

**STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND AND WATER  
SOUTHCENTRAL REGION LAND OFFICE**

**PRELIMINARY BEST INTEREST FINDING  
AQUATIC FARMSITE LEASE APPLICATION**

**APPLICANT: GREG BATES  
ALASKA SHELLFISH FARMS  
ADL # 230647**

**LOCATION: KACHEMAK BAY / HALIBUT COVE**

The Department of Natural Resources is accepting public comment on the following preliminary decision document for a 10-year aquatic farm site lease. **Written comments must be received on or before 5:00 p.m., Tuesday, December 8, 2009.**

**PROPOSED ACTION:** The applicant is requesting an aquatic farm lease near Halibut Cove, Kachemak Bay, Alaska. The farm site proposal is an area measuring 700 ft x 550 ft for shellfish grow-out plus an area measuring 100 ft. x 50 ft. for shellfish hardening. The site will be situated among existing aquatic farms in the Halibut Cove area.

The applicant has been successfully culturing Pacific oysters and blue mussels for various other farmers within Kachemak Bay for several years. The farm site is located off the south shore of Halibut Cove, approximately 9 miles southeast of the City of Homer, Alaska.

Access to the site is only accessible by boat or floatplane. A location map is attached to this decision.

**AUTHORITY:** AS 38.05.035; AS 38.05.070; AS 38.05.075; AS 38.05.083; AS 38.05.127;  
AS 38.05.128; 11 AAC 63.020

This decision addresses and is based on those issues under the authority of the Department of Natural Resources (DNR) under Title 38. While other issues may be addressed that are not within the scope of DNR's responsibilities, this decision's purpose is to determine whether or not to renew an existing tideland lease and does not make any determinations whatsoever on the issuance of other agency authorizations that are necessary for aquatic farming activities.

**ADMINISTRATIVE RECORD:** The administrative record for this application is file number ADL 230647.

**LOCATION:**

**GEOGRAPHIC LOCATION:** The proposed farmsite is located on state-owned tide and submerged lands 9.0 miles east of Homer in Halibut Cove, Kachemak Bay.

**USGS MAP COVERAGE:** Seldovia D -4

**NAUTICAL CHART:** 16645

**LEGAL DESCRIPTION:**

Township 7 South, Range 11 West, Seward Meridian,  
And more specifically described as:

**Grow-out Area:**

Section 5: SW ¼ within Halibut Cove, overlapping into:  
Section 6: SE ¼ within Halibut Cove encompassing a total area measuring  
700 ft. x 550 ft. for shellfish grow-out, containing approximately 8.83 acres, more  
or less; and,

**Hardening Area:**

Section 5: SW ¼ along the shoreline of Halibut Cove encompassing an  
area measuring 100 ft. x 50 ft. for a shellfish hardening area containing  
approximately 0.11 acres, more or less

The total area encompassed by this aquatic farm proposal is approximately 8.94 acres,  
more or less.

**POLITICAL INFORMATION:**

**BOROUGH/MUNICIPALITY:** This application is inside the Kenai Peninsula Borough.

**COASTAL DISTRICT:** The application inside the Kenai Peninsula Borough Coastal District and is  
subject to their coastal district management plan and enforceable policies

**REGIONAL CORPORATION:** Cook Inlet Region, Incorporated and the Seldovia Village Tribe.

**FISH AND GAME ADVISORY COMMITTEES:** Homer and Seldovia Fish and Game Advisory  
Committees.

**TITLE:**

**ACQUISITION AUTHORITY:** Submerged Lands Act of 1953. (P.L. 31, 83<sup>rd</sup> Congress, First  
Session; 67 Stat. 29); Equal Footing Doctrine; Section 1 of the Alaska Statehood Act.

**TITLE REPORT:** A title report was requested on November 2, 2009.

**PLANNING AND CLASSIFICATION:**

**LAND MANAGEMENT PLAN:** Kenai Area Plan (KAP), Region 9, South Side Kachemak Bay and

Chugach Islands, Unit 562A, Kachemak Bay Critical Habitat Area General Tidelands, adopted January 7, 2000.

**LAND CLASSIFICATION:** The KAP classifies state owned tidelands in this area as wildlife habitat and harvest. These classifications allow aquatic farming activities.

**SURFACE MINERAL ORDERS:** The proposed site is open to mineral entry.

**ALASKA COASTAL MANAGEMENT PROGRAM:** The proposed aquatic farm is currently undergoing Alaska Coastal Management consistency review. If the project is found to be inconsistent the project can not obtain a lease.

**ACCESS:** Access to the proposed sites is by boat or floatplane. A fifty-foot-wide easement will be reserved to protect public access in accordance with 11 AAC 63.050(b)(6) and 11 AAC 53. If additional specific easements are required, they will be addressed under the final recommendation section of this document.

#### **SURVEY AND APPRAISAL:**

**SURVEY:** A survey is not required by law before issuing a 10-year negotiated lease. However, the department has the right to require one in the future, at the applicant's expense, if boundary conflicts or disputes over acreage arise.

