

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

PRELIMINARY DECISION

ADL 227591 Early Tide Seafarms, LLC

Amendment No. 1

AS 38.05.083

This Preliminary Decision 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 Preliminary Decision. The deadline for commenting is **5:00 PM on February 20, 2018**. Please see the Comments Section on page 10 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.

Requested Action:

The Department of Natural Resources (DNR), Division of Mining, Land and Water (DMLW), Southcentral Regional Office (SCRO) has received a request from Early Tide Seafarms, LLC to amend aquatic farm lease ADL 227591 by adding 4.52 acres to the leasehold. SCRO is considering the issuance of an amendment to ADL 227591 for the remaining four years of the lease.

ADL 227591 was issued to Steven Rykaczewski on December 1, 2011, with an expiration date of November 30, 2021. The lease was assigned on April 14, 2017, from Steven Rykaczewski to Early Tide Seafarms, LLC.

The legal description for this lease is:

SE1/4 of Section 19, Township 5 South, Range 10 West, Seward Meridian, and more specifically described as:

Located southeast of the entrance of Bear Cove, along the shoreline and approximately 1/2 mile east of Bear Island, about 16.7 nautical miles northeast of Homer, Alaska, encompassing an area for oyster grow-out measuring 160 feet by 128 feet or 1.47 acres.

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 by adding an additional 4.52 acres to expand the oyster growing operation, including an increase in size of an existing work raft and adding a new work raft. The combined proposed lease acreage is 5.99 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 38.05.035(e) Written Findings; AS 38.05.070(b)

Generally; AS 38.05.083 Aquatic Farming and Hatchery Site Leases; and AS 38.05.945 Public Notice. The authority to execute the Final Finding and Decision, and the lease amendment, has been delegated to the Regional Managers of DMLW.

Administrative Record:

Case file ADL 227591 constitutes the administrative record for the Early Tide Seafarms, LLC lease amendment application.

Legal Description, Location, and Geographical Features:

The state land where this proposed amended lease site is located is described as follows:

- **Site reference name:** Bear Cove
- **Legal description:** SE1/4 of Section 19, Township 5 South, Range 10 West, Seward Meridian
- **Geographical locations:** Bear Cove, Kachemak Bay near the communities of Homer, Halibut Cove, and Seldovia within the Kachemak Bay State Critical Habitat Area, but outside Kachemak Bay State Park
- **Approximate Lat/Longs:**

Suspended culture for Pacific oysters: 324 feet by 805 feet = 5.99 acres

NE Corner Latitude: 59°43.504' N	Longitude: 151°02.579' W
SE Corner Latitude: 59°43.408' N	Longitude: 151°02.759' W
SW Corner Latitude: 59°43.436' N	Longitude: 151°02.848' W
NW Corner Latitude: 59°43.533' N	Longitude: 151°02.668' W

- **Existing surveys:** None
- **Municipality/Borough:** Kenai Peninsula Borough
- **Native Corporations/Federally Recognized Tribes:** Cook Inlet Regional Corporation, Seldovia Native Association, Seldovia Village Tribe

Title:

The DNR Title Report #RPT-10174 issued from DNR's Realty Services Section on September 8, 2017, states that the State of Alaska holds title to the subject tidelands under the Equal Footing Doctrine and the Tide and 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 the Kenai Area Plan (Area Plan), Region 8: Upper Kachemak Bay and Fox River Flats, Unit Number 532, Bear Cove Tidelands¹. The Area Plan map for the proposed amended lease site is Map 8A, Fritz Creek and Upper Kachemak Bay, found in Chapter 3 of the Area Plan. The tideland designations for the proposed leasehold are Public Recreation and Tourism (rd)¹

¹ Kenai Area Plan Ch. 3 p. 3-248

and Habitat (ha)¹. The tideland classifications for the proposed leasehold are Public Recreation Land² and Wildlife Habitat Land².

The proposed operation must be in the overall best interest of the State before an authorization may be issued. Factors that are to be considered in this decision are identified in 11 AAC 63.050(b). In Chapter 2 of the Area Plan, Goals, Management Intent, and Guidelines, goals include providing opportunities to increase income and diversify the State's economy through the use of state tidelands and submerged lands for aquatic farming³. The Area Plan cited the *Kachemak Bay and Fox River Flats Critical Habitat Areas Management Plan* in Chapter 2⁴. It specifically states in the Area Plan that DNR will manage for aquaculture consistent with this plan and any future adopted changes to the Critical Habitat Area Management Plan. Some bays and coves of Kachemak Bay are precluded from siting an aquatic farm or have specific restrictions. However, Bear Cove is not one of those listed⁴. In accordance with the Area Plan and classifications, aquatic farming is an allowable use on state owned tidelands.³

Traditional Use Findings:

Traditional use findings will not be discussed in this Preliminary Decision because the proposed lease site is located within the Kenai Peninsula Borough, an organized borough. Pursuant to AS 38.05.830 a traditional use finding is not required.

Access:

Access to the aquatic farm is by boat or floatplane.

Access To and Along Navigable and Public Waters:

Nearly all shore and tide lands 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. DNR has determined that the issuance of this aquatic farm lease will not block reasonable access to state navigable water. The along easement extends 50 feet seaward from the line of mean high water (MHW).

