

Meeting Notes
Interagency Arctic Research Policy Committee
Principals' Meeting
June 1, 2012
10:00-12:00
The White House Conference Center

Principal (or Alternate) Attendees by Agency: Dana Goward (DHS), Robert Dietrick (DOC/NOAA), John Stubstad (DOD), Gerald Geernaert (DOE), Alan Thornhill (DOI), David Balton (DOS), David Murk (DOT), Lek Kadeli (EPA), Jimmy Kolker (HHS), Tim Ragen (MMC), Tom Wagner (NASA), Subra Suresh (NSF), Irene Kariampuzha (OMB), Steve Fetter (OSTP), Eva Pell (SI), Daniel Casidy (USDA)

Presenter other than Principals: Simon Stephenson (NSF)

IARPC Staff: Brendan Kelly (Executive Director), Sara Bowden (Secretary)

The meeting was chaired by Dr. Subra Suresh, Director of the National Science Foundation and Chairman of the IARPC.

Summary of Action Items:

ACTION: The 5-Year Plan, according to ARPA, must be updated every two years. Suggestions from Principals on how best to undertake the updating process are requested.

ACTION: Mr. Stephenson will work with Dr. Kelly to contract staff support for IARPC.

ACTION: A summary of international research activities in the Arctic should be included on the next IARPC Principals' agenda.

ACTION: The Staff Group should collect a summary of agency activities prior to the next Principals' meeting.

ACTION: The Staff Group will look into the dates and times of the Alaska Arctic Marine Symposium, the Alaska Forum on the Environment and the Open Water Meeting in order to inform them of IARPC activities.

Meeting Notes:

1. Opening Remarks and Principals' Introductions

The June 2012 meeting of the IARPC Principals was opened by Dr. Subra Suresh at 9:10 in the Eisenhower Room of the White House Conference Center. He welcomed everyone to the meeting and invited Principals to make self-introductions.

2. Introductory Remarks

Dr. Steve Fetter, OSTP, thanked Dr. Suresh for his leadership and stated that this is his last IARPC meeting. He will be leaving OSTP and returning to academia at the University of Maryland. He noted that the IARPC is now the principal mechanism in the U.S. government for coordinating Federal research in the Arctic and is making valuable contributions to efforts there. He expressed his regret at leaving but looks forward to monitoring continuing efforts of the IARPC in the years ahead.

Dr. Suresh thanked Dr. Fetter for his valuable contributions to IARPC.

3. The agenda was misnumbered; there was no number three. The Principals moved immediately to item four.

4. Update on Action Items from the April 2011 Meeting

Dr. Brendan Kelly, IARPC Executive Director, reviewed the action items from the April 2011 meeting of the IARPC Principals. He noted that on action item 1 (see attachment 1), the staff group asked OSTP and OMB leadership for their views on undertaking a budget crosscut for Federal Arctic research. The guidance was that rather than undertake a budget crosscut, the IARPC should focus on implementing the 5-Year Arctic Research Plan (hereinafter referred to as the 5-Year Plan).

With regard to item 2, the staff group determined that a few complete reports from one or two agencies would be more useful than many short informational items from each IARPC agency. Therefore, during this meeting, the IARPC Principals will hear reports from the Smithsonian Institutions and NASA. If the Principals would rather have each agency give a short synopsis, then the agenda for the next Principals' meeting will reflect that. (In a later discussion, it was agreed that longer reports from a few agencies is more useful than many short ones from all the agencies. Agencies will inform the Executive Director, however, if they have items they wish to convey to the IARPC at its future meetings.)

Item 3 deals with agency representation, and Dr. Kelly shared the Staff Group representation from each agency. He asked all agencies to consider if additional representation is necessary to ensure coverage of all Arctic-related activities of the agency.

Item 4 asked the Staff Group to develop a fact sheet on the various interagency efforts which focus, or have influence, on the Arctic. The Staff Group collaborated with the National Oceans Council to develop a Venn diagram (Attachment 2). Dr. Kelly asked the Principals to look over the diagram and to provide feedback through their staff person if they would like to make any changes. He indicated that the diagram is useful for ensuring that agencies understand where different activities occur and how their agency can align with those activities.

Item 5 requested that Principals submit suggestions to the U.S Antarctic Blue Ribbon Panel. The U.S. Antarctic Program Blue Ribbon Panel conducted an independent review of the current U.S. Antarctic Program to ensure the nation is pursuing the best 20-year trajectory for logistically supporting science and

diplomacy in Antarctica. The Panel aimed to identify and characterize a range of options for supporting and implementing the required national scientific endeavors, international collaborations, and strong U.S. presence in Antarctica. Dr. Kelly Falkner (Acting Director of Polar Programs, NSF) stated that the report will be released on July 23rd.