**APPRAISAL:** The Division of Mining, Land and Water has approved an administrative lease fee schedule for aquatic farm sites that meet the conditions listed within the schedule. The most current lease fee schedule will be used to establish the fair market rental each lessee must pay. The applicant has the option to have a site-specific appraisal done, at the applicant's expense, before the lease is issued, if he or she does not wish to use the fee schedule. If an applicant opts for a site-specific appraisal, the division-approved appraisal will establish the rental for the lease and the fee schedule will no longer be an option.

**PUBLIC/AGENCY NOTICE AND COMMENTS:** Public notice of the proposal has been sent to various newspapers, post offices, agencies, boroughs/cities, native corporations and Fish and Game Advisory committees. Public and agency comments are welcome during the comment period and will be considered in the final best interest finding. Only those who provide written comments during the comment period will be sent a copy of the final best interest finding and will be eligible to appeal. The final best interest finding will consider and address any comments related to the subject proposal. The final best interest finding will include explanation of the appeal process. The public comment period begins on November 9, 2009 and will end at 5:00 p.m. on December 8, 2009.

**PENDING INTERESTS:** The Alaska Department of Fish and Game has provided the following information:

The Alaska Department of Fish and Game (ADF&G) has reviewed the subject proposal and has done a partial review and determination of this proposal under its statutory and regulatory requirements.

## Project Description

The applicant is requesting a proposed aquatic farm site located in Halibut Cove under ADL 230647, approximately 9 miles Southeast of Homer, Alaska, on state-owned tide and submerged lands. The northeast corner of the site is located at 59° 35.940' N, 151° 12.067' W and runs south 550 feet then west 700 feet comprising 8.83 acres. In addition a 50 foot by 100 foot hardening area is requested south of the aquatic farm site comprised of 0.11 acre resulting in a total request of 8.94 acres. The project is adjacent to other leased aquatic farm sites and permitted operations.

The applicant proposes to culture Pacific oysters on two parcels: Parcel 1 is for the main grow out area and Parcel 2 is intended for a hardening area. The oyster suspended culture system would be in Parcel 1 and consist of up to 25 - 400 foot longlines each containing up to 50 suspended lantern nets and buoys alternating every 50 feet along the longline and anchored by 1000 lb concrete attached to a 150 feet - 1" polyline and a mooring buoy. In addition, the applicant proposes to have four work rafts measuring 16 feet by 20 feet anchored by a 1000 lb. cement weight by 1" line adjacent the longlines in Parcel 1. Parcel 2 would use rebar racks with ADPI bags. Access to the site is by boat from Halibut Cove.

## Evaluation

***I. Physical and Biological Characteristics:*** Based on the information provided by the applicant on the site physical and biological characteristics, the site appears to be capable of supporting the farm activities proposed. In addition, several active oyster farms are nearby the proposed site.

***Protection from Oceanographic and Atmospheric Extremes:*** The proposed aquatic farm operation project is in an area that appears to be protected from extreme oceanographic and atmospheric extremes. The farm gear proposed for use at the site have a similar configuration and anchoring systems as existing adjacent aquatic farms in the area and appears to be able to withstand these extremes.

***Sufficient environmental conditions:*** The proposed aquatic farm operation project is in an area that appears too have sufficient water exchange, water temperatures, currents, salinity, and primary production to support an aquatic farm and maintain healthy environment for other marine organisms.

***Sufficient Water Depth:*** Based on information provided by the applicant, the water depth at the aquatic farm site ranges from 90 to 110 feet and more than sufficient to prevent gear from grounding and impacting the benthos under floating structures.

***Eelgrass and Kelp Beds Maintained:*** Based on the application information provided by the applicant, there does not appear to be any eelgrass in the proposed project area. The exact locations and extent of kelp beds is not well documented in the area. If health and the abundance of kelp beds in the area are not properly maintained within the proposed aquatic farm site, project modifications to the Aquatic Farm Operations Permit will be made to correct the condition.

***Anadromous Fish Streams:*** Anadromous streams catalogued for various salmon species are

located near the proposed project<sup>1</sup>. However, the proposed aquatic farm operation is not located within 300 feet of the mouth of an anadromous fish stream. The closest anadromous stream is 1.1 miles from the site being proposed. Table 1 summarizes the distance between the aquatic farm site coordinate and the mouth of the anadromous stream, the classification number for the stream, and lists all the fish species that reside or spawns there.

DNR ADL	Location	Name of Stream	Number	Dist. Between site and mouth of stream (feet)	Fish Species
230647	Halibut Cove		241-15-10420	1.1 miles	coho salmon

**II. Existing Uses not Significantly Altered:** The proposed aquatic farm site will not significantly alter an established use defined as a commercial fishery, sport fishery, personal use fishery, or subsistence fishery. Table 2 summarizes the traditional and existing uses for commercial, sport, and subsistence fisheries and anchorages in the proposed aquatic farm site area.

ADL-site	General Area	Species	ADF&G Stat Area	Geoduck Commercial Fishery	Herring Spawning Area	Red Urchin Commercial Fishery	Salmon Setnetting Commercial Fishery	Salmon Trolling/Salmon Purse Seining	Dungeness crab	Recreational Sport Fishery/Personal Use	Anchor	Subsistence
230647	Halibut Cove	Pacific oysters	241-15	No	No	No	Yes	No	No	Probably	No	No

**Commercial Fisheries:** The proposed aquatic farm is located in ADF&G Commercial Fisheries Division Statistical Area subdistrict 241-15. The proposed aquatic farm site is not expected to cause any significant alterations to the existing commercial fishery uses in the area.

