

North Slope Science Initiative
Director's Report
November 1, 2007

General Comments and Progress

North Slope Science Initiative (NSSI) has not been static since the June 2007 Oversight Group meeting. Considerable effort has been expended to implement projects and initiatives approved by the Oversight Group since obtaining a budget in mid-April 2007. Each of the projects on the approved list have been allotted significant time to complete either contract or agreements. Limited experience in utilizing grants.gov by both procurement staff and me has slowed implementation to a pace that has left some projects to be carried over into fiscal year 2008. Additionally, all projects needing to go through the process of grants.gov or contracting, except one, are over the local procurement authority and must either be reviewed by Denver or Washington Office, or both. Now, enter a situation where three staff members were working on implementing NSSI at the end of March 2007, to only the Director in July 2007. Combine these obstacles with difficulty in coordinating projects with industry, non-governmental organizations and NSSI member agencies, and the net result was an implementation less than expected.

Despite the about experiences several projects have either been implemented or are going through a review process in Denver or Washington, DC. The Geographic Information Network of Alaska (GINA) agreement has been signed with the University of Alaska Fairbanks (UAF). This agreement will partner UAF with NSSI for the long-term development of a "one-stop-shop" for information and data across the North Slope. By the end of December 2007, a staff member from GINA will be co-located with NSSI in Anchorage to bring together the identified data sets and provide a point of contact for member agencies, as well as industry and non-governmental organizations. The goal is to have GINA functional (and visible) in early 2008. The water quality project (ALWAS) was contracted for two years with Michigan Tech University and the University of Michigan. Advice from a small sub-committee of the Science Technical Advisory Panel (STAP) suggested a two season deployment of ALWAS: one in late fall, just prior to freeze-up and the second in the spring just after breakup. The late awarding of the contract did not permit deployment in the fall of 2007. However, the principles are working with industry and UAF to plan a spring deployment in 2008.

Many of you have recognized the NSSI website has not been kept up to date. The agreement with Michigan Tech Research Institute (MTRI) expired in April and we were not able to advertise for a new contract by the end of the fiscal year. I

am currently editing the announcement to be published sometime in November 2007.

The hydrologic gauging stations planned for deployment on the North Slope have not been without their own set of challenges. While funding for three stations has been allocated, none have been placed on the ground. There was agreement for two of the stations on the Tamayariak and Canning Rivers in the Arctic National Wildlife Refuge (ANWR), but placement of the third station in the National Petroleum Reserve Alaska (NPRA) does not have an agreed upon location. There was some administrative issues in dealings between agencies responsible the two sites on ANWR that has not been fully resolved. The NPRA site location will be established in an upcoming one-day workshop in Fairbanks in early December. Right now the funding has been allocated to an on-going BLM/USGS agreement. The overall cost of gauging station placement and maintenance on the North Slope will become a major funding issue in the near future. There is an immediate need to investigate alternate technologies for stream gauging in remote locations. I would suggest this task be assigned to the STAP.

The project database stumbled during the summer with Adam leaving NSSI. However, Adrienne is now tasked with implementing and making it useable to us all. The current issue is time allocated by the North Pacific Research Board.

Finally, Ducks Unlimited, Inc. (DU) is the selected entity to develop protocols for land cover and change detection. They will be holding meetings in Anchorage and Fairbanks in late November that include participation from the STAP. The work DU will be doing over the next few months will help determine what the contract for land cover change detection will ultimately look like.

Associations and Linkages with Programs Outside of NSSI

The Department of the Interior (DOI) began a process of developing a Climate Change Strategy for DOI administered lands last spring. DOI has established a climate change task force operating under the Deputy Secretary. Three subcommittees were formed to address a broad spectrum of issues DOI is facing regarding climate change. The three subcommittees are: Policy and Legislation, Land and Water Management and Science. NSSI is participating in the science subcommittee and has been asked to help bridge the other two subcommittees to develop an overall strategy. Two group meeting have been held: June and August to date. A draft strategy is due to the Secretary by the end of the year.

NSSI is participating in the National Science Foundation's Arctic Observing Network (AON) strategy as a principle investigator. The result is considerable

interaction with the Interagency Arctic Research Policy Committee (IARPC) in developing a long-term strategy for the storage and retrieval of long term observational data related to the Arctic. NSSI and the State of Alaska have been working in partnership with NSF to help develop the best possible system for Alaska's North Slope. As a principle investigator in AON, NSSI has been asked to help develop a sustained Arctic observing system. I will be joining an international team mid-November in Stockholm, Sweden, with follow-on meetings in Calgary, Canada in the spring. I have been working

NOAA is utilizing a regional collaboration team approach to determining the future needs for services. Several committees have been formed to address aviation weather, climate change, ecosystem assessment, remote sensing, sea ice, and several others. They will be determining commonality between the subcommittees to develop a strategy for the future. NSSI continues to be a participant in the process.

NSSI is coordinating with the Alaska Oceans Observing System and the University of Alaska International Polar Year initiative "North by 2020." This is an opportunity to develop ways to better facilitate data exchange and access.

Meetings and Introductions

Several meetings were held with principles on the implementation of GINA in June, July, August and September.

Participated in the June and August DOI climate change committee meetings in Denver and Seattle.

Chaired the NSSI section on water measurements at the American Association for the Advancement of Science Alaska meetings the last week in September.

September 27, 2007, a STAP meeting was held in Anchorage. See attached minutes for more detail.

Met with USGS Director Mark Myers, Deputy Director Bob Doyle and Science Advisory, Jim Devine at USGS Headquarters in Reston, Virginia on October 24th. The subject was NSSI leadership and organization and structure with regard to DOI climate change strategies. Some discussion was centered around the administrative placement of NSSI within the DOI.

A meeting was held at DOI with Ashley Banister, Alaska Affairs, Abe Haspel, Assistant Deputy Secretary, and Jim Mosher, Assistant Secretary for Fish and Wildlife and Parks. The discussions were NSSI budget related, development of an

overall DOI Arctic Policy and functionality of NSSI in relation to the member agencies.

I had a meeting with Martin Jeffries, NSF, Office of Polar Programs, in Arlington, Virginia on October 26th. This was to discuss the structure of NSSI as it related to the Arctic Observing Network and the Sustained Arctic Observing Network.

A NSSI staff committee meeting will be held on October 30th in Anchorage.

Science Technical Advisory Panel

The STAP was tasked to develop a list of monitoring programs in priority order as a first task. A second task to the STAP was to expand on the topics listed in the first task and provide justifications for the monitoring programs. Step three in the monitoring task involves the oversight group selecting monitoring topics from step two and tasking the STAP to provide recommendations.

STAP was also tasked to expand the current sub-committee on GIS/remote sensing to provide continuing advice to the development of information to be included in GINA.

The last task for the STAP was to establish a sub-committee to provide advice to the Director on the protocols necessary to develop a North Slope-wide land cover data base and change detection program. The sub-committee is to work Ducks Unlimited.

A proposal was received by Alaska Fire Service on October 24th to have the STAP provide direction and recommendations on studies related to the 256,000 acre fire on the North Slope this summer.

A suggestion was made by USGS to task the STAP with providing recommendations for the use of technology to address North Slope hydrology. This suggestion was to help gather hydrology information without establishing a series of gauging stations that are prohibitively expensive to maintain in a remote area.

Recommendation to Oversight Group

Task the STAP for each of the above subjects.