

Climate Change Immediate Action Workgroup Meeting Summary
October 28, 2008 - Anchorage, AK
10:00 am – 3:30 pm

Communities and individuals participating by phone:

Fairbanks: Elizabeth Marino (UAS)
Kotzebue:
Kivalina: Janet Mitchell
Koyukuk: Attended in Person
St. Michaels:
Nome:
Newtok: Stanley Tom, Co-Chair Relocation Committee
Dave Albert, IGAP Coordinator
Shaktoolik: Michael Sookiayak
Shishmaref: Curtis Nayokpuk
Karla Nayokpuk
Fred Eningowuk
Bryce Eningowuk
Unalakleet: Attended in Person
Anchorage: Vivian Melde Ecology & Environment
Margit Hentschel, Walsh Environmental

Anchorage In-Person

IAW Members

Mike Black, Co-Chair (DCCED)
Trish Opheen Co-Chair (USACE)
Luke Hopkins (AML)
Bob Pawlowski (Legislative Liaison to Denali Commission)
John Madden (MVA)
Mike Coffey (DOT)
Amy Holman (NOAA)

Public and Agency Participants

Cindy Pilot – Koyukuk
Steve Ivanoff – Unalakleet
Toby Anungazuk, Jr. – Golovin
Jack Fagerstrom – Golovin
Margaret (Meg) King – Facilitator
Kolena Momberger – DEC
Sally Russell-Cox – DCCED
Jamilia George – Executive Branch Liaison to Denali Commission
Andy Jones- MVA
Bruce Sexauer – USACE
Melanie Harrop – USACE
Jackie Poston – DEC/EPA
Joel Scheraga – US EPA- Director - Global Change Research
Clint Adler – DOT
Barbara Sheinberg – Sheinberg & Associates
Robin Bronen –UAF
Karl Ohls – Consultant for NWAB

Introductions: Those present introduced themselves.

Agenda Review: The facilitator reviewed the agenda.

Organization of 10/28/08 Meeting Summary:

- Framing the IAWG's 2008-09 efforts
- Strategy, timeline and topics
- Policy, funding and other suggestions to effectively meet IAWG's mission
- Detailed discussion notes
- Public comments

Framing the IAWG's 2008-09 Efforts

IAWG Mission The IAWG members reviewed and revised the previous year's mission statement. This discussion resulted in the following revised mission statement, changes are notes in **blue**:

Revised Mission: The IAWG mission is to make recommendations on **continuing or additional** projects, **policies** and goals that can be **initiated or** accomplished in a 12-18 month timeframe (**January 2009 – June 2010**) for the communities that face imminent threats of loss of life, loss of infrastructure, loss of public and private property, or health epidemics due in-part to a changing climate.

Based on the mission-review-discussion, the IAWG developed the following recommendations.

Recommendation: IAWG Co-Chairs should have a conversation with the Sub-Cabinet Chair to include the Commissioner of Department of Military & Veterans Affairs as a member of the Sub-Cabinet, and revise the administrative order.

Recommendation: IAWG members identified three reports as highly relevant and that the Group would benefit from a briefing on: USACE – Baseline Erosion Assessment (overview on today's agenda); MVA – 30 year review of disasters in Alaska; and the GAO – revised report on relocating Alaska rural communities.

Target Date for IAWG's Work: End of January

The end of January was identified as the most effective timeframe. The IAWG agreed it will need to meet frequently to identify accurate budget numbers and work them through the OMB process. (Process: Recommendations made by IAWG first to Sub-Cabinet then OMB and then to Legislature)

ACTION: The group requested that the Sub-Cabinet chair be contacted to determine what OMB's deadline for budget requests is.

IAWG Membership - Changes

Bob Pawlowski identified his new affiliation as the Legislative Liaison to the Denali Commission; Amy Holman, NOAA Regional Liaison to Alaska was also present; Chris Maisch with DNR was unable participate, but spoke with Co-Chair Black about his interest and desire to continue.

Parking Lot: It was also suggested that someone from the University of Alaska be added to help determine how to evaluate impacts and data and to have a better connection with the University, as it is still lacking – sense that UA needs to be more active/involved. It was suggested that Buck Sharpton may be appropriate.