**Geoducks:** No commercial geoduck dive fishery takes place at the site.

**Sea cucumber:** No commercial sea cucumber dive fishery takes place at the site.

**Red Sea Urchins:** No commercial red sea urchin dive fishery takes place at the site.

**Salmon:** A salmon set netting fishery occurs near this site in the Lower Cook Inlet, Southern District. There are ten shore fishery leases within 0.5 square miles of the site no closer than 1000 feet from the site. In 2009, there were 11 recorded salmon landings in this statistical subdistrict area. No salmon trolling, seining, or gillnet salmon fishery occurs

<sup>1</sup>Johnson, J. and K. Klein. 2009. Catalog of waters important for spawning, rearing, or migration of anadromous fishes - Southcentral Region, Effective June 1, 2009. Alaska Department of Fish and Game, Special Publication No. 09-03, Anchorage.

at the site. The proposed aquatic farm site is not expected to cause any significant alterations to existing salmon fishery use.

**Herring:** No commercial herring fishery occurs in this area.

**Dungeness crab:** No commercial crab fishery occurs in this area.

**Sport Recreational Fishery:** The area is not a significant site for Sport Anglers. Traditional troll and bottom fishing area for sport fishers is not known to occur in this area. Due to their design, oyster farms have not seemed to have significant negative impact on anglers. The proposed aquatic farm site is not expected to cause any significant alterations to the existing sport recreational fishery use.

**Subsistence Use:** The proposed aquatic farm site is not expected to cause any significant alterations to the existing subsistence use.

**Anchorage:** This area is not known to have any critical vessel anchorages.

**III. Compatible with Fish and Wildlife Resources:** The proposed aquatic farm site is compatible with fish and wild life resources in the area.

**Predator and Pest Control Methods:** Predator exclusion devices to be used at the proposed site are expected to be utilized in a manner that minimizes impacts on non-targeted fish and wild life resources in the area.

**Sensitive Wildlife:** The proposed aquatic farm site is not expected to adversely impact seabird colonies, sea lion haulouts and rookeries, seal haulouts and pupping areas, and walrus haulouts.

**Sea Bird Colonies** – There are no sea bird colonies identified within 1 mile of the proposed sites.<sup>2</sup>

**Sea Mammal Habitat** - There are no sea mammal haul outs within 1 mile of the proposed sites<sup>3</sup>.

Permit and ADL	General Area	Applicant Contact Name	Species	Sea Lion Haulouts	Harbor Seal Haulouts	Distances from Nearest Haulout Area (miles)
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<sup>2</sup> U.S. Fish and Wildlife Service, (current year). Beringian Seabird Colony Catalog -- computer database. U.S. Fish and Wildlife Service, Migratory Bird Management, Anchorage, Alaska 99503.

<sup>3</sup> Analysis completed by NOAA Fisheries Service, Alaska Region, Protected Resources Division. Specifically, the data used to complete this analysis were provided by researchers from NOAA Fisheries Service, Alaska Fisheries Science Center, and National Marine Mammal Laboratory.

230647	Halibut Cove	Greg Bates	Pacific Oysters	No	No	1.9 miles
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**Endangered species:** The proposed aquatic farm site will not adversely impact endangered and threatened species recovery and habitat efforts.

**IV. Operation and Development Plan:**

**Increase Productivity:** The operation and development plan for this project sufficiently describes how the operation will improve the productivity of the species intended for culture above what would occur in natural conditions using approved methods such as predator exclusion, reduction of competing species, destiny manipulation, import of naturally produced seed, import of hatchery produced seed, programming harvest to optimize growth and shellfish condition, and habitat improvements.

**Maintenance:** The operation and development plan for this project indicates that support facilities and culture gear and anchoring system will be installed with sufficient anchors and maintained.

**Rotation Schedule:** The projected rotation schedule is consistent with the life history of the species intended for culture.

**V. Species to be Cultured and Site Suitability**

**BONDING AND INSURANCE:** The department has not conducted a site suitability study for this site. Based on information provided by the applicant, the proposed site is capable of supporting the activities proposed. The proposed parcels in this aquatic farm operation project are located in an area that is thought to be suitable for suspended oyster culture. The proposed parcel is located adjacent to nearby existing suspended oyster farms and is expected to be suitable for suspended oyster culture. Bonding, or another form of security, is required under AS 38.05.083 and 11 AAC 63.080. The bond must cover the costs of site cleanup and restoration, any associated cleanup costs after termination of the lease, including any unpaid rentals or other obligations accruing until site restoration is complete. The bond regulations require:

The minimum security amount for a lease is \$2,500. However, if three or more lessees post an association bond to cover all of their leases, the minimum security amount is 50 percent of the amount individually calculated for each lease. The association must designate an agent for notification purposes. The association has the right to be notified of the termination of a lease covered by its association bond. If neither the former lessee nor the association completes the site restoration as required by AS 38.05.090, the department will use the association bond for this purpose, up to 100 percent of the amount individually calculated for that lease. The association may remove a lease in good standing from the coverage of its association bond after a 60-day notice to the department, during which time the affected lessee must make other arrangements to comply with 11 AAC 64.080(b). A lease that is in default or that has been terminated with site restoration still pending may not be removed from the coverage of an association bond.

