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ETOLIN ISLAND AREA

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# Mariculture Pilot Project



Alaska Department of  
**NATURAL  
RESOURCES**

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1988

## AQUATIC FARM DISTRICTING PROJECT

Interagency meetings were held in Juneau and Anchorage to discuss districting proposals for aquatic farming in Alaska. Meeting dates and members present:

### Southeast (October 5, 1988)

|                        |                    |
|------------------------|--------------------|
| Janet Burleson (Chair) | DNR, DLWM          |
| Kevin Duffy            | ADF&G, FRED        |
| Gary Gunstrom          | ADF&G, Comm. Fish. |
| Charles Low            | USFS               |
| (for John Harmening)   |                    |
| Nancy Holguin          | OMB, DGC           |
| Amy Kruse              | DEC, EQ            |
| Andy Pekovich          | DNR, DLWM          |
| Terry Rader            | DNR, DLWM          |
| Rick Reed              | ADF&G, Habitat     |
| Ron Schonenbach        | DNR, DLWM          |
| Lana Shea              | ADF&G, Habitat     |

### Southcentral (October 10, 1988)

|                        |                    |
|------------------------|--------------------|
| Janet Burleson (Chair) | DNR, DLWM          |
| Terry Rader            | DNR, DLWM          |
| Dennis Haanpah         | ADF&G, Comm. Fish. |
| Wayne Dolezal          | ADF&G, Habitat     |
| Mike Ostasz            | DEC, EH            |
| Janetta Prichard       | DNR, DLWM          |
| Veronica Gilbert       | DNR, DLWM          |
| Mike Sullivan          | DNR, DLWM          |
| Kevin Duffy            | ADF&G, DLWM        |

### District Nomination Process

Invitations for nominations were mailed to approximately 300 individuals and organizations. Ads were placed in 13 coastal area newspapers. News releases were prepared and distributed to all newspapers and radio stations within the state.

Over 1600 nominations for aquatic farm districts and areas to be excluded from aquatic farm development were received by DNR staff during the 40 day nomination period. Nominations summaries are:

|            |                                                    |        |
|------------|----------------------------------------------------|--------|
| Southeast: | Proposed aquatic farm areas:                       | 162    |
|            | Proposed for exclusion from areas:                 | 369    |
|            | Areas identified as used by fishing organizations: | 500(+) |
|            | Total:                                             | 1031   |

|               |                                                    |     |
|---------------|----------------------------------------------------|-----|
| Southcentral: | Proposed for aquatic farm areas:                   | 83  |
|               | Proposed for exclusion from areas:                 | 79  |
|               | Areas identified as used by fishing organizations: | 412 |
|               | Total:                                             | 574 |

Total for both districts: 1605

General consensus among the group was that subdistrict boundaries should follow existing boundaries where practical and feasible. Boroughs, coastal management zones and area plan boundaries were suggested as potential subdistrict boundaries.

Other items discussed:

- Clarification of DNR authority to close areas and not accept applications for those areas was requested.
- Closing areas adjacent to wilderness areas were discussed but no agreement was reached.
- State parks should not comprise a separate subdistrict but be included in whatever subdistrict they are in. Clarification of management intent would be provided in the narrative of each subdistrict.

## AQUATIC FARM DISTRICTING PROJECT

### NARRATIVE COMMENTS FROM NOMINATION REQUEST BY ORGANIZATION OR INDIVIDUAL:

SIERRA CLUB  
Alaska Field Office  
241 E. Fifth Avenue, Suite 205  
Anchorage AK 99501  
276-4048

Aquatic farm development should be prohibited from:

- Marine Parks
- ADF&G Critical Habitat Areas
- Critical Wildlife Habitat (such as: eagle nests, mouths of anadromous fish streams, seal haul out and pupping areas, seabird colonies, and waterfowl/shorebird concentration areas)
- Key Recreation Anchorages
- Key Commercial Fishery Anchorages
- Areas with Restricted Navigability

Aquatic farm development should not occur adjacent to:

- Designated or Proposed Federal Wilderness Areas
- State or National Park Uplands and Tidelands
- State or Federal Areas set aside for Fish/Wildlife Viewing, Protection or Interpretation
- Other Areas where aquaculture is incompatible with the designated purpose

Aquatic farming should be limited to:

- Areas of existing development:
  - To avoid user conflict.
  - To keep costs down by having existing transportation opportunities and commercial markets nearby.

