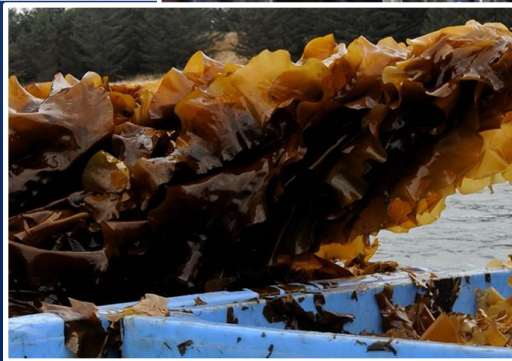


UNDERSTANDING AQUATIC FARMING ADF&G PERMITTING

SUSTAINABLE SOUTHEAST PARTNERSHIP KELP AND OYSTER FARMING WORKSHOP

HOSTED BY SPRUCE ROOT COMMUNITY DEVELOPMENT



MICHELLE MORRIS

AQUACULTURE PERMIT COORDINATOR

ALASKA DEPARTMENT OF FISH AND GAME

MARCH 19, 2021

WHAT ARE THE WAYS TO OPERATE AN AQUATIC FARM IN ALASKA?

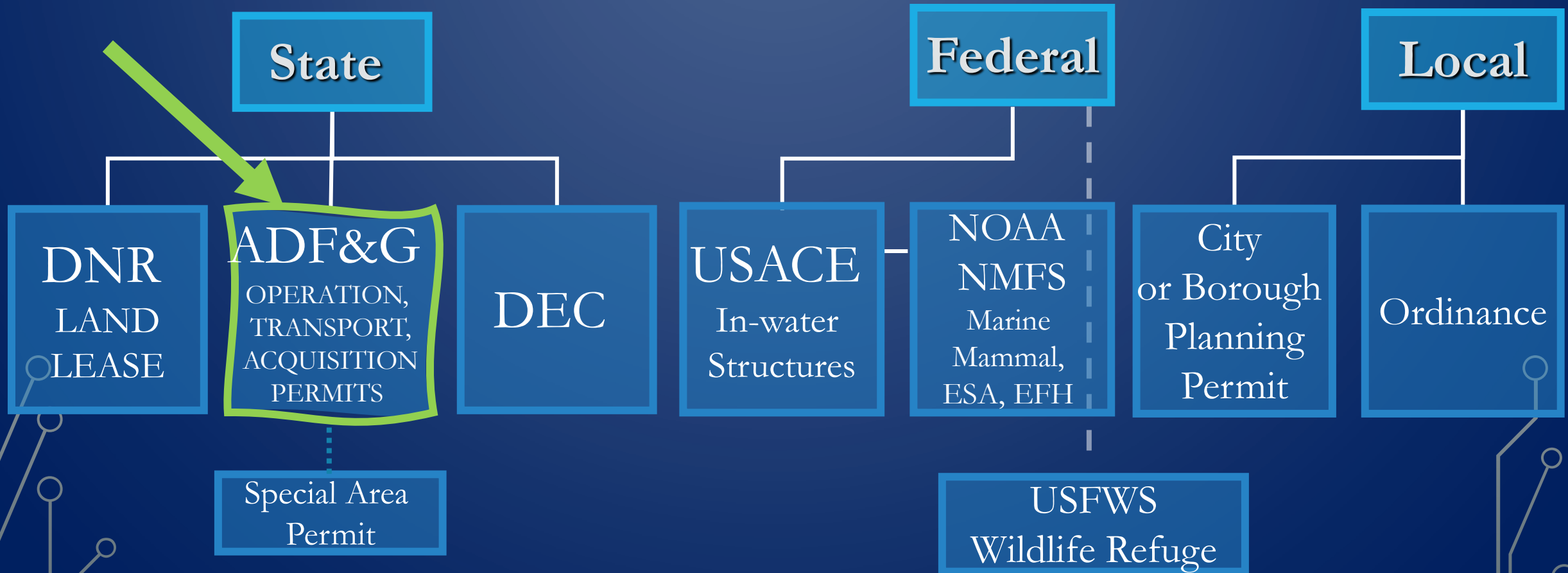
1. Aquatic Farm Operation Permit – Natural Set

- Allows for the collection of natural setting species, that are listed on the operation permit, for sale. Only species that were preexisting or have naturally settled on the site or gear may be harvested.

