

**Mariculture Task Force: Comprehensive Plan**

Presented to:  
*Alaska Shellfish Growers' Association*

Presented by:  
*Julie Decker, Chair, MTF*

December 7, 2017

MADE IN ALASKA  
**MARICULTURE**  
ALASKA SHELLFISH GROWERS' ASSOCIATION

**Mariculture Task Force**

**February 26, 2016:**  
Governor Walker established the Alaska Mariculture Task Force (MTF) by [Administrative Order #280](#)

**May, 2016:**  
Governor Walker appointed members of the MTF

**March 1, 2018:** Delivery of Comprehensive Plan

**Comprehensive Plan - Timeline**

**November, 2017:**  
MTF approved outline of comp plan

**December, 2017:**  
MTF Drafting Committee writes first draft

**January, 2018:**  
MTF approves draft for public review

**mid-Jan – mid-Feb, 2018:**  
MTF gives presentation & receives public comments

**Mid-February, 2018:**  
MTF reviews public comments, revises plan, creates final version of plan

**March 1, 2018:** Delivery of comp plan to Governor

**Comprehensive Plan - Contents**

- Message from the Governor
- Message from the MTF
- Vision
- Goal
- Guiding Principles of the Plan
- Elements of the Plan
- Appendix A – Background of the MTF
- Appendix B – Administrative Order #280
- Appendix C – Summary of the Findings of Phase 1
- Appendix D – Summary of the Findings of Phase 2
- Appendix E – MTF Advisory Committee Recommendations
- Appendix F – List of Research Completed to Date
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**Comprehensive Plan - Vision**

*Develop a viable and sustainable mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment and communities.*

**Comprehensive Plan - Goal**

**Grow a \$100 million mariculture industry in 20 years.**

*\*note: total annual output, in 2017 dollars*



**Comprehensive Plan – Guiding Principles**

**SCOPE**

For the purposes of this plan, **mariculture is defined as** enhancement of wild fisheries, aquatic farming, and restoration of invertebrates and aquatic plants. For this plan, the mariculture definition does not include salmon fishery enhancement. Also **mariculture in Alaska does not include finfish farming**, which is not legal in State waters.



**Comprehensive Plan – Guiding Principles**

**COORDINATION**

Implementation of this comprehensive plan requires coordination at every level in order to efficiently and effectively expedite development of the mariculture industry. For instance, local, state, federal and tribal governments, industry, communities, the University, and other interested stakeholders will ideally share development plans and activities and funding opportunities in an effort to avoid duplication and speed adoption of successful efforts. Coordination does not mean centralized decision making.



**Comprehensive Plan – Guiding Principles**

**LEADERSHIP**

Achievement of the vision and goal of this comprehensive plan will require the leadership of industry and other interested stakeholders. Leadership includes commitment of time and resources from those interested in developing mariculture.



**Comprehensive Plan – Guiding Principles**

**SUSTAINABILITY**

Mariculture development will be compatible with sustainability principles, and maintain and improve environmental integrity. The Alaska Constitution, and ADF&G management practices of sustained yield principles and the precautionary approach all require careful development of a blue economy which is environmentally friendly.



**Comprehensive Plan – Guiding Principles**

**ALASKA NATIVES**

Alaska Natives will benefit from mariculture development and will be involved in every element of the development process in order to ensure that outcome.



### **Comprehensive Plan – Guiding Principles**

#### **INNOVATION**

Determination to overcome challenges and hurdles will require innovation. Alaska presents many unique challenges, and developers will look globally to applicable research and solutions to apply to Alaska's circumstances and geography without "reinventing the wheel".

### **Comprehensive Plan – Guiding Principles**

#### **COMPLEMENT & PROTECT**

Implementation of this comprehensive plan will complement existing uses, such as subsistence, commercial fishing, and conservation. Protection of existing uses currently exists in state laws and regulations. Development will also create efficiencies with existing assets, infrastructure and expertise, for vessels, processing plants, products, and markets.

