

Barrow Atqasuk Science Advisors

Corrected Minutes

17 March 2016

Fairbanks, Alaska

In-Person Participants: BASA members in *italics*

Karl Newyear, UIC Science (meeting leader)

Nagruk Harcharek, UIC Science (ex-officio)

Anne Jensen, UIC Science (ex-officio)

Mike Abels, UAF IAB/Toolik Field Station

Carin Ashjian, Woods Hole Oceanographic Institution

Chris Baird, National Ecological Observatory Network (NEON)

Faustine Bernadac, National Ecological Observatory Network (NEON)

Kelly Falkner, National Science Foundation

Amy Halloran, Sandia National Laboratory

Marin Kuizenga, CH2M Hill Polar Services (CPS)

Denny Lassuy, North Slope Science Initiative

Anna Liljedahl, UAF

Andy Mahoney, UAF

Sally McFarlane, Department of Energy

Shady Grove Oliver, The Arctic Sounder

Ignatius Rigor, University of Washington

Vladimir Romanovsky, UAF

Anna Schemper, CH2M Hill Polar Services (CPS)

Bill Simpson, UAF

Julia Madeleine Taylor, UAF

Bryan Thomas, NOAA ESRL

Craig Tweedie, University of Texas El Paso

Call-In Participants

Bob Hollister, Grand Valley State University

Hank Loescher, Next Generation Ecosystem Experiment (NEON)

Stan Wullschleger, Next Generation Ecosystem Experiment (NGEE)

Donatella Zona, San Diego State University and University of Sheffield

Administration Items

- The roster of BASA members was confirmed by those participating in person or via teleconference.
- BASA is currently lacking a representative from the Social Sciences. It was suggested to solicit interest from recently-supported PIs in this broad field such as Wendy Eisner (Univ. of Cincinnati). Lilian Alessa (Univ. of Idaho, Arctic Council Sustainable Development Working Group) was also mentioned. As per the recently established BASA Terms of Reference formal nominations are sought from the community for approval by current BASA membership.

Recent Meetings

- The Arctic Waterways Safety Committee met in Juneau on 2-3 March. The role of this organization and its membership were briefly presented. Many participants and other interested parties held a sidebar meeting to the Arctic Science Summit Week on 16 March 2016 to clarify results and future directions for efforts. The importance of respect for and involvement of indigenous/subsistence communities was stressed, as well as obtaining information about international operations (e.g. foreign research vessels) in US waters.
- UIC hosted a Business Development Tour in Barrow on 7-10 March. The centrality of science to UIC's business model and long history of Inupiat involvement in science activities was emphasized to a group of invited participants. One session focused on the BARC and potential avenues to pursue funding for further build-out of the originally envisioned phases. This meeting exposed a different audience to UIC operations in science and other functions, and provided valuable feedback. A key takeaway is the need for a formal "business case" such as an update to the 1999's "Future of an Arctic Resource". UIC Science believes that creation of a Long-Term Facilities Plan will largely address this point, and this topic was discussed at length later in the agenda.

Updates on Barrow and Atqasuk Operations

UIC Science presented numerous examples of operational changes in Barrow and Atqasuk including the following:

- UIC Science is fully staffed with 15 Barrow-based positions and additional management and support staff in Anchorage. We currently have a dedicated North Slope Science Liaison specializing in outreach to support Broader Impact efforts of researchers.
- Lodging options for researchers in Barrow during 2016 include NARL huts, primarily for projects supported via CPS and Ukpik Nest 1 dormitories (formerly Dario's), which

has been refurbished with 21 rooms (2 beds each) and includes shared bathrooms / showers, kitchen, dining, lounge, and laundry facilities. The cooking facilities include 2 each gas stove/ovens, microwaves, household refrigerator/freezers, and commercial refrigerators, plus cabinet and countertop space, running water, and plates / utensils / cookware. Internet access and cable TV are provided in each room. Color and Black&White printers are available at the BARC, as previously. The house on Herman Street and the Boxer Street apartments are no longer available. Lodging in Atqasuk is currently TBD as the owner of the house leased for the previous two years plans to reoccupy it. The remodeling of the 200 (BASC) wing of Building 360 into dormitories is currently on hold.