Public Trust Doctrine:

Pursuant to AS 38.05.126 all authorizations for this site will be subject to the principals 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.

Management Analysis:

The scope of this review is to evaluate and determine if a lease amendment for the above-mentioned parcel is in the best interest of the State and supports the overall intent of the Aquatic Farm Act.

¹ Kenai Area Plan Ch. 3 p. 3-248

² Kenai Area Plan Ch. 4 p. 4-5

³ Kenai Area Plan Ch. 2 p. 2-4

⁴ Kenai Area Plan Ch. 2 p. 2-5

In 1988, the legislature adopted statutes referred to collectively as the Aquatic Farm Act. The legislature, through the adoption of the Aquatic Farm Act, established in statute the State could proceed and indeed encourage development of shellfish farming. The two central tenets of the State's aquatic farming policy are:

1. The State should encourage the establishment and responsible growth of an aquatic farming industry; and,
2. Development and siting of aquatic farming operations should be made with full consideration of established and ongoing activities.

With these considerations, aquatic farm leases were designed to achieve commercial production and develop a foundation for an aquatic farming industry in the State of Alaska.

Management Goals for Aquatic Farms:

The overall intent of the Aquatic Farm Program is to provide citizens access to public lands and resources with the goal of creating an industry which will foster the State's economic growth through the creation of employment opportunities and development of Alaska-grown shellfish and seaweed products.

Three main state agencies, the Department of Fish and Game (ADF&G), DNR, and the Department of Environmental Conservation (DEC) oversee the regulatory responsibilities for the commercial operation of Alaska aquatic farms. These agencies work cooperatively to ensure the State's public lands and resources are being used in such a manner as to positively contribute and benefit the residents of the State of Alaska through means such as economic growth and the availability of locally grown products.

As part of the lease conditions the applicant/lessee is required to submit two documents which the agencies will use to measure the aquatic farm's viability and determine if it is the State's best use of the land and resources. Evaluative measures are derived from a variety of sources including, but not limited to, current industry standards, comparable farms in the area, and research and technology based trends on both the local and regional scale.

The first document an applicant/lessee is required to submit an Operation and Development Plan describing a basic business strategy for the aquatic farm site. This includes general information such as location information and infrastructure (i.e. work rafts, covered processing facilities, flupsys, etc.) to be used on the farm site. It also contains measurable goals established by the applicant/lessee, to include information on startup and projected stocking, species to be cultured, anticipated seeding schedules and production and harvest levels for each 12-month cycle. In addition, it specifies business practices such as methods used to improve the productivity of the species being raised (i.e. predator exclusion controls, seeding schedules, etc.), cultivation and harvesting techniques, equipment used for cultivation and harvesting, number of people on site, projected number of days the site is actively being farmed, and methods of accessing the farm site. As the business market is a fluid entity DNR is under the expectation this Operation and Development Plan will be modified (with prior department approval) over the life of a lease.

Annual reports are the second required document a lessee must submit for an aquatic farm site to remain in compliance with lease terms. These reports are used as an evaluative tool by DNR, ADF&G, and the lessee to measure the productivity of an aquatic farm site, the current feasibility of the Operation and Development Plan, and to identify any problems (i.e. seed shortage, environmental factors, etc.) that have been encountered over the course of a 12-month period. In addition to identifying any difficulties an individual farm may be encountering, these annual reports will provide the regulatory agencies a method of identifying larger scale or industry wide problems and trends.

Lease Management Discussion

ADL 227591 has been assigned to two parties since it was issued to the original lessee, Randall Baldwin dba Shirttail Creek Farms. Randall Baldwin was issued a 10-year aquatic farm lease on July 1, 2001, with an expiration date of June 30, 2011. The first lease assignment occurred on March 7, 2006, to Steven Rykaczewski. A land use permit was issued to Steven Rykaczewski on March 15, 2011, with an expiration date of November 30, 2011. The land use permit was issued because the lease was to expire prior to when a lease renewal could be authorized. Steven Rykaczewski was issued a 10-year aquatic farm lease on December 1, 2011 with an expiration date of November 30, 2021. The lease was assigned on April 14, 2017, from Steven Rykaczewski to Early Tide Seafarms, LLC.

Steven Rykaczewski was required to meet the Commercial Use Requirement (CUR) by 2016 per 11 AAC 63.030(b). He exceeded that requirement in 2016 and had met or had been close to successfully meeting the CUR in the previous three years. Early Tide Seafarms, LLC will be required to meet the CUR of \$15,000.00 after the fifth year of lease operations, if the lease is renewed in 2021.

All annual fees have been paid and the lease is considered to be in good standing with the department.

Operation and Development Plan

A revised Operation and Development Plan for the proposed lease amendment was signed on August 31, 2017, and is accepted by SCRO as complete. Should the proposed lease amendment be granted, it is anticipated that the Operation and 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.

Compliance with Existing Regulations and Lease Stipulations

SCRO recognizes there are many challenges faced by aquatic farmers in Alaska. One such challenge is cooler water temperatures which lead to slower growth rates and more time on the farm before the product attains marketable size. In addition, difficulty obtaining seed during portions of the last few years has presented challenges for farmers attempting to maintain their

stock at an optimal or projected level. Harvest window closures as a result of Paralytic Shellfish Toxin and Vibrio outbreaks also reduce the overall productivity of aquatic farms.

