Immediate Action Workgroup - Meeting Summary
January 21, 2011; 1 – 5 pm
Anchorage - Denali Commission Conference Room

Agency Participants: Trish Opheen and Carl Borash, USACE; John Madden, DHS&EM; Chris Maisch, Deanne Stevens, Nicole Kinsman, and Gabriel Wolken, ADNR; Mike Coffey and Nick Mastrodicasa, ADOT; Larry Hartig and Kolena Momberger-Byers, ADEC
Luke Hopkins, AML; Amy Holman and Matt Forney, NOAA; Mike Black, ANTHC; Shirley Kelly, EDA; Bob Pawlowski, AK Legislature; Jackie Kramer, US EPA; Sally Cox and Jimmy Smith DCCED-DCRA

Community Participants: Steve Ivanoff, Kawerak; CindyPilot, Koyukuk; Edwin Weyiouanna, Howard Weyiouanna, Sr., Fred Morris, Karla Nayokpuk, Shishmaref; Millie and Stan Hawley, Kivalina; Willie Atti, Darrel John, Johnny Friend, Andrew Kiunya, and Patrick Andrew, Kwigillingok; Ernest Weiss, Nelson Lagoon; Shelly Wade, Agnew-Beck (Koyukuk Contractor)

Facilitator: Margaret King, MJKING & Associates

Community Updates

Unalakleet (Steve Ivanoff, Kawerak)

Community Strategy: Unalakleet's strategy is a combination of protect in place and migration to enable the community to protect infrastructure and provide for human safety.

USACE/Erosion Profects: Contractor constructed the first half of the erosion project in Unalakleet and the City is working with USACE to amend the design on the inside part of the river on the second and final phase planned for construction in 2012, which is another 800 feet. The funding for the 800 feet is: 35% match requirement under Section 116 has been provided by the State to the City of $6.5 mm, and USACE has $6.7 mm and is seeking the remainder of the funding estimated at ~$4.5 million. BUDGET CHALLENGES: As USACE is currently under a continuing resolution for funding, finding additional funds and getting them through the approval process is challenging – especially to have a project bid in Fall 2011 to be ready to construct in 2012. Further, based on the emphasis to reduce the federal budget, it may then be a number of years before such an appropriation happens. It may be useful to consider another option, such as obtaining the $4.5 from State funds to complete the project. USACE would need to develop an IIS agreement similar to what was done on Kivalina where 400 feet of revetment was constructed by our contractor with state funds provided to the NWAB.

Roads: "Beach Road" was elevated along the beach with some funding from the Denali Transportation program just prior to the flood of 09 that prevented substantial water damage to the homes just on the inside of the road. Unalakleet's IRTP is being updated for inclusion in the State's plan.

Evacuation Shelter: Unable to time the rehabilitation with the idea to use the old gym as an evacuation shelter. There is no evacuation shelter and no planning is currently being done for an evacuation shelter. Efforts to design and get a cost estimate have been

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made; likely location is somewhere in the Foothills Subdivision. Until erosion issue addressed, this is not as high of a priority.

Waterline Relocation: VSW is now moving from the planning stage to the design stage on relocating Unalakleet's water source line that had a section of it exposed from the flood of 2009. This was an area mined through the permitting of the DNR by a local contractor and despite our opposition continued to mine this threatened area. It has now been halted but is late as damage has already occurred. *(NOTE: Kawerak has requested the State (DNR) review this practice of issuing permits to mine – in particular for gravel materials – on sites close to infrastructure.)*

Once the design is done Unalakleet/Kawerak/VSW will be looking for funding partners to assist in the construction to construct sooner than later to avoid loosing our system.

DCRA-ACCIMP Community Planning Grant: Unalakleet is using its community planning grant from for the new Foothills Subdivision Master Plan.

IAWG needs estimated costs for FY 12 & 13

IAWG needs guidance from community and IAWG members if:

- Funds are needed from the state
- Funding strategy / assistance from federal
- What programs, if any, already exist for funding

Shaktoolik (Steve Ivanoff, Kawerak)

Community Strategy: Shaktoolik's strategy is to protect in place.