IAWG Strategy, Timeline and Topics: 2008-09

November 10, 2008	GAO Draft Report Overview
	EM – 30 Year Hazards Report Overview
	Advance IAWG Policy #2 Data Needs and ANTHC input for RNWG Guidance
	Identify: Budget/OMB Submission Dates /Subcabinet Meeting Dates/Approval on IAWG Policy Recommendations
	Revisit IAWG Membership
	Budget Placeholder Templates for State CIP and Ops Budgets and process/responsibility for getting placeholder in
	Determine how to prioritize other communities for IAWG’s efforts: e.g. are others involved, e.g. Regional-health, Native/Village Corps; How vulnerable is a community? (take away homework)
November 24, 2008	Revise and Update Community Projects and Goals for Initial 6 Communities
	Complete Prioritization/Criteria for other communities (11/10 homework)
	Identify Projects and Goals for New Communities
	Mini-Grants – Identify system that transitions mini-grant projects into Program
	Identify New Funding and/or coordination of funding
December 5, 2008	Identify means to advance Policies 1 & 2 from 4/17/08 Report
	Augment Policies 1 & 2 and determine if additional policy recommendations are needed/what can be agreed upon.
	NOAA Opportunities – How to integrates State’s needs into NOAA projects
	Review/Refine Projects and Goals for 6 initial and new communities and identify who can provide budget/cost projections
	Create Table of Contents for Draft Report
December 22, 2008	First Draft Report – continue to refine items above, including budget numbers
January 7, 2009	Second Draft Report – continue to refine items
January 27, 2009	Final Report – Recommended projects, budgets, coordination and policies to Sub-Cabinet

Policy, Funding and Other Suggestions to Effectively Meet IAWG's Mission

For convenience this section was culled from the detailed notes to make it easier to use these thoughts and ideas.

Policies

Because of additional communities the IAWG is now focused on, in addition to the initial 6, it may need to consider broader policies, goals or a programmatic approach for funding needs.

IAWG developed long-term policies/recommended policies, but it shouldn't stop there—need to convert to actionable projects. This is part of an indicator for more comprehensive plans to include policies, funding sources and recommendations – which would also show support for our Federal Partners.

There's a concern that funding for IAWG's recommendations for emergency management activities will not be carried forward as MVA is not on the Sub-Cabinet. (Recommendation: MVA on Sub-Cabinet)

Parking Lot: The IAWG's work creates a situation where it's developing information about communities across Alaska. Although the IAWG's focus is to address needs from changing climates, it could have access to information and data about **all** imminent threats to **all** communities not just climate change-related, and there may be new events, adding to the level of complexity to address impacts. These imminent threats are none-the-less as real and as potentially devastating as those caused by climate change, if a threat occurs. How should the IAWG handle this information? Should it reach beyond its climate change focus to recommend how the State should address on a permanent/programmatic level even if different from how the climate change impacts will be addressed? How should the hazards be reclassified based on today's knowledge?

Data Policy Recommendation: Request status from Sub-Cabinet on IAWG's recommendation to *Identify and Develop a Data Strategy* (page 4 – 4/17/08 report). Update 4/17/08 report to reflect outcome from FY08 supplemental or FY09 budget.

Part of Data Policy: **Provide guidance to agencies** on what the data collection needs and issues are, and the need for coordination between agencies. Identify budgets too.

At what level is guidance provided – do points of contacts need to be identified, is division level or Sub-Cabinet level sufficient?

Funding

Create place-holder/template in Governor's budget – by end of December 2008, so that there's no surprise when funding requests are made later.

Federal funding - **Continuing Resolution ends at the end of March**—are there implications for the State – either for match or funds that augment other federal agencies efforts?

Recommendation: Create a programmatic name in the State's budget for a 35% level to augment USACE Corps – Alaska funding requests.

DCRA Community Database if useful to expand/revise to include additional information (risk assessment data) from IAWG/Climate Change efforts, is additional funding needed? Note – funding needs for agencies to support community projects, data and information collection use likely needs to be considered systematically/programmatically too.

