

Director's Report
North Slope Science Initiative

September 18 through December 3, 2008

The **United States and Canada Oil and Gas Research Forum 2008** held on October 28-30, 2008, was a resounding success. The forum featured a balanced platform to present research relevant to oil and gas exploration and development in the Arctic. The meeting was held in conjunction with the Minerals Management Service Information Transfer meeting, but shared facilities and some speakers. The forum attracted 241 attendees, including representation from the United States, Canada and Norway. Presentations were in four main categories: technology, physical science, biological science and cultural. In all, there were 44 presentations and 26 posters. The forum is currently being synthesized by Golder and Associates in Canada, and is expected to be available in December 2008.

A follow-on workshop was held in Barrow on November 12-14, 2008, as part of the University of Alaska: North by 2020. The workshop entitled **Reducing environmental risks and impacts in Arctic coastal and offshore oil and gas development** had several goals including:

1. Review international state-of-the-art technologies for Arctic offshore oil and gas exploration to identify innovative approaches for offshore Alaska to reduce environmental risks and impacts, including those stemming from underwater noise, discharge or oil spills, particularly in the exploration phase.
2. Assess state, federal and industry standards and regulations for Alaska offshore exploration in light of the latest standards and emerging best practices internationally to identify opportunities to reduce environmental risks and align incentives for continuous improvement.
3. Identify opportunities to reduce environmental risks through more effective utilization of local and traditional knowledge in oil and gas planning and emergency response.
4. Identify opportunities and needs for improved environmental and social-science data and information for industry and agency decision-making.
5. Identify opportunities to improve communication, coordination or flexibility for responsive decision-making in the changing Arctic offshore environment and make recommendations to state and federal policymakers as appropriate.

This workshop included participation from the United States, Canada, Norway, Finland and Russia. The workshop was opened by Mayor Itta and brought significant participation from North Slope communities. Materials from this workshop are also being synthesized by several University of Alaska graduate students and will be available in December 2008.

NSSI Deputy Director, Denny Lassuy, organized and moderated a special session on "**Fish and Fisheries of the North Slope**" at the 2008 meeting of the Alaska Chapter of the American Fisheries Society (Anchorage, Nov. 29). Talks covered freshwater, anadromous, and marine species and topics from recreational to subsistence fisheries, and even potential commercial fisheries options. Common threads, not surprisingly, were the dearth of on-the-ground (or in this case, in-the-water) information on North Slope fishes and how much needs to be done now to

even be able to describe the changes that may occur with energy development and climate change. Each panelist was asked what they thought were the top needs and critical questions for a secure future for fish and fisheries on the North Slope and its offshore waters. Responses generally included the need for baseline information on species identification, presence and distribution, but also raised such issues as: seasonal habitat use, differences between eastern and western North Slope environments, concern with water availability and quality, data sharing tools, the potential changing role of fish in arctic ecosystems and how new invasions may alter these ecosystems, international management for migratory stocks, and of course, how all of these may change with a warming environment. The session was primarily intended to start gathering fish folks who are actively involved with or interested in marine and freshwater fishes of the North Slope of Alaska, to share their current knowledge and share their thoughts on what more we need to know. However, it has already led to the establishment of a “North Slope Fish Group” listserv of nearly 70 members. The session also served to initiate active discussions on how NSSI can work with the Alaska Chapter AFS, possibly in conjunction with the North Pacific Research Board, to develop a “full blown” management-focused workshop at the 2009 meeting of the Alaska Chapter to better define our needs, share our priorities, and hopefully share the load in meeting these emerging challenges.

The Inland Northwest Research Alliance and the University of Alaska Fairbanks is sponsoring a symposium “**Lessons from Continuity and Change in the Fourth International Polar Year,**” to be held in Fairbanks on March 4-7, 2009. One of the sections will have an Arctic oil and gas development theme.

We continue to work closely with the Science Technical Advisory Panel (STAP) and the Senior Staff Committee to define the management questions, data needs and challenges that have been presented in the **Emerging Issues** section of the 2008 and 2009 annual operating plans. The STAP were presented with the first matrix (permafrost, coastal and riverine erosion, and caribou) that included the Senior Staff Committee management questions in each of the categories. The STAP was tasked to review the management questions, data needs and challenges to consider recommendations on the science approach or efforts that would be needed to credibly address each of the areas. Continuing with this effort, the STAP at a meeting on September 18, 2008, reviewed another group of general subjects that focused on emerging marine issues (oceanographic/sea ice conditions, increasing marine activities, and marine mammals). By the time of the Dec. 4 Oversight Group meeting, all remaining emerging issues identified in the 2008 and 2009 Operating Plan and 2008 Report to Congress (Table 1) will have been analyzed by the Senior Staff Committee to identify the relevant management concerns. In turn, these will be reviewed by the STAP early in 2009. Also at their September 18 meeting, the STAP selected Bill Streever as the new chair and Robert Suydam as the vice-chair. Both Denny and I thank John Kelley for his service and are already fully engaged with Bill and Robert as the NSSI moves forward with its work.

A nomination package for six positions on the STAP was forwarded to the Federal Register on October 30, 2008. The call for nominations will close 45-days after publication in the Federal

Register. It is expected the appointments will take considerable time for confirmation since we will be working with a new administration.

All Federal Advisory Committee Act documents and reports have been completed and the database updated. There continue to be requests for minor modifications of the FACA database as the General Services Administration refines database requirements.

The U.S. Fish and Wildlife Service and ARCUS co-sponsored a workshop **Wildlife Response to Environmental Arctic Change (WildREACH): Predicting Future Habitats of Arctic Alaska,**” on November 17 and 18, 2008, in Fairbanks. The workshop purpose was to identify critical research, modeling and synthesis activities necessary to advance our understanding of the effects of climate change on birds, fish and mammals dependent on the terrestrial and freshwater systems of arctic Alaska; find areas of common interest among researchers and managers, and promote collaborative efforts to improve the quality of information available to support management decisions. These efforts continue to compliment the work the NSSI is doing on emerging issues and we look forward to strong collaborative efforts in the future.