

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

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

**APPLICANT: Michael Sheets
ADL #107847**

LOCATION: Northeast Heceta Island / West of Karheen Passage

The Department of Natural Resources is accepting public comment on the following preliminary decision document for an amendment to existing aquatic farm site. **Written comments must be received on or before 5:00 p.m., Thursday, September 15, 2011.**

PROPOSED ACTION: The applicant is requesting the approval to relocate his existing suspended oyster grow-out area and to increase the size by 0.19 acres. Parcel 1 is proposed to be a 300 ft. x 427 ft. (2.94 acres) suspended culture grow-out area. He will be adding two new parcels. Parcels 2 and 3 are proposed to be a 12 ft. x 100 ft. (0.03 acres each) area for flip-flop bag culture and hardening areas. The new area will be located within one mile of the existing farm site off the northeastern shore of Heceta Island in southeast Alaska.

The total acreage of the proposal is 3.0 acres, more or less.

The proposed farm site locations are only accessible by boat or float. 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. Information included in the original preliminary decision document may not be included in this document if conditions have not been altered. Original preliminary decisions for this lease can be obtained by contacting the aquatic farm program manager for the DNR in Anchorage.

ADMINISTRATIVE RECORD: The administrative record for this renewal application is **ADL 107847**.

LOCATION:

USGS MAP COVERAGE: Craig (C-1) Quadrangle

NAUTICAL CHART: 17426

LEGAL DESCRIPTION:

Those tide and submerged lands located in southeast Alaska lying within:

Township 70 South, Range 79 East, Copper River Meridian,

SW ¼ of Section 17 – northeast Heceta Island and south of Garden Island, encompassing 3 parcels. Parcel 1 is proposed to measure 300 ft. x 427 ft. to be used as a suspended culture oyster grow-out area; Parcels 2 and 3 are proposed to measure 12 ft. x 100 ft. to be used as oyster culture and hardening areas, according to the site drawings attached and made a part of the lease authorized under ADL 107065 and labeled Attachment B, containing 0.27 acres, more or less.

Parcel 1: 300 ft. x 427 ft. = 2.94 acres. The four corners are proposed to be located at:

NE Corner: Latitude 55 47.863' N Longitude 133 20.531' W
SE Corner: Latitude 55 48.814' N Longitude 133 20.544' W
SW Corner: Latitude 55 48.824' N Longitude 133 20.667' W
NW Corner: Latitude 55 48.873' N Longitude 133 20.654' W

Parcel 2: 12 ft. x 100 ft. = 0.03 acres. The four corners are proposed to be located at:

NE Corner: Latitude 55 48.080' N Longitude 133 20.897' W
SE Corner: Latitude 55 48.077' N Longitude 133 20.896' W
SW Corner: Latitude 55 48.073' N Longitude 133 20.924' W
NW Corner: Latitude 55 48.075' N Longitude 133 20.924' W

Parcel 3: 12 ft. x 100 ft. = 0.03 acres. The four corners are proposed to be located at:

NE Corner: Latitude 55 48.075' N Longitude 133 20.869' W
SE Corner: Latitude 55 48.073' N Longitude 133 20.868' W
SW Corner: Latitude 55 48.078' N Longitude 133 20.896' W
NW Corner: Latitude 55 48.080' N Longitude 133 20.897' W

Total combined parcels equals 3.00 acres.

Parcels are located in the Ketchikan Recording District.

GEOGRAPHIC: The proposed farmsite is to be located on state-owned tide and submerged lands off the northeast shore of Heceta Island west of Karheen Passage.

POLITICAL INFORMATION:

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

REGIONAL CORPORATION: Sealaska Corporation.

FISH AND GAME ADVISORY COMMITTEES: Craig Fish and Game Advisory Committee and the Klawock Fish and Game Advisory Committee.

PLANNING AND CLASSIFICATION:

LAND MANAGEMENT PLAN: Prince of Wales Area Plan, Unit 10, Shaheen, Subunit 10a, Heceta Island. The tidelands in the proposed area north of Nossuk Anchorage are designated Recreational Anchorage (Ra). This designation denotes areas commonly used by recreation

or commercial vessels for anchoring. An anchorage area is noted to the south. The area where the aquatic farm currently is located along with the area that the farm is being relocated too is not used as an anchorage due to the shallow water and rocks at the entrance to the area.

The management intent for aquatic farming in Subunit 10a, Heceta Island states that aquatic farming should locate in a place and in a manner that will have minimum impacts on primary designated uses.

MANAGEMENT INTENT AND GUIDELINES: State tidelands and submerged lands are to be managed for multiple use.

SURFACE MINERAL ORDERS: All state lands are open to mineral entry in this subunit.

CULTURAL RESOURCES: Cultural sites are identified in this subunit. Most are concentrated along the northern shore of Warm Chuck Inlet located approximately 8 miles to the east of the proposed aquatic farm site. There are no known cultural sites in the proposed farm site area.

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, Fish and Game Advisory committees, etc. 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 or who testify at a public hearing will be sent a copy of the final best interest finding and will be eligible to appeal. The final best interest finding will include an explanation of the appeal process. **The public comment period begins on August 17, 2011 and will end at 5:00 p.m. on Thursday, September 15, 2011.**

The preliminary best interest finding is subject to public comments received during the comment period. The final best interest finding will consider and address any comments related to the subject proposal and will be available on or about October 10, 2011. If significant changes occur to this decision as a result of public comments received, additional notice will be sent to those who provided comments, either in writing or by testifying at a public hearing.