In consideration of these challenges, SCRO still has the responsibility to appropriately manage lands held in trust for the residents of the State of Alaska and to ensure the authorized aquatic farms are operating in accordance with the intent of the Aquatic Farm Act. The primary method used to accomplish this is the adoption of regulations governing how laws are to be implemented.

Key regulations for the management of aquatic farms are identified below:

11 AAC 58.510, Lease Utilization

This regulation states the land being leased must fall within the scope of what is being proposed by the applicant and approved by DNR. Leases must be developed and utilized consistent with the approved Operation and Development Plan within five years or the lease may be terminated.

11 AAC 63.030(b), Commercial Use Requirement (CUR)

The CUR is one method DNR has available to determine whether or not the aquatic farm is being farmed to a commercial benchmark. The CUR was codified in the 1998 regulations as a quick and quantifiable measurement of productivity by the fifth year of operations (and beyond) and it provides DNR and ADF&G a means of identifying farms that may need closer monitoring. At the time the CUR was adopted, the primary species being farmed was the Pacific Oyster which had an established record of growth data in Alaskan waters available to regulators and industry members. At this time the CUR states a farm needs to be making annual sales in excess of \$3,000.00 per acre or \$15,000.00 per farm by the fifth year of operation of aquatic farm product, as defined in AS 16.40.199. Failure to meet CUR constitutes a default and may be cause for termination, per 11 AAC 63.110(7).

11 AAC 63.110(7), General Lease Provisions, Operation and Development Plan

The applicant has provided a site description and a project description to DNR and ADF&G with their application. They also provided a projection on how much planting and harvesting they plan to do during the 10-year term. DNR is aware of some of the issues faced by farmers when trying to establish any realistic long term projections. This is why the Operation and Development Plan is considered a fluid document and subject to change (with DNR approval) over the life of the lease in reaction to unanticipated changes in the basic business plan. Leaseholders are encouraged to communicate changes to plans with DNR frequently to communicate how farming activities are progressing. Failure to develop the lease site in accordance with the approved Operation and Development Plan within five years of lease issuance will result in non-compliance and subject the lease to cancellation.

11 AAC 63.110(7), General Lease Provisions, Annual Reports

Annual Reports (due by January 31st of each year) are valuable documents for both DNR and ADF&G. They are the main tool both agencies use to identify and understand issues the aquatic farmer may be encountering which could inhibit the productivity of an aquatic farm site. Reports also communicate if the site is being utilized in accordance with the Operation and Development Plan and if the CUR is being met annually, per 11 AAC 63.030(b). By failing to submit complete

and timely Annual Reports, the lessee not only falls out of compliance with aquatic farm regulations, but also inhibits DNR's constitutional responsibility to ensure the land is being utilized in accordance with the best interest of the residents of the State.

Proposed Action:

A central tenet of DNR's Mission Statement is to responsibly develop state resources by making them available for maximum use consistent with public interest. In keeping with this statement DNR proposes to issue Early Tide Seafarms, LLC an amendment to their aquatic farm lease. The following regulations will be used by DNR to adequately assess Early Tide Seafarms, LLC progress as aquatic farmers:

- 11 AAC 63.110 (7) requires compliance with an approved Operation and Development Plan and the timely submission of Annual Reports.
- 11 AAC 63.110 (11)(B) requires the lessee to provide the department with any records it has determined are necessary to verify the lessee's compliance with the lease provisions.
- 11 AAC 63.030(b) requires progress shown toward being able to meet the CUR prior to the end of the lease term (this can be done by supplying ADF&G and DNR annual reports).
- 11 AAC 58.510 requires the lessee to make substantial use of the land within five years of the lease term and develop it in accordance with the approved Operation and Development Plan.

Hazardous Materials and Potential Contaminants:

No hazardous materials or fuel are planned to be stored on the leasehold.

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 11 AAC 63.080 Early Tide Seafarms, LLC has submitted a performance guaranty for the original leasehold.

- **\$2,500.00 Performance Bond:** Early Tide Seafarms, LLC is a member of the Kachemak Shellfish Growers Co-op bond association and has submitted a \$1,250.00 bond to DNR. A lessee may reduce the bond amount if three or more lessees post an association bond to cover all of their leases. The minimum-security amount is 50% of the amount individually calculated for each lease. Therefore, the bond for Early Tide Seafarms, LLC was for \$1,250.00, as an association bond member.
This bond will remain in place for the life the proposed amendment to 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 Operation and 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.

- **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:

In accordance with 11 AAC 96.065, Early Tide Seafarms, LLC will be required to submit proof of liability insurance to SCRO, with the State of Alaska listed as a “NAMED” insured party. Early Tide Seafarms, LLC will be responsible for maintaining such insurance throughout the term of the lease.

Survey:

In accordance with AS 38.04.045, this short-term land 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. Early Tide Seafarms, LLC has submitted GPS coordinate points for the four corners of the proposed amended lease area.

Grant:

The term for an aquatic farm lease is 10 years, per 11 AAC 63.100. The term dates for the amendment to the lease will remain as December 1, 2011, through November 30, 2021, contingent on approval of the Final Finding and Decision.