USACE/Erosion Project: is now working on studies in Shaktoolik and Golovin and we are anxiously waiting for the results and hopefully a recommendation.
USACE has obtained an accurate survey datum and is preparing a flood inundation map to reduce flood risk to future buildings constructed in Shaktoolik. Also a Section 103 Shore Protection Study was initiated in 2010 and will resume when the flood mapping information is completed in 2011.

Roads: Shaktoolik and Kawerak are proposing an elevated road, like in Unalakleet, as it's believed it can provide the same protection for homes in Shaktoolik. Kawerak (S. Ivanoff) is including this proposal in the IRTP plan and submitting it to the STIP, State Transportation Improvement Program. Kawerak/Ivanoff will be discussing the project's prioritization with ADOT and currently believes it will be one of the highest priorities.

Evacuation Center: As stated in past meetings the Shaktoolik school is coming up for a rehabilitation project and our hope is to convince the State that we should seriously consider a new construction project that could serve as a school/evacuation shelter. The community was saved by the slush that came in on the flood of 2009 that had winds of 65 mph from the southwest to west. If the school was also built as an evacuation center it would give the residents a safer place to hunker down in a flood that now puts logs on their doorsteps.

DCRA-ACCIMP Community Planning Grant: Shaktoolik has selected a contractor for community planning. The same team that has been working with Koyukuk was selected by the community to work with Shaktoolik.

IAWG needs guidance on recommendations:

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- next step from USACE Studies
- funding

Golovin (Steve Ivanoff, Kawerak)

Community Strategy: None identified.

USACE/Erosion Projects: Initiated a Section 103 Shoreline Protection Study in 2010. Alternative solutions are currently being evaluated (cost estimates and economic analysis) to determine if a cost-shared feasibility study is warranted.

Roads: Kawerak (S. Ivanoff) is updating Golovin's road needs in the IRTP plan and submitting it to the STIP, State Transportation Improvement Program.

IAWG needs next steps/priorities for community and funding recommendations

Koyukuk (Cindy Pilot, Tribal Administrator)

Community Strategy: Koyukuk's strategy is to protect in place. It is in a high-risk area for floods, fire and erosion. The powerpoint presentation is available at: http://www.climatechange.alaska.gov/iaw_mtg11.htm#21jan

DCRA-ACCIMP Community Planning Grant: Koyukuk has been using a community-planning grant to identify a site and develop conceptual plans for an evacuation center. This effort has been a partnership with the Tribal Council, City, DCRA, and the City's contractors' USKH, Agnew-Beck and Cold Climate Housing Research Center. The center will double as an evacuation center, command center, with a separate facility to serve as an emergency medical facility when needed for emergency efforts. When not needed for emergency situations, the facilities will function as a community center for elder lunch program, lodging when needed, tribal offices and new community clinic.

Koyukuk has developed a new community profile map; and a wildlife plan with a recommendation for a firebreak. The Koyukuk Village Council was granted its funding request to develop the firebreak from TCC for this. Through Interior Region Housing Authority a request to AEA for a Tier I biomass feasibility and fuel inventory studies have been requested. Funding is being requested from AEA to Legislature for FY 12. *C. Maish suggested that Garn boiler is likely a good fit, and Will Putnam at TCC is a good resource for Koyukuk.*

ADOT: Doesn't believe it has a role at this time; no additional funds for upgrade to existing road since Community Evacuation Center is being sited close to town.

IAWG needs estimated costs for:
- Evacuation Center design

IAWG needs guidance from community and IAWG members if:
- Funds are needed from the state
- What programs, if any, already exist for funding
- Confirm no action/$s needed from DOT

Shishmaref (Edwin Weyiouanna)

Community Strategy: Shishmaref's strategy is to relocate, but there's also a need to protect in place while a new community site is identified, plans are developed, and funding and construction are realized.