Evaluation by the Alaska Department of Fish and Game

I. Physical and Biological Characteristics: Based on the information provided by the applicant on the site physical and biological characteristics, the proposed sites appear capable of supporting the farm activities proposed. Details listed for the proposed areas are summarized below.

Protection from Oceanographic and Atmospheric Extremes: The physical exposure notes from

Alaska ShoreZone imagery mapped data¹ shows the area as “protected” defined as a maximum effective fetch of < or = to 10 km. The proposed support facility structures and farm culture gear have a sound configuration and anchoring system and are comparable to existing farm gear used in Southeastern Alaska that can withstand ocean and atmospheric conditions. The applicant is moving his existing gear to a less exposed area in the bay to ensure that the gear stays in place. Additional monitoring of the site may be warranted.

Sufficient Environmental Conditions: The proposed aquatic farm operation project is in an area that appears to 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 for the suspended growing area, Parcel 1 averages approximately 45 ft and culture gear extends down 7 ft. This is more than sufficient to prevent gear from grounding and impacting the benthos under floating structures.

As a note to the applicant, under circumstances where water temperatures may reach 63 degrees, culture gear used in Parcel 1 would not be able to be lowered into deeper recommended depths of 60 ft where cooler temperatures are found. This is an accepted ADEC corrective action practice to eliminate or decrease the possible occurrence of pathogenic stage of *Vibrio parahaemolyticus* is known to cause gastroenteritis in humans. As of yet, there have been no reports or any outbreaks in Southeast Alaska.

Eelgrass and Kelp Beds Maintained: Eelgrass and kelp habitats are among some of the most productive and biologically diverse. Among other things, eelgrass and kelp beds helps prevent erosion and maintain stability of near-shore environments and provide food, breeding areas, and protective nurseries for fish, shellfish, crustaceans, and many other animals. Operations must be done in a manner to minimize turbidity in the area and to prevent any trampling or shading that may impact the health and abundance of eelgrass beds.

ShoreZone imagery data¹ for intertidal areas shows continuous bio-bands of eelgrass, *Zoster* sp., adjacent to two proposed intertidal site parcels, Parcels 2 and 3. There is the potential that access to Parcels 2 and 3 or gear used at these parcels, may result in trampling or shading continuous eelgrass beds that may significantly and adversely impact the health and abundance of eelgrass beds near these sites. Review of ShoreZone aerial photos show that for Parcels 2 and 3 have good access through less dense eelgrass or areas where there is no eelgrass. The following operation permit conditions will apply to this amendment to maintain the health and abundance of eelgrass beds and avoid significant adverse impacts to this important resource:

A 4-foot buffer zone will be required around established eelgrass beds (*Zostera* sp) to maintain the health and abundance of eelgrass beds in the area. You will not conduct operational activities or place culture gear within the buffer zone. If new data becomes available on eelgrass beds in the area, further measures to increase or decrease this buffer may be required. Entrance to and exit from intertidal parcels must occur where eelgrass is least dense or absent.

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.

¹ NOAA (National Oceanic and Atmospheric Administration), Fisheries, National Marine Fisheries Service. Alaska ShoreZone: Coastal Mapping and Imagery. <http://akr-mapping.fakr.noaa.gov/szflex/> (Accessed July 2011).

II. Existing Uses not Significantly Altered: The proposed aquatic farm site will not significantly alter an established use defined in regulations as a commercial fishery, sport fishery, personal use fishery, or subsistence fishery.

Commercial Fisheries: The proposed aquatic farm is located in ADF&G Commercial Fisheries Division statistical area sub-district 103-90. The proposed aquatic farm site project is not expected to cause any significant alterations to the existing commercial fishery uses in the area. Details on each commercial fishery is listed below.

Geoducks: Harvest data shows commercial geoduck fishery landings took place in 2009, but not in 2008 and 2010 for this area.

Sea cucumber: The proposed areas are near the Sea Otter Sound commercial sea cucumber dive fishery harvest area. Harvest data shows commercial sea cucumber fishery landings took place in 2008 and 2010, but not in 2009 for this area. There is a commercial sea cucumber fishery in the greater area of Sea Otter Sound, however the proposed new site represents a tiny fraction of sea cucumber habitat and fishery area.

Red Sea Urchins: No commercial red sea urchin dive fishery landings took place for this statistical area.

Salmon: Harvest data shows landings in this statistical area during 2010 for commercial salmon fisheries using purse seining (Chinook, coho, sockeye, pink, and chum salmon), hand trolling (Chinook, sockeye, coho, and pink salmon), and power trolling (Chinook, coho, pink, and chum). No salmon set netting or gillnet salmon fisheries occurred for this area in 2010.

Herring: No commercial herring fishery landings occurred in this area in 2010.

Shrimp: Spot shrimp fishery landings were reported in 2010 for this statistical area.

Dungeness crab: Harvest data from statistical area 103-90 shows commercial Dungeness landings in 2010. Aerial surveys of the Dungeness grounds in central and northern Southeast are conducted every June after the commercial fishery opens. Statistical area 103-90 is not part of the annual aerial survey so effort data can only be described for the statistical area itself, and not for any of the bays or inlets that are part of statistical area 103-90. It is likely that this proposed farm site will have no impact on commercial Dungeness fisheries or on Dungeness habitat in the project area. The project footprint is small, the growing area is subtidal and suspended, and the bottom type is listed as rocky in the application.

