Welcome, Introductions & Objectives for the Day

*Brian Rogers, Co-Facilitator, Interim Chancellor, University of Alaska Fairbanks*

**Introductory Remarks**

*Larry Hartig, Chair, Governor’s Sub-Cabinet on Climate Change Commissioner and Director, Alaska Department of Environmental Conservation (ADEC)*

Discussed legislative issues related to adaptation. Specifically, the draft Waxman-Markey bill contains a section on adaptation that mirrors a lot of what Alaska is doing. If there is a national bill on adaptation Alaska is well-positioned to have a voice and quickly engage with other agencies. Another important issue is the Omnibus bill—in which Section 117 was deleted. This section has provided a funding mechanism for the Corps of Engineers to fund erosion projects in Alaska (more rapidly than the usual 12- to 29-year process). This time frame is longer than many villages have to address significant erosion concerns. AK will be working with tribal and community leaders to try to have Section 117 reinstated, but will also look at other options as climate change legislation goes forward.

**Review of Schedule and Next Steps**

*Fran Sussman (ICF International) Co-Facilitator and Jackie Poston (ADEC)*

**Immediate Action Workgroup Update**
Michael Black, Department of Commerce, Community, and Economic Development

Presented the progress of the Immediate Action Workgroup (IAWG), and the four options recommended by the group. Described how the ability of the IAWG to make progress depended on the knowledge of the people involved in the group regarding their agencies and how to make events happen.

Review and Approve Technical Working Group (TWG) Options: Public Infrastructure

Barbara Sheinberg (Sheinberg Associates), Facilitator

The Facilitator noted that there are similarities between what the PI TWG did and the IAWG charge, however PI is thinking more in terms of longer term actions for the state. She then presented the three “options” developed by the PI TWG.

PI-1: Create a Statewide System for Key Data Collection, Analysis, Monitoring, and Access.

One member pointed out that climate change will affect all communities, large and small in AK. The degree of collaboration and how it works will depend on capacity of individual communities. So it is important to acknowledge that some communities have different capacity—whether a large or small community. The response was that the analysis is scalable. If these assessments are community based, then local communities can make the decisions.

Another member asked if the TWG was aware of groups that are already doing some of these activities, and the TWG responded that they are. There was additional discussion of the need to have an agreement among all agencies operating in a particular region on related issues. It was pointed out that there is overlap between the IAWG, PI, and RN groups, as well as with the work in identifying arctic civil infrastructure needs being conducted by the US COE Cold Regions Research and Engineering Laboratory.

There was a discussion of data needs—which include both public infrastructure conditions and environmental conditions. The PI TWG’s identifiable needs related to the condition of existing infrastructure.

PI-2: Promote “No Regrets” improvements

Several members held a discussion of the name, “No regrets” and whether it was misleading, since some of the paths that would be followed might actually result in regrets, because there is no way to know in advance what the best path is. It was pointed out that the purpose of this option was to develop a process for addressing infrastructure issues, rather than focusing on fixing specific problems with infrastructure.

A member of the IAWG pointed out that that group looked at how structures could be adjustable, adaptable – whether they could be easily moved, or cheap enough that don’t mind losing them, or built so that adapt to changing conditions.

PI-3: Build to Last: Build Resiliency into Alaska’s Public Infrastructure

Discussion of this option covered a few points. First, PI TWG pointed out that the option is about alignment and collaboration. The TWG discussions haven’t gone into the details of how that collaboration would occur. It is a “what” recommendation—with the “how” left up to the AAG and Subcabinet.
Second, the discussion moved onto issues of data and whether a new agency is needed. On the data issue, the PI TWG is looking at the issue that there needs to be better integration of data and how it is used by local people, engineers, decision makers. Some on the group felt a new agency was appropriate—most felt that something like the IAWG, CC exec roundtable, or the Denali commission—was a model. There was discussion about the form of the entity, and the immediate need for a lead entity to integrate efforts. Fundamentally, the TWG did not think they should make a recommendation for a new agency. The discussion of the AAG supported the idea that the issue of “what form” the agency should be was an issue for the Subcabinet.

