

STATE OF ALASKA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER

PRELIMINARY DECISION

ADL 107829

Shikat Bay Oysters, Inc.

Application for Lease Amendment

AS 38.05.083

This Preliminary Decision (PD) is the initial determination on a proposed disposal of interest in state land and is subject to comments received during the Public Notice period. The public is invited to comment on this PD. The deadline for commenting is **November 4, 2019**. Please see the Comments Section of this decision for details on how and where to send comments for consideration. Only the applicant and those who comment have the right to appeal the Final Finding and Decision (FFD).

Proposed Action:

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Land Office (SCRO) has received a request from Shikat Bay Oysters, Inc. (SBO) to amend aquatic farm lease ADL 107829 by adding an additional 4.0 acres, more or less, of tide and submerged lands located within Shikat Bay, Alaska for the purpose of continuing the culture and harvest of Pacific oysters (*Magallana gigas*). The location of the project area is further described as being within the SW1/4 of Section 3, SE1/4 of Section 4, NE1/4 of Section 9, and the NW1/4 of Section 10 in Township 69 South, Range 79 East, Copper River Meridian.

SCRO is considering the issuance of an amendment to ADL 107829 for the remaining years of the lease. The proposed amended farmsite will consist of one parcel encompassing an area measuring 752 feet by 405 feet or 6.99 acres using a grow-out raft and tray system for oyster cultivation.

Scope of Review:

The scope of this decision is to determine if it is the State's best interest to issue an amendment for this aquatic farm lease for the proposed combined lease acreage of 6.99 acres.

Authority:

This lease amendment application is being adjudicated pursuant to AS 38.05.035(b)(1) Delegation of the Powers and Duties of the Director; AS 38.05.070(b) Generally; AS 38.05.083 Aquatic Farming and Hatchery Site Leases; and AS 38.05.945 Notice. The authority to execute the Preliminary Decision, Final Finding and Decision, and the lease has been delegated to the Regional Manager of SCRO.

Administrative Record:

The administrative record for the proposed action consists of the Constitution of the State of Alaska, the Alaska Land Act as amended, applicable statutes and regulations reference herein, the

1998 Prince of Wales Island Area Plan and other classification references described herein, and the case file for the application serialized by DNR as ADL No. 107829.

Legal Description, Location, and Geographical Features:

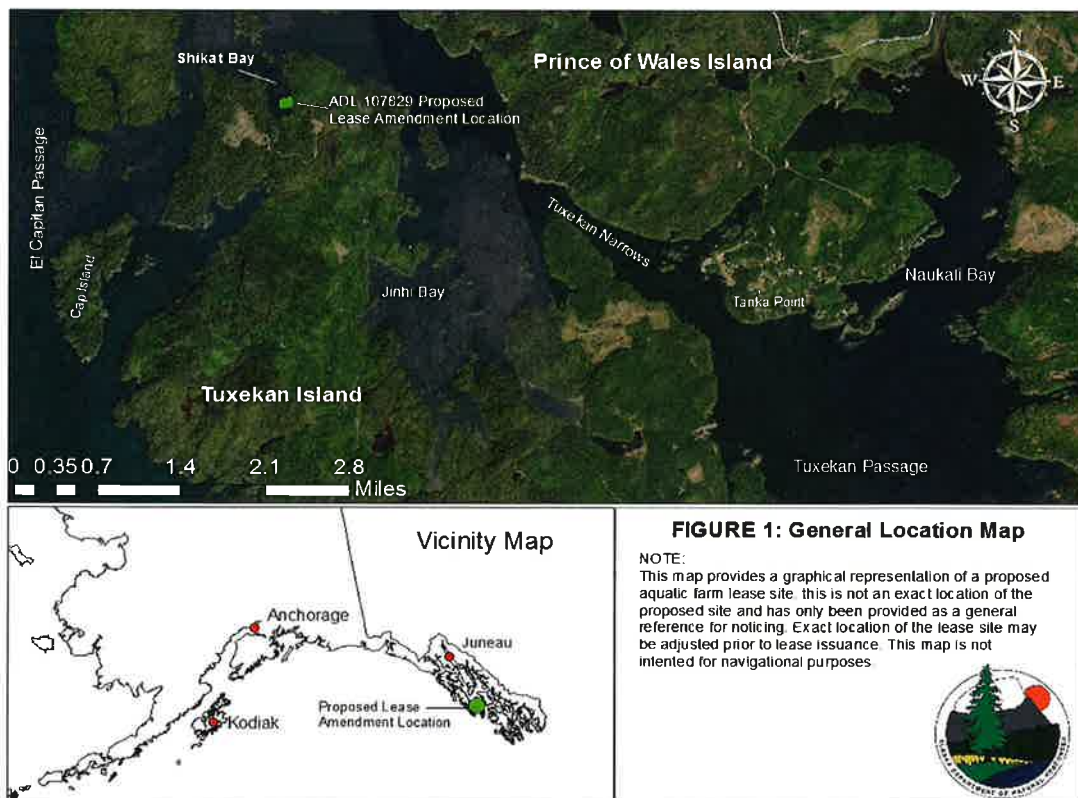
The state land where this proposed leasehold amendment is located is described as follows:

- **Site reference name:** Shikat Bay
- **Legal description:** SW1/4 of Section 3, SE1/4 of Section 4, NE1/4 of Section 9, NW1/4 of Section 10, Township 69 South, Range 79 East, Copper River Meridian
- **Geographical locations:** Shikat Bay, approximately 5 miles to Naukati Bay, Alaska and 76 miles to Ketchikan, Alaska. See Figure 1 for the project location.
- **Approximate Lat/Longs:**

Parcel 1: Grow-out Area for Pacific oyster: 752-feet by 405-feet = 6.99 acres

NE Corner	55°54.525 N 133°17.631 W
SE Corner	55°54.407 N 133°17.698 W
SW Corner	55°54.418 N 133°17.815 W
NW Corner	55°54.535 N 133°17.748 W

- **Existing surveys:** None
- **Municipality/Borough:** No organized Municipality or Borough
- **Native Corporations/Federally Recognized Tribes:** Sealaska Corporation



Title:

A DNR Title Report (RPT-20090) issued on August 29, 2019 from DMLW's Realty Services Section attests that the State of Alaska holds title to the subject tide and submerged lands under the Equal Footing Doctrine and the Submerged Lands Act of 1953.

Third Party Interests:

No third party interests are known at this time.

