

## LEGISLATIVE LUNCH & LEARN MARICULTURE'S MOMENT

APRIL 4, 2023



#### SOUTHEAST CONFERENCE

- Incorporated in 1958, primarily to advocate for creation of Alaska Marine Highway System.
- •Stayed together to advocate for issues that are key to the southeast region as a whole. Look for consensus.
- •Members from nearly every community, chamber of commerce, and economic development organization in the region, along with businesses and organizations.
- •Conduct economic planning through CEDS process and implement CEDS, providing technical assistance and project development support.
- Federally-designated Regional Economic Development District and State-designated ARDOR.



#### ARDOR Program

#### Alaska Statute 44.33.896

DCCED Shall: Encourage formation

Establish boundaries

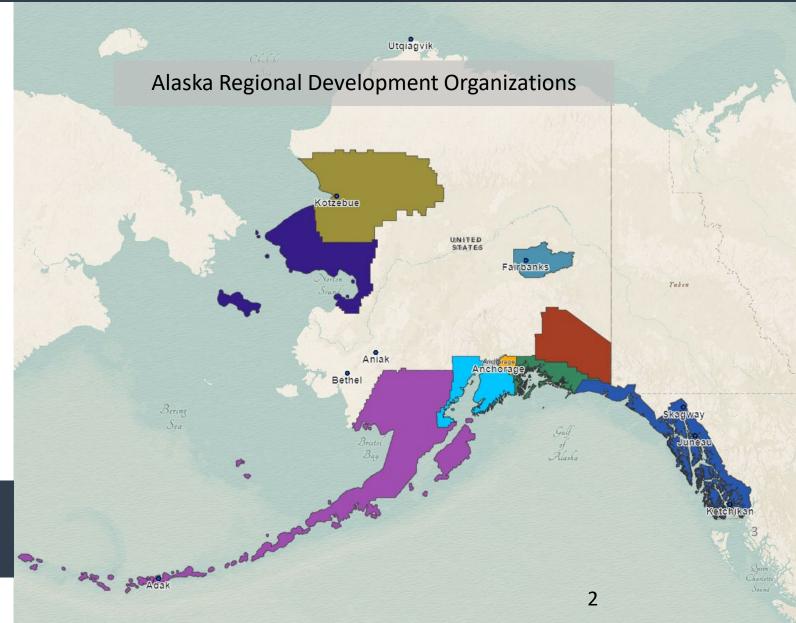
**Gather Information** 

Serve as a Liaison

Assist each organization to

Encourage economic development
 Collect and distribute information
 Participate in marketing, trade missions
 Develop and Implement strategies

HB 192, passed in 2021, extended authorization of ARDOR Program to 2031. (*thank you!*)



