

Draft: 022109

Overarching Option #1: Establish an Alaska Center for Knowledge Sharing on Climate Change and Arctic Issues

DESCRIPTION

This option was identified by the Adaptation Advisory Group (AAG) at their February 5th meeting as a recommendation of interest across multiple Technical Work Groups. The Natural Systems TWG and the Economic Activities TWG, offered similar proposals and have been tasked with integrating their ideas to formulate an option for AAG consideration at their April 3rd meeting. A few members of the NS and EA TWGs have agreed to work on this option. Members of other TWGs and institutions with an interest and expertise are welcome to participate.

SUMMARY OF TWG RECOMMENDATIONS

EA TWG: Establish an online Arctic Issues Center that allows interested participants to network, coordinate, communicate and share information on the Arctic Ocean and that provides a central data archive for information related to Arctic issues and policy.

NS TWG: The State of Alaska will establish and fund an Alaska Center for Climate-Change that will provide a centralized source of information (e.g., climate projections, accurate mapping), adaptation tools, and technical assistance for communities, state agencies, NGOs, and businesses to enhance their capacity to plan for and adapt to climate change.

DRAFT OPTION OUTLINE BASED ON PREVIOUS WORK BY THE NS AND EA TWGS

Overarching Option #1: Establish a Center for Knowledge Sharing on Climate Change and Arctic Issues

Option Description

Recommendation

A Center (online, virtual) that allows interested participants to network, coordinate, communicate and share information on climate change and Arctic Ocean issues will be established. This Center will provide a data archive of existing information and research on these topics. This archive will be managed as a portal that links information across various organizations, supporting improved access to resources such as climate projections, maps of climate and Arctic conditions and changes, research on climate change effects, policies, forums, workshops, adaptation tools, technical assistance opportunities, etc. for communities, state agencies, NGOs, and businesses to enhance their capacity to plan for and adapt to climate change and to coordinate their activities relative to Arctic issues.

Issue

Numerous activities are underway to collect data relevant to climate change in Alaska and on the Arctic, within state agencies, among Alaskan research institutes, at the federal level, and in international organizations. There is limited knowledge about the results that these diverse activities generate and lack of means to use the information for decision-making for coordinating responses and adapting to climate change. Additionally, participation in various forums is not always leveraged or coordinated. Results and findings from climate change data collection and research, Arctic data collection and research, and decision and results from forums related to both of these issues are challenging to access and use. Most Alaskan communities and businesses have very little understanding of the recent and projected environmental and ecological changes they are experiencing due to climate change and approaches they could take to adapt. Further, most state and federal agencies responsible for planning and managing both natural resources and built/human capital are not sufficiently informed about climate-change research and predictions to make good decisions regarding strategies to adapt to climate change.

Overview

Coordination and Collaboration: Many agencies, universities and individuals are currently conducting research or monitoring activities relevant to climate change and its impacts in Alaska. A number of coordinating forums currently exist whose mission is to share current and planned projects relating to climate change, including the Alaska Marine Ecosystem Forum, the State-Federal Climate Change Roundtable, the Alaska Ocean Observing System, and the Governor's Sub-Cabinet on Climate Change. This option recommends that the State of Alaska review these initiatives and consider how to better coordinate state, local, federal, university, and private activities to maximize the benefits of these efforts and minimize duplication. Alaska currently lacks a comprehensive inventory of the various efforts collecting or managing data. This option proposes that an inventory be conducted and an approach to coordinating and ensuring access to these information resources be developed. This will include establishment of an online resource that allows interested participants to network, coordinate, communicate, and share information on climate change and Arctic issues such as resource management, boundaries, shipping, navigation and health. Participants in this effort would work to better inform Alaska on climate conditions; research activities on climate change and the Arctic; and state, national and international forums on the Arctic. This will help Alaskan residents, as well as U.S. delegations to Arctic forums.

Data Management: Many of the entities described above are currently conducting research or monitoring activities that result in data relevant to climate change and its impacts in Alaska. However, many Alaskans lack means to access observations, data, and information. There is no central web-based “gateway” to easily access Alaska/Arctic projects, data, and information. There are some initiatives currently underway such as the Alaska Marine Information System for ocean and coastal information, sponsored by the Alaska Ocean Observing System, the North Pacific Research Board, and the Geographic Information Network of Alaska. This option recommends that the primary state and federal data providers develop a consensus process and system for archiving and accessing climate change and Arctic data in Alaska that is integrated and interoperable with other data across the nation and globe.

Need

The option helps to organize existing disparate resources among various entities and agencies to facilitate access to data and information to better support planning to adapt to climate change and set direction for future use of Arctic resources.

