



# Promoting Coastal Community Resilience through Alaska Fisheries Business Self-Assessments

## Overview

### Project Location

Kachemak Bay, Alaska

### Project Duration

July 2017 to August 2019

### Project Lead

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Research Reserve  
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### Project Type

Science Transfer – Promoting  
the use of science

### Project Partners

- Alaska Marine Conservation Council
- Alaska Sea Grant
- Kachemak Bay National Estuarine Research Reserve
- University of Alaska

### Project Webpage

[nerssciencecollaborative.org/project/Bentz17](http://nerssciencecollaborative.org/project/Bentz17)

Climate change is a pressing concern for Alaska's coastal communities and fisheries-related businesses facing disruptions to the abundance and reliability of fish populations. Local fisheries represent millions of dollars in economic activity and are important to the food security and cultural identity of Alaskans. In the face of climate impacts, strong and adaptable fisheries businesses are an essential component of community resilience. As decision-makers in south-central Alaska began climate adaptation planning, they recognized that fishermen were often under-engaged in resilience conversations and lacked resources to integrate climate risks into business strategic planning. To respond to this need, the Kachemak Bay National Estuarine Research Reserve, in partnership with Alaska Sea Grant, the University of Alaska, and the Alaska Marine Conservation Council, set out to provide business resilience tools and training and to strengthen a network of local fisheries businesses prepared for climate impacts.

The project convened a network of fisheries industry leaders, resource managers, business owners, non-profits, and resilience experts to collaboratively adapt a [Fisheries Resilience Index](#) business self-assessment developed by the Mississippi-Alabama Sea Grant Consortium for use in Alaska. In a series of resilience focus groups with diverse fisheries business sectors (commercial, charter, mariculture, and aquaculture), participants discussed challenges, solutions and the value of the self-assessment to identify how they could improve their capacity to respond to disasters, adjust seasonal activities, and undertake long-term planning. In Kachemak Bay, the project has increased the diversity of stakeholders engaged in community resilience efforts and demonstrated the applicability of business self-assessments for climate affected coastal ecosystems and economies.

## Project Approach

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The project team adapted and refined the Fisheries Resilience Index to be relevant to Alaska's small businesses. The team used expert input from the Alaska Marine Conservation Council and Alaska Sea Grant on the best available climate science and current and historical fisheries resilience evaluations. An Alaskan Young Fishing Fellow was engaged to better connect with the fishing community, and to provide a young fisherman with learning, leadership, and career-building opportunities. Focus groups with Kachemak Bay fisheries businesses were conducted to gain insight into perceptions of resilience and ensure the self-assessment met local business needs. Finally, the Kachemak Bay Reserve presented the project and products at local, state, and national venues and distributed final project materials to provide trainings for additional Alaskan coastal communities in partnership with Alaska Sea Grant and the Alaska Marine Conservation Council. These resources are now available for use across Alaska.

## Products

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- **Alaska Fisheries Resilience Index Tool:** The project team developed this [self-assessment tool](#) for the Alaska fisheries industries to help businesses assess their ability to respond to climate impacts.
- **Training and Facilitation Toolkit:** To support the use of the Alaska Fisheries Resilience Index, the team also created training and facilitation resources, including a [Focus Group Template](#) and a [Professional Training Kit](#).
- **Report:** The project team compiled overarching themes from conversations with fisheries businesses into a [Focus Group Results Summary](#). It includes best practices, lessons learned, and recommendations from businesses.
- **Outreach Tools:** The team created [fact sheets and presentations](#) that can be used to promote project engagement.

## Benefits

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- Fisheries industry leaders, fisheries managers, business owners, non-profits, and resilience experts in Alaska increased their awareness and understanding of climate change science and vulnerabilities.
- The Kachemak Bay fishing community expanded its capacity to prepare for climate change by integrating current and locally-relevant science and resources into business strategic planning to inform disaster preparedness, succession planning, and loan applications.
- Alaskan resilience experts have a strengthened network around coastal resilience and fisheries in a changing climate.
- Kachemak Bay Reserve adjusted monitoring and research priorities based on information from project participants. An annual "State of the Bay" report will be published every March with the express purpose of informing stakeholders of ecosystem trends and relevant indicators for fisheries.
- The Kachemak Bay Reserve grew its capacity to engage diverse sectors of the community on issues around climate impacts and hazards. Through extended interaction with focus groups, the reserve generated new ideas for citizen science projects with fishermen, oyster farmers, and ecotourism operators.

## What's Next

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- Engaging new partners to connect resources with additional Alaskan Fishing Communities through workshops and trainings.
- Following up with fishermen and collecting metrics of progress toward tangible business risk-reduction activities and awareness of resources as a result of using the Alaska Fisheries Resilience Index.
- Having ongoing conversations among partners on future strategies and ideas toward business and community resilience.

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### About the Science Collaborative

*The National Estuarine Research Reserve System's Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. The Science Collaborative is managed by the University of Michigan's Water Center through a cooperative agreement with the National Oceanic and Atmospheric Administration (NOAA). Funding for the research reserves and this program comes from NOAA. Learn more at [nerrsciencecollaborative.org](http://nerrsciencecollaborative.org) or [coast.noaa.gov/nerrs](http://coast.noaa.gov/nerrs).*