

**NORTH SLOPE SCIENCE INITIATIVE
OVERSIGHT GROUP MEETING**

Wednesday, October 7, 2009, 1:00 p.m. – 4:30 p.m.

Thursday, October 8, 2009, 8:30a.m. – 1:00 p.m.

North Slope Borough Office
Barrow, Alaska

MEETING NOTES

Oversight Group

Karla Kolash, Chair (NSB)
Tom Lonnie (BLM)
Gary Edwards for Geoff Haskett (USFWS)
John Goll (MMS)
Sue Masica (NPS)
Doug Vincent-Lang (ADFG)
Leslie Holland-Bartels (USGS)
Jon Kurland (NOAA)
Samantha Carroll for Dick LeFebvre (ADNR)

STAP

Bill Streever, Chair
Robert Suydam, Vice-Chair

NSSI Staff

John Payne, Director
Denny Lassuy, Deputy
Jess Grunblatt, UAF/GINA

Senior Staff Committee

Bob Winfree (NPS)
Ben Green (NSB)
Brian Person (NSB)

Visitors

Mayor Itta, NSB
Craig George, NSB
Warren Matumeak, Barrow
Julia Gourley, U.S. State Department

Welcome and Introductions of Oversight Group (Karla Kolash, Chair)

Karla Kolash welcomed the group, introduced Mayor Itta to the group and had them introduce themselves. The Mayor welcomed the group. He mentioned NSB staff and the great job they have

done. He thanked the group for coming to Barrow for the meeting. He mentioned the landing of three whales yesterday. The fall season has been very successful. The Mayor also said the reason the NSB approves the NSSI is that they feel it makes sense to collaborate in pursuit of a greater knowledge base and sound science. He stressed that this is a great time to take advantage of the opportunity to do research. He hopes that working together through NSSI will yield more than just one individual effort would. They are committed to doing their share to make that happen. He noted recent assistance to the FWS during their site visit after an apparent walrus trampling event. He thanked Geoff Haskett and his staff for their assistance. He acknowledged and thanked the NSSI staff. He ended by saying that he discusses NSSI every opportunity he has as the NSB wants to base their decisions on good sound science. He thinks policy makers in DC consider NSSI to be a step in the right direction. He is encouraged by the responses he has been getting from the new administration.

Julia Gourley, U.S. State Department, introduced herself. She is here on behalf of the Arctic Council. The eight countries involved in the Arctic Council get together to discuss arctic issues and what they can do to address them. An example of the work the Council is doing is a task force for cooperation on rescue missions. There has been almost no Coast Guard presence in the Arctic; other countries face similar circumstances. The first meeting to work on this will be coming up, hosted by the US. Other Arctic Council projects involve biological diversity, climate forcing carbons, and an Aleut Project project that relies on local knowledge. The State Department relies on the work that the federal, state and local agencies do in these areas. She thanked the group for allowing her to attend.

Approval of July 22, 2009 Oversight Group Minutes, (Karla Kolash, Chair)

The July 22 2009 minutes were reviewed. John Goll commented on some implied follow-up in the minutes that was not in the action item column. He specifically noted that for the LandFire meeting referenced in Anchorage, the revisions to the Director's Report were not specifically spelled out. He asked if the Fisheries Workshop was to be postponed. He also referenced an Oil and Gas Forum mentioned during the last meeting. John Goll reiterated that when decisions are made, it should be referenced in the notes or an action item should be included.

ACTION:

The minutes were approved pending the needed corrections.

Director's Report, John Payne:

The Report to Congress has been through ASLM and OMB and is going through the counsel. It is moving forward at a rapid pace thanks to DOI-Alaska's office and DOI national office. Denny further thanked NSB staff for submitting images that were used in the report.

