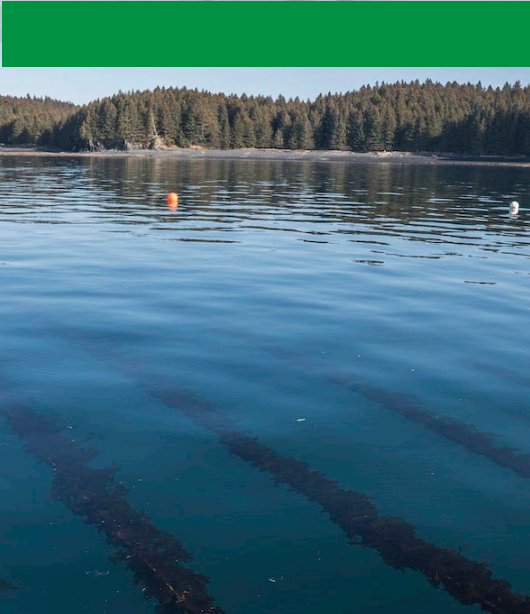




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# Alaska Aquaculture Permitting Guide (2021)



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**Assembled by the Alaska Aquaculture Interagency Working Group:**

[Alaska Sea Grant](#), [National Marine Fisheries Service](#), [Alaska Department of Natural Resources](#), [Alaska Department of Fish and Game](#), [Alaska Department of Environmental Conservation](#), [U.S. Army Corps of Engineers](#), and the [U.S. Fish and Wildlife Service](#), October 2021.

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**Copies of this document may be downloaded at:** <http://akaquaculturepermitting.org/>

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**Disclaimer:** This guide should serve as an introduction to the permitting process and a helpful reference but should not replace regular communication with the regulatory agencies. The authors have made every effort to ensure the accuracy of the information in this guide at the time of its completion. However, laws, regulations, and guidelines can change. Therefore, readers of this guide should contact the state and federal regulators to ensure that the information is up to date.

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**Cover photo credits:** Boat harvesting kelp photo courtesy of Seagrove Kelp Co., bottom left kelp lines photo courtesy of Kodiak Kelp Co., bottom center oyster photo Tommaso Shellfish, bottom right kelp harvest courtesy of NOAA Fisheries



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**Contact before you start:**

**1**

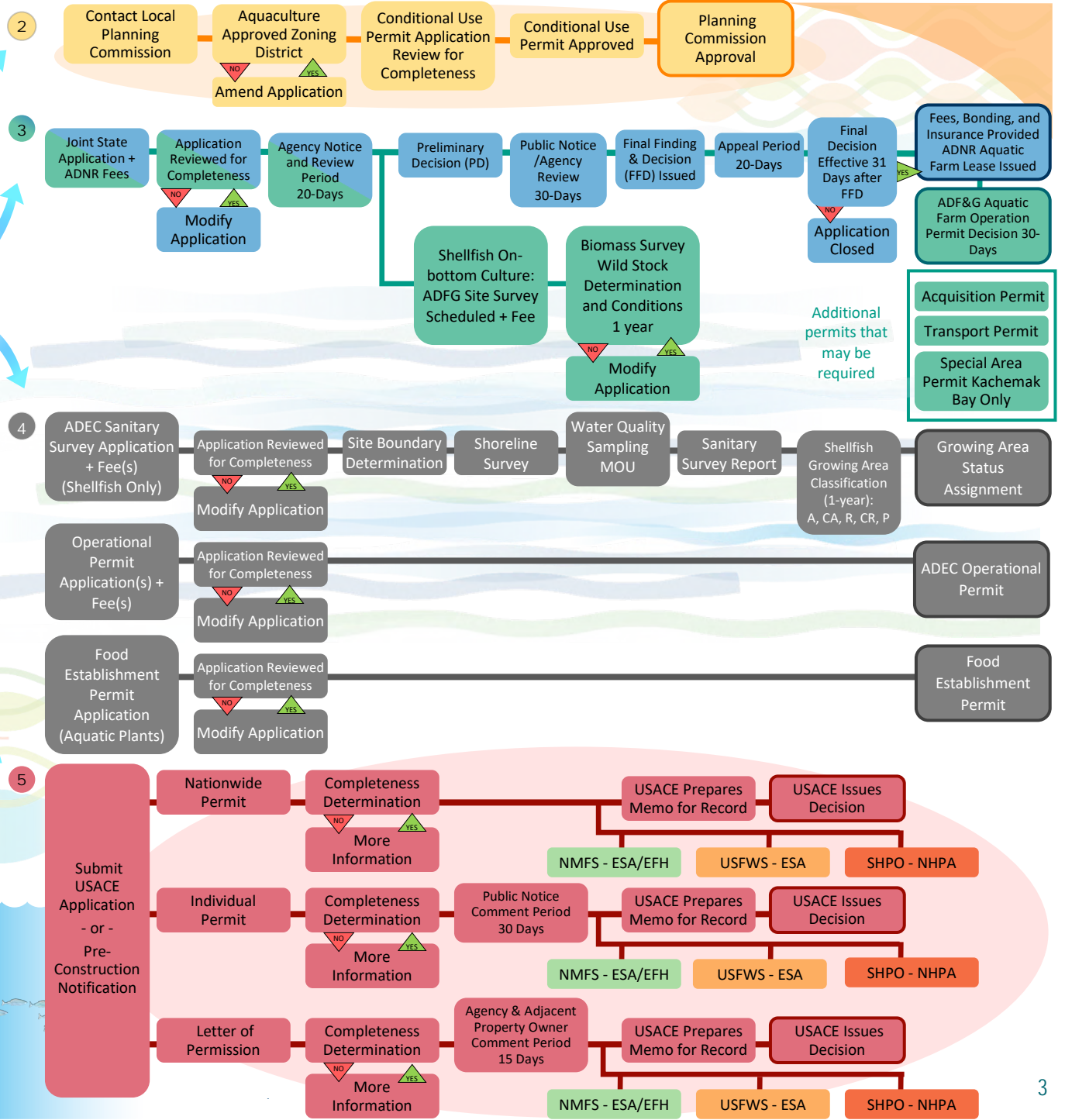
- Alaska Native entities in your area (tribes and village corporations) as appropriate.
- Your local government/city planners
- Nearby property owners
- Other area users (commercial fishermen, subsistence users, etc.)

- USACE
- SHPO
- USFWS
- Local GOV
- ADEC
- NMFS
- ADF&G
- ADNR

# Alaska Aquaculture Permitting Process

Permitting Portal

Pre-Application Meetings



## Section 1: Overview

### Purpose

The purpose of this guide is to assist individuals with navigating the leasing and permitting process for marine aquaculture (shellfish, invertebrates, seaweed) in the state of Alaska. Finfish farming is illegal in Alaska state waters.

### Definition of Aquaculture

Alaska Statutes, Article 2. Section 16.40.199. defines an *aquatic farm* as a “facility that grows, farms, or cultivates aquatic farm products in captivity or under positive control”; *aquatic farm product* is defined as an “aquatic plant or shellfish, or part of an aquatic plant or shellfish, that is propagated, farmed, or cultivated in an aquatic farm and sold or offered for sale.” Finfish farming is prohibited in state waters under Alaska Statute Article 3 (Sec. 16.40.210).

Aquaculture in Alaska is also subject to other municipal, state, and federal regulations. Relevant statutes and regulations can be found in Section 7.

### Audience

This guide is intended primarily for individuals seeking a new authorization or an authorization renewal, amendment, or transfer for a commercial aquaculture operation in the state of Alaska. It does not include authorizations for private non-profit salmon hatcheries. “Authorization” is used in this guide as a blanket term covering state and federal permits and leases.

### What does this guide cover?

This guidance document outlines the steps necessary to obtain state and federal permits and a state lease to conduct commercial aquaculture activities in Alaska; provides information on permit and lease amendments, renewals, and transfers; lists general resources for growers; and provides an overview of the state and federal statutes and local ordinances governing aquaculture in Alaska.



### Lead and Supporting Agencies

The Alaska Department of Natural Resources coordinates the review and distribution of the State Joint Agency Application to other state authorizing agencies (Alaska Department of Environmental Conservation, Alaska Department of Fish and Game). The U.S. Army Corps of Engineers authorizes the placement of aquatic farm infrastructure in state of Alaska navigable waters in consultation with relevant federal agencies (National Marine Fisheries Service, U.S. Coast Guard, U.S. Fish and Wildlife Service, State Historic Preservation Office).

### Helpful Acronyms to Know

#### State Agencies:

- **ADEC:** Alaska Department of Environmental Conservation
- **ADF&G:** Alaska Department of Fish and Game
- **ADNR:** Alaska Department of Natural Resources

### Federal Agencies and Designations:

- **NMFS:** National Marine Fisheries Service (also known as NOAA Fisheries)
  - **USACE:** United States Army Corps of Engineers
  - **USCG:** United States Coast Guard
  - **USFWS:** United States Fish and Wildlife Service
  - **EPA:** Environmental Protection Agency
  - **ESA:** Endangered Species Act
  - **EFH:** Essential Fish Habitat
  - **NHPA:** National Historic Preservation Act
  - **SHPO:** State Historic Preservation Office
- 

## Section 2: Getting Started

### Have a clear plan for your project.

Just like when you apply for a building permit, you must know your plan before you start to fill out the application. This may include drawings with dimensions, maps, pictures, etc.

### Questions to Consider:

- What is the intent of your project and what is your final product? Commercial aquaculture involves the sale of a cultivated organism. If your project is for research or educational purposes, different rules apply, such as:
  - Aquaculture organisms that are cultivated and used as part of research or education projects under an Aquatic Resource Permit may not be bartered, traded, consumed, or sold
  - Any species approved for release is considered common property and may not be claimed for cost recovery or any other reason
  - Specimens *not* approved for release must be destroyed and disposed of as directed
- Is there an aquatic farm in your area that you can tour or volunteer at in order to understand the seed-to-consumer process better before you start?
- What shellfish, invertebrate, or seaweed species do you want to farm?
  - Species that may be cultivated include **species native to Alaska** and **live oysters imported from the Pacific Coast of North America**. See [5 AAC 41.070. Prohibitions on importation and release of live fish](#) and [5 AAC 41.295. Stock transport permits](#) for full requirements.
  - If it is seaweed, can you find parent stock within 50 km of where you intend to cultivate it?