ALASKA CENTER FOR THE ENVIRONMENT  
700 H Street, Suite 4  
Anchorage AK 99501  
274-3621

Aquatic farm development should not be sited offshore of:

- State or National Parks
- Designated or Proposed Wilderness Areas
- State or Federal Areas set aside for the protection of fish and wildlife when the purpose of those areas are primarily for viewing or natural history interpretation and include a substantial aesthetic component (for

example, Round Island).

Aquatic farming should generally be located:

- Adjacent to existing developments (because):
  - Such policy both protects fish and wildlife, aesthetic and recreational values in presently undisturbed areas, and
  - Reduce costs by siting aquatic farms close to existing markets and to transportation and other facilities.

In particular:

- In Prince William Sound areas farther than 1 - 2 miles (depending on topography, etc.) from the following locations should not be made available: the town of Whittier, Cordova, Valdez, Chenega and Tatitlek, and the hatcheries at Cannery Creek, Main Bay, Lake Bay and Port San Juan.

U.S. FOREST SERVICE  
U.S. Dept. of Agriculture  
Forest Service  
Alaska Region  
P.O. Box 21628  
Juneau AK 99802-1628

Aquatic farms should not be located:

- Adjacent to Wilderness Areas.
- Adjacent to Wilderness Study Areas until studies are complete.
- Heavy used recreation areas next to communities and recreation cabin sites.
- Bays with Log Transfer Facilities.
- Areas where development would limit navigation.
- Heavily used subsistence areas; subsistence determinations would be required before any upland permits could be issued.
- Areas managed for remote, primitive recreation experience.
- Key access public points for resource and recreation uses.

Aquatic farm districts in general should:

- Encompass state and private land first, and contain a minimum of Forest Service Lands.
- Incorporate areas as designated for mariculture in the

Prince William Sound Plan, Prince of Wales Plan, and  
the Etolin Island Area Mariculture Pilot Project.

Other:

- Since conflicts have developed concerning upland uses and caretaker residences, consideration should be given to making districts small so some basic consolidations could take place for upland uses such as caretaker residences.
- The mariculture program should be incorporated into the forest plans and area plans as much as possible. We recommend that Don Lyon of the TLMP Revision Team be contacted to discuss how the information regarding mariculture districts might best be coordinated in the TLMP Revision.

ROBERT J. ELLIS  
Box 2966  
Sitka AK 99835

Aquatic farms should not be located:

- Adjacent to designated wilderness areas.
- In areas or bays used for commercial or subsistence fisheries (presently or historically).
- In, or adjacent to areas used for subsistence hunting or fishing.
- Where displacement of present or historic uses of public lands would occur as a result of aquatic farming.

KACHEMAK BAY CONSERVATION SOCIETY  
Nancy Lord  
Box 846  
Homer AK 99603

Aquatic farms should not be located:

- With the exception of the presently-existing experimental 25 acre site for mussel rafts in Halibut Cove Lagoon, there should be no aquatic farming within the waters of Kachemak Bay State Park and Kachemak Bay State Wilderness Park, to include waters in the proposed additions to these parks.

ALASKA WILDERNESS SAILING SAFARIS  
P.O. Box 1313  
Valdez AK 99686

All areas in Prince William Sound should be closed except:

- Sites in tidal lands adjacent to lands owned by the Cities of Whittier, Valdez (except areas proposed for AMSA status as part of the Valdez Coastal Management Plan), Cordova, Tatitlek, and Chenega and in Lake Bay and Port San Juan (with the provision Prince William Sound DEC and ADF&G offices receive adequate funding.)
- Reasoning:
  - Locating new industries adjacent to existing settlement reduces production costs, administrative costs and provides superior services to aquatic farm development.
  - Prevents competition with existing uses in remote areas.