The next four action items dealt with the 5-Year Plan. All have been implemented as requested by the Principals. The 5-Year Plan currently is undergoing external review. It has been widely distributed, and invitations to comment have been sent to the Alaska Governor's office, the President of the Alaska State Senate, the Speaker of the Alaska House of Representatives, the Alaska Municipal League, and more than 20 Native organizations.

Dr. Kelly shared the 5-Year Plan review process and roll-out calendar (Attachment 3) with the Principals. The 5-Year Plan is scheduled to be released at the end of August.

Finally, the Principals asked for inclusion of a discussion on international activities at a future Principals' meeting. Dr. Kelly noted that this item will be included on the agenda for the next meeting, and Ambassador David Balton indicated his support for such a discussion.

5. Indigenous Knowledge: A Component in Arctic Research and Outreach

Dr. Eva Pell, Undersecretary for Science, Smithsonian Institution and IARPC Principal, provided an overview of changes affecting indigenous peoples in the Arctic and how indigenous knowledge is informing Arctic research. She began by stressing that change is not new to the people who live in the Arctic. They have experienced rapid change—not only environmental but also economic—in the past, and they have adapted. Indigenous knowledge spans a wide range of experiences and conditions making it a valuable component of Arctic research.

Dr. Pell provided a history of the Smithsonian Institution's involvement in the Arctic, which began in the 1850s and has continued through the present, including the International Polar Year 2007-08. She detailed how the Smithsonian is working to bring artifacts and information back to the local communities. For close to 150 years, Inuvialuit of the Northwest Territories have had little contact with hundreds of artifacts made and used by their ancestors. Five hundred and fifty items, bought as a side-project by Hudson's Bay Company trader Roderick MacFarlane, became one of the founding collections of the Smithsonian Institute in Washington. The current project will allow elders an opportunity to study and record their knowledge of the items, including clothing, pipes, and tools. Other activities underway include the Inuvialuit Living History Project; the Yupik knowledge workshops aimed at keeping the Yupik language alive; and the work by Igor Krupnik of the Smithsonian Institution on indigenous observations of ice in Gambell, Alaska.

Dr. Pell noted the growing recognition of the importance of including indigenous knowledge in research in the Arctic. IARPC's 5-Year Plan includes a chapter on assessing vulnerabilities of Arctic communities to impacts of climate change and development of adaptation strategies to maximize sustainability, well-being, and cultural and linguistic heritage; and the IPCC-5 includes the use of indigenous knowledge in several sections. On October 24-28th, the 18th Inuit Studies Conference will be held for the first time outside of the Arctic at the Smithsonian Institution in Washington DC.

In the subsequent discussion, it was noted by Dr. Alan Thornhill that it is a challenge to find ways to include social sciences in decision making, but it must be done. The July issue of “Ocean Science” will include some ways that the Department of Interior is working with local communities to provide input to decision making. Captain David Murk pointed out that the Coast Guard has found that local peoples are a valuable multiplier of their research, and their involvement with local communities is important to the work of the Coast Guard in the Arctic. Finally, Dr. Tim Regan noted that the Marine Mammal Commission has years of experience of working with local communities and that their experience shows that the earlier communities are involved in research, the more valuable their participation becomes.

6. Remote Sensing: An Integral Part of Arctic Research

Dr. Tom Wagner presented an overview of NASA activities in the Arctic on behalf of Dr. Waleed Abdalati who was unable to attend the meeting. He outlined NASA’s current and future remote sensing capabilities in the Arctic, the importance of interagency collaboration on research projects that incorporate remote sensing, and provided some examples of opportunities and recommendations for IARPC collaborations in the future.

He stated that NASA’s Earth observing fleet in 2012 includes many international collaborators and most of the satellites are polar orbiting, offering excellent opportunities for data collection in the Arctic. In addition to satellites, NASA maintains a healthy array of airborne observations as well.

In the Arctic, NASA has two key foci. The first is ice sheet and glacier characterization for sea level rise prediction, and the second is sea ice characterization and its climate connections. In this regard, he noted that NASA staff scientists write the algorithms to map sea ice and work with colleagues at other agencies and institutions to see them used (e.g., NOAA, NIC, Navy, NSIDC). The U.S. now has an over 30-year record of sea ice extent from passive microwave, which is the most important data set for modeling sea ice-climate connections.