Comments/Discussion:

None

ACTION:

None

NSSI STAP Packets:

Nominations are now in the Secretary of Interior's office for review awaiting official notification. There were 12 applications for 6 positions and NSSI made recommendations that were accepted by the Secretary. Doug asked if a STAP member's term expires before the Secretary approves the new terms can they continue on for an amount of time. John said GSA guidelines differ from the Departmental guidelines. A verbal agreement was made that the current appointments may continue until the new ones are signed. The NSSI STAP charter is up for renewal in April 2010 with no major changes expected. The new charter will be forwarded for approval this fall.

John thanked the group for the quick turn around on the report and thanked the Office of Communication within BLM-Alaska for their editing work on the report.

John mentioned the U.S. Arctic Research Commission meeting that he recently attended. He accompanied the Coast Guard on an Arctic fly over and discussed North Slope search and rescue options. He also noted meeting new Canadian staff and U.S. Navy personnel. William Decker, USN, will be going back to school focusing on Arctic policy.

Questions/Comments:

Doug Vincent-Lang asked about the recent Ocean Policy Taskforce meeting and asked if NSSI would be asked for assistance on a report they will be putting out. John said NSSI was only asked to help coordinate the meeting. John Goll mentioned they are still holding meetings all over the country.

Doug asked about the AOOS connection to GINA discussion and wanted to know what the status is. John Goll says there has been a push for data integration within the DOI Arctic Policy Group. He recalled a meeting that was held about a year ago on this subject, but has not really seen anything since. MMS staff is looking at this and if other DOI agencies want to get involved let them know. Jess referenced a meeting they will be having in Fairbanks to address this.

Julia mentioned the IARPC, a federal interagency group that looks at Arctic research priorities.

ACTION:

None

Review and Approval of 2010 Annual Operation Plan:

The first version was put out during the April meeting. It has been revised twice since and there is still no firm FY10 budget at this point. John asked for the OG's approval as is until the budget comes through.

Comments/Questions:

Doug asked if the budget is different than anticipated, would NSSI staff come back to OG to discuss possible projects to drop to meet the budget.

Karla suggested holding off on approving the budget until after the STAP gives their presentations on Emerging Issues tomorrow. Doug agreed. John Goll said the Emerging Issues presentations will allow the group to look at each project's importance and maybe see which agency or agencies may want to champion a project since NSSI cannot support all of them.

Gary Edwards said he thought the group was going to make decisions about what projects they would fund in 2010. Karla said she did not think the OG would approve the operating plan today, but thought that they would have better information on the projects so they can make some decisions tomorrow.

John Payne said he did send out letters to the various projects notifying them of the potential shortfall and suggesting they may need to look at agency monies for possible funding. John Goll clarified that the group was looking at Table 5. Doug also mentioned that NSSI does not have \$1 million for projects even if funded at that level because \$400,000 is used for salaries and coordination costs.

Doug asked if there is possibility of more funding. Ted Murphy said he does not think it will be increased. Tom Lonnie asked if there is any carryover from last year's budget, and John Payne said no, that in fact they are actually slightly overspent for FY 09. Tom also asked if the positions showing vacant are included in the FY 10 budget. They are still included. This means if there is a budget shortfall these positions and their related travel expenses could be taken off and the money put back into projects.

ACTION:

The group will hear all the Emerging Issue Summary reports tomorrow and then will look at which projects they may want to fund assuming certain budget amounts.

Agency Roundtable:

North Slope Borough

Terrestrial Studies:

Brian Person told the group about terrestrial projects NSB has going on. The majority of the projects are operated through grant funding. The projects are:

- Subsistence Harvest Documentation Program- This program looks at all 8 villages. It looks at the numbers of caribou, berries, and marine mammals harvested. There is a spatial element

involved as they look at the areas in which these are harvested. It began in 1992. The upcoming year there will be a pilot study within NPR-A on hunter effort based on distribution.

