



Case Study: From Visioning Success to Tracking Progress

Alaska Resilience Workshops Result in Inclusion of Climate Adaptation in Comprehensive Plan

Overview

Regional leaders and community stakeholders worked with the Kachemak Bay National Estuarine Research Reserve (KB NERR) and project partners to develop a climate resilience workshop series. The workshops aimed to enhance the capacity of coastal communities on Alaska's Kenai Peninsula to adapt to and prepare for a changing climate.

A jointly developed vision of a desirable future and a set of climate scenarios served as the cornerstones of successful adaptation indicators and metrics (SAIMs) that were developed in the workshop series. In turn, the SAIMs were documented and linked to concrete adaptation strategies.

These strategies, which addressed existing challenges in a climate-sensitive and vision-consistent manner, were included in the Kenai Peninsula Borough's Comprehensive Plan Update.

The process of developing SAIMs has informed follow-on research projects, community engagement efforts, and plan implementation.



Clustered vision elements emerging from a visioning exercise at Kachemak Bay National Estuarine Research Reserve. Photo credit: Syverine Bentz

Background

The coastal communities on the Kenai Peninsula and within the Kachemak Bay National Estuarine Research Reserve (KB NERR) are already coping with a variety of challenges related to a changing environment. Particularly, communities that depend on coastal resources for their economic livelihood and cultural well-being are seeing dramatic impacts.



This case study was created to serve as a reference for individuals interested in indicators and metrics to help communities define and track progress on their climate adaptation goals. Additional background and resources are available on the website: www.ResilienceMetrics.org. This website was developed in partnership with the National Estuarine Research Reserve System with funding from NOAA.

Facilitation Tools and Job Aids

- Facilitation Tool: Art & Science Collaborative to Visualize Possible Futures
- Facilitation Tool: Visioning Adaptation Success
- Facilitation Tool: Game of Futures
- Facilitation Tool: Reciprocity Circle
- Job Aid: How to Conduct a Visioning Exercise
- Job Aid: Worksheet Climate Scenarios Game of Futures
- Job Aid: Common Principles of Good Governance
- Job Aid: Decision Criteria and Structured Decision-Making
- Job Aid: Questions to Ask About Good Decision-Making
- Job Aid: Qualities of Good Adaptation Actions

Resources

- Kachemak NERR Resilience Factsheet: https://resiliencemetrics.org/sites/default/files/SAIM%20workshop%20materials/Kachemak%20Bay/6_Handouts/KBNERR%20Climate%20Resilience%20Completed%20Fact%20Sheet.pdf
- Scenario Narratives: https://resiliencemetrics.org/sites/default/files/SAIM%20workshop%20materials/Kachemak%20Bay/6_Handouts/April%202017%20Materials/day%201/Session%203_Climate%20scenarios/Scenario%20Descriptions/Scenario%20Narratives_final.pdf
- Decision Criteria Worksheet: https://resiliencemetrics.org/sites/default/files/SAIM%20workshop%20materials/Kachemak%20Bay/6_Handouts/April%202017%20Materials/day%201/Session%204_%20Criteria/Decision%20Criteria_Worksheet.pdf
- Adaptation Actions Brainstorm (2016): https://resiliencemetrics.org/sites/default/files/SAIM%20workshop%20materials/Kachemak%20Bay/6_Handouts/April%202017%20Materials/day%201/Session%202_How%20to%20fix%20leak/Adaptation%20Measures%20From%20CACC%20Spring%202016.pdf

Outside of the high-arctic, the impacts of recent climate change in Alaska are best documented on the Kenai Peninsula. However, the documentation efforts (research and monitoring) had not been used to their full potential to help develop recommendations or a long-term strategy for adaptation.

Drawing upon experience with scenario planning to help local communities prepare for climate change in the Tijuana River Valley (Southern California), KB NERR, with support from the Tijuana River NERR, used the best available science to inform dialogue among local decision-makers on the Kenai Peninsula about how climate change may impact communities. Through these conversations, regional leaders and community stakeholders collaboratively developed plausible future planning scenarios of possible environmental responses to a changing climate.

This scenario work also built on previous regional efforts aimed at effectively preserving ecosystem services in the face of climate change by strengthening social, economic, and ecological resiliency to climate-related risks.

The Successful Adaptation Indicators and Metrics work benefited greatly from this important foundation. KB NERR hosted three multi-day workshops for a diverse group of stakeholders from Kachemak Bay and the Kenai Peninsula to help build adaptive capacity, formulate adaptation objectives and pathways, and link adaptation actions to ongoing planning processes to increase the likelihood of implementation.

Outcomes

The workshop series provided training to community members on the basics of adaptation. Participants began by creating a shared vision of a desirable future. Facilitators assisted community members in linking potential threats and response strategies to their newly formulated vision. Workshop participants used the challenges they are already experiencing as starting points for their adaptation strategies, despite the uncertain path of future climate change. They also brainstormed ways to track progress and success for each of the adaptation strategies, which highlighted the relevance and usefulness of developing indicators and metrics.

One notable lesson came from the first two workshops (training in adaptation fundamentals, and working on a shared desirable future, exploring climate scenarios and developing adaptation pathways): The link between thinking about adaptation and doing adaptation was still tenuous. The final workshop therefore focused deliberately on existing climate-related challenges and how they could be addressed in ways that are sensitive to possible climate futures and consistent with achieving the shared vision.

Once several concrete strategies were developed, workshop participants built skills and capacity to identify and prioritize strategy-related indicators and metrics to track progress towards a more resilient future. Because diverse decision-makers, including elected and appointed officials and government planning staff, participated in the workshop series, strategies were incorporated into a regional Comprehensive Plan. This outcome illustrates that the Borough has acknowledged it has a large role to play in planning for and responding to climate change-related impacts.

- Adaptation Actions Brainstorm 1 (Fall 2017): https://resiliencemetrics.org/sites/default/files/SAIM%20workshop%20materials/Kachemak%20Bay/6_Handouts/April%202017%20Materials/day%201/Session%202_How%20to%20fix%20leak/Adaptation%20Measures%20From%20Fall%202017.docx

Links

- Art and Science Collaborative: <http://www.nerrssciencecollaborative.org/resource/art-science-collaborative-alaskan-kids-know-climate-change>
- Kenai Peninsula Comprehensive Plan Update: https://www.kpb.us/images/KPB/PLN/PlansReports/Comp_Plan/2019_KPB_Comprehensive_Plan.pdf

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A final lesson from the series of projects and workshops is this: one intervention is not enough. Instead, adaptation consists of an ongoing series of efforts, in which each can build on the other and partnerships can be leveraged. For example, the scenario planning effort was leveraged in additional partnerships:

NOAA's Office for Coastal Management (OCM) partnered with KB NERR to host their Climate Adaptation for Coastal Communities (CACC) training, which laid the foundation for adaptive capacity-building efforts;

The scenario planning project served as a catalyst to begin addressing climate change on the Kenai Peninsula; it attracted broad based local support and aligned with additional resources provided by NOAA OCM;

Then KB NERR developed a deep and meaningful association with the NERRS Science Collaborative's Successful Adaptation Indicators and Metrics (SAIM) project to advance adaptation planning on the Peninsula in concrete and practice-relevant ways; and

KB NERR engaged with additional stakeholders through the Kenai Lands Forum and the Art and Science Collaborative based on needs identified at the OCM training workshop for further collaboration between workshops.

The work in the region since then has continued, with additional research projects, planning efforts and implementation of plans.