NASA’s IceBridge Project, he stated, is bridging the gap between ICESat and ICESat-2. He outlined the campaigns completed in 2009-2012 as well as the instrumentation on these flights.

Dr. Wagner also showed how remote sensing is facilitating research of other Federal agencies and academia. For example, he showed how satellite data is helping to map ecosystem changes through observations of sea ice and chl-a; how satellites are mapping ocean currents to better understand Arctic Ocean freshwater pathways; how satellite are influencing studies of Arctic stratospheric clouds; and many others.

Dr. Wagner suggested that IARPC should encourage broader use of remote sensing to answer Arctic system science questions. Extensive satellite records exist for many important geophysical properties of the polar regions and can serve as links for system science. He also suggested that remote sensing tools are available from space and aircraft and these can be used to improve coverage and time series of field work in specific areas. Given the scope and costs of Arctic science, agencies need to join forces for the large field campaigns.

7. Five-Year Arctic Research Plan

Dr. Suresh asked Dr. Kelly to review the status of the 5-Year Plan. Dr. Kelly informed the Principals that the 5-Year Plan currently is undergoing public review until June 22, at which point the plan will be revised by staff and sent out for LRM (Legislative Review Memorandum) review within each agency. IARPC staff will be kept informed of the process so that they can identify their LRM representative and ensure that this review is coordinated with the IARPC staff.

The timeline (Attachment 3) calls for a roll-out of the 5-Year Plan from the White House and National Science Foundation in late August or early September. Principals will be kept informed throughout the process.

The Arctic Research Policy Act of 1984 calls for the 5-Year Plan to be updated every two years. Principals' thoughts on the best approach to the updating process would be appreciated.

ACTION: The 5-Year Plan, according to ARPA, must be updated every two years. Suggestions from Principals on how best to undertake the updating process are requested.

8. Five-Year Research Plan Implementation

Dr. Suresh asked Mr. Simon Stephenson to outline an implementation strategy for the 5-Year Plan.

Mr. Stephenson noted that implementing the research outlined in the plan will rely on scientists within IARPC agencies as well as in the broader research community. Implementation also will require staff support. Ms. Sara Bowden has been working part-time—with the generous assistance of the Arctic Research Commission—to support IARPC staff meetings. Similarly, NSF contracted with Ms. Abby Graefe to help with handling public comments on the research plan. Both Ms. Bowden and Ms. Graefe have worked part-time on an interim basis, however, implementation of the research plan will require regular staff support. There are some models for other interagency groups, such as the National Ocean Committee and US Global Change Research Program. For IARPC, support is needed especially for coordinating meetings and workshops of Federal and non-Federal researchers and stakeholders. NSF suggests contracting the equivalent of 2 FTEs, including Sara, and additional support for web services. If it is agreeable to the Principals, NSF is prepared to fund contracts for administrative and web support of the IARPC.

The Principals thanked NSF for this contribution and supported immediate work to establish the necessary staffing.

ACTION: Mr. Stephenson will work with Dr. Kelly to contract staff support for IARPC.

9. Chukchi and Beaufort Seas Research Partnership

Dr. Suresh stated that the first initiative in the 5-Year Plan is “Understand sea-ice dynamics, ecosystem processes, ecosystem services, and climate feedbacks in the Beaufort and Chukchi Seas and the contiguous Arctic Ocean.” In previous Principals' meetings, Alan Thornhill pointed to the Department of Interior's need for information about the Chukchi and Beaufort seas, and he stressed the value of coordinating research efforts by IARPC agencies in the region. To that end, the NSF and the North

Pacific Research Board (NPRB) have partnered with Shell Oil and ConocoPhillips to further our understanding of that ecosystem.

Dr. Kelly noted that the NPRB-NSF-industry collaboration has solicited a synthesis study that will inform industry in the leasing process and the agencies in future research needs. This unique industry-government collaboration is challenging, but extremely worthwhile.

Dr. Thornhill continued by stating that interest in the off-shore realm in Alaska is increasing, not only in the oil and gas, but also for wind farms and hydro power. Given this increase in interest, there is a need for more research, but agencies need to be very strategic about where research dollars are spent. Over the past decades, DOI has invested in research on monitoring bowhead whales and seals and has been observing with interest the area of Hanna Shoals. At the same time, the Department is constantly evaluating investments so that it can focus on areas where there are gaps in knowledge. Partnering with other agencies is critical to plugging the holes in our understanding of this ecosystem. DOI believes that by working together with other agencies, it can be better stewards of Federal research dollars.

Dr. Robert Detrick, NOAA, stated that NOAA has and will continue to work with DOI and NSF in the Chukchi and shares Dr. Thornhill's interests in maximizing the public research investment.