Compensation and Appraisal:

DMLW has approved a 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 38.05.105. At this time, the rates for aquatic farms are \$450.00/acre or partial acre and \$125.00 for each additional acre or partial acre. In accordance with the Aquatic Farmsite Fee Schedule, Report No. 2522-12, a breakdown of the amendment to the lease fee will be as follows:

5.99 acres (1 x \$450.00) + (5 x \$125.00) = **\$1,075.00 per year**

The applicant has the option to have a site-specific appraisal done for each site, at the applicant's expense, before the amendment to the lease is issued if they do not wish to use the DNR approved fee schedule. If an applicant opts for a site-specific appraisal, the DNR-approved appraisal will establish the rental for the lease and the fee schedule will no longer be an option.

Assignment of Lease:

The proposed amendment to the lease, if issued, may be transferred or assigned to another individual or corporation **only** with prior written approval from the State of Alaska. 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.

Reclamation:

In accordance with AS 38.05.090(b), all lessees must restore their lease sites to a “good and marketable condition” within a minimum of 120 days after the termination of their 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 Review was conducted for a 20-day review starting on September 14, 2017. The deadline for agency comments was October 3, 2017.

The following agencies were included in the review:

- DNR DMLW – Mining
- DNR DMLW – Water
- DNR DMLW – Title
- DNR DMLW – Land Sales
- DNR Office of History and Archaeology/SHPO
- DNR Division of Oil and Gas
- DNR Division of Parks and Recreation
- ADF&G - Habitat
- ADF&G – Aquatic Farm Coordinator
- DEC - Shellfish
- Department of Transportation and Public Facilities
- US Fish and Wildlife Service
- U.S. Army Corp of Engineers
- National Oceanic and Atmospheric Administration
- U.S. Environmental Protection Agency
- U.S. Coast Guard
- Kenai Peninsula Borough
- City of Homer

Agency Notice Comments:

During the Agency Review, SCRO received two comments.

ADF&G – Habitat Comment:

Additional work rafts, lines, and buoys will need a Special Area Permit from ADF&G, Habitat Division.

SCRO Response:

DNR has advised Early Tide Seafarms, LLC of this required permit. Furthermore, lease stipulation No. 26 states: The lessee shall, at the lessee's own expense, comply with all existing and hereafter enacted environmental responsibility laws ("Environmental Laws"). The lessee shall, at the lessee's own expense, make all submissions to, provide all information to, and comply with all requirements of the appropriate governmental authority (the "Authority") under the Environmental Laws.

U.S. Army Corps of Engineers:

Work and/or structures conducted in marine waters would require U.S. Army Corps of Engineers authorization under Section 10 of the Rivers and Harbors Act. Mr. Randal Vigil will be reaching out to Early Tide Seafarms, LLC to discuss our procedures for this type of activity.

SCRO Response:

DNR has advised Early Tide Seafarms, LLC of this communication and required authorization. Furthermore, lease stipulation No. 26 states: The lessee shall, at the lessee's own expense, comply with all existing and hereafter enacted environmental responsibility laws "Environmental Laws"). The lessee shall, at the lessee's own expense, make all submissions to, provide all information to, and comply with all requirements of the appropriate governmental authority (the "Authority") under the Environmental Laws.

Public Notice of the Preliminary Decision:

Pursuant to AS 38.05.945, the notice will be posted on the Alaska Online Public Notice System at <http://aws.state.ak.us/OnlinePublicNotices/Notices/Search.aspx> for at least 30 consecutive days per AS 38.05.945(b)(3). The post offices located in Homer, Seldovia, and Anchor Point will be requested to post the notice of the Preliminary Decision per AS 38.05.945(b)(3)(C). Courtesy notices will also be mailed or e-mailed to neighboring property owners, permit/lease holders, and other interested parties on January 17, 2018 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 this decision.

**Written comments about this project must be received in this office no later than
5:00 PM on February 20, 2018 to be considered.**

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

Postal: Department of Natural Resources
Southcentral Region 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).

Recommendation:

SCRO 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. This decision considers the applicant's history and experience with aquatic farming, their existing Operation and Development Plan, the existing uses in the area, and the overall benefit to the State's aquatic farm industry. It is the recommendation that the State issue Early Tide Seafarms, LLC an amendment to their 10-year lease, adding 4.52 acres to expand the oyster growing operation, with the understanding that if the lessee fails to comply with the submission of the Annual Reports, Commercial Use Requirements, or with any other information the Department requests, this will constitute a violation of the lease terms and steps may be taken to terminate the lease authorization.




Karen Cougan, Aquatic Farm Program Coordinator



Date

Preliminary Decision:

It is the determination of the Division of Mining, Land, and Water that it may be in the State's best interest to issue an aquatic farm lease amendment for the remaining four years to their lease to Early Tide Seafarms, LLC, as described above. Upon authorization of the amendment to lease ADL 227591, the applicant will pay the annual lease fee of \$1,075.00 per year. The applicant will be required to meet the State of Alaska liability insurance requirements. This application shall now proceed to public notice.