2025 SOUTHEAST ALASKA ECONOMIC PLAN Recipient of the 2021 NADO Impact Award

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ALICEANN WOHLBRUCK

2021

### Southeast Alaska 2025 Economic Plan

Southeast Conference's Comprehensive Economic Development Strategy 2021-2025



Tlingit & Haid

## Why mariculture?

#### **Mariculture = Opportunities & Benefits for Alaskans**

economic, environmental, community, cultural, and food security

### SEAFOOD & MARITIME

#### Seafood

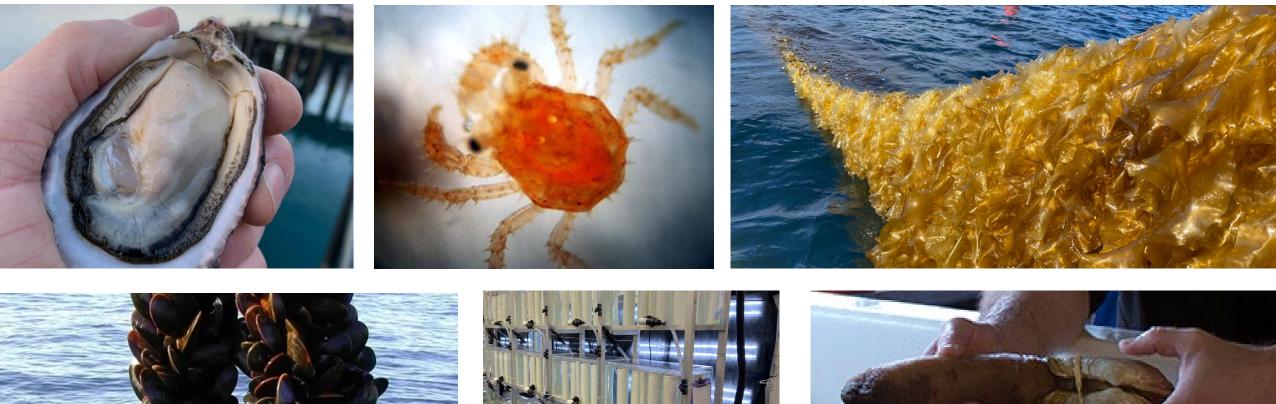
- 1. Priority Mariculture development
- Work to promote a year-round seafood economy
- 3. Further develop seafood markets
- 4. Maintain a stable regulatory regime
- 5. Research the effects of changing ocean conditions on the marine environment
- Support regional processors becoming economically competitive
- 7. Communicate the importance of salmon hatcheries
- 8. Seafood sector workforce development
- Full resource utilization & ocean product development.





