

Alaska Mariculture Development Plan
Draft Action Plan
2019-10-13

Category: Industry

(18 actions)

Industry Development

- **Create Alaska Mariculture Development Council***

Objective – industry-driven coordination across stakeholder groups, agencies, and elements in order to facilitate and guide development of the industry.

Tasks:

- Investigate existing models and functionality
 - Consider funding mechanisms & composition
 - Consider authority & responsibility for implementation of comprehensive plan
- Create guiding principles which include various industry sectors
- Designate representational distribution of members of the Council
- Designate the authority and responsibility of the Council
- Write foundational documents (i.e. legislation, bylaws, etc.)
- Adopt foundational documents

Timeline: 2019-2021

Responsible entities: MTF, others as needed

Infrastructure

- **Develop in-state seed/juvenile supply***

Objective – Investment to secure shellfish and seaweed seed/juveniles for future current and future industry growth.

Tasks:

- conduct statewide needs assessment
- promulgate regs to implement HB 76 (Mar Rev Loan Fund to include hatcheries)
- secure operating funds for existing hatcheries
- consider funding mechanisms and models besides seed sales (i.e. tourism, self-assessment on final sales, cost recovery, etc.)
- consider management models (i.e. cooperative, non-profit, state-owned/industry-operated, vertically integrated, etc.)
- provide technical transfer and expertise to hatchery staff
- support new hatcheries and nurseries as needed for industry growth and regional development

Timeline: 2019-2023

Responsible entities: MTF/AMDC, AFSC, ADCCED, Alutiiq Pride, OceansAlaska, Kachemak Mariculture Cooperative, farmers.

Access to capital

- **Expand Mariculture Revolving Loan Fund (MRLF)**

Objective – Provide additional capital to small farms and non-profit hatcheries, because increased participation and demand will quickly surpass the state's existing MRLF

Tasks:

- Support adding funds to state's existing MRLF
- Align industry needs with MRLF (i.e. improve collateral valuations)

Timeline: 2019-2020

Responsible entities: MTF, ADCCED, Legislature

- **Explore and expand additional sources of public and private capital**

Objective – Provide access to additional sources of capital for farms and hatcheries

Tasks:

- Discuss options for other financing to be used for mariculture development (i.e. ADNR's Agriculture RLF, AIDEA's financing programs, NOAA's Federal Fisheries Finance Program, USDA Farm Service Agency loan program, etc.)
- Once alignment is confirmed, distribute information to industry

Timeline: 2019-2021

Responsible entities: MTF, NOAA Regional Aquaculture Coordinator (RAC), ADCCED

Business Models

- **Consider cooperative structures**

Objective – Educate industry participants about the ability of coops to offer members many benefits (efficiencies, shared risk, common facilities, seed, markets, etc) & are models used in both seafood & agriculture

Tasks:

Timeline: 2020-2023

Responsible entity: Alaska Cooperative Development Center

- **Consider community-based structures**

Objective – Explore and identify the potential benefits of community-based models of ownership and operation of mariculture development

Tasks:

Timeline: 2020-2023

Responsible entity: ???

Industry Information Needs

- **Provide web-based central clearing-house for mariculture information**

Objective – Create and maintain an easily accessible and regularly updated public information center

Tasks:

- Develop and maintain list of funding sources for mariculture development
- Develop guide to federal and state permit requirements
- Collect & display all relevant educational materials

Timeline: 2020-2021

Responsible entity: Alaska Sea Grant, NOAA RAC

- **Investor Outreach**

Objective – Provide information specifically designed for potential investors (growth rates, PSP, etc) to develop business plans & assess opportunities

Tasks:

- Create fact sheet for investors
- Do targeted outreach to seafood processors, ANCs, CDQs, PCSGA (WA growers)

Timeline: 2020-2023

Responsible entity: MTF/AMDC, Alaska Ocean Cluster?

- **Support continued learning through visits to other regions of world**

Objective – develop contacts in other regions that allow information sharing and learning with existing industry

Tasks:

Timeline: 2020-2023

Responsible entity: ASGA, PCSGA?