Consider Policy for maintenance and operations for projects/infrastructure that aligns with a new capital structure and would be a cost effective approach for the State. (See Public Comment section of Summary)

Other Suggestions - Meeting IAWG Mission Effectively

J. Madden expressed that the IAWG **will have a challenge describing the differences between (various reports)** the initial GAO report where 9 communities were identified, the USACE BEA report with the identified 21 Priority Action communities and the 6 initial communities the IAWG focused on in its earlier effort. There will need to be some justification about why the IAWG isn't considering all communities that have been identified. Why add one, why take away, how we present will be very important.

Build on last year's report as a model to detail community needs and specifics about projects to address those needs. Look at last year's report and see what fits to enhance, modify, etc. and be compatible with last year's report.

IAWG can go beyond erosion (Koyukuk impacts are due to flooding) and look at loss of water source, fire hazards, flooding, infrastructure, etc. (see Parking Lot item above)

Need better understanding / **definitions of assessments and studies** – how do they differ, how do they fit together, or not.

Detailed Discussion Notes

Project Status Review – from 4/17/08 Report

NOTE: FY 09 Funds available for these projects as of July 1, 2008 required new procedures such as RFP's, new personnel, and regulations to be put in place first, which is primarily the accomplishments to-date during the 7/1 – 10/28/08 timeframe.

All Six Communities: Suite of Emergency Plans

John Madden - \$400,000 funding covers the identification of need, not the need itself. As needs are identified, EM will come back to the IAWG with that information and request for action and associated resources.

Andy Jones - Homeland Security provided a status summary. The funds are to ensure that communities are prepared if an emergency occurs, and includes plans on how to handle potential emergency situations and training to prevent loss of life and property.

Contractor selected - Ecology & Environment, and they will travel to communities beginning November 17, 2008 for initial trainings and to hold conversations with communities about what is needed in the suite of emergency management plans for six of the communities. Each community will have a customized plan—for and by each community.

Funds were transferred from HS-EM to DNR Forestry to develop a fire management plan with the sixth community – Koyukuk. All plans and training should be completed by December 2009.

All Six Communities: Community Relocation Plan

Sally Cox, DCCED provided a status summary. New regulations for releasing funds are in place, grant application template completed, Newtok has already submitted, and recruitment for a new planner position is completed. This person will assist communities with community planning activities. The six communities the IAWG focused on last year were named in the grant solicitation and Sally is working with each community to complete the grant application/template for receiving funds. DCCED used the community of Newtok as a pilot to develop and refine this process. After funding for the 6 communities, there will be some funds for mini-grants, which will be a competitive granting program for conducting assessments based on potential impacts from climate change, e.g. erosion, flood, fire. (Questions/discussion about what assessments are and comments about needing better understanding (definitions) of assessments and studies – how they differ, how to the fit together, or not.)

DCCED fully expects the requests for funding will be more than dollars available. Mini-grants are up to \$50,000, but there could be as little as \$100,000 available from FY08 Supplemental.

All Six Communities: Reduce Capital Budget Expenditures

Trish Opheen, USACE – Commented that the strategy worked well to coordinate state funding to receive Corps federal funds. USACE-Alaska received \$40mm in a supplemental which was a majority of the funds appropriated for the entire nation. The 35% state-funding level was effective.

Recommendation: Create a programmatic name in the State’s budget for these funds.

All Six Communities: Preliminary Engineering and early Coordination

Mike Coffey, ADOT/PF has been working with Newtok on its community shelter and barge landing in conjunction with USACE. Unalakleet soon, waiting on some additional information, conversations – key folks at DOT and/or Corps have been on travel and haven’t had a chance to talk. Need to look at techniques that may be cost effective – e.g. beach nourishment.

It was noted that the funding level of \$600,000 did not represent the actual need to ensure this type of early coordination with the communities and USACE.

Jamalia George, Denali Cmsn provided some information about assistance to imminently threatened communities through IRT (integrative readiness training- for active duty armed forces - Marines/DOD program). Projects that an IRT can provide assistance to will benefit underserved communities, offer an exercise for joint military services/ cooperation, and connect military to the community. Potential assistance to Newtok are to construct various projects including the evacuation shelter and to perhaps build a quarry will likely be a 5-year effort. This may provide a long-term model for IRT assistance to rural Alaska communities in peril, and to work with the Pentagon to ask for that assistance.