2. Aquatic Farm Operation Permit – Cultured

- Allows for the sale of species, listed on the operation permit, that are grown from:
 - Hatchery/nursery produced seed or
 - from juvenile wild stock organisms collected through a stock acquisition permit.

MAJOR STATE, FEDERAL, LOCAL AUTHORIZATIONS



ALASKA DEPARTMENT OF FISH AND GAME



MISSION

To protect, maintain, and improve the fish, game, and aquatic plant resources of the state, and manage their use and development in the best interest of the economy and the well-being of the people of the state, consistent with the sustained yield principle.



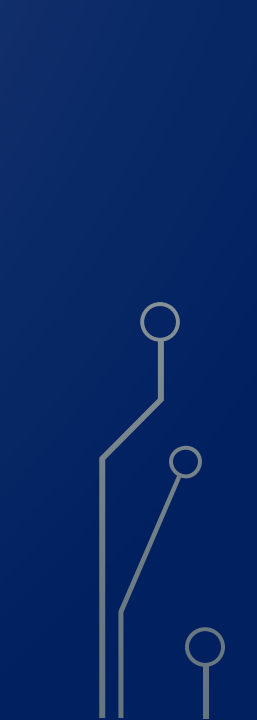
1988 Aquatic Farm Act Implementation - AK Statutes 16.40.100-199

Aquatic Farming Regulations – 5 AAC 41.200-41.400



ARTICLE 2. AQUATIC FARMING

Section 16.40.105 CRITERIA FOR ISSUANCE OF PERMITS

- (1) The physical and biological characteristics of the proposed farm or hatchery location must be suitable for the farming or the shellfish or aquatic plant proposed;
 - (2) The proposed farm or hatchery may not require significant alterations in traditional fisheries or other existing uses of fish and wildlife resources;
 - (3) The proposed farm or hatchery may not significantly affect fisheries, wildlife, or their habitats in an adverse manner;
 - (4) The proposed farm or hatchery plans, and staffing plans must demonstrate technical and operational feasibility; and
 - (5) The proposed farm site may not include more than an insignificant population of a wild stock, on the site, of a shellfish species intended to be cultured.
- 
- 
- 

5 AAC 41.240 REVIEW AND DETERMINATION CRITERIA

1. Physical and biological characteristics of the location are suitable for culture.

- ✓ **Protected - Exchange rates, water temps, currents, salinity, food availability, light, and suspended sediments**
- ✓ **For Suspended culture - Water depth is sufficient to prevent gear from grounding and impacting benthos under structures**
- ✓ **Health and abundance of eelgrass and kelp beds maintained**
- ✓ **Operation not located with 300 ft of mouth of anadromous fish stream**

2. Proposed operations does not significantly alter an established use.

3. Operations compatible with fish and wildlife resources in the area.

- ✓ **Predator control methods have been designed to minimize impacts on non-targeted fish and wildlife.**
- ✓ **No adverse impact to seabird colonies, sea lion haulouts / rookeries, seal haulouts and pupping areas, walrus haulouts.**
- ✓ **No adverse impacts to endangered and threatened species recovery and habitat protection efforts.**

5 AAC 41.240 REVIEW AND DETERMINATION CRITERIA

4. For on-bottom culture proposals for all other indigenous species where wild stock exists, the commissioner has offered an opportunity to harvest species.

6. The proposed aquatic farm site contains an insignificant population of the species intended for culture as determined by 5 AAC 41.235

5. The proposed aquatic farm operation and development plan demonstrates feasibility by describing:

- ✓ Improve productivity of species intended for culture above what would occur in natural conditions.
- ✓ Any support facilities, culture gear, and anchoring systems will be installed and maintained.
- ✓ The projected harvest rotation schedule is consistent with the life history of the species intended for culture.

ADF&G PERMITS

1. **Aquatic Farm/Hatchery Operation Permit** (AFOP) - 10 years

To operate an aquatic farm or hatchery including acquire, possess, and sell aquatic farm products.