At this time, the Department does not require these operations to have insurance. Insurance may be required in the future depending on the operation and the policies of the department at the time changes are made to the lease or another lease is issued. Insurance, such as Workman's Compensation Insurance, may be required under other state laws.

**TRADITIONAL USE FINDING:** The presence of aquatic farm sites should not disrupt traditional and/or existing uses of the area, such as commercial and sport fishing, subsistence activities, boat travel, anchorage and recreation. Through agency and public input, more traditional and existing use information may surface. If such information becomes available, any potential and/or existing conflicts will be addressed in the final best interest finding.

**KENAI AREA PLAN INFORMATION SPECIFIC TO THIS PROPOSAL:** This proposal lies within Region 9, South Side Kachemak Bay and Chugach Islands, Unit 562A, Kachemak Bay Critical Habitat Area General Tidelands, adopted January 7, 2000. The designations are habitat and harvest. These areas are to be managed so that their principle resources are protected. The existence of the farm site over the last 10-years has not appeared to have caused impacts to the habitat and harvest values in this area.

**UPLAND OWNER/MANAGEMENT INTENT:** The uplands adjacent to the proposed amendment are privately owned. To date, there have been no conflicts between upland owners and the existing aquatic farm sites.

**ENVIRONMENTAL RISK QUESTIONNAIRE:** The applicant has indicated that this proposed activity will not generate, use, store, transport, disposal of, or otherwise come in contact with toxic and/or hazardous materials, and/or hydrocarbons.

**CONSIDERATIONS:** The following criteria, set out in 11 AAC 63.050(b), has been considered and represents what is known at this time:

**Land Management:** There are no known land management policies or designations, other than those in the Alaska Coastal Management Program, the Kenai Area Plan, and the Management Plan for Kachemak Bay State Critical Habitat Area (ADFG, 1993) that may impact this proposal. Measures taken to mitigate impacts on the resources identified in the above-mentioned plans are listed below.

**Pending/Existing Uses:**

1. There are no known pending use conflicts or potential impacts to nearby communities or residential land due to the placement of this farm at the proposed location.
2. Information available suggests the aquatic farm should not disrupted traditional and existing uses of the site for use as an anchorage, commercial and sport fishing, recreation, and tourism.

Issuing a lease for an aquatic farm would not compete with commercial and sport fisheries as access to those resources being sought after would be protected and

stipulated in any resultant lease agreement.

In order to inform the public of their continued access rights, any resultant lease would stipulate the requirement that signs be posted with information that informs the public of their rights of access through the farmsite as well as access to those fish and wildlife resources not being cultured at the aquatic farmsite.

3. There are no historic and cultural resources known to exist in the area.
4. There are no commercial or industrial facilities known to exist in the area.

**Public Access:** Public access has been and will be protected in accordance with 11 AAC 63.050(b)(6) and 11 AAC 53 and will be addressed in any resultant lease agreement.

**Public Trust Doctrine:** Any resultant lease agreement is subject to the principles of the Public Trust Doctrine in order to protect the public's right to use navigable waters and the land beneath them for navigation, commerce, fishing, and other purposes.

**Mitigation Measures:** In addition to the mitigation measures identified above under Pending/Existing Uses, paragraph 2, any resultant lease renewal may include additional stipulations necessary to mitigate conflicts identified during the public/agency comment period

**Social, Economic, and Environmental Concerns:** There are no known significant social, economic, and environmental effects from the existing lease.

**Surface Area:** The proposal does not encumber more than a third of the surface area of a bay, bight, or cove in accordance with 11 AAC 63.050(c).

**ADVANTAGES AND DISADVANTAGES OF THE PROPOSAL:** This aquatic farm could provide opportunities to increase income and diversify the state's economy by utilizing state tide and submerged lands for this purpose. The advantage of this lease on state owned tide and submerged lands is the continued employment opportunities as well as any secondary jobs created or increased from businesses involved in marketing, transport or sale of the farmed products.

There are several other aquatic farm sites in the same area as this proposal that have been there for 10-years or longer. There seems to be no obvious disadvantages of an additional aquatic farm site on state owned tide and submerged lands. The public should be aware that access through the site, as well as access to any of the common property resources not being cultured at the site are public uses that remain intact. Therefore, and as mentioned above, any resultant lease would stipulate the requirement that signs be posted informing the public of their rights at the aquatic farmsite.

**RECOMMENDATION:** Considering the information known at this time and described within this decision, it appears to be in the state's best interest to allow this aquatic farm site of approximately 8.94 acres more or less to the applicant for suspended culture. Any resultant lease will include stipulations that may be identified as a result of public comments. Approval of the application is recommended with a security bond

set at \$2,500 or \$1250 with an association bond. Should the Division of Governmental Coordination find the project inconsistent with the Coastal Management Program, the lease would not be issued.