Classification and Planning:

The project area is subject to DNR's Prince of Wales Area Plan (Area Plan), Unit 7, Sea Otter Sound, Subunit 7b, Tuxekan. The Area Plan map for the proposed amended lease site is Unit 7, Sea Otter Sound, Subunits 7b and 7c. The tideland designation for the proposed leasehold amendment is Recreation/anchorage. This designation converts to the tideland classification of Public Recreation Land. The land adjacent to the aquatic farmsite, Tuxekan Island, is owned by the United States as part of the Tongass National Forest.

In Chapter 2 of the Area Plan, Areawide Land Management Policies, Aquatic Farming cites AS 38.05.083 and the goals include "provide opportunities to increase income and diversify the state's economy through the use of state tidelands and submerged lands for aquatic farming." In Chapter 2 of the Area Plan, Management Guidelines for Aquatic Farming: "Aquatic farming will be allowed on state tidelands or submerged lands where there is no significant conflict and the objectives of statute and this management plan are met. The siting of aquatic farming facilities may be more difficult on tidelands designated for log transfer or storage, mineral transfer or access, crucial fish and wildlife habitat, intensive storage areas adjacent to proposed land sales or existing residential areas, anchorages or developed recreation. These areas will be available for aquatic farming if the Department determines in the 'best interest' finding that: 1) it is practicable to operate an aquatic farming operation so that it is compatible with the other uses of the immediate area; and 2) the proposed activity is consistent with the management intent of the statute and this management plan. Specific stipulations related to siting, operations, and maintenance may be imposed by the Department in addition to those otherwise required in order to achieve site and use compatibility. In no case will aquatic farming be allowed to foreclose access to mineral, timber, important fish and wildlife resources or recreation use areas." The proposed leasehold amendment in Shikat Bay does not pose any of these potential land use conflicts.

As stated in Chapter 3 of the Area Plan, Management Intent and Guidelines for Subunit 7b, the "Sea Otter Sound marine waters have characteristics favorable for aquatic farming." The Management Intent for aquatic farming specifies "aquatic farming is allowed but should locate in a place and in a manner that will have minimum impacts on primary designated uses. Where feasible and prudent, aquatic farming should locate in open water or in larger bays rather than in small isolated coves. Aquatic farming should not preclude residential uses, including access, anchorage, and planned disposal of land." The Guidelines for aquatic farming specify certain lagoons, small isolated coves, and estuaries in Subunit 7b that are precluded from siting an aquatic farm because of conflicts with

existing uses and values. However, Shikat Bay is not one of those listed. Chapter 3 also mentions that there may be cultural resources on northwest Tuxekan Island. The proposed aquatic farm lease will have an additional stipulation and contact information if any such sites are discovered during lease operations.

In accordance with the Area Plan and classification, the proposed leasehold amendment is consistent with the Area Plan specifications for Shikat Bay.

Traditional Use Findings:

Because this aquatic farm lease site is not located within an organized borough, AS 38.05.830 and 11 AAC 63.050(b)(5)(B) require consideration of whether the lease site impacts traditional and existing uses of the site. This aquatic farm has been in operation at this site since 2010 when the ADL 107829 lease was issued. The adjacent uplands, Tuxekan Island, is not state-owned land and is part of the Tongass National Forest and is managed by the U.S. Forest Service. The Island has no permanent residents and is used for recreational activities such as camping, and sometimes logging.

There are no known uses at the lease site or the uplands that conflict with the existing aquatic farm and none are anticipated because of the amendment to the lease to add an additional four acres. Due to the nature of aquatic farming, the proposed farmsite amendment is not expected to impact traditional or existing uses at the lease site or the nearby area. If any additional traditional or existing uses may be identified or become evident during the public notice period, they will be discussed in the FFD.

Access:

Access to and from the aquatic farm is by boat or floatplane from Naukati Bay, Alaska.

Access To and Along Navigable and Public Waters:

Nearly all shore and tidelands in the State of Alaska are subject to a To and Along Easement under AS 38.05.127 and 11 AAC 51.045. The purpose of this easement is to uphold the constitutional right of the public to have free access to, and use of, the state's waterways. At the proposed lease site, the Along easement is 50 feet seaward from the line of mean high water.

Public Trust Doctrine:

Pursuant to AS 38.05.126 all authorizations for this site will be subject to the principles of the Public Trust Doctrine; specifically, the right of the public to use navigable waterways and the land beneath them for: navigation, commerce, fishing, hunting, protection of areas for ecological studies, and other purposes. These rights must be protected to the maximum extent practicable while allowing for the development of this project. As such, SCRO is reserving the right to grant other authorizations to the subject area consistent with the Public Trust Doctrine.

Lease Discussion:

ADL 107829 was issued to Gregg Parsley dba SBO as an aquatic farmsite lease on March 1, 2010 with an expiration date of February 29, 2020. SBO submitted an application for an aquatic farm lease amendment to continue the cultivation Pacific oysters on March 1, 2017. The proposed leasehold amendment will be comprised of one parcel of adding 4.0 acres to the current 2.99-acre parcel for a total area of approximately 6.99 acres. Additional facilities include one support float, one tumbler raft, four grow-out rafts, one work float, and mooring lines and anchors at amended leasehold area corners.

Pursuant to 11 AAC 63.030(b), the development plan submitted with an aquatic farmsite lease application “must result in commercial use of the site beginning no later than the fifth year of the lease operations and continuing for the rest of the lease term.” At this time the Commercial Use Requirement (CUR) states a farm needs to be making annual sales “of at least \$3,000.00 per acre or fraction of an acre, or \$15,000.00 per farm, whichever is less.” Under 11 AAC 63.110(7), the lease will include provisions that failure to meet the CUR constitutes a default and may be cause for revocation, and annual reports of the previous year’s sales are due by January 31st of every year. The CUR for SBO’s proposed amended leasehold is \$15,000 in annual sales. Annual reports have been received for each year since lease issuance. Since the original lease issuance in 2010, SBO met the CUR in 2012 and every year from 2014 to 2018.

The proposed lease amendment will be subject to the terms of DMLW’s standard lease document and any Additional Stipulations based, in part, upon the following considerations.

Development Plan:

The Development Plan dated January 28, 2019 is accepted by SCRO as complete but may be subject to change based on agency and public review. Should the proposed lease be granted, it is anticipated that the Development Plan will need to be updated throughout the life of the lease as activities and/or infrastructure are added or subtracted. All updates must be approved, in writing, by SCRO before any construction, deconstruction, replacement of infrastructure, or change in activity will be permitted. SCRO reserves the right to require additional agency review and/or public notice for changes that are deemed by SCRO to be beyond the scope of this decision.