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USACE/Erosion Project: USACE has plans and specs nearly complete for Phase 3 (about 625 feet of rock revetment at total cost of $12.5M) but lacks Federal and Non-federal funds for construction. Phase 3 would complete the additional ocean-side rock revetment / protect the northeastern edge of the community including the sewage lagoon and washeteria. 35% from non-federal source is needed, or $4,400,000 is needed for cost-sharing to build this section, along with federal funds. USACE and others are working together to identify sources for this needed funding.

Community comments: Noted that East side of revetment fills up every spring as there's no culverts and need to pump. USACE responded that it was part of the design and anticipated as an annual maintenance need. The other viable option would have cost substantially more, and funds didn't allow. It was also reported that the last storm that water came within 100 feet of the community's current "safe haven" its church, and water was under the school.

ADOT: FAA has funded Airport Master Plan study, along with a Wind Study at new A/P site. Cracks in current runway were repaired by ADOT.
A Reconnaissance Study for the relocation road currently being conducted. There's about $5mm in SAFET-LU federal highway bill reauthorization, if /when Congress passes. Estimated cost for road is ~$30 mm. Utilizing Ear Mountain as rock source, which has been a challenging location – access though F&WS Refuge with good cooperation, environmental/naturally occurring metals issues.

DCRA-ACCIMP Community Planning Grant: The grant is being used for relocation site selection; currently in RFP process. Kawerak conducted a pre-planning/assessment.

Other Community Projects:
- NRCS assessment of Tin Creek, conducted by Bristol Bay Environmental for
- Energy Audit, to be completed by 1/31/11 (by Kawerak?)

Community identified it needs assistance for fundraising for a shelter at relocation site.
IAWG needs estimated costs for:
- Revetment: Minimum - $4.4 mm non-federal; $8.8 federal
- Identify needs beyond relocation site selection, for FY13 budget:

IAWG needs guidance from community and IAWG members on:
- Next steps from energy audit
- What programs, if any, already exist for funding

Kivalina (Millie Hawley)

Community Strategy: Reviewing projects that have been funded/constructed in Kivalina, by default the strategy being used is to protect in place. However, Kivalina has not yet identified its preferred strategy. Kivalina recently sent a letter to USACE requesting to reopen the dialogue for relocation. Although there are some in the community who believe relocation is the best alternative, it's been difficult to pursue this option because adequate data is still needed to verify that a selected site has sound geologic and hydrologic capacity for the new site to be suitable for relocation. Without this, agencies are unable to make funding requests to Congress or the Legislature for assistance to the community for relocation.

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USACE/Erosion Project: Status of Kivalina's request to begin discussions about relocation is that USACE is preparing a scope and study cost estimate for further evaluation of community relocation and/or expansion alternatives for Kivalina.

DCRA-ACCIMP Community Planning Grant: Kivalina is using these funds to conduct a community-wide, consensus building and planning effort.
(Post 1/21 Meeting: Funds remain to continue Kivalina community planning. It may be possible to integrate community planning with Kivalina's recent request to USACE. Prior to preparing this documents, several suggested that USACE should consider a meeting with several representatives from other agencies to help identify options.)

ADOT: Permanent repair project for Airport is currently in design; estimated funding is $4.7 million; funding from FAA and approved by Alaska's APEB (Airport Project Evaluation Board).

Road Planning Funds: Kivalina, working with Manillaq, obtained road-planning funds from BIA. The community has identified a bridge from the spit to the main land as being a community priority. Kivalina worked with WH Pacific (N. McCullough) on this planning effort.

ANTHC Community Health Impacts Report is completed for Kivalina (and Pt. Hope is also included in the same document. This report provides an assessment of public health impacts due to climate change phenomena, such as sediment, melting permafrost, food security, infrastructure maintenance and needs. See:
http://www.anthc.org/chs/ces/climate/climateandhealthreports.cfm
It was also noted that similar reports for other communities in the Northwest Arctic Borough will be out soon.

Newtok (Sally Cox, DCCED-DCRA/Mike Coffey, ADOT)

Community Strategy: Newtok's strategy is to relocate.