Bob Pawlowski, Legislative Liaison spoke about possible opportunities if different techniques and engineering know-how are used – particularly as applied to beach protection. He talked about the usefulness of knowing the types of engineering approaches and construction technologies that have been employed in the community or in similar circumstances, e.g. armor rock versus sheet pile, or soils versus rock sources, so communities can evaluate the site selection on the needs for specialized techniques and engineering approaches. This information, along with data gained from smaller projects in the community, can help in planning the immediate projects and increase their success. This approach may lead the IAWG to identify the kind of data, engineering approaches and technology that can be utilized and shared as a “systematic approach.

All Six Communities: Identify and Develop a Data Strategy

Mike Black, DCCED — It is unclear if funding was received for this effort and if so, if progress has been made. Recommendation: Request status from Sub-Cabinet.

Individual Communities: Pages 5 – 8 and Pages 27 - 45

This part of the status update/review was based on individuals’ comments, questions, and suggestions, rather than page-by-page or community-by-community.

Bob Pawlowski, Denali Commission – The DCRA Community Database is a useful tool and suggests expanding/revising it to include additional information that is being developed from the IAWG and perhaps broader climate change strategy efforts. Would additional funding be needed for this?

Amy Holman, NOAA – Offered up some opportunities to develop the data, which the IAWG identified as needed in its 4/17/08 report for 5 of the 6 communities.

Geodetic Control

--Tested new airborne gravimeter over south central in July 2008, first products planned for December 2008

--Needed to gather data necessary to reduce vertical error from 2 m to 2 cm

--Coordinating with AK Statewide Digital Mapping Initiative for data sharing and possibly joint flights

Ice Forecasting

-- USGC provided oral requirement for 7-day-a week Sea surface temperature and ice forecasting and analysis

--Not funded

--NWS invites IAWG to identify a pilot area for demonstration purposes

--Meeting with MMS and UAF on developing a new ice forecasting model

Tide and Water Levels

--Currently prioritizing tide and water level station needs

--Request IAWG prepare a list of where it believes the next 10 tide and water level stations should be installed, in order of siting preference. NOAA is hoping to install 2 stations per year.

--Expect rate of 2 station installations per year

Weather Observations

--No specific plans

--Will press to get weather observing equipment onto new tide and water level stations

Notes and Opportunities

--Precipitation frequency estimate project will provide new baseline estimates for engineering in 2011.

- NOAA & USACE Integrated Ocean and Coastal Mapping effort for 10 year revisit rate for open coast and 5 year for critical areas

-- Preserve America grants

- Through NOAA and National Program. For national program, need to apply to be a Preserve America community first
- Cooperative Institute for Coastal and Estuarine Technology grant
- Pre-proposals Nov 17, full proposals March 5, funding decisions June 09, funding July 09
- Requires PI from National Estuarine Research Reserve (Kachemak Bay NERR)
- Information on funding opportunities given to Andy Jones

Policy Recommendations: pages 47 - 58

Mike Black, DCCED – Policy recommendations haven't been taken to Sub-Cabinet for discussion/approval and would like to have on an agenda for Sub-Cabinet.

Homework: IAWG members agreed to review Policy 2 – issues of data collection, mapping, coordination, evaluation and usage and be prepared for conversation next meeting.

Steve Weaver, ANTHC suggested to the IAWG that 4 or 5 key data points need to be agreed upon to significantly move the data and research issues forward regarding climate change.

He was asked by the IAWG to send them some of the information he's put together.

S. Weaver's response to the IAWG was sent to the facilitator and is attached as a separate file to the meeting summary.

The *SWeaverDataCommunityConceptThinking.doc* provides a 1 page description of three tools S.

Weaver has identified that are needed to address climate change impacts to communities. This includes the 4-5 key data points he spoke about on 10/28/08, along with conceptualizing how the data could be used in community planning, and a Community Vulnerability Assessment.

Steve Ivanoff from Unalakleet/Kawerak voiced concern about it being a problem if relied too much on climate data and not on population and other human-centric data.

USACE Baseline Erosion Assessment Report (BEA)

USACE is waiting from the State for any concerns it may have. Once those are addressed, USACE will provide the report via disk and post on IAWG website.