- If it is shellfish, do you have access to [seed](#)?
- Does your project overlap with protected species? Certain marine species (e.g., marine mammals, fishes, and birds) and habitats (e.g., critical habitat) are protected by state and federal laws. Mitigation efforts may be required to minimize potential effects to protected species (see [Section 3: Siting Your Farm](#)).
- What equipment and materials do you have on hand and what materials need to be purchased for building your farm site? If you plan on purchasing used gear, take steps to prevent spread of [invasive species](#).
- What size farm are you considering? Check out the [Alaska Shellfish Farm Size Feasibility Study](#) to help you figure out what size of farm and species types may be most profitable and sustainable.
  - What will permitting fees cost for that acreage? (See [Appendix](#)).
  - How much kelp/how many oysters do you want to grow?
  - Will you have room to expand?
  - Is there an existing farm you could purchase or lease?
- What is feasible for your workforce?
  - Do you have access to workers who have the necessary skills (skiff/boat operation, knot tying, etc.) and seasonal availability?
  - What wages will they expect?
  - Will your workers need to stay on site or will they commute every day? Do you have the resources (bunkhouse, skiff, etc.) available for them to do so?
- How much money do you need to make for your farm to be profitable?
  - Do you plan to make the farm your full time job? Part time?
- Do you have a potential insurance carrier that can provide farm insurance and workers' compensation insurance (including for yourself)?
- What general area would you like to be located in?
  - What (city, state, or federal) agency, native corporation, or tribe manages the location of your potential farmsite?
  - Is aquaculture an allowable use in the area (see [ADNR Area Plans](#))?
  - Have you visited potential sites that are suitable for the species you want to farm?
  - Can you access your site year-round? Identify transit routes and shoreside infrastructure. Ensure safe transit routes to/from aquaculture projects and product landing sites, and access to adequate infrastructure such as utilities, ice, storage, and transportation.
  - Does your preferred area freeze in the winter? Winter icing can severely damage gear and indicate too much fresh water for optimal harvests.

- Is your preferred area in a shallow bay? Small shallow areas can get too warm in the summer and result in low oxygen levels or minimal water exchange rates and can be detrimental to shellfish health.
- Are there other farms nearby? Could you collaborate with those farms on product transportation, growing area classification, water quality testing, etc.?
- What are you going to do with your product? Direct to market, sell to processors, something else?
- If you are not direct marketing to consumers, do you have a buyer/processor for your product? How much (weight/volume) are they interested in buying?

### Talk to your community.

Talk to property owners or other frequent users adjacent to your proposed site about your plan. This will help reduce potential user conflicts later in your application process.

- If you are not an Alaska native and/or not a tribal member in the area in which you are planning to farm, request input from local tribal and native corporation leadership. It may be appropriate to contact the regional or village corporation, and/or tribal government depending on where your project is located. Make sure the area you plan to use does not conflict with traditional subsistence use or have other cultural value with which your farm might harm or interfere. The [National Congress of American Indians Directory](#) and [this GIS map layer](#) can help you find what tribes and native corporations are in your area. For help with how best to coordinate with tribal governments, you can also contact state and federal agency tribal liaisons:
  - **Gina Shirey**  
ADEC Local and Tribal Government Coordinator  
[gina.shirey@alaska.gov](mailto:gina.shirey@alaska.gov)  
907-465-5272
  - **Kendall Campbell**  
USACE Tribal Liaison  
[kendall.d.campbell@usace.army.mil](mailto:kendall.d.campbell@usace.army.mil)  
907-753-5582
- When possible, talk with other aquaculture farmers in your area about their experiences and your plans.
- Talk to your [local area ADF&G Office's](#) dive fishery managers, and the ADF&G permit coordinator (907-465-4724), regarding potential overlap with dive fisheries.
- Contact your local city or borough government and the appropriate planning section, as additional authorizations may be required from them. Please provide the name, address, and telephone number of the person(s) you contacted and list any required authorizations in your state application:
  - [Ketchikan Gateway Borough Planning and Community Development](#)
  - [City of Craig Planning and Zoning](#)
  - [City and Borough of Juneau Permit Center](#)
  - [City and Borough of Sitka Planning and Community Development](#)



- [City of Thorne Bay Planning and Zoning](#)
- [City and Borough of Yakutat Planning and Zoning Commission](#)
- [Kenai Peninsula Borough Land Management Division](#)
- [City of Kodiak](#)
- [City of Unalaska Planning Department](#)
- [City of Cordova Planning Department](#)
- [City of Valdez Planning Department](#)
- [City of Homer Planning Department](#)

If you're unsure if you're within city or borough boundaries, use the [Mariculture Map city and borough layers](#) to find out if you are within a nearby city or borough boundary.

### Questions to ask your city or borough:

- Is my proposed location zoned for marine aquaculture?
- What local permits are required for my type of farm in my proposed location?
- How long does the approval process take in this city/borough?
- What taxes need to be paid on aquaculture harvests?
- Does the city or borough charge tax on the ADNR lease?

### Set up a pre-application meeting.

Contact and set up a meeting (depending on individual agency preference and capacity) with state agencies (ADNR, ADF&G, and ADEC) and federal agencies (USACE, USCG, USFWS, and NMFS). **Alaska law requires that to engage in aquatic farming activities, any person must be permitted through ADF&G and ADEC.** If your farm is located on state tidelands or submerged lands, you must have a lease through ADNR. Further, you must be permitted by USACE to place your farm equipment in navigable waters.

Early coordination with state and federal agencies may prevent delays in the processing of your application. Consult with relevant agencies about the proposed activities. These regulatory agencies may have similar and overlapping interests, so it is a good strategy for applicants to work with these agencies concurrently (rather than sequentially) to the extent that the process allows. Doing so will provide opportunities for all of the agencies to share information and coordinate their review processes, increasing the prospects for a timely decision on the application and minimizing the chances of having conflicting requirements from two or more authorities.

Permitting & Consulting Agency Contacts	
Agency	Contact Information
ADNR Aquatic Farming Program Coordinator	907-269-8543 <a href="mailto:dnr.aquaticfarming@alaska.gov">dnr.aquaticfarming@alaska.gov</a>
ADFG Permit Coordinator	907-465-4724 <a href="mailto:dfg.dcf.aquaticfarming@alaska.gov">dfg.dcf.aquaticfarming@alaska.gov</a>
Alaska Department of Environmental Conservation	Shellfish Program: 907-269-7636 <a href="mailto:dec.shellfish.processing@alaska.gov">dec.shellfish.processing@alaska.gov</a>  Environmental Program (water quality certification): Angela Hunt 907-269-7599 <a href="mailto:angela.hunt@alaska.gov">angela.hunt@alaska.gov</a>
National Marine Fisheries Service Alaska Regional Office	Regional Aquaculture Coordinator: Alicia Bishop 907-586-7224 <a href="mailto:alicia.bishop@noaa.gov">alicia.bishop@noaa.gov</a>
U.S. Army Corps of Engineers	District Office: 907-753-2712 <a href="mailto:regpagemaster@usace.army.mil">regpagemaster@usace.army.mil</a>
U.S. Coast Guard District 17	Waterways Management Office: Todd R. Buck 907-463-2272 <a href="mailto:todd.r.buck@uscg.mil">todd.r.buck@uscg.mil</a>
U.S. Fish and Wildlife Service	Seaweed: Sabrina Farmer 907-271-2778 <a href="mailto:ak_fisheries@fws.gov">ak_fisheries@fws.gov</a>  Shellfish: Kevin Foley 907-271-2778 <a href="mailto:ak_fisheries@fws.gov">ak_fisheries@fws.gov</a>
U.S. Forest Service (only necessary if your project is located in or adjacent to Forest Service lands)	<a href="#">Chugach National Forest:</a> 907-743-9500  <a href="#">Tongass National Forest:</a> 907-225-3101

## Section 3: Siting Your Farm

Site suitability is an important factor to consider when starting an aquaculture operation. Designing an aquaculture project to avoid potential use conflicts and minimize potential environmental impacts increases the efficiency of the permit process and identifies possible issues early in the process. This section contains information not only about what to avoid, but also what positive characteristics to look for in a site to optimize growth and keep your crop healthy long-term.

### Siting Tools

The following site selection and mapping tools can help identify potential overlap with existing ocean user groups and biologically important areas adjacent to or within a proposed site:

- [Mariculture Map](#)  
This web-based mapping tool can be used to create the maps required by state and federal applications. Some layers also provide useful siting information and we have linked to them below under the relevant agency siting requirement or recommendation. For more information about interacting with and customizing maps refer to the documents in the [AOOS Mariculture Portal](#).
- [NOAA OceanReports](#)  
This web-based, report-centric tool provides coastal and ocean planners with a high-level analysis for their custom-drawn area of interest. It provides summary statistics and infographics for six main topics: general information, energy and minerals, natural resources and conservation, oceanographic and biophysical, transportation and infrastructure, and economics and commerce.
- [Alaska Mapper](#)  
This online mapping tool can show the location of existing aquatic farms and other state authorizations. This information is helpful in determining areas where conflicts with other users may exist.
- [ADNR Area Plans](#)  
Planning documents used by ADNR to determine the compatibility of a project within a certain area. Will help applicants determine if aquaculture is an allowable use within a given area.

Review the Siting Considerations listed below to determine what data layers to select in siting your shellfish, invertebrate, or seaweed farm. If you would like more information on aquatic farm site selection please reach out to Alaska Sea Grant Marine Advisory Agent [Melissa Good](#) (907-486-1517) for guidance.

### Siting Considerations

Siting your farm will likely be an iterative process since there are many factors to take into consideration. This section is organized into general guidance; areas you must avoid when siting your project; and other biological and physical siting considerations for state and federal permitting.

ADNR requirements do not apply to farms sited on private tide land. However, an application must still be submitted to ADF&G and requirements still apply.

## General Siting Guidance

Beyond the state and federal permitting process, there will be local siting restrictions and regulations depending on your city or borough. See [Section 2: Getting Started](#) for tips on talking to your community—from tribal members to city government.

There is no substitute for going out and looking at potential sites yourself. Many questions about suitability can be answered by visiting an area multiple times and talking to existing users about potential challenges and characteristics of an area.

ADF&G [Local Area Offices](#) can provide helpful information for siting your project.

### State and Federal Siting Requirements:

- Proposed project(s) must be at least 300 feet from any anadromous streams (use the [anadromous waters](#) layer to measure distances to nearest streams)
- Proposed project(s) must be sited in a configuration that does not impede the navigation of the waterbody
- Proposed project(s) must be outside of existing [USACE Civil Works projects](#) and maintained federal navigation channels. Contact USACE at 907-753-2712 for additional information
- Proposed project(s) must be sited outside the Glacier Bay National Park Marine Protected Area
- Proposed project(s) must be sited outside Whiting Harbor in Sitka, Alaska

## State of Alaska Biological and Physical Siting Considerations

During the leasing and permitting process, the state of Alaska considers many different aspects of a project to determine potential issues and use conflict. While these are not requirements, it is helpful to know what other information the state will consider when reviewing your project.