Community Relocation Effort 2010: 1500 foot road to MEC (Mertarvik Evacuation Center) site completed with community grant funds from Legislature to Newtok through DCCED-DCRA (~$4mm). ADOT- design and construction role. USACE NEPA permitting role.

2011: In general will construct foundations and utility projects, e.g., parking pad, fuel pad, install fuel tanks, septic system, water line to well and construct support buildings that can be used for storage for 2011-12 winter, and then for community after construction is completed. Will also develop quarry to use rock for construction and then hopefully as a community economic development asset beyond completion of MEC.

AK-DOT additional efforts:
-DOT is conducting a Harbor Waterfront study; funding from BIA IRRA funds, ~$356k will take 2 years 2011 and 2012 field season, report completed in early 2013.
-DOT is conducting an Airport Master Plan site assessment for Mertarvik using FAA funds

DCRA-ACCIMP Community Planning Grant: Funds are being used to create a strategic community master plan, which was awarded to the team of USKH, Agnew-Beck, and others. This effort is scheduled to be completed in early 2012.

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Atmautluak & Kipnuk (Sally Cox, DCCED-DCRA)

DCRA-ACCIMP Community Planning Grant: Hazard Impact Assessments funding provided to Kipnuk and Atmautluak (FY09 funds). When Hazardous Impact Assessments are completed; next step is community planning (FY11 funds).

<u>Guests & Presentations</u>

SDMI (Statewide Digital Mapping Initiative) Presentation by Nicholas (Nick) Mastrodicasa, Project Manager - State of Alaska Department of Transportation —Aviation Division - Alaska Aviation Safety Project (AASP); Statewide Digital Mapping Initiative (SDMI) Office: 907-266-2776

ACTION: IAWG members agreed to write and sign a letter of support to be submitted to the Alaska Climate Change Executive Roundtable.

Digital Elevation Mapping - Alaska is the only state in the union that has not been digitally mapped in a uniform and contiguous manner. The planning phase of this project has been completed through a statewide stakeholder driven process inclusive of all state, federal and local agencies. This effort resulted in a published statewide requirement regarding the fidelity and resolution of elevation data.

<u>A Digital Elevation Model (DEM) is critical to understanding:</u>

- *Hydrology:* water resources, run off and necessary for improving the accuracy of the National Hydrography dataset.

- *Sea Ice:* Shorelines were once protected from winter storm surges by ice shelves in coastal western Alaska. This ice no longer forms and coastal erosion threatens several Native villages. Sea rise also threatens other coastal villages. The DEM is a critical component in understanding the dynamics of good site selection including but not limited to healthy water sources now and in the future, flood plain analysis and subsidence issues in order to achieve this scientific understanding and subsequent predictive modeling, an accurate DEM is required to properly conduct the research. Without this baseline, adaptation and mitigation efforts cannot be applied responsibly.

- *Wildfire Protection:* Many Native villages and rural/urban areas are located within or abut potential wildfire areas. An accurate map, particularly elevation data and hydrological data, is critical to modeling wildfire behavior and are essential for the production of accurate maps are a high priority for wild-land fire suppression.

- *Infrastructure Protection and Development:* An accurate map having accurate elevation data is foundational to all infrastructure development including but not limited to resource allocation; resource conservation; industrial planning - ground water contamination/mitigation & restoration; urban and agricultural land use development; desktop project design/engineering; telecommunications; utilities; roads to resources; pipeline; rail, and mineral resource development.

Questions were asked about using maps and what was available. Nick M. requested to contact him directly via email, and he would provide information to get the best available maps for your area and needs.

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Commissioner Hartig

Newtok Harvard National Economic Development Award – Commissioner Hartig formally congratulated and recognized this award given to Newtok. See: http://www.thetundradrums.com/article/1050newtok_receives_economic-development_award

Comments about IAWG and Climate Change initiative for Alaska – Commissioner Hartig commented that the IAWG was the right face for climate change efforts at this time. There have been many changes in the cabinet, and as for the Climate Change Sub-Cabinet, he is the only member who has been working with this issue in this role. Need to recognize the legislative session and other priorities with time pressures will likely get commissioners' attention.