Sport Recreational Fishery: Since no permit system is in place for the personal use fishery, the amount of effort and harvest in the area would be difficult to gauge. The Statewide Harvest Survey does tally personal use harvest in Southeast but summarizes these data on a wider scale than district or statistical area. Due to their design, oyster farms have not seemed to have significant negative impact on anglers. It is likely that the project area is also used by personal use Dungeness fishers. The proposed aquatic farm site project is not expected to cause any significant alterations to the existing sport recreational fishery use.

Subsistence Use: Subsistence harvest of fish, shellfish, aquatic plants, and marine mammals by residents of Whale Pass, Craig and Klawock Community may occur in the area. Coffman Cove

residents may harvest marine invertebrates in the area for subsistence according to Tongass Resource Use Cooperative Study (TRUCS) data. Naukati and Edna Bay residents have harvested marine invertebrates over the larger area of Sea Otter Sound, Davidson Inlet, El Capitan Passage and the nearshore waters of Prince of Wales Island and other major islands according to a 1997 household survey conducted by the Subsistence Division. Statistical area 103-90 lies within Section 3-C and there is no customary and traditional use of Dungeness crab in this section. The proposed amendment 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 wildlife resources in the area except for Parcel 1.

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 wildlife 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.²

Eagle Nest: Proposed New Parcel 1 is within 330 ft of the base of a tree or structure that supports a bald eagle nest³ (Figure 1). If within site of an active bald eagle nest, no work rafts (FLUPSY nursery raft included), on which equipment is worked on shall be present and no equipment haulouts shall occur within 660 ft of the eagle nest. **ADF&G will not issue an operation permit for Parcel 1 as the placement of an aquatic farm site cannot be within 330 ft or if it can be seen from the site, 660 ft of an eagle nest.** This is necessary to adequately protect this resource. The proposed aquatic farm project operations will significantly affect this resource in an adverse manner (5 AAC 41.250 (a)(6)). The applicant can propose to move the parcel outside of the buffer.

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 U.S. Fish and Wildlife Service, Migratory Bird Management. Alaska Bald Eagle Nest Atlas-computer database. 2008.

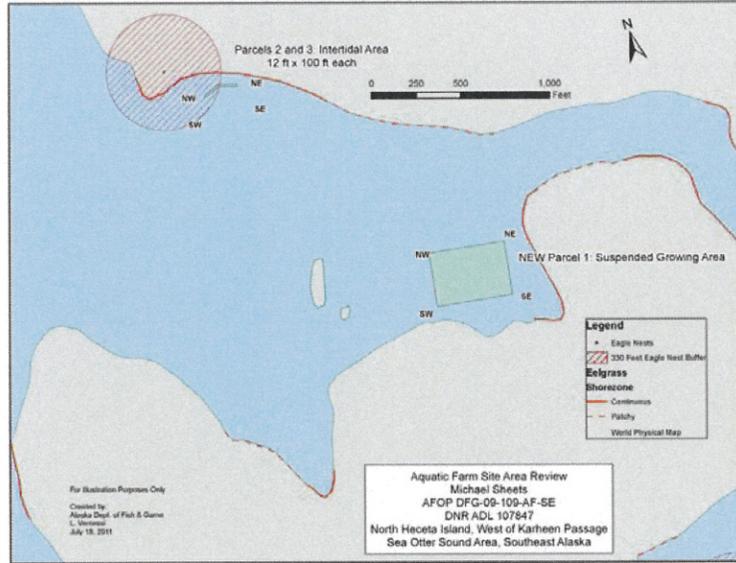


Figure 1. Vicinity of Eagle Nests, Herring Spawn, and Eelgrass near the Sheets Proposed Site Parcels

Sea Mammal Habitat: There are no sea mammal haul outs within 1 mile of the proposed sites⁴.

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. Approved methods include 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 be 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

⁴ 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.

suspended oyster culture.

ENVIRONMENTAL RISK ASSESSMENT: The applicant has submitted a signed environmental risk questionnaire. The questionnaire asks for information on potentially hazardous materials, such as plans for onsite storage of fuel or chemicals. The applicant has indicated that no on-site use, storage, transport, disposal, or otherwise, of any petroleum products will be used during the course of the proposed activities.

BONDING AND INSURANCE:

BONDING: 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 regulations require the minimum security amount of \$2,500 (or \$1,250 with an association bond) for an aquatic farm lease. Factors such as location and amount of improvements at the site are taken into consideration when the bond amount is determined. Please refer to the Recommendation section at the end of this decision for the bond amount that was determined appropriate for this proposal.

INSURANCE: At this time the DNR does not require this type of activity to have general liability insurance. General liability insurance may be required in the future depending on the aquatic farming operations and the procedures of the department at the time changes are made to the lease or a renewal lease is issued. The lessee is responsible for acquiring other types of insurance, such as Workman's Compensation Insurance that may be required under other local/state/federal laws.

POTENTIAL CONFLICTS/PENDING INTERESTS: There are no known pending interests at the location of the proposal.

TRADITIONAL USE FINDING: The proposed aquatic farm would not appear to cause disruption of traditional and/or existing uses of the area, such as commercial and sport fishing, subsistence activities, boat travel, 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.