Acting
for

Clark Cox, Regional Manager

Southcentral Regional Office, Division of Mining, Land & Water



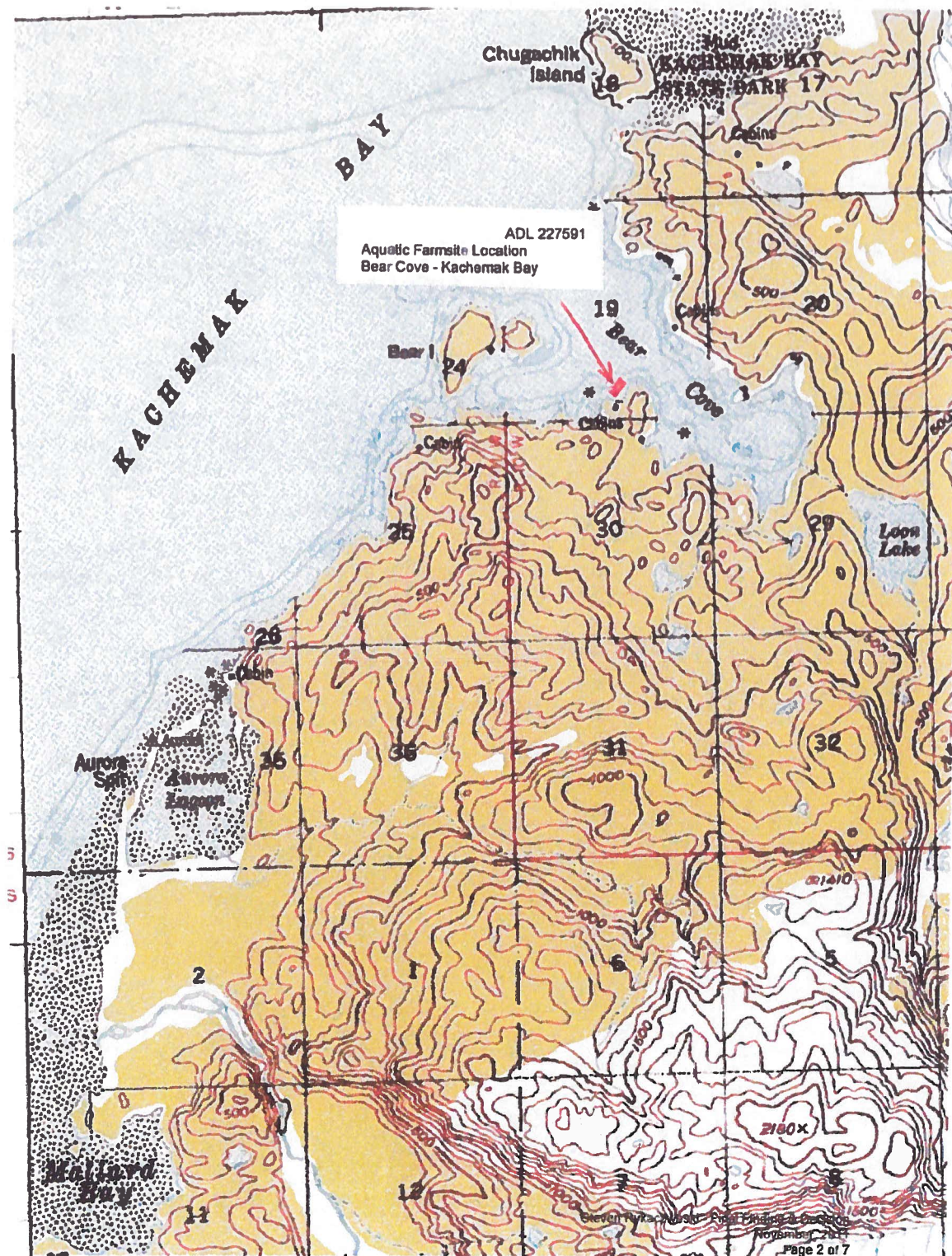
Date

Attachments

Attachment A – Development Plan Vicinity Map, Detailed Location Map, Site Plan Map, Cross-Sectional Diagram, Project Description, and Operation and Development Plan (The complete Development Plan is available upon request.)



Attachment A Development Plan



Attachment A Development Plan

Figure 3 Detailed Location Map

Early Tide Seafarms, LLC

Bear Cove

Kachemak Bay, Alaska

NOAA Chart No. 18645

July 26, 2017

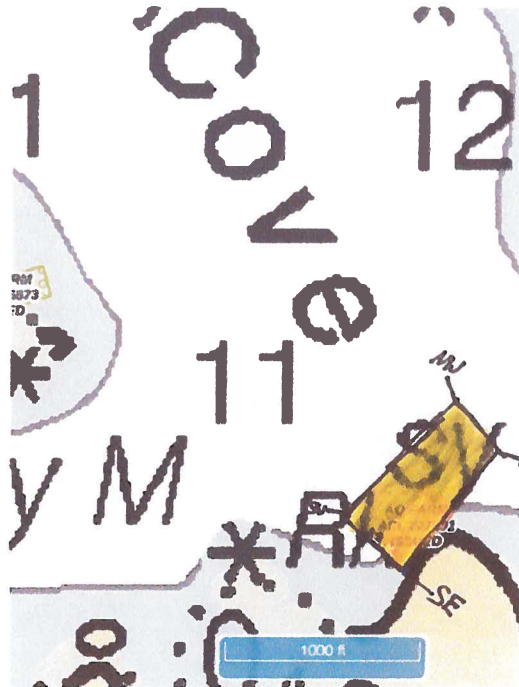
Coordinates:

NE 59 43.504' N, 151 02.579' W

SE 59 43.408' N, 151 02.759' W

SW 59 43.436' N, 151 02.848' W

SE 59 43.533' N, 151 02.668' W

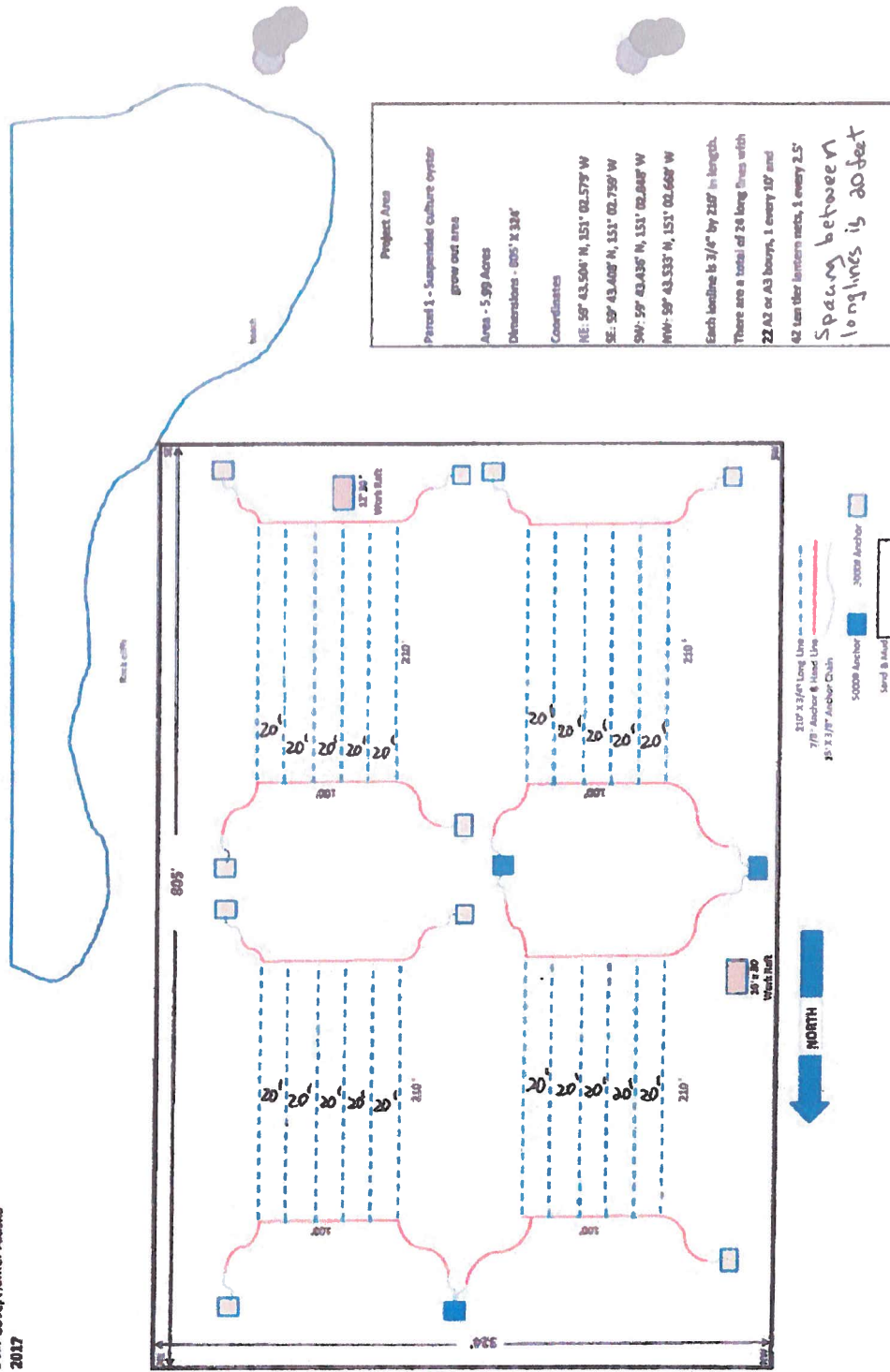


ADL 227591

Attachment A Development Plan

**Early Tide Sea Farm LLC
Site Plan Map Fig 1**

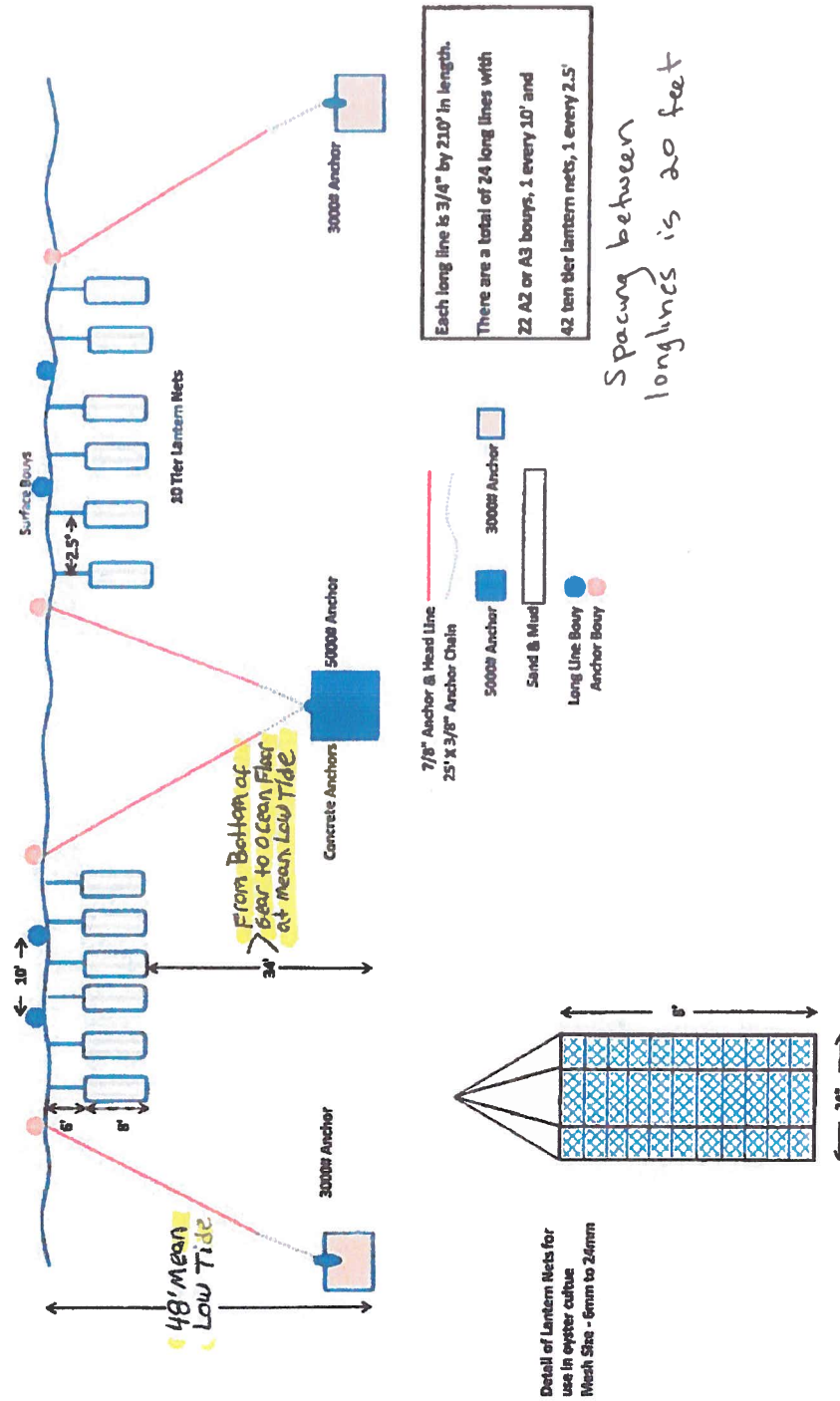
Figure 1 - Site Plan Map
Name - Early Tide Sea Farm LLC
Waterbody - Ikaemak Bay, South Central Alaska
Region - Bear Cove, Homer Alaska
April 24, 2017



Attachment A Development Plan

Early Tide Sea Farm LLC Cross Sectional Drawing

Figure 2 - Cross Sectional
Name - Early Tide Sea Farm LLC
Waterbody - Kachemak Bay, South Central Alaska
Region - Bear Cove, Homer Alaska
Date - April 24, 2017



Attachment A

Development Plan

Early Tide Seafarms LLC, Aquatic Farm
Amendment Description
Waterbody – Kachemak Bay, South Central Alaska
Region – Bear Cove, Homer Alaska
Date – August 31st, 2017

Amendment requested: Increase acres, move site footprint to NW and add work raft and increase size of current work raft (details below).

Also want to amend the operation and development to reflect request to increase size and added culture gear.

1. **Site Location Modifications:**
Footprint moving toward the Northwest.