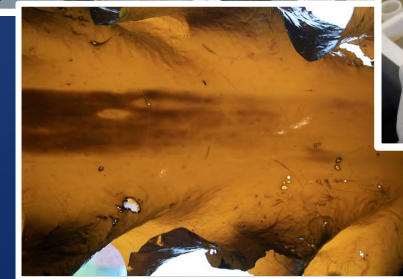
2. **Stock Transport Permit** (STP) - 1 year

To transfer stock to, from, or between an aquatic farm, hatchery, or stock acquisition site (waters of the state)

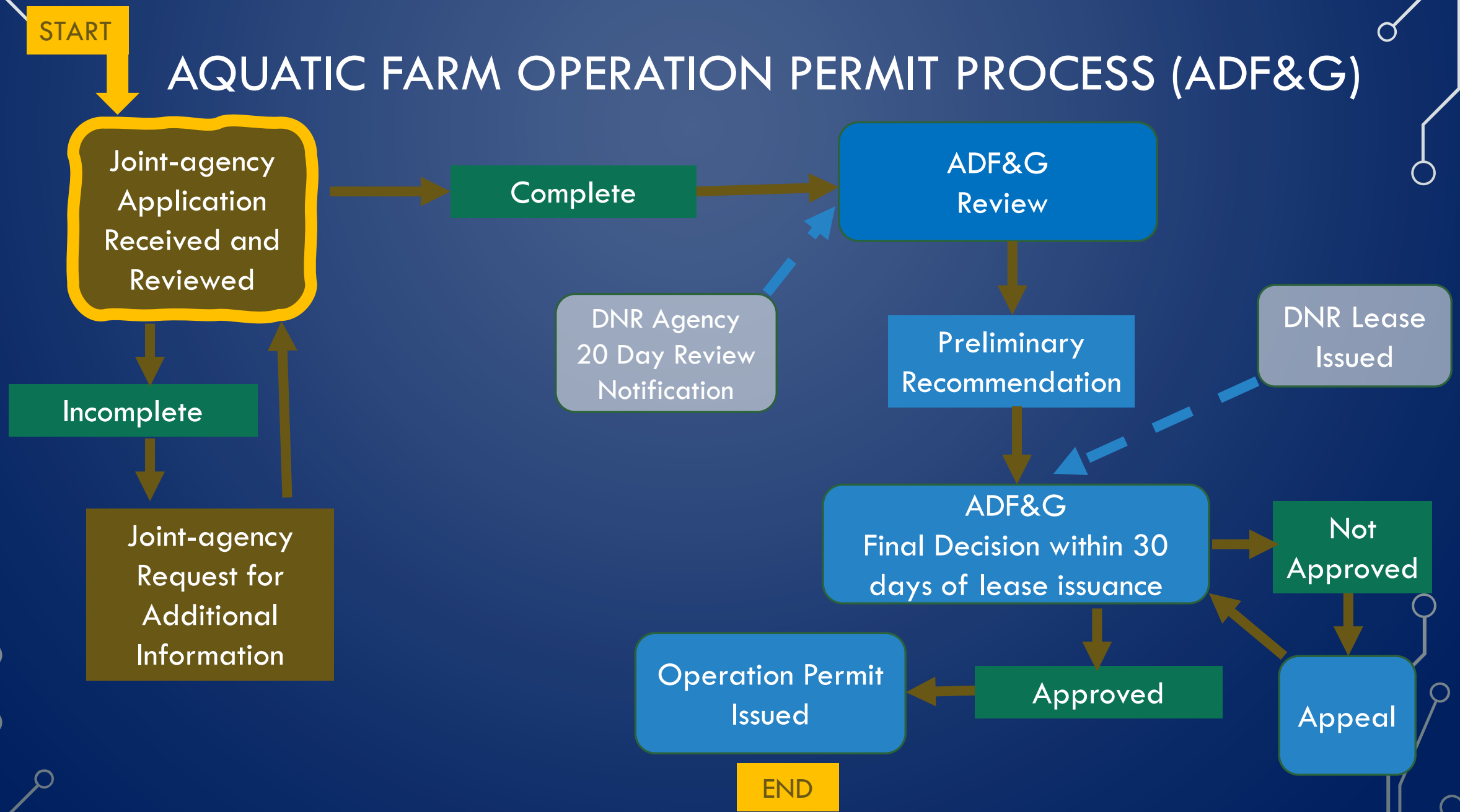
3. **Aquatic Stock Acquisition Permit** (ASP) - 1 year

To collect **wild stock** from outside an aquatic farm site for the purpose of providing broodstock or seed stock to an aquatic farm or hatchery intending to acquire wild stock for culture.