Upland Owner/Management Intent: The U.S. Forest Service (Tongass National Forest) is the upland owner of the lands adjacent to the aquatic farm proposal.

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 Prince of Wales Island 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 suggests the aquatic farm will not disrupt traditional and existing uses of the site for use as an anchorage, commercial and sport fishing, recreation, and tourism.

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

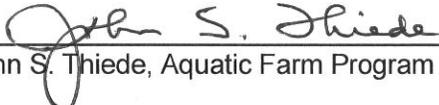
Social, Economic, and Environmental Concerns: There are no known significant social, economic, and environmental effects from the existing lease.

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).

Aquatic farm sites have the opportunity 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 continued employment opportunities as well as any secondary jobs created or increased from businesses involved in marketing, transport or sale of the farmed products.

After researching this proposal there seems to be no obvious disadvantages in issuing 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 farm site.

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 10-year aquatic farm lease for approximately 2.96 acres more or less to the applicant for caretaker facilities associated with the existing aquatic farm in Nossuk Bay. 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.



John S. Thiede, Aquatic Farm Program Manager



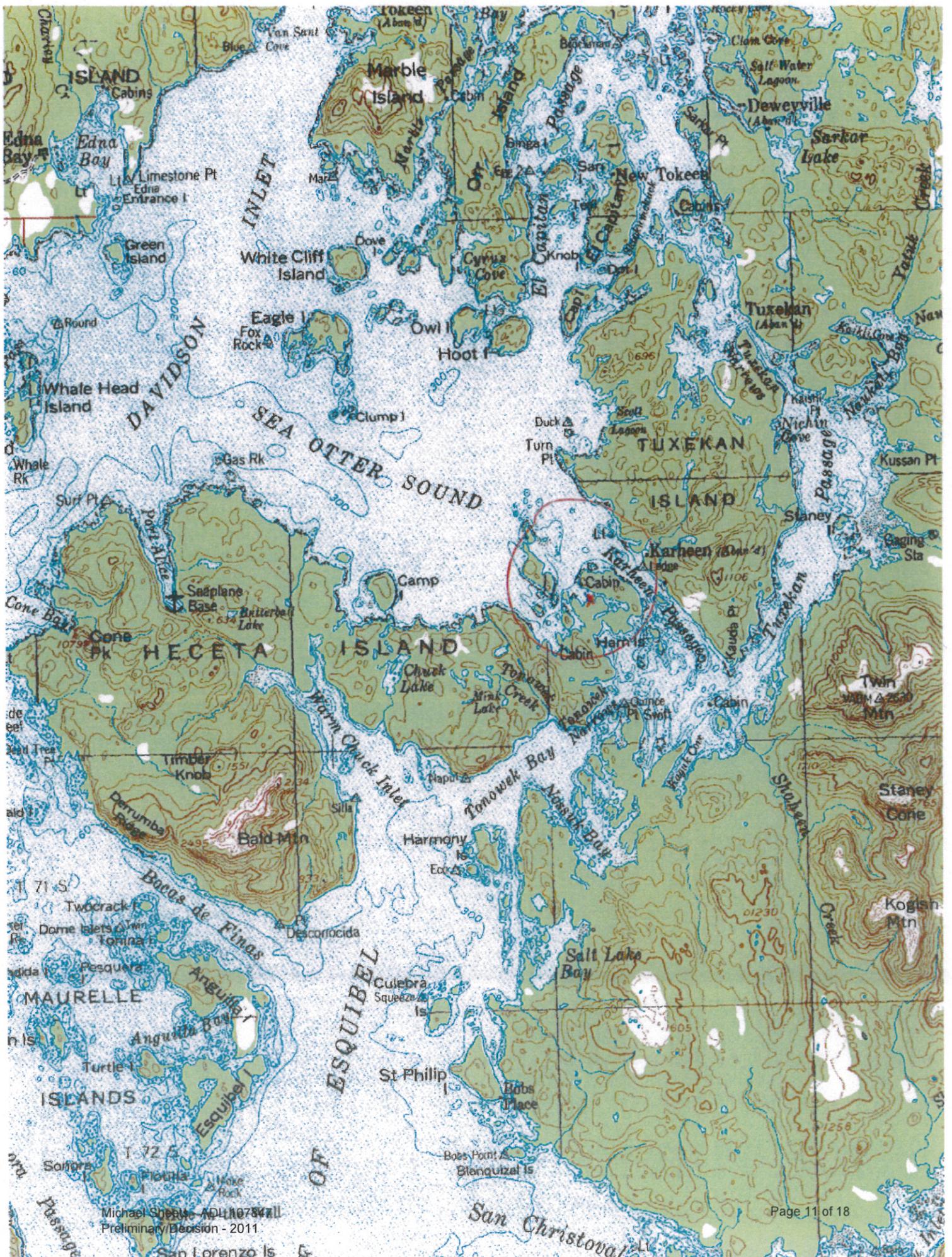
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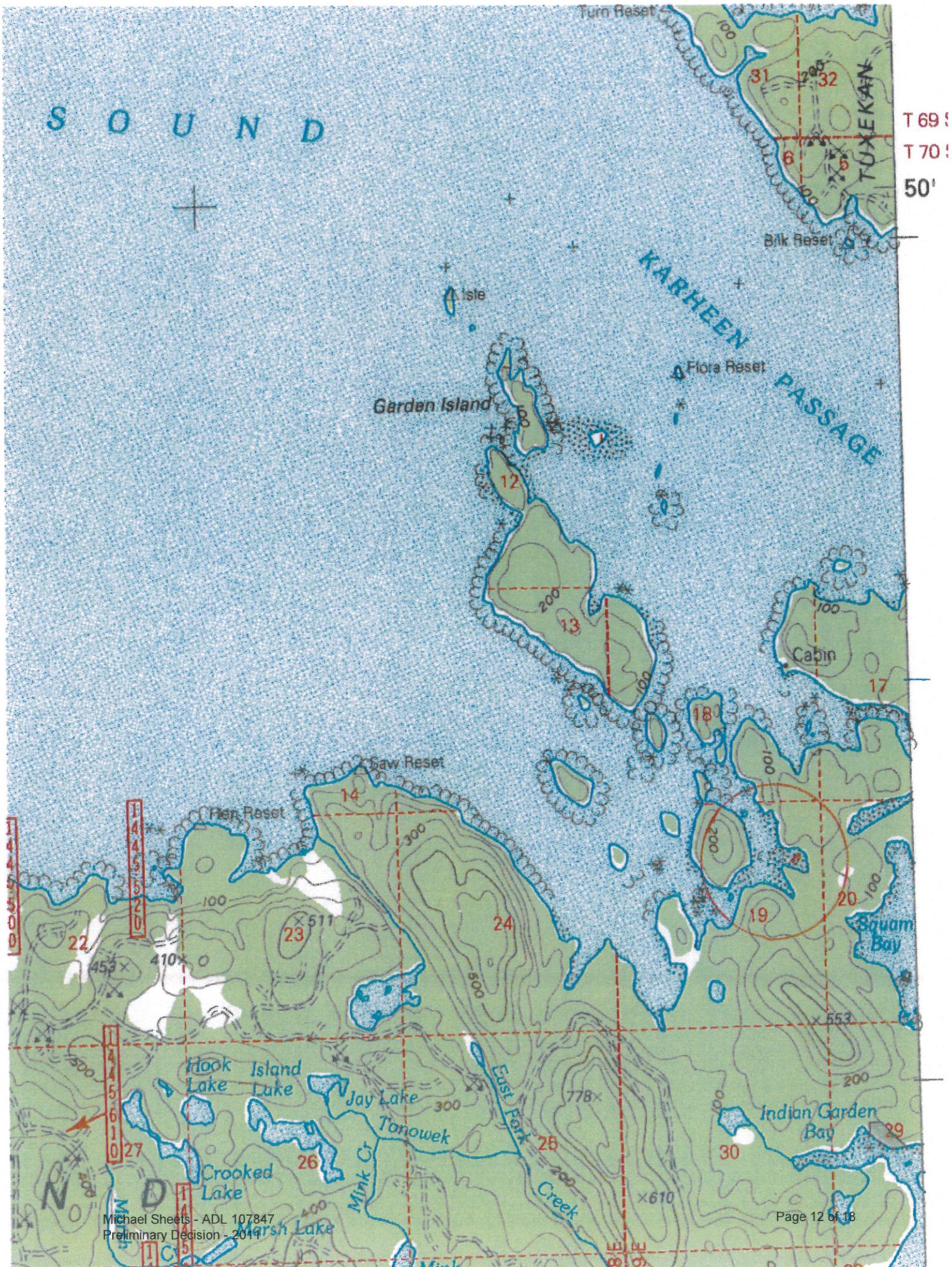
all equipment will remain the same as before
except the 12 x 200' beach area - will be used
for Handling and Uxar bags