Dr. Suresh called upon Dr. John Farrell, USARC, who asked to make a comment with regard to the IARPC 5-Year Arctic Plan. Dr. Farrell said that the US Arctic Research Commission remains very keen to see the White House authorize and assist in the conduct of an Arctic research budget crosscut analysis. He said that an annual budget compilation and analysis is called for in the Arctic Research and Policy Act of 1984, as amended. The law says that IARPC is to 'provide the necessary coordination, data, and assistance for the preparation of a single integrated, coherent, and multiagency budget request for Arctic research'. Similarly, he said, OSTP is supposed to review all agency and department budget requests related to Arctic research, and to consult with IARPC and USARC accordingly. Finally, Farrell mentioned that OMB is supposed to consider all Federal agency requests for research related to the Arctic as one integrated, coherent, and multiagency request, and review it before submission of the President's annual budget request for its adherence to the IARPC 5-Year Plan. Such budget compilations and reviews have not been done for at least 7 years, and now would be the time to do it, with the development of a new 5-Year Plan. Dr. Suresh favorably acknowledged this suggestion.

10. Interagency Working Group on Domestic Energy Production and Permitting in Alaska

Deputy Secretary of Interior, Mr. David Hayes, joined the IARPC Principals' meeting by telephone. He said that in July 2011, President Obama issued a directive to develop a deputy-level group focused on the potential oil and gas energy issues. The focus of the Interagency Working Group on Domestic Energy Production and Permitting in Alaska has been on the Arctic because of the off- and on-shore energy potential in that area. The interagency group has met several times and has learned that policy makers were not communicating as well as they might. There are a number of agencies or departments with jurisdiction for leasing in the Arctic, e.g.; EPA, Coast Guard, Bureau of Land Management, NOAA, Bureau of Ocean Energy Management, and others. Each of these agencies has been operating in their own silo and efforts have not been well coordinated. Many are undertaking their own programmatic environmental impacts reports.

As the interagency working group looked at the permitting process, they learned that we did not have a good way to pull together the associated science. They realized a need to identify resources, bring in traditional knowledge, and to better understand impacts in order to make informed decisions.

The interagency working group has reached out to the broader science community in order to coordinate and improve the decision making process. One way that they believe they can do this is by focusing on ecosystem based management (EBM). The National Ocean Council is also looking at EBM and the Ministers of the Arctic Council member states have established an expert group to explore possible international cooperation on Arctic EBM-based activities.

Deputy Secretary Hayes thanked the IARPC for its 5-Year Plan and expressed his hope that the Plan will help to reinforce the importance of using science to inform decision making.

Dr. Suresh thanked Mr. Hayes for his useful presentation.

11. Closing Remarks

Prior to closing the meeting, Dr. Suresh introduced Dr. Kelly Falkner, the Acting Director of the Office of Polar Programs at NSF. She reiterated that the Antarctic Blue Ribbon Panel report is in its final stage of review and will be released later this month.

Dr. Suresh provided a summary of an international collaboration effort being led by the United States to develop better practices for funding basic, peer-reviewed science around the world. He described the efforts that have been undertaken over the past 18 months and shared his views on the process. He noted that given the amount of research being done in the Arctic and Antarctic, we may want to engage the IARPC with this process in the future. A summary article of the process is provided in Attachment 4.

Dr. Kelly asked the Principals if they prefer a shorter 2 hour meeting or the former 3-hour meeting. It was agreed that the 2-hour meeting is desirable. Mr. Balton expressed his desire to include an item on international activities at the next Principals' meeting.

ACTION: A summary of international research activities in the Arctic should be included on the next IARPC Principals' agenda.

Principals suggested that the current model of two agencies reporting during the meeting is desirable, but that it would also be helpful to have a very brief summary of what other agencies are doing for the next Principals' meeting. This could be collected and collated by the Staff Group.

ACTION: The Staff Group should collect a summary of agency activities prior to the next Principals' meeting.

Dr. Regan noted that three meetings take place in Alaska which would benefit from information from the IARPC. These meetings are the Alaska Arctic Marine Symposium, Alaska Forum on the Environment, and the Open Water Meeting. Informing these meetings of activities of Federal agencies as well as the activities of IARPC would be extremely good outreach.

ACTION: The Staff Group will look into the dates and times of the Alaska Arctic Marine Symposium, the Alaska Forum on the Environment and the Open Water Meeting in order to inform them of IARPC activities.

Dr. Suresh thanked everyone for their participation and closed the meeting at 12:00.