**Summary: Was there any disagreement with the three recommended options?**

The discussion at this point came back to the issue of data. One member observed that three types of data are needed: human health, natural systems, and public infrastructure data and engineering data. Everyone needs all these types of data—it is a cross-cutting issue and interconnected. These data need to be in one location.

Some members were still troubled about the “no regrets” concept, pointing out that, in the real world, there will be regrets, there will be budgetary constraints, there will be risks.

Recommendation: The TWG should go back and work on the PI-2 concept, coming up with a different name. The goal will be to reconcile this issue of “no regrets” with the idea that we will need to experiment and make decisions, and may make mistakes. So “no regrets” is not the same as “no risk.”

No objections to PI-1 and PI-3.

**Review and Approve Priority Options from Technical Working Group (TWG): Health and Culture**

*Jason Vogel (Stratus Consulting), Facilitator*

**HC-1. Establish an Office of CC Coordination**

One member observed that HC-1 is very much related to IAWG policy recommendation #2 and PI option, and there needs to be coordination. The issue in HC-1 is that there needs to be a way to continue to address impacts on these communities. In addition, the HC option is not limited to state agencies, but is very broad, and so can bring in both state and federal organizations.

It was suggested that the TWG reword the option to reflect: challenges to “at risk” communities. In addition, it should be changed to “streamline the process for NEPA compliance” or other rewording.

**HC-2: Disease Surveillance And Control**

No discussion.

**HC-3: Health Impacts Evaluation Initiative**

One member asked whether there are examples of the kinds of health impacts that happen on a rapid basis that we can point to. The answer was that they are used in the US Canada, and there should be examples of rapid assessments.
HC-4. Sanitation And Solid Waste Management

One member observed that funding of water and sewer systems has dropped in recent years. So to say that this could be performed with existing resources is probably optimistic. By 2016, federal funding for these types of projects will be gone in AK.

A TWG member explained that, in this and the other three options, we’re looking from the bottom up. We’re looking at effects in ecosystems, because those systems impact human systems. Ultimately we’re looking at being able to sustain a traditional and subsistence way of living, as well as reduce toxic and metal exposure; so the focus is broader than looking only at human impacts.

Option 5. Archaeological And Cemetery Sites

One member observed that there is a need to make an assessment and highlight the issue of how we respond societally—we may create new risks to archaeological cemeteries and sites. Another member said that there are those who will oppose any mandatory property tax exemption on cemeteries. Make it optional—don’t need to eliminate from the option—just make it optional for local governments to offer (or eliminate the language from the proposal).

Another member observed that whatever studies are done—examining sites for erosion, etc.—need to be done expeditiously so they don’t slow down the process. They should also be done without taking a lot of new resources. A TWG member observed that this option is oriented towards making sure that whatever is done respects traditions.

Summary: Was there any disagreement with the three recommended options?

Will hold HC-1 until discuss cross cutting discussion in the afternoon.

One member observed that HC-2 is too prescriptive in terms of how the option is done, and number of new FTEs. In fact there are other ways that this could be done. The fear is that, if the option is linked to a very specific recommendation, and—for example, the Governor says “no new hires”—then this option is linked to that and goes out. The focus should be on “what” the policy is and less emphasis on “how”.

One member observed that a general theme should include a need to take advantage of traditional knowledge.

One member asked whether there will be a drafting committee at the end of the process to put the various options on a common plain. Specifically, how much detail should be in the options for the common report?

