# STATE OF ALASKA AQUACULTURE REPORT

**February 2024**

NOAA FISHERIES

NOAA Fisheries Alaska Region

Aquaculture Program

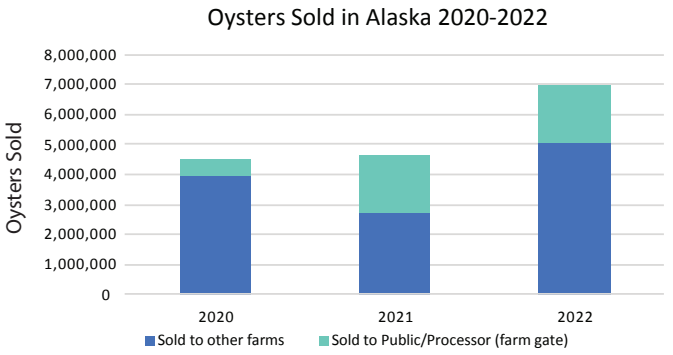

U.S. Department of Commerce | National Oceanic and Atmospheric Administration | National Marine Fisheries Service

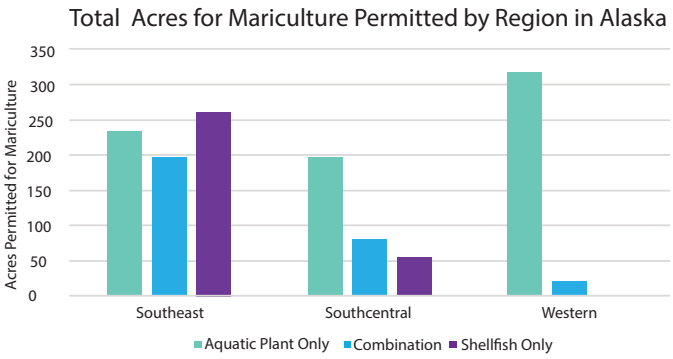
# AQUACULTURE IN ALASKA

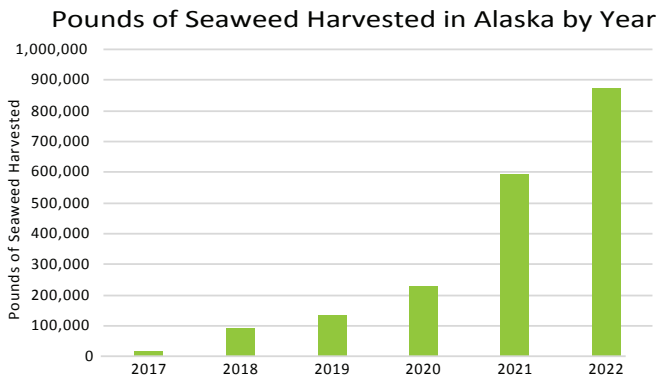
Sustainable aquaculture, also known as mariculture, is a nascent but rapidly developing industry in Alaska. Aquaculture production has grown throughout Alaska over the preceding decades, with a recent maximum of 1,915,831 oysters sold to the public in 2021 (Alaska Department of Fish and Game). The Alaska Department of Natural Resources has reported an increase in the number of applications submitted with a significant increasing trend each year, with the exception of 2021 (likely due to the pandemic). The average number of applications received increased from approximately 6 per year between 2014 and 2018, to approximately 14 applications per year between 2019 and 2023.

