

Breakout Session #4 – Cross-Cutting Issues  
Tuesday p.m., 8 October 2013  
Interagency

NASA agency bias, NSF is hardly ever at the table (e.g. USGCRP). Carbon cycle interagency working group (NASA, DOE, NOAA, etc. but not NSF with a persistent present). NASA/NOAA/etc. will do a targeted joint call, lack of enthusiasm from NSF North American Carbon Program – extra funds to do extensive synthesis, NSF doesn't get behind the broader stuff. In recent years, that's been addressed through a NEON member.

Some differences in Ocean BGChem.

Other thoughts – NSF PI with NASA experience – very different cultures, NASA is top down in the implementation. NASA can spend big \$ on “one question” and NSF can't/doesn't. Mission driven agencies have responsibilities to deliver products.

This also makes NSF essential because it is uniquely inquiry driven. NASA does pay attention to where NSF scientists are headed.

In the case of ABOVE, NSF investigators in a white paper will drive and influence NSF.

Similar in the case of atmospheric composition, white papers and selling it is essential.

NASA can address larger and more systematic data collection that NSF idiosyncratic projects identify as important.

That's the science context, but what about logistics. NSF is also different in that it is the only agency with an Arctic logistics program. So it is internally very well coordinated and also acts as a good broker of services for other agencies.

ICEBridge is going to be in ANT, based out of Mac for the first time. Enormous effort for NASA to gain access to that NSF logistics infrastructure. Worked flawlessly. NSF was very responsive.

What is the best case scenario – what does RSL expect of or from other agencies?  
Give us your ideas?

Barrow helicopter example... is there a means to create an opportunity for agencies to share on their field programs? A better sense of what's out there. It would be very AK based. Greater sharing of information about field projects and routine operations.

DOI has established an Arctic coordinating mechanism – its brand new. This could be a good access point.

IARPC is new and really getting off the ground with an unprecedented level of exchange and coordination, but we really don't have a lot of experience with it yet.

NOAA NWS or BLM has likely contracted to get where they are going. It might not mesh well with researcher needs.

As IT's grow into their maturity, we will have created some resources that could be utilized by the research community to investigate opportunities.

NASA found anecdotally, if you talk person to person, you find resources. Not a broadly coordinated effort.

AK is largely federal land, DOI presence is heavy, the AK headquarters for those agencies is in Anchorage. They enjoy a lot of independence (from DC), they don't like being told what to do by DC. There is a tension.

IARPC needs to be aware of this, while still playing a roll in opening doors.

IARPC website page – could be populated with research logistics, relatively up-to-date. NSF did approach the cryosphere program through AON. Would this be useful? You need a working group behind that of field support managers. NSF is the lead agency of IARPC and has a large budget for RSL, they could take the lead to create an IA WG. Get to know each other.

You do need a WG behind a website because there are issues e.g. of cost reimbursement, are onerous.

A long-term, third-party mechanism could be a e.g. UAF to manage the cost sharing.

There could be a pot of money to support research in the arctic that is co-founded by many groups. Enormously complicated, but even agency to agency is complicated.

e.g. NASA has a line item in the budget for NSF logistics.

In the ice camp group earlier, the 1% for science idea, e.g. the Exxon Valdez oil spill trust fund, which is then used to support continuing research.

Big sky thinking, oil leases have a tax that is in part used to support third party field logistics. If is it AK based, that might limit its use to AK.

Could NSF assume the responsibility of expanding the RSL mandate to cover logistics for other agencies (who request/require)? Following a USAP model.

Would that increase rigidity and scale (empire) of operations at a place like Greenland?

Mission agencies in AK must have fleets of assets. Not to support research, but their mission. This is more than NSF would want to take on.

USCG C130 Arctic Domain Awareness (ADA) flights, CU researchers put instruments in a pod on board. Culpis I has flown, Culpis II has not yet. Jamie Morrison (SCISSORS) is also using ADA flights through ONR. CG currently makes these flights available at no cost. If you can participate on non-interference. This is an example of where investigators make the government look good. They often create the relationship and present the appearance that the agencies figured it out on their own.

