



Alaska Adaptation Advisory Group

Meeting 1 Summary

Anchorage, Alaska

May 16, 2008

1. Attendees

A. Adaptation Advisory Group Members: Elaine Abraham, Bruce Botelho, Michael Cerne, Terry Chapin, Patricia Cochran, Billy Connor, Jeff Demain, Bryce Edgmon, Stan Foo, Laura Furgione, Steve Ivanoff, Pete Larsen, Stephanie Madsen, Denise Michels, Tony Nakazawa, Bob Pawlowski, Buck Sharpton, Jeff Short, Orson Smith, Bill Streever, Brad Thomas, Fran Ulmer, and Steve Weaver

B. Attendees – Public: Dave Atkinson, Aubrey Boure, Tim Bradner, Elden Johnson, Andy Jones, Tara Jollie, Meg King, Margaret Manosoff, Becky Schaffer, Chip Treinan, Deborah Williams

C. Attendees – State Participants: Tim Benindtendi, Mike Black, Alice Edwards, Clint Farr, Larry Hartig, Susan McNeil, Kolena Momberger, Jackie Poston

D. Attendees – Consultants: Brian Rodgers, Ken Colburn, Gloria Flora, Jason Vogel

2. Purpose and Goals: Overview of Administrative Order 238 and Structure of Climate Change Sub-Cabinet's Efforts in Alaska

Larry Hartig, DEC Commissioner

Commissioner Hartig introduced the goals of the climate change planning process. He stated several huge issues face Alaska: climate change; energy costs; natural gas pipelines; resource development in general; and sustainability especially of rural communities. Issues will be difficult to separate since they are all interrelated. He asked the advisors to capture all thoughts but to stay focused on climate change.

- No debate on whether climate change is occurring
- Relatively small changes in atmosphere have significant effect on the environment.
- Warming will have effects on habitats
 - Less sea ice
 - More intense forest fires, more insects
 - Change in distribution of species
 - Appearance of new species.
- Our world shares one atmosphere – there's no opting out
- We can build strategy from ground up, without unintended consequences
- We all must take responsibility
- The inventory shows the effects Alaska can have are unique and shows opportunities

- Emissions reductions may not be difficult and there could be many ancillary benefits
- If we fail to act there could be repercussions in the market
- State lead-by-example will be an important part of state government leadership
- Governor wants info and analysis of cap-and-trade, how it affects residents of Alaska

Administrative Order 238 established the Alaska Climate Change Sub-Cabinet comprised of five cabinet members - Departments of Commerce, Community and Economic Development; Environmental Conservation; Natural Resources; Fish and Game; and Transportation. The Sub-Cabinet is supported by the University of Alaska (research and modeling) Buck Sharpton, and John Katz, liaison for the Governor on federal matters. This order applies to all sources and all opportunities.

Immediate Action Work Group identified most at-risk communities and brought together reps from each village. Recommendations were forwarded; legislators put up 1/3 of money needed (\$10.6M) to address those needs, the rest may come from federal government.

The Commissioner stated the State has no intention to steer or control this process. He likely will attend all meetings, use him as a resource. Recommendations will be taken very seriously; the Governor will assess and carry them forward to the legislature.

Western Climate Initiative (WCI) (Alaska is observer): participants listen to each other, each playing to their own strength and contributing what they can. Since WCI is focused on cap-and-trade, the Governor doesn't think Alaska was prepared to join yet.

3. Briefing on Current Adaptation Efforts and Needs in Alaska

A. Alaska Climate Impacts Assessment Commission Report

Tim Benintendi, Alaska Climate Impacts Assessment Commission Report

The Legislative Resolve 49 from 2006 created the Climate Impact Assessment Commission, and issued a report issued March 2008. Some major policy issue recommendations did not achieve unanimity, see link: http://www.housemajority.org/coms/cli/cli_final_report_20080301.pdf. Most of the many recommendations focused on research. They support a permanent commission.

B. Report of the Sub-Cabinet's Immediate Action Workgroup

Mike Black, Report of the Sub-Cabinet's Immediate Action Workgroup

The Immediate Action Workgroup was charged with discovering actions that needed to be taken in the next 12 to 18 months. See link:

<http://www.climatechange.alaska.gov/iaw.htm>. This report is available on the DEC climate website <http://www.climatechange.alaska.gov/>.

Funding stream limitations were discussed for example, waiting for damage to occur before funds are released or proactive remedies can be taken. Effective Response and Adaptation strategies must be supported by a comprehensive statewide data collection and evaluation system.

Six communities looked at closely:

Kivalina – shoreline erosion threatened waste storage containment area, and fuel tanks: new seawalls (built by COE) destroyed in storm 2006, \$3.3M funded through DOT.

Koyukuk – on Yukon River, seasonal flooding, erosion; COE helping – state not involved, problem ensuring sustainable flooding, evacuation route will be cut off during flooding. Airport is in danger. Planning necessary before funding needs known; \$5.3M projected.

Newtok – Baird Inlet, severe damage by erosion and storm surge flooding because sea ice was away from shore. Saturated soil already, sea walls not possible, no barge traffic possible, cannot offload fuel, about to lose drinking water. Melting permafrost is causing subsidence. Relocation in progress, surface water is becoming saline and water is entering homes. Gas now costs \$11/gallon because all must be flown in. \$3.3 M funded.