- Teshekpuk caribou herd monitoring in coordination with BLM and ADFG. There are approximately 45 satellite collars on the herd. They are looking at key migration corridors, breeding habitat, etc. This is very useful information for the Borough and also companies when planning their infrastructure to reduce impact.
- Employed 40 satellite collars on arctic fox in collaboration with UAF and BP. They are looking at the overwinter movement of these animals and will compare and contrast the animals within different areas of the NPR-A. They are looking at their overwinter diet, etc.
- Numerous waterfowl projects; cited the lesser snow goose project. There are also vegetation experiments tied in with this study.
- Numerous fish projects. These are in collaboration with DNR, ADFG, and BLM. They monitored harvest effort and species composition numbers, and water chemistry. There were a number of trawls done and seining.
- Health assessments were done on several species, especially caribou and arctic fox.

Questions/Comments:

John Goll asked if the projects are listed on the NSB site. Brian said they are working on putting them on the site.

Leslie asked for a copy of the sheet listing them. Karla also mentioned that the projects will be listed on the projects worksite within GINA.

Bill also suggested the items be highlighted in the NSSI newsletter. Karla liked the idea.

Warren asked when the last census on the Teshekpuk herd was done. Brian said it was done last year at a total of 65,000. That was an increase from the census before of 48,000.

Warren asked if all the caribou that were tagged were depicted on the map. The answer was yes.

ACTION:

Brian Person will get Leslie Holland-Bartels a copy of the sheet.

Marine Studies:

Robert Suydam talked about marine studies. He mentioned the fact that their studies are collaborative in nature. They are as follows:

Bowhead whale study - most of it is driven by the international whaling commission. They look at numbers, size, and structure. They use GIS to track movement. This assists them to analyze long-term

impact from climate change, development, etc. They recently relooked at the Bowhead's olfactory sense. They were thought to not have a sense of smell, but actually do appear to have a sense of smell.

Beluga program looks at whale movement and health. This involves tagging them with transmitters to track their movement. They have tagged about 25 Chukchi belugas. The tags have lasted anywhere from 4-18 months. They have found beluga in the far north Chukchi Sea.

They have a developing ice seal program. They recently hired a biologist in that specialty. This will be a collaborative study with NINFS, ADFG, and USFWS.

Oil & Gas impact on subsistence mammals.

The marine program will be expanded to look further at marine health.

Questions/comments:

Warren told stories of hunting bowhead and noticing that they can smell as evidenced by them diving when they smell the hunters. He asked if they have noticed where the animals with the highest contamination levels are. Robert said these have been noticed in Western Canada and the Cook Inlet area.

Doug asked what specific impacts on animals from oil and gas they are looking at. Robert said they are looking at examples of healthy animals to compare them in the future to other animals to detect any cumulative impacts.

ACTION: None

Alaska Department of Natural Resources

Oil & Gas Projects:

Samantha told the group about the following projects:

- Pipeline corridor for anticipated gas pipeline
- Gap analysis for oil assistance regulatory
- Alaska coastal assistance program

Questions/Comments: None

ACTION: None

Minerals Management Service:

John Goll went over the OCS 5-year program studies. A recent lawsuit has stalled development on the North Slope only, not the Gulf of Mexico. They lost on the point of not using the NOAA process to look at the ocean waters. They are now doing that. They are currently on a 5-year cycle from 07-12. Secretary Salazar decided to postpone the 2010-2015 programs. MMS will have to do scoping, etc. before anything else can occur. At this point the Secretary has to make a decision on the current 5-year

program before MMS can have anymore lease sales and any activity from the recent lease sale may occur.

BP has the world's longest well scheduled to be drilled next summer. It will be an approximately 8-mile horizontal drill. If the technology works it will greatly improve the blueprint for drilling on the North Slope. MMS is monitoring this program.

Shell has one proposal in for Beaufort. MMS is reviewing it for NEPA compliance. They asked for more information and should be coming to a conclusion in the next couple of weeks. Shell also submitted their plan for the Chukchi. If MMS deems it submitted it will take 30 days.

John mentioned a plethora of lawsuits they have pending on proposed OCS activities. He passed out copies of the studies MMS is currently doing and mentioned they are also referenced on their website. There will be 76 projects with 63 going on in the Beaufort/Chukchi Sea areas. This involves \$43M over several years. These projects are all collaborative in nature, mostly with NOAA National Marine Fisheries and NIML. COMIDA now has to do their flyovers out of Kotzebue. They will be able to revisit sites periodically to monitor changes, etc. He stressed that MMS has been doing social science for the past 30 years. He also mentioned the Bowfest Project and how integrated studies have been helpful.

