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

PRELIMINARY DECISION

ADL 234006 Kelp Blue 49
Application for Lease
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 Preliminary Decision. The deadline for commenting is **May 24, 2023**. 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.

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 Kelp Blue 49 (KB) to lease 121.89 acres, more or less, of state-owned tide and submerged lands for 10 years for the purpose of cultivating giant kelp (*Macrocystis pyrifera*) located approximately 11.59 nautical miles southwest of Naukati Bay, Alaska. The location of the project area is further described as being within the SE1/4 of Section 5, NE1/4 of Section 8, and W1/2 of Section 9, Township 70 South, Range 78 East, Copper River Meridian.

SCRO is considering the issuance of a 10-year aquatic farmsite lease to KB for the purpose of cultivating giant kelp. The proposed aquatic farm will consist of one parcel used for the installation of a netting system for kelp.

Scope of Review:

The scope of this decision is to determine if it is in the State's best interest to issue this aquatic farmsite lease.

Authority:

This lease application is being adjudicated pursuant to AS 38.05.035 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 Public 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 referenced herein, the 1998 Prince of Wales Island Area Plan and other classification references described herein, and the casefile for the application serialized by DNR as ADL 234006.

Legal Description, Location, and Geographical Features:

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

- **Site reference name**: Sea Otter Sound
- **Legal description**: SE1/4 of Section 5, NE1/4 of Section 8, and W1/2 of Section 9, Township 70 South, Range 78 East, Copper River Meridian
- **Geographical locations**: Southeast Sea Otter Sound, north of Camp Island on the north side of Heceta Island.

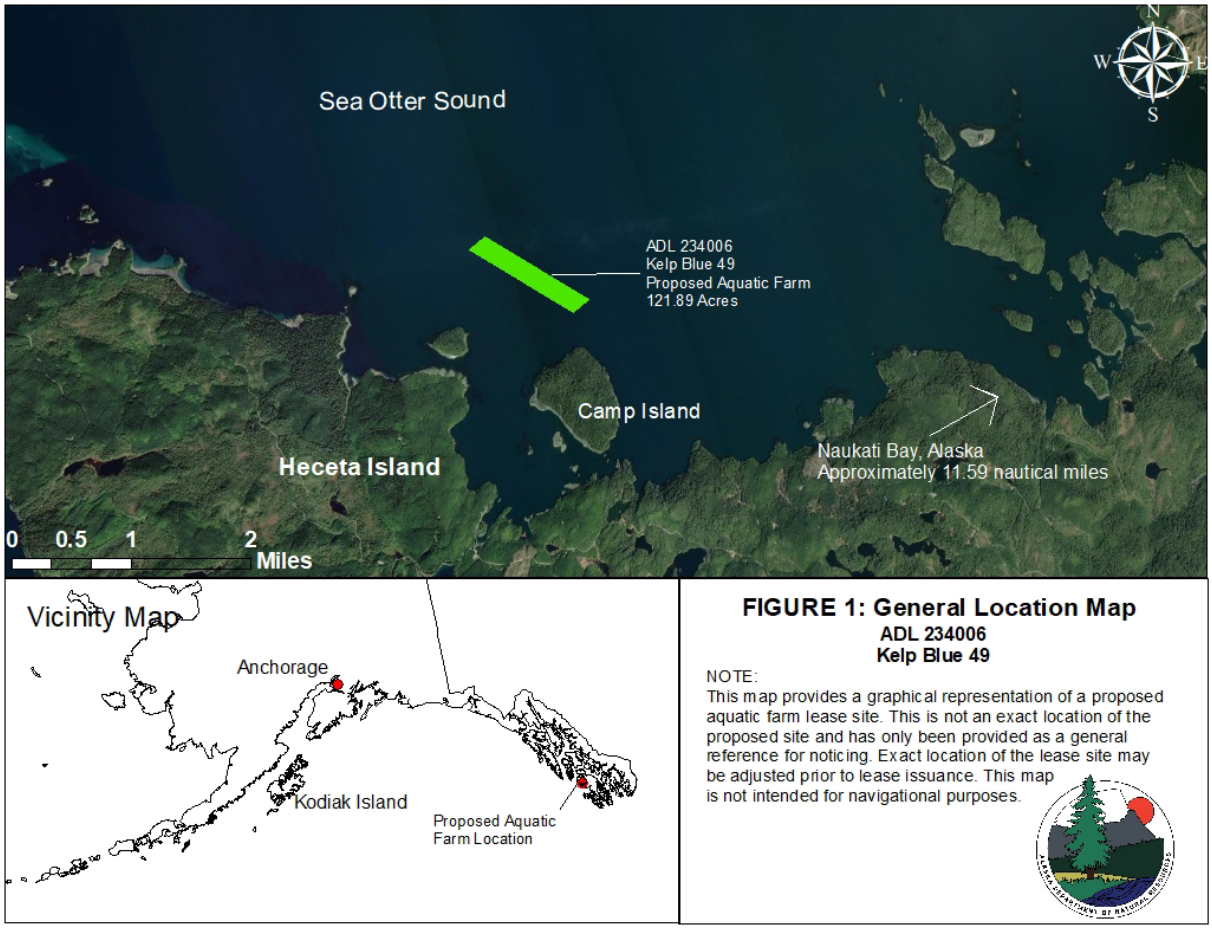


FIGURE 1: General Location Map
ADL 234006
Kelp Blue 49

NOTE:
This map provides a graphical representation of a proposed aquatic farm lease site. This is not an exact location of the proposed site and has only been provided as a general reference for noticing. Exact location of the lease site may be adjusted prior to lease issuance. This map is not intended for navigational purposes.

- **Approximate Lat/Longs (NAD 83)**:

  Parcel #1: 984-feet by 5,412-feet

  NE Corner: 55° 49.465'N, 133° 28.710'W
  SE Corner: 55° 48.800'N, 133° 27.705'W
  SW Corner: 55° 48.706'N, 133° 27.931'W
  NW Corner: 55° 49.367'N, 133° 28.961'W
- **Existing surveys**: None
- **Municipality/Borough**: None
- **Native Corporations/Federally Recognized Tribes**: Sealaska, Craig Tribal Association, Klawock Heenya Corporation, Klawock Cooperative Association, Shaan-Seet Incorporated
- **Size:** 121.89 acres, more or less

Title:

A DNR Title Report (RPT-22794) was requested on July 29, 2022, from DMLW's Realty Services Section. A Title Report issued from DMLW's Realty Services Section will state whether the State of Alaska holds title to the subject tidelands under the Equal Footing Doctrine and the Submerged Lands Act of 1953. SCRO reserves the right to modify the Final Finding and Decision based upon information contained within the Title Report.

Third Party Interests:
No third-party interests are known at this time.

Classification and Planning:
The project area is subject to the Prince of Wales Area Plan (POWIAP), Southern Region: Unit 10 - Shaheen, Subunit Heceta Island 10a, Map: Shaheen, Subunit 10a. The tideland designation for the proposed site is General Use (Gu) which converts to the classification of resource management land.

The management intent for aquatic farming outlined in Chapter 1 of the POWIAP recognizes the difficulty in specifically identifying areas deemed suitable for the siting of aquatic farms (1-7). The POWIAP seeks to minimize conflict with designated primary and upland uses, as well as to foster the development of an aquaculture infrastructure. To this end, it is recommended by the POWIAP that aquatic farm sites be concentrated in a few areas (1-7). The PWAP outlines 21 limited areas identified because of significant conflicts with anchorage, navigation, fish and wildlife habitat and harvest, or recreation where aquatic farming will not be allowed (1-8). The leasehold is not located in one of these areas. Aquatic farming may be allowed in the rest of the

planning area, providing it is consistent with all applicable local, state, and federal permitting requirements.

