



MEMORANDUM

DATE: February 22, 2008

FROM: Senior Director, DEHE 

SUBJECT: The Need for Data: Draft IAW Policy & Research Recommendations Comment

TO: Immediate Action Work Group

RECOMMENDATIONS:

I have reviewed the seventh draft IAW Policy and Research Recommendations. Most if not all, the recommendations include an element of data collection/evaluation. I would urge the Work Group to develop and include a stand-alone data gathering recommendation to:

- (1) Catalog currently available data and the entities collecting it.
- (2) Identify the suite of data/indicators needed on which to base climate change policy and strategy development.
- (3) Create collaborative MOU among data custodians and collectors.
- (4) Identify the gaps in data between what is and what should be and assign/fund the gap.
- (5) Establish a central data access website that links collaborators and data collectors/custodians to a central location enabling ready access to the most current information.

BACKGROUND:

At both the tactical and strategic level, data is our first step. Today the ANTHC expended funds in the construction of public health infrastructure in various locations across Alaska. We looked to the existing record (data) to set criteria for roof designs (snow load, wind load and precipitation). We examine local soils to establish a foundation design. As we move forward the variations in weather force us to question the historical record on which we base these design decisions and assumptions. The better our access to complete, current and accurate data and data trends is, the better our designs will be. The better our facilities function, the better our return on investment. We need better data and better access to data now to ensure sound investment in infrastructure that will function properly throughout its design life.

To establish a strategy to adapt to and mitigate the impact of climate change on our society will require an understanding of the challenge. Indicators of risk, Rates of change, and windows of exposure will have to be created to identify and prioritize the most effective response scenarios. To make decisions in a systematic repeatable fashion as to how to prioritize our limited resources or to select the community with the highest hazard profile will require data. The GAO report on erosion identified 180+ rural communities at risk from erosion hazards, in addition to the 6 you

are reviewing now. Who is at most risk? Who is next? Why? To answer these questions and to justify those answers will require data.

Once we have a strategy and a plan, who is buying? Traditionally Alaska has sought federal assistance with virtually all major infrastructure improvement programs. Today federal programs dollars are highly competitive. Domestic programs are hard pressed to compete for funding in the current environment of foreign priorities and other emergencies. As we look forward to communicate our story we will have to clearly articulate and justify our need. The historical weather patterns and how they are different today have to be described. Their impact on our communities, subsistence lifestyles, wildlife, forests and coastline needs to be quantified. The cost of doing nothing compared to the cost of doing something. To understand the changing nature and dynamic impact of erosion, a description of then and now will be required. We will not be able to effectively tell our story without data.

To publicize the climate change issue and promote support across Alaska will require a marketing campaign that educates on the impact and what individuals can do to make a difference. Carbon footprints and the activities and behaviors needed to reduce it. What is the benchmark? What are the targets? Why?

It's all about data. Every facet of our preparation, every step of our development and deployment of climate change strategies and interventions is better served and implemented with data. The sooner we have it available, the more often we can use and reuse it as we move through our processes.

ENVIRONMENTAL DATA IDENTIFICATION, COLLECTION, ACCESS & UTILIZATION:

Data is a balancing act. Not enough of it leads to inefficient or incorrect results. Too much of it leads to paralysis and limited results. I see the data of interest as being primarily in three major categories: Engineering, Human Health and Biology. Within these major categories can be found as many subsets as we choose to highlight; such as: coastal, geology, forestry, and wildlife.

ANTHC is a health provider for Alaska Natives. With our focus on rural Alaska data sets, specific interests include: infrastructure criteria, weather related injury deaths (thin ice etc), zoonotic diseases, and drinking water access/safety. We are prepared to partner with federal and state agencies to assist in the organized tracking and trending on this and related data.

The Canadians have been organizing and establishing their climate change indicator database over the last two years. They have just begun their data collection/analysis phase. I see this as a ready source/start point for a similar Alaska effort.

We need to identify interested participants, and set a collaborative MOU in place. We should consider using the Denali Commission MOU as a model. Once the partnership is established,

review the Canadian results to date and establish our climate change data set goals. From there we can identify data currently available/being collected and by who. With a series of short cycle reviews, we can identify gaps in the needed data collection, assign responsibilities, and/or seek funding for those gaps. With the data matrix established, we can initiate a coordinated program of data collection, analysis and trending. In parallel with this effort, a central website platform linking custodian data sites together can be constructed. This would help make the scientific data readily available for users and policy makers to in a uniform and systematic manner.

Steven M. Weaver, P.E., DEE