Questions/Comments:

Bill asked if he understood correctly that most of MMS studies are contracted out and asked why. John said it was a decision made for workforce management reasons.

ACTION: None

Bureau of Land Management:

In FY 09, the Atigaru Legacy Well was plugged and remediated. This came out of the need to plug and remediate four wells that threatened the North Slope coast line. There has been great support from the Department. We will be plugging Drew Point in FY 2010.

BLM-Alaska is also working with the Air Force and ADEC to clean up old dump sites from mining activities. This is on-going and the Air Force is paying to clean it up. These cleanups will allow BLM to release the ROW within the NPR-A for these areas.

There was a Lease Sale in Sept. 08 and the acres were released in 09. We are looking at another lease sale next fall. This went very well and NSB was a collaborator.

The Bear Tooth Unit was approved for ConocoPhillips to drill.

We have 3-4 proposals for the gas pipeline. Two are in-state proposals and the others propose a route through Canada. BP and Conoco have a proposal for a ROW. BLM intends to have an open season sometime in FY 2010 for that proposal. The in-state ones do not have a ROW proposal.

BLM-Alaska intends to have a new integrated activity plan for the entire NPR-A. This would also take into consideration would could happen off-shore if the Chukchi/Beaufort are opened up.

All of these can be made available upon request.

Questions/Comments:

John mentioned the success of the water telemetry studies NSSI has done in relation to ice road work.

Bill Streever expressed interest the disposal of heavy metals. He also asked if most of the sites were gravel pads. Tom said the concern was that at that time all the contaminants were held in holding ponds. He also asked if they are revegetating the sites. Tom said the priority was not revegetating, it was preventing the contaminants from going into the seas because of coastal erosion.

ACTION: None

U.S. Fish and Wildlife Service:

Gary Edwards mentioned their migratory bird studies. He mentioned the RITs they have in the study areas. They are liaisons in those communities. They have coordinated with NSB on these studies. They are trying to have a greater permanent presence on the North Slope.

They are about to launch a major initiative with about \$3M funding to develop landscape conservation cooperatives. These will be collaborative and look at climate change as well as other issues at the landscape level.

Questions/Comments:

Doug expressed his concern that new governance bodies not be created that duplicate efforts that NSSI is already doing. Gary said they would see their governance body being broader based and he agreed they do not want to duplicate efforts.

ACTION: None

U.S. Geological Survey:

Leslie covered the USGS projects and provided a handout of those projects to the group.

Highlighted projects:

- Polar Bear activity of land (one is NSF-funded, a 2010 project is in collaboration with MMS)
- Yellow-billed loon populations (comparing Canada numbers to Alaska numbers)
- Walrus
- Landscape changes on North Slope, effect on nesting geese population
- Arctic cisco study
- Coastal erosion study (prediction models for future erosion)
- Streamflow monitoring (10 stream gauges on North Slope)
- Gas hydrate studies (with DOE, industry, BLM)
- GIS database

Questions/Comments:

Bill Streever asked about polar bear detection studies. USGS is not doing these; ADFG is going to do a study.

Bill asked about third party researchers and the conflict industry has had with them. Leslie said she would need to get specifics to address the issue.

ACTION: None

National Oceanic and Atmospheric Administration:

Jon Kurland presented information on the following studies NOAA is conducting:

- Ice seals
- Spotted seals
- Ringlet bearded seals
- Section 7 activity under the Endangered Species Act
- Arctic Fish Management Plan (prohibits most commercial fishing in the Arctic)
- COMIDA
- Arctic/Sub-arctic conveyance surveys

Questions/Comments: None

ACTION: None

NPS:

Sue Masica presented the following projects:

- Remote weather site stations within the parks
- Coastal erosion studies on western arctic parks (study to be released this fall)
- Species monitoring (caribou, brown bear, musk ox)

Questions/Comments:

None

ACTION: None

Alaska Department of Fish and Game:

Doug cited Governor Parnell's push to develop OCS responsibly.