- **Develop and maintain GIS map tool**

Objective - provide siting info to potential investors/regulators that allows development and reduces conflict

Tasks:

- Build & house prototype; demonstrate to agencies & industry
- Incorporate suggested changes into version 2.0
- Provide instructional webinars to interested participants

Timeline: 2019-2020

Responsible entity: AFDF, Axiom, AOOS, ADEC, ADFG, ADNR, farmers

Industry Training

- **Expand formal education in mariculture**

Objective - expanded capacity of University, ANSEP and other institutions/programs to educate/train for all levels of workers (including researchers, hatchery, business, financing, etc)

Tasks:

Timeline: 2020-2023

Responsible entity: University of Alaska

- **Develop & circulate mariculture skill-building resources**

Objective -

Tasks:

Timeline: 2020-2023

Responsible entity: Alaska Sea Grant

- **Offer professional development to growers, available remotely & in-person**
Objective -
 Tasks:
 Timeline:
 Responsible entity: Alaska Sea Grant

- **Offer informal, flexible training programs**
Objective -
 Tasks:
 - build on progress to date (e.g. boot camp, apprenticeship, mentorship)
 - provide "Introduction to Shellfish/Seaweed Farming" for new farmers or farm employees
 Timeline:
 Responsible entity: Alaska Sea Grant, Tribes, AFDF, ALFA, Blue Evolution, OceansAlaska

Marketing

- **Build on ASMI programs**
Objective – Consider the benefits of and stages of industry “joining” ASMI and adding marketing of mariculture products to the existing marketing of wild capture seafood products.
 Tasks:
 - Draft bill to amend ASMI statutes:
 - to remove prohibition to market aquatic farm products
 - to allow for self-assessment election, similar to existing seafood industry funding mechanism
 - to add farmer Board seat upon successful self-assessment election
 - ASMI Board resolution in support of bill
 - Determine sponsor, introduce and support passage of legislation
 - Change ASMI Bylaws
 - Secure other funding mechanisms or sources to augment ASMI work in the near term
 - Revise ASMI strategic plan & tag line to include mariculture products & messaging
 - Include information about positive benefits of mariculture at every level of marketing, similar to inclusion of sustainability in wild seafood marketing
 Timeline: 2019-2020
 Responsible entity: MTF, ASMI ED & Board, Legislature

- **Build collaboration with Alaska Grown and others**
Objective - build synergy with a larger group of Alaska Food Producers (e.g. Alaska Food Policy Council, Alaska Grown, ASMI, etc.)
 Tasks:

- Encourage collaboration between Alaska Grown & ASMI; utilize ASMI All Hands meeting
- Encourage collaboration between Alaska Grown & ASGA; utilize ASGA annual meeting

Timeline: 2020-2023

Responsible entity: MTF, ASGA, ASMI

Public Outreach

- **Provide public outreach**

Objective - provide public outreach to multiple audiences to help assure realistic & positive views of mariculture using practical and factual information

Tasks:

- identify priority groups & develop effective communication with each
- effective communication may be written material, presentations, meetings, ongoing coordination with groups or individuals
- identify and counter opposition to mariculture & aquaculture; issues include potential for environmental damage, genetics, conflicting users, market competition, aesthetics

Timeline: 2019-2023

Responsible entity: MTF, ASGA, AFDF, ASG

- **Provide industry advocacy**

Objective – Increase understanding in governmental sectors of industry goals and needs

Tasks:

Timeline:

Responsible entity: MTF, AFDF, ASGA, PCSGA

Category: Government

(19 actions)

State of Alaska:

Statutory

- **Pass legislation to allow shellfish enhancement***

Objective – Legalize restoration, rehabilitation & enhancement of shellfish

Tasks:

- Continue to support HB 41 and SB 22 through committee testimony
- Compile scientific info to counter opposition
- Work with sponsoring Legislators and committee chairs to move bill out of Senate Finance Committee and onto Senate floor vote

Timeline: 2019-2020

Responsible entities: MTF, AFDF, industry, Legislature

- **Pass legislation to reduce requirements on renewals**
Objective – reduce uncertainty for farmers and reduce backlog of applications

 - Continue to support HB 116 through committee testimony
 - Work with sponsoring legislators and committee chairs to move bill
 - Get support from the Administration

Timeline: 2019-2020
 Responsible entity: MTF, AFDF, industry, Legislature

- **Allow subleasing of aquatic farms**
Objective – allow for multiple public or private relationships to encourage new entrants into aquatic farming (i.e. communities, Alaska Native Corporations, others)

Tasks:

 - ADNR will discuss internally to confirm this is possible.