## In Alaska, mariculture is enhancement, restoration and farming of shellfish and seaweeds.

Finfish farming is prohibited by Alaska Statute 16.40.210

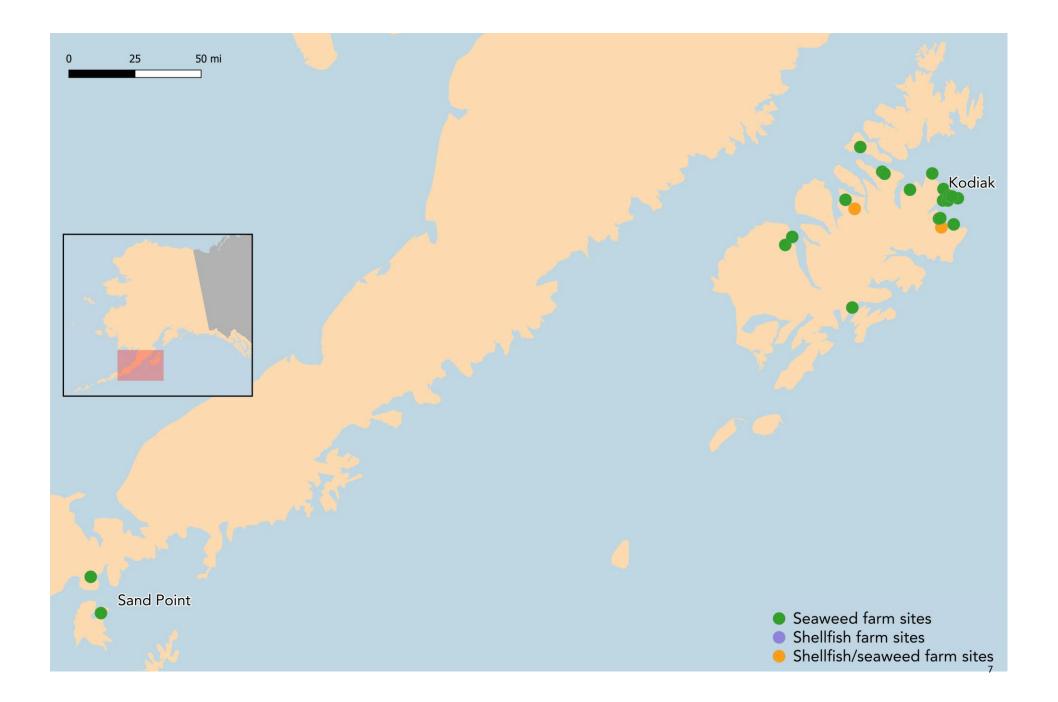




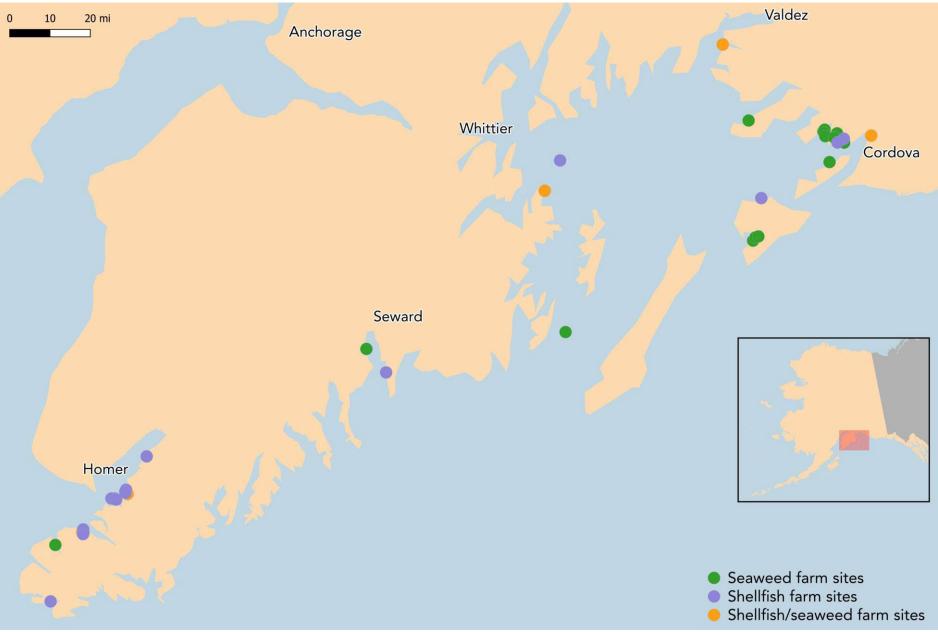




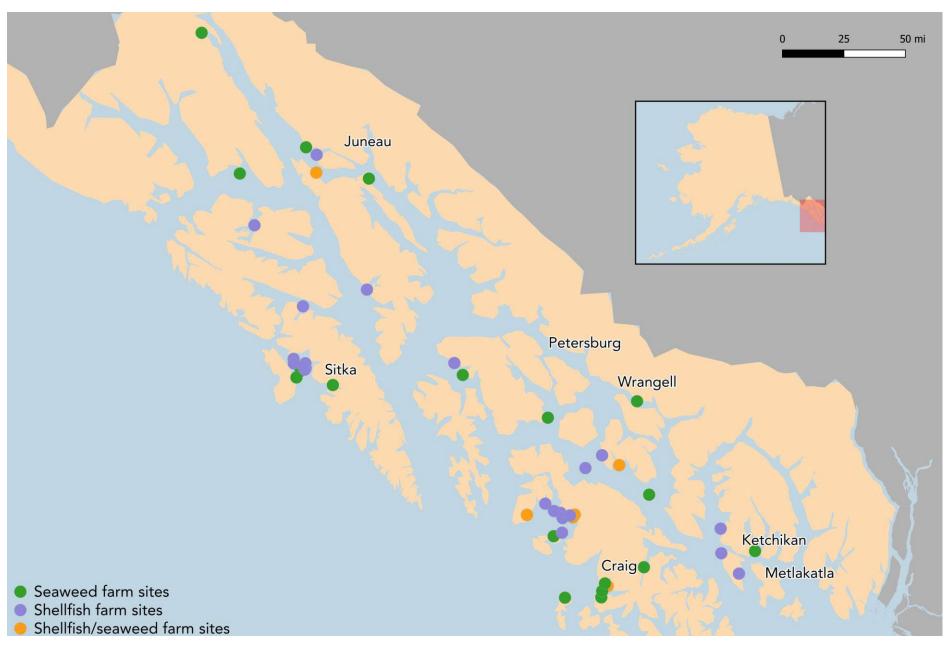
#### Kodiak/ Aleutians



Cook Inlet/ Prince William Sound



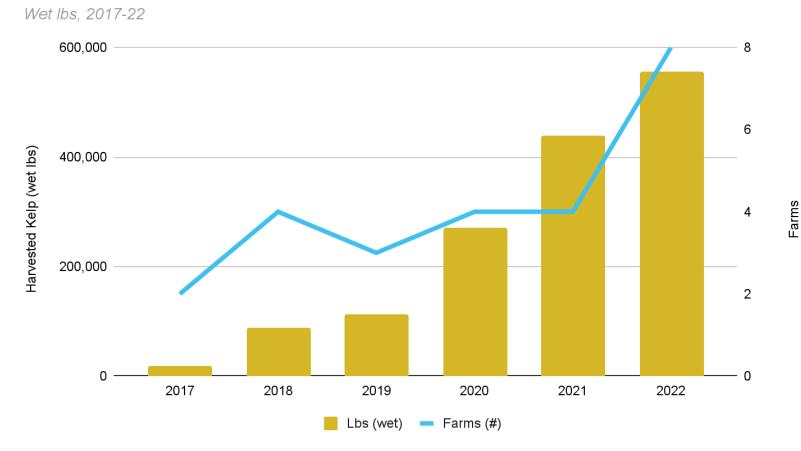




#### **Alaska Seaweed Sector Overview**

- 8 producing farms in 2022
- 24 permitted
- 23 under review
- 560,000 pounds
   in 2022
- 80,000+ pounds wild harvest

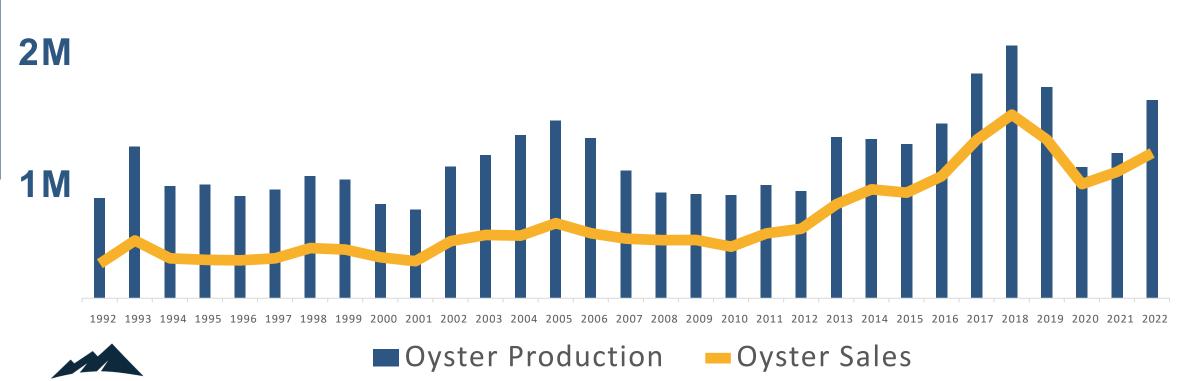
#### Alaska: Kelp harvest





### Alaska Oyster Sector Overview

• About \$1.1 million in sales in 2022 at roughly 13 farms



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### Mariculture Hatchery and Nursery Sector Overview

- 5+ seaweed hatcheries
  - 420,000 feet seeded string in Fall 2021
- 6 oyster nursery/FLUPSY operators
  - Currently using imported larvae/seed
  - ~9 million oyster seeds for farms
- Technologies in flux
- Various other species being tested





## Industry Trajectory - Sales

- Currently mariculture is roughly a \$2M dollar industry in Alaska by revenue
- Could grow to \$7M (low), \$60M (medium), or \$185M (high) in ten years
- Seaweed the majority of the revenue in these models
- Medium and High cases depend on BBBRC award or similar government investment





Alaska Mariculture Industry Revenue Projections (\$millions)