Within Chapter 2 of the POWIAP, Areawide Land Management Policies, the goals set forth for aquatic farming are to provide opportunities to increase income and diversify the state's economy through the use of state tidelands and submerged lands for aquatic farming (2-2). Management guidelines set forth within Chapter 2 of the POWIAP state that all aquatic farm operations must meet the requirements of applicable local, state, and federal regulations and statutes before the Department will issue an Aquatic Farmsite Lease (2-2). Chapter 2 further states that aquatic farming will be allowed on state tidelands or submerged lands where there is no significant conflict and the objectives of statute and the POWIAP are met (2-3).

In managing State tidelands and submerged land adjacent to federal conservation units, specifically the Tongass National Forest (TNF), DNR will take into consideration the management intent for the uplands identified in the Tongass Land Management Plan (TLRMP) (2-3). Activities, including aquatic farming operations, that are incompatible with the management intent of the TLRMP will generally not be authorized unless the conditions of the other local, state, and federal permits or authorities are met and unless there is an overriding state interest and there is no feasible and prudent alternative. The TNF uplands closest to the proposed leasehold are found on Heceta Island. Within the TLRMP, the TNF uplands on Heceta Island are within the Land Use Designation (LUD) for timber production. According to the TLRMP, the goals for these uplands are to maintain and promote wood production from forests lands that are suitable for timber production, managing these lands for sustained long-term timber yields. Chapter 4 of the TLRMP mentions aquatic farming, stating cooperation between state and federal agencies is called for to meet industry and public needs for aquatic farming programs. DNR will consult with the U.S. Forest Service when determining compatibility of activities. Agency Review request was sent to the U.S. Forest Service for this proposed parcel on July 5, 2022, with no concerns received during the Agency Review.

According to Chapter 3 of the POWIAP, management intent for Subunit 10a: Heceta Island will be managed for multiple use (3-148). The management intent for aquatic farming found within Chapter 3 or the POWIAP states that aquatic farming should locate in a place and in a manner that will have minimum impact on designated primary uses (3-148). Aquatic farming sites may be allowed adjacent to existing or proposed land sale areas at Heceta Island if they are consistent with land sale design and if they will not; block access to trails, beaches, or land reserved for public use or private ownership, significantly detract from the view from waterfront lots, or require upland owners to meet significantly higher sewage treatment standards (3-148). If aquatic farming is proposed before a land sale is designed, the land manager may permit aquatic farming provided the adjacent uplands are not likely to be used for residential settlement, not likely to be reserved for public use, or the aquatic farming facility can be mobile and can accept a short-term permit or lease (3-148).

General guidelines set forth for aquatic farming within Chapter 3 of the POWIAP state that aquatic farming will not preclude timber harvest support activities in Port Alice to protect the long-term use for forestry and aquatic farming or support facilities will not be allowed in Warm Chuck Inlet

or on adjacent state uplands designated recreation to protect the very high recreation, cultural, and fish and wildlife habitat and harvest values (3-149).

In accordance with the area plan, aquatic farming is an allowable use on state owned tidelands. The proposed operation must be in the 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).

Traditional Use Findings

The proposed lease is not located within an organized borough. AS 38.05.830 and 11AAC 63.050(b)(5)(B) require consideration of whether the lease site impacts traditional and existing uses of the site.

The proposed leasehold falls within the Alaska Department of Fish and Game (ADF&G) Game Management Unit (GMU) 2 and the Southeast Alaska Region for commercial fisheries. ADF&G hunting regulations list black bear, deer, wolf, and wolverine as species that can be hunted. Federal Subsistence Regulations list black bear, deer, coyote, fox, hare, lynx, wolf, wolverine, grouse, and ptarmigan as species that can be taken. Trapping regulations for GMU 2 list beaver, coyote, red fox, lynx, marten, and several other furbearers. The proposed lease site is located within the Southeast Alaska/Yakutat subsistence fishing area. ADF&G regulations for the Southeast personal use fishery state salmon, herring, groundfish, king crab, tanner crab, Dungeness crab, shrimp, and scallops can all be harvested.

The Southeast Alaska/Yakutat commercial fishery consists of Alaska waters between Cape Suckling on the north and Dixon Entrance on the south. Salmon are harvested in the Southeast Alaska commercial fishery with purse seines, drift gillnets, and with hand and power troll gear. Herring are harvested in winter bait, sac roe, spawn-on-kelp, and bait pound fisheries. Commercially important shellfish species in the region include golden and red king crab, Dungeness crab, Tanner crab, and pandalid shrimp. Miscellaneous shellfish such as sea cucumber, sea urchins, and geoduck clams are harvested in dive fisheries in the region. ADF&G has management jurisdiction over all groundfish resources within the state waters as well as management authority for Demersal Shelf Rockfish, ling cod, and black and blue rock fish in both state and federal waters.

The proposed lease is within the Prince of Wales Management Area for Sport Fisheries. Most sport fishing effort in marine waters usually occurs from late may through early September for chinook salmon, Coho salmon, and halibut. The majority of the chinook and halibut effort and catch occurs on the west coast of Prince of Wales Island. Many anglers target the “fall run” coho that usually begin entering freshwater streams in late August and peak in September. However, a few island streams contain runs of “summer run” Coho and these fish can be found in fresh water as early as late June. The largest Coho return in the area is to the Klawock River. The Klawock River hatchery releases millions of Coho smolt annually, and the best time to fish for Klawock Coho is from late

August through September. Almost all streams on Prince of Wales Island that contain anadromous salmon have a Coho run. The best months for Steelhead fishing on the island are April and May, but a few small fish can be found throughout the winter in some of the larger streams.

The Southeast Alaska/Yakutat subsistence fishery area species include salmon, halibut, herring, spawn-on-kelp, shellfish and groundfish. In addition, eulachon, Dolly Varden, trout, and smelt are all taken for subsistence purposes. Depending on the area, salmon can be harvested with set gillnets, drift gillnets, gaffs, spears, beach seines, dip nets, cast nets, and hand purse seines. The permit issued for each area specifies the allowable types of gear. Shellfish species taken for subsistence include Dungeness crab, king and tanner crab, shrimp, abalone, geoducks and scallops. Groundfish species that can be harvested in the subsistence fishery include sablefish, Pacific cod, lingcod, flatfish, walleye Pollock, skates, and all species of rockfish.

The siting of the proposed aquatic farm should not interfere with traditional and/or existing uses of the area, including commercial or sport fishing, subsistence activities, boat travel, and recreation. Public Notice may reveal more unknown uses. If such information becomes available, any potential or existing conflicts will be addressed in the Final Finding and Decision.

Access:
Access to the aquatic farm is by boat from Craig/Klawock with minimum site visits of twice per week.

Access To and Along Navigable and Public Waters:
AS 38.05.127 and 11 AAC 11 51.045 require that before leasing land, we determine if a body of water is navigable and if it is, that we provide for easements or reservations as necessary to ensure free access to and along the waterbody. The waters of Sea Otter Sound are tidally influenced and thus navigable. However, the lease is entirely within these waters and located further than 50 feet from Mean High Water, thus a .127 easement is not necessary.

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:
KB initially applied for a 10-year aquatic farmsite lease on April 20, 2022, for a 121.89-acre to cultivate giant kelp within Sea Otter Sound. A complete application was received by the ADF&G and SCRO on June 23, 2022.

The proposed lease site will be comprised of one parcel, covering an area of 121.89 acres, more or less. The parcel will measure 984 feet by 5,412 feet. The proposed aquatic farm will hold an array structure consisting of 5 modules in lateral direction and 32 modules in longitudinal direction. The total array will measure 820 feet by 5,248 feet with each module measuring 164 feet by 164 feet. The array will be placed in the direction of the dominant wave direction to dampen the force of the waves. The modules will consist of a netting system (grid system) and frame system made of thick fiber ropes from which kelp will grow. The netting spacing is 13.1 feet by 13.1 feet to mitigate the risk of whale or other marine mammal entanglement. The netting structure on which the kelp will grow will sit at a depth of 49 feet under the surface of the water. All lines will be under constant tension in all tidal and wave conditions.