Hazardous Materials and Potential Contaminants:

No hazardous materials or fuel will be stored on the proposed lease. i

The use and storage of all hazardous substances must be done in accordance with existing federal, state and local laws. Debris (such as soil) contaminated with used motor oil, solvents, or other chemicals may be classified as a hazardous substance and must be removed from the sites and managed and disposed of in accordance with state and federal law.

Lease Performance Guaranty (bonding):

In accordance with AS 38.05.083(e), SBO has submitted a performance guaranty for the original leasehold.

- **\$2,500.00 Performance Bond:** SBO has submitted a \$2,500.00 performance bond. This bond will remain in place for the life of the lease. The bond amount is based upon the level of development, amounts of hazardous material/substances on site, and the perceived liability to the state. This bond will be used to insure the applicant's compliance with the terms and conditions of the lease issued for their project. This bond amount will be subject to periodic adjustments and may be adjusted upon approval of any amendments, assignments, re-appraisals, changes in the development plan, changes in the activities conducted, or changes in the performance of operations conducted on the authorized premises, and as a result of any violations to one or more of the authorizations associated with this project. Pursuant to AS 38.05.083 and 11 AAC 63.080, the bond may be used to cover cleanup and restoration costs.
- **Reclamation Bond:** SCRO is reserving the right to require a reclamation bond due to non-compliance issues during the term of the lease or near the end of the life of the project.

Insurance:

SBO will be required to submit proof of liability insurance to SCRO, with the State of Alaska listed as a "NAMED" insured party. SBO will be responsible for maintaining such insurance throughout the remaining term of the lease.

Survey:

In accordance with AS 38.04.045, this short-term lease does not require a survey. However, the State of Alaska reserves the right to require one in the future, should the need arise due to changes in statutes or increased use of the area. SBO has submitted GPS coordinate point(s) for the four corners of the proposed leasehold.

Compensation and Appraisal:

DMLW 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. Fees are subject to adjustment per AS 38.05.083(c). The current annual rate for a 6.99-acre aquatic farm lease is a base fee of \$450.00 for the first acre and \$125.00 for each additional acre or partial acre. In accordance with the Aquatic Farmsite Fee Schedule, Report No. 2522-13, a breakdown of the lease fee will be as follows:

6.99 acres (1 acre at \$450.00) + (6 acres x \$125.00) = **\$1,200.00 per year**

If the applicant does not agree with the fee schedule amount of \$1,200.00, a fair market value determination can be obtained by the applicant. Fair market value is determined by obtaining a DNR approved appraisal of the lease site. If an appraisal is conducted to determine fair market value of the lease site, the applicant will be required to pay the appraised amount and the \$1,200.00 annual fee will no longer be an option. The appraisal cost will be borne by the applicant. The parcel

may need to have an approved Alaska Tidelands Survey to accomplish the appraisal. If a survey is required the cost will be incurred by the applicant.

Assignment of Lease:

The proposed lease, if issued, may be transferred or assigned to another individual or corporation **only** with prior written approval from the DMLW. A lease will not be assigned to an entity if that entity does not meet the statutory requirements of the lease or the lease is not in good standing. DMLW reserves the right to amend the terms of the lease prior to assignment.

Reclamation:

In accordance with AS 38.05.090(b), all Lessees must restore their lease sites to a “good and marketable condition” within 120 days after termination of the lease. What level of reclamation constitutes as being “good and marketable” is at the discretion of SCRO. DNR reserves the right to require a reclamation bond at any time.

Agency Notice:

An Agency Notice was conducted for a 20-day review starting on February 5, 2019 and then extended due to agency request. The extended deadline for agency comments was March 4, 2019. The following agencies were included in the review:

- DNR DMLW – Mining
- DNR DMLW – Water
- DNR Southeast Land Office
- DNR Division of Parks and Outdoor Recreation (DPOR)
- DNR DPOR, Office of History and Archaeology, State Historic Preservation Office
- DNR Natural Resource Conservation and Development Board
- DNR Division of Oil and Gas
- DNR DMLW – Realty Services
- Alaska Association of Conservation Districts
- ADF&G – Habitat
- ADF&G – Aquatic Farm Coordinator
- Alaska Department of Environmental Conservation (ADEC) – Shellfish
- Alaska Department of Transportation and Public Facilities
- U.S. Forest Service – Tongass National Forest
- U.S. Army Corp of Engineers
- U.S. Fish and Wildlife Service
- National Oceanic and Atmospheric Administration (NOAA)
- Southeast Alaska Soil and Water Conservation District
- U.S. Environmental Protection Agency
- U.S. Coast Guard
- City of Ketchikan

Agency Review Comment(s):

During the Agency Review, SCRO received comments from one agency.

NOAA:

NOAA's National Marine Fisheries Service (NMFS) provided a letter to SCRO advising NMFS is required to provide Essential Fish Habitat (EFH) Conservation Recommendations for actions that would adversely affect EFH.

"Essential Fish Habitat

The North Pacific Fishery Management Council has identified EFH for life history stages of five species of Pacific salmon in Shikat Bay in the Fishery Management Plan for the Salmon Fisheries in the EEZ off Alaska.

Shorezone identifies the intertidal zone of mostly bare mobile sandy beaches interspersed with rock outcropping and a few cliffs on the East shore. Barnacles, rockweed, and green algae are ubiquitous. Soft brown kelps are common in the area. Eelgrass, seagrass biobands and bull kelp are present along parts of the shoreline in Shikat Bay but not immediately adjacent to the oyster operation.

EFH Effects

The most direct effect to salmon EFH and herring spawning areas is potential disturbance of submerge aquatic vegetation (SAV), primarily eelgrass and soft brown kelp. These habitats are idea for juvenile salmon rearing and herring eggs often adhere to the vegetation. Infrastructure placement and maintenance activity, including raking of beds, can uproot plants. Increased boat traffic and shading necessitated by out-grow docks can impede their growth. Indiscriminate dumping of shells can make productive bottom substrates barren.

The possible introduction of invasive species into the area can effect EFH; this is most likely when gear from another area is reused in a new area. Invasive species have unknown effects on the local environment and are very hard to eradicate once they start to spread.