John S. Thiede  
John S. Thiede, Aquatic Farm Program Manager

November 6, 2009  
Date



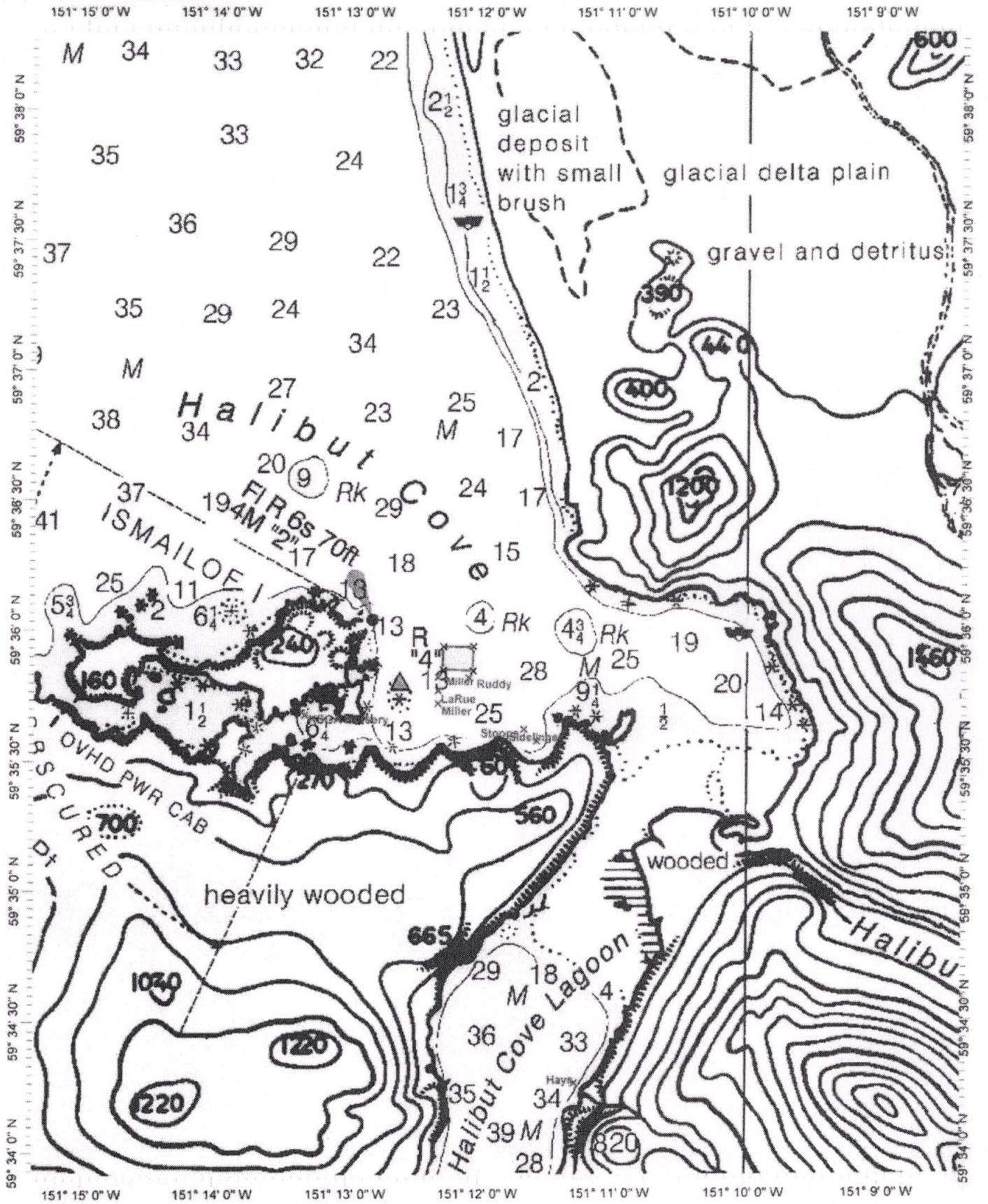


Chart Name: GORE PT. TO ANCHOR PT.  
 Chart ID: 16645\_1  
 Top Left: 59° 38' 17" N 151° 15' 22" W  
 Bottom Right: 59° 33' 54" N 151° 8' 22" W