With regard to subsistence, the observation was made that the TWG should not minimize the importance of subsistence, but also should not try to solve all the subsistence issues out there through climate change work—but should focus on climate change issues. Various federal and other state processes and legislation are out there. We can be sending messages out there that your food may not be healthy. So subsistence is a large part of the discussion, but don’t suggest things that go outside the scope of workgroup, because that’s when you get into more political issues.
The meeting facilitator summarized the discussion: Addressing subsistence more clearly is a follow-up item. AG members should come back with specific instructions or language suggestions if they have them.

Review And Approve Priority Options Descriptions: Common Themes

Nancy Tosta (Ross and Associates), Facilitator

The facilitator described the task of this work group as how to coordinate not only within the AAG but also across the AAG and MAG. She identified three common themes:

- Data—how made accessible, gathered, integrated etc.
- Community assistance—resources for communities, data analysis, funding, expertise, etc.
- Policy & programs—commonality around programs and policies addressed.

One member observed that this discussion segues into the level of detail that we present to the Subcabinet. How far do we go in filling out this chart? There was a bit of discussion about how to complete the charts, what coordination functions are needed, how to work within state priorities. Different commissions or agencies can serve different functions. There was discussion of the Governor’s Office, the Denali Commission, the Executive Roundtable, and the roles they could play.

The meeting facilitator summarized the discussion:

1. there’s a need for coordination among state agencies
2. one to coordinate with tribal entities
3. knowledge center—another entity (undefined)

It was pointed out that a connection is needed to local, tribal organizations—which have a lot of information that needs to be gathered as well.

One member pointed out that, ultimately, you want all the agencies involved addressing and acknowledging their roles in all of this. It could be a climate change coordinator, or simply that all agencies acknowledge that they have a climate change-related function. The member also pointed out that this option has grown from technical data to information to—now—knowledge, and so has become a much larger project than just getting data. The presenter answered that this option is actually very lean, just a few people.

A member pointed out that the coordination can be very different if there is a new agency, or a collaborative committee. How much detail should the AAG be developing? Ideally, an idea should go to the Subcabinet, get feedback, and then the AAG does more work. One member proposed that the recommendation should be that it is important to have the coordination function across state agencies—but not be specific about what it should be—leave some of that to the Subcabinet.

A member pointed out that, regarding the organization chart, it is important that list tribes explicitly on the chart and acknowledge that there is a collaborative role.

A member asked where outreach and adult education are on the chart, because they are important tactically for the longer term. Answer was that they are not listed specifically, but implicit in it. Another member pointed out that education will be a challenging issue. Public outreach is one part of it, and perhaps higher priority than K-12.
A member pointed out that option 2 could be problematic; information takes too long to download.

The meeting facilitator summarized the discussion: both groups have had this issue of intergovernmental and intragovernmental coordination. Try to pull together so don’t have competing visions, so that the Subcabinet doesn’t have to pull together pieces of this and that. Idea is to coordinate—although not entirely possible since MAG has many of its own unique issues.

**Review and Approve Priority Options Descriptions by Technical Working Group (TWG): Economic Activities TWG**

*Nancy Tosta, Facilitator*

**EA-1. Develop data**

No discussion.

**EA-2. Use Data To Develop And Evaluate Economic Scenarios For The Ak Economy**

One member observed that this is a very valuable option, but we need to put some time bounds on it. Our ability to predict in the future is weak, for example, we’re more concerned about sea level rise in 10–20 years rather than 200 hundred years. Going too far out is a problem for credibility and even we don’t need to go that far out for planning. Summary: need some bounds.

Another member observed that the IPCC predictions are the most credible we’ve got, but need to consider others as well. Another member responded that you make decisions about data sources and assumptions. Then you do a “what if” – e.g., if it rises by a meter, what are the implications for economics in the next 50 years.

Another member stated that, regardless of what model you use, you can just give industry experts a list of basic assumptions, and ask them how each industry would be in 50 years, etc. Then talk to FEMA, coast guard etc.—so can do a better job of planning.

**EA-3: Improve Availability Of Mapping, Surveying, Charting And Imagery Data**

One member asked that the TWG tweak the formulation to change the language of “the state should.”