Oyster farms often introduce plastic/synthetic lines, bags, crates, docks and equipment into the ocean. If even a portion of these materials are not removed when an oyster operation ceases, they will degrade into microplastics that are harmful to all fish, but in particular, juveniles.

EFH Conservation Recommendations

The proposed aquatic farm site will occur within EFH for life history stages of all five species of Pacific salmon. In accordance with Section 305(b)(4)(A) of the MSA, NMFS makes the following EFH Conservation Recommendations:

1. Require the applicant use new materials for the oyster grow-out raft, suspended culture tray system, and other structures in contact with the seawater to minimize the potential for an invasive species introduction. Alternatively, ADNR could develop standards for decontamination and procedures to inspect reused equipment prior to allowing its deployed

in a new location. Introduction of invasive species to the marine environment would have lasting adverse impacts to EFH.

2. The entire operation must be at least 20 feet from eelgrass beds and stands of kelp. Map all rooted aquatic vegetation populations before the project expansion begins and each time before the lease is renewed. If the aquatic vegetation has expanded towards the operation during the original lease, the new lease would need to adjust the siting of its grow-out rafts to minimize effects to submerged aquatic vegetation. The 20-foot buffer is based on eelgrass growth rates and the length of state tideland leases.
3. Do not dump the shells in Shikat Bay as they create a barren zone on the bottom that will not grow submerged aquatic vegetation. Dispose of them on land or in water at least 200 feet deep and 1/4 mile offshore; these deeper areas have less light and are generally less productive.
4. Require the permittee to remove all structures, floats, lines, culture trays, etc. and restore the aquatic farm site once they decide to vacate the operation to minimize continued impacts to EFH from abandoned structures.
5. Consider establishing an escrow account with the applicant where funds would be returned to the applicant once cleanup of the location had been completed. Escrow requirements could be proportional to the size of the operation, or in this case the size of the expansion."

SCRO Response:

NMFS' comments are acknowledged and SBO was provided the letter from NMFS containing the EFH Conservation Recommendations. SBO was required to submit a performance guaranty bond prior to lease authorization. This is described within "Lease Performance Guaranty (bonding)" above.

DNR statutes and regulations do not specify management of aquatic farms relating to biological and water quality issues, and this is outside the scope of DNR's authority. Biological and water quality issues are under ADF&G and ADEC authority, respectively. ADF&G will address invasive species in the ADF&G Operation Permit.

Public Notice of the Preliminary Decision:

Pursuant to AS 38.05.945, this PD will be advertised for 30-day public comment period. Notice will be posted on the Alaska Online Public Notice System and the post offices located in Naukati Bay, Edna Bay, Whale Pass, Coffman Cove, Craig, and Klawock. Courtesy notices will also be mailed or emailed to neighboring property owners, permit/lease holders, and other interested parties on **October 3, 2019** for a 30-day public comment period.

Comment(s):

This decision is subject to both public and agency comments and all comments received by the comment deadline will be considered in the Final Finding and Decision. Only those who comment and the applicant have the right to appeal the Final Finding and Decision.

**Written comments about this project must be received in this office no later than
5:00 PM on November 4, 2019 to be considered.**

To submit comments, please choose one of the following methods:

Postal: Department of Natural Resources
Southcentral Regional Land Office
ATTN: Karen Cougan
550 West 7TH Avenue Suite 900C
Anchorage, AK 99501-3577
Phone: 907-269-8543
E-mail: karen.cougan@alaska.gov
Fax: 907-269-8913

If public comments result in significant changes to the Preliminary Decision, additional public notice may be given. To be eligible to appeal the Final Finding and Decision, a person must provide written comments during the Preliminary Decision comment period per AS 38.05.035(i)-(m).

Signature Page Follows

Recommendation:

DMLW has completed a review of the information provided by the applicant, examined the relevant land management documents, and has found that this project is consistent with all applicable statutes and regulations. DMLW considered three criteria to determine if this project provided the best interest to the State and the development and enjoyment of its natural resources. The criteria include direct economic benefit to the State, indirect economic benefit to the State, and encouragement of the development of the State's resources. This authorization provides a direct economic benefit to the State with the collection of one-time filing fees and any yearly rent/fees. The authorization of this lease amendment is in the State's best interest as it furthers economic development of the State's aquatic farm industry. It is recommended that DMLW issue a lease amendment to SBO.


Karen Cougan, Aquatic Farming Program Coordinator

9/11/19
Date

Preliminary Decision:

It is the determination of DMLW that it may be in the State's best interest to issue an aquatic farm lease amendment to SBO, as described above. Upon authorization of the lease amendment to ADL 107829, the applicant will be required to pay the annual lease fee of \$1,200.00, maintain their \$2,500.00 performance bond, and provide proof of liability insurance. This PD shall now proceed to public notice.


Clark Cox, Regional Manager
Southcentral Regional Land Office, Division of Mining, Land & Water

9-25-19
Date

Attachments

Attachment A – Development Plan: Project Description, General Location Map, Detailed Location Map, Site Plan Maps, and Cross-Sectional Diagram



Attachment A Development Plan

Shikat Bay Oysters Amendment Description 2018

Shikat Bay Oysters, Inc.
(Naukati Bay, Alaska)
PO Box 129
Craig, Alaska 99921
(907) 965-5964
gwparsley@yahoo.com
www.oyster.alaska.com

Aquatic Farm Amendment description:

This amendment is to increase the existing ADL 107829 lease area of one parcel from the current 2.99 acres to 6.99 acres by adding 4.00 acres. The amendment will add 95 feet to the NW/NE Corners and 355 feet to the SW/SE corners. The total area will be 752 feet X 405 feet. Used for the culture of Pacific Oysters (*magallana gigas*).

The new quadrants are as follows:

NE Corner	N 55.54.525 W 133.17.631
SE Corner	N 55.54.407 W 133.17.698
NW Corner	N 55.54.535 W 133.17.748
SW Corner	N 55.54.418 W 133.17.815

B) Eel Grass and Anadromous streams. Nothing but the size of the tideland lease changes in this amendment from the original "Coastal Management Plan". No Eel Grass or Anadromous streams will be affected.

C) All support facilities and growout rafts are moored to the anchors via 1" Poly-Dacron rope.

D) All construction uses rough sawn non-treated lumber and poly wrapped styro-foam flotation logs.

