

**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: Anthony Lindoff
DBA: *Coho Properties, LLC*
ADL #107863**

LOCATION: Southeast Keku Strait; E of Entrance Is.

The Department of Natural Resources is accepting public comment on the following preliminary decision document for the renewal of an existing aquatic farm site. **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 in an unnamed cove at the southeaster portion of Keku Strait approximately 13 miles southeast of Kake, Alaska. The applicant is proposing 2 culture grow-out areas plus a hardening area. Grow-out Site #1 would be a rectangular area comprised of 1.17 acres; Site #2 is a slightly larger rectangular area approximately 1.78 acres; the hardening area is proposed to be 0.34 acres.

The total farm site area requested will be approximately 3.29 acres, more or less.

Access to the site is by boat. The proposed location 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 issue a DNR 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 the application submitted is file number ADL 107864.

GEOGRAPHIC LOCATION: The proposed farm site is located on state-owned tide and submerged lands in an unnamed bay in the southeast portion of Keku Strait, just north and east of Entrance Island north of Horseshoe Island in Big John Bay and within Stedmen Cove on the west side of Kupreanof Island, in southeast Alaska and approximately 13 miles southeast of the community of Kake.

USGS MAP COVERAGE: Petersburg C-6

NAUTICAL CHART: 17372

LEGAL DESCRIPTION:

Township 58 South, Range 74 East, Copper River Meridian,
And more specifically described as:

Section 21: S½ within an unnamed bay northeast of Entrance Island, encompassing two separate areas for suspended shellfish culture for a total of approximately 2.95 acres more or less; and

Section 28: NW¼ just east of Entrance Island for shellfish hardening containing approximately 0.34 acres more or less.

According to the drawings attached to this document and labeled as Attachment B, containing approximately 3.29 acres, more or less.

LATITUDE/LONGITUDE: NAD 83

Site #1: NW Corner: 56° 49.214' N, 133° 45.793' W
 NE Corner: 56° 49.206' N, 133° 45.757' W
 SE Corner: 56° 49.154' N, 133° 45.797' W
 SW Corner: 56° 49.155' N, 133° 45.844' W

Site #2: NW Corner: 56° 49.351' N, 133° 45.971' W
 NE Corner: 56° 49.334' N, 133° 45.885' W
 SE Corner: 56° 49.301' N, 133° 45.934' W
 SW Corner: 56° 49.017' N, 133° 44.569' W

Hardening Area site: NW Corner: 56° 49.119' N, 133° 45.999' W
(North Stedman Cove) NE Corner: 56° 49.119' N, 133° 45.909' W
 SE Corner: 56° 49.111' N, 133° 45.909' W
 SW Corner: 56° 49.111' N, 133° 45.999' W

POLITICAL INFORMATION:

BOROUGH/MUNICIPALITY: This application is outside of an organized borough.

COASTAL DISTRICT: The application lies outside of an approved coastal district. The nearest coastal district is the City of Kake.

REGIONAL CORPORATION: Sealaska Corporation

FISH AND GAME ADVISORY COMMITTEES: Kake and Sumner Strait Fish and Game Advisory Committees.

TITLE:

ACQUISITION AUTHORITY: Submerged Lands Act of 1953. (P.L. 31, 83rd 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: Central/Southern Southeast Area Plan, Adopted in November 2000.

LAND CLASSIFICATION: The Central/Southern Southeast Area Plan classifies state owned tidelands at the proposed location as Public Recreation – Dispersed Use and Wildlife Habitat, under classification order number CL SE-00-001. These classifications allow for 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 farmsites 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

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 Keku Strait near Entrance Island under ADL 107863, approximately 13 miles southeast of Kake, Alaska, on state-owned tide and submerged lands. The northeast corner of Site 1 (Parcel 1) is located at 56° 49.206' N, 133° 45.757' W and runs south 340 feet, west 160 feet, north 398 feet, and east 130 feet comprising 1.17 acres. The northeast corner of Site 2 (Parcel 2) is located at 56° 49.334' N, 133° 45.885' W and runs south 260 feet, west 354 feet, north 254 feet, and east 300 feet and comprises 1.78 acres. In addition, located to the south, there is a hardening area (Parcel 3) with a northeast corner located at 56° 49.119' N, 133° 45.909' W measuring 50 feet by 300 feet comprising 0.34 acre for a total of 3.29 acres.

The applicant proposes to culture Pacific oysters on three parcels: Parcel 1 is an intertidal grow out area measuring approximately 340 feet x 160 feet; Parcel 2 is an intertidal grow out area measuring approximately 254 feet, and 300 feet; and Parcel 3 is a hardening area measuring 50 feet by 300 feet. The oyster intertidal culture system would consist of 10 pairs of intertidal vexar bags measuring 36" x 19" and secured between poly coated wires with standard longline snaps. A 2" x 6" spreader will be placed between every five vexar bags. Post made of 3" PVC pipe will be spaced every 10 feet along the longline and the posts will be secured by a "Ted-Head anchoring system" using a 10" concrete base weighting 50 lb. anchor buried 6" in the substrate and buoy attached to the anchor line. Floatation will be attached to each of the bags using high density foam inserts. Access to the site is by boat from Kake.

Evaluation

I. Physical and Biological Characteristics: The proposed aquatic farm site is located in a location area that has physical and biological characteristics that are suitable for culture of oysters.