### **Elements of the Plan**

Each of the nine elements will contain prioritized recommendations from the five Advisory Committees, including estimated timeline and responsible stakeholders for future action

### **Elements of the Plan (1)**

**Support Alaska hatchery production to ensure industry access to seed and/or juveniles.**

- *Primary bottleneck to industry growth*
- *Recommended by several ACs*
- *Need to assure access to seed for all farm sizes*

### **Elements of the Plan (2)**

**Establish an industry driven, multi stakeholder coordinating entity.**

- *Identified as a systemic problem*
- *Could be an interim version initially*
- *Models like AKCRRAB/MTF/others*
- *Or potential existing entities that it might be*
- *Recommended by several ACs*

### **Elements of the Plan (3)**

**Implement identified research needs**

- *Establish a Mariculture Research Center (MRC) within the University of Alaska*
- *Implementation of the short term research priorities identified by the R&D AC, in Appendix E*
- *Hire Alaska Sea Grant Mariculture Specialist to provide links from research to other elements of mariculture development*

### ***Elements of the Plan (4)***

**Align laws, regulations and agency practices with stakeholder needs**

- *Improve DNR lease requirements, including bonding requirements, structure of lease fees, reduction of risk, inclusion of best practices, etc*
- *HB 76 & HB 128 – MRLF & shellfish enhancement*
- *Other AC recommendations*

### ***Elements of the Plan (5)***

**Invest in mariculture priorities and expansion through new and existing sources; growth should come from small, medium and large entities**

- *NOAA Aquaculture Coordinator in Alaska Region*
- *Expansion of existing Mariculture Revolving Loan Fund*
- *Explore public/private partnerships*
- *Align existing state & federal funding sources for more efficient development by addressing developmental hurdles (e.g. AIDEA, MRLF, USDA, EDA, NOAA)*

### ***Elements of the Plan (6)***

**Improve public understanding and support for mariculture**

- *Increase efforts*
- *Centralize outreach materials*
- *Build local & tribal outreach*
- *Intended to avoid conflict and increase rate of success for new farm apps*

### ***Elements of the Plan (7)***

**Promote success in mariculture through Alaska Native participation**

- *Build tribal outreach*
- *Partner with Tribes on workforce development programs*
- *Build partnerships with Alaska Native orgs with interest in mariculture development*

### ***Elements of the Plan (8)***

**Develop and enhance the mariculture workforce (existing & future farmers, hatchery & scientific workforce)**


- *Intensive, hands on bootcamp*
- *Develop apprenticeship/mentorship program*
- *Develop & circulate mariculture skill building resources*

### ***Elements of the Plan (9)***

**Develop new mariculture markets and products**

- *Seaweed, oyster and mussel product developments (see list of R&D short term priorities)*
- *Revise ASMI strategic plan & tag to include mariculture products & messaging*
- *Build collaboration between ASMI & Alaska Grown*

**APPENDIX C**




**Economic Analysis to Inform the Alaska Mariculture Initiative: Phase 1 Case Studies**

Presented by  
**Alaska Fisheries Development Foundation**  
March 2015

**Scope of analysis:**

- ✓ Current economic impact, history & growth of industry, investment climate, lead state agency, level of coordinated R&D, regulatory process, development strategies & key stakeholders, species present, relevancy to Alaska, etc.
- ✓ **Case studies:** Seaweed in Ireland, Clams in Florida, Geoducks in Washington, Alaska King Crab, Alaska Salmon Enhancement, Spanish Mussels, PEI Mussels, New Zealand Mussels

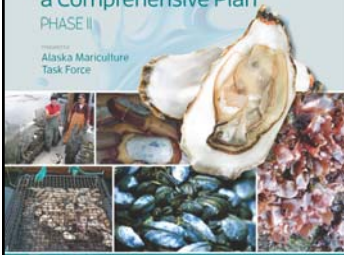
**Funded by:**



**APPENDIX D**

Alaska Mariculture Initiative  
**Economic Analysis to Inform a Comprehensive Plan**  
PHASE II


Presented by  
**Alaska Mariculture Task Force**




**Scope of analysis:**

- ✓ Existing industry in AK
- ✓ Opportunities & Challenges
- ✓ Economic Model for Growth
- ✓ Strategic Development Goals

**Funded by:**



**APPENDIX E – AC Recommendations**




**WANTED:  
ASGA  
Feedback**

MADE IN ALASKA  
**MARICULTURE**  
ALASKA DEPARTMENT OF NATURAL RESOURCES  
ALASKA

**Bren Smith, GreenWave:**  
Owns 20-acre farm in CT;  
grows oysters, kelp, mussels, scallops