E) Existing facility includes, authorized;

- 1 each-20 foot X 40 foot float with building that includes the ADEC licensed shellfish processing facility.
- 1 each- 20 foot X 40 foot work float with booms to lift stacks of oysters from the water, two shellfish tumblers, sort tables and tray storage.
- 1 each- 10 foot X 20 foot Airplane/Boat float used for airplane tie -off, this raft will be used for tray and gear storage after the new Airplane/Boat float is constructed.
- 1 each- 12 foot X 20 foot tumbler raft
- 9 each- 16 foot X 20 foot growout rafts, 12 are authorized under existing permit
- In water anchors and mooring lines to support the existing floats
- 2000 each- 21 inch X 21 inch growout trays with slings

F) Additional Support Facilities, Floats and equipment Proposed;

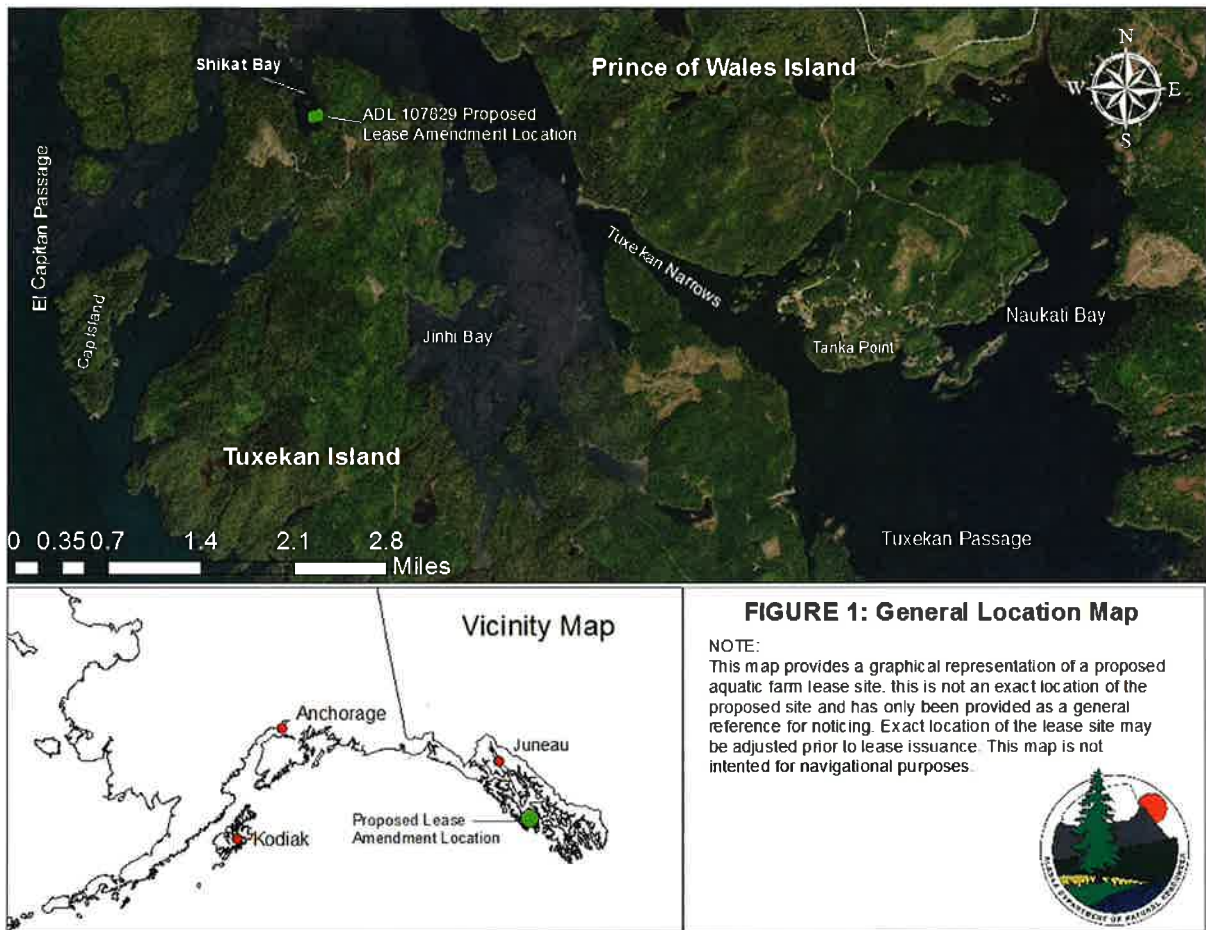
- 1) Add a 20' X 30' support float. This float will house a new generator, potable water tank, inverter battery system and solar panels. Purpose; New power generation is being installed and the new facility

