

Project Scope of Work

Alaska Mariculture Initiative:

Economic Analysis to Inform Comprehensive Plan – Phases 2 and 3

January 1, 2017

The economic impact of mariculture (enhancement, aquatic farming, and restoration of shellfish and marine plants) could grow to \$1 billion in Alaska by 2045 given a coordinated effort, a public-private partnership, and a comprehensive plan designed to reach this goal.

Problem Statement: The potential economic impact of a fully developed mariculture industry in Alaska is not well understood by industry or policy makers. It is also not entirely clear what is needed to move from Alaska's current micro industry (approximately \$1 million in annual sales) to a fully developed industry. In general, the existing seafood industry (harvesters and processors) does not consider themselves to be potential beneficiaries of mariculture development. Since the *Aquatic Farm Act* was passed in 1988, allowing for aquatic farming of shellfish and marine plants, the stakeholders and agencies have not been acting in coordination to expedite the development of the industry, pointing to the necessity for a statewide comprehensive plan.

Background: In 2014, the Alaska Fisheries Development Foundation (AFDF) was awarded a grant from NOAA to spearhead the **Alaska Mariculture Initiative** (AMI), with the following goals: 1) Expand stakeholder base, create partnerships and increase capacity to be effective, 2) Develop a comprehensive plan with the various stakeholders and agencies.

As a result of the activities surrounding the AMI, Governor Walker established the Alaska Mariculture Task Force (MTF) by [Administrative Order #280](#) and appointed its members in May, 2016. The MTF is directed to submit a comprehensive plan to develop a viable and sustainable mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska's economy, environment, and communities to the Governor by March 1, 2018.

An important part of the work by the MTF to create a comprehensive plan will be an economic analysis to help inform the decisions in the planning process. This economic analysis will contain three phases as described in detail below. In the most basic terms, the economic analysis will answer the following questions:

Phase 1: What have other regions achieved? How did they do it? What was their payoff/benefit?

Phase 2: How could/should Alaska do it?

Phase 3: What would be the payoff/benefits for Alaska?

PHASE I: COMPLETED - Comparative case studies which outline examples of successful mariculture industries in different regions of the world with similar or relevant environmental and/or economic conditions to Alaska, including native species and potential stakeholders. See [here](#).

SCOPE OF WORK FOR THIS PROJECT

PHASE II: Economic Framework or Model – a set of *economic analyses to support the statewide comprehensive plan developed in an iterative process with the MTF.*

- Design a simple economic framework or model of various potential approaches to developing the mariculture industry in Alaska. This model can be used to analyze economic costs and benefits as well as the speed and scale of development resulting from the implementation of a comprehensive plan.
- This framework or model will be developed in an iterative process with the MTF and its Advisory Committees, listed below:
 - Investment & Infrastructure
 - Regulatory Issues
 - Research, Development & Environmental Information
 - Public Education & Marketing
 - Workforce Development
- This framework or model will be used to inform the comprehensive planning process by helping the MTF understand economic costs, benefits and impacts of different potential approaches to a comprehensive plan and its implementation.
- Examples of these approaches include (but are not necessarily limited to):
 - limited government involvement; attraction of private business
 - public-private partnership
 - significant public investment initially, followed by private investment
- The information from Phase II should be useful in determining the best balance of these inputs/investments, and the best “bang for the buck” (where marginal benefits begin to fall off).
- Phase 2 should integrate the recommendations of the MTF and AC’s into a draft comprehensive plan for presentation to and consideration by the MTF.

PHASE III – Analysis of the cost/benefit and economic impact of the final statewide comprehensive plan adopted by the MTF and recommended to Governor Walker. This should be a refined analysis of what the final comprehensive plan will cost and what the benefits will be (jobs, economic impact, etc.).

Briefing Document – A simple, short, attractive and engaging document which summarizes the work of Phases 1 – 3 with the intention of using it as a communication tool for investors, public policy makers, and other stakeholders. Length should be in the 10-page range and the document should include distilled info expressed by info-graphics, charts, pictures, etc., as much as possible. Contractors shall take direction from the Public Education & Marketing Advisory Committee in creating this document.

Deliverables: Deliverables will include the following:

- Presentation to the MTF summarizing the results of Phase 1
- Participation in Mariculture Task Force (MTF) meetings via teleconference and at least twice by a representative in-person
- Participation in Advisory Committee meetings via teleconference
- Phase 2 – a written report, via e-copy and 15 hard copies delivered to MTF members, which will serve as a draft comprehensive plan
- Presentation to the MTF summarizing the draft comprehensive plan (results of Phase 2)
- Written report (via e-copy and 15 hard copies) for Phase 3
- Briefing document, both e-copy and approximately 500 hard copies
- PPT presentation explaining the contents of the briefing document for use by MTF members and others

Quality of Work: The economic analysis should be complete, accurate, and appropriate for guiding public and private policy decisions regarding investment. In other words, the work should be practical and written in language and using theories that are understandable to business owners and policy makers.

Timeline: AFDF is looking for a contractor who can complete this project within the following schedule:

- Phase II – draft comprehensive plan – September 1, 2017
- Phase III & Briefing Document – March 1, 2018

Funding available: AFDF secured a grant from EDA, plus matching funds from the State of Alaska and industry for a total not to exceed \$60,000 for this scope of work. For contractual purposes, these funds will be divided as follows: Phase 2 = \$25,000, Phase 3 = \$25,000, Briefing document = \$10,000.

Estimates: Please call Julie Decker (below) with estimates for this project scope of work.

Questions: For questions, please call or email Julie Decker at 907-276-7315, jdecker@afdf.org.

See [here](#) for more information regarding the **Alaska Mariculture Task Force** and [here](#) for more information regarding the **Alaska Mariculture Initiative**.