SOUTHEAST ALASKA CONSERVATION COUNCIL  
 P.O. Box 021692  
 Juneau AK 99802  
 586-6942

Aquatic farms should not be developed:

- Adjacent to existing or proposed wilderness areas & monuments.
- National and State Parks.
- National and State Wildlife Refuges.
- Fish and wildlife habitat areas.
- Critical Habitat Areas as defined by ADF&G.
- Popular Recreation Areas.
- Important Subsistence Areas.
- Bird Rookeries.
- Marine Mammal Haul Outs.
- Estuarine Habitat for Shellfish & Benthic Organisms.
- Sedge Grass Flats.
- Saline Sedge Grass Marshes.
- Bear Concentrations
- Salt Chucks.
- Anadromous Fish Streams.

Designating districts should not be a complicated process. Throughout the legislative debate, the intent was to institute a relatively simple process in order to avoid time consuming and expensive preparation of full area plans. SEACC believes this planning is necessary to avoid negative cumulative impacts and user conflicts.

SEACC recommends that the minimum logical districts would be:  
 (see attached map)

- Northern Southeast
- Southern Southeast
- Prince William Sound

- Cook Inlet
- Kodiak
- The Alaska Peninsula and Aleutian Islands
- Western Alaska

#### CHUGACH ALASKA CORPORATION

Chugach Alaska Building  
3000 A St., Suite 400  
Anchorage AK 99503

The Prince William Sound should be the base for aquatic farm district planning. Chugach Alaska Corp. provided comments to the PWS Plan toward the goal that development of the mariculture industry in the State be managed so as to strengthen the viability of the existing seafood production, processing and marketing industries.

Chugach Alaska promotes the objective that mariculture facilities should be permitted where compatible with upland resource management direction.

#### NORTH PACIFIC FISHERIES ASSOCIATION, INC.

Headquarters  
Box 796  
Homer AK 99603

- The Division of Land and Water Management should solicit comments from ADF&G concerning aquatic farm siting.
- NPFA sees no merit in having two very large aquatic farm districts (SE & SC) subdivided into subdistricts of which the vast majority are unsuitable for aquatic farming. A plan of this sort smacks of administrative convenience and should be abandoned. We feel that the legislature was clear in its intent that the districts only be organized around areas where aquatic farming can succeed.
- No aquatic farming should be allowed within one mile from mean low water terminus of any stream listed in the State's anadromous stream catalog.
- No aquatic farm development should be allowed abutting National Parks or Monuments.
- Any single bight, cove or bay need be filled shoreline to shoreline with aquatic farms. No bay should have more than 30% of its total area be considered impacted area and, no more than 40% of any bight, cove or bay, at mean low water shall be impacted area.
- No preference rights for use of uplands should be given to aquatic farm permittees.

- Initial permits for aquatic farms should be short term. Longer term permits should only be issued after all improvements are installed and the aquatic farm is underway.

- All aquatic farms should be required to obtain a state business license.

## AQUATIC FARM DISTRICTING PROJECT

### NARRATIVE COMMENTS FROM NOMINATION REQUESTS BY ISSUE:

1. Aquatic farm development should be limited to areas near existing development.

- Development in these areas prevent developments in undeveloped areas.
- Aquatic farms would have the benefit of community services, closer access to market, transportation centers etc.