Attachment A Development Plan

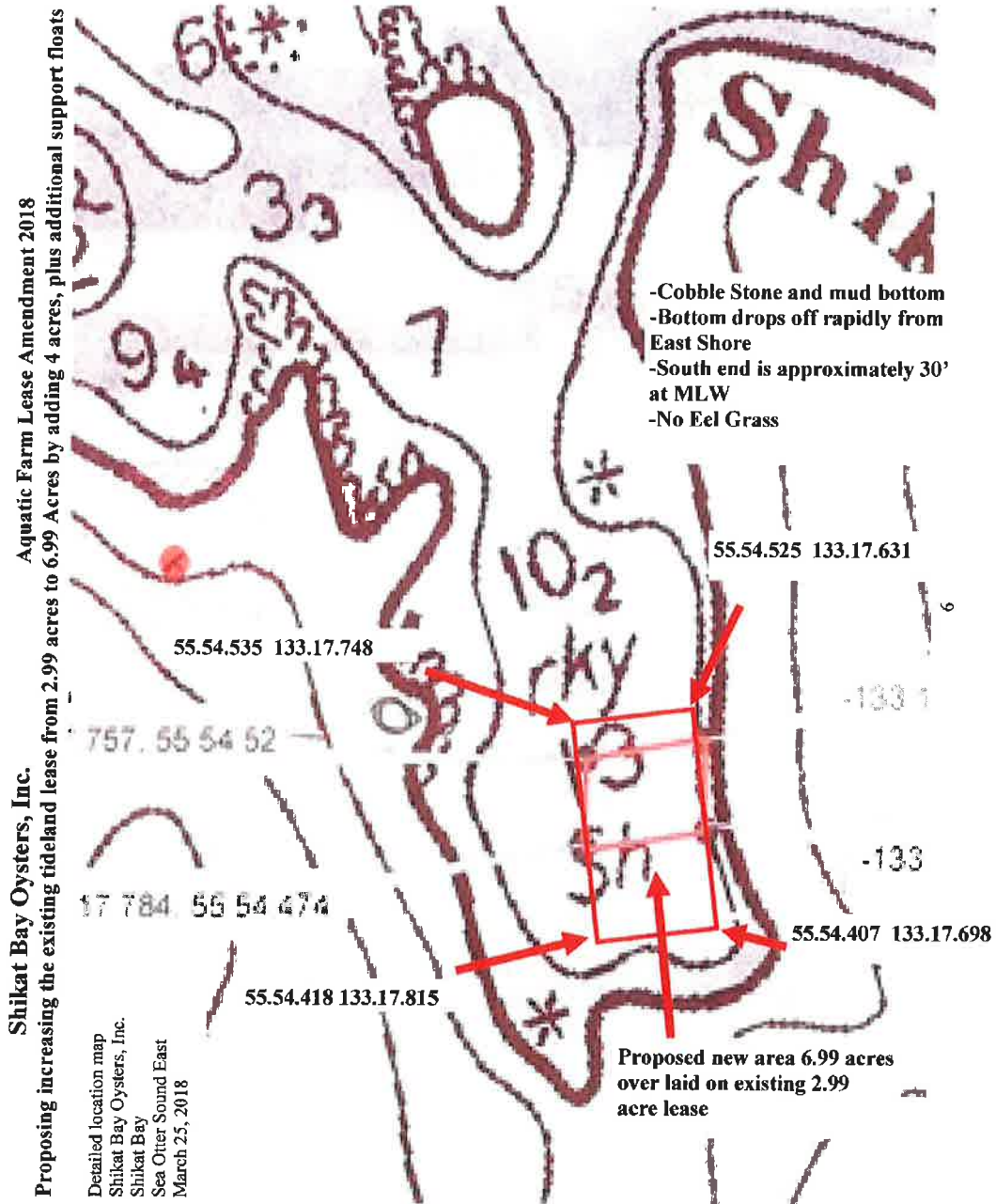
is needed to support this equipment. The battery backup in conjunction with the power generation and solar system will run the existing refrigeration when generator power is off. The need for larger capacity potable water system is necessary for expansion.

- 2) Using the existing Airplane/Boat Float for tray storage and will be converted to tray storage and support of the tumbler rafts.
- 3) Construct a new 12' X 20' Airplane/Boat float.
- 4) Constructing 2 (two) new 16' X 20' growout rafts plus 2 (two) 20' X 20' grow out rafts purchased from another farm for total of 4 (four) new growout rafts.
Growout rafts are used to culture oysters in growout trays suspended from the growout rafts to a depth of 6 feet from the water surface.
NOTE, Shikat Bay Oysters is currently authorized for 12 each- 16 foot X 20 foot growout rafts and has 9 (nine) in the water. Because of new/better growing practices of placing less oysters per tray which enhances quality of the oyster, makes for more rapid growth and reduces mortality, therefore, it is "anticipated" the 2 (two) new growout rafts and the 2 (two) 20' X 20' purchased growout rafts will be needed within 2 (two) years for a total of 16 growout rafts.
- 5) Add growout trays from another farm that include 1200 each- 24 inch X 24 inch. The larger trays will be used to manage spat/seed/baby oysters up to 1 (one) inch or 25mm
- 6) The 16 foot X 20 foot growout rafts can support up to 35 (thirty-five) stacks of 9 (nine) trays of a total of up to 315 (three-hundred fifteen) trays per raft.
- 7) Spat Tumbler rafts, 1 new spat tumbler raft will be added. The spat tumbler raft holds up to 8 pyramid shaped tumblers to grow and shape new seed/spat (baby oysters) prior to being placed in growout trays which are suspended from the growout rafts. The tumblers are 36 inches on three sides and 30 inches wide. The Tumblers are mounted to the raft where they can be rotated by hand on a routine basis.
- 8) Mooring lines and Anchors, The processor facility, support float and the work float will be moored to several 4,000 pound anchors and large rocks located below then high water (MHW) line. Once the growout rafts are gone through/serviced they are removed from the main facility and moored separately or in groups which require several variations in mooring strategies to keep the rafts well within the tideland lease boundaries. Further, extra winter mooring strategies for both the main facility and growout rafts are necessary requiring using all the anchoring. All floating mooring lines that are used to secure the growout rafts have seine net floats secured at adequate spacing to identify the floating line. The Airplane float is attached to the main work float, the grow-out rafts and tumble rafts are anchored to the existing anchoring system or attached to the main work float as needed.