Protection from Oceanographic and Atmospheric Extremes: Based on information supplied by the applicant, the proposed aquatic farm operation project is located in an area that is in "a nice protected bay" and "is protected from prevailing winds". The location appears to be protected from oceanographic and atmospheric extremes. The farm gear proposed for use on both Parcel 1 and 2 is expected to be able to withstand these extremes.

Sufficient environmental conditions: Based on information supplied by the applicant, the proposed aquatic farm operation project is in an area that has sufficient water exchange, water temperatures, currents, salinity, and primary production to support an aquatic farm and maintain healthy environment for other marine organisms. The applicant does indicate that there is a non-

anadromous stream nearby that may experience icing, but apparently the currents are strong enough to not allow the tideland to freeze.

Suitable Substrate: The substrate composition based on information supplied by the applicant: for the proposed aquatic farm site, Parcel 1, is primarily an intertidal flat rock beach, with mostly firm, rock and mud composition which will be suitable for Pacific oysters, the target species; and for the proposed aquatic farm site, Parcel 2 is firm, mud-sand composition which is also suitable for a hardening area for the target species.

Sufficient Water Depth: The water depth at the aquatic farm site is 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 applicant indicated there was brown and green algae.

Anadromous Fish Streams: Anadromous streams catalogued for various salmon species are located near the proposed project¹. The proposed aquatic farm operation is not located within 300 feet of the mouth of an anadromous fish stream. The closest anadromous stream is 2.8 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.

Site No.	Location	Name of Stream	Number	Dist. Between site and mouth of stream (feet)	Fish Species
107863	Entrance Island		105-32-10230	2.8 miles	coho salmon, dolly varden

II. Existing Uses not Significantly Altered: The proposed aquatic farm site is not expected to cause any significant alterations an established use defined as commercial fishery, sport fishery, personal use fishery, and 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	Gener-al Area	Species	ADF&G Stat Area	Geoduck Commercial Fishery	Sea Cucumber Commercial Fishery	Red Urchin Commercial Fishery	Salmon Gillnetting Commercial Fisher	Salmon Troll-ing/ Salmon Purse Seining	Herring/D ng-eness crab	Recrea-tional Spor Fishery/ Personal Use	Anchor	Sub-sistence
107863	Entrance Island	Pacific oysters	105-32	No	Yes	No	No	Yes	No	Probably	No	No

Commercial Fisheries: The proposed aquatic farm is located in ADF&G Commercial Fisheries

¹¹Johnson, J. and K. Klein. 2009. Catalog of waters important for spawning, rearing, or migration of anadromous fishes - Southeast Region, Effective June 1, 2009. Alaska Department of Fish and Game, Special Publication No. 09-04, Anchorage.

Division Statistical Area subdistrict 105-32. 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 occurs in this area.

Sea cucumber: These sites are in the Rocky Pass sea cucumber dive fishery harvest area. On a three year rotation, the last fishery occurred there in 2006 and is currently open, in 2009, for a commercial fishery. The number of permits (individuals) for this statistical area harvesting sea cucumbers accounted for 4% (2 out of 54) of all the 2006 (last fished) recorded that harvested in the Petersburg SE Management Area. The proposed aquatic farm site is not expected to cause any significant alterations to the existing sea cucumber uses in the area.

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

Salmon: No salmon gillnetting fishery, salmon trolling, or gillnet salmon fishery occurs at the site. The site lies within a subdistrict area where troll commercial salmon fisheries do occur. In 2008, there was one recorded salmon landing in this statistical subdistrict area. The proposed aquatic farm site is not expected to cause any significant alterations to the existing salmon uses in the area.

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 in the area.

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

proposed sites.²

Sea Mammal Habitat - There are no sea mammal haul outs within 1 mile of the proposed sites³. Sea otters are in the area.

Permit and ADL	General Area	Applicant Contact Name	Species	Sea Lion Haulouts	Harbor Seal Haulouts	Distances from Haulout Area (miles)
107863	Entrance Island	Coho Properties	Pacific oyster	No	No	2.6 miles

Endangered species: The proposed aquatic farm project is not expected to 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

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.

² 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.

³ 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.

BONDING AND INSURANCE: 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.

CENTRAL/SOUTHERN SOUTHEAST AREA PLAN INFORMATION SPECIFIC TO THIS PROPOSAL: This proposal lies within Region 2, Kuiu/West Kupreanof – North. The designation for this area is General Use (GU). A General Use designation is given to lands that contains one or more resource values, none of which is of sufficiently high value to merit designation as a primary use, or, because of the size of the parcel, a variety of uses can be accommodated with appropriate siting and design considerations.

When pertaining to tidelands, this designation applies to tidelands, shorelands and submerged lands not designated for specific, habitat, harvest, economic, or recreation functions. This does not mean that the tideland or submerged land lacks value, but the appropriateness of whether and how a tideland parcel is to be used will be decided through formal state and federal permitting procedures. Areas not specifically identified with a designation on the Plan Maps; not otherwise classified in this plan; or that are acquired by the state subsequent to the approval date of this plan, are designated General Use

UPLAND OWNER MANAGEMENT: The uplands adjacent to the proposal are within the Petersburg Ranger District of the Tongass National Forest, owned and managed by the U.S. Forest Service. The Tongass National Forest Land and Resource Management Plan designates the adjacent uplands as Semi-Remote Recreation, which objective is to manage to provide for recreation and tourism in natural-appearing settings where opportunities for solitude and self-reliance are moderate to high. In accordance with the

with the Central/Southern Southeast Area Plan, the Forest Service will be consulted to determine if the proposal is consistent with the management intent of their plan.