The array structures will be anchored to the seafloor with a floating anchor system comprised of a combination of helical screw anchors for silty sedimented bottom and drag anchors, or gravity anchors, for sea floor with boulders or uneven surface. A total of 136 anchors will be used. Anchors will be placed approximately 164 feet in depth at intervals of 82 feet, 164 feet, and 328 feet. A total of 204 1.9-inch steel wire mooring lines at 141 feet each in length will be used. Each mooring line will be equipped with composite subsea buoys and the array will be clearly marked with special marker buoys. The array structure will be fabricated from untreated polyurethane ropes.

Seeded twine will be cut into lengths of 10cm. Initially, the twine will be manually affixed to the netting material in wet conditions to reduce exposure to the air. The attachment of twine to the netting will take place in intervals. The applicant anticipates that it will take approximately 4-6 weeks to seed and install 10 acres of arrays and netting. Applicant proposes to install in batches until installation is complete. The applicant anticipates completing the installation in 40-60 weeks.

Monitoring will begin as soon as the first netting structures are placed in the water. A remote operated vehicle will be used to survey seedlings at depth within the water. The applicant plans on monitoring arrays for any fouling organisms and incidental species. In addition, the applicant states they will be conducting extensive environmental monitoring to understand the impact of the cultivated kelp on the biodiversity and water geochemistry.

Harvest will occur three times per year and applicant proposes to only harvest to five feet below the surface of the water to allow kelp to re-grow. Initial harvest will be by hand with the intent to move to a fully mechanized harvester in the future.

At this time, the Commercial Use Requirement (CUR) states a farm must make annual sales of aquatic farm products of at least $3,000.00 per acre or $15,000.00 per farm by the fifth year of operation and continuing for the rest of the lease term. Failure to meet CUR constitutes a default and may be cause for termination. Annual reports of sales are due January 31 of each year.

The proposed lease 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 June 4, 2022 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. 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) and 11 AAC 63.080, KB will be required to submit a performance guaranty for the lease site.

- **$12,200.00 Performance Bond:** This bond will remain in place for the life the proposed 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, changes in the performance of operations conducted on the authorized premises, or 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:
KB will be required to submit proof of liability insurance to SCRO, with the State of Alaska listed as a "NAMED" insured party. KB will be responsible for maintaining such insurance throughout the 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. KB 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 farmsites that meet the conditions listed within the schedule. The most current lease fee schedule will be used to establish the fair market rental each lessee must pay. Fees are subject to adjustment per AS 38.05.083(c). The current annual rate for a 121.89-acre aquatic farm lease is a base fee of $11,247 for the first 120.01 acres and $62 for each additional acre. In accordance with the Aquatic Farmsite Fee Schedule, Report No. 2522-15, a breakdown of the lease fee will be as follows:

121.89 acres (120.01 acres at $11,247) + (1.88 acres x $62) = **$11,371.00 per year**

If the applicant does not agree with the fee schedule amount of $11,371.00, 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 $11,371.00 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 Review was conducted starting on July 5, 2022 and ending on July 25, 2022. The following agencies were included in the review:

The following agencies will be included in the review:

- DNR DMLW – Mining
- DNR DMLW – Water
- DNR DMLW – Resource Assessment and Development
- DNR DMLW – Realty Services
- DNR DMLW – Survey Section
- DNR Southeast Regional 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
- Alaska Department of Fish and Game
- Alaska Department of Environmental Conservation
- Alaska Department of Transportation and Public Facilities
- Alaska Department of Commerce, Community, and Economic Development
- Alaska Mental Health Trust Land Office
- Alaska Association of Conservation Districts
- Alaska State Troopers Wildlife Division
- U.S. Forest Service
- U.S National Park Service
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Oceanic and Atmospheric Administration
- U.S. Environmental Protection Agency
- U.S. Coast Guard

Agency Review Comment(s):
During the Agency Review, SCRO received comments from two agencies and "no comment" from two agencies.

ADF&G Comment:
ADF&G's Permit Coordinator submitted a letter on behalf of ADF&G Division of Commercial Fisheries (Management, Gene Conservation Lab and Fish Pathology), Division of Sport Fish, Division of Wildlife Conservation, Subsistence Section and Habitat Section dated July 25, 2022. Within the July 25, 2022, letter from ADF&G is a Department Advisory, advising the applicant of general conditions pertaining to ADF&G's statutory and regulatory provisions for issuance of an

Aquatic Farm Operation Permit (AFOP) if the applicant's project is approved. ADF&G also requests that the July 25, 2022, letter be included in the preliminary decision as an advisory to the applicant and for public reference.

The following concerns and recommendations are noted in the ADF&G letter and may be addressed in the AFOP:

- Division of Sport Fish: expects The proposed farm will likely impact and conflict with existing sport fisheries occurring in Sea Otter Sound and other nearby waters.

- Marine Mammal Research Program:The application complies with the guidelines set forth with the ADF&G marine mammal mariculture policy.Advisories or mitigation steps recommunicated by NOAA Fisheries National Marine Fisheries Service (NMFS) or the US Fish and Wildlife Service (FWS) to reduce marine mammal disturbances should be followed. Removing all gear form the water during the non-growing season may minimize gear loss, user conflicts, and marine mammal entanglement and habitat exclusion potential. Any marine mammal entanglements should be immediately reported to the NMFS 24 hr. Stranding Hotline.

- Access Defense Program: The roposed project could potentially block access to public waters.

SCRO Response:
SCRO acknowledges ADF&G's comment. As one of the resource managers in the area, ADF&G's input is an important source of information. SCRO relies on input from ADF&G and other stakeholders to advise of any expected impacts and solutions that may fall outside of SCRO's authority. SCRO has provided a copy of ADF&G's July 25, 2022, letter to KB. As requested in ADF&G's letter, the PD herein contains ADF&G's letter, which will be advertised for a 30-day public comment period. The ADF&G Permit Coordinator's July 25, 2022, letter is attached to this PD.

In an email received from KB on August 12, 2022, responding to ADF&G's comments from the Division of Sport Fish, the applicant stated that the CEO of KB, along with co-founder have already had initial contact with the owner of the Sea Otter Sound Lodge to inform them about the proposed farm. The applicant stated that they would keep in close contact with the lodge to find a suitable solution whereby neither the lodge nor the sport fish community would be impacted by the farm. The applicant stated the farm has been designed such that it does leave sufficient navigation corridors for boats to go around the site. The applicant is also consulting with other sport fishers in the area to listen to their concerns.

In response to the Marine Mammal Research Program, the applicant stated that the proposed substrate structures are designed to withstand exposure and rough seas. All lines, chains and other materials are under constant tension to reduce marine mammal entanglement. Applicant continued, stating that the farmsite will be frequently monitored by boat to ensure the farm is in good condition, but also to monitor other positive and negative impacts to marine biodiversity and water chemistry.

In response to the Access Defense Program, the applicant stated that it is not their intention to cause any blockage for public anglers or boaters. Applicant stated the farm has been designed so that it leaves sufficient corridors for boat to go around the site. Applicant stated they are open to suitable solutions to ensure the public anglers and boaters will not be impacted by the kelp farm.

DNR's statute and regulations for aquatic farmsite leases do not specify management of aquatic farms relating to fish and game but authorize SCRO to process requests to use state lands and waters, and to consider issuing a lease for state-owned tideland, shoreland or submerged land to develop aquatic farms. Management of fish and game is within the authority of ADF&G, and as such, SCRO must defer to them and encourages the applicant to work directly with them. ADF&G may add to its operation permit authorization the conditions it deems appropriate regarding fish and game.