Bruce Sexauer, USACE - provided an overview based on the 2-page Executive Summary handed out and a **powerpoint** presentation.

21 Priority Action Communities have been identified, this includes 5 of the 6 villages the IAWG focused on in its previous work and highlighted in its 4/17/08 report.

USACE noted that Koyokuk (the 6th IAWG focus community) was not on the list of 21 Priority Action communities, as its impacts are from flooding – which are significant, but this report was expressly to identify communities seriously impacted by erosion.

USACE needs to get teams into 12 of the Priority Action communities USACE has identified in order to acquire additional/sufficient information about erosion problems/hazards in those communities.

USACE noted that information is not the same as data. Data is needed to conduct design work. Information provides the context and direction for what data is needed.

In order to take the next step with the information from the BEA, \$2mm is needed to conduct community assessments, e.g. get the information – each of the 12 communities ~\$100k. The other \$800k is to conduct a similar Baseline Assessment for communities threatened by **flooding**.

Timing – Once USACE has comments from the State, it will provide a timeline for finalizing the BEA report. It will likely be finalized sometime in March 2009.

Discussion on Information Available to use for USACE Proposed Flood Assessment

J. Madden added that the 30 year report on community emergencies will be a good resource for the Corps to jumpstart its community flood assessment effort.

M. Black added that there is also flood plain mapping available from DCCED, which has used historic flood levels, often based on local and traditional knowledge by talking with elders and identifying high-water marks on trees and facilities, and photos.

Procedure for mapping and collecting information/data matters. It can be very expensive, or can be much more reasonable if design data/info collection to use information available in order to establish erosion rate from history. DCCED has that information.

Methodology/standards used will be very important – whether historical or average. Important to justify and describe how you came to a conclusion.

The value of the data is to determine where/where not to place infrastructure.

Bruce S. USACE still needs to determine what standard it's going to use, what will work, and what's required by Corps, FEMA, etc. and what information/data is already available.

Discussion on Link to Policy Considerations

J. Madden identified that erosion is only one form of hazards and community impacts but there are others (permafrost, surges, subsidence, floods, seismic) – the emphasis on erosion might skew the analysis of other likely hazards on a project. He suggested that need some kind of rating factor for all information/potential hazards is needed in order to make good decisions (about projects/infrastructure). There's also the tradeoff or consideration of culture vs. commerce.

USACE reminded that its charge from Congress was to identify erosion hazards, and it recognizes this isn't the only hazard in rural Alaska. USACE also stated that guidelines are often restrictive on benefit/cost, but that didn't apply to the BEA.

S. Ivanoff added that weighing culture vs. commerce is important and that even though subsistence is a viable economic means in rural Alaska it's not usually part of a project's cost-benefit analysis. He'd

like to see a formula created and used for making decisions on projects. Elim—couple of houses that are ready to fall. St. Michaels—lakes and sink hole changing.

J. Madden added that a process is needed to achieve consensus and then that outcome needs to be taken back up and distilled into policy. This requires understanding (incorporating) local level concerns. Good work, hard work, but there is more to be done.

Communication Challenges

J. Madden expressed that the IAWG will have a challenge describing the differences between the initial GAO report where 9 communities were identified, the USACE BEA report with the now 21 Priority Action communities are identified and the 6 communities IAWG focused on in its early effort. There will need to be some justification about why the IAWG isn't considering these communities that have been identified. Why add one, why take away, how we present will be very important.

Amy Holman commented that the information presented and additional information that is available, e.g. 30 year hazard report from EM and photos and mapping from DCCED will be great for NOAA.

Public Comments

Two public comment sessions were provided; one, shortly before lunch, and the other, before closing the meeting at 3:30 pm.

Shishmaref (Curtis) A major problem is lack or **lapse of funding for maintenance**. When there aren't the maintenance \$\$\$'s then the capital funds to rebuild or fix are significantly higher. It also prevents communities from losing what it already has. Example: Seawall was undercut and took down a house. Both the seawall and home now need substantially more funding, not to mention the human toll of losing ones home.

Discussion about maintenance funding once a project is in place – how does it work.

Corps – Maintenance is a local funding responsibility.

Mike B—very easy for a community to get the idea—Corps built, Corps will maintain—which is not the case. Communities need to know who will maintain and be responsible. Project costs over the long haul—that way communities can plan out what they might need.