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.

ALASKA COASTAL MANAGEMENT PROGRAM COMMENTS: Comments that are received during the coastal consistency review will be included in the final finding along with any stipulations.

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 Central/Southern Southeast Area Plan, and potentially the Tongass National Forest Land and Resource Management Plan 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 at this time suggests that placement of an aquatic farm at this location would not disrupt the 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 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 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 placement of this proposal.

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 issuing this lease on state owned tide and submerged lands is the probable employment opportunities as well as any secondary jobs created or increased from businesses involved in marketing, transport or sale of the farmed products.

There seems to be no obvious disadvantages of this activity 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.

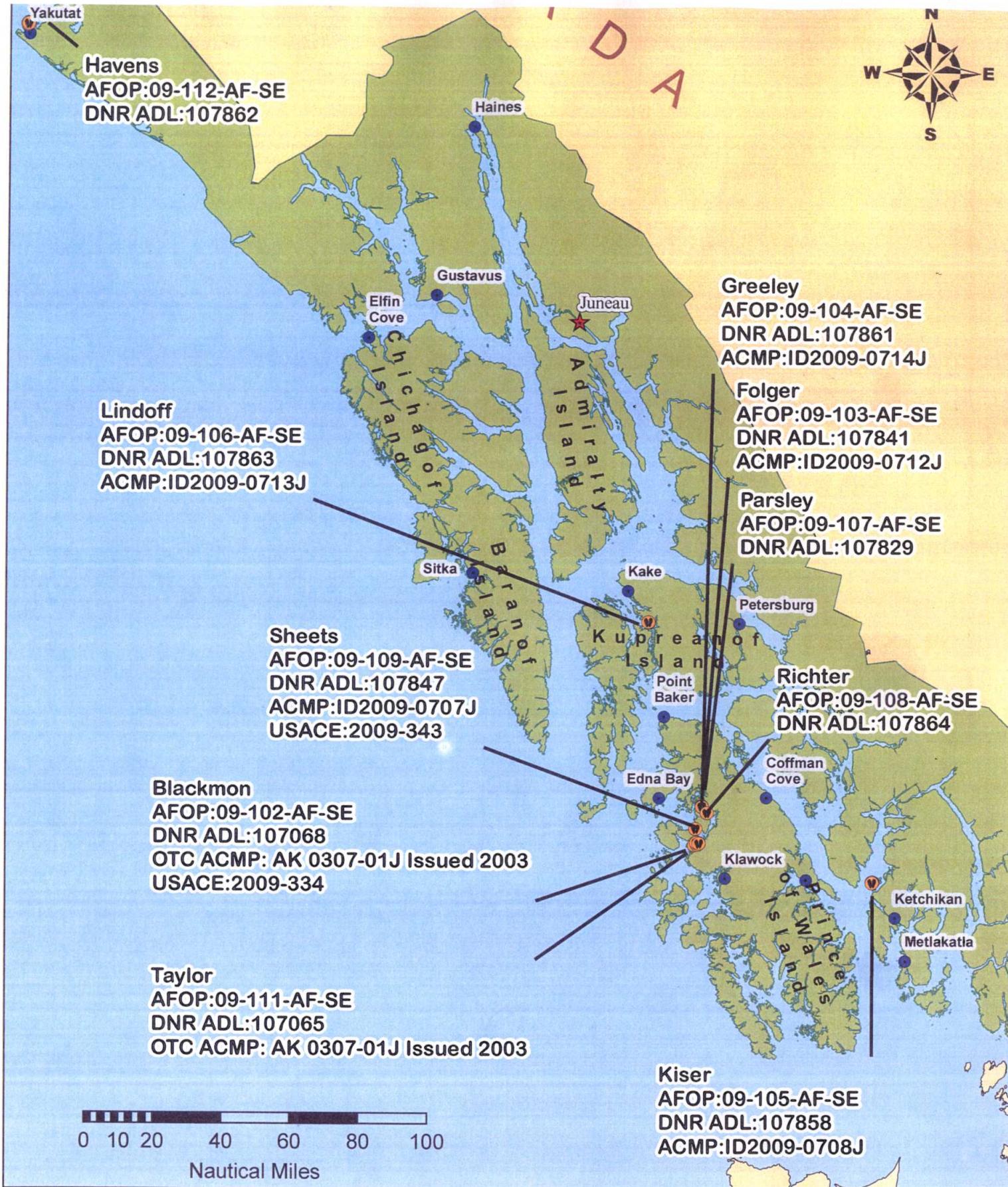
RECOMMENDATION: Considering the information known at this time and described within this decision, it appears to be in the state's best interest to issue a lease for approximately 3.29 acres more or less to the applicant for shellfish culture. Any resultant lease will include stipulations that may be 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, Aquatic Farm Program Manager