Option Design

Structure

Central to this option will be the establishment of a focal point for collecting and disseminating information relative to the various state, national, and international entities and forums on climate change and Arctic issues. It is expected this focal point will likely be an on-line portal to facilitate this knowledge sharing. The organization responsible for the portal will also maintain a directory of contacts and events that is easily accessible by those wishing to make contacts for inquiries or knowledge sharing. This focal point will most likely be a state-university funded site within a university. This entity will have several responsibilities such as the following:

1. Develop a comprehensive inventory of entities collecting data relevant to climate change and Arctic issues in Alaska. Establish means to evolve the inventory to ensure currency and the ability to integrate new efforts.
2. Provide access to information about climate change and Arctic issues through existing entities such as the Scenarios Network for Alaska Planning (SNAP), the Alaska Ocean Observing System (AOOS), the Geographic Information Network of Alaska (GINA), the Alaska Center for Climate Analysis and Policy (ACCAP). These units collect and generate data that can help answer questions about climate change and provide information and maps of historical, current, and projected future conditions.
3. Provide access to research papers and references for better understanding impacts of and potential responses to climate change.
4. Provide access to an inventory of successful Alaska-relevant climate-change adaptation programs as well as contact information for the communities, agencies, NGOs, and businesses that developed these. This will enable stakeholder groups to learn quickly from others that have developed successful climate-change adaptation plans.
5. Provide access to data about Arctic forums and individuals participating in them, results of discussions, and decisions. This will aid participants in understanding and tracking Alaska’s views and positions on Arctic concerns.

Targets/Goals

A primary goal of the option is to ensure that investments in Alaska in data and information relative to climate change and Arctic issues be leveraged to ensure they serve the communities, businesses, and people of Alaska. This includes understanding existing efforts and providing access to the data they produce.

Targets are as follows:

- Secure funding to conduct a comprehensive inventory of existing efforts, including primary points of contact and develop a plan for an approach to coordinate access to the data they produce.
- Develop a prototype of a portal/center that would support improved access to the data identified above
- Establish a portal/center for accessing climate change and Arctic data and research
- Use the portal to provide technical assistance and strategies that improve the ability to respond to a changing climate and address Arctic issues
- Establish clear measures of performance (e.g., number of users, number of contributors, relevance of information) for the portal to ensure on-going adaptation to potentially changing needs

Timing

2009: identify funding for initiating this effort.

2010: (after a competitive process), identify an individual or organization to develop the plan for the portal/center and launch the planning process, resulting in an inventory of current activities and initial and long-term approaches to coordinate efforts. Begin implementation of the portal.

2011: provide online access to data and information

2012: provide technical assistance and support for addressing climate change and Arctic issues

Parties Involved (in implementation of this option)

Representatives of the various centers at the University of Alaska, representatives from selected state agencies who are knowledgeable about agency needs and expertise related to climate change, federal agency representatives with responsibilities for collecting data relevant to climate change and Arctic issues, private sector representatives addressing climate change and Arctic issues, community representatives with knowledge about community needs relative to climate change, NGOs.

Evaluation

Metrics could be established around effectiveness and utilization of the network; routine user surveys could be conducted.

Research and Data Needs

This option is for a clearinghouse of information and knowledge sharing, so no additional research is anticipated. It is expected that this climate change evaluation has generated enough participation to result in the initial list of network participants.

Implementation Mechanisms

Approval by Subcabinet?

Funding?

Legislation?

Outgrowth of the State Climate Change Immediate Action Working Group?

Integration of existing UofA “centers?”

Related Policies/Programs and Resources

Related Policies and Programs

This program builds on and integrates the efforts of several entities that address climate change: State Climate Change Immediate Action Working Group and the University SNAP, AOOS, GINA, and ACCAP programs.

Available Resources

Each of these entities already has some state funding in place (direct state funding to CCIAWG and university funding to SNAP, AOOS, GINA, and ACCAP). There is additional federal funding provided by NOAA to AOOS and ACCAP. These funding mechanisms have enabled these entities to develop substantial capacity and expertise but not at a scale or level of coordination sufficient to implement the ACCC.

Feasibility

Feasibility

This program could be implemented immediately, perhaps using money from the federal stimulus package that is allocated to Alaska, because all the pieces are in place and have the technical expertise to conduct their part of the effort. The largest unresolved issue is how to formalize the State-University and within University partnership in a way that makes it responsive to state needs but insulates it from short-term political crises and shifts in priorities; it may well be logical to include federal (e.g., NOAA) and NGO partners as well and to have representation from stakeholder groups (e.g., communities and businesses) or that it be a public-private partnership arrangement. Ensuring participation from those that work on Arctic issues could be a challenge.

Constraints

TBD

Adaptation Benefits and Costs

Benefits

This option would involve relevant stakeholders in discussions on data relevant to climate change and Arctic issues, and could result in more fruitful and coordinated discussions occurring at the community, state, regional, and federal levels.

Costs

TBD

TWG Approval and Deliberations

This option was identified by both the Natural Systems and Economic Activities TWGs. It was refined by representatives from each of those TWGs, as well as.....

To be completed.