The farm lay out will be the same

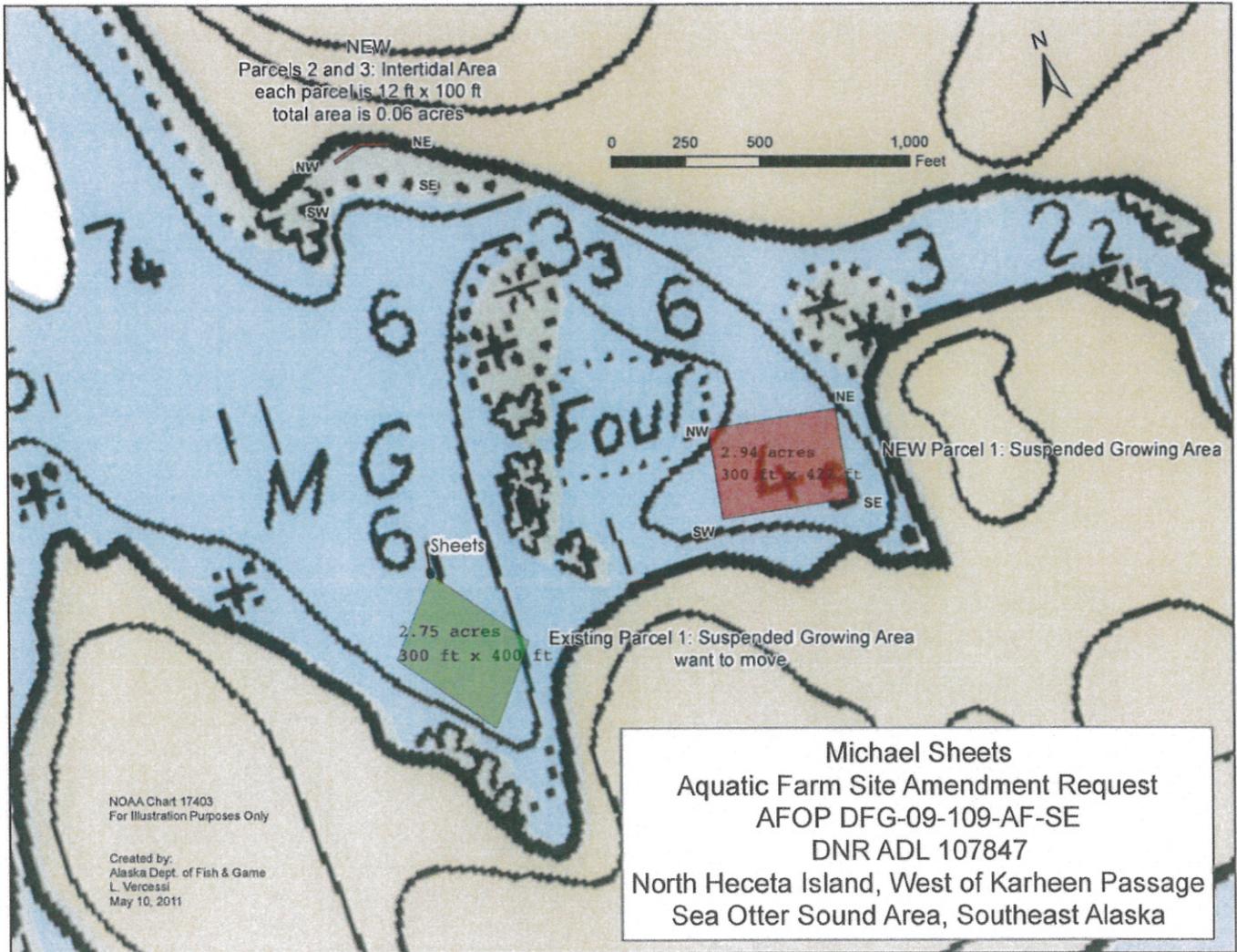
The reason for moving is the new Replacement area
is much more protected from N W swell that
caused some damage last winter