Steve I Gabion sea wall – Unalakleet requested funding from FEMA to original status once declared disaster. (once disaster declaration - easier to get funds for restoration, but not to improve the structure – to a higher standard – that's why a state funding source to leverage the equipment that is mobilized to restore a structure could be highly cost-effective for the State)

Bruce S (USACE)—Shishmaref—on going planning hasn't occurred, because they need so much now to protect. Kivalina a little different....

Mike C (ADOT/PF) Maintenance and operations are often over looked and no funding. Would like to have a policy for M&O with new capital structure.

Bob P (Denali Commission) — part of its policy review.

Steve I—Need to continue pursuing maintenance funding for these projects.

Golovin (Toby)—Erosion problem due to creek changing course. **Would like to have Golovin on the list.**

USACE (Melanie) Golovin is on the Corps list.

Toby - Need funding, all new infrastructure in Flood Plain in Golovin.

Jack - Interesting to here and listen to the differences between flooding and erosion. We have both - Flooding and Erosion. Brand new high school, with ocean one step away. We have erosion, storm surges, etc. *Why not ranked higher?* Partly our fault, not as involved as should be. It is a documented problem and there's no way not to see we are in peril. We do have some heavy equipment and small projects the Native Corp has assisted. Example—elevated road that lasted 18 hours. Out-lying areas were able to assist.

Steve I—So far, the flooding and erosion at Golovin have been during low tides—**if high tide, high winds, the storm surges will take out the town.**

USACE (Bruce) —What is in harms-way, subsistence issues, etc—these issues are why these communities are on the list and why they were placed on the list.

Toby - Water/sewer project only partially complete—continually coming under water.

Research Needs Working Group Co- Chair, Clint Adler

Inquired about whether there's value in taking/developing a risk evaluation structure that could be used statewide.

Bob P. - Suggested taking SNAP (Scenarios Network for Alaska Planning) and strengthening it along with identifying data gaps from federal agencies in order to make infrastructure decisions/analysis.

Trish—Not much discussion today, but we did provide

Steve I—Protecting a town could be cheaper – how to analyze protection rather than moving, identify alternatives e.g. protect, move, elevate, build on moveable platforms and then identify how to analyze.

Shishmaref (Karla) Water shortage and contamination problems — causing disease. Had to empty reservoir and clean now have potential for another water shortage. Have some of the same problems like Newtok. Same issues as in the past with erosion.

Trish - USACE project is moving ahead. Mobilizing to community in 09, but the project is just shy of the revetment to the lagoon. Something to look at around the lagoon and airport. Folks are familiar with these issues and will be out there next 2 seasons. Who did the investigation of the lagoon? ANTHC—possible. (Steve W. will look into)

S Weaver input, via email/10/31/08: ANTHC has an active on-going project in Shishmaref involving the upgrade of the water treatment plant and the repair of the reservoir liner. We expect this project to be completed in January. Our sanitation deficiency system project listing for Shish includes \$24.7 million in unmet sanitation needs. A **washeteria lagoon project is not** included in that list, but the FY09 unmet needs annual update process begins in the Jan/Feb timeframe. Conversations with the community at that time will enable that project to be included. Listing the project is just the first step, prioritization within available funding and eligibility for state funding are issues that will need to be addressed before such a project can move forward.

Curtis asked some specific questions about the community grant process from DCCED and Sally Cox responded, and followed –up saying she'd talk with him after the meeting on a 1-to-1 phone conversation.

Steve I—Stressed in-migration occurring in Shishmaref—it's population is increasing. Need to understand population trends too.

Koyukuk (Cindy P) Community hasn't decided if they want to relocate or not. Some community members don't want to abandon the site totally. Want to access.

Mike B—DCCED stated that abandoning site wouldn't be required. The essential infrastructure would be placed in a location that is safe. The current structures/ community can be a staging area or fish camp—so there still can be connections. If site is “abandoned” it won't be maintained. Need better understanding of some of these terms, such as “abandon”. What does that mean to a community in day-to-day or season-to-season terms? There could be some useful learning from the Newtok model—maybe something that Koyukuk wants to use.

Meeting Adjourned: 3:30 pm