Below we have broken these down into: Biological Siting Considerations, Physical Siting Considerations, Legislative Designations for Non-Farming Purposes, and Other Considerations.

### State-level Biological Siting Considerations

These are parameters as set out by ADF&G, ADNR, and ADEC for health and safety purposes, and to minimize impacts on the environment and existing users.

The items listed below refer to questions about site suitability in the [Joint State Agency Aquatic Farming Application](#). These areas should be avoided, or applicants should contact the managing agency to determine how to avoid significant impacts either to the species or to your farm (contact ADF&G [Local Area Offices](#), ADEC [Shellfish Program Manager](#), and ADNR Aquatic Farm Leasing Program Coordinator at 907-269-8543).

The state-level **biological** siting considerations include:

- Herring Spawning Areas (ADF&G). [Western and Southcentral Alaska](#) (Mariculture Map layer), [Southeast Alaska](#) (static maps), [Sitka Sound](#) (interactive maps). Note that it is recommended to avoid herring spawning areas. If herring spawn within the farmsite, farmers cannot touch their gear or product until the hatch is complete (approx. 4 weeks) and the product may no longer be usable after hatching. There is no regulation requiring farmers to avoid spawning areas, however, roe on kelp may not be sold.
- [Kelp](#) and [Eelgrass](#) beds (ADF&G)
- Shorebird or Waterfowl Concentration Areas ([Seabirds](#) layer) (ADF&G)
- Placing farms <500 m from large wildlife groups (>50 animals) [Harbor Seal Haulouts](#), [Steller Sea Lion Haulouts](#), or [Walrus Haulouts](#) (see [2019 Marine Mammal Interactions Guidelines](#)) (ADF&G).
- [Sea Otter Concentration Areas](#) (ADF&G).
- [Black and Brown Bear Concentration Areas](#) (ADF&G). (Applicable to shellfish intertidal projects).
- Commercial, Subsistence, Sport Fish, or Personal Use Harvest Areas (ADF&G). Talk to your [Local Area Office](#) and [Subsistence Section](#), and look at [Personal Use Harvest Areas](#) in your region.
- Private Nonprofit Hatchery Harvest Areas: Aquatic farms or facilities sited within Special Harvest Areas (SHA) or Terminal Harvest Areas (THA) must have the approval of the hatchery operator/manager (ADF&G). Talk to your [Local Area Offices](#). To get a general sense of hatcheries in your proposed area, check ADF&G resources regarding [Hatchery Facilities](#) and their [Annual Management Plans](#).
- For Shellfish, look for areas with sufficient phytoplankton (microalgae) in the water for growth (*based on [Alaska Oyster Growers Manual, 4th Edition, Chapter 3](#)*), but avoid areas with a history of disease organisms (shellfish and aquatic plants), or [harmful plankton blooms and shellfish toxicity](#) (shellfish only). For more information, contact Thomas Farrugia ([farrugia@aoos.org](mailto:farrugia@aoos.org)) with the Alaska Ocean Observing System and explore the [Alaska Harmful Algal Bloom \(HAB\) Network reports](#).

### State-level Physical Siting Considerations

This information is best found by visiting your proposed site and talking with ADF&G [Local Area Offices](#), an ADEC [Shellfish Program Manager](#), or ADNR Aquatic Farm Leasing Program Coordinator (907-269-8543).

The state-level **physical** siting considerations include:

- Farm parcels for one proposed project should be no more than approximately three miles apart in a single application
- Year-round accessibility to proposed project site
- Protected sites with low probability of severe storms or winter icing
- Located outside high-use vessel traffic corridors

- Equipment and anchorage built to withstand local tidal currents and severe storms
- Good oxygen exchange/flushing and water circulation sufficient to disperse biological wastes. This is best measured at your site, but see these [ocean circulation models](#) for a general sense of your proposed site
- Adequate [salinity](#) (salinity concentrations above 28 parts per thousand are desired for both shellfish and kelp operations)
- Adequate [temperature](#) (temperatures > 60°F and < 31°F may pose problems such as Vibrio bacteria contamination or icing)
- Located outside significant freshwater influence (freshwater may impact shellfish growth and/or survival, or carry fecal coliform or other pollutants)
- Minimal suspended sediments or turbidity. You can test water clarity using a secchi disc at your proposed project site
- Acceptable water quality and no history of pollution sources (see [Water Quality Layers](#))
- For vertically suspended gear, it is recommended that the site have sufficient water depth of 30-40 ft. at mean low water (MLW) to prevent gear from dragging bottom at low tides (ADF&G). In addition for shellfish, depths ≥ 60 ft. are recommended to enable farmers to drop gear if water temperatures go higher than 60°F to help minimize Vibrio spp. bacterial growth (use the [Detailed Location Mariculture Map option](#) for marine charts of your proposed site)
- Appropriate bottom contour and characteristics for anchoring or substrate for intertidal culture (clams, geoducks, or beach hardening areas)
- Avoids commonly used anchorages (ADF&G, ADNR management plans, and/or the applicable U.S. Coast Pilot)
- Avoids Floatplane Access Areas (ADEC, ADNR)
- Avoids oiled areas from the 1989 Exxon Valdez oil spill. See [these relevant map layers](#); for questions regarding specific areas, contact the Pipeline Corridor Regional Office at 907-271-4336 (ADEC)

### **Legislative Designation for Non-farming Purposes**

There are some areas in the state that have been legislatively designated for purposes other than aquatic shellfish farms. Contact the ADF&G Statewide Permit Coordinator at [dfg.dcf.aquaticfarming@alaska.gov](mailto:dfg.dcf.aquaticfarming@alaska.gov) for additional information. The following area(s) may not be compatible with aquatic farm development projects:

- [State game refuges, sanctuaries, state parks](#), marine parks, and [critical habitat areas](#)
- The Fox River Flats and Kachemak Bay Critical Habitat Areas allow suspended culture farms only. A [Special Area Permit](#) (SAP) is needed to operate an aquatic farm in Kachemak Bay

See the [Refuges, Sanctuaries, Critical Habitat Areas & Wildlife Ranges list](#) for details.

## Other Considerations

There are additional considerations for choosing species of culture for an aquatic farm. Contact the ADF&G Statewide Permit Coordinator at [dfg.dcf.aquaticfarming@alaska.gov](mailto:dfg.dcf.aquaticfarming@alaska.gov) for additional information. Think about the following when choosing a species:

- For on-bottom culture, there is a user fee required by ADF&G to conduct a survey of the initial abundance of the species intended for culture
- If a proposed commercial geoduck harvest site location has more than an insignificant wild stock geoduck population, as determined by ADF&G, any number in excess can be harvested by a common property commercial fishery, or may be harvested by the permit holder if the permit holder reasonably compensates the state (contact your [Local Area Office](#))
- When permitted operations conclude, restoration of wild stock numbers may be required

## Shellfish Growing Area Classification

Before your permit is issued, ADEC will determine if an area is safe for the harvest and sale of shellfish. Please contact Carol Brady, Shellfish Specialist (907-269-7636, [carol.brady@alaska.gov](mailto:carol.brady@alaska.gov)) for more information and to receive an application. Farmers should consider the following when searching for a suitable aquatic farm site:

- Areas used by boats for recreation, moorage, and anchorage, or in close proximity to a proposed growing area may cause conditions that could prevent classification of the growing area. Look at the [Mariculture Map](#) layers to get a better sense of existing uses
- Farms should be sited in areas free of waste discharge. Review [potential discharge areas](#). Caretaker housing facilities are allowed, but must be a minimum of 300 feet from the boundary of a growing area if sewage is discharged. ADEC can approve a sewage disposal system adequate to protect shellfish from contamination for any caretaker facilities associated with an aquatic farm operation
- Areas used by commercial fishing or personal use fishing/hunting within the immediate area or near the growing area could cause conditions that prevent classification of the growing area. This information is best found by talking with existing local users and nearby communities
- Large wildlife populations in the area and/or the presence of [anadromous waters](#) may cause conditions that will affect water quality and thus food safety. This may be resolved in a classification area by limiting harvest times
- An upland area where cabins and homes exist may cause conditions for food safety issues and thus prevent classification of the growing area. Previously existing facilities may have septic tanks that have been permitted by ADEC with in-water discharge of sewage which may prevent classification of the growing area. This information is best found by visiting your proposed site and city or borough planning department

## Federal Biological and Physical Siting Considerations

### Federal Siting Considerations

These areas should be avoided when possible, or applicants should contact the USACE at 907-753-2712 to determine how best to avoid significant impacts. Consider following best management practices to further reduce the project's potential impacts to [listed species](#) and [habitat](#).

Federal siting considerations include:

- Determine if the proposed site overlaps with Endangered Species Act (ESA) listed species, or designated critical habitat for both [NMFS](#) and [USFWS, and avoid negative impacts to those protected resources](#)
- Consider avoiding [Biologically Important Areas](#) (BIAs)
- Identify if the proposed site overlaps with Essential Fish Habitat (EFH) for federally managed species (using [this mapping tool](#) or reviewing the Fishery Management Plan for the area) and avoid negative impacts to those species' habitat components

## Required Maps for Joint State Agency and USACE Permit Applications

### Creating Your Maps

It is acceptable to use paper maps and hand draw the following requirements, but it is strongly recommended that you use the [Mariculture Map tool](#) for the General Location Map/USACE Vicinity Map, the Detailed Location Map, and the Site Plan Map/USACE Site Plan View, in order to create editable, high quality products. If you need to change any components of the maps due to application revisions, it can be done easily in the Mariculture Map.

For help creating custom maps in the Mariculture Map tool, visit the [Create Custom Map Overview](#) and [Create Custom Map How-to](#) help page. On the [Mariculture Map homepage](#) you will see default layers for making the [General Location Map](#), the [Detailed Location Map](#), and the [Site Plan Map](#). You can click on these links to load the appropriate map or chart for each of the requirements listed below.

**Note:** While the Site Plan map link includes many relevant data layers as required by the Joint Agency State Application (see [Site Plan Map Requirements](#) below), it does not include ALL of the relevant components. Particularly examine “known existing uses,” or other gaps that may not be captured in the preloaded Mariculture Map layers. Consider contacting the ADF&G Statewide Permit Coordinator ([dfg.dcf.aquaticfarming@alaska.gov](mailto:dfg.dcf.aquaticfarming@alaska.gov)) the ADNR Aquatic Farm Leasing Program Coordinator (907-269-8543), and USACE (907-753-2712) to ensure your map requirements are met.