U.S. Fish and Wildlife Service (USFWS) Southern Alaska Fish and Wildlife Field Office and Anchorage Fish and Wildlife Conversation Office:
The USFWS provided a letter on July 25, 2022, informing the applicant of their jurisdiction over Trust Resources in the area of the proposed aquatic farm. These include species protected under the Marine Mammals Protection Act, Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act. The USFWS provided site specific information and recommendations (excerpted below) based on known wildlife presence and habitat use in the project area.

Site-Specific Information:
The letter includes the following site-specific information:

- Sea otter density, potential encounters and disturbance of sea otters, and measures and precautions to avoid harming or harassing sea otters.
- Harvesting of sea otters by Alaska Native hunters in the area of the proposed site.
- Occurrence of natural kelp beds adjacent to the proposed farm and measures to minimize impacts to the natural kelp beds.
- The proposed farm is within an Important Bird Area (IBA) for the high abundance of rhinoceros auklets (*Cerorhinca monocerata)* and overlaps ranges of other species of migratory birds.

Recommendations:

- Choose a farm location that avoids or minimizes potential overlap with important habitats.
- Consult with an engineer to confirm the proposed anchor weight and configuration are sufficient.
- Regularly monitor and maintain aquatic farm structures, lines, moorings, and anchors.
- Minimize the number of vertical lines in the water, remove grow lines and culture gear from the water when not in use, and clean gear on land before transporting.
- Properly dispose of waste materials and reduce the use of plastics.
- Operate vessels at slow speeds (10 knots or less).and in parallel when near marine species.
- Ideally, vessel operators would maintain 437 yards (400 meters) or greater between vessels and marine species, as practicable or if local conditions do not allow for a 437-yard (400-meter) buffer, the buffer may be reduced to 109 yards (100 meters).
- Perform site visits during daylight hours when possible and configure lighting to minimize effects on migratory birds.
- Farm staff should be aware of laws regarding sea otters and contact the Marine Mammals Management Sea Otter Program with any questions about interactions with sea otters or, report injured or entangled sea otters to the Alaska SeaLife Center Stranding Hotline.
- Report injured birds and entangled birds to the Service's sick and injured bird hotline.
- To discuss issues or equipment that were not previously considered in the permit application or that may negatively impact migratory birds and other resources under authority of the to the Service, contact the Southern Alaska Fish and Wildlife Field Office, Anchorage Fish and Wildlife Conservation Office.

SCRO Response:
SCRO acknowledges USFWS' comment. As one of the resource managers in the area, USFWS input is an important source of information. SCRO relies on input from USFWS and other stakeholders to advise on any expected impacts and solutions that may fall outside of SCRO authority.

DNR's statutes and regulations authorize SCRO to process requests to use state lands and waters, and to consider issuing a lease on state-owned tideland, shoreland, and submerged land to develop aquatic farms. SCRO fully acknowledges that management of marine mammals, migratory birds, and bald and golden eagles is within the authority of USFWS, and as such, SCRO must defer to them and encourages the applicant to work directly with them.

Pursuant to 11 AAC 63.110(2), a lease is subject to all applicable federal, state, and local laws in effect, or placed in effect after its effective date. SCRO has provided a copy of the USFWS' letter to KB to inform KB of these concerns and recommendations.

Public Notice of the Preliminary Decision:

permit/lease holders, and other interested parties on April 21, 2023 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 May 24, 2023 to be considered.

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

Postal: Department of Natural Resources
Southcentral Regional Land Office
ATTN: Brent Reynolds
550 West 7th Avenue Suite 900C
Anchorage, AK 99501-3577
Phone: (907)-269-8567
E-mail: brent.reynolds@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. SCRO considered three criteria to determine if this project serves 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 is in the State's best interest as it furthers economic development of the State's aquatic farm industry. It is recommended that SCRO issue a 10-year lease to Kelp Blue 49.

Brent Reynolds 1/17/2023

Brent Reynolds Date
Natural Resource Specialist 2

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 farmsite lease to Kelp Blue 49, as described above. Prior to issuance of this lease, the applicant will be required to pay the annual lease fee of $11,371.00, submit a $12,200.00 performance bond, and provide proof of liability insurance. This Preliminary Decision shall now proceed to public notice.

Samantha Carroll 2/24/2023

Samantha Carroll, Regional Manager Date
Southcentral Regional Land Office
Division of Mining, Land & Water

Attachments

Attachment A – Project Description, Maps and Diagrams
Attachment B – ADF&G Letter

Attachment A
Project Description, Maps and Diagram

PROJECT DESCRIPTION

DATE SUBMITTED: Click or tap here to enter text.

Company Name

Kelp Blue 49

Site Location [*Include water body, distance from nearest community, any landmarks, general region of Alaska, and whether on state tidal and/or submerged lands or private. Provide enough information to understand where it is located.*]

The proposed aqatic farms is located off the coast of Prince of Wales Island in South East Alaska within the state submerged lands.

It's located 11.59 nautical miles from Naukati Bay (unincorporated) in Sea Otter Sound. The nearest community and city/operating harbor and base of operations is Craig, AK. Figure 1: General Location Map, Figure 2a Detailed Location Map.

This farm, when fully deployed will hold an array structure consisting of 5 modules in lateral direction and 32 modules longitudinal direction. In total the array will measure 820 feet by 5248 feet (99 acres) with each module measuring 164 x 164 feet. The array will be placed in the direction of the dominant wave direction to dampen the force of the waves. The total area of the first farm including buffer zone for anchor lines etc, will measure 5412 ft by 984 ft (122 acres).

The modules consist of a netting system (grid system) and a frame system (thicker fibre ropes) from which the kelp will grow. The netting spacing is 13.1 x 13.1 feet to mitigate the risk of whale (or other marine mammal) entanglement. The netting structure on which the kelp will grow will sit around 49 feet under the water surface. All lines will be under constant tension in all tidal and wave conditions. Figure 3: Site Plan Map, Figure 4a+b: Site Plan Map

The array structures will be anchored to the seafloor with a floating anchor system comprised of a combination of helical screw anchors for silty sedimented bottom and drag anchors or gravity anchors for sea floor with boulders or an uneaven surface. Anchors will be placed at >164 feet depth at intervals of 82, 164 and 328 feet. Each mooring line will be equipped with composite subsea buoys and the array will be clearly demarcated with special marker buoys complying with local applicable standards. Figure 5, 6, 7

The array structure will be fabricated from untreated polyurethane ropes.

Onshore facilities and support structures will be located in Craig/Klawock and Craig/Klawock Harbour. Access to the site will be by skiff and tender. Equipment storage will be located in the Craig/Klawock Harbour area or in Ketchikan.

Site Dimensions, Acres for Each Parcel

Parcel 1:

Acreage: 121.89 acre

Side 1: 0.20mi

Side 2: 1.00mi

Side 3: 0.18mi

Side 4: 1.01mi

Total Acres of All Parcels

Total acreage: 121.89 acres

Species You Intend to Farm [*Include scientific and common species name*]

Scientific name: Macrocystis Pyrifera

Common species name: Giant Kelp

Culture Method [*Describe operation activities to be done onsite such as outplanting of seedstock, husbandry techniques to be used (culling, sorting, washing, etc.), maintenance and monitoring activities, management of fouling organisms and incidental species, predator control measures, and schedule of activities such as timing of outplanting seeded lines or adding seedstock into trays, etc. Describe what methods you plan to use based on the definition in* ***5 AAC 41.400(6)****. "Culture" means to use or the use of methods to manipulate the biology and the physical habitat of a desired species to optimize survival, density, growth rates, uniformity of size, and use of the available habitat, and to efficiently produce a product suitable for a commercial market.*]

Seeded twine will be supplied by an approved hatchery operation.

Out-planting of Seeded Twine to Array Modules

The seeded twine will be cut into lengths of 10 cm. Initially, the twine will be manually affixed to the netting material in wet conditions (submerged in shallow water) to reduce exposure to the air.