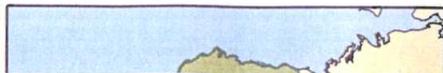
Date

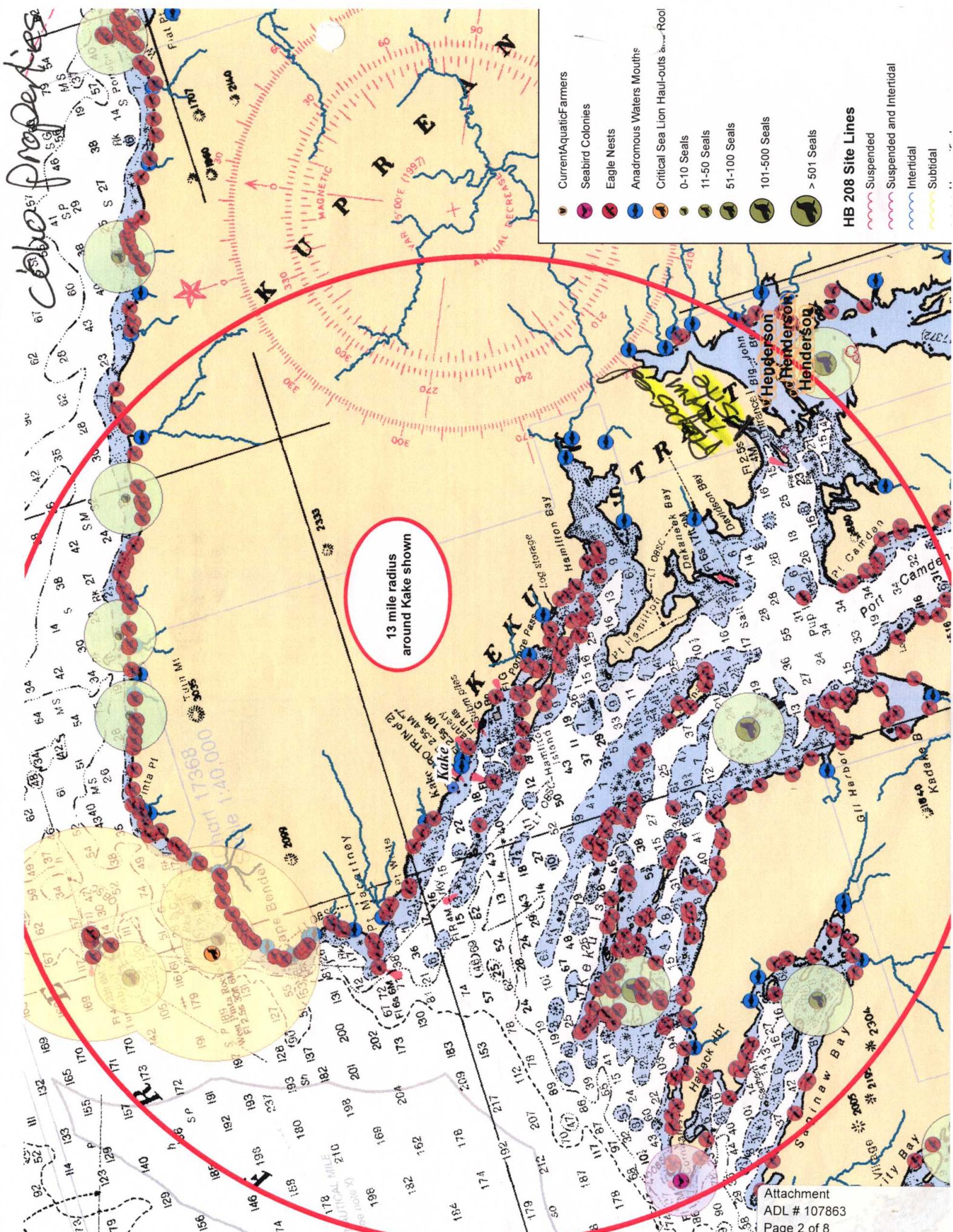


2009 Aquatic Farm Opening Sites Southeast Alaska

Attachment
ADL # 107863
Page 1 of 8

-  2009 Aquatic Farm Application Sites
-  Capital

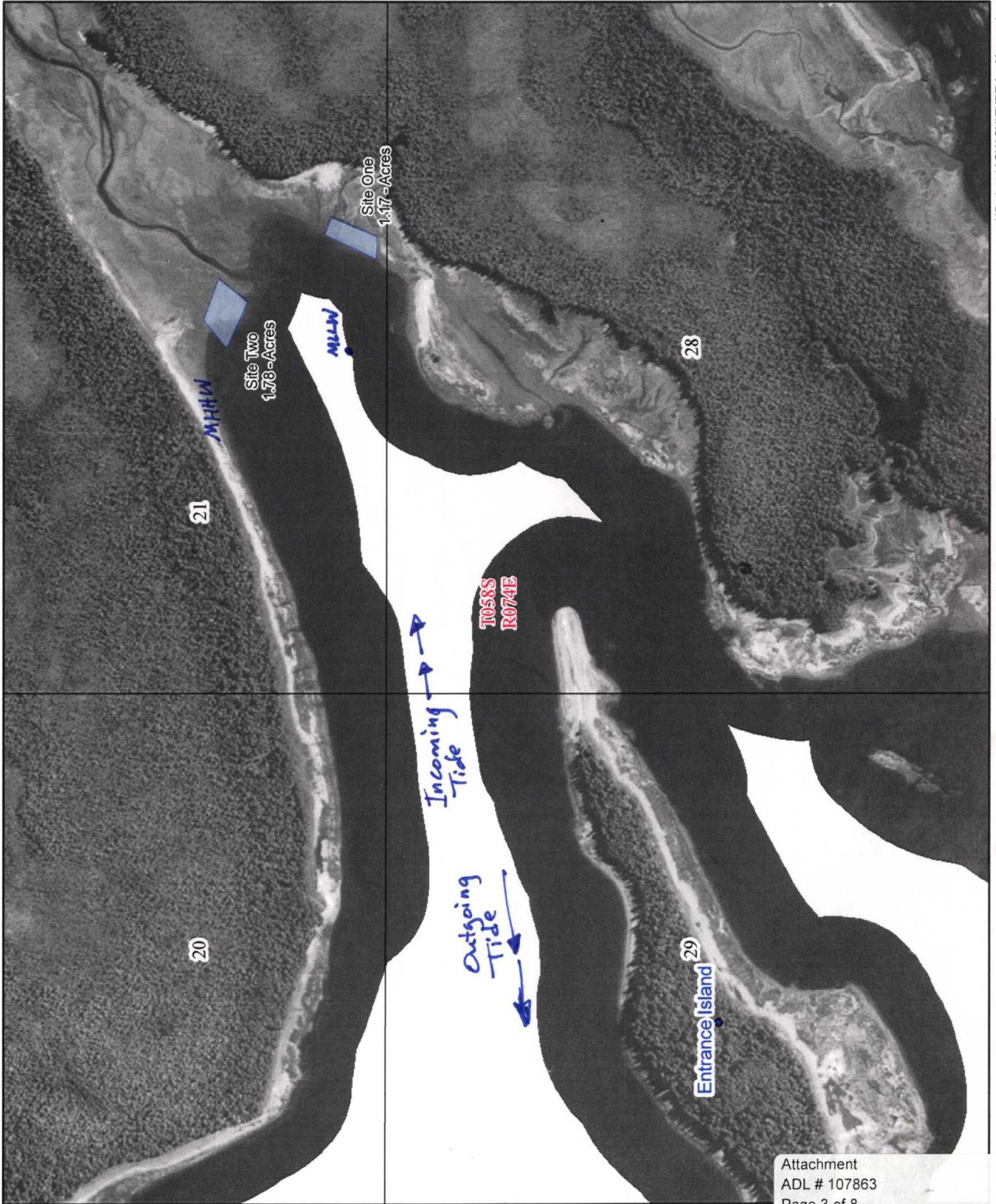




Cobeco Properties

- Current/Aquatic Farmers
 - Seabird Colonies
 - Eagle Nests
 - Anadromous Waters Mouths
 - Critical Sea Lion Haul-outs
 - 0-10 Seals
 - 11-50 Seals
 - 51-100 Seals
 - 101-500 Seals
 - > 501 Seals
- HB 208 Site Lines**
- Suspended
 - Suspended and Intertidal
 - Intertidal
 - Subtidal

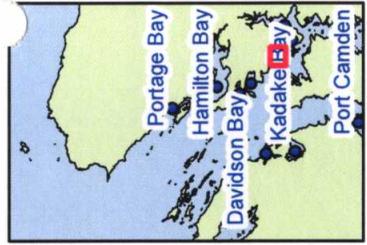
South Kake Area - Aquaculture Sites - (T 58S / R 74E)