# HALIBUT

59° 35.940' N, 151° 12.295' W NAD83

59° 35.849' N, 151° 12.067' W NAD83

59° 35.516' N, 151° 12.211' W NAD83

59° 35.510' N, 151° 12.179' W NAD83

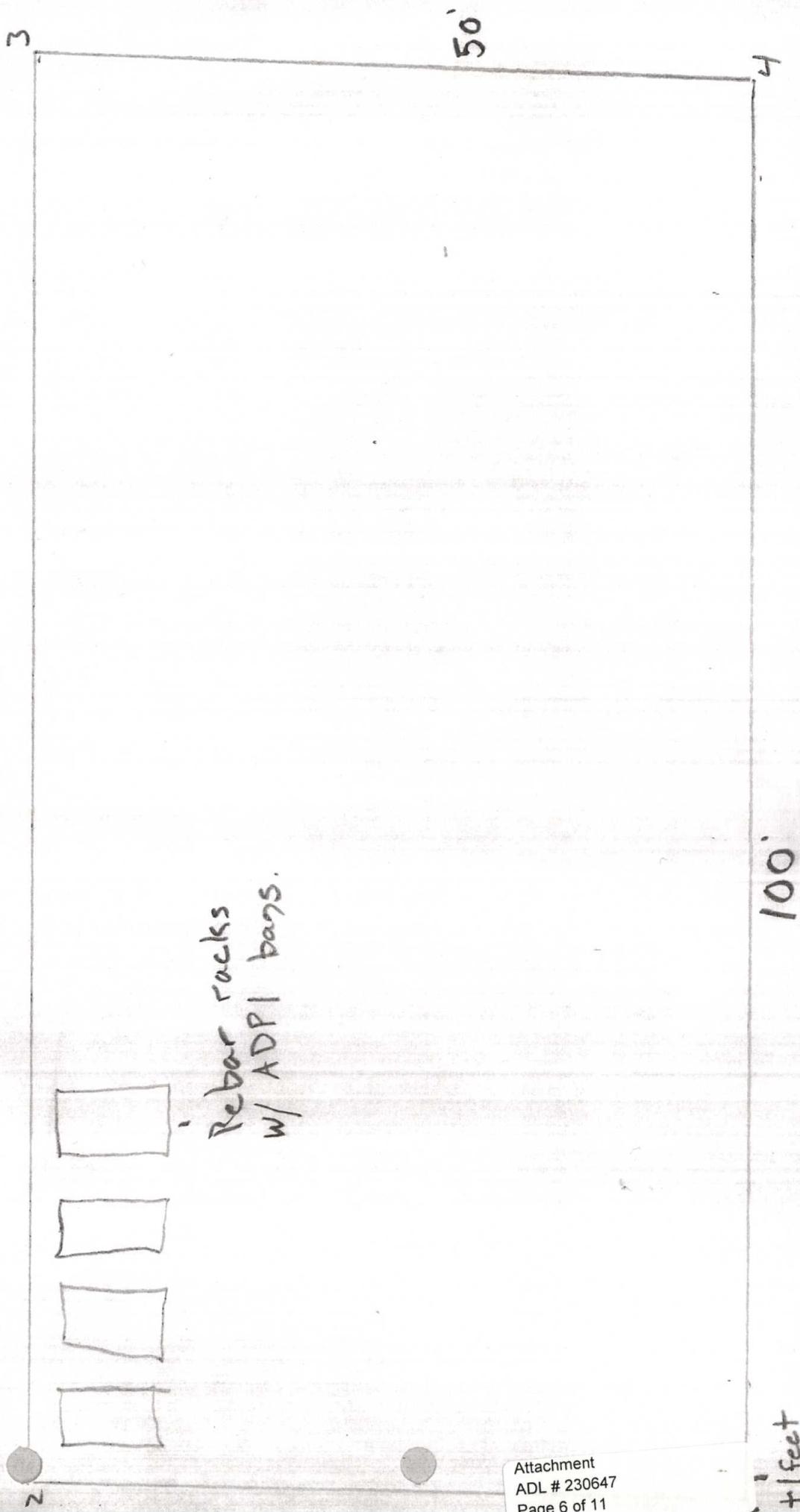


Harding Site

1" = 10'

\* 0.11 acres

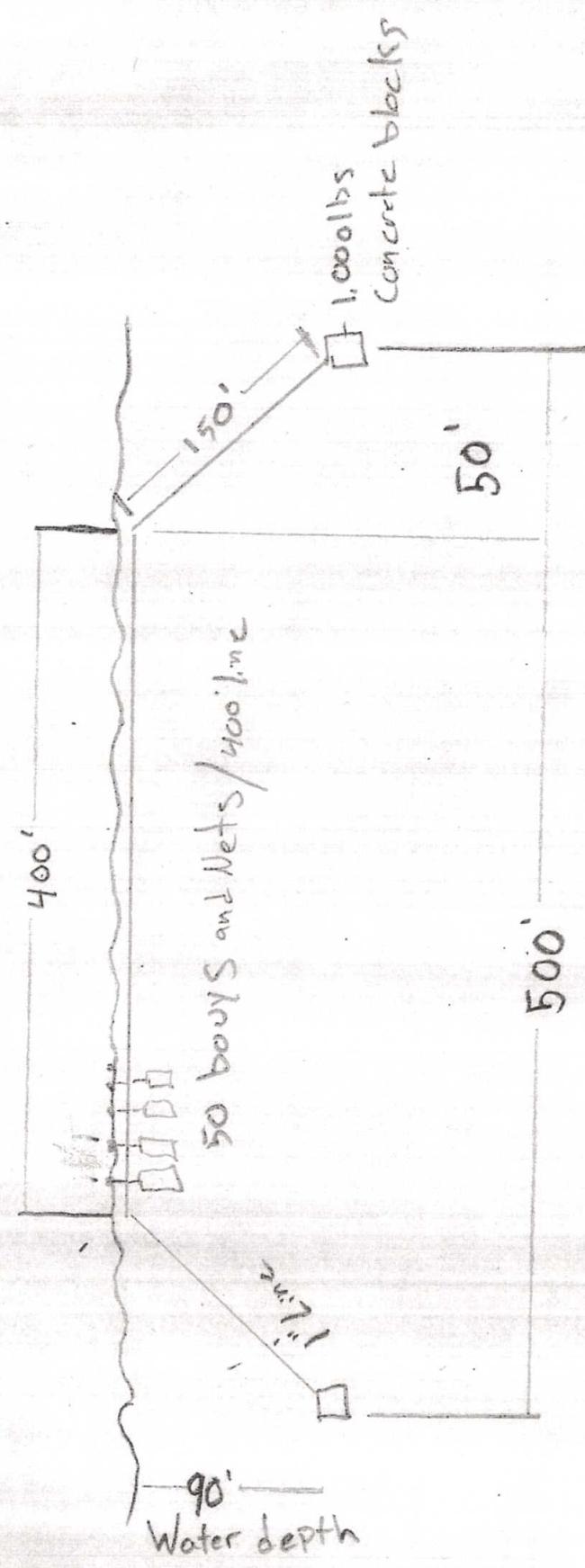
0.11 acres



Rebar racks  
w/ ADPI bags.

