Meeting Notes
Interagency Arctic Research Policy Committee: Staff Meeting
15:00-17:00
13 June 2011

Location: Eisenhower Executive Office Building
Room 530, Washington D.C.

Attendees:

| Name | Affiliation |
|---|---|
| Kate Moran | Office of Science, Technology and Policy (OSTP) |
| Simon Stephenson | National Science Foundation (NSF) |
| Igor Krupnik | Smithsonian |
| Mike Slimak | Environmental Protection Agency (EPA) |
| Alison Labonte | Office of Science, Technology and Policy (OSTP) |
| Nikoosh Carlo | National Science Foundation (NSF) |
| Erica Key | National Science Foundation (NSF) |
| John Farrell | U.S Arctic Research Commission (USARC) |
| Shella Biallas | Department of the Interior(DOI) |
| Adrianna Muir | Department of State/ Oceans and International Environmental and Scientific Affairs (DOS/OES) |
| Mike Kuperberg | Department of Energy/Office of Science (DOE/SC) |
| Jack Kaye | National Aeronautics and Space Administration (NASA) |
| Brendan Kelly | National Science Foundation (NSF) |
| Ashley Chappell | National Oceanic and Atmospheric Administration (NOAA) |
| Doug DeMaster | National Oceanic and Atmospheric Administration (NOAA) |
| Charles Byvik | Department of Defense (DOD) |
| Kathy Crane | National Oceanic and Atmospheric Administration (NOAA) |
| John Calder | National Oceanic and Atmospheric Administration (NOAA) |
| Hajo Eicken | University of Alaska |

Agenda: Convened 3:00pm adjourned 5:20pm

1. Committee on Environment, Natural Resources & Sustainability
2. Arctic Science, Engineering , and Education and Sustainability
3. Update on Arctic Council Working Groups
4. Update on NOC strategic action plan on Changing Conditions in the Arctic
5. Study of Environmental Arctic Change
6. Five-year research plan and working groups
7. Summary, assignments, and next meeting

Action Items Summary:

1. Committee on Environment, Natural Resources & Sustainability: Kate Moran reviewed several agencies and committees that IARPC should work with and turn to so as to ensure that IARPC does not duplicate efforts and processes that have already been completed. In developing a five-year research plan, the IARPC should work with the groups listed below rather than creating new groups.

    - Kate Moran reviewed the four committees within the National Science and Technology Council:
    - Science, Technology, Engineering, and Math Education
    - Environment, Natural Resources, and Sustainability (CENRS)
    - Homeland & National Security
    - Science
    - Technology

    Subcommittees of the CENRS include:

- Air Quality Research
- Critical and Strategic Mineral Supply Chains
- National Task Force on Earth Observations
- Disaster Reduction
- Ecological Systems
- Global Change Research / Climate Change Science
- Ocean Science & Technology
- Toxics & Risks
- US Group on Earth Observations
- Water Availability & Quality

Within the Global Change Research Program, the point of contact is Kathy Jacobs who works on climate assessment. This is a group that IARPC should work with for consistency. Kate recommended, and Brendan concurred, that IARPC should have Kathy Jacobs come to an upcoming meeting and provide guidance on where IARPC overlaps and ways in which IARPC can help GCRP. Other activities that are going on that IARPC should be aware of are: (1) communication and education work group on communication tools and links with integrated observations committee, (2) US Group on Earth Observations; IARPC should work with them when they have developed their strategic plan to prevent duplication.

Kate Moran also outlined a few more groups and efforts we should work with:

- USGEO
- National Ocean Council
- USGCRP
- National Climate Assessment

2. Arctic SEES program (Erica Key and Nikoosh Carlo, NSF)

The Arctic Science, Engineering, and Education for Sustainability (ArcSEES) program pertains to the goals of IARPC in that ArcSEES is facilitating the interests of stakeholders. The goal is to promote the research and education needed to address the challenges of creating a sustainable human future. The Arctic region has been identified as a priority for the research. Dealing with the interaction with the natural and social systems there are three topics/pillars of sustainability; technology, society, and environment. Sustainability science is at the center of the interaction between all three pillars. Education is also very necessary for the success of this science and action. One of the goals is to support fundamental research that will improve OPP's ability to evaluate the sustainability of the Arctic human-environment system. Another goal of ArcSEES is to have integrated efforts to provide community-relevant sustainability pathways and engineering solutions. Research is looking to involve stakeholders, tribal colleges/MSI's, other indigenous organizations, and minority serving institutions. The scope of ArcSEES is in developing sustainable solutions not just applicable to Alaska but to upscale results into real-world solutions for circumpolar communities. The themes of interest are social and environmental change, natural resource development, built and natural environments, and governance. On 19 April 2011, ArcSEES held a conference to explore what is already there and what opportunities are possible. Weekly meetings have been taking place to keep up with federal and national priorities to ensure that the progress of the solicitation is in line with the goals of federal, national, and ArcSEES intended goals. This solicitation will develop purposeful pathways to achieve goals with implementation into the communities. The current status of this project is at the finalization of the full solicitation and clearance process. The relationship of ArcSEES to the IARPC is to develop a partnership with the IARPC. It is intended not as an NSF document *per se* but to be a document that engages other agencies. The partnership is to engage in money or intellectual capital. ArcSEES is open to multiple pathways to develop partnerships, to enable other groups to participate in the ArcSEES solicitation project. (Reference handout to see the modes of participation).

Questions:

1. Kate: Who are other partners on board for the project? Erica: Thos partnerships are still in the works.
2. Igor: What is the dream goal of ArcSEES? And what is its financial scale? Erica: Fund some great science at $10 million. ArcSEES plans large projects and some smaller pilot projects.
3. Igor: Would you consider having different levels of proposals? Erica: We already have a track for that, where they can apply through different parts of SEES to do different levels/forms projects.
4. Igor: Will each proposal be interdisciplinary or singular research? Erica: Interdisciplinary projects are encouraged but not required; they must show relevance to sustainability and application to community.

5. Kate: Have you been in any contact with foundations that would be interested in funding this for partnerships? Erica: Not as of yet, but they are willing to explore the idea. Kate: Recommend foundations such as the MORE Foundation.

Igor Krupnik expressed a strong willingness to partner with intellectual capital. Erica Key reviewed some of the other SEES projects being covered throughout NSF. ArcSEES has also been looking to have connections to the more locally connected agencies, such as EPA in Alaska to give a stronger root system to the solicitation. John Farrell raised a concern on defining what is and is not sustainable science? Erica explained that they seek to sustain society and that necessarily involves many fields. Igor recommended having a group come together to truly decide this question and find a solution. Simon explained that this has been done in the NSF and the solicitation needs to move forward.

3. Arctic Council Working Groups (Adrianna Muir, State Department)

Sustainable Development Working Group (SDWG):
- Arctic Human Development II
- Arctic Maritime and Aviation Transportation Infrastructure Initiative
- Human Health Experts Group

Protection of the Arctic Marine Environment (PAME):
- Ecosystem-based Management project
- Survey of Arctic indigenous marine use (in collaboration with SDWG)
*(AME more policy based, ecosystem based management project to determine objectives to be fed into their projects.)*

Arctic Contaminants Action Program (ACAP) -Review of their progress
- Demonstrations on diesel black carbon reductions
*(Trying to take research products into action.)*

Conservation of Arctic Flora and Fauna (CAFF)
- Circumpolar Biodiversity Monitoring Program expanding to cover terrestrial and coastal taxa.
(*not a research based group)*

Arctic Monitoring and Assessment Program (AMAP)
- Short-lived Climate Forcers Expert Group
- Ocean Acidification Expert Group
*(looking to expand to have experts in troposphere and methane. Assessment on ocean acidification to come out in 2013.)*

Emergency Prevention Preparedness and Response (EPPR)
- Improving Technical Analysis Capabilities for Radiological Emergency Response
- Input on Oil Spill Prevention
*(tasked with developing a report for oil spill prevention. They have partnerships with Russia.)*

AC-wide projects:
- Ecosystem-Based Management

- Sustaining Arctic Observing Network
- Resiliency Assessment
- Arctic Change Assessment

Adrianna Muir highlighted that there should be more coordination between the working groups where one doesn't necessarily do the research but handles policy should collaborate with those that do the research. Kate Moran stressed that IARPC's interest is to integrate these other agencies and other international arena. Sustainability fits well into the Arctic Council. [i]

4. Update on Strategic Action Plan on Changing Conditions in the Arctic (John Farrell)

The National Ocean Council is developing strategic action plans (SAPs) in nine areas of national priority. One is the "Changing conditions in the Arctic". The plan has seven overarching themes, and the plan is supposed to endure over several years. Granular actions are supposed to be in the action plan. They have developed six of these actions which begin implementation in 2012. These are intended to guide budget preparation, which is distinctly different than just a report or assessment. Fiscal reality is the big issue, which is highly dependent on the direction the White House and Congressional actions; high levels of funding seem unlikely in the near term. The information that this document provides is guidance that should be of interest to IARPC. Dr. Farrell reviewed the six actions:

1. Improve arctic environmental response management

2. Observe and forecast arctic sea ice

3. Establish a distributed biological observatory

4. Improve arctic communication

5. Advance arctic marine mapping and charting

6. Improve coordination on Arctic issues

Kate Moran noted that we should look at these six action items as IARPC makes its strategic plan. The NOC strategic action plan has been posted for its second comment period.

5. Study of Environmental Arctic Change (Hajo Eicken, University of Alaska Fairbanks)

Representing the Study of Environmental Arctic Change (SEARCH) program, Hajo Eicken expressed an interest in cooperation between the IARPC and SEARCH. The Study of Environmental Arctic Change is a program which looks at the long term of arctic change. There are three main aspects they examine: observing change, understanding change, and responding to change.

SEARCH had a workshop on coordinating arctic observing on the international level and developing the responding to change effort. Responding includes adaptation, mitigation of change, and the means of informing sustainable decisions in the arctic. SEARCH is also co-sponsoring a workshop that looks at the response to arctic change and the level of involvement which will have different stakeholders as part of the project. Two points to explore for the relationship with IARPC:

1. Observing change. The emerging interagency Arctic Observing Network (AON), currently funded mostly by NSF and NOAA under SEARCH has to build on strong interagency coordination. SEARCH is addressing this in the near-term through a process meant to help with coordination of Arctic long-term observation efforts (with an international Arctic Observing Summit planned for late 2012). The IARPC can provide guidance to SEARCH coordination and sustained support of long-term observing activities in an interagency setting.

2. Responding to change. In terms of understanding and responding to Arctic environmental change, SEARCH has worked with partners at NOAA to develop a forum for improved sea ice predictions as relevant to different stakeholders (coastal communities, agencies, private sector). SEARCH is seeking assistance on how to best transition observing activities into the operational realm so that they can inform both academic research and decision-makers responses to change. This requires collaboration and coordination between a broad range of different agencies, with IARPC potentially providing important guidance on consolidation of such activities.

Brendan stated that IARPC will be relying on work that SEARCH has done already to create the five-year Arctic research plan. Eicken plans to submit the SEARCH goals and strategy documents currently under development to IARPC for input and guidance, in particular on the two issues identified. Kate expressed that this is a conversation that should continue in future meetings especially considering they both have 5-year plans to create. Brendan concurred.

6. Five-year Arctic research plan and working groups (Moran and Kelly)

The five-year Arctic research plan outline was revised based on comments from IARPC staff, particularly from NASA. Kate made a call to the group for comments on first three sections. The discussion today is to focus on the Research Initiatives.

Brendan suggested that IARPC should put each goal in context of all the efforts that are already taking place as outlined earlier in the meeting. IARPC is linking across numerous on-going efforts and that needs to be specified in the outline.

Doug DeMaster asked if IARPC will designate specific funding. The group came to agreement that they should leave negotiations on funding to another group.

The importance of focused research in the Chukchi and Beaufort seas—parallel to recent efforts in the Bering Sea—was discussed in the context of expected level funding. In that context, it was clarified that the Arctic Research Policy Act defines the Arctic as including the Bering Sea. IARPC's job is to describe in the research plan research that is needed regardless of cost. Simon Stephenson cautioned, however, against an unconstrained action plan. The work needed should be presented to John Holdren.

Discussions about financial needs for Arctic research ensued. Doug asked if it would be helpful to show a projected increase or not in the plan. Ashley Chappell brought up the argument that we have something similar to the Ocean SMP with items prioritized: having a clear direction from administration what the priorities are. Brendan clarified that IARPC is to advise on the priorities for the administration including under the Arctic Region Policy and the Arctic Policy Group. Jack Kaye pointed out that the scope of the research plan is not just oceanic but from the bottom of the sea floor to the top of the atmosphere. IARPC needs to show the connection to all these things, which poses a risk and challenge to focusing on issues in the same way the Arctic Ocean strategic action plan does. Good to be aspirational but there are limits for the IARPC plan. IARPC needs to prioritize but not become too specific.

Kate asked the group to provide feedback on the outline draft and timeline by Wednesday at COB. Examine the outline leads and provide feedback on those specifically as well. IARPC should look to add the Army Corp of Engineers for the "develop, deploy, and assess" part of the outlined plan. When the final outline is complete, the assigned leads should begin working on their sections. When the first sections are drafted, the group can begin to describe the infrastructure needs.

Simon stated that in the first three points the system scale is missing. Mike Kuperberg agreed and stated that system modeling needs to be employed to identify key research needs.

Brendan noted that everyone should look at the timeline and shoot to have this completed by the 1st of December. Kate thought that IARPC should aim for a research plan of about 30 pages.

Next meeting 11 July 2011 at 3:00 – 5:00 pm. Shella will investigate a meeting space at the Department of Interior. The next Principals' meeting is planned for 7 September 2011 at 9:00 am – 12:00 pm.

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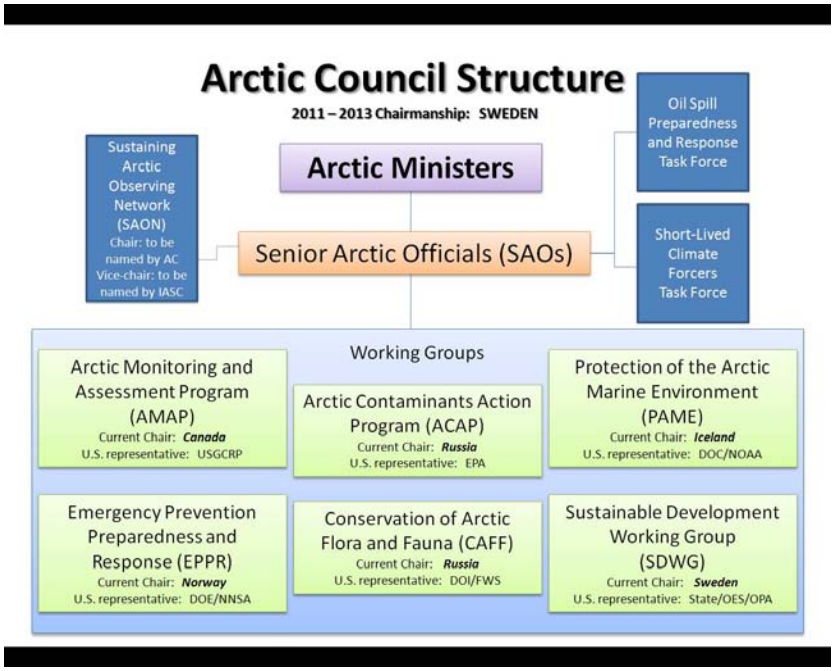
Arctic Council Structure
2011 – 2013 Chairmanship: SWEDEN
Arctic Ministers
Senior Arctic Officials (SAOs)
Sustaining Arctic Observing Network (SAON)
Chair: to be named by AC
Vice-chair: to be named by IASC
Oil Spill Preparedness and Response Task Force
Short-Lived Climate Forcers Task Force
Working Groups
Arctic Monitoring and Assessment Program (AMAP)
Current Chair: Canada
U.S. representative: USGCRP
Arctic Contaminants Action Program (ACAP)
Current Chair: Russia
U.S. representative: EPA
Protection of the Arctic Marine Environment (PAME)
Current Chair: Iceland
U.S. representative: DOC/NOAA
Emergency Prevention Preparedness and Response (EPPR)
Current Chair: Norway
U.S. representative: DOE/NNSA
Conservation of Arctic Flora and Fauna (CAFF)
Current Chair: Russia
U.S. representative: DOI/FWS
Sustainable Development Working Group (SDWG)
Current Chair: Sweden
U.S. representative: State/OES/OPA