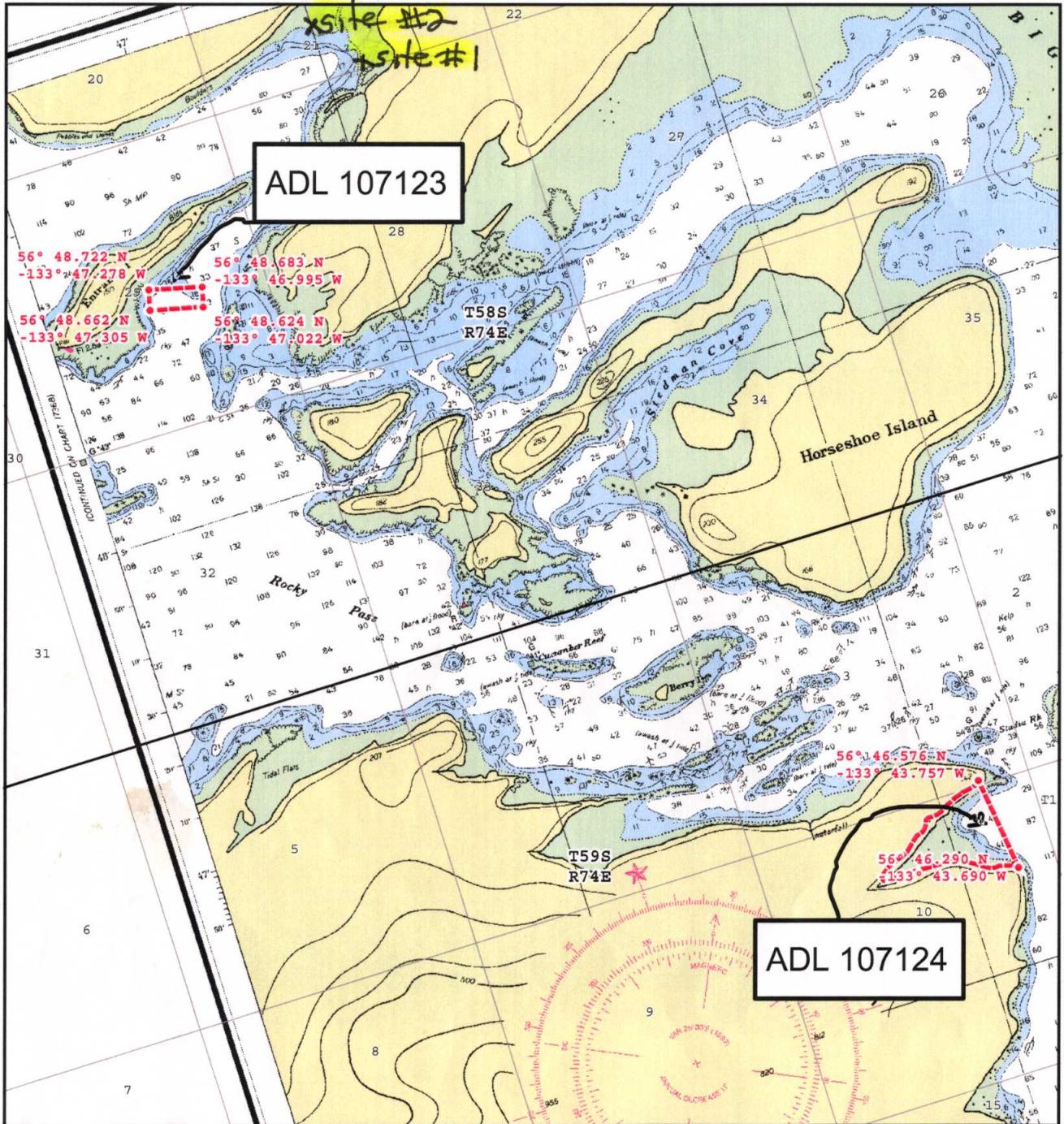
Prevailing Wind
SE

Both Sites are in
Section 21 of
Township 58 S.
, Range 74 E.

Vicinity Map



Coho Properties marine chart location



LEGEND

- DESIGNATED AREA BOUNDARIES
- PREAUTHORIZED SITE LOCATIONS
- EXISTING FARMSITES
- COORDINATE REFERENCE POINTS (NAD83)
- ANADROMOUS FISH STREAMS
- TOWNSHIP/RANGE SECTION

NOT FOR NAVIGATIONAL PURPOSES

0.3 0.15 0 0.3
Miles

Alaska Albers Equal Area Conic, NAD83

STATE OF ALASKA, DEPT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER
AQUATIC FARM DISPOSAL PROGRAM

SOUTH ENTRANCE BAY SOUTH ROCKY PASS

REFERENCE NUMBER	FARM SITE BID NUMBER	CULTURE METHOD	MAXIMUM FARM SIZE
WRA-C004	ADL 107123	Suspended Culture	1 acre
WRA-C005	ADL 107124	Suspended Culture	5 acres



Sealaska - floating bags

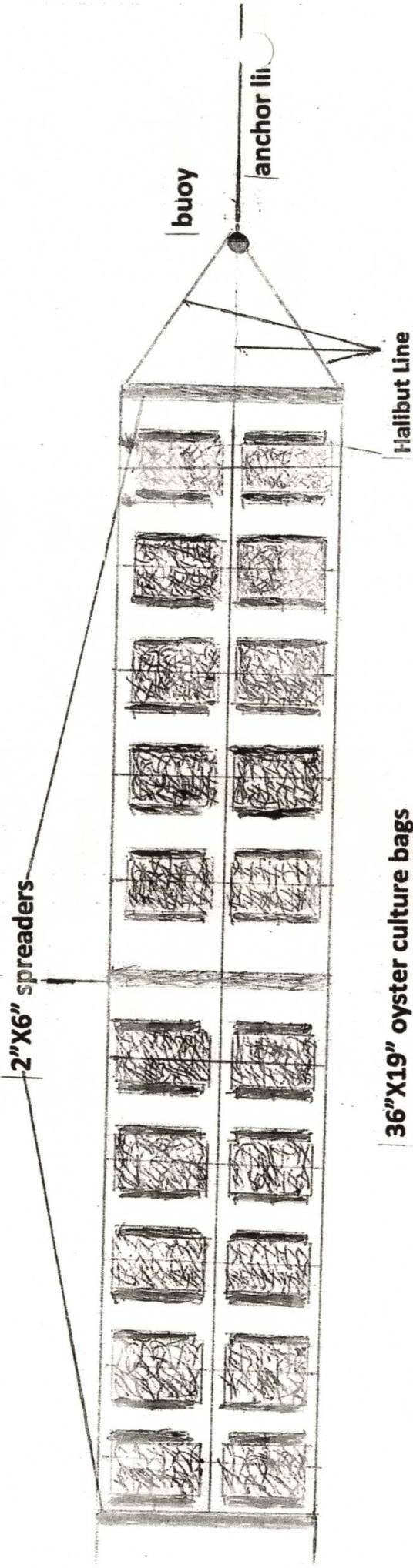
- Open ended bags are closed with zip ties.