Timeline: 2019
 Responsible entity: ADNR (Colles, Joe)
*****ADNR believes this is already allowable and has already been done in Yakutat and Kake.**

- **Allow eco-tourism and education as allowable activities at aquatic farms**
Objective – encourage tourism and mariculture partnership activities

Tasks:

 - Draft bill to make ecotourism an allowable activity on aquatic farm leases (AS 38.05.095)
 - Identify sponsor for the bill

Timeline: 2019-2020
 Responsible entity: ADNR (Colles, Joe), MTF, Legislature

Regulatory changes

- **Amend commercial use requirement (step #1) and enforce (step #2)**
Objective - allow shorter or longer term for commercial use requirements, depending upon species; enforce new regs.

Tasks:

 - DNR has current draft regs for step #1
 - Review draft regs for see if any additional changes need to be made; combine in reg package; provide public notice and comment period
 - Give farmers at least 2 years notice prior to enforcement

Timeline: 2020-2022
 Responsible entity: ADNR, MTF

- **Build tribal & local outreach into application process**
Objective - avoid conflict and increase rate of success for new farm apps

Tasks:

 - add requirement to application to send letter to local tribe and community

Timeline:

Responsible entity: MTF, ADNR

***ADNR already does this by alerting nearby entities during public comment process. This can be furthered as an industry best practice.

- **Regulatory amendment to allow flexibility to increase term of lease from 10 to 20 yrs**
Objective – allow both 10 or 20-yr term leases (20-yr requires additional site survey)

Tasks:

- Internal discussions to determine all possible paths to this end result

Timeline: 2019-2020

Responsible entity: ADNR (Colles, Joe), MTF

***DNR believes the ability currently exists to allow for a longer term lease given a survey (survey technology is getting easier and will become cheaper 2021) and a competitive bid. This may allow for up to 55 year leases.

Policy issues

- **State of AK commitment to support mariculture & comprehensive plan**

Objective - State will express clear commitment to support comp plan & defined state role & direct regulatory agencies to adopt advocacy approach to mariculture industry

Tasks:

- Support is being provided through actions of Alaska Development Team

Timeline: 2019-2022

Responsible entity: MTF, Governor, Alaska Development Team, Legislature

***Governor Dunleavy: “We want to make Alaska the mariculture capital of the world.”

- **ADFG genetics policy**

Objective – continue to develop relationships and understanding between industry and ADFG to allow advancement of mariculture techniques and practices while preserving genetic integrity

Tasks:

- sterile stock & species that do not reproduce do not need to be subject to genetics policy
- when a lack of data for a species exists, require a timeline for data collection in order to reduce precautionary restrictions
- analyze application of recent seaweed genetics research results
- identify priority genetics research

Timeline: 2019-2023

Responsible entity: MTF; AFSC; ADF

- **Revise aquatic farm application**

Objective - adhere to actual language in statute/reg for application requirements

Tasks:

- Note improvements as ADNR staff get through app backlog

- Work with MTF& other industry to revise application

Timeline: 2019-2022

Responsible entity: ADNR, ADFG, MTF, Governor's office, Legislature

- **Reduce bond rates for low risk operations**

Objective - allow reduced bonds for farmers with demonstrated training or experience

Tasks:

- Work with Division of Insurance to understand the problem better and clear up the language to clarify

Timeline:

Responsible entity: ADCCED (Fagnani), Division of Insurance (Laurie), ADNR (Colles)

*** Minimum bond language is in reg (\$2,500); the bond market doesn't know how to write the bond and the bond language; bond pool language is already in place which allows for 3 or more farmers to form a bond pool which reduces the bond requirements by half.

- **Obtain legal authority for agreements between farmers for clean-up**

Objective – support DNR offering bond & abandoned gear to other farmers for clean-up services

Tasks:

- State could issue RFP for industry to do it
- State could require 3 bids; or
- Industry could come to DNR to clean up an abandoned site and get the bond funds and maybe other sources (situation dependent).

Timeline:

Responsible entity: Educational issue within industry, ASGA, etc.

***Both of these options are possible already. The best thing for industry to do is to assign the lease before the industry farmer fails and abandons. DNR does keep an informal list of people that might be interested in taking over a lease assignments.

- **Limit lease fee increases**

Objective – support freeze on lease fee increases for five years, to encourage stability, predictability leading to investment

Tasks:

Timeline:

Responsible entity:

***Statutes require DNR to assess lease fees every five years. They just raised rates, but had not raised fees prior to that for a while. Consequently, this action seems not likely and is recommend for removal.

