

Phase II: Alaska Mariculture Industry Economic Analysis



Photo credit: NOAA David Csepp



Prepared for:
Alaska Governor's Mariculture Task Force

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Scope of Work

- Alaska Mariculture Industry Today
- Opportunities and Challenges
- Economic Model
- Strategic Development Goals, Pathways and Outcomes



Alaska Mariculture Industry Overview

Current production

- Pacific oysters
- Blue mussels
- Geoducks
- Sugar kelp



Research and development

- King crab
- Sea cucumbers
- Abalone
- Clams
- Purple-hinged rock scallops
- Sea urchin
- Cockles

Alaska Mariculture Industry Overview

- Participation: permit number/location, active permits
- Description of activity: site sizes, gear type, labor requirements
- Products
- Production trends
- Sales: price trends, revenue
- Markets: trade flows, current/projected market conditions
- Research and development progress/investment

Next Steps

1. Chapter 1 Review *May*
2. McDowell Group/Advisory Committee Collaboration on Chapters 2 and 3 *May/June*
 - Development Opportunities and Challenges
 - Industry Investment Sources
3. Economic Modelling *July/August*
4. Final Report *September*



Alaska Mariculture Economic Model

Inputs	Small Farm	Mid-Size	Large Farm
• Scale of commercial operation (acres)	-	-	-
• Annual commercial production (lbs)	\$-	\$-	\$-
• Annual farm-gate earnings	\$-	\$-	\$-
• Annual first wholesale production volume (lbs)	\$-	\$-	\$-
• Annual first wholesale earnings	\$-	\$-	\$-
• Labor income incl. owner's wages/profits (% of operating revenue)	0%	0%	0%
• Annual labor income (incl. owner's wages/profits)	\$-	\$-	\$-
• Employment (peak number of workers)	\$-	\$-	\$-
• Employment (annual average)	\$-	\$-	\$-
• SOA annual tax revenue	\$-	\$-	\$-
• SOA annual lease revenue	\$-	\$-	\$-
• Initial capital investment requirements	\$-	\$-	\$-
• Development period (# years to first commercial sales)	\$-	\$-	\$-

Alaska Mariculture Economic Model

All Products Summary

Yrs 1-5 Yrs 6-10 Yrs 11-15 Yrs 16-20 Yrs 21-25 Yrs 26-30

- Total annual farm-gate earnings
- Total annual first wholesale earnings
- Total annual labor income
- Total annual SOA tax revenue
- Total annual SOA lease revenue

Total Economic Impacts – Industry-wide

- Direct, indirect and induced employment
- Direct, indirect and induced labor income
- Direct, indirect and induced value added
- Direct, indirect and induced output