The aquatic farm is located 16.7 nautical miles northeast of Homer in Bear Cove, a small cove within Kachemak Bay, lower cook inlet. The site is located, in major part or in whole, within Township 5 South Range 10 West, Seward Meridian, Section 19
2. **New Dimensions and Calculated Area:**
Expand footprint from 160 ft. x 400 ft. to 324 ft. x 805 ft.
Increasing currently from 1.47 acres to 5.99 acres
3. **New Support Facilities:**
Add a new 16 ft. x 30 ft. work raft.
Add 9 ft. x 12 ft. to existing 12 ft. x 20 ft. work raft (In Permit/Lease). Bringing total size of work raft to 12 ft. by 30 ft.
Rafts are built with outdoor non-pressurized wood consisting of closed cell encapsulated foam
4. **Species Change:** No change
5. **Culture Method Change:** No change
6. **Gear Changes:**
Increase lantern nets from 252 nets to 1008 nets.
Nets are 10 tier and appx 8 ft. long and appx 2 ft. circumference ranging in size from 6mm to 24mm webbing.

Page 1 of 2

Attachment A Development Plan

7. Equipment Changes:

Increase longlines from 6 to total of 24 lines. (3/4 Inch Blue Steel Crab Lay)

Increase buoys from 120 to 528 (Polyform A3 Size)

Increase anchors from 4 – 3,500 lb. anchors to 10 – 3,500 lbs. and 3 5,00 lb. anchors. All anchors are made of concrete.