Summary: Was there any disagreement with the three recommended options?

No, they are approved.

A question was raised of what level of detail to provide for the Subcabinet, particularly for the common themes group. High level? Issues? Broad proposal? Or down to costs and detailed estimates? For the TWGs, the recommendation was that aggregate budget information be provided, with the details in an “appendix” —as a specific proposal that could be used for the sub-cabinet if they are interested in this.
Review and Approve Priority Options Descriptions by Technical Working Group (TWG):
Natural Systems

Jan Caulfield (Jan Caulfield Consulting), Facilitator

NS-1: Incorporate Climate Change into Commercial Fisheries and Assist Fishing Communities and Users in Adaptation

One member asked why the recommendation is limited to commercial fisheries? The answer provided by a TWG member was that the group was tasked with trying to prioritize among the various uses. The decision was initially made that tourism (included recreational fishing) would be addressed by the EA TWG, and subsistence and related issues addressed by the HC TWG.

A member added that the Alaska Department of Fish and Game manages commercial and noncommercial fisheries, and should take into account the implications of climate change for all uses and user groups.

A member expressed concern with a potential moratorium on commercial fishing of new species or in areas where commercial fisheries do not now occur (e.g., Arctic Exclusive Economic Zone). There might be a benefit to undertaking commercial harvest, such as to harvest invasive species to reduce their populations and impact.

The AAG suggested that NS-1 be broadened to address commercial and noncommercial fisheries; recommend close coordination between state and federal fishery managers; and clarify that only fishery-related infrastructure is discussed in this option (provide cross-reference to PI which addresses broader range of infrastructure).

NS-2: Review And Modify Alaska’s Wildland Fire Policy And Program

A member commented that if a prescribed fire is going to be set in an area underlain by permafrost, it is best to conduct that burn in the spring, to allow vegetative growth to occur that will insulate the remaining permafrost. Another member suggested that the NS TWG coordinate with the Forestry, Agriculture, and Waste (FAW) TWG on the Mitigation Advisory Group regarding the greenhouse gas implications of prescribed burns.

NS-3: Address Climate Change Effects on Freshwater Resources; Improve Hydrologic Data

One member asked that the option make a stronger statement that Alaska’s water resources should be managed adaptively to retain sufficient instream flow to meet fish and wildlife needs.

Another member noted that the Alaska Department of Environmental Conservation has groundwater well logs that might serve as a source of data for groundwater resources.

NS-4: Reduce the Introduction and Spread of Invasive Species, in the Context of Climate Change

One member asked that the TWG make it clear that NS-4 is recommending a collaboration of state, federal, and all levels of government to address invasive species.

NS-5: Prepare For Adaptive Management Of Fish And Wildlife
One member suggested that NS-5 recognize the contents of the Waxman-Markey bill, which includes requirements to develop state natural resource management plans. It may be necessary to update the Alaska Wildlife Comprehensive Strategy to include adaptation to climate change.

**NS-6: Develop Capacity In New Forestry And Wood Biomass**

The AAG recommended that NS-6 be forwarded in its entirety to the FAW TWG. It is important that the recommendations not be lost.

**NS-7: Support Local Sustainable Agriculture**

One member asked that this option include more about marketing Alaskan agricultural products. Another asked that the option reference sustaining the “supply of quality, affordable foods for all Alaskans…”

**Summary:** Any objections to going forward with the seven options?

No objections.

**Next Steps for the AAG and Technical Work Groups, Date and Time of Next MAG Meeting**

*Fran Sussman, Co-Facilitator*

Next meeting will be May 15, in the morning (a time will be found). Key purpose will to be go over “common themes” options. We will try to get an Exec summary before June 19 meeting.

**Public Input and Announcements**

*Brian Rogers, Co-Facilitator*

Comments by Ian Dutton. And Karla Dutton

**Adjourn**