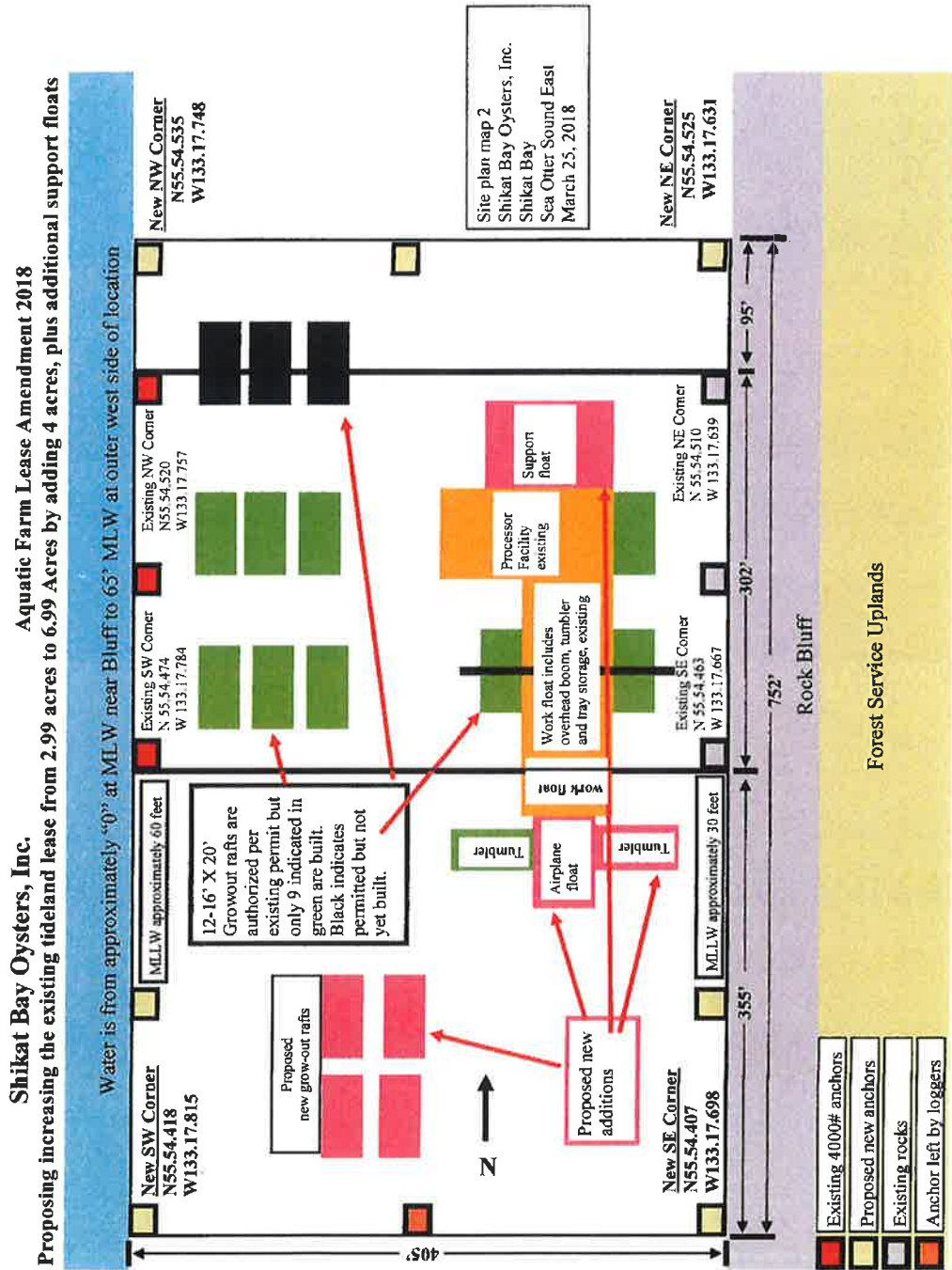
Attachment A Development Plan



Attachment A Development Plan



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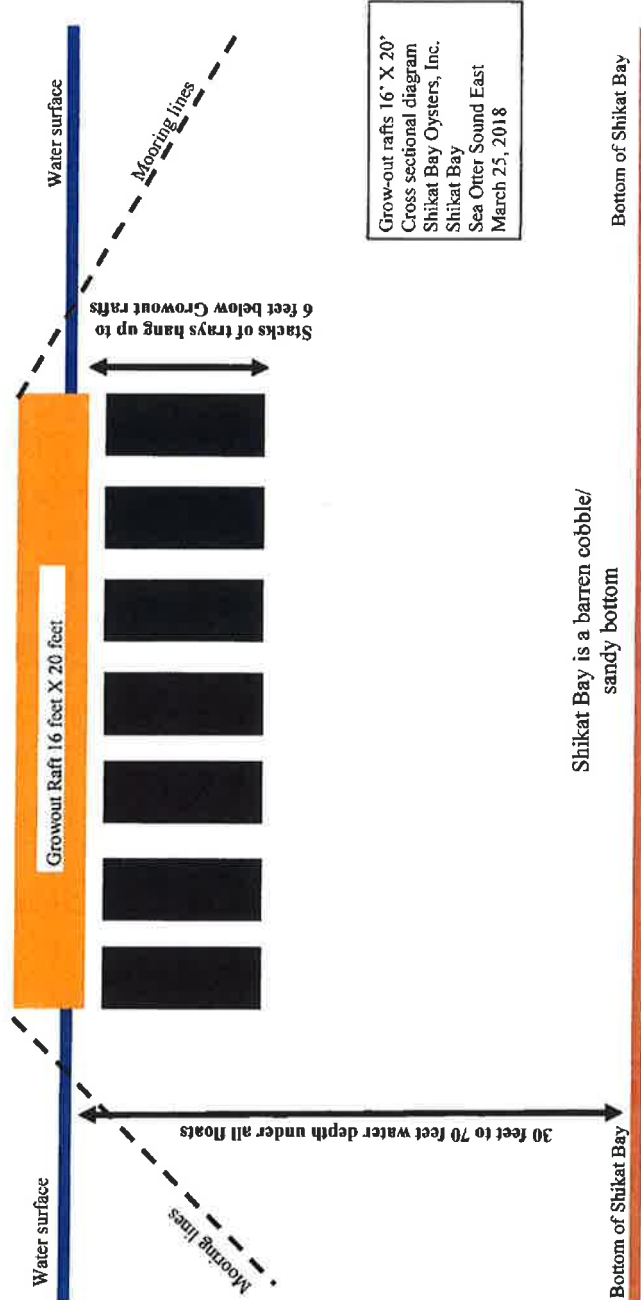


Attachment A Development Plan

Shikat Bay Oysters, Inc. **Aquatic Farm Lease Amendment 2018**
Proposing increasing the existing tideland lease from 2.99 acres to 6.99 Acres by adding 4 acres, plus additional support floats

Each 16 foot X 20 foot Growout raft can hold up to 35 stacks of 9 each- 21 inch X 21 inch trays. The stacks of trays are suspended from the growout raft by 3/8 inch poly rope slings and hang up to 6 feet below the growout raft. The rafts are either moored to the work float for servicing the oysters or moored separately away from the work float facility. Each raft is numbered and serviced as required.