If run into roadblocks, let him know. Best to fit IAWG efforts/recommendations into existing agency programs and to coordinate at the appropriate levels. Best to continue focus of 18 months out, and to focus on projects in communities. IAWG can provide suggestions about revising the name of IAWG, but likely not a priority at this time.

US Arctic Research Commission – Commissioner Hartig met with them today; last meeting was in 2007 in Shishmaref.

There was some discussion about IAWG membership, website updates and resources to support IAWG effort. It was verified that membership, for now was addressed / determined in Nov 2010 and that the updates would reflect that soon. Resources that will be available are uncertain.

Commissioner Hartig also acts as the Alaska Climate Change Executive Roundtable co-chair and can help with a letter of support for the SDMI Mapping.

<u>IAWG Discussion</u>

Deanne Stevens (DNR-DGGS, Fbks) let the group know that DNR-DGGS had received CIAP funds for geologic assessments, and wished to work with IAWG, its participating agencies, and others to determine the best use of the funds and DGGS' efforts. Deanne introduced Nicole Kinsman who is the lead for this effort. The DCCED representative, S. Cox welcomed talking with DGGS, and T. Opheen and others suggested a sub-group should meet and talk. **(Post 1/21**, N. Kinsman will be at the AFE and suggested to meet – **Thursday, Feb 10th; 9 – 10:15 am.)**

J. Kramer (EPA) suggested that the plans agencies are using would likely be something that communities with IGAP grants might be willing to partner with some of these grant funds. IAWG members suggested learning more about IGAP. **(Post 1/21** – It might be useful to list and describe the various plans agencies are using to ensure protection of communities and planning for the future. Presenting this, or having this available for communities with IGAP funding could be beneficial. Plans such as suite of emergency/evacuation plans; wildfire assessment; hazardous mitigation evaluation; community planning.)

J. Kramer also suggested that a brochure created about a year ago in support of the State's Climate Change initiative hasn't been printed/used. Members asked that the electronic version be provided for review. J. Kramer commented that it's unlikely it can be edited. **(Post 1/21** – Facilitator's conversations with members provided the following suggestions: There needs to be some level of review and approval; primary questions are

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Has Commissioner Hartig approved? Does it reflect IAWG's efforts or is it much broader and will confuse the audience/message IAWG is trying to convey? Another option suggested was that with Word 2007 and Publisher capabilities, it might be easier and more accurate to develop 1-page/2-sided descriptions of various IAWG efforts for distribution.)

Amy Holman (NOAA) introduced Matt Forney as the new Navigation Manager for Alaska and recommended that he be contacted about nautical charting and other data needs, e.g., where hi-res is needed. Matt stated that the Draft Arctic Charting Plan is available and anticipated to be final in March 2011. No priority areas are/will be identified. Not going as far north as hoped.

NOAA Leadership met with CEQ (White House office) on climate change and talked about IAWG and ACER.

Preparing for NOAA budget to go down.

Bob Pawlowski stated that Denali Commission will be meeting with C&RA committee in Juneau on Feb. 1

<u>Future Meetings</u>

IAWG - February 3:

9 -11 Conference call to review updated community accomplishments and needs

IAWG-February 14:

9 – 1 pm Meeting at Denali Commission Office/conference room; to review in more detail updates on accomplishments and needs. Providing room for information or recommendations on how IGAP can work in conjunction with IAWG, Letter of Recommendation for DEM, dialogue with communities and how to address/determine additional communities.

Post 1/21: <u>Recommended not to include IGAP at 2/14 meeting.</u> IAWG hasn't yet determined how to identify new communities. 200+ communities/tribes receive IGAP grants. To try and identify how IAWG and IGAP might work together with this many potential participants and no system will likely cause confusion.

Alaska Climate Change Executive Roundtable – Feb 16:

Useful to have the recommendation letter supporting DEM for this meeting.

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