8. No Other Changes.

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Attachment A Development Plan



*Complete one operation and development plan for each species

AQUATIC FARM OPERATION AND DEVELOPMENT PLAN - PART A

Part A includes questions regarding your proposed operation. Your proposed aquatic farm or hatchery plans must demonstrate technical and operational feasibility (AS 16.40.105(4)). Please provide any additional information that you consider pertinent to your operating plan on additional sheets of paper as necessary.

Name Early Tide Seafarms LLC

Species Pacific Oyster

ADNR Lease ADL No.: 227591

ADF&G Permit No. 00 - 10 -AF- SC

1. Provide an estimate of the total days and number of people (including yourself) that will be needed to operate your farm site for each year:

Year 1:	Number of Days <u>175</u>	Number of People <u>2</u>
Year 2:	Number of Days <u>175</u>	Number of People <u>2</u>
Year 3:	Number of Days <u>175</u>	Number of People <u>3</u>
Year 4:	Number of Days <u>175</u>	Number of People <u>4</u>
Year 5:	Number of Days <u>175</u>	Number of People <u>4</u>

2. Site Monitoring/Maintenance

- a. How often, in days per month, do you intend to monitor your site for things such as adequate anchoring, disease, exotic species settlement, fouling, gear drift, snow load, wind damage, vandalism, etc.?

Growing season 25 (days/month) Winter months 3-7 (days/month)

- b. Where will you store any farm gear and/or equipment when not in use? inside net pens and storage shed located

- c. How will you keep the gear and shellfish free of fouling organisms (hot-dip, air dry, pressure washing, etc.)? Pressure Washing, Air & Sun drying

- d. How will you manage incidental species over the course of operations (sea urchins, sea cucumbers, butter clams, or other non-targeted species)? They will be removed from nets and placed back in water

- e. For on-bottom culture, if you intend to use predator netting, how long will you keep netting over your product? N/A (months)

3. Recordkeeping

- a. What methods are you going to use to measure the success of your operation (growth, survival or mortality rates, production, etc.)? Growth, Production, Survival versus planting Rate
- b. Will you maintain records of aquatic farm product, such as counts and measurements to track survival and growth? Yes ☒ No ☐ Describe: Daily Logs entered into words spreadsheet on laptop

Attachment A Development Plan

- c. Do you plan to record other physical or environmental parameters at your site such as water temperatures and salinity? Yes ☒ No ☐ Describe: Woods spread sheet, Surface temp and 6' depth with water toperture sensors

4. Harvest

- a. How often do you intend to harvest your product? 2x Monthly during growing season and 1x Bi Monthly in winter mont
- b. How do you intend to harvest your product? Suspended: Manual XX Other _____
On-Bottom: Hand/Digging _____ Hydraulic wand _____ Manual _____ Other _____

5. Sales

- a. DNR has a commercial use requirement (CUR) of \$3,000 per acre per year or \$15,000 per farm, whichever is less. What is your anticipated total production using farm gate value by the end of year 5?
\$ 188,000

6. Seed Acquisition

- a. Which certified shellfish seed source(s) will you use? KMSA
- b. Applicable for indigenous species (mussels, scallops, abalone, etc.), how do you intend to collect wild seed? N/A

PART A - SIGNATURE BLOCK

Signature: Carl R. Luber

Date: 4/24/2017

Attachment A Development Plan

(Continued - Page 2)

AQUATIC FARM OPERATION AND DEVELOPMENT PLAN

Name Early Tide ADL Number 227591 ADF&G Permit No. 00 10 Species Pacific Oysters
(Individual plan required for each species)

Calendar Year	Installation Schedule and Structures (Corresponds to diagrams and drawings)			Production Seed	# of Seed Collected Onsite (Only applies to indigenous sp.)	Aquatic Farm Production Projected Harvest and Sales		
	Support Facilities ¹	Gear Types And Numbers ²	Anchoring Systems			Projected Sales ³ (\$)	# of Animals	# of Pounds
(Year 6) 2017	Increase BNR land lease to 6 Acres	Add 3 lines A28AS bouys w/ 42 nets	Add 3000# 5000# concrete anchors w/ 1/8" line	300,000 500,000	N/A	\$ 25,025	42,000	N/A
(Year 7) 2018	Add 1 in length in workraft	Add 34 lines w/ A28AS bouys w/	Add 3000# 5000# concrete anchors w/ 1/8"	300,000 To 500,000		\$ 25,025	000	N/A
(Year 8) 2019	Add separate 16'x30' work raft. Made of non-pressure treated wood	None	None	000 000		\$ 48,666	80,000	N/A
(Year 9) 2020	None	None	None	300,000 To 500,000	N/A	000	320,000	
(Year 10) 2021	None	None	None	300,000 To 500,000		\$ 186,000	000	

¹ Support facility includes: caretaker, storage, or processing facilities, work rafts, etc.
² Equipment includes: grow-out racks, longlines, bouys, etc. Gear includes: trays, lines of feature nets, or predator netting. This must correspond to diagrams and drawings.
³ Projected sales are based on Best Case Scenario which is defined as the unprocessed value, excluding the cost of packaging or transport product to first point of sale.

I understand I must improve productivity according to above operation and development plan for the periods and that this plan can be amended to reflect any changes as the aquatic farm operations develop.

SIGNATURE Col. Fisher DATE 8/31/2017