

Immediate Action Workgroup

- **Immediate** – 12 to 18 months
- **Action** – initiatives that can be undertaken with or leading to demonstrative results
- **Work** – meetings every two weeks to identify recommendations for the next 12 – 18 months
- **Group** – Membership includes agencies with an interest in results such as DOT/PF, COE, Denali Commission, DEC, NOAA, DMVA, DGGS and Division of Forestry in DNR, Commerce, AML, Alaska Legislature, and communities.

The IAWG brings an important element to the State's response to the changing Arctic. Unlike other groups and other state's we are tasked with advising the Climate Change Subcabinet and the Legislature on what actions are needed in the short run attempt to adapt to the changes observed, changes that have a definable and demonstrable impact on the built and natural environment of the state. These impacts are often easiest to see at the community level.



The changing environment tests our ability to adapt. Our recent response to changing environments has been to build more substantially and with greater mass and strength. The lessons of the indigenous cultures point to another way of adapting, building for movement and flexibility.



Both approaches may need to be incorporated into our response to a changing Arctic environment.

The IAWG was started at the calling of Commissioner Hartig as a way of initiating actions without awaiting a lengthy planning and analysis phase. The call recognized that there were things to be done now that could not be delayed if we were to minimize the impacts to communities on the leading edge of the affects of a changing environment. We had a few tools to work with:

- A very preliminary list of the most impacted communities;
- A mission given by Commissioner Hartig;
- A small group of relevant and focused agencies;
- A determination to do something as we all agreed something was worth doing;
- An invitation to the communities and others to participate in identifying the solutions through local initiatives, ideas and effort;
- Recognition of fiscal realities.

The process employed was innovated and included:

- Meet every two weeks;
- Focus on initially 6 communities identified as imminently threatened;
- Apply resources to most immediate needs;
- Learn lessons from doing;
- Incorporate and encourage local initiatives;
- Keep focused and invite collaboration;
- Demonstrate results;
- Don't foreclose options if at all possible.

What has been accomplished in
approximately one year?

Newtok

- Planning resources were provided for the Newtok Traditional Council to prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work has been started and will be done by the end of 2009.



- USACE and the Newtok Tribal Council entered a Project Partnering Agreement enabling ACOE to construct an emergency evacuation building and access road at Mertarvik when Federal funding is provided by Congress. Collaborative design work for the road is ongoing within the Corps and ADOT.

Newtok

- USACE and the Newtok Tribal Council entered a Project Partnering Agreement enabling USACE to construct an emergency evacuation building and access road at Mertarvik when Federal funding is provided by Congress. Collaborative design work for the road is ongoing within the Corps and ADOT/PF.
- Commitment from the Innovative Readiness Training Program in the Department of Defense to locate a military training effort at Mertarvik with the intention of helping the community build roads, an emergency shelter and a quarry for material at Mertarvik
- Newtok received a community planning grant through the Alaska Climate Change Impact Mitigation Program for the design on an evacuation shelter. The community hired the Cold Climate Housing Center, who is in the process of designing a sustainable and energy efficient emergency shelter.

Kivalina

- Planning resources were provided for the City and Tribe of Kivalina to jointly prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work will begin during Feb 09.



Photo: Colleen Swan

- DCCED/DCRA staff is working with the community to develop a proposal for a community planning grant that addresses the recommended immediate actions for the community through the Alaska Climate Change Impact Mitigation Program

Kivalina

- \$3.3 million provided to the Northwest Arctic Borough to begin construction of a revetment to protect vulnerable shoreline of community
- USACE engineers obtained a supplemental appropriation from Congress to complete the revetment protection in 2009 for the Oceanside shoreline of Kivalina thereby securing the shore for a minimum of 15 years.
- Resources provided to DOT/PF to participate with the Corps in design and development of shoreline protection measures

Shishmaref

- Planning resources were provided for the City and Tribe of Shishmaref to jointly prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work has been started and will be done by the end of 2009.