Fees: a. if culturing clams an on-bottom survey is needed to assess clam abundance (subtidal - \$5000/day) and intertidal (\$2000/day);
b. renewal or transfer of operation permit (\$100)



AQUATIC FARM OPERATION PERMIT PROCESS (ADF&G)



WHAT MATERIALS ARE REQUIRED TO APPLY FOR AN AQUATIC FARM OPERATION PERMIT?

1. A COMPLETED JOINT-AGENCY APPLICATION
2. ADDITIONAL DOCUMENTS
 - a. Project Description
 - b. General Location Map (USGS)
 - c. Detailed Location Map (NOAA CHART)
 - d. Site Plan Map
 - e. Cross Sectional Diagram
 - f. Detailed Drawing
 - g. Operation and Development Plan

AQUATIC FARM PROGRAM APPLICATION

You are encouraged to submit a completed application as early in the filing period as possible. The 2012 application form must be used and properly completed before state agencies can process your project. **An incomplete application will not be processed.** A checklist is included to assist you in meeting this requirement. The best way to facilitate the review of your application is to schedule a pre-application meeting with DNR and ADF&G to discuss your project. The original application including attachments and all required fees must be delivered and physically present in the Alaska Department of Natural Resources office no later than 5:00 p.m. on April 30th.

The project location is in: (Check one) **Southeast Alaska** **Southcentral Alaska**
(Southeast = Projects south of or in the Yakutat area / Southcentral = Projects north of Yakutat)

A. APPLICANT INFORMATION

Name

Business Name (If Applicable)

Mailing Address (PO Box or Street Address)

City State Zip

Email Address

Home/Office Phone Cell Phone

If you live in a remote area please provide a contact person (name, phone & email address) who can be easily reached.

Contact Name

Contact Phone Number

Business Partner Name (If applicable)

Business Partner Email Address (If applicable)

Business Partner Phone (If applicable)

AQUATIC FARM OPERATION PERMIT APPLICATION OPERATION AND DEVELOPMENT PLAN

1. Shows improvement in productivity of the organism above what would occur in natural conditions
2. Summarizes installation and maintenance of support facilities / culture gear/ anchoring systems
3. Schedule is consistent with life history of species intended to be cultured.

OPERATION AND DEVELOPMENT PLAN: PART A

- Staff Plan – Number of days and staff needed to operate
- Site Monitoring/Maintenance
 - Gear storage off season
 - Anti-fouling techniques
 - Management of incidental species
- Record Keeping – physical and environmental
- Harvest – frequency and methods
- Seed Acquisition