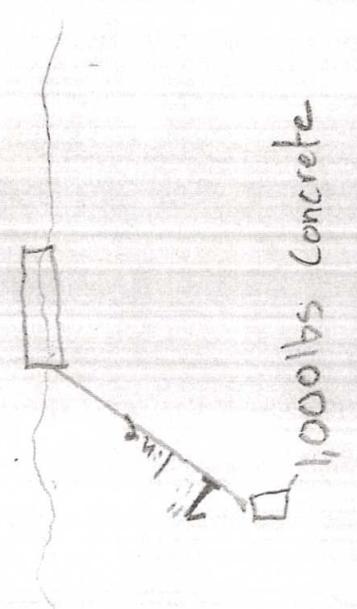
1" = 100'

Cross Section



Cross Section of Work raft

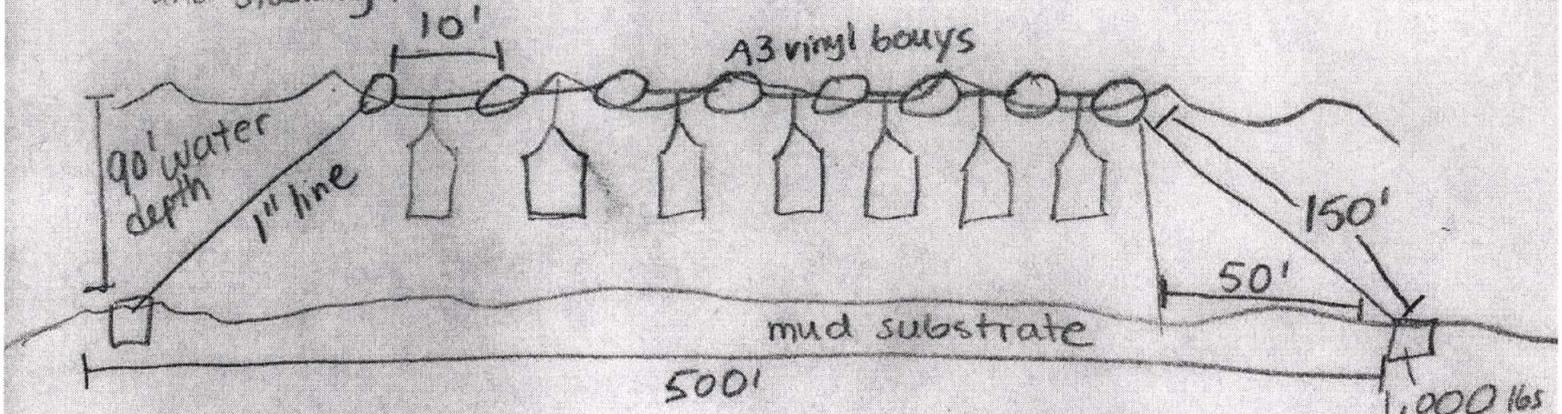
Work Raft



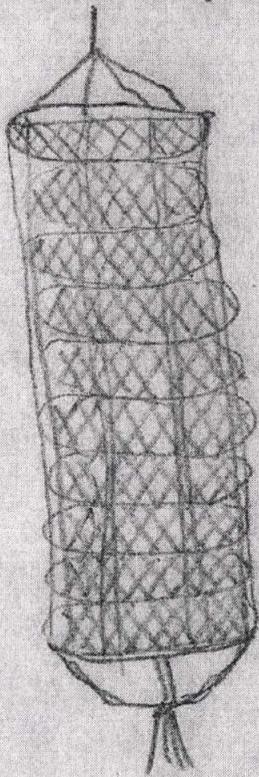
# Cross Section of Farm Site

Longline for suspended lantern nets and stocking trays.