The attachment of twine to the netting will take place in in batches. It is anticipated that it will take 4-6 weeks to seed and install 10 acres of arrays and netting. We will be installing in batches until the installation procedure is optmised. Over the course of the installation period, we will be conducting regular consultations with stakeholders and the community to ensure proper integration of feedback and address any concerns that might arise.

If there is no pause between installing each batch, with fair weather and we don't optimize the installation proceduere, we could compete the 99 acres of array and netting installation in 40-60 weeks.

Monitoring of Out-planted Kelp

As soon as the first netting structures are in the water, we will begin monitoring the growth of the seedlings. We will use a remote operated vehicle (ROV) to survey the seedlings at depth. We will be monitoring for attachment success. Where twine or seedlings have become detached, we will re-attach twine if necessary. Overall the seedlings will be monitored for morphology, growth rate, number of uprights and survival rates.

We will also be monitoring the arrays for fouling organisms and incidental species, both of which do not form a problem and where possible, these organisms will remain in place.

In addition to the monitoring of the kelp, we will be conducting extensive environmental monitoring to understand the impact of the cultivated forest will have on marine biodiversity and water geochemistry (increased fish stocks, changes in water quality, etc).

Harvest & Regrowth Assessment

In order to make baseline assumptions on yield and re-harvesting, harvesting tests will be conducted. The kelp will be ready for harvesting +/-7 months after out-planting. For the first harvests, the kelp will be harvested manually. The first harvest will be weighed, measured and brought to shore. The harvested plants will then be monitored for re-growth.

We will harvest 3 times per year and only harvest to 5 feet below the water surface so the kelp can re-grow.

Support Vessels: We will require five support vessels:

1.one installation and seeding vessel type work cat, with over the side rollers, cranes and winches (approx. 130 feet x 35 feet)

2. screw anchor installation rig (approx. 130 feet x 35 feet)

3. harvester vessel (approx. 130 feet x 35 feet)

4. One dive support vessel (approx. 20 feet) with winches and small hiab cranes for installation support.

5. One monitoring vessel (12 feet) for monitoring the farm

Two vessels will be equipped with DP (dynamic positioning) systems. The only vessels that would need to stay at the same place are the installation vessel and dive support vessel. These vessel require stationkeeping to install the helical screw anc31hors in the sea bed, and to install the netting. Total operation time per anchor and net won't take more

than a few hours. The vessel won't be anchored at site unless weather requires a safe shelter, in this case all regulations will be followed.

Culture Gear and Equipment (Type, Size, Number, Configuration, Material, and Anchoring System) [*If more than one parcel, indicate what parcel specific gear will be located on. If more than one species, indicate gear to be used for each. Gear includes any structure that holds or protects the organism like trays, tiers of lantern nets, Vexar bags, OysterGro system, grow-out submerged longlines, predator netting, longlines, buoys, depth control systems, etc. Include approximate installation schedule, or if and what gear will remain installed year-round etc.*]

Anchor system: Helical screw anchors, 500 lbs, 136 units, including forerunner swivel assembly and shackles

Netting: Fibre rope for netting, 0.7" diameter, 4160 ropes of 164 feet, 682240 feet in total, specific material to be determined (e.g. carbon fiber rope)

Mooring lines: Steel wire for mooring lines, 1.9" diameter, 204 mooring lines of 141 feet, 28780 feet in total, steel wire.

Buoys: Subsea buoys, 3,000 lbs buoyancy, 1500 lbs weight, 612 units, composite / plastic with technical foam

Demarcation buoys, PATON, special marker buoys (according to standards of US Coast Guard), 1,500 lbs buoyancy, 750 lbs weight, 6 units including mooring line and swivels/ shackles (1 PATON at every corner of the rectangular farm with signal Fl(4) Y and two at the midpoint between the longer sides with signal Fl(2.5) Y).

Additional shackles and/or swivels will be required for the connections of the farms.

Seed Acquisition Plan (Commercially produced and/or wildstock) [*Commercially produced juveniles or seed stock must be obtained from an approved seed source. Do you intend to collect wildstock juveniles or natural set organisms for direct culture on your proposed site? Yes/No. If yes, describe collection methods (applicable for indigenous species: i.e. mussels, scallops, abalone, natural set aquatic plants, etc. This does not refer to broodstock collection on behalf of hatcheries for propagation. If increasing number of acquisitions per year, indicate projected amounts per year. Aquatic plant species can be combined into total feet of line per year.]*

Stocks will be obtained from an approved seed source

Harvest Equipment and Method [*Describe harvest equipment and methods to be used, activities to be done onsite, and schedule of harvest of aquatic farm product. If more than one species, include harvest information for each species or group of species like macroalgae if the harvest information is the same.*]

We will be harvesting the kelp up to three times per year on an ongoing basis for the duration of our licence. We will only be harvesting to 5 feet under the water surface so the kelp can re-grow. Our initial harvests will be manual harvests with divers (manual harvesting will be done by hand, through the use of cutting tools and collection in collection bags/ nets) and a collection vessel but with the intent to move to a fully mechanized harvester using a purpose built mechanical harvesting vessel.

Support Facilities (Type, Size, Number, Configuration, Material, and Anchoring) [*Support facilities include caretaker facility, storage rafts, work rafts, processing rafts, etc.*]

We won't require any on-site storage space or rafts.

Access to and from Site [*Include nearest community, transportation type used and how many times traversing back and forth*]

The nearest community is Naukati Bay, but we will operate from Craig/Klawock. Transportation from Craig/Klawock to the site will be by vessel (or smaller support/monitoring vessel of 35 feet or larger vessel for installation / seeding / harvesting of 130 ft). Aside from when we are installing the arrays, minimum transportation back and forth would be 2 times a week and after every storm event.

Storage Location of Equipment and Gear When Not in Use [*Include whether on private lands and nearest community*]

Commercial storage will be required for the construction materials and equipment in the municipality of Craig. A large enough warehouse/outside storage , or several smaller storage areas are appropriate. Estimated total warehouse / outside storage area is 500 ft x 500 ft.

Mooring space is needed for the three 130 ft vessels and two 35ft support vessels. Local vessels will also be chartered.

C. PROJECT OPERATION PLAN

1. **How will support facilities, culture gear and anchoring systems be maintained?**
   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 10 days (days/month) **Off months** no off months (days/month)

   b. How will you keep the gear and shellfish free of fouling organisms (hot-dip, air dry, pressure washing, etc.)?

      A healthy occurrence of organisms on the array will be permitted- see response 1c.

   c. How will you manage reduction of competing species over the course of operations (relocate sea stars, grow-out cages, or other possible protection from competing species)?

      Because of the unique nature of the strucuture (an off-shore, suspended substrate), it is unknown what organisms will occur on the structure. We hope the structure to form the basis of a kelp habitat and thus would promote the development of competing organsims in a controlled situation. If dominance which is seen as detrimental to the cultivated species does occur, mitigation methods will need to be employed (relocation of mobile organisms, methods to reduce settlement of sedentary organisms).

   d. If you intend to use predator netting, how long will you keep netting over your product?

      (months)

   e. If using predator netting, how will you minimize impacts on non-target species, including seabirds, seals, sealions, walrus and whales?

      N/A

2. **Projected Harvest Rotation Consistent with Life History**
   a. How often do you intend to harvest your product by species?

      3 times per year, top +/-5 feet of biomass only

   b. Do you plan on utilizing density manipulation by culling or redistribution?

      no

   c. What techniques will be used to optimize growth or condition of product?

      We will not use anything to optimize the growth or condition of the product developing on the array.

3. **Acquisition of hatchery or wild seed**
   a. Will you use a certified or approved shellfish seed source(s)? **Yes** ☐ **No** ☐
   b. Will you use an Alaska kelp hatchery? **Yes** ☒ **No** ☐
   c. How do you intend to collect wild seed? (Applicable for indigenous species: i.e. clams, natural set kelp, invertebrates, etc.)