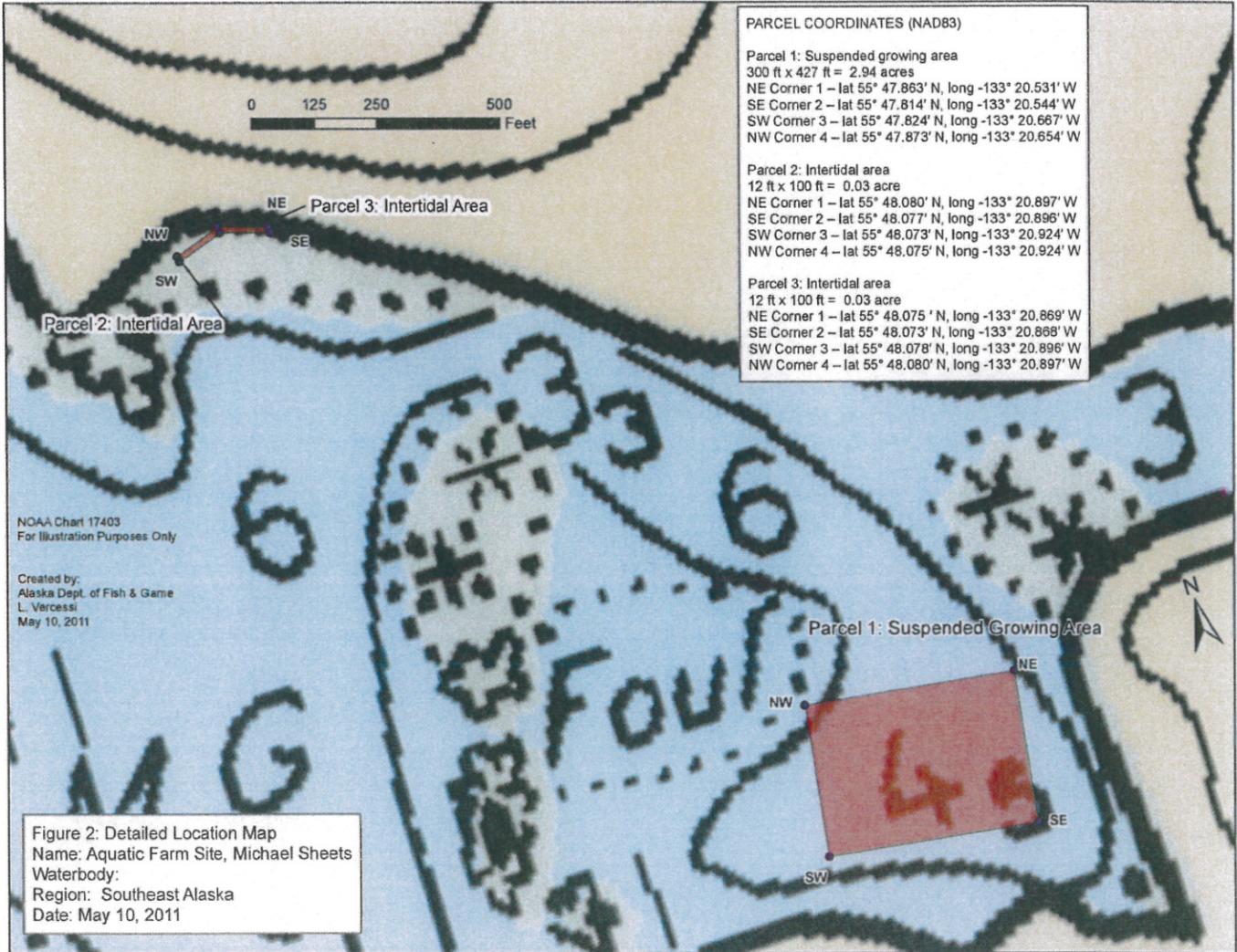
Michael Sheets 2/4

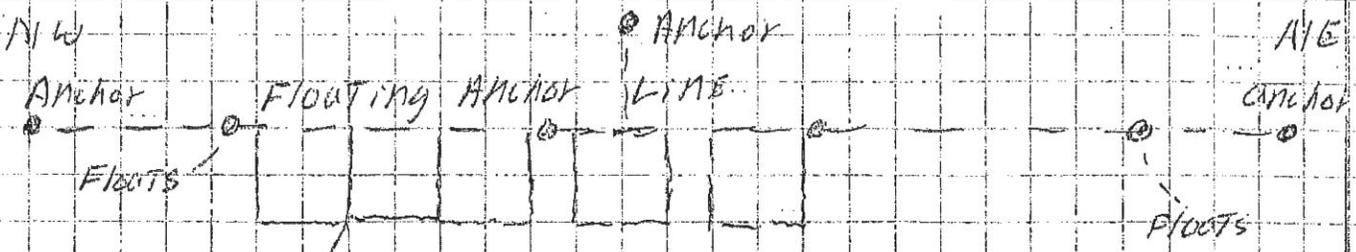




T 69'
T 70'
50'

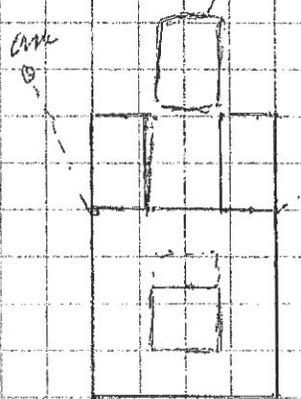






OYSTER FLOOTS
14x20

OYSTER FLOOTS CAN BE MOVED TO PROCESS
FOR TUMBLING / SORTING / CLEANING



anchors will be concrete
with 1" rebar

40x10 main float
with 16x16 work shed with concrete work area float

400'

300'

SE

15' x 15' x 15'

TURN ON SYSTEMS HERE

40x40

FLIRT w 20 FINGERS

15x15 WORK SARD

Floor will be constructed with untreated local wood - flotation will be sink wrapped STAYDOWN - The wood frame will not touch water

anchors will on SW corner - following lines to NW corner and SE corner one ~~is~~ one to NE corner

400'

10x20 Floats

for Hanging Trays

100'