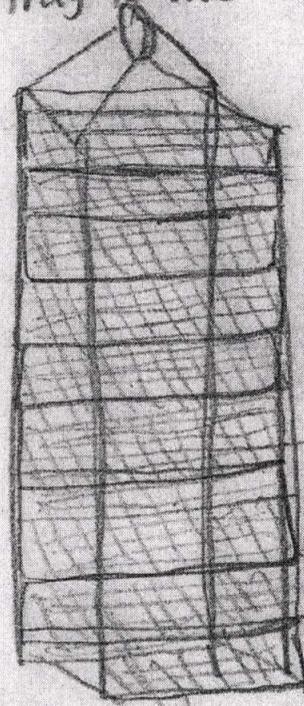
50 bouys/nets per 400' line



Detail of a lantern net to use in oyster culture

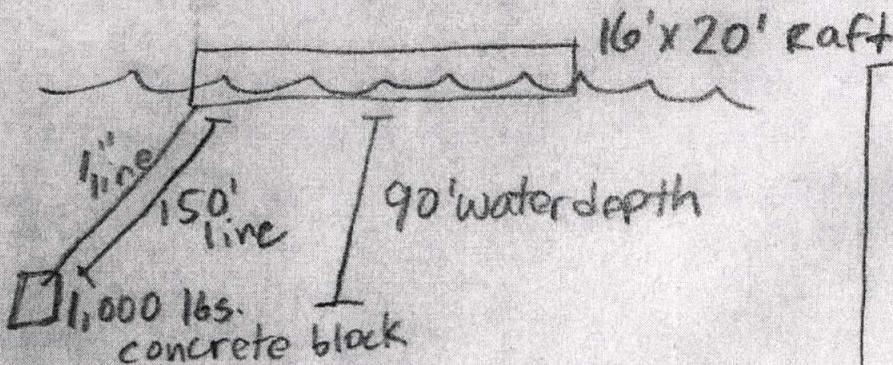


Detail of wire mesh stacking tray to use in oyster blocks culture



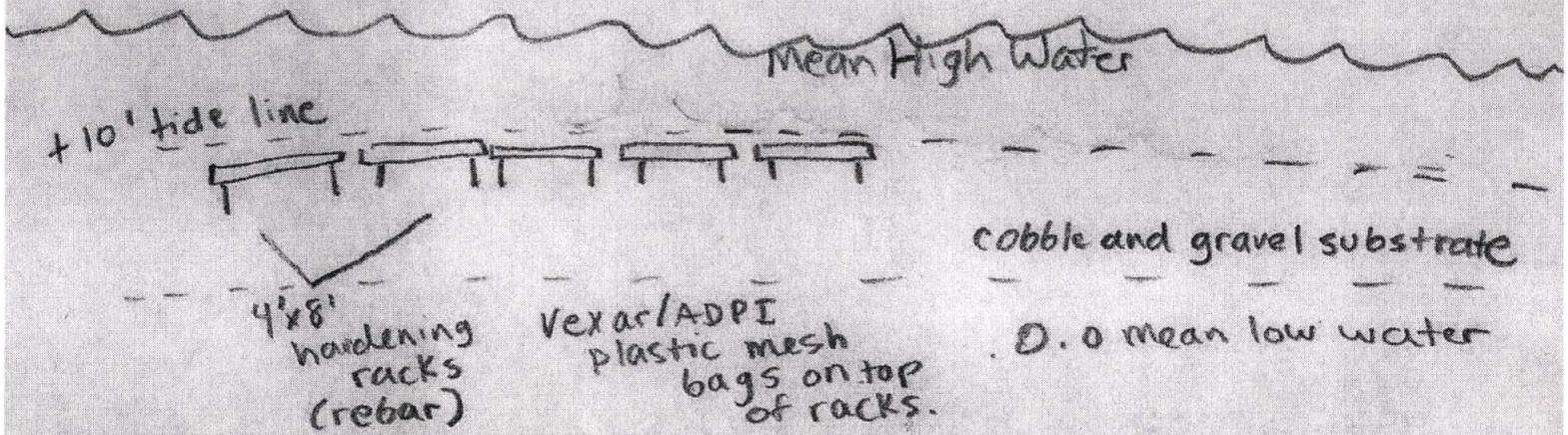
10-tier

## Cross Section of Work Raft



Greg Bates  
Halibut Cove,  
Kachemak Bay  
2009

# Cross Section of Hardening Beach



Greg Bates  
Halibut Cove,  
Kachemak Bay  
2009

Alaska Shellfish Farms  
Lease Application

Section E. Current Land Use

The proposed site, located in Halibut Cove, is adjacent to four existing oyster farms. Many other uses occur in the three miles surrounding the farms, although none, other than tourism in relation to the farms, occur in the immediate vicinity of the proposed site and existing sites. There will not be significant impact to any existing users. The current farms, are well established and other land users are adjusted to the farms existence. Many tourists, sightseers and local kayak outfitters view the farms, tours often come out to educate the public about the benefits of shellfish aquaculture. The proposed farm will probably be viewed by tourist also. Our farm will be clearly marked at the corners with fluorescent buoys and the site will not be located in any navigational channels. Because the farm will be located adjacent to the existing farms, seaplanes and boats will know to avoid it, as they are used to avoiding the other farms. There are existing commercial setnetters and sport fishing in the area, but those users do not fish directly where the farm will be located. There are commercial lodges in Halibut Cove, but they also do not use the area where the farm will be located, they may use the operation as a talking point. The Halibut Cove Harbor and sheltered boat anchorage is located within three miles but our site will in know way affect those uses. Boats do not anchor where the site is proposed, the bottom is mud and is exposed to the predominant wind, it is not located in a good boat anchorage. There are some upland bear trails, residential housing and archeological sites in Halibut Cove but our site is located away from those areas and will not impact them. The residents are very accustomed to seeing the oyster farms, many say they like people making a living out there. Our proposed site will not significantly impact any other users or uses that we foresee.

**Alaska Shellfish Farms  
Proposed Lease Description**

A suspended culture shellfish farm located in Halibut Cove on South Side of Kachemak Bay. Shellfish will be grown at depths from 5-30 feet below the surface, gear will be suspended by floating longlines. The farm will be large enough to sustain a family with year-round production.