Click or tap here to enter text.

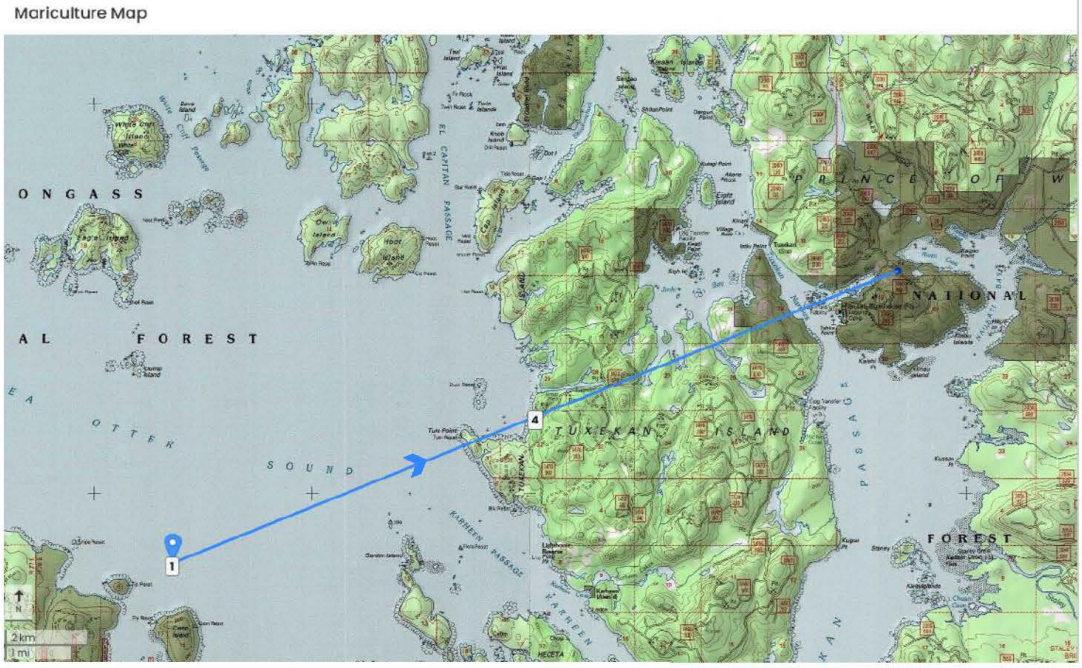
4. **Describe how operation of the aquatic farm will improve the productivity of species intended for culture not covered by the previous questions (examples: predator exclusion, reduction of competing species, density manipulation by culling/redistribution, importing natural or hatchery seed, program harvest to optimize growth/condition and habitat improvement)?**

   The Kelp will grow on a netting structure, adding to the productivity of the species as it would not have been there if the structure was not there.

D. PROJECT LOCATION

kelp blue

Kelp Blue Application: Sea Otter Sound
Figure 1: General Location Map

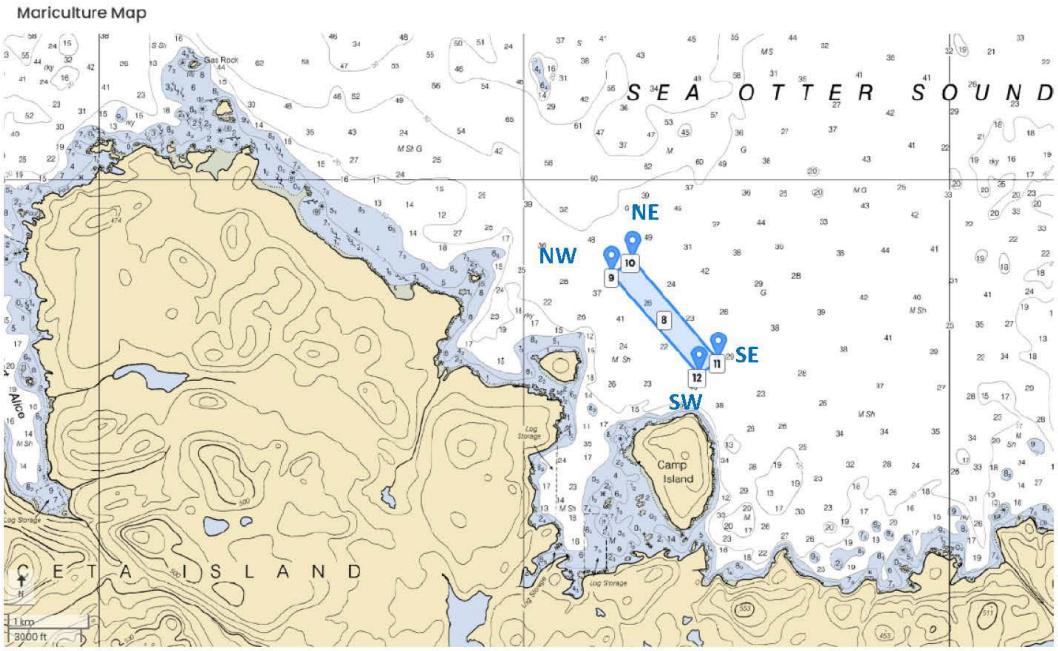


caroline.slootweg@kelp.blue
ferdi.knoester@kelp.blue

kelp blue

Sea Otter Sound

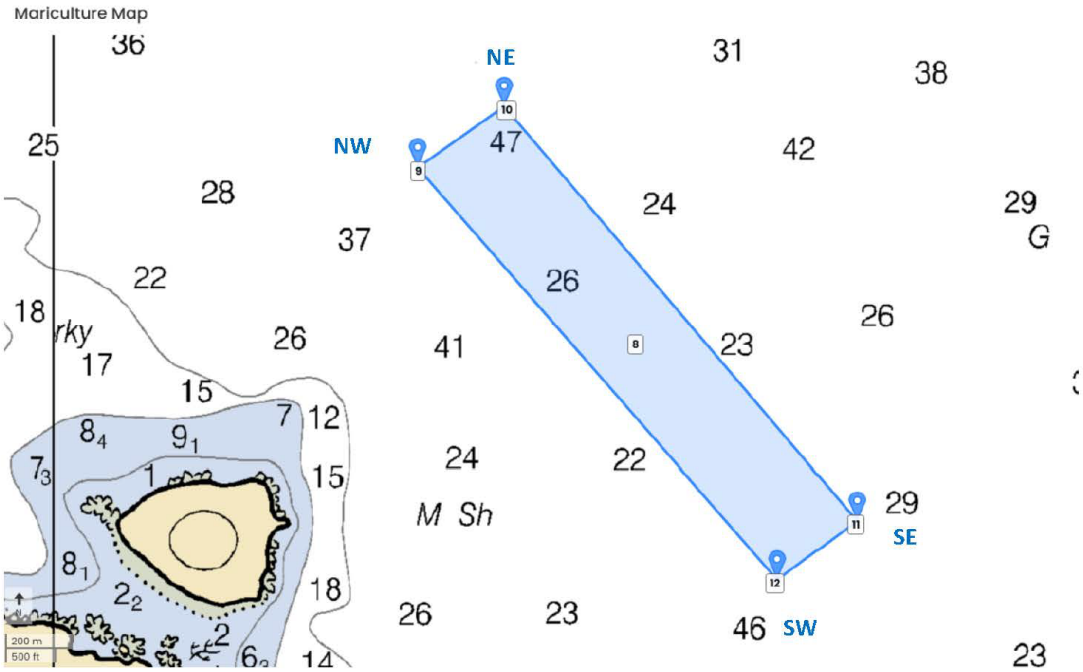
Figure 2a: Detailed Location Map



Detailed Location Map
Applicant: Kelp Blue 49
Water body: Sea Otter Sound
Area/region: West of Prince of Wales Island, Southeast Alaska
Figure 2
NOAA Chart 17403