- Floats are secured tightly with zip ties.
- Bridals attach bags to longlines. For bridals, a line going through bag with longline snaps on either end.
- The open end will be sealed with snaps.



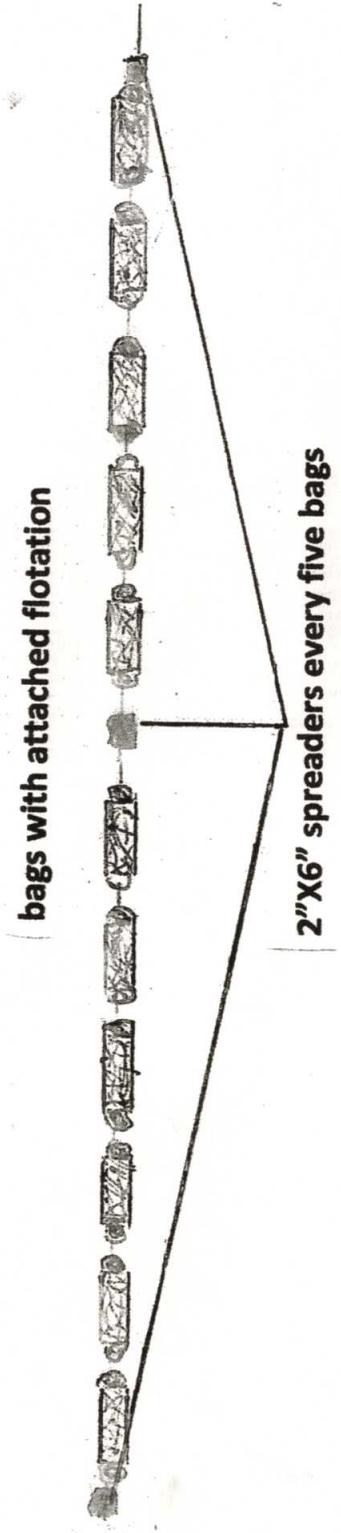
Floating Bag Culture System

Top View



36"X19" oyster culture bags
flotation attached
to each side of bags
(high density foam)