- The National Ecological Observatory Network (NEON) is currently constructing a 10-meter tall tower and conex-sized instrument hut northeast of CakeEater Lake in the BEO, accessed by trail mat/boardwalk. An electric line to operate this installation will be teed from the existing overhead power line. As is protocol for observatories, data collected by this NSF/BIO-funded nationwide project will be freely available to all researchers. Interest was expressed in adding internet and/or radio repeaters on this tower to provide more reliable field communications.
- UIC Science continues to augment the vehicle fleet with the addition of two side-by-side ATVs and three snow machines. Older snow machines will be retained but put into lower rotation. The side-by-sides seat 4 and offer a more fuel-efficient alternative for groups who do not require large cargo space.
- Other small equipment additions include a dry ice maker, analytical balances, and a new handheld radio system. The new radios are digital and hosted by UIC Science so we are no longer piggybacking on the NSB Police system. Current range is approximately 10-15 miles and we are working on methods to increase this. It may be possible to place repeaters in the BEO. Additional hand-held units can be purchased for just a few hundred dollars.
- Repairs to the BARC card-key security system have been hampered by problems with the vendor, but this continues to be a priority.
- A new online Researcher Outbrief using Survey Monkey is being rolled out. This is intended primarily for projects not supported via CPS, while the established protocol for CPS projects will remain in place.
- Materials from the Bill Brower library in Building 360 have been moved. Framed photographs are displayed in the Ukpik Nest. Other materials will be catalogued and made available to researchers. Personnel at Ilisaġvik College may be interested in this effort. UIC Science will communicate with Tuzzy Library to ensure previously catalogued items are accounted for. Further build-out of the BARC complex may provide an opportunity to re-establish a dedicated library/reading room and could

include a display area for materials from former NARL Director Max Brewer for which there is no currently available space.

- The Barrow Area Information Database (BAID, www.barrowmapped.org) has been funded and will continue to be available. This provides access to metadata about current and historical science projects in the Barrow/Atkasuk areas. Several new products are available online including comparisons between historical and modern imagery and a coastal erosion tool. BAID staff, in conjunction with funding from the Coastal Impact Assessment Program will continue to provide dGPS support on a no-cost basis to researchers (via UNAVCO). BAID also maintains a system of basic weather stations and comms capability throughout UIC lands, and will support terrestrial lidar this year. These services are available for other researchers to use.

Long-Term Facilities Plan

- Mike Abels presented information on the approximately 2-year long process used to create the 2013 Toolik Field Station Long-Term Facilities Plan. This procedure involves several incremental steps beginning with statement of a Vision, Goals, and Guiding Principles which inform subsequent steps leading to a Decision Matrix. Components of the Decision Matrix can be weighted based on relevant considerations allowing an objective comparison of different options.
- A completed document can be offered to management authorities and prospective funders as evidence of forethought and buy-in from all constituents.
- Necessary topics to address include: description of facility history and current status, current limitations/need for improvements, cost estimates, ongoing operations and maintenance (O&M), lifetime expectancy, designation of areas to be protected from development, and other constraints. A schedule of reviewing and updating the Plan should be made clear.
- Some differences between Toolik and Barrow include: TFS is a remote campus of UAF while Barrow operations are conducted by a private corporation; commercial services are available in Barrow; Barrow is host to other agencies with independent science operations. These issues should be incorporated into the Decision Matrix.
- Documents including the 1999 “Future of an Arctic Resource”, 2013 BEO Master Plan, and 2013 “Increasing Arctic Accessibility Over the Next Twenty Years” reports can help inform the content of a Long Range Facilities Plan in addition to the example provided by Toolik Field Station. It is not necessary to start from scratch.
- While not using facility development as a driver for science, Barrow’s unique features, both logistical and environmental, should be emphasized.
- It is recommended to start the process by creating a project timeline, breaking the effort into smaller, focused topics that can be more easily accomplished by selected

people. A single group does not need to be expert in all the chapters, but can build on complementary and simultaneous progress by other subcommittees.

- Review by an external group to verify reasonableness and avoid an “echo-chamber” effect is necessary.
- While some of the effort can be voluntary, some funding will likely be required for personnel time, meetings/workshops, etc.. The scope cannot be estimated at this time.

Other

- It would be useful to the science community for an annual summary of projects to be compiled and made publicly available. This can lead to collaborations and avoid duplication of efforts, as well as enhance collegiality within the research community. Applications such as BAID and ARMAP (www.armap.org) somewhat address this issue but a more focused document such as the BEO Annual Reports formerly produced by BASC are a useful tool.
- The North Slope Science Initiative will hold a **Science Technical Advisory Panel** meeting in Barrow on 9-10 May. NSSI to provide further details to UIC Science.

Next Meeting

- The next ~quarterly BASA meeting is proposed to occur via teleconference in early June, while avoiding conflicting with the International Conference on Permafrost in Potsdam, Germany on 20-24 June. UIC Science will arrange for the teleconference.

Action Items

- UIC Science to review recently supported Social Sciences projects for possible representation on BASA. Nominations are also solicited from the community.
- UIC Science will continue to pursue making the BARC card key system fully operational.
- UIC Science will coordinate with Ilisaġvik College and Tuzzy Library to properly catalogue materials from the Bill Brower Library.
- UIC Science to propose a timeline and scope for creation of a Barrow Long-Term Facilities Plan.
- NSSI to provide details of their upcoming Science Advisory Board meeting.
- UIC Science to arrange for the next BASA meeting via a teleconference in early June.