Sea Otter Sound
Figure 2b: Soil type

Main soil type: MUD, SHOAL, GRAVEL



caroline.slootweg@kelp.blue
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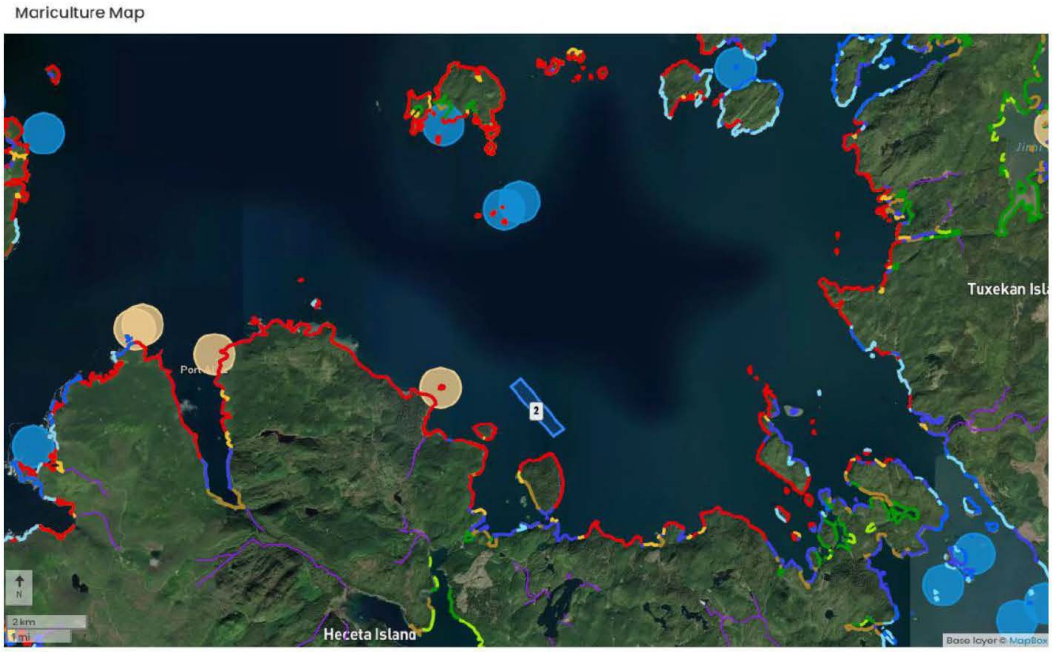
kelp blue

Figure 3: Site Plan Map



Site Plan Map
Applicant: Kelp Blue 49
Water body: Sea Otter Sound
Area/region: West of Prince of Wales Island, Southeast Alaska
Figure 3

Alaska ShoreZone
Kelp Biobands

Alaria
Patchy
Continuous

Soft Brown Kelp
Patchy
Continuous

Dark Brown Kelp
Patchy
Continuous

Dragon Kelp
Patchy
Continuous

Giant Kelp
Patchy
Continuous

Bull Kelp
Patchy
Continuous

Alaska ShoreZone
Sea Grass Biobands

Surfgrass
Patchy
Continuous

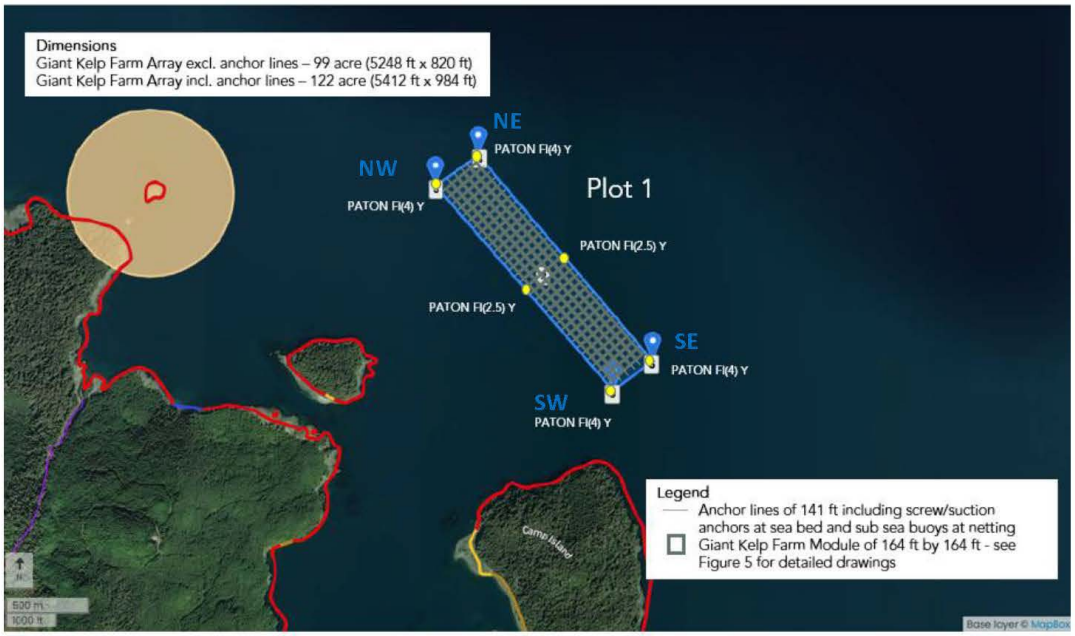
Eelgrass
Patchy
Continuous

ADF&G Anadromous Waters Catalog (2020)
ADF&G Anadromous Waters Catalog (2020)

Harbor Seals
Alaska Harbor Seal Haul-out 500m Buffers
Key Haulout
Not Key Haulout

Figure 4a : Site Plan Map

Mariculture Map



Site Plan Map
Applicant: Kelp Blue 49
Water body: Sea Otter Sound
Area/region: West of Prince of Wales Island, Southeast Alaska
Figure 4

Alaska ShoreZone
Kelp Biobands

Alaria
Patchy
Continuous

Soft Brown Kelp
Patchy
Continuous

Dark Brown Kelp
Patchy
Continuous

Dragon Kelp
Patchy
Continuous

Giant Kelp
Patchy
Continuous

Bull Kelp
Patchy
Continuous

Alaska ShoreZone
Sea Grass Biobands

Surfgrass
Patchy
Continuous

Eelgrass
Patchy
Continuous

ADF&G Anadromous Waters Catalog (2020)
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Harbor Seals
Alaska Harbor Seal Haul-out 500m Buffers
Key Haulout
Not Key Haulout

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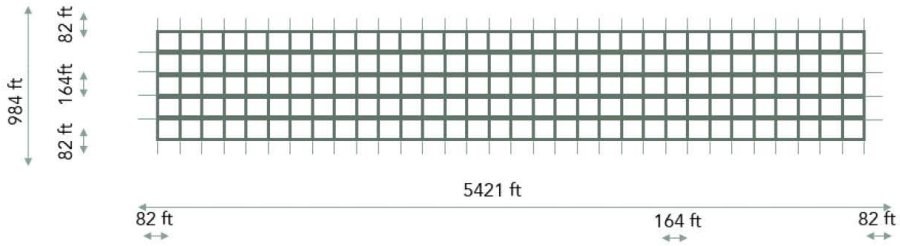
Figure 4b : Site Plan Map: Top View including total dimensions



Feet

Dimensions		
Array width incl. anchors	300m	984ft
Array length incl. anchors	1650m	5412ft
Netting area:	40ha	99acre
Netting spacing:	4m	13.1ft
Anchor spacing x:	50m	164ft
Anchor spacing y:	50m	164ft
Total area incl. anchors:	50ha	122 acre