Mission agencies might hesitate to expose their assets too much, not rewarded for sharing necessarily and there are impacts. But it could be good for them to demonstrate that there are multiple uses.

For those agencies that operate outside of AK, they would be able to address the pan Arctic opportunities. Some agencies work across borders (DOI, NPS, NOAA).

How does NASA interact with Thule? Its all managed through the 109<sup>th</sup>. Discussion of how DoD interacts with other players through Thule.

Back to helos and CPS coordination in Barrow might help. They have an advantage b/c they see the full scope of the research. There is no formal mechanism inside Barrow for agency coordination. Things mostly go through CPS.

Is there a place (Barrow? Fairbanks?) where lots of agencies are active and could build some coordination capacity? Barrow might be too hard as there is already a lot of pressure on resources. Fairbanks might be simpler.

What about the ocean logistics community? The Healy. BOEM. RUSALCA. DBO. Ocean is where some of the best collaboration is going on. The state is contributing as well. They are using AOOs to do real-time data sharing.

BOEM is funding a lot of research and actively collaborating with other agencies. NOAA has been sending survey vessel (Fairweather) to AK water to address coastal mapping and near-shore bathymetry.

Sikuliaq. How widely known – it is a global vessel – it can be sent anywhere in the world. It is not limited to Arctic, so the Arctic needs to keep proposal pressure on it. Designed for moderate Arctic waters, so it is important to see that it is well used in the Arctic. Plan it should be ready in January of 2014, but it's a bit behind, 2-3 months.

Facilities in Barrow. Big navy hangar in mothballs. Any talk of putting it to use? There is a surplus, ice-capable Finnish hovercraft that the US may hope to acquire. The idea was to put it in Barrow. But it is not moving forward. There is also a hazardous materials issue in the warehouse as well.

NSSI. State, Federal and Local. And Industry. Is there a model there? The ED chairs one of the IAPRC groups. He does encourage other agencies to further utilize. Are they playing a field support or coordination role?

CG SAR helo's in Kodiak could be useful for some science deployments if they could be used. The IARPC SIIT could pursue this. ONR-CG-Navy relationships.

Given all the changes in Barrow, is there any interest in moving science support to another village? Are there other viable locations for science? Wainwright or Port Lay, still on the North Slope and looking for a bigger piece of the science pie (some discussion of tension around this, might not be totally welcome). There is an economic benefit to the communities where science occurs.

Might be a role for explicit canvassing of shared needs, e.g. of Barrow helo's.

Shrinking resources, raising prices. Maybe a coordinated interagency contract could be bid to manage costs.

Glaciers and Fjords IT, etc. are starting to have a community workshops. Those are good venues to have that conversation.

Action item: Learn more about how (if) NSSI is coordinating field research.

USARC (FT. Wainwright, e.g.), Army geospatial command. SERDP is the funding call for permafrost stuff, etc.. On occasion, they can talk to military folks for logistical support. – DOE, DOD (army/air), multiple more. The army-air needs helo time and they help researchers out. POC would be the Lt. Gen of the US Army AK.

## Summary

- Context: Different agency science cultures (mission versus inquiry) leads to different logistics cultures. Large coordinated experiments versus smaller idiosyncratic examples. Mission based agencies have research and operational logistics assets that could potentially be leveraged for research.
- Context: Many federal assets are managed through AK offices with a great deal of local freedom. One challenge will be identifying what those assets are.
- Building capacity within IARPC (information harvesting, canvassing for shared needs, website publishing and IARPC logistics WG development). There is already icebreaker coordination happening. Formalize the informal

discussions, bring in a greater audience, increase transparency and address roadblocks (cost sharing).

- Building capacity for easier cost sharing/reimbursement among the agencies. Can a third party entity play a more expanded role in reducing the cost reimbursement roadblocks (e.g. Toolik is easy b/c of UAF, Barrow is hard)? Is CPS already doing this, but the mechanism isn't clear to the community?