

**Immediate Action Workgroup**  
Executive Sub-Cabinet on Climate Change  
ADEC – Lab - 5252 Hinkle Road  
Anchorage, Alaska  
December 22, 2008  
10:00 – 4:00 pm

Call – in 1-800-315-6338 – code 4294 #

**10:00 Open/Welcome/Introductions/Agenda Review**

- Discussion – Criteria for Selecting Communities/Projects
- Identify New Projects and Communities: Actions in next 12 – 18 months
- CIAP Presentation (S. Kreel – DNR/D. Johnston - MMS)
- Follow – up
  - Policies 1&2 from 2008 and new potential policies
  - NOAA request for additional IAWG input (Lidar)
  - IAWG at AFE – Finalize Day and Time
- First Draft of Recommendations Report

**10:15 am Criteria for Selecting New Communities/Projects**

- Review IAWG Process & Discussion

**10:45 am Discussion – New Potential Projects & Draft Recommendations**

- Resource Extraction – problems, and planning and community involvement

**11:15 am Discussion – New Priority Communities & Draft Recommendation**

**11:45 am Public Comment**

**NOON Lunch** (Select Date for IAWG at AFE)

**12:45 pm CIAP Program and Funding Overview - Q&A** (see CIAP Handouts PDF document)

**1:30 pm Review New Policy Areas: J Madden and M Coffey** (see pages 2-3)  
**IAWG decision needed: whether to include in recommendations**

**2:15 pm Break**

**2:30 pm Continue Policy Reviews**

**3:00 pm Review NOAA request for additional IAWG input** (see page 4)

**3:30 pm IAWG Recommendations Report**

**3:45 pm Public Comments**

**4:00 pm Close**

## Potential Policy Issues for IAWG Recommendation

(2:00 pm Agenda Item)

### Issue 1: Range of potential threats that may not be related to climate change.

J. Madden's Division will take lead in developing draft IAWG policy recommendation.

Background information in 10/28 meeting summary, in 30 year EM report

- Need to identify IAWG's role in this. (link to climate change)
- Need to link actions to climate change for IAWG to legitimately address:
  - What phenomena do we expect with a warming climate?
    - Ice free conditions
    - Erosion
    - Sea level rise
    - Permafrost degradation
    - Forest Fires
- Need to consider who should fund.
- Need to identify other funding sources: Disaster relief funds as in other states

### Issue 2: Institutionalize collaboration across state and federal agencies to address complex issues that require agencies with a variety of authorities and different funding sources to address. (e.g. Put IAWG out of business)

Discussion lead to statement recognizing the State needs to go beyond climate change, as it's difficult/information/data doesn't exist to separate out what is/isn't Climate Change. Perhaps should be something like EPA climate change program. (J. Madden will take up with Issue 1 above)

### Issue 3: Maintenance and Operations Funding (Mike Coffey lead)

#### IAWG Comments

Mike B: From DOT's stand point - easier to get Capital rather than Maintenance funds. Maintenance needs to relate to revetment projects; 15 yr life without maintenance. With maintenance, life would be longer, but local communities don't have the funding. This leads to questions—why wouldn't we put monies for maintenance.

J. George: Shoreline erosion is another consequence—multiplied or declined to a point other infrastructure is delayed. Flooding v Erosion

John M.—hazard mitigation is another benefit of maintenance.

Trish—Decision efforts/analysis look at 5 years, 10 years. DOT could look at maintenance; at some point—need to look at all viable solutions.

Mike B.—ISER – Sustainability for Rural Communities; Steve Colt—UAA the communities could operate so they wouldn't have a problem if they had more maintenance funds. But Legislature and Congress prefer to fund Capital budget.

### Issue 4: State needs to take credit for its efforts on climate change

State needs to take full credit for amount put into Climate Change—programmatic name. Especially with new federal administration, which will likely address C Change differently than current administration.

### **POLICY 3: Effective and sustainable shore-protection structures are an integral part of the state's climate change adaptation strategy and must be supported by a long-term O&M funding program.**

The State of Alaska has vital national and state interest in the stability and behavior of coastal structures around its coastline. Coastal structures are important assets for the economic health of many coastal communities to:

- Protect harbors and inlets that are important commercial and military navigation links
- Protect shore-based infrastructure
- Provide beach and shoreline stability control
- Stabilize navigation channels
- Protect navigation, coastal communities, roadways, bridges, etc.
- Provide flood protection
- Provide recreational activities

Rubble mounds are the dominant coastal structure between Alaskan ports, harbors, navigation channels and the sea. The majority of these structures are breakwaters, revetments, jetties, and groins. They are used for protecting harbors, wave reduction within harbors, retaining sediment, protecting navigation waterways, shoreline protection, and bluff protection. Other types of structures are common including seawalls, piers, and bluff protection. While most navigation structures are federally owned and maintained, most shore-protection structures are locally owned and maintained.

Most of these structures were originally built in the early 1900's and have been extended and rehabilitated many times.

The coastal infrastructure in the state is aging. Maintenance of existing inlets becomes more important each year as ship traffic and ship drafts increase. As the inlet-protecting jetties erode, dredging costs can increase at an alarming rate. In addition, maintenance of existing revetments and other shoreline structures is becoming more important with increasing coastal population. As a result, inspection, repair, and rehabilitation of existing structures represents a large part of coastal rubble-mound work within the state while new construction of this class of structure represents a diminishing fraction of the projects.

Because the cost of replacing the existing coastal protection infrastructure is high, improving the means and methods for reducing these costs is important. One present opportunity is to reduce the design and construction costs of coastal structures is by employing risk, life-cycle, and reliability analysis techniques in both planning and design studies in order to develop more efficient designs. Regular preventative maintenance efforts can substantially reduce risks, save lives and property, and reduce full replacement costs.

## Review NOAA request for additional IAWG input

(3:15 pm Agenda Item)

Amy Holman: *What I need is to know is what the requirements are for these remaining needs - we addressed tide gauges on 11/24, but I need to be able to articulate what the IAWG wants/what the IAWG would consider success with regards to ice forecasting, weather observations, geodetic control. Where? How many? To accomplish what goal?*

### **From 11/10 IAWG Meeting Summary**

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

#### Other 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