Shaktolik – During floods of 2004 and 2005, village becomes an island, no access route out because the airport is littered with log debris. In 1935 the village was located 8 miles away, but the people were forced to move to shore; in 60's villagers moved to their current site. Planning effort \$3.3M for planning.

Shishmaref – Currently shoreline work is being done. Fall storms particularly bad with on sea ice causing shoreline erosion; sea walls are not helping, some houses lost.

Coordination with COE planning; projected \$8.5M.

Unalakleet – Gabion revetment installed by NRCS, Yukon logs beat the wall; a 1500 foot rock revetment is recommended by COE, \$12.8M. Log inundation, needs to raise access road by 2' (COE). Recommended \$5.5 MM (35% of \$13.5 MM)

Relocation in the past has been to move the community. Each community needs to weigh choices. Different options are to provide safe facilities nearby, add an emergency shelter, move to another area; a step by step approach. How does the state decide to move a post office, school, or airport?

Funding and Action Recommended:

- a. Develop suite of emergency action plans and training (funded);
- b. Each of six communities that needed relocation plan, to be put together by local, state, federal effort (funded in part);
- c. All six communities need more coordination with meaningful participation by the State. Alaska was told 35% co-funding of COE projects would attract more federal funding;
- d. DOT requires \$600M to participate in design and implementation of projects in conjunction with COE;
- e. Insufficient data – gaps need to be filled.

Populations are not declining in these villages, which is different than other rural areas. Non-subsidized loans allow individual choice to move to a higher elevation, but these locations have no access to services like water and sewer. Erosion control projects are more a rear guard action to buy time for people locate to a safer location.

4. Framework of Climate Impacts in Alaska

Jason Vogel, Stratus Consulting / National Commission on Energy Policy

Public Infrastructure

- Ports and harbors
- Railroads
- Design for future infrastructure and retrofits
- Private homes & buildings
- Commercial facilities

Health & Culture

- WQ and Health addressed in this group should interface with focus on Systems addressed under Infrastructure
- Water Supply includes Water Quality, delivery systems and availability
- Consider impacts from Energy Supply here too
- Drought, Fire and Smoke
- Food Security
- Sustainability and self-reliance
- Refer to Subsistence as a Way of Life
- Meteorological change/patterns
- Uncertainty about the future cause of emotional stress
- Emergency Response Needs

Natural Systems

- Hydrology
- Ocean acidification and adaptation issues
- Discussion on Acidification (followed up by email with scientific details on subject)

Other Economic Activities

- Energy Supply & Demand
- Construction
- Insurance
- Air transport
- International Boundaries
- Freight movement into and within state
- Cargo & logistics
- Banking
- Seismicity/Ash/Tsunamis
- Alternative Energy

Identify and track data requirements, and develop assumptions (Email follow up to this re: time horizon and underlying scientific assumptions).

5. Overview of the Alaska Climate Change Adaptation Advisory Group Planning Process *Brian Rogers, Acting Chancellor, UAF, and Ken Colburn, Climate Change Strategies*

They stressed an open process; agendas, summaries, presentations and other materials are posted on the web. This process is non-binding, flexible, informal, and consensus-driven.

An Impacts Analysis has been prepared (reviewed above), now identify potential policy options by sector and ensure they complement any policies and programs already place, or

proposed, in Alaska. Stakeholders for advisory and technical work groups were identified based on diversity and depth of expertise.

The goal for this stepwise planning process is to develop policy recommendations that are comprehensive. A catalog of states' actions will include key Alaska actions to adapt to climate change to reduce future impacts. This catalog is a starting place to identify the advisory group's priorities.

Each advisory group will have technical work groups (TWG) analyze information before making recommendations to the advisory groups for their consideration. Decision criteria and examples of adaptation policy recommendations were listed. TWGs for the Adaptation Advisory Group (AAG) are: Public Infrastructure; Health and Culture; Natural Systems; and Economic Activities.

The TWG's will recommend +/- 40 draft options for further development. Advisory groups will have six meetings; a seventh if needed. Between these meetings TWGs will screen, prioritize and propose initial policy options to include goals, timing, coverage, parties and implementation mechanisms. After all meetings conclude, the consultants will write a final report to present to the Climate Change Sub-Cabinet.

6. Next Steps for the AAG and its TWGs

The next steps for the advisory and technical groups are to refine Impacts Analysis for Alaska and to develop catalogs of potential state actions, by sector. AAG members were asked to review the catalog of potential state actions, to review Alaska's Impacts Analysis to prepare for discussion about priority policy option for analysis.

7. Discussion

Possible Policy Levers/Tools to Consider

- Local government and unorganized boroughs
- Restructuring government

8. Key Meeting Dates

May 16, 2008 (1st Meeting): Launch Process; Review Inventory - Anchorage

July 16, 2008 (2nd Meeting): Review, Expand Catalog of Potential Policy Options - Fairbanks

September 23, 2008 (3rd Meeting): Approve Catalog of Policy Options (TWGs will recommend slate of priority policy options for AAG approval)

November 7, 2008 (4th Meeting): Approve Priority Policy Options (recommended by TWGs)

February 6, 2009 (5th Meeting): Approve Straw Proposals as prepared by TWG's

March 5, 2009 (tent.) (6th Meeting): Approve Analyses of Recommended Options for Final Report.

Possible 7th Meeting prior to Report Submission.