#### Supported by:

Sierra Club  
Alaska Center for the Environment  
Alaska Wilderness Sailing Safaris

2. Aquatic Farms should not be developed adjacent to wilderness areas (designated, proposed or areas under study):

#### Supported by:

Sierra Club  
Alaska Center for the Environment  
U.S. Forest Service  
Robert J. Ellis  
Southeast Alaska Conservation Council

3. Aquatic Farms should not be developed in or adjacent to:

Marine Parks  
Critical Habitat Areas  
Key Anchorages  
Commercial Fishing Areas  
Terminal Transfer Facilities  
National Parks or Monuments  
Designated Fish/Wildlife viewing areas  
Popular Recreation Areas  
Areas with Restricted Navigability  
Important Subsistence Areas  
Areas Managed for Remote, Primitive Recreation  
Access Points  
Bird Rookeries  
Marine Mammal Haul Outs  
Sedge Grass Flats  
Saline Sedge Grass Marshes  
Salt Chucks  
Anadromous Fish Streams

Supported by All or Some of the Following:

Sierra Club  
Alaska Center for the Environment  
U.S. Forest Service  
Robert J. Ellis  
Kachemak Bay Conservation Society  
Alaska Wilderness Sailing Safaris  
Southeast Alaska Conservation Council  
North Pacific Fisheries Association, Inc.

## AQUATIC FARM DISTRICTING PROJECT

### NOMINATIONS FOR DISTRICTS/SUBDISTRICTS BY MAJOR AREA

The project team has received several nominations for larger areas for districts or subdistricts:

#### Nominated by Cities/Boroughs:

- Kodiak Island
- Sitka City and Borough
- Yakutat Area from Cape Spencer to Cape Suckling (see map)

#### Nominated or Considered by State Agencies:

- Prince of Wales Island Planning Area
- Prince William Sound Planning Area
- Stikine Planning Area (when defined)
- Kenia Planning Area

All State Marine Parks

#### Nominated by Southeast Alaska Conservation Council:

see map

## AQUATIC FARM DISTRICTING PROJECT

### CLOSURES AND STIPULATIONS

DNR recognizes there may be areas identified within subdistricts that should be closed to mariculture development. Other areas may require development of specific stipulations to accommodate conflict of interest.

DNR clearly has authority to close areas and not accept applications for them. Two options have been identified for effecting closures:

1. Close entire subdistricts to development.
2. Close areas within subdistricts to development.

Size of proposed subdistricts may make closing entire subdistricts difficult, for other areas within a subdistrict may be suitable for mariculture development. It is more likely that areas identified as unsuitable for mariculture development will be noted in the narrative description for each subdistrict and applications will not be accepted for those areas.

Large subdistricts are proposed for this first districting scenario. As the mariculture industry matures and agencies gain expertise to manage development, corrections and modifications may be made to subdistricts.

### CONFLICTS WITH OTHER USES

DNR uses an adjudication process when responding to applications for land use authorizations. Statutes mandate DNR make a "best interest" determination prior to conveying any property rights. Best interest determinations are based on planning guidelines and classifications (when they exist). Other uses of the area being applied for are also considered. For mariculture, a public review process is mandated which will include public hearings in the district where permits may be issued.

The Etolin Island Area Mariculture Pilot Project contains a comprehensive list of guidelines and mitigating measures for siting, designing or operating aquatic farms. These guidelines, when used with information from area plans, land classifications and public comments provide good sources of information on which to make a best interest determination.

Conflict resolution usually involves two approaches:

1. Separating uses geographically. Competing uses can often be separated to avoid conflicts.
2. Mitigating measures, such as site design, timing

restrictions on use, or access corridor stipulations may allow more than one use of a site and resolve conflicts.

The following is a discussion of specific areas recommended for closure or for development stipulations:

#### Wilderness Areas

Area plans recognize wilderness areas are managed to maintain the primitive and remote character of the land. Area plan guidelines from Prince of Wales Island and Prince William Sound Area Plans are summarized below:

- Tideland facilities may be authorized consistent with the recreation, habitat, and wilderness intent for the wilderness.
- Tideland facilities may be allowed if they are mostly underwater and cause only limited impact on fish and wildlife, recreation, tourism, and wilderness values.
- Tideland authorizations may be issued if the land manager determines no feasible alternative location exists and that the benefits outweigh the impacts to the wilderness, and fish and wildlife.

In addition to these general guidelines, area plans may identify areas where mariculture development may not occur due to conflicts or other use designations.