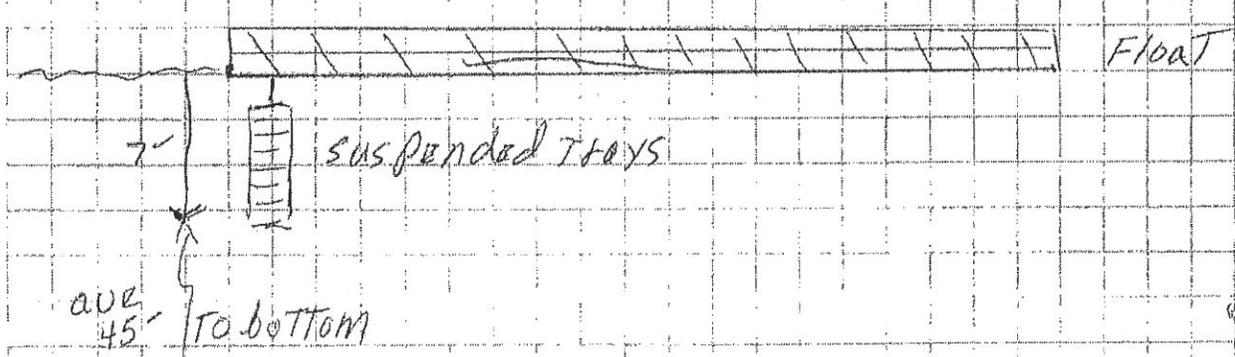
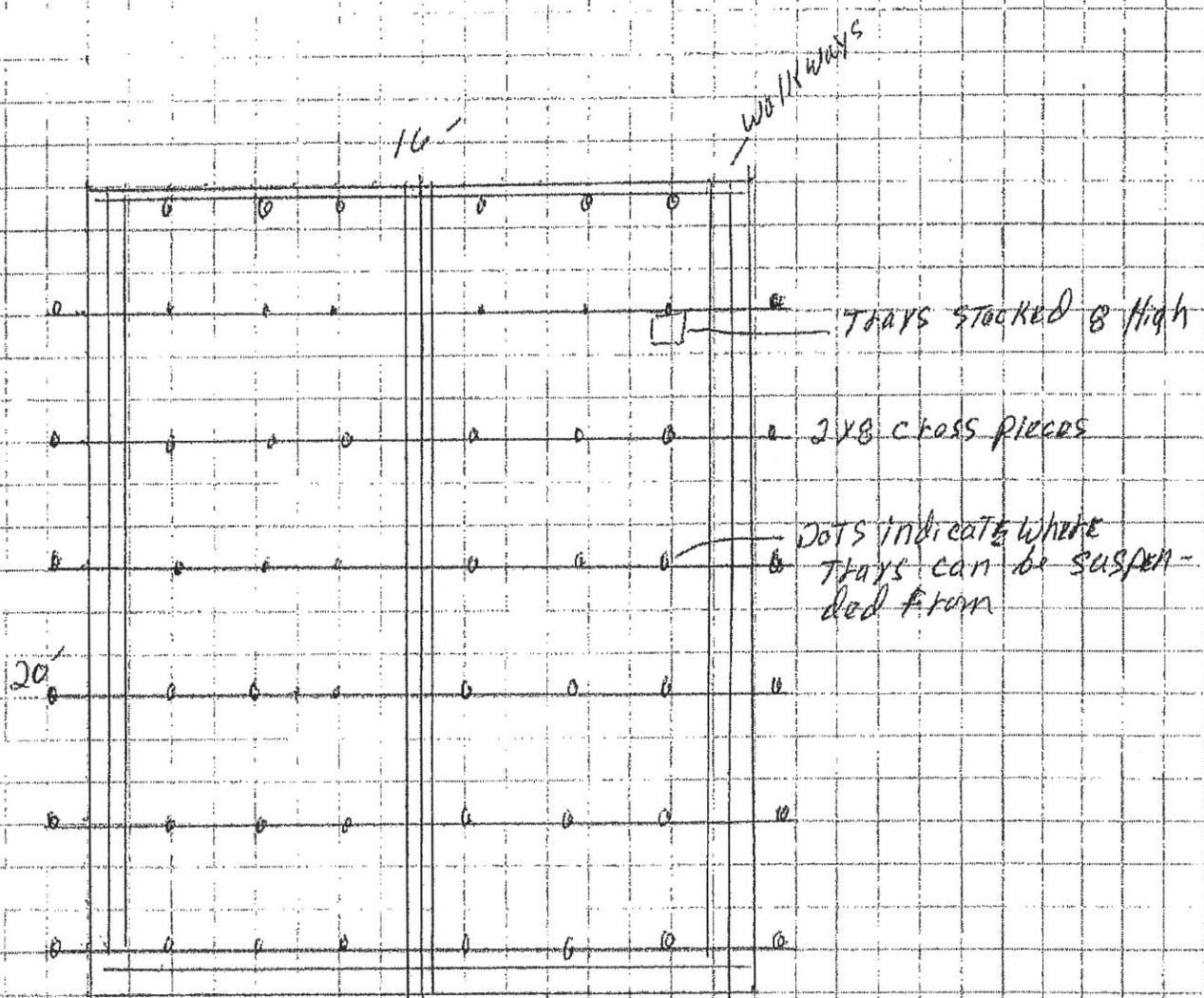
Trays will be stacked 8 High start with 100 pan oysters

in 100 trays thin to 300 trays

approach flat by end of year

floats will be constructed

same as work float



Trays to be used

TOP TRAY ABOUT
3' UNDER WATER
LINE ON BOTTOM
OF EACH TRAY

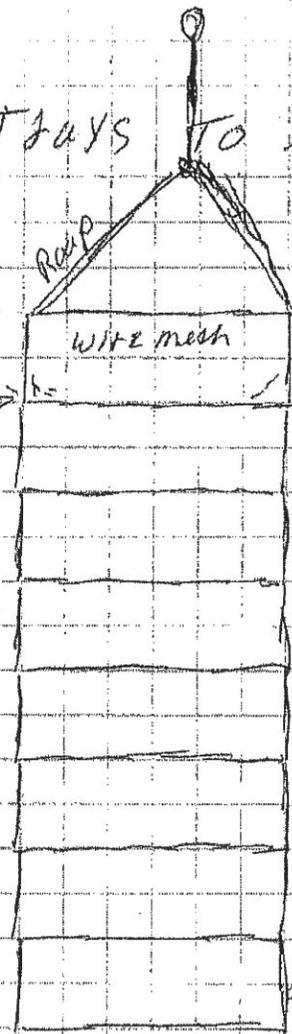
Each TRAY HAS
CLIPS ON ALL FOUR
CORNERS FOR STAPLES

Each TRAY WILL
HAVE 1,000 HATCHERY
SEED AT START

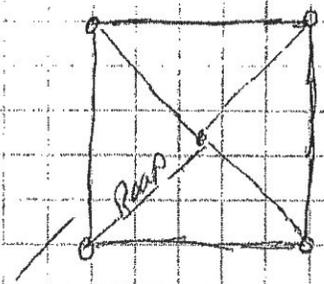
100,000 ON EACH
FLOAT

TRAYS WILL BE
ADDED AS OYSTERS GROW
100 TO START ABOUT 300 BY GROWOUT

BOTTOM OF TRAYS WILL BE ABOUT 7' UNDER WATER
WATER WILL BE 40 TO 60' DEEP



$22" \times 22" \times 6" =$ High Each Tray



$22 \times 22 \times 6 =$