He cited the following projects:

- Population and distribution of Steller's Eider
- Possible comparison techniques on polar bears in the Chukchi and Beaufort

- Wildlife corridor project on North Slope
- Change in salmon distribution along North Slope
- Whale migration (beluga/bowheads)
- Possible study on yellow-billed loon

Questions/Comments:

Denny asked who the contact for polar bear and salmon studies. Doug noted that Bill Morris does the fish work, but they are not sure who will do the detection work for polar bear.

Karla noted the theme of collaboration during the presentations. John further stressed the importance of collaboration. He also mentioned the upcoming workshop on spill prevention technologies (see MMS website) and a November 10 renewable energy workshop, probably at MMS.

ACTION: None

Public Comment:

Robert Suydam mentioned the walrus trampling issue and suggested it is sometimes difficult to deal with these situations. He suggested that increased human activity in the marine environment, including tourism, science-related activity, and industry activity will eventually cause a ship to run aground. He suggested NSSI would be a good vehicle to look at ways to deal with this when it does occur. He thanked USGS and the Sea Life Center for their assistance. He also mentioned a multi-disciplinary workshop the STAP recommended to the OG. He encouraged a meeting of that nature because it stretches across disciplines and agencies and encourages a collaborative scientific approach and feels it would be a huge benefit. He also referenced a public comment he made during the last OG meeting. At the time he felt the STAP was struggling with their role and he thinks the emerging issues papers have assisted them in adding value. He does wonder what the next step is. He thinks the STAP could come up with a science roadmap showing how they think they can benefit the NSSI. He thanked the group for holding the meeting in Barrow.

The meeting was adjourned at 4:50 p.m.

Thursday, October 08, 2009:

Conference Recommendation Discussion:

Bill reviewed the process the STAP took in presenting the proposal to the OG. The STAP believes there is still a need to hold the conference to get all the scientists from various fields together to discuss issues and collaborate. They feel 2010 may not be feasible at this point. They recommend:

- Using upcoming conferences to get exposure for NSSI
- Continue looking to 2011 for an NSSI-sponsored conference in Alaska
- Continue to have a strong presence in available conferences in 2010 (e.g., the Climate Change and/or Arctic Tracts at the 2010 Alaska Forum on the Environment)

Questions/Comments:

John Goll and Doug Vincent-Lang recalled the OG approving moving ahead with plans for a conference, but that it was decided that it would not be possible to hold it in 2010. A discussion ensued, including the cost, logistics, etc. NSSI would want the conference to focus on both offshore and onshore issues.

John Goll posed the option of having the conference in the fall of 2010. Bill Streever said it would be possible if there were permanent staff dedicated to making it happen, but if STAP members who have other jobs have to do it, it would likely have to wait until 2011. Denny said a lot of the decision was fiscally driven. Leslie and John said that a lot of the work should be done by agency staff.

Karla Kolash recalled a discussion at the last meeting on this and that the NSB would be willing to offer financial assistance and thought BP would as well. Bill agreed. Leslie asked the group if they agree that the STAP should have a consolidated conference and asked for a vote.

Robert Suydam said a meeting focusing on terrestrial or marine might be possible and maybe focusing on one geographic area might be useful. John Goll said his preference is to include the whole picture rather than piece-mealing it. He thought there would be some value in discussing the US/Canada workshop during the next meeting.

Doug stated he is still unclear what the purpose of the workshop would be. He asked for a purpose summary. Bill said there is a purpose statement in the summary and there would be several workshops within the conference.

Bob Winfree said a multi-disciplinary conference is much different than a one focus conference. This provides more synergy between the various disciplines. He said looking at other upcoming conferences is very important too so they are not competing with others.