The Etolin Island Area Mariculture Pilot Project makes the following recommendation:

- Recommendation #3: Mariculture development should be consistent with any approved federal, state or local government plans. All mariculture development permitted by the State of Alaska adjacent to lands under management of other agencies should consider any land use designations by those adjacent land managers.

A task force should be formed to develop procedures for identification of significant use conflicts, policies to resolve conflicts during the district review process, and to develop review criteria to assign "best use" of public lands and waters.

#### State Marine Parks

State marine parks are by statute open to aquatic farming. However, no leases may be issued for lands within designated state parks and any permits issued must be short term. It was suggested at the first meetings that a separate subdistrict for

marine parks may not be appropriate. State marine parks would be included within subdistrict boundaries and narrative description of the parks and special conditions applicable to them could be included in the subdistrict description.

#### Other Conflicts

The list of other potential conflicts includes:

- Recreation Uses
- Anchorage
- Fish and Wildlife Harvest
- Other Commercial Uses of Tidelands
- Logging
- Mining
- Urban Development
- Residential Development
- Historic or Archeological Sites
- Access
- Subsistence Uses
- Fish and Wildlife Habitat

Development of specific guidelines to minimize conflicts, such as site design, culture techniques or time restrictions may be necessary.

AGENDA  
Southeast Subdistrict Meeting  
October 25, 1988

Introduction

Old Business

- DNR Authority for Closures
- Introduction of Proposed Boundaries
- Conflicts - DNR's adjudication process for conflict resolution

New Business

- Permitting and Development Guidelines
  - Area Plan Guidelines
  - Etolin Guidelines

## AQUATIC FARM DISTRICTING PROJECT

Contact List 10/24/88  
SOUTHEAST

JANET BURLESON  
DNR - DLWM  
400 Willoughby, Su. 400  
Juneau AK 99801  
Phone: 465-3400  
Profs #: NRSCJBU  
MS: 1004

RICHARD DAVIS  
2347 Kevin Court  
Juneau AK 99801  
Phone:  
Profs #:  
MS:

KEVIN DUFFY  
ADF&G - FRED HQ  
P.O. Box 3-2000  
Juneau AK 99802  
Phone: 465-4160  
Profs #: FFHCPNP  
MS: 1100

GARY GUNSTROM  
ADF&G - Comm. Fish.  
P.O. Box 20  
Douglas AK 99824  
Phone: 465-4250  
Profs #:  
MS: 1100

JOHN HARMENING  
USFS - REGIONAL OFFICE  
P.O. Box 21628  
Juneau AK 99802  
Phone: 586-7847  
MS:  
Profs #:

NANCY HOLGUIN  
OMB - DGC  
P.O. Box AW  
Juneau AK 99801  
Phone: 465-3562  
Profs #: GCHCNAH  
MS: 0165

BART KOHLER  
SEACC  
P.O. Box 021692  
Juneau AK 99802  
Phone: 586-6942  
Profs #:  
MS:

AMY KRUSE  
DEC - EQ  
P.O. Box 3-2420  
Juneau AK 99801  
Phone: 789-3151  
Profs #: VROCSE  
MS: 1801

CHARLES LOM  
USFS - REGIONAL OFFICE  
P.O. Box 21628  
Juneau AK 99802  
Phone:  
MS:  
Profs #:

ROGER PAINTER  
AK Mariculture Assoc.  
130 Seward St., RM 201  
Juneau AK 99801  
Phone: 463-3600  
Profs #:  
MS:

ANDY PEKOVICH  
DNR - DLWM  
400 Willoughby, Su. 400  
Juneau AK 99801  
Phone: 465-3400  
Profs #: NRSCSED  
MS: 1004

TERRY RADER  
DNR - DLWM  
400 Willoughby, Su. 400  
Juneau AK 99801  
Phone: 465-3400  
Profs #: NRSCMPP  
MS: 1004