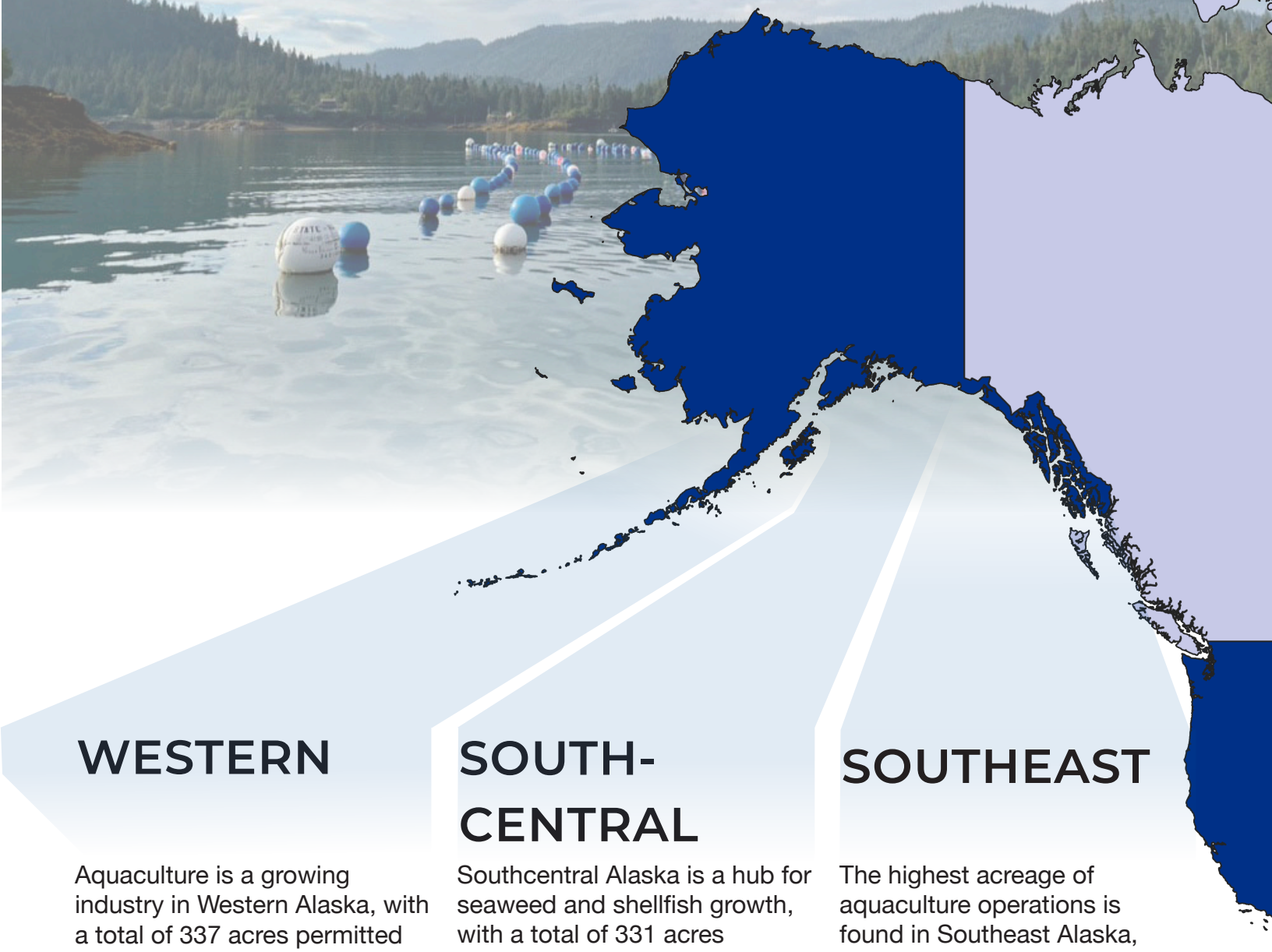
Opportunities for aquaculture development have continued to emerge, with the formation of the Alaska Mariculture Task Force in 2016, which established a goal to develop Alaskan mariculture into a $100 million industry by 2040. In 2022, the Alaska Mariculture Cluster secured a $49 million grant from the Economic Development Administration's Build Back Better Regional Challenge, and in 2023, Alaska was announced as the location for NOAA's next Aquaculture Opportunity Area (AOA) process.

In Alaska, the primary species grown for aquaculture include oysters, blue mussels, and sugar, ribbon and bull kelp. Forty two seaweed and invertebrate species have been permitted for aquaculture in Alaska. Finfish farming is illegal in Alaska state waters. Aquaculture is beneficial to local economies and communities, and is thought to often be environmentally friendly.



## WESTERN

Aquaculture is a growing industry in Western Alaska, with a total of 337 acres permitted for aquaculture in the region. Oysters and seaweed are grown in western Alaska, which accounts for 12 total permitted plots throughout the region, located from as far west as the Aleutian Islands and as far east as the island of Kodiak.

## SOUTH-CENTRAL

Southcentral Alaska is a hub for seaweed and shellfish growth, with a total of 331 acres permitted for aquaculture. 30 sites are currently permitted for aquaculture in this region, which spans from Cook Inlet to west of Yakutat.

## SOUTHEAST

The highest acreage of aquaculture operations is found in Southeast Alaska, with 690 total acres permitted in the region by late 2023. This acreage contains 40 individual sites dedicated to seaweed and shellfish aquaculture.

# SPOTLIGHTS

## NICK MANGINI

### KODIAK ISLAND SUSTAINABLE SEAWEED

I have been farming since 2017. Mariculture holds a unique and enormous potential for Alaska. With more coastline than the rest of the United States combined, Alaska is blessed with ample room to expand the industry in “safe” environments for this type of growth. With the lack of major industrial infrastructure and environmental disturbances caused by human interaction, Alaska provides the needed water to promote a natural growing environment for many of the promising species being derived from the mariculture industry. The protected waters in Alaska’s rugged outer coast are abundant, providing shelter in very nutrient rich areas.

## JEFF HETRICK

### MARICULTURE DIRECTOR AT THE ALUTIIQ PRIDE MARINE INSTITUTE, HATCHERY & RESEARCH VOICE

Alaska’s ultimate success with mariculture will be the result of ingenuity and stubbornness. We have everything in place to be successful, a favorable regulatory environment, public financial support and insatiable markets for clean sustainable seafoods. It has taken a long time but I think we’re almost there.