The bottom of the site is from 30 Feet to 70 Feet deep

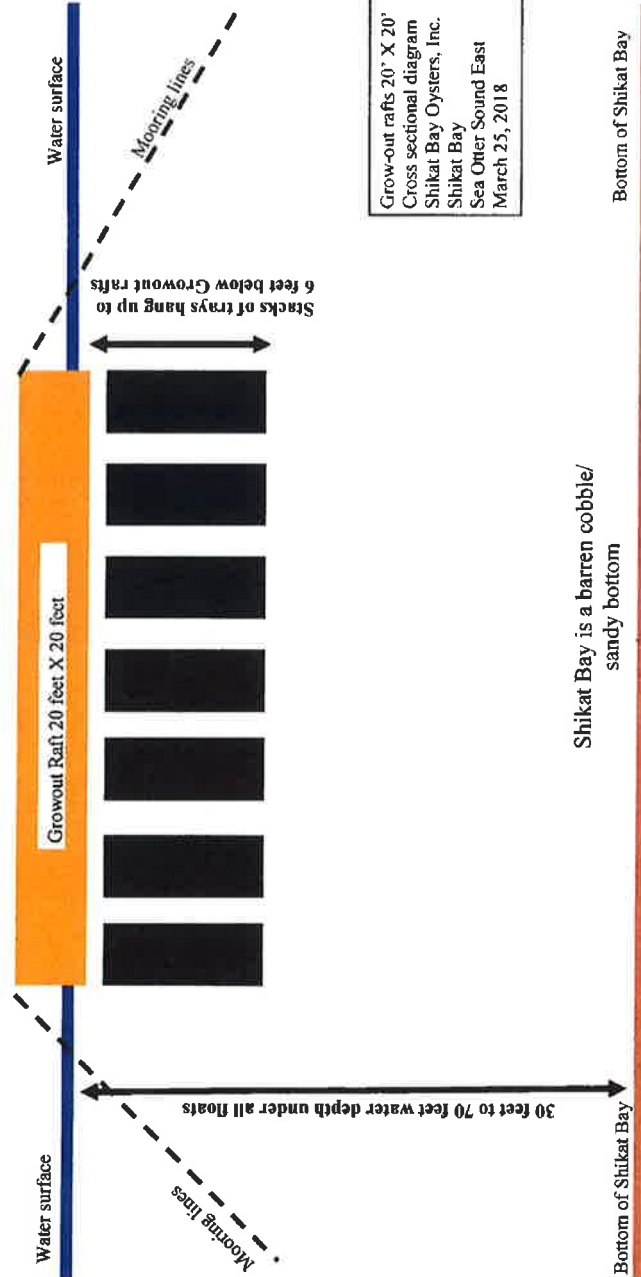


Attachment A Development Plan

Shikat Bay Oysters, Inc.
Aquatic Farm Lease Amendment 2018
Proposing increasing the existing tideland lease from 2.99 acres to 6.99 Acres by adding 4 acres, plus additional support floats

Each 20 foot X 20 foot Growout raft can hold up to 35 stacks of 9 each- 24 inch X 24 inch trays. The stacks of trays are suspended from the growout raft by 3/8 inch poly rope slings and hang up to 6 feet below the growout raft. The rafts are either moored to the work float for servicing the oysters or moored separately away from the work float facility. Each raft is numbered and serviced as required.

The bottom of the site is from 30 Feet to 70 Feet deep

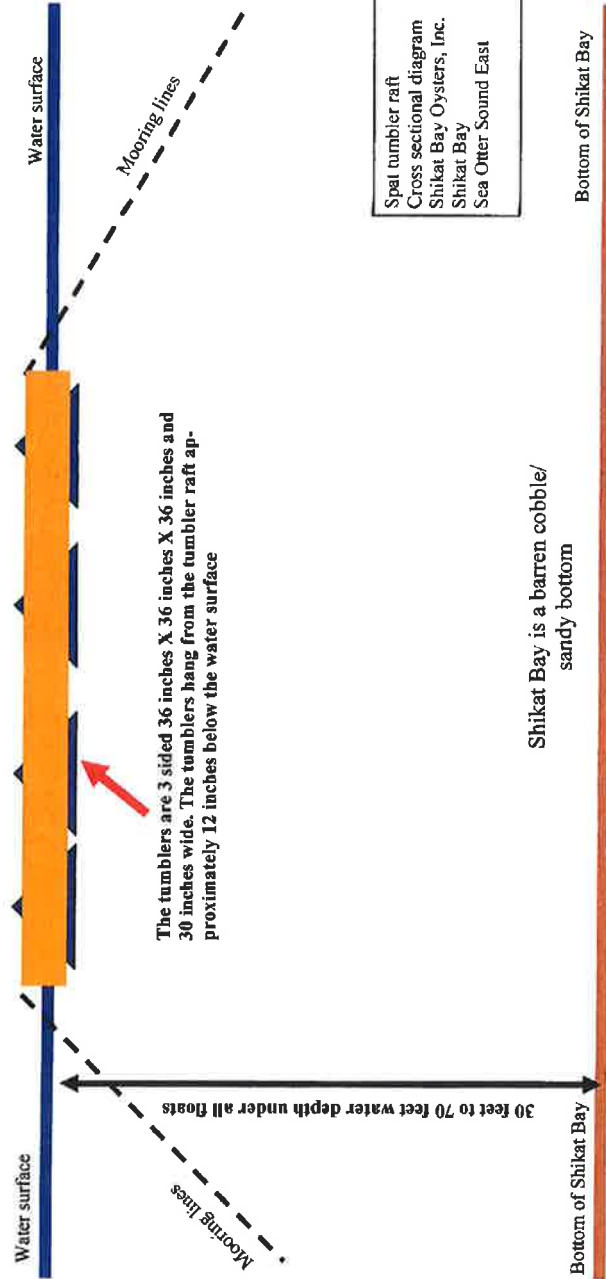


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Shikat Bay Oysters, Inc. Aquatic Farm Lease Amendment 2018
Proposing increasing the existing tideland lease from 2.99 acres to 6.99 Acres by adding 4 acres, plus additional support floats

The Tumbler raft holds up to 8 pyramid shaped tumblers to grow and shape new seed/spat (baby oysters) prior to being placed in the growout trays which are suspended from the growout rafts. The rafts are 12 feet X 20 feet. The tumblers are 36 inches on three sides and 30 inches wide. The Tumblers are mounted to the raft where they can be rotated by hand on a routine basis. The rafts are typically moored to the main work float or Airplane/Boat float for daily servicing during summer months and could be moored away from the main float in winter months.

The bottom of the site is from 30 Feet to 70 Feet deep



Attachment A Development Plan

Shikat Bay Oysters, Inc.
Proposing increasing the existing tideland lease from 2.99 acres to 6.99 Acres by adding 4 acres, plus additional support floats

Aquatic Farm Lease Amendment 2018



Farm Layout
Shikat Bay Oysters, Inc.
Shikat Bay
Sea Otter Sound East
March 25, 2018

Attachment A Development Plan

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Detail of Growout Raft and Hanging
Trays. This is the typical method used
at Shikat Bay Oysters.
Trays are stacked a maximum of 9
trays high.



Grow-out rafts and hanging trays
Shikat Bay Oysters, Inc.
Shikat Bay
Sea Otter Sound East
March 25, 2018

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Attachment A Development Plan

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Spat Tumble Rafts. These Rafts hold the pyramid shaped tumblers that are used to raise spat from 3/16" to 1'



Spat tumbler raft layout
Shikat Bay Oysters, Inc.
Shikat Bay
Sea Otter Sound East
March 25, 2018