OPERATION AND DEVELOPMENT PLAN: PART B

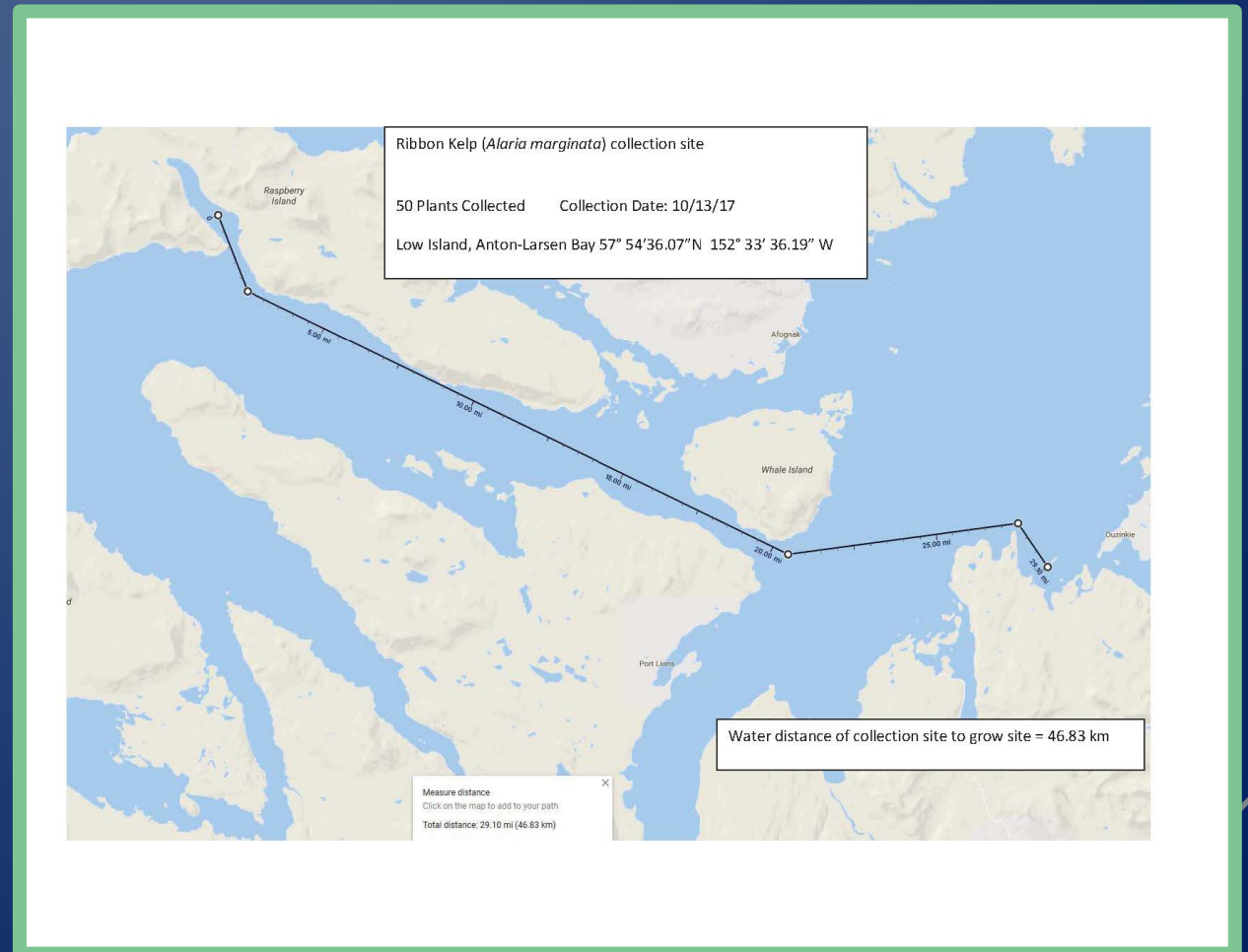
AQUATIC FARMING OPERATION AND DEVELOPMENT PLAN - PART B

Complete one operation and development plan for each species using a reasonable expectation of what you believe is possible for each year of the 10-year lease and operation permit. This is a projection to help you visualize a 10-year farming plan. By the end of year 5, sales must meet or exceed the commercial use requirement and be maintained or increased in the remaining years of the lease. Commercial use equals the annual sum of farm sales from all species combined. An amendment is needed to make any significant changes to gear or acquired numbers.

Name		DNR ADL		ADF&G Permit No.		Species (scientific and common name)	
Calendar Year	Installation Schedule			Seed Acquisition		Projected Harvest and Sales	
	(What you plan to install each year; type, number, and dimensions/poundage; needs to correspond with diagrams and drawings. Note if removed annually.)			# of <u>Hatchery Produced Seed</u> Total seed to be acquired (shellfish) or total feet of line (aquatic plants).	<u>OR # of Seed from Natural Set on Gear or Wild stock</u> Only for indigenous species to be collected for farm. Not broodstock.	Projected Sales ³	# of Organisms or # of Pounds
	Support Facilities ¹	Equipment/ Gear ²	Anchoring Systems				
(Year 1) 20						\$	
(Year 2) 20						\$	

CONSIDERATIONS FOR KELP AQUATIC FARMING GENETIC PRECAUTIONARY APPROACH



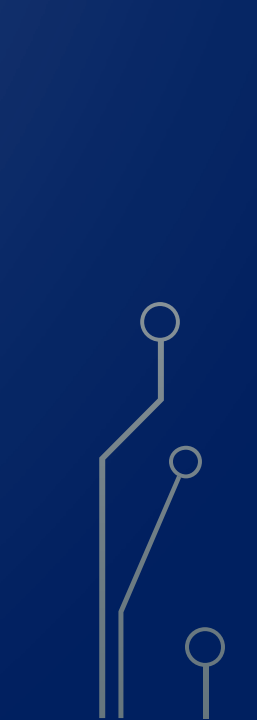
To minimize the risk of genetic or disease impacts on wild populations, hatchery-cultivated macroalgae seedstock may only be outplanted within 50 km (by water) of the broodstock (parent) collection site.