Karla agreed that a sub-committee is necessary if a conference is to be scheduled. John reminded her of the sub-committee that was created during the April 15 meeting, but Leslie and Karla said it was a conceptual sub-group, not an operational one. A discussion ensued.

ACTION:

Karla asked the OG if they agree with the concept of a multi-discipline 3-day conference in FY 2011. The OG would take ownership of the conference with the direction of the STAP, with NSSI not funding the whole thing. Doug Vincent-Lang moved to approve the conference and Samantha Carroll seconded the motion. A vote was taken and a 2011 conference was approved by the OG.

Karla decided to use the present sub-committee developed during the April 15 notes with a lead. John Goll nominated Leslie Holland-Bartels to take the lead and Tom Lonnie seconded the motion. Leslie will coordinate meetings of the sub-group and report back to the OG.

STAP will give the conference proposal to Leslie by October 16. The conference would happen in February, March or April of 2011. Leslie will coordinate with Bill.

Bill Streever brought up the need to better link researchers to management's needs. He feels the researchers are not connecting the needs with the bigger picture and thinks management needs to focus on that as well. He feels this should be a top-down approach.

Emerging Issues Summaries, Bill Streever, STAP:

Bill Streever gave a PowerPoint presentation on the emerging Issues (see NSSI website), outlining:

- Process the STAP took in presenting emerging issues to the OG
- Issue-by-issue highlights & recommendations
- Discussion on options for agency leads/collaboration
- Discussion of future direction & priorities
- Future emerging issues, e.g., rehabilitation of sites within the North Slope

Questions/Comments:

Bill said the STAP's goal is to get OG's acceptance of the papers, pending whatever fixes are needed.

Bob asked if the STAP is asking for concurrence only and not looking for NSSI funding for all the identified projects, as they will be collaborative. Bill agreed. Funding is not the issue at this time.

John Goll referenced the language of the Emerging Issues and Future Directions section of the Report to Congress and said it was a good outline to follow. He suggested having a preface on how the papers will be used.

ACTION: None

Weather/Climate Change:

The STAP feels strongly that of all the emerging issues that the "weather and climate summary" is of the utmost importance and it is crucial to get accurate up-to-date information in this area.

Gary Edwards said he felt the issue paper seemed geared more toward weather than climate. He asked for clarification. Doug agreed. They asked if by addressing weather is that going to lead to better climate change models. Bill said that when this was presented to the climate change weather experts, it was agreed that good weather data is the basis for good climate forecasting and this is where it ended up. John Goll said he remembered an earlier discussion of maybe taking climate out and just doing weather monitoring. He went back to recommendation 3 and thought maybe a basic set of data for monitoring and collecting should be developed. Bill said the STAPs thought was that this would be something done during a workshop as part of the process of implementing the recommendations.

Denny noted that he sat in with the group on this discussion. They understood that the goal included getting to climate, but the group recognized that there are many people already people doing that and that the basic data to feed the climate models is what most urgently needed improvement. They want to ensure those models are based on reality, so they focused on weather as a process and as an underlying basis for climate change monitoring. That would be the product of the process laid out. Gary suggested that type of verbiage be added to the issue paper as clarity.

Bob Winfree said there is a lot of value in models, but in AK there are very few weather data records. To develop an accurate model is difficult. They might not be reflective of what is actually happening on the

North Slope if they are based on global models. If projecting change in the interim, temperature change data would have to be more accurate.

Bill Streever suggested adding a statement about the need for getting better weather data to come up with better climate change prediction models. Leslie said she liked the current write up and thought it was very helpful. She thought the bullets on pages 2 & 3 were good explanations.

Doug suggested changing the name to meteorological data as opposed to climate change. Bill reminded the group that climate is accumulated weather patterns so it is weather.

Doug brought up the fact that wind was not prominently mentioned in the paper and that it does have an effect. John Goll mentioned a wind study MMS is doing with UAF. He thinks adding wind and more terrestrial language might help.

John Goll asked the OG what the next step is to proceed, who is taking the lead? A discussion ensued on whether it would be discussed now or at the next meeting. Karla suggested the revisions be made and those decisions be made at the next OG meeting. Bill suggested a hybrid approach, maybe if someone from a specific agency volunteers to take the lead on a specific issue.