- **Amend DNR leases application fees**

Objective – change the three categories of lease fees to more closely align with the current range of application sizes being received which will help small farms (e.g. change categories from 0-1, 1-2, 2-3 acres to 1-50, 50-100, 100+ acres)

Tasks:

- DNR will review current regs and consider drafting new regulations
- New regs are proposed for adoption through public process in reg package

Timeline: 2019-2020

Responsible entity: ADNR (Colles, Joe)

*****NEW – after discussion with Alaska Development Team**

- **Reduce application backlog**

Objective – ADNR lease application process completed for all applicants within 1 year

Tasks:

- ADNR internal review of staffing
- Implement system review during processing of applications in order to prepare for improvements to system

Timeline: 2019-2021

Responsible entity: ADNR, MTF

- **Allow ADEC data to be visible**

Objective – allow public access to data collected from water sampling & PSP testing that is important for farmers to access (either nearby or new start-ups)

Tasks:

- ADEC commitment to provide access if not overly burdensome to ADEC IT staff
- Axiom IT contractors contact ADEC IT staff to determine requirements needed from ADEC

Timeline: 2019-2020

Responsible entity: ADEC (Christina & IT), Axiom

- **Create new bond pool and insurance pool**

Objective – commercial liability and workers comp insurance is expensive and insurers often do not understand what is needed for this new industry in order to write policies; may be addressed through creation of new pool (e.g.

Tasks:

- Internal discussion between ADCCED, ADNR & Division of Insurance to better understand requirements and potential solutions
- Consider pathways to reduce these hurdles
- Consider creation of insurance and bond pools through legislation

Timeline: 2019-2020

Responsible entity: ADCCED (Fagnani & Laurie – Division of Insurance), ADNR (Colles), MTF

Federal Government

Policy

- **Encourage NOAA to hire Aquaculture Coordinator in Alaska Region***
Objective – provide leadership, coordination and support at the federal level for mariculture endeavors in Alaska
Tasks:
 - Document need and priorities for increased NOAA capacity
 - Identify NOAA funding
 - Conduct hiring processTimeline: 2019
Responsible entity: NOAA, MTF
- **Support Alaska Sea Grant hiring Mariculture Specialist***
Objective – fill the previous position not re-filled after a retirement
Tasks:
Timeline:
Responsible entity: Alaska Sea Grant, University of Alaska, Alaska Development Team
- **Re-instate the Corps of Engineers general permit for farming**
Objective - Instead of requiring each farmer to obtain individual Corps permits, re-instate general permit for all
Tasks:
Timeline:
Responsible entity: NOAA RAC, US Army Corps
- **Support revision of marine mammal policy**
Objective – Ensure marine mammal polices are applied consistently and reasonably to protect wildlife and allow mariculture development (seals, sea lions, whales)
Tasks:
 - Consider NOAA report “Evaluation of US shellfish aquaculture permitting systems” 2018
 - ADFG Consultation on potential changes
 - Consider affects of Hump back whale listingTimeline: 2019-2020
Responsible entity: NOAA (Scheurer, RAC), ADFG
- **Support certification of new testing labs and methods**
Objective - Enable efficiencies in transportation, test results & potential fee reductions
Tasks:
 -Timeline: 2021-2023
Responsible entity: Sitka Tribe of Alaska, ADEC
*****ADEC is supportive (e.g. will work with Sitka Tribe towards certification) particularly as industry grows and may exceed capacity at ADEC lab in ANC, but noted industry**

would have to pay a fee for a third-party testing. ADEC emphasized a desire to see more labs certified for water quality testing.

Category: Research

(2 actions)

- **Explore options for implementation of Mariculture Research Center (MRC) concept***
Objective – Adopt a flexible approach to implementation of this concept which takes advantage of timely opportunities related to funding and staffing availability, and can ramp up to the full vision over time as the industry grows.

Tasks:

- Consider the inclusion of the following elements:
 - Entity for research coordination and funding
 - Director of research coordination and funding
 - Research Advisory Body
 - Annual R&D Forum
 - Maintain and annually update lists of research priorities

Timeline: 2019-2021

Responsible entities: MTF, NOAA, University, ASG, Alaska Development Team

- **Support completion of and funding for the identified research priorities**
Objective – Support growth and increased productivity of industry

Tasks:

- Create strategy to secure federal funds
- Create strategy to secure other funds

Timeline: 2020-2023

Responsible entity: MTF, Alaska Development Team, Alaska Ocean Cluster?

*Priority recommendations from comprehensive plan