## Application Mapping Requirements

USACE-specific steps are **indicated in bold**. Otherwise, all steps apply to both the state joint agency and USACE applications.

Make sure each map includes the type of map (*i.e.* *General Location Map*), project name, and name of applicant. See [USACE Drawing Checklist](#) and the [State Joint Agency Application](#) for more guidance.

- **General Location Map (USACE Vicinity Map)**  
This map is a larger scaled map showing a larger surrounding area with less detail. Use a USGS Topographic quadrangle map (*scale: 1" = one mile (1:63,360)*) and label it "Figure 1." Show the following information:
  - USGS Map name (e.g. Craig B-4)
  - Names of water bodies
  - General location of the farm site
  - Distance (in nautical miles) to the nearest community
  - Direction (arrow) of the site from the nearest community
  - Directional arrow identifying North
  - Scale on map
  - Legend box
  - **List latitude and longitude of farmsite (USACE Vicinity Map)**
  - **Show and label areas with eelgrass, kelp, or mudflats (USACE Vicinity Map)**
- **Detailed Location Map (State Application Only)**  
This map is a smaller scaled map showing more detail. Use a [National Oceanic and Atmospheric Administration \(NOAA\) navigational chart](#), label it "Figure 2," and show the following information:
  - NOAA Chart Number
  - Boundaries of each farm area parcel with clearly labeled corners (NE, SE, SW, and NW)
  - Directional arrow identifying North
  - Scale on map
  - Legend box
  - If an upland area is proposed, provide the location and type of use (e.g. housing, storage shed)
- **Site Plan Map (USACE Plan View)**  
Draw an overhead view of the farm area parcel(s) and surrounding area. Label it "Figure 3" and show the following information:

- All in-water structures and anchoring systems (all anchoring systems and anchor scope have to be inside the farm parcel boundary)
- Acres of each parcel
- All equipment and support facilities with dimensions (in feet)
- Areas of eelgrass beds (intertidal zone)
- Areas of kelp beds (subtidal zone)
- Fuel and chemical storage
- Nearby anadromous streams (salmon)
- Distance between all facilities, gear or equipment on the proposed farm site
- Legend box
- For **USACE Plan View**, also include:
  - Name of water body
  - High Tide Line (HTL) and Mean High Water (MHW)
  - Distance between proposed activity and any nearby federally-authorized navigation channels or navigation projects
  - Major natural and man-made features on site and nearby
  - Cross-section views of locations (e.g. A-A')
  - Water depths around the project (include whether you used MLLW or mean sea level)
  - Species to be cultivated and methodologies (e.g. long-line Pacific oysters)
  - Identification of areas with canopy predator nets
  - Areas of mudflats
- **Cross-Sectional Diagram(s) (USACE Section Views)**  
Provide cross-sectional diagram(s) of all support facilities, equipment, and gear, showing their placement and anchoring systems. More than one diagram may be required. Label it “Figure 4” (and so on) and show the following:
  - Dimensions of all facilities
  - Gear or equipment on the proposed farm site
  - Distance from bottom of gear to ocean bottom at MLLW
  - Scale
  - Legend box
  - For suspended or on-bottom culture, also include:
    - Water depth at low tide
    - Major on-bottom physical features (e.g. bottom contours)

- Dimensions of the anchoring configuration and weight
  - **For USACE Site Map, also include:**
    - HTL, and MHW/MLLW
    - Cross-section view label (*e.g. A-A*')
    - Type and location of materials used in construction
    - Method of construction
    - Height of all structures
    - Show and label areas with eelgrass, kelp, or mudflats
  - **Detailed Drawings (State Application Only)**  
Provide detailed drawing(s) of all support facilities, equipment, and gear. *Note that more than one diagram may be required.* Label and show the following:
    - Dimensions (length/width/height) of all proposed gear and equipment
    - Legend box
- 

## Section 4: Step-by-Step Application Process Instructions

This section is meant to be used as a supplement to the [flowchart](#) of Alaska Aquaculture Permitting Processes developed by the Alaska Interagency Working Group. It walks you through the local, state, and federal application processes. It is recommended that steps 1-2 be completed prior to submitting formal applications with the state or federal agencies below to minimize possible delays later in the process.

### State and Federal Aquaculture Permitting Process

The following information is organized into five steps, with more detailed components in each section:

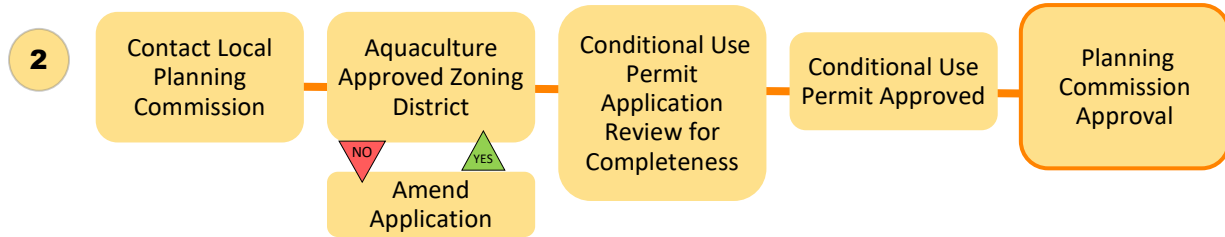
1. Plan Your Project
2. Local Permitting Process
3. State Joint Agency Application Process
4. ADEC Shellfish and Aquatic Plants Permitting Process
5. USACE Application Process

#### **Step 1. Plan Your Project**

1. Follow the steps in [Section 2: Getting Started](#) and [Section 3: General Siting Guidance](#) to:
  - Avoid user conflicts
  - Make sure your proposed site is in an area that follows relevant regulatory city, state, and federal guidelines and requirements

- Create your site maps and diagrams according to state and federal application requirements
2. Contact State and Federal Agencies to set up pre-application meeting:
    - **ADNR** – aquatic farm lease information
    - **ADF&G** – aquatic farm operation and other permits
    - **ADEC** – shellfish growing area classification, shellfish harvester and other permits, and water quality certification
    - **USACE** – nationwide permit, individual permit, or letter of permission
    - **USCG** – private aids to navigation (PATON)

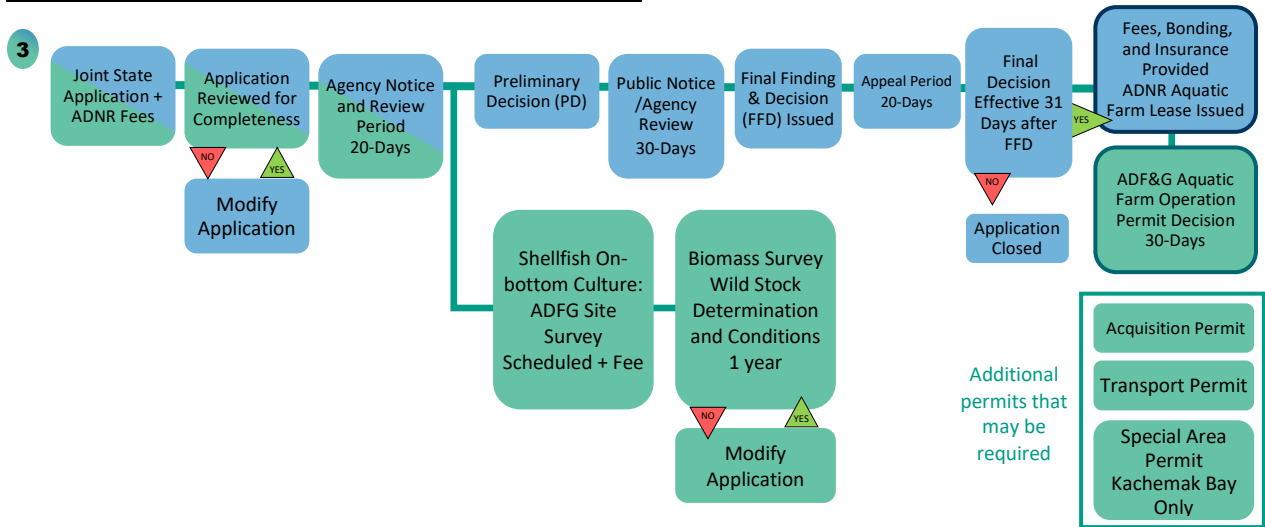
**Step 2. Local Permitting Process**



You may need an authorization from a municipality or borough if your farmsite is within their boundaries. If you plan to use uplands in your operation, prior permission from the adjacent upland owner must be obtained (keep in mind that this process varies greatly from city to city, refer to [Section 2: Getting Started](#), and work closely with your local planning commission).

1. Contact the local planning commission.
2. Find out if your proposed site is in an Aquaculture Approved Zoning District. If not, amend the proposal.
3. Stand by for planning commission review of conditional use application completeness. You may need to provide more information.
4. Conditional Use Permit approved.
5. Planning commission approval.

### Step 3. State Joint Agency Application Process



Prospective farmers are required to submit a [State Joint Agency Application](#) along with the [application fee](#). The application fee amount depends on the size of the proposed farm and can be found in the fee schedule below (An application opening period is scheduled every year from **January 1 - April 30**. Note that it is possible for the agencies to decide not to open the application period in a given year, but unlikely). The application is used by ADNR, ADF&G, and ADEC to determine your proposal’s feasibility.

1. **Submit a joint agency application** to ADNR with required application fee.

Joint Agency Application Fees	
Joint Agency Application Fee (see <a href="#">ADNR fee schedule page</a> for more information)	>1 acre: \$600 1-3 acres: \$1200 >3 acres: \$2000 One-time fee
Wild Stock Survey for Shellfish on-bottom culture <sup>1</sup>	Fee calculated per day/per site, location and site-size dependent. Fees may be as high as \$5000.

2. **Review of application completeness.**  
Stand by for ADNR and ADF&G review of application completeness - you may need to provide more information or modify the application.
3. **Agency notice and review period (20 days)**  
Stand by for agency notice and review period.
4. **Shellfish on Bottom Culture<sup>1</sup>**  
ADFG Site Survey Scheduled and fee. If you are planning on bottom culture to grow clams, ADF&G will contact you to schedule an initial site survey (this can add up to a year of review time).

<sup>1</sup> Only needed for on-bottom culture shellfish operations.