RICK REED  
ADF&G - Habitat  
P.O. Box 20  
Douglas AK 99824  
Phone: 465-4290  
Profs #: FH1CDGL  
MS: 1100

RON SCHONENBACH  
DNR - DLWM  
400 Willoughby, Su 400  
Juneau AK 99801  
Phone: 465-3400  
Profs #: NRSCSED  
MS: 1004

LANA SHEA  
ADF&G - Habitat  
P.O. Box 20  
Douglas AK 99824  
Phone: 465-4290  
Profs #:  
MS: 1100

## Mariculture in Area Plans

Area plans are currently being developed for two Alaska coastal areas with mariculture potential: Prince of Wales Island Area Plan and Prince William Sound Area Plan. Other area plans will be developed in the future.

Guidelines for mariculture are evolving and being developed in various offices throughout state government. Because of this evolution, area plans avoid rigid, inflexible guidelines. Instead, they initially develop general guidelines and indicate issues additional guidelines should address.

The Alaska legislature has declared a moratorium on finfish mariculture development to extend through June, 1990. Plan guidelines are not sufficient to address complex issues related to these types of mariculture. Should these activities become legal, area plans recommend development of policies for these activities prior to authorizing them. Policy development could take the form of a plan, study, or recommendations of a working group. Area plans identify some issues for policy development.

Mariculture discussion occurs for two levels of management in Prince of Wales Island and Prince William Sound Area Plans: 1) area wide guidelines give general management direction and limited siting criteria for mariculture and; 2) site specific management direction is provided to guide the state's response to potential competing uses.

Clarification of management intent reflects department policy requiring other activities to be compatible with designated primary uses. Mariculture sites have not been designated due to lack of sufficient data to identify appropriate sites.

In general, mariculture activities may encounter the following situations under area plans.

1. Areas which have not been designated for other specific uses or have been designated for other uses and resources which do not present apparent conflicts. It is reasonable to expect that in these areas it will be easier to obtain authorization for mariculture activities.

2. Areas that have been designated for other uses and resources which may present significant conflicts. Areas designated for log transfer or storage, mineral access, crucial fish and wildlife habitat, intensive harvest areas, developed recreation, anchorages, or adjacent to existing or proposed land sale areas may have significant conflicts. Siting mariculture activities in these areas may be more difficult. Mariculture can be authorized if the conflicts can be adequately addressed and if mariculture operations can meet the management intent and guidelines for the area.

3. Areas where specific requirements may be attached to mariculture locations or operations. For example, mariculture will not be sited within 300' of the mouth of an anadromous fish stream without the approval of ADF&G.

Offshore of Wilderness Areas or Wildlife Refuges, mariculture growing facilities that are submerged and do not impact the visual characteristics of the wilderness or refuge may be easier to permit than floating types. However, support or caretaker facilities will not be authorized in these areas.

4. Performance standards will be attached to permits or leases to ensure the area is used for the appropriate activity, use is economically viable, and the permit or lease is not used for speculation. Similarly, development plans will be required before approval of a permit or lease. Stipulations will be determined during permit processing.

Area plans can provide guidance for mariculture in specific areas. This is to clarify policy implementation or to note specific circumstances affecting mariculture development.

Examples of proposed area plan guidelines include:

1. Where there is an existing community or state subdivision, mariculture may be allowed if it is consistent with land sale design and will not: 1) block access, 2) detract from the view of waterfront lots, or 3) require upland owners to meet higher sewage treatment costs.

2. Near proposed state land sales, mariculture may be permitted if adjacent uplands are: 1) unlikely to be used for residential settlement, 2) unlikely to be reserved for public use, or 3) where mariculture can accept a short term permit or lease.

3. Mariculture will not preclude floathomes in six limited area designations for floathomes in Prince of Wales Island planning area.

4. Areas known for high recreation or fish and wildlife harvest values are discouraged from mariculture if there are feasible and prudent alternatives.

5. In areas that have a high potential for mariculture development such as Sea Otter Sound in the Prince of Wales Island planning area, cumulative impacts of mariculture will be periodically assessed.