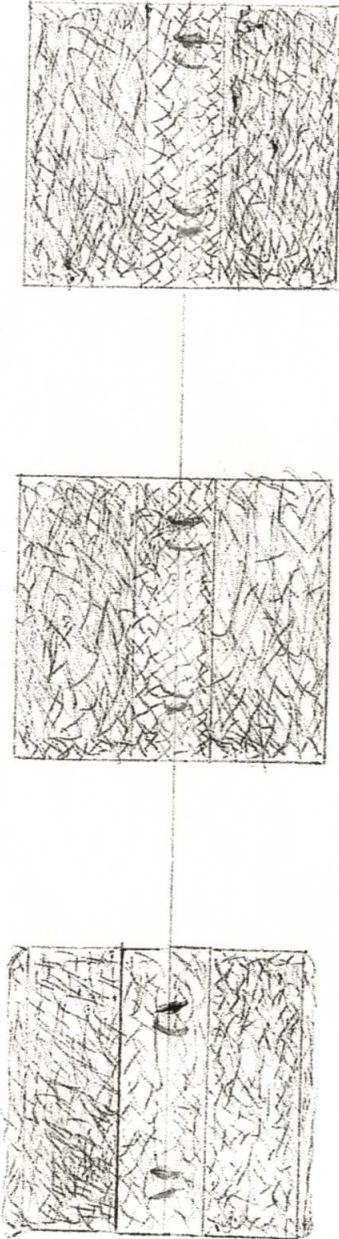
Side View



bags with attached flotation

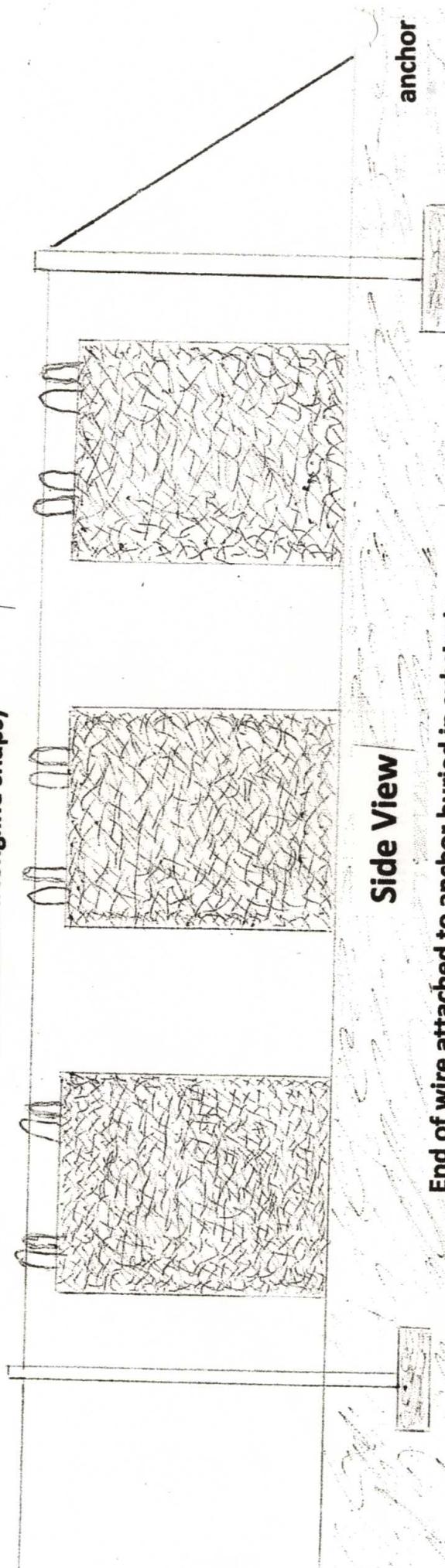
2"X6" spreaders every five bags

Top View

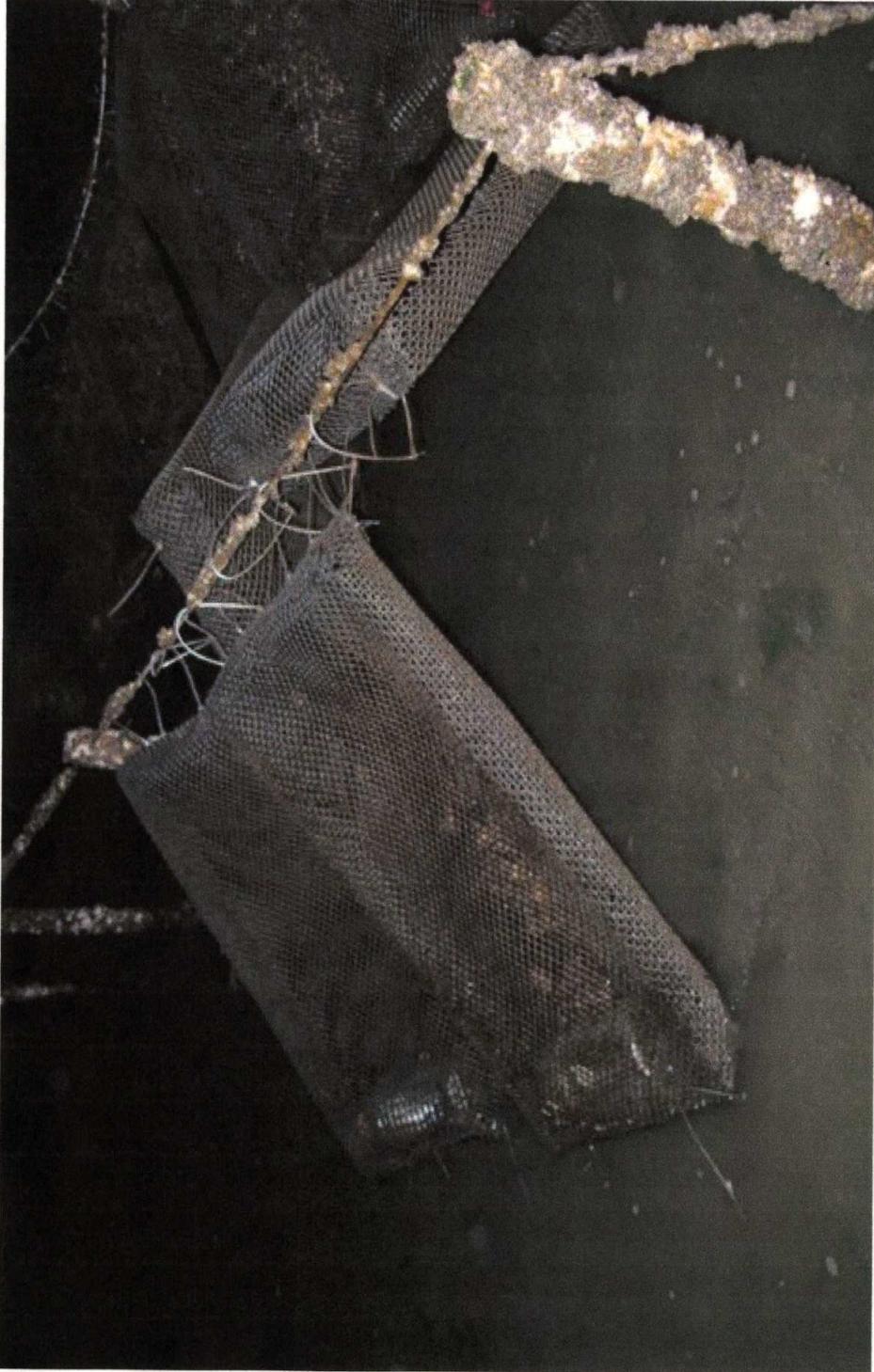


36"X19" oyster culture bags
(two bags clipped to poly-coated wire
with standard longline snaps)

Side View



End of wire attached to anchor buried in substrate
Wire threaded through holes drilled in 3" PVC pipe
3' PVC pipe with 10" concrete base buried 6" in substrate
Posts spaced every 10'



Intertidal Oyster Bag Culture

Example of intertidal bag culture system at John Lentz's farm on Hood Canal. Flotation is provided by one-gallon plastic bottles. The PVC posts are anchored by steel fencing driven three feet into the substrate.

Sealaska Corporation