

# Aquatic Farming

## Background

Currently, there are no aquatic farms within the planning area. However, experimentation is being conducted and as market conditions, technology, and the economics of this industry change, aquatic farms can be expected in the planning area during the next twenty years. Management guidelines for their siting and operation follow.

## Goal

**Economic Opportunities and Community Development.** Provide opportunities to increase income and diversify the state's economy through the use of state tidelands and submerged lands for aquatic farming.

**General Conditions.** Alaska Statute (AS 38.05.083) provides that state tidelands and submerged lands may be used, under lease, for aquatic farming or related hatchery operations. It also mandates regulations that: 1) require the Department to establish application siting guidelines; 2) specify the criteria for the approval or denial of lease applications; 3) consider limiting the number of sites to be leased within an area in order to reduce cumulative impacts on the environment and natural resources; and 4) protect the public's right of access and use of navigable waters and the land beneath them for navigation, commerce, fishing, and other purposes, as required under the Public Trust Doctrine.

DNR is required to provide siting guidelines for potential farmers during the application process. The siting guidelines include state regulatory agencies' requirements and federal laws that provide for the protection of fish and wildlife. Other guidelines are provided that assist in selecting sites that may enhance production or operations, such as areas with good water circulation that provide for abundant food sources and adequate flushing to remove wastes generated from the species being cultured. The state regulatory agencies involved in authorizing farmsites include DNR, the Alaska Department of Fish and Game, and the Alaska Department of Environmental Conservation. If the applicant follows these guidelines, their chances of obtaining the necessary authorizations are greatly improved.

**State and Federal Review Processes.** Regulations at 11 AAC 63 require the Department to make a best interest finding before issuing a lease. The proposed operation must be in the overall best interest of the state before an authorization may be issued. Factors that are to be considered in this decision are identified in 11 AAC 63.050 (b). These factors include: whether the proposed aquatic farm will conflict with other uses; whether it is compatible with land management policies in adopted federal, state, and local plans at the proposed location and nearby uplands; how public access, including the adjacent upland owner's right of reasonable access, and the public's rights under the Public Trust Doctrine will be protected;

and whether the proposed aquatic farm will have any significant social, economic, and environmental effects. The Preliminary Best Interest Finding is subject to a public and agency review under AS 38.05.945. This review includes localities/boroughs/communities, Native organizations, Fish and Game Advisory committees, adjacent upland owners, and affected valid third party interests.

Concurrent with this review is a review under the Alaska Coastal Management Program (ACMP).<sup>1</sup> All aquatic farm proposals must be consistent with ACMP statewide standards and the enforceable policies of local coastal district plans, if applicable, in order to be authorized. Federal authorizations that have previously undergone a coastal consistency review may also be required in aquatic farming operations and include the U.S. Army Corps of Engineers' General Permit 91-7N for aquatic farm structures within navigable waters and Nationwide Permit (NWP 4) which pertains to fish and wildlife harvesting, enhancement, and attraction devices and activities. Aquatic farm proposals that do not meet the requirements of these permits must undergo a separate individual review and authorization process conducted by the U.S. Corps of Engineers. As stated previously, all aquatic farm requests must meet the requirements of 11 AAC 63.050 and the current joint-agency application guidelines provided by DNR.

**State Authorizations for Aquatic Farms.** Should the aquatic farm proposal be found to be in the state's best interest, an Aquatic Farm Lease will be approved by the Department. The lease specifies operation, siting, environmental and habitat criteria that must be satisfied during the lease term. An Aquatic Farm Operation Permit must also be acquired from the Alaska Department of Fish and Game (ADF&G) in order to ensure that the proposal is technically and operationally feasible, the physical and biological suitability of the area can support the operation, and habitat and public uses of fish and wildlife are protected (AS 16.40.105). ADF&G also requires a transport and acquisition permit in order to obtain and transport seed and/or broodstock between a hatchery and the farmsite and to be able to sell their product. In addition, the Alaska Department of Environmental Conservation (ADEC) requires that the water quality in the growing area meet both the state water quality standards and the requirements of the National Shellfish Sanitation Program, incorporated by reference in 18 AAC 34.200, to ensure the product is safe for human consumption. Product may only be sold from within areas classified by ADEC.

## Management Guidelines

The combination of state and federal review and authorization requirements provides a comprehensive basis for the approval of proposed aquatic farm operations. Additional operational, siting, habitat, or environmental requirements in this plan are therefore generally unnecessary in order to effectively manage aquatic farming operations within the planning area. The subsequent management guidelines delineate standards for the approval of aquatic

---

<sup>1</sup> The Alaska Coastal Management Program was terminated on July 1, 2011, pursuant to AS 44.66.030.

farm operations and the factors that are to be considered in the siting of these operations next to sensitive uses and resources, and adjacent to federal or state land managed its scenic, recreation, wildlife, or other natural values.

**A. General Management Approach.** Aquatic farming will be allowed on state tidelands or submerged lands unless there is significant conflict with other uses of the immediate area or it is inconsistent with the requirements of 11 AAC 63.050 or this management plan. The siting of aquatic farming facilities may be more difficult on tidelands designated for: log transfer or storage; mineral transfer or access; critical or crucial fish and wildlife habitat or harvest; anchorages; or developed recreation. In addition, siting of aquatic farm facilities may be more difficult on tidelands adjacent to proposed land sales or existing residential areas, legislatively designated areas such as state critical habitat areas or game refuges/sanctuaries, and federal conservation system units such as national parks, monuments, preserves, or wildlife refuges where the upland management objective is to retain a natural environment. Specific stipulations related to siting, operations, and maintenance may be imposed by the Department in addition to those otherwise required in order to achieve site and use compatibility.

**B. Tidelands Adjacent to State Legislatively Designated Areas or Federal Conservation System Units.** The Department will consider adjacent upland resource management goals and objectives when granting authorizations on tidelands and submerged lands adjacent to management units subject to state legislatively designated areas or federal conservation units. When an aquatic farm request is received, the Department will review applicable state or federal management plans for compatibility. Aquatic farming operations that are not compatible with the management intent for uplands set forth in these plans and cannot be made compatible through mitigation measures will usually not be authorized. If however, there is an overriding state interest, there is no feasible or prudent alternative site, and all the other conditions of the local, state and federal permits or authorities are met, then an aquatic farming operation can be authorized.

Generally, aquatic farming operations involving the presence of caretaker facilities, structures used for storage or other operational needs, or the presence of personnel on a frequent basis are incompatible adjacent to uplands where the management intent is to retain land in an undeveloped state. The Department will consult the appropriate upland agency when determining compatibility of aquatic farm activities in these areas.

**C. Other Guidelines Affecting Aquatic Farming.** Other guidelines will affect aquatic farming management practices. See other sections of this chapter.