\$600

\$500

\$400

\$300

\$200

million

## Industry Trajectory - Economic Output

- Economic Output with multiplier effects up to \$850 million industry in 20 years (high case) with ~5,000 jobs
- Medium case is \$325 in economic output in 20 years with ~1,825 jobs
- \$100s of millions in private sector investment needed achieve this growth as well as aggressive public sector economic development and policy support

or blic and								
	2022	2027	2032	2037	2042	\$0		
-Status Quo	\$3	\$5	\$11	\$21	\$32			
Medium	\$3	\$23	\$100	\$210	\$325			
—High	\$3	\$45	\$315	\$580	\$850			



\$900

\$800

\$700

\$600

\$500

## New Positions (12) & Funding Secured (\$110 million+)

- Key new positions created & filled (12):
  - NOAA RAC + Mariculture Research Lead
  - 2 x ADNR lease application process
  - UAF assistant professor (seaweed)
  - Mariculture Specialist, Alaska Sea Grant
- ARPA-E **\$2.5 million** seaweed research
- USDA **\$500K** for mariculture incubator processing facility (SEC)
- USDA **\$500K** for OceansAlaska; **\$100K** for Naukati project
- EVOS TC **\$32 million** mariculture research
- EDA BBB **\$49 million + 20% match = \$65 million**
- Alaska Legislature **\$5 million** mariculture matching grant program
- Alaska Legislature **\$5 million** to University for mariculture
  - MADE IN ALASKA

## MARICULTURE

- MRTC Director, Alaska Sea Grant
- 5 x AK Sea Grant Fellows
- AMA Executive Director
- More rolling out under BBB



#### ALASKA MARCULTORE CLUSTER

The US Economic Development Administrations (EDA) Build Back Better Regional Challenge program provides transformational investments to develop and strengthen regional industry clusters across the country, embracing equitable economic growth, creating jobs, and enhancing U.S. global competitiveness Accelerating a viable and sustainable mariculture industry for the long-term benefits of Alaska's economy, environment, and underserved communities





## Partnerships, Planning & Preparedness

## Opportunity

## = Success





## **Component Projects + Sub Recipients**



## **Project Descriptions**

	RLF	Governance, Coordination & Outreach	Workforce Development	Research & Development	Marketing	Green Energy	Equipment & Technology
\$10	0 MILLION	\$3.5 MILLION	\$10.5 MILLION	\$9.5 MILLION	\$1.2 MILLION	\$0.7 MILLION	\$26 MILLION
	tart-up Capital	Governance     Body	New Curriculum     & Certificate	Seaweed Tissue     Analysis	• B2B & B2C Market Research	•Long-Term Green Energy	•Feasibility Studies
Co	oroader collateral definitions ap Financing	• Communications & Public Relations Plan/ Implementation	Programs at UAS, UAA, & UAF • Hands-on Training	<ul> <li>Product Development R&amp;D</li> <li>Applied Technologies</li> </ul>	<ul> <li>Development of Buyer's Guides &amp; Other Assets</li> <li>Marketing</li> </ul>	Plan •Collect Energy Data •Create Analysis & Recommendations	• Processing & Hatcheries Equipment Purchases
	echnical ssistance	•Regional Outreach Liaisons	• Oyster & Seaweed Training Manuals	Acceleration •Annual Conference •Carbon	Program Implementation	•"Best Practices" Guide	PSP Lab Equipment for ADEC Seed Supply,
			• Knowledge Exchange	Sequestration R&D			Site Selection, & Monitoring Program

THE AMC'S GOVERNANCE BODY WILL ALLOW TIME FOR CONVERSATIONS,

TRUST BUILDING AND APPROPRIATE PLANNING WITHIN UNDERSERVED

POPULATIONS AND COMMUNITIES TO ENSURE

THE EQUITABLE DISTRIBUTION OF THE BENEFITS OF MARICULTURE THROUGHOUT COASTAL ALASKA.





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Check for updates and join our mailing list: www.alaskamariculturecluster.org