Photo: Tony Weyiouanna

- DCCED/DCRA staff is working with the community to develop a proposal for a community planning grant that addresses the recommended immediate actions for the community through the Alaska Climate Change Impact Mitigation Program

Shishmaref

- \$3 million requested in FY10 Governor's budget to begin construction of a revetment to protect vulnerable shoreline of community
- USACE engineers obtained a supplemental appropriation from Congress to extend the revetment protection for the ocean side shoreline of Shishmaref thereby securing the shore for a minimum of 15 years.
- Resources provided to DOT/PF to participate with the Corp in design and development of shoreline protection measures

Koyukuk

- Planning resources were provided for the City and Tribe of Koyukuk to jointly prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work has begun and will conclude by the end of 2009.



- DCCED/DCRA staff is working with the community to develop a proposal for a community planning grant that addresses the recommended immediate actions for the community through the Alaska Climate Change Impact Mitigation Program.

Koyukuk

- FY 10 Governor's budget includes \$800k to DOT/PF to design village evacuation road to higher ground
- Corps working with community on alternative flood damage reduction plans for the village.

Unalakleet

- Planning resources were provided for the City and Tribe of Unalakleet to jointly prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work will begin this month.



Photo: Steve Ivanoff

- DCCED/DCRA staff is working with the community to develop a proposal for a community planning grant that addresses the recommended immediate actions for the community through the Alaska Climate Change Impact Mitigation Program.

Unalakleet

- \$5 million provided by the Alaska Legislature to the City of Unalakleet to build a section of a shoreline revetment designed by the Corps for a vulnerable portion of the beach
- USACE engineers obtained a supplemental appropriation from Congress to complete the revetment protection of the ocean side shoreline of Unalakleet thereby securing the shore for a minimum of 15 years.

Shaktoolik

- Planning resources were provided for the City and Tribe of Shaktoolik to jointly prepare suite of emergency plans and training working with the State's Emergency Management Division to provide readiness in case of flooding and erosion. This work has begun and will be completed by the end of 2009.



- DCCED/DCRA staff is working with the community to develop a proposal for a community planning grant that addresses the recommended immediate actions for the community through the Alaska Climate Change Impact Mitigation Program.

Shaktoolik

- USACE initiated a shore protection study (Section 103) to determine the most economical and environmentally acceptable way to protect the community from coastal storm damages.
- Kawerak has completed a preliminary design of the evacuation road and route to safe high ground site.

What needs to be done?

A strategy and an organization of efforts at the local, regional, state and federal level needs to be devised to address imminent threatened communities to ensure that we are capable of responding in a timely, efficient and effective manner.

What's been learned in this most recent series of IAWG meetings is that the impacts from climate change phenomena will likely affect many communities,



not just the 6 and both a strategy and collaboration are needed if we're to be successful at addressing these impacts.

Adaptation requires swift recognition of problems and decisive responses that are within the means of all parties. It does no good to advance ideas that are not likely to be implemented, are disruptive to collaboration or are self serving at the expense of teamwork.

Through this strategy, we must bring together many efforts focused on a common vision of the desired result and then focus this “organization of efforts” to achieve those results. The common result we see is a return to the adaptive brilliance exemplified in indigenous communities of the past without foregoing the advancement in health, economies and technologies offered by the 21st century of innovation.

All levels of our state must focus on the problems of a rapidly changing environment. We must encourage the responsiveness of our available resources to address adaptation.

We cannot accept the standard way of doing business that has resulted in sluggish and compartmentalized decision making. Our infrastructure decisions that are so critical to the adaptations needed to live in harmony with a changing Arctic must be based on wisdom and not the same old designs and methods.

How can we achieve our new vision?

- Provide a mechanism to coordinate – and include/listen to communities about what works/doesn't

Applied research

- Education on what is happening
- Invite the world into our solutions
- Arctic engineering that recognizes the environment
- Central clearing house that communicates infrastructure decisions to incorporate our best design, siting and building methods to the problems.