MORE PERMITS!

WHAT ELSE DO YOU NEED AFTER YOU GET YOUR AFOP?

- Check with US Army Corps of Engineers
 - Check with Local Authorities (City and Boroughs/Parks)
 - Check with DEC
 - F&G Aquatic Stock Acquisition Permit – for wild stock collection to facility
 - F&G Stock Transport Permit – for transport from facility to facility
- 
- 
- 

SEED SOURCES

- Out-of-state certified seed sources and instate approved seed distributors can be found online at http://www.adfg.alaska.gov/static/license/aquaticfarming/pdfs/seed_sources.pdf
- Please check this list before applying for a stock transport permit!

SOURCES FOR SEED PURCHASE						
INSTATE SHELLFISH HATCHERY AND SEED DISTRIBUTION PROVIDERS						
Contact Information	Facility Name	Water Body or Location	Species	Life Stage	Broodstock Origin	Approval Expiration Date
Alutiiq Pride Shellfish Hatchery Manager: Jeff Hetrick PO Box 369, Seward, AK 99664 jh@seward.net 907.224.5181	Alutiiq Pride Shellfish Hatchery	Seward, AK (land-based)	Pacific oyster <i>Magallana gigas</i>	Juvenile	Willapa Bay, WA	7/8/2024
Blue Starr Oyster Company Manager: Eric Wyatt PO Box 369, Craig, AK 99921 alaskan@bluestarroysters.com 406.235.6059 (phone) / 907.401.1372 (cell)	Blue Starr Oyster Company	Token Bay	Pacific oyster <i>Magallana gigas</i>	Juvenile	Mixed West Coast	6/18/2022
Eagle Shellfish Farm Manager: James Aquiar PO Box 2211, Cordova, AK 99574 jamesaquiar804@gmail.com 907.253.3481 (phone)	Eagle Shellfish Nursery	Simpson Bay	Pacific oyster <i>Magallana gigas</i>	Juvenile	Mixed West Coast	10/9/2023

YOU ARE A FARMER! NOW WHAT?

- Annual report is due January 31 each year.
- Any changes to add species, gear, or acreage require an amendment.
- Keep in touch with support groups
 - Alaska Shellfish Growers Association (includes aquatic plant farmers)
 - UAF Sea Grant
 - NOAA

WHAT IS THE CURRENT BREAKDOWN OF ISSUED AQUATIC FARM PERMITS?

Type	Number	Percent	Acres	Percent
Shellfish Only	46	60%	357.06	41%
Kelp Only	13	17%	267.2	31%
Combination	14	18%	248.89	28%
Hatcheries	4	5%	0.44	0%
Total	77		873.59	

WHAT IS THE CURRENT BREAKDOWN OF PENDING APPLICATIONS?

Type	Number	Percent	Acres	Percent
Shellfish Only	6	19%	87.5	7%
Kelp Only	21	66%	806.36	61%
Combination	5	16%	431.11	33%
Hatcheries	0	0%	0	0%
Total	32		1324.97	

THINGS TO REMEMBER: HOW TO SUBMIT A SUCCESSFUL APPLICATION

- Research your location!
- Use the checklist in Joint Agency Application for required materials and mapping requirements. Consistency!
- If unsure, reach out for help! Many agencies are here to help negotiate the process.
- Be responsive and available to application questions. Incomplete applications lead to delays.

QUESTIONS?

For additional assistance, please contact:
Aquaculture Section/Division of Commercial Fisheries
Alaska Department of Fish and Game
P.O. Box 115526, Juneau, AK 99811-5526
Aquatic Farming email: dfg.dcf.aquaticfarming@alaska.gov

(907) 465-4724 - michelle.morris2@alaska.gov
(907) 465-4235 - garold.pryor@alaska.gov
Fax: (907) 465-4168

ADF&G:

<http://www.adfg.alaska.gov/index.cfm?adfg=fishingaquaticfarming.main>

APPLICATION:

https://www.adfg.alaska.gov/index.cfm?adfg=aquaticfarming.general_opening



Photo by Nick Mangini