Because someone had suggested the National Weather Service within NOAA may be the appropriate lead, Denny noted that the STAP group that worked on this summary felt strongly that the NWS may not actually be the appropriate lead for this process or that if they were, there must be an understanding that the intent of these recommendation is not to get everything up to NWS standards but to maximize the value of the data now available and make improvements from that basis.

Leslie suggested the group go through them all first and then make assignments to specific leads to address any of the issues that come up. She wants to get the papers at a point that they can accept them for circulation and work out the logistics later.

Tom agreed with John and Leslie. He wants to move on and get the papers accepted first. Just because the OG accepts it does not mean a particular agency necessarily has to adopt it. The next meeting could be used for the particular agencies to address what areas they are willing to support financially, etc. He also said he does not want to disregard what the NWS is saying about climate change/weather change.

Doug said it is important to acknowledge that these documents are living documents, subject to change.

Leslie said that how you meet national standards for data collection versus local standards can be challenging.

There was a brief discussion of the nature of the OG's decision on the Emerging Issue Summaries. Dave Yokel noted that the OG's role is not to approve or disapprove of the STAP's advice, but that the OG can decide what they want to use.

Tom Lonnie said he wants to make sure the papers meet the needs of NSSI. Denny suggested that the OG may want to think about wording any decision as "accepting" rather than "approving" these summaries as STAP products.

ACTION:

None

Increasing Marine Activities:

John Goll said the wording in the document differs from the NEPA approach. Bill said the STAP was looking at a broad based approach, not restricting its consideration to NEPA compliance.

John Goll said he saw more regulatory generalized statements, not going into the research specific areas. Karla thought that a generalized approach was the only way to address it.

Bill asked John for some examples of what he is looking for. John referred to bullet five and said he thought the group would address more of the issues and how they would be addressed. Bill said the STAP thought there was a need in studying methods being used in looking at cumulative effects and make suggestions for improvements.

Robert Suydam said the STAP addressed the issues with the hopes that they would assist the OG in making management decisions. He asked for clarification on what the OG wants from the STAP in making the documents more useful. John gave an example of ocean noise. He thought making suggestions to deal with specific issues and who could deal with them would be helpful.

Bill said that from the STAP viewpoint the suggestions made are ways to come up with a better method. They view it as being the OG's prerogative to decide which agencies would deal with specific issues.

Karla recognized that some of the issues are still unresolved, but thought the paper was useful.

Ben Green stated he has been somewhat involved with the emerging issues papers. He was surprised that the issues of marine spatial planning and new ways to look at regulating managing activities in the marine environment, specifically subsistence activities, were not more specifically addressed. The NSB would like to see considerable attention paid to those activities. However, the STAP was tasked with looking at the science and technology needed, not to address specific scenarios.

Robert Suydam did not recall discussing marine spatial planning in great detail and thought it could be a part of future conversations. John Goll does not think this is a STAP function as this type of policy would be dictated at the national level. John Payne brought up the national report on marine spatial planning that is being created. Denny noted that while the STAP is not a policy body, there are definitely science considerations involved in the process of marine spatial planning.

ACTION:

None

Changing Sea Ice/Ocean Conditions:

Doug said that ocean acidification was not adequately discussed in the paper. He thought it should be addressed and asked if it would be incorporated in the fisheries paper later on. Denny said given its potential impact, it would likely have to at least be noted in the fisheries paper. There was little discussion of this topic during the STAP breakout on this issue.

Bill agreed that maybe a small change in text to address ocean acidification could be added.

Karla suggested addressing it under workshop recommendations.

John Goll asked for a clarification on the models. He asked if they wanted to look at what kind of ice might be out there. Bill said he thought they are predictions of ice.

Warren said on behalf of the NSB he would like to thank the group for their efforts. A lot has been accomplished, but there are still things to sort out. He encouraged the group to continue to work together. He brought up acidification and how it affects animal species by eliminating their available food chain.

