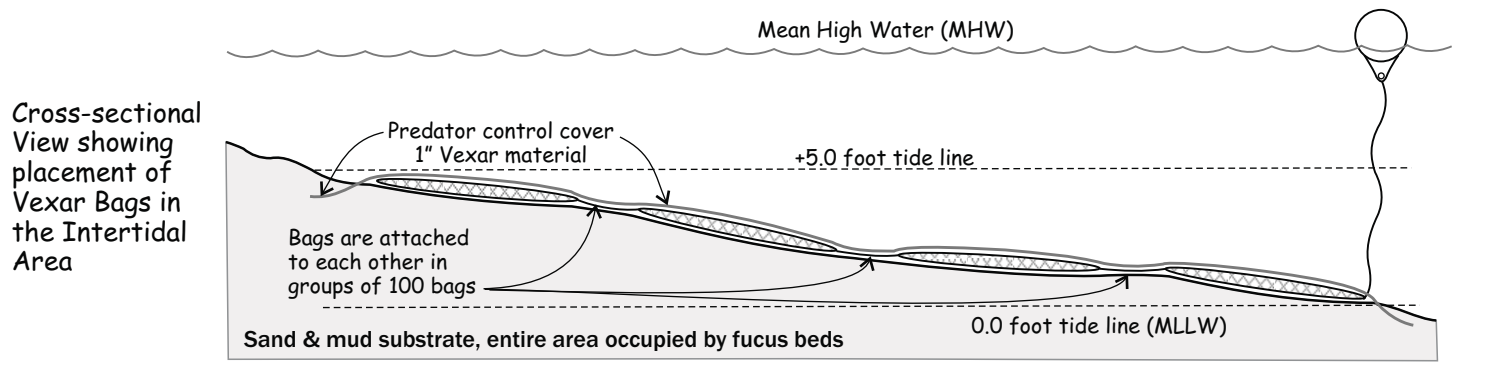
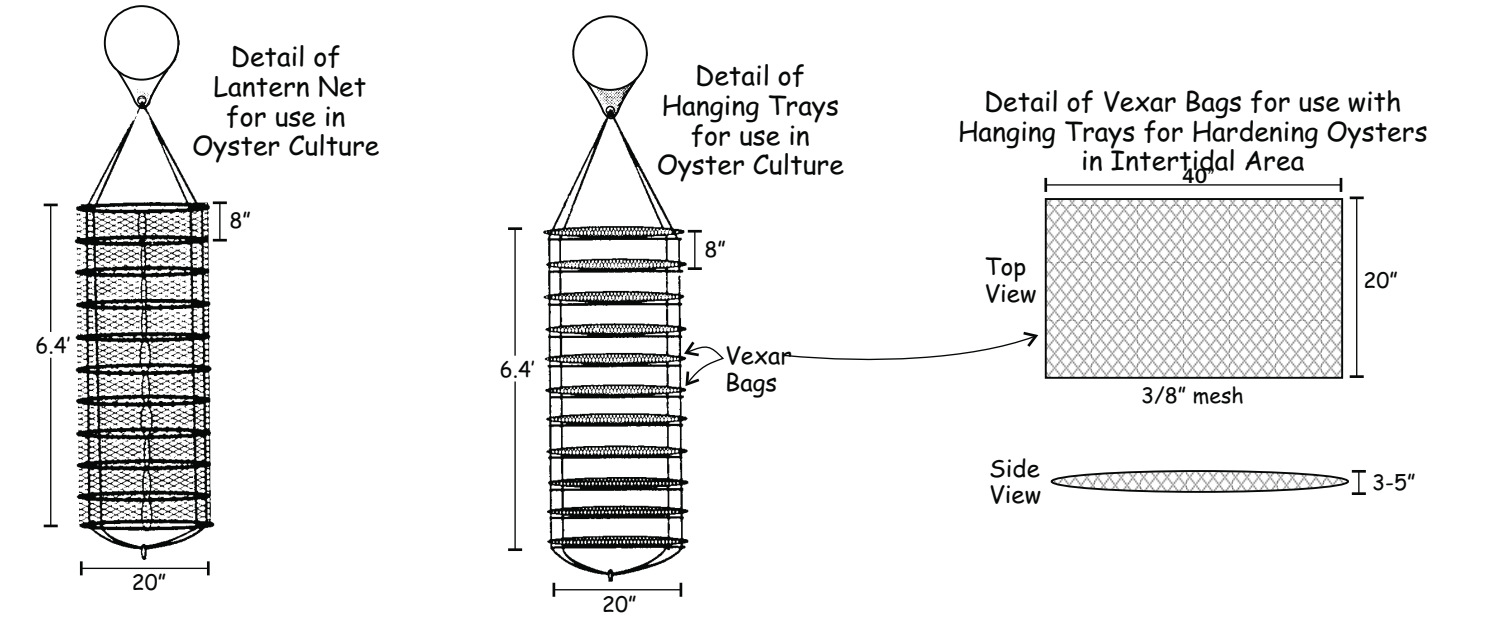


Figure 2 - Detailed Cross-sectional Diagrams and Drawings

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