Figure 5: Cross-sectional Diagrams: Front View

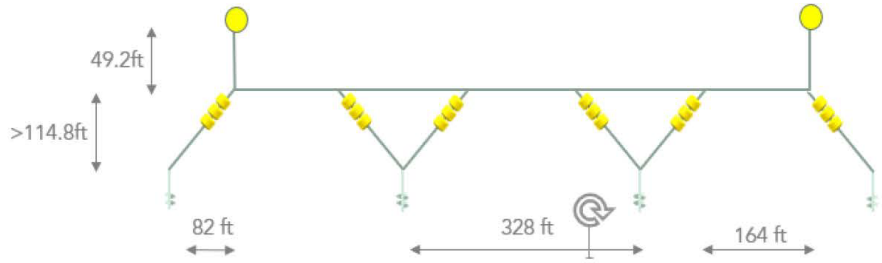


Figure 6: Cross-sectional Diagrams: Side View

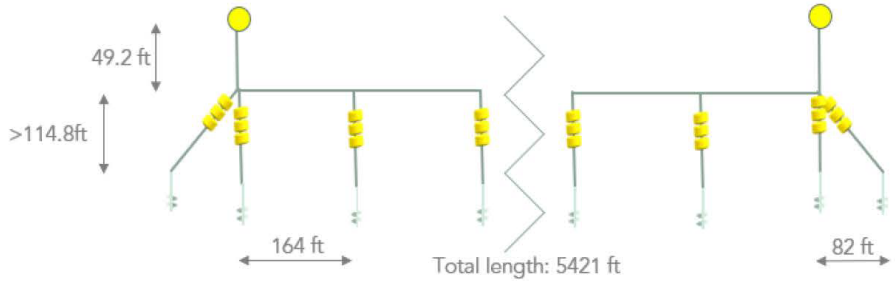
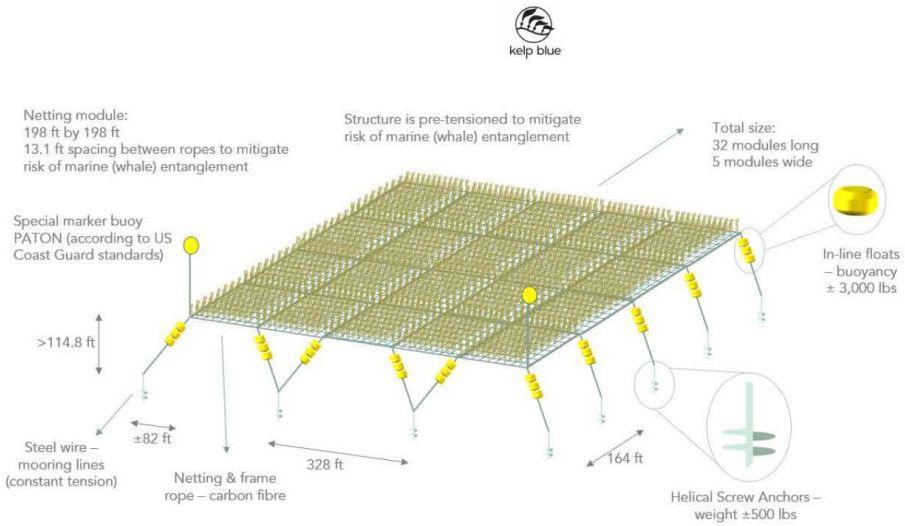


Figure 7: Detailed Drawing


kelp blue
Netting module:
198 ft by 198 ft
13.1 ft spacing between ropes to mitigate risk of marine (whale) entanglement
Structure is pre-tensioned to mitigate risk of marine (whale) entanglement
Total size:
32 modules long
5 modules wide
Special marker buoy
PATON (according to US Coast Guard standards)
In-line floats – buoyancy ± 3,000 lbs
>114.8 ft
±82 ft
Steel wire – mooring lines (constant tension)
Netting & frame rope – carbon fibre
328 ft
164 ft
Helical Screw Anchors – weight ±500 lbs

Attachment B
ADF&G Letter

THE STATE of ALASKA
GOVERNOR MICHAEL J. DUNLEAVY

Department of Fish and Game

Division of Commercial Fisheries
Headquarters Office

1255 West 8th Street
P.O. Box 115526
Juneau, Alaska 99811-5526
Main: 907.465.4210
Fax: 907.465.4168
Permit Coordinator: 907.465.4724

July 25, 2022

Brent Reynolds
Department of Natural Resources
Southcentral Regional Land Office
Aquatic Farm Leasing Program
550 West 7th Avenue, Suite 900C
Anchorage AK 99501

Re: Alaska Department of Fish and Game Agency Review Comments
Slootweg / Kelp Blue 49 Aquatic Farm Site Proposal – Sea Otter Sound
DNR File No. ADL 234006

Dear Mr. Reynolds:

The Alaska Department of Fish and Game (ADF&G) has completed a preliminary review of the project proposal, **ADL 234006** relevant to criteria specified in authorizations for Aquatic Farming AS16.40.105 and 5 AAC 41 200-400. ADF&G Division of Commercial Fisheries (Management, Gene Conservation Lab and Fish Pathology Section), Division of Sport Fish, Division of Wildlife Conservation, Subsistence Section and Habitat Section, were part of the initial review. *There are minimal concerns pertaining to an aquatic farm operation permit at the proposed location.* Mitigation measures or compromises will be discussed to address concerns before an operation permit is issued. Any comments from other government agencies or from the public that may impact applicable department provisions will be considered as part of the final department review for an aquatic farm operation permit which will be issued within 30 days of the lease being issued. Recommendations from this preliminary review are summarized below.

Department Advisory

Please advise the applicant that if the project is approved, general conditions pertaining to Alaska Department of Fish and Game statutory and regulatory provisions for issuance of an Aquatic Farm Operation Permit (AFOP) will be included in the operation permit. In addition, site-specific conditions that have been recommended by staff may be included in the AFOP.

Division of Commercial Fisheries has reviewed this request and have no concerns.

Gene Conservation Lab has no comment at this time.
Fish Pathology Section has reviewed this request and have no concerns.

Attachment B
ADF&G Letter

Division of Sport Fish has reviewed this request and has concerns that the proposed farm will likely impact and conflict with existing sport fisheries occurring in Sea Otter Sound and other nearby waters. Sport fishing for salmon and groundfish occurs in the area of the proposed farm and it is also a navigation corridor for boats traveling to and from the fishing grounds from a lodge approximately 2 miles south of the proposed farm site in Sea Otter Sound. These concerns will be discussed and mitigated with operations permit conditions.

Invasive Species Program Coordinator has no comment at this time.

Division of Wildlife Conservation has reviewed this request and have no concerns.

Marine Mammal Research Program: This application complies with the guidelines set forth with the ADF&G marine mammal mariculture policy established on April 12, 2019. Any advisories or mitigation steps recommunicated by NOAA Fisheries National Marine Fisheries Service (NMFS) or the US Fish and Wildlife Service (FWS) to reduce marine mammal disturbances should be followed. Large whales, especially humpbacks, are highly susceptible to entanglement in lines in the water; Removing all gear from the water during the non-growing season may minimize gear loss, user conflicts, and marine mammal entanglement and habitat exclusion potential. Any marine mammal entanglements should be immediately reported to the NMFS 24 hr. Stranding Hotline, phone – (877) 925-7773 and the ADF&G Permit Coordinator (907-465-4724).

Access Defense Program: Has reviewed this request and has concerns. Proposed project could potentially block public angler and boater access to public waters. These concerns will be discussed and mitigated with operations permit conditions.

Seabird Program: Has reviewed this request and no comments at this time.

Habitat Section has no comment at this time.

Subsistence Section has reviewed this request and have no concerns.

Our department requests that the Department of Natural Resources consider providing this in their Preliminary Decision as an advisory to the applicant and for public reference.

Thank you for the opportunity to provide comments on this aquatic farm proposal. If you have any questions, please contact me at (907) 465-4724.

Sincerely,

Michelle Morris

Permit Coordinator

ecc: Garold V. Pryor, Aquaculture Section Chief, ADF&G
Caroline Slootweg, Kelp Blue 49