ACTION:

Bill will ask the authors of this paper what the numbers referenced.

Permafrost:

After the presentation of this topic, Leslie asked if much of the permafrost discussion is based on botany. Bill said that is definitely an aspect.

Bill said the immediate concern is active layer change. Mapping would be useful.

ACTION:

None

Coastal and Riverine Erosion:

Jon Kurland asked if there is discussion of a preferred methodology for coastline mapping. Bill was not sure.

Doug asked if it is possible to use digital mapping to get a better depiction of the shoreline. Bill said numerous methods have been used and he is unsure which technique works best.

Doug said soil hardness and how close it is to erosion are key in determining what works best.

Tom asked if the group is also looking at accretion. Bill said yes.

ACTION:

None

Hydrology and Lake Drying:

No comments on the presentation of this issue.

Action:

None

Coastal Salinization:

Karla expressed the need for adding a local knowledge component to this issue.

ACTION:

Bill will have the group add a local knowledge component to this issue.

Contaminants:

John Goll asked if there is similar concern for the terrestrial areas as with the marine animals. Bill said he is sure there is and he will get back with the STAP and ensure he is correct. He thinks the focus is mainly on the marine environment, but they are applicable to the terrestrial one too.

Leslie brought up contamination coming into the US via migratory birds. Denny said this was addressed in the migratory bird issue summary.

John Goll referenced page 4 addressing the mud factions. He asked how these would be addressed. Drilling muds are specifically addressed. Bill said it is a significant concern on what will be done with drilling muds during offshore drilling. John said the process is outlined through EPA. Robert said that those guidelines do not address effects on species in this environment.

Action:

Bill will ask the group if the terrestrial areas are included in this paper.

Fire Regime:

Tom Lonnie said that looking at fire activity as individualized occurrences is important.

Karla asked if it was the consensus of the group that the Anaktuvuk fire was not a sign of things to come. Bill said the group felt there was not enough data to determine that. She also stated that if they are going to let tundra fires burn unless they directly affect villages, that subsistence resources (e.g., caribou) should also be considered.

ACTION:

None

Vegetation Change:

No comments on this issue presentation.

ACTION:

None

Migratory Birds:

Doug expressed the need for accurate subsistence use data. Collecting better information in this area on a broad scale would be necessary. Survey methodology should be on a smaller, not so broad scale on rare bird species. The studies should be more specific. He would like to see these in the recommended section of this paper.

Robert Suydam acknowledged Doug's comments on harvest data. The group did not put it in the recommendations because the Alaska Migratory Bird Co-Management Council is already addressing this. Karla suggested noting that in the paper.

ACTION:

The group note the Alaska Migratory Bird Co-Management Council is already addressing harvest data.

Caribou:

Doug said the ADF&G management of these herds are at different levels based on the concerns facing each herd. He feels some of the wording changes are misleading as the "inconsistencies" in their management are necessary. Bill said that is why it is termed "perceived inconsistencies."

Gary Edwards said it depends on how one reads the paper.

Brian Person said the group realized the need for different management techniques, but that there is still a perception among some that they are not all being managed equally. Bill suggested adding the phrase that there is a need to recognize the differences in the individual herds when managing them.

Dave Yokel suggested changing the term "inconsistencies" to "differences."

Denny mentioned there is a scientific basis for some of the language that refers to the need for consistency among caribou data gathering efforts because to understand the significance of climate change there would have to be some correlation of monitoring between the herds.

Doug asked about what was meant by identifying a lead on caribou management. He wants to change that. Bill asked if it could be changed to identifying means of improving the collaborative process.

Leslie and Robert both said questions posed to the STAP should be science related not management.

ACTION:

Doug will work on rephrasing the perceived inconsistency term and will send it to Bill via e-mail by October 16.

The document will be reworded to change the term "lead" to "means of improving the collaborative process" within the document.

Marine mammals and their prey:

Leslie said it may be worthwhile in mentioning NSB studies already taking place