## BRENT REYNOLDS

### ALASKA DEPARTMENT OF NATURAL RESOURCES

The role of the Aquatic Farm Program is to adjudicate applications for proposed activities on State of Alaska tide and submerged lands, determine whether the project is consistent with all applicable statues, regulations, and area plans, seek agency and public input through agency review and public notice, and determine if the project is in the best interest of the State. The Aquatic Farm Program supports the current and previous administrations’ established goals to create a $100 million dollar mariculture industry by 2040.

## MICHELLE MORRIS

### ALASKA DEPARTMENT OF FISH AND GAME

I am the Statewide Permit Coordinator for ADF&G. Alaska certainly has the potential to grow the industry, but there are a lot of challenges. The size of Alaska creates costs and issues that might not be seen in other locations around the world. Despite these challenges we are seeing growth in aquaculture development in Alaska, and lots of great minds, from researchers to managers to industry, are working on overcoming these challenges.

# FUTURE DIRECTIONS FOR AQUACULTURE IN ALASKA

## ALASKA MARICULTURE ALLIANCE

BY JASON LESSARD, EXECUTIVE DIRECTOR

It's heartening to see a growing interest and support for mariculture both nationally and globally. It's particularly exciting, though, here in Alaska. Our pristine waters and ample coastline provide us with a tremendous amount of opportunity to support a robust and, most importantly, sustainable mariculture industry – one that will have long-term benefits for the state and transformational potential at the community level. Whether it's new economic opportunities for Alaskans in our coastal communities, the ability of Alaska to play a role in developing new industries like plastics alternatives, or the food security and food sovereignty it can help support, it's hard not to be excited about mariculture in Alaska. I believe that if we continue on this path of responsible, forward-thinking development, the proven combination of good resource stewardship and Alaskan resourcefulness is poised to do amazing things.

## BUILD BACK BETTER

In 2022, the Alaska Mariculture Cluster was awarded a $49 million grant for mariculture development from the Build Back Better Regional Challenge. Administered by Southeast Conference, the Alaska Mariculture Cluster is a comprehensive project spanning four regions across Alaska with a goal of creating a viable mariculture industry that can excel past the lifespan of the Build Back Better funding that ends in 2026. The seven component projects in the cluster create a holistic approach for building the industry, reducing the cost structure for farmers and processors, enhancing workforce development plans, attracting private sector investments, increasing demand via product development and marketing, and engaging a governance body with representation from around the state to ensure equitable growth.

## AQUACULTURE OPPORTUNITY AREAS

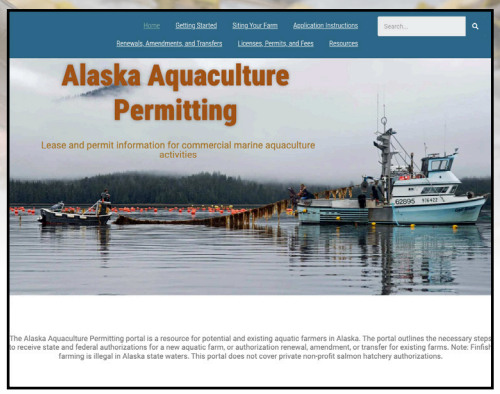
In June 2023, NOAA Fisheries, in tandem with the state of Alaska, announced a multi-year process to identify Aquaculture Opportunity Areas in Alaska state waters. Aquaculture Opportunity Areas (AOAs) are areas that have been evaluated through spatial analysis and National Environmental Policy Act (NEPA) review, and have been determined to be environmentally, socially, and economically appropriate to support multiple commercial aquaculture operations. The size and location for AOAs will be determined through spatial analysis, Indigenous Knowledge, and public engagement. In Alaska, this effort will occur within state waters, and will only consider invertebrate (e.g. shellfish, sea cucumber, etc.) and seaweed aquaculture. The identification of AOAs is a planning process bringing in the best available information to help new farmers and managers make informed decisions on where projects should occur. Any future aquaculture sited within AOAs will need to go through the state Aquatic Farm Application process. NOAA will host stakeholder workshops in 2024 as part of the AOA identification process.

To learn more about AOAs in Alaska, visit: https://www.fisheries.noaa.gov/alaska/aquaculture/identifying-aquaculture-opportunity-areas-alaska

# HOW TO GET STARTED

## ALASKA PERMITTING PORTAL

To learn more about permitting a new aquaculture site in Alaska state waters, visit the Alaska Aquaculture Permitting Portal (see the link in the QR code below). This online resource is a tool for both potential and existing aquaculture farmers. The portal provides resources and outlines the steps to receive state and federal authorizations for a new aquatic farm, or to receive authorizations for renewals, amendments, or a transfer for existing farms.




## FUNDING OPPORTUNITIES

There is a plethora of funding opportunities available to support aquaculture industry growth in Alaska, including opportunities for business support, research, educational workshops, and more. Numerous funding opportunities can be found on the NOAA Fisheries Alaska Aquaculture Program website, and on the Southeast Conference website.

## FOR MORE INFORMATION AND FUNDING SOURCES, PLEASE VISIT:

**Alaska Aquaculture Permitting Portal**

**AMA Funding Opportunities Page**

**NOAA Funding Opportunities Page**

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