**5. Results of Biomass Survey<sup>1</sup> (1 year)**

For on-bottom clam culture, ADF&G will conduct a site biomass survey to determine the existing population of shellfish to be cultured. Depending on the results of the survey, site specific conditions may be included in your permit to meet harvest and restoration of wild stock requirements.

**6. Preliminary Decision**

ADNR makes a preliminary decision (PD) based on your application information and agency input. This will include a recommended decision about your application and your development plan for public review.

Note: Submit your USACE application after receiving a Preliminary Decision on your State Joint Agency Application.

**7. Public Notice/Agency Review (30 Days)**

ADNR provides a 30-day public comment and review window of the preliminary decision.

**8. Final Finding and Decision Issued**

ADNR makes a Final Finding and Decision (FFD) based on public notice input and all previously received information. You will receive the ADNR final Administrative Order and Decision, including terms of lease if approved.

**9. Appeal Period (20 Days)**

If your application is denied, you have a 20-day period to appeal the ADNR Final Finding and Decision. Anyone else who commented during the 30-day public comment period can also appeal the decision, whether it was an approval or denial.

**10. Final Finding and Decision**

Decision becomes a Final Administrative Order on the 31st day after issuance.

**11. Fees, Bonding, and Insurance Provided and Aquatic Farm Lease Issued**

Receive, sign, notarize, and return ADNR lease. Make sure to also include the first annual lease fee, proof of liability insurance, and performance guarantee bond. ADNR will then send you a finalized signed lease after you complete. Your finalized lease is conditionally valid for 10 years.

ADNR Lease & Associated Fees	
Annual Lease Fee	\$450 for the first acre plus an additional. \$125 per acre or portion thereof ≤ 30 acres. See <a href="#">ADNR fee schedule</a> for farms >30 acres.
Performance Guarantee Bond	Minimum of \$2,500.
Proof of Liability Insurance	Based on quote from insurance company or broker.

## 12. Aquatic Farm Operation Permit Decision

ADF&G will approve or deny an Aquatic Farm Operation Permit (AFOP) within 30 days of the Aquatic Farm Lease being issued. A person adversely affected by the commissioner's decision (either approval or denial) has 30 days to ask for reconsideration only if the person has new or additional information relevant to the decision.

## 13. Aquatic Farm Operation Permit Issued.

The AFOP will include requirements that must be adhered to for the length of the 10-year permit. The permit must be signed and the signature page returned to ADF&G. An annual report is required to be submitted to ADF&G by **January 31** of the following year of each year of operation.

### Additional ADF&G permits that may be necessary:

- **Special Area Permit<sup>2</sup>**

To farm in Kachemak Bay, you will need a Special Area Permit (SAP). Go to [ADF&G Special Area Permits - Refuges, Sanctuaries, and Critical Habitat](#) to apply. Once an Aquatic Farm Operation Permit is approved, ADF&G can issue the SAP. The application does not require an additional fee.

- **Aquatic Stock Acquisition & Transport Permit<sup>3</sup>**

An Aquatic Stock Acquisition and Transport Permit is required to acquire wild stock for the purpose of providing broodstock or seedstock to an aquatic farm or hatchery, or to acquire wild stock for culture at an aquatic farm or hatchery. To request approval, use the [Aquatic Stock Acquisition and Transport Application](#) and submit it to the department at least 30 days before the proposed acquisition.

- **Stock Transport Permit<sup>4</sup>**

A Stock Transport Permit is required to import and transfer seed stock to, from, or between an aquatic farm and hatchery in Alaska. ADF&G must issue a Stock Transport Permit before shipment of any seedstock may occur. To request approval to transport seed stock, submit a [Stock Transport Permit Application](#) to the department at least 45 days before the requested date of transport. Pathology samples may be required to be submitted.

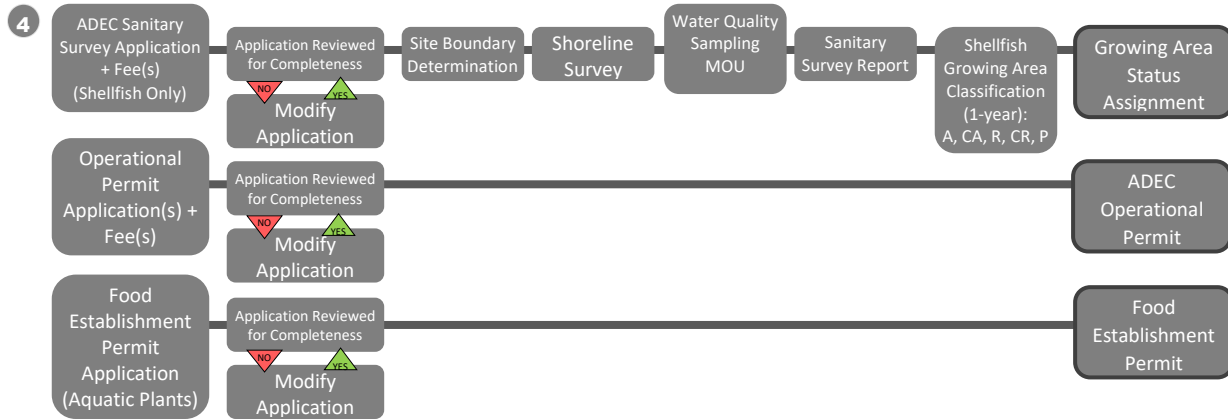
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<sup>2</sup> Only needed for farm operations in Kachemak Bay

<sup>3</sup> Only needed if acquiring wild stock

<sup>4</sup> Only needed to transport seedstock to, from, or between an aquatic farm and hatchery

**Step 4. ADEC Shellfish and Aquatic Plant Permits**



For seaweed, you’ll need the [Aquatic Plant Food Establishment Permit](#) from ADEC if you’re doing more than harvesting and trimming your crop.

If you’re growing shellfish you’ll need a [Shellfish Growing Area \(SGA\) classification](#) as part of receiving your operational permit from ADEC. You will also need a [Shellfish Harvester Permit](#) and potentially a [Shellfish Dealer Permit](#) depending on what you plan to do with your products. It is important to note that you may start the shellfish growing classification step sooner, in order to expedite the total length of your application process. However, you may risk taking on the costs of a year of testing only to have your project denied in the joint agency application process.

**Shellfish Growing Area (SGA) Classification (process can take up to 1 year)**

Contact the [ADEC Shellfish Program Manager](#) for an application for the Initial Sanitary Survey to Classify a Proposed Shellfish Growing Area. **Note:** payment of the \$500 initial classification fee is required with submission of the application. An operator will be expected to collect water samples and pay for shipping to the ADEC laboratory in Anchorage. More information can be found on the [Classified Shellfish Growing Waters](#) webpage.

ADEC Shellfish Growing Area (SGA) Classification Fees	
Initial Classification	\$500 one-time fee.
Annual Reapproval of Classified Areas	\$150 for each day ADEC conducts SGA reapproval activities.



Once your application is submitted and reviewed for completeness, it will go through the following process:

**1. Site Boundary Determination**

Boundaries are determined considering topography, sources of natural and human contamination, and potential for additional growing areas nearby. ADEC obtains this information from the State of Alaska Aquatic Farms Application, information you provide in your Operational Permit application, and using existing data from ADF&G shellfish inventory studies.

**2. Shoreline Survey and Identification of Potential Contaminants**

ADEC will conduct a shoreline survey to identify potential contaminants in the area by considering various physical and biological site characteristics.

**3. Water Quality Sampling MOU**

Proposed growing or harvesting area waters must be tested to assure they meet fecal coliform standards in the National Shellfish Sanitation Program (NSSP). Note: Water quality samples may be collected by an operator through a Memorandum of Understanding (MOU) with ADEC.

**4. Sanitary Survey Report**

Information from steps 1-3 will be compiled into a sanitary survey report, culminating in a Shellfish Growing Area Classification.

**5. Shellfish Growing Area Classification**

The classification area can be approved, conditionally approved, conditionally restricted, prohibited, or restricted. The classification of the SGA is determined by the water quality data collected and analyzed from samples collected over a minimum of year.

Samples are collected throughout a minimum of a year period to provide an idea of water quality of the area throughout the year. All areas must be reclassified every year. In Alaska, the most common SGA Classification is “Approved” or “Conditionally Approved,” but this is dependent on ADEC water sample review.

Shellfish Growing Area (SGA) Classification	Definition
Approved	A growing area where harvest for direct marketing is allowed.
Conditionally Approved	A growing area which meets the criteria for the approved classification except under certain conditions described in a management plan.
Conditionally Restricted	A growing area that meets the criteria for the restricted classification except under certain conditions described in a management plan.
Prohibited	A growing area where the harvest of shellstock for any purpose is not permitted. Unclassified areas are treated as areas classified as Prohibited.

Shellfish Growing Area (SGA) Classification	Definition
Restricted	A growing area where harvesting shall be by special license and the shellstock, following harvest, is subjected to a suitable and effective treatment process through relaying or depuration.

**6. Growing Area Status Assignment**

The Growing Area Status will be designated as open, closed, reopened, remote, or seasonally remote, and may change during a harvest period.

Growing Area Status Assignment Definitions	
Status	Definition
Open	Shellfish may be harvested subject to its classification.
Closed	Result of sewage spill, biotoxin levels or emergency.
Reopened	Emergency abated, fecal coliforms, biotoxin levels or other contaminants returned to acceptable levels.
Remote	Lack of human habitation, not impacted by actual or potential pollution sources.
Seasonally Remote	Area is classified as approved but a closure period is defined. One sample required before reopening.

**7. ADEC Operational Permit**

An ADEC Operational Permit is required to harvest shellfish or sell their products from a SGA classified as Approved or Conditionally Approved. Download the application for [harvesters here](#). Download the application for [dealers here](#). Dealer permits are only required for farmers who are processing products beyond harvest.

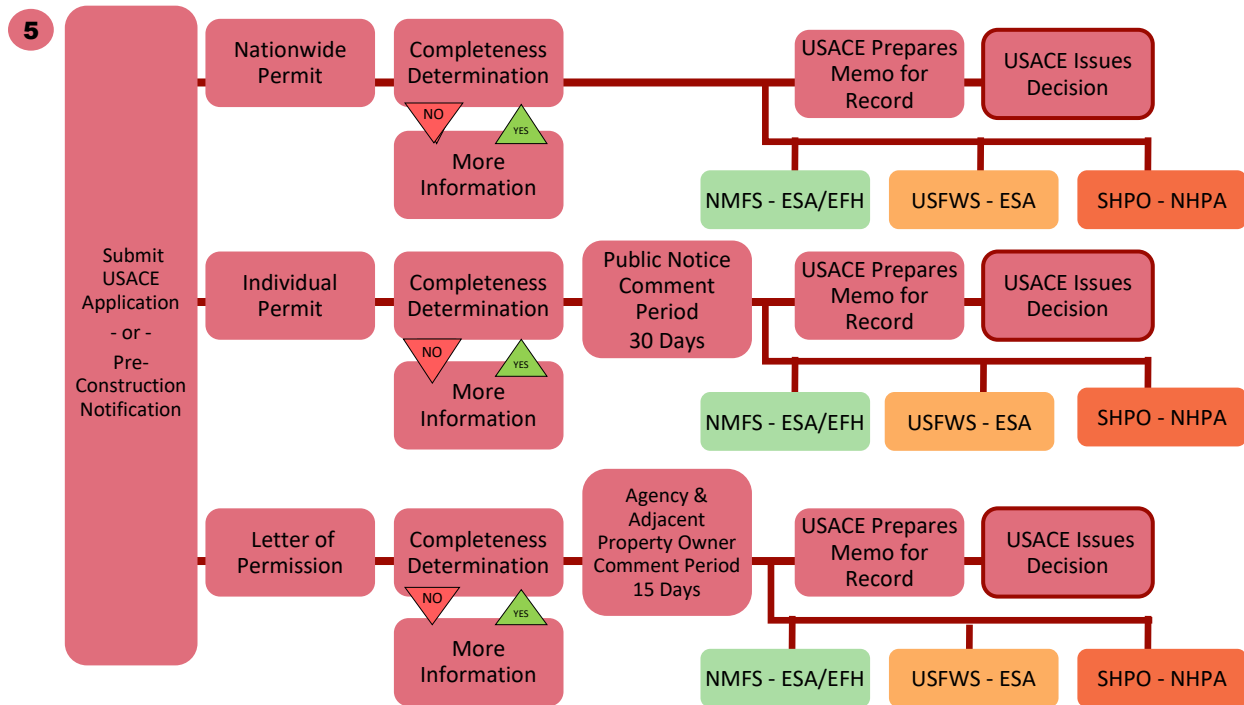
- i. Submit application and associated fee.
- ii. Complete and submit proof of [harvester or dealer training](#).
- iii. Other requirements: Depending on which permit you apply for, you may need to submit additional materials such as the [Seafood Plan Review Checklist](#) (for shellfish dealers). You can find a list of other potentially required materials [here](#). Information about Hazard Analysis Critical Control Point (HAACP) and Sanitation Standard Operating Procedure (SSOP) requirements can be found [here](#). Contact the [ADEC Shellfish Program Manager](#) for assistance

Types of Shellfish Operations	
Type of Operation	Definition
Shellfish Harvester	A person who takes shellstock by any means from a growing area. Harvesters may only sell products to permitted shellfish dealers in Alaska.
Shellstock Shipper	A dealer who grows, harvests, buys, or repacks and sells shellstock. They are not authorized to shuck shellfish nor to repack shucked shellfish. A shellstock shipper may also buy, repack, and sell in-shell products as well as ship shucked shellfish.
Shellstock Reshipper	A person who purchases shellfish from dealers and sells the product without repacking or relabeling to other dealers, wholesalers, or retailers.
Shucker-Packer	A person who shucks and packs shellfish. A shucker-packer may act as a shellstock shipper or reshipper or may repack shellfish originating from other certified dealers.
Shellfish Repacker	Any person, other than the original certified shucker-packer, who repackages shucked shellfish into other containers.
Geoduck Dive Vessel	A vessel used to hold and transport harvested geoducks for market.

Associated Permit Applications & Fees		
Type of Operation	Permit Application	Annual Fee
Geoduck Dive Vessel	Geoduck Dive Vessel Application	\$162.00
Shellfish Harvester	Shellfish Harvester Application	\$162.00
Shellstock Shipper	Shellfish Dealer Application	\$162.00
Shellstock Reshipper	Shellfish Dealer Application	\$162.00
Shucker-Packer	Shellfish Dealer Application	\$649.00
Shellfish Repacker	Shellfish Dealer Application	\$325.00

### 8. Aquatic Plant Food Establishment Permit

If you're growing aquatic plants AND processing them beyond harvest and trimming: you will need to obtain a [food establishment permit](#) from ADEC. This permit is required for processes such as freezing, drying, and packaging the product.

**Step 5: USACE Application Process**

It is recommended that if you are pursuing a Letter of Permission, or Individual Permit, that you submit your USACE application after you have received initial approval (a preliminary decision) from the State, and the project description is finalized ([review Step 3](#)). This helps avoid the need to resubmit your application if changes to your proposal occur as a result of feedback from the public or state agencies during the state permitting process. If you are pursuing a Nationwide Permit, you are required to submit a copy of the ADNR preliminary decision with your Preconstruction Notification to the USACE.

1. Complete the USACE [Application for Department of the Army Permit](#) for all permit types or the [Nationwide Permit Pre-construction Notification](#) for nationwide permits (Up to a \$100 fee for an individual permit at time of issuance, no associated fee for all other permit types, approximate review time 60-120 days).
2. Follow [instructions](#) and submit via email to [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil) or in person at your [local Regulatory Field Office](#). Follow the [USACE application map instructions](#) in [Section 3: Siting Your Project](#) to make sure you have included all required information. Note that your application will be reviewed using one of three pathways depending on your project: a Nationwide Permit (NWP), an Individual Permit (IP), or a Letter of Permission (LOP).
3. Once your application has been received, a project manager is assigned to your application process for the duration.

## Other Applicable Laws, Permits, and Consultations

Under section 7(a)(2) of the Endangered Species Act (ESA), the USACE must consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) on activities that may affect a listed species or designated critical habitat. In addition, Essential Fish Habitat (EFH) consultation with NMFS, or a National Historic Preservation Act (NHPA) consultation with the State Historic Preservation Office (SHPO) and other consulting parties may be required. While the applicant does not conduct these consultations, they may be required to provide information to the USACE and can help front load their applications by considering adding best management practices to further reduce their project's potential impacts to listed species and habitat. Learn more about the consultation process for NMFS, and [EFH](#) and [ESA](#) best management practices by visiting the [NOAA Fisheries Aquaculture Permitting in Alaska](#) webpage.

For projects reviewed as Letters of Permission or Individual Permits, a Clean Water Act Section 401 Water Quality Certification (WQC) from ADEC may be required. When you submit for your USACE authorization, you should also request a “pre-filing meeting” with ADEC (or Environmental Protection Agency (EPA) if proposing to farm in waters near Annette Island/Metlakatla). No sooner than 30 days after you request a pre-filing meeting with ADEC/EPA you can apply for a WQC. You should include (carbon copy or “cc”) the USACE on all requests made to ADEC/EPA. ADEC/EPA will decide whether a WQC is required, not required, or waived for your project. Information on how to request a pre-filing meeting with ADEC and apply for a WQC can be found [here](#). For projects in waters around Annette Island/Metlakatla, a pre-filing request can be emailed to the EPA at [R10-401-Certs@epa.gov](mailto:R10-401-Certs@epa.gov). EPA will instruct applicants how to apply for a WQC.

Your project may require a Private Aid to Navigation (PATON) permit from the USCG depending on the location and components of your farm. Contact the District 17 PATON Manager at 907-463-2272, or USCG Marine Information Specialist Todd Buck (907-463-2269, [todd.r.buck@uscg.mil](mailto:todd.r.buck@uscg.mil)) to receive help in determining if your project will require a PATON.

## Nationwide Permit (NWP) - processing time up to 60 days

NWPs are permits issued nationwide, typically every five years. When applying for a NWP, the USACE verifies that the proposed project fits the terms and conditions of the NWP. The USACE has issued three NWPs which authorize specific types of aquaculture projects:

- NWP 48 - Commercial Shellfish Mariculture Activities
- NWP 55 - Seaweed Mariculture Activities
- NWP 56 - Finfish Mariculture Activities (Not legal in Alaska state waters).

Additional information on these NWPs can be found on [USACE's website](#).

NWPs provide the most efficient permitting option if your project qualifies.

1. If your application is deemed incomplete, you will be asked to provide more information.
2. Any required consultations (see [Other Applicable Laws, Permits, and Consultations](#)) must be completed.

3. USACE will complete a memo for record.
4. USACE will issue a decision.

### **Individual Permit (IP) - processing time up to 120 days**

An IP is most often used for projects that are large in scale and may involve more substantial environmental impact. A fee of up to \$100 is required at time of permit issuance.

1. If your application is deemed incomplete, you will be asked to provide more information.
2. Public Notice and Comment Period. The project manager will draft and share a public notice, evaluate the impacts—both to the public and the environment—of the project, consider all comments received, negotiate modifications to the project if necessary, and draft appropriate documentation to support a recommended permit decision. A Public Interest Review will be based on public comment and analysis of other relevant factors. The project manager will determine if the project conflicts with public interest. If the project is deemed not in the public interest, it will not be approved.

General criteria considered are:

- Relevant extent of public and private needs
- Practicality of using alternative locations and methods to accomplish project purposes (in cases where unresolved conflicts of resource use exist)
- Extent and permanence of beneficial and detrimental effects the proposed project may have on the public and private uses for which the area is suited
- Coordination of Project. Any required consultations (see [Other Applicable Laws, Permits, and Consultations](#)) must be completed
- USACE will complete a memo for record
- USACE will issue a decision

If your application is denied, you have 60 days to submit an appeal request for the decision. During the appeal review, a site visit and/or appeal conference may be coordinated. Once a final decision is made, it cannot be re-appealed. More information about the appeal process can be found [here](#).

### **Letter of Permission (LOP) - decision to issue will take up to 120 days**

An LOP is currently the most commonly used form of approval for aquaculture projects from USACE and is deemed sufficient for relatively small-scale projects where the proposed work would be minor, would not have significant individual or cumulative impacts on environmental values, and should encounter no appreciable opposition.

1. If your application is deemed incomplete, you will be asked to provide more information.
2. Agency & Adjacent Property Owner Comment Period (15 Days) and Coordination of the Project (see [Other Applicable Laws, Permits, and Consultations](#)).
3. USACE will complete a memo for record
4. USACE will issue a decision

If your application is denied, you have 60 days to submit an appeal request for the decision. During the appeal review, a site visit and/or appeal conference may be coordinated. Once a final decision is made, it cannot be re-appealed. More information about the appeal process can be found [here](#).

## Section 5: Authorization Amendments, Renewals, and Transfers

This section applies to farmers who are already operating a permitted farm and would like to change the conditions of their farm lease or permits or renew existing leases and permits. Information for both state and federal permit amendments, renewals, and transfers is provided below. Note that depending on the modifications, amendments to a state permit or lease may require amendments to federal permits as well.

### State Authorizations

State operation permit and lease amendments, renewals, and transfers vary in process depending on the scope of the project. Amendments may require working with one agency, or all of them. Also note that renewals for ADF&G permits and ADNR leases are on a 10-year cycle, while ADEC Operational Permit and Shellfish Growing Area Classification (for shellfish farmers only) must be renewed annually.

### Authorization Amendments

There are two types of amendments, the Single Agency Amendment, and the Joint Agency Amendment. See the [ADF&G Amendment Matrix](#) to help you figure out which process you need to use based on the changes you would like to make to your farm.

- **Single Agency Amendments (ADF&G)** are generally used for changes such as adding or removing a culture species or minor changes to culture gear and equipment, and only requires review from ADF&G. This process most likely will not trigger a need for an amendment to the USACE permit.
  1. Fill out and submit the [ADF&G Aquatic Farm Operation Permit Amendment Request Form](#). ADF&G does not require a fee to view and process the amendment. If you are modifying shellfish culture species, also see the [ADEC Amendments](#) information below.
  2. Include cross-sectional and over-head drawings for any gear, equipment, and facility changes, if applicable. See [drawing instructions in Section 3](#).
  3. Include an updated project description to reflect requested change, if applicable, using the ADF&G [Project Description Outline](#).
- **Joint Agency Amendments (ADF&G, ADNR).** If the proposed amendment will increase the footprint of the lease, alter its locations, or cause a significant change in gear, equipment or facilities, then a full decision and public notice process will be required (similar to a new application). The application fee for this

type of amendment is \$400. This process will likely trigger the need for an amendment to your USACE permit as well. See the section for amendment of [federal permits](#) below. If the proposed amendment will not increase acreage, change locations, and only makes minor changes to gear, equipment, etc. then no amendment application or public notice is required and the fee is \$160.

1. Fill out and submit the [Joint Agency Aquatic Farm Amendment Request Form](#) with associated fee. Contact ADNR (907-269-8543, [dnr.aquaticfarming@alaska.gov](mailto:dnr.aquaticfarming@alaska.gov)) to see if a fee applies to your project.
  2. If decreasing acreage, draw a new site plan map.
  3. If your amendment includes an increase in acreage, change in location, or significant gear, equipment, and facility changes, a full amendment application (same form as new application) will be required. This includes updated cross-sectional and over-head drawings and any other application documents that will change due to the proposed amendment. A full amendment application must go through the entire application and public notice process. See [drawing instructions in Section 3](#).
  4. Include an updated project description to reflect requested changes, using the ADF&G [Project Description Outline](#).
- **ADEC Amendments**  
Amendments to ADEC permits are very project dependent, so be sure to contact the Shellfish Program Coordinator (907-269-7636, [dec.shellfish.processing@alaska.gov](mailto:dec.shellfish.processing@alaska.gov)) for more information about your specific project. Please note the following:
    - To expand a shellfish farm beyond the existing farm boundary lines, new water quality stations are required to be set up, and a minimum of 15-30 water quality samples will need to be collected to evaluate the water quality of the desired expanded area.
    - A new shoreline survey might need to be conducted, depending how expansive the new boundaries are.
    - For new shellfish species, an operator must notify the Shellfish Program Coordinator.
    - Additional information may be requested on a case-by-case basis, depending on the species and associated processing activities.
    - For non-shellfish species, a separate ADEC permit may be required depending on the project. Contact your Shellfish Program Coordinator.

### **Authorization Renewals**

ADNR, ADF&G, and ADEC all require renewals. ADNR and ADF&G renewals must happen every 10 years, while the ADEC process is annual.

- **ADNR Lease Renewals** are required every 10 years. Currently the renewal process is undergoing revisions that will streamline the process for both farmers and regulators.



Revisions are expected in fall of 2021. Contact ADNR at 907-269-8543, [dnr.aquaticfarming@alaska.gov](mailto:dnr.aquaticfarming@alaska.gov) for more information.

1. Fill out the [Joint Agency Application](#) (same as new application).
  2. Include maps, cross-sectional and overhead drawings of gear, equipment, and facilities. See instructions in [Required Maps for Joint State Agency Application, and USACE Permit Application](#).
  3. Fill out and include an updated project description to reflect requested changes. See [Project Description Outline](#).
- **ADF&G Operation Permit Renewals** are required every 10 years along with a \$100 fee. Applicants must submit required materials at least 30 days before their permit expires.
    - Fill out and submit the [Aquatic Farm Operation Permit Renewal Request Form](#) and include the \$100 fee made out to the State of Alaska.
  - **ADEC Renewals** for both the Operations Permit and Shellfish Growing Area Classification (for shellfish farmers only) must be renewed annually. Contact the Shellfish Program Coordinator (907-269-7636, [dec.shellfish.processing@alaska.gov](mailto:dec.shellfish.processing@alaska.gov)) for more information about your specific project.
    - **Operations Permit**  
ADEC-issued permits for shellfish harvester and dealer operators are issued on a calendar year basis and expire on December 31 of each calendar year. If an operator wishes to operate in the next calendar year, a renewal application must be completed and submitted along with the associated permit fee for review. See the [Licenses, Permits, and Fee and Cost Schedules table](#) for fee information. Currently, renewal applications are emailed to operators approximately 60 days before the expiration date to allow for time to complete and submit the application. Operators who don't have email access can contact our office to request a mailed or faxed copy of their renewal application.
    - **Shellfish Growing Area Classification:**  
Reapprovals are based on the water quality samples collected from active water quality stations in that area during that calendar year. There is a fee associated with reapprovals: \$150 for each reapproval activity (water sample collection event for the area) and areas require 2-5 water sample collections for each station. Therefore, reapproval fees can be between \$300-\$750, depending on how many sampling events are required—which is dependent on the classification based on the current water quality data available. If there is more than one operation in a classified area, the total amount is prorated between the number of operators—i.e., in an area with 5 operators and a reapproval fee of \$750, each operator would be invoiced \$150. If there were only one operator in an area with a reapproval fee of \$750, that operator would be invoiced the full \$750.

**Authorization Transfers** of ADF&G Operations Permits and ADNR Aquatic Farming lease are allowable as described below. However, ADEC Shellfish Operations Permits and Food Establishment Permits *may not* be transferred and requires new farm operators to reapply.

- **ADNR Aquatic Farming Lease Assignments (Transfers)**

The following information covers an ADNR lease assignment. However, sometimes an assignee wants to change aspects of the operation when receiving an assignment. Depending on the desired changes an amendment may also be required. If the amendment doesn't require a full public process, then the assignment and amendment can typically be combined into one decision and document. This process will require more information to be provided by the assignee and may result in additional fees.

1. When a lease assignment is requested, ADNR will send out an assignment information form to gather information from the assignor (person assigning the lease away) and the assignee (person receiving the lease). In most cases a new or updated project description may be required from the assignee.
2. After receiving the assignment information form, updated project description, and the \$160 assignment fee, ADNR will use that information to write a decision to approve (or deny, but this is rare) the assignment.
3. Once the decision is signed, ADNR will send a copy of the decision and assignment documents to both parties to sign, notarize and send back.
4. The assignee will then return the signed and notarized assignment document as well as proof of insurance, a replacement bond, and any outstanding annual fee (this can be paid by either party but must be current before an assignment will be completed).
5. Once all documents and deliverables are received, ADNR will execute the assignment and officially transfer the lease to the assignee.

- **ADF&G Operations Permit Transfer**

A person to whom a permit is being transferred may use the operation permit only for the purposes of the original permit and is subject to the same permit conditions and limitations. A transfer requires the approval and signature of the current permit holder on the application, a \$100.00 transfer fee, and must be submitted at least 30 days before the transfer is required. If you are transferring your operation permit and there is an aquatic farm lease, please contact ADNR for a reassignment of the lease. Be sure to obtain an ADNR lease reassignment before applying for an operation permit transfer unless the operation has no lease.

1. Fill out and submit the [Aquatic Farm Operation Permit Transfer or Renewal Request Form](#) with the \$100 associated fee.
2. If applicable, include cross-sectional and overhead drawings of gear, equipment, and facilities. See drawing [instructions in Section 3](#).
3. If applicable, fill out and include an updated project description to reflect requested changes. See [Project Description Outline](#).

- **ADEC Shellfish Operations Permits and Food Establishment Permits**  
ADEC-issued permits for shellfish operators are not transferable. However, if the new farmer is operating within the same bounds as the previous lease, the SGA classification process does not need to be re-done, shortening the length of the process. See the [ADEC Shellfish and Aquatic Plant Permits](#) part of *Section 4* for application details.

## Federal Permits (USACE)

The process for amending, renewing, or transferring a USACE permit may depend on the type of permit (NWP, IP, LOP) and the scope of the project. Note also that amendments to a USACE permit will almost certainly trigger the need for amendments to state permits.

### Federal Permit Amendments

If requesting a modification of the structures placed in the water, provide a written request with project plans showing changes. If the project modifications are extensive, farmers may be required to reapply with a new application. Contact the USACE District Office at 907-753-2712 or [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil) for more information. Any structural changes described in the USACE permit amendment will also need to be described in either the single or joint agency amendment process. See the [State Authorizations](#) section above for details.

### Permit Renewals

Before a permit has expired, a permit extension may be requested by submitting a written request for extension. If the permit has expired, farmers must reapply. An extension lasts for five years.

- **Individual Permits and Letters of Permission**  
If there are no changes to the operation's configuration or circumstances, review of a permit extension is typically a quick and straightforward process. However, if there have been changes to an area since the permit was issued, including, but not limited to, the presence of an ESA listed species or a new designation of critical habitat, the project will likely have to go through a more extensive review to examine impacts and ensure it still complies with relevant regulations.
- **Nationwide Permit**  
For NWPs, the project will require review in order to make sure that it still qualifies for the permit. If so, it will be reverified under the current NWP until that NWP's expiration.

### Permit Transfers

The permit transfer process depends on if the original permit was an Individual Permit, Nationwide Permit, or Letter of Permission.

- **Individual Permit**  
If the project was originally authorized by an individual permit, the permittee can send USACE a written request with the permit signed by the transferee in the appropriate space, and the permit will be transferred.
- **Nationwide Permit**  
If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner. Submit a letter to the USACE District Office (907-753-2712 or [regpagemaster@usace.army.mil](mailto:regpagemaster@usace.army.mil)) to

validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

### **Letter of Permission/Multiple Permit Transfers**

In the case of multiple permit transfers (where the transferee line has already been signed), or when a project has been authorized by a Letter of Permission:

1. Request a permit transfer in writing.
2. USACE will then prepare an affidavit for the transfer and send that to the permittee.
3. The permittee will then need to have it signed by the transferee and notarized, and then send it back to USACE, at which point the permit transfer will be processed.

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## **Section 6: Resources for Growers**

### **Workshops and Classes**

- HACCP Training Resources:
  - [Cornell Cooperative Extension Seafood HACCP Training Course](#)
  - [Oregon State University Seafood Network Information Center](#)
  - [US Food and Drug Administration Fish and Fishery Trainings and Information](#)
- See [alaskaseagrant.org](http://alaskaseagrant.org) for upcoming workshops and trainings.

### **Shellfish and Seaweed Growing Guidance**

- [Sources for Seed Purchase, Instate Shellfish Hatchery, and Seed Distribution Providers](#)
- [Aquatic Farm Operation Permit Contact Listing](#)
- [Alaska Oyster Growers Manual, 4th Edition](#)
- [A Guide to the Processes, Techniques, and Equipment for Farming Kelp in New England Waters](#) (This manual is based on farming seaweed in New England, but has many good resources about requirements for growing conditions, gear, etc.).
- [Alaska Fisheries Development Foundation](#) training resources. Contact Riley Smith ([rsmith@afdf.org](mailto:rsmith@afdf.org)) for more information.

## Managing Toxins, Pathogens and Invasive Species

- Seed Source Provider: ADF&G Fish Pathology lab may require samples before transport of seed stock from one aquatic farm/hatchery to another aquatic farm/hatchery in the state of Alaska. Seed Provider [information](#).
- Disease control: Shellfish samples can be sent to the ADF&G pathology lab using this [form](#).
- Harmful Algal Blooms and Paralytic Shellfish Poisoning: visit ADEC [Shellfish Safety](#) and the [Alaska Harmful Algal Bloom Network](#) to learn more.
- Vibrio: Learn more by reading the [Vibrio Harvest Brochure](#) and the ADEC [Current Year Vibrio Control Plan \(PDF\)](#), report water temperatures at your farm site and learn what other farmers are reporting at the [Vibrio Water Temperature Reporting Portal](#).
- [Vibrio Predictive Tool](#): National Centers for Coastal Ocean Science has created a maximum sea surface temperature tool to help predict potential Vibrio outbreaks.
- Visit the pages below or contact Sea Grant MAP agent [Melissa Good](#) for information about combating these species on your farm:
  - ADF&G [European Green Crab](#) information
  - ADF&G [Tunicates](#) information
  - Maine Sea Grant [Mud Blister Worms](#) information (not currently in Alaska but range is extending North)

## Grants, Loans, and Business Planning Resources

- [Division of Economic Development Mariculture Loan Program](#)  
The State of Alaska runs a loan program for the planning, construction, and operation of aquaculture businesses. Applicants may borrow up to \$100,000 annually (up to \$300,000 aggregate balance). Visit the [website](#) or call the Juneau office (907-269-8150) or Anchorage office (800-478-5626) for more information.
- [NOAA Fisheries Aquaculture Funding Opportunities and Grants](#)  
NOAA's Office of Aquaculture maintains a list of various funding and grant opportunities through NOAA and other agencies. Funding may address a variety of issues such as environmental monitoring, recirculating aquaculture systems, shellfish farming, alternative feeds for aquaculture, new species research, and offshore aquaculture.
- [Alaska Shellfish Farm Size Feasibility Study \(2015\)](#)  
This study shows potential profitability of aquaculture farms based on farm size, species grown, site selection, and other relevant factors. Findings highlight higher short and long-term profits with larger farm sizes and the value of product diversity rather than a monoculture, among other important considerations. The study was conducted by the State of Alaska Department of Economic Development with assistance from the University of Alaska, Center for Economic Development. The overall goal of this study is to provide key information for current and prospective Alaska shellfish farmers and investors, and those engaged in the development and management of the industry.

- [Alaska Seaweed Market Assessment \(2021\)](#)  
Alaska Fisheries Development Foundation, with grant support from the Pacific States Marine Fisheries Commission, contracted with McKinley Research Group to assess current and potential markets for Alaska seaweed. To achieve the potential of the seaweed aquaculture industry in Alaska, industry and individual producers must identify markets that are a match for the species, product forms, and cost structures that Alaska can provide. This report informs this discussion, while acknowledging uncertainties associated with the nascent state of the industry, emergent technologies, and evolving consumer preferences. It includes assessments of world seaweed production and trade, domestic production, food markets for seaweed, emerging uses and opportunities for seaweed, and an assessment of Alaska's current position and future opportunities.

### Miscellaneous Alaska-Specific Publications

- [Alaska Mariculture Development Plan](#)
- [Alaska Mariculture Task Force Final Report](#)
- [Guidelines for Emerging Mariculture Industry and Marine Mammals Interactions](#)
- Freitag, G. 2017. *Seaweed Farming in Alaska*. Alaska Sea Grant Marine Advisory Program, Ketchikan, AK. ASG-63.

### Aquatic Farmer Associations and Grower Support Groups

To have your group added to this list, please contact Sea Grant MAP agent [Melissa Good](#).

- Alaska Mariculture Alliance (website forthcoming as of 10/21)
- [Alaska Shellfish Growers Association \(ASGA\)](#)
- [Kachemak Shellfish Mariculture Association \(KSMA\)](#)
- [Pacific Coast Shellfish Growers Association \(PCSGA\)](#)

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## Section 7: Governance of Aquaculture in Alaska

Aquaculture in Alaska operates within one of the most comprehensive regulatory frameworks in the world. Existing regulations govern a multitude of environmental concerns including disease management, siting of gear, seafood safety, and the protection of marine mammals, fish habitat, and threatened and endangered species.

### Local Ordinances

Contact your [local city or borough](#) to learn about aquaculture ordinances in your area.

### State Statutes and Regulations:

- [Alaska Department of Fish and Game Statutes](#) (AS 16.40.100-199)
- [Alaska Department of Fish and Game Regulations](#) (5 AAC 41.200-400)

- [Alaska Department of Natural Resources Statutes](#) (AS 38.05.083-085)
- [Alaska Department of Natural Resources Regulations](#) (11 AAC 63.010-900)

**Federal Statutes and Regulations:**

- [U.S. Rivers and Harbors Act](#) (Sections 10 & 14; 33 U.S.C. Section 407 and Section 408)
- [Department of Defense, Corps of Engineers, Department of the Army Regulatory Program of the Corps of Engineers](#) (33 C.F.R. 320-334)
- [U.S. Clean Water Act](#) (Sections 401 & 404; 33 U.S.C., Sec. 1314)
- [National Environmental Policy Act](#) (42 U.S.C. 4321 et.seq.)
- [U.S. Fish and Wildlife Coordination Act](#) (16 U.S.C. 661-666c)
- [Marine Mammal Protection Act](#) (Section 302; 16 U.S.C.)
- [Endangered Species Act](#) (Section 7; 16 U.S.C. 1531 et.seq.)
- [Magnuson-Stevens Fishery Conservation and Management Act](#) (Essential Fish Habitat provisions; Section 305; 16 U.S.C. 1801 et.seq.)
- [National Historic Preservation Act](#) (Section 106; 16 U.S.C. 470)

## Appendix

### Appendix I: Aquaculture Licenses, Permits, and Fees

The information in the table below is subject to change. Visit the respective websites for the most current information.

Initial Application Materials		
Agency	Application or Required Document	Fee or Estimated Cost
ADF&G and ADNR	<a href="#">Joint Agency Aquatic Farm Application</a>	>1 acre: \$600 1-3 acres: \$1,200 >3 acres: \$2,000
ADNR	Annual Lease Fee: No application, paid with approved, signed farm lease submitted to ADNR	\$450 for the first acre plus an additional \$125 per acre or portion thereof ≤ 30 acres. See <a href="#">ADNR fee schedule</a> for farms >30 acres.

<b>Initial Application Materials</b>		
<b>Agency</b>	<b>Application or Required Document</b>	<b>Fee or Estimated Cost</b>
ADNR	Performance Guarantee Bond: submitted with signed farm lease submitted to ADNR (no additional application)	Minimum of \$2,500
ADNR	Proof of Liability Insurance: submitted with signed farm lease submitted to ADNR (no additional application)	Based on quote from insurance company or broker.
ADF&G	Wild Stock Survey for Shellfish on-bottom culture	Fee calculated per day/per site, location and site-size dependent. Fee may be as high as \$5,000.
ADF&G	<a href="#">Stock Transport Permit Application</a>	No fee
ADF&G	<a href="#">Aquatic Stock Acquisition and Transport Permit Application</a>	No fee
ADEC	Shellfish Growing Area Classification-contact <a href="#">ADEC Shellfish Program Manager</a> for an application	\$500
ADEC	<a href="#">Shellfish Harvester Application</a>	\$162
ADEC	<a href="#">Shellfish Dealer Application</a>	Shipper: \$162 Reshipper: \$162 Repacker: \$325 Shucker-Packer: \$649
USACE	<a href="#">USACE Application-all permit types</a>	Fee up to \$100 at time of issuance for an Individual Permit, no fees for other permit types.
<b>Amendment, Renewal, and Transfer Application Materials</b>		
<b>Agency</b>	<b>Application or Required Document</b>	<b>Fee or Estimated Cost</b>
ADF&G	<a href="#">ADF&amp;G Aquatic Farm Operation Permit Amendment Request Form</a>	No fee



Initial Application Materials		
Agency	Application or Required Document	Fee or Estimated Cost
ADF&G and ADNR	<a href="#">Operation Permit Amendment Request Form (Joint-agency)</a>	Project dependent, contact ADNR for determination
ADNR	Full amendment that requires a finding under AS 38.05.035(e) and full public notice	\$400
ADNR	Amendment not requiring a finding under AS 38.05.035(e) (updated project description, etc)	\$160
ADNR	Aquatic Farm Lease 10-Year Renewal Application	>1 acre: \$280 1-3 acres: \$600 >3 acres: \$1200
ADF&G	<a href="#">Aquatic Farm Operation Permit Renewal Request Form</a>	\$100
ADF&G	<a href="#">Aquatic Farm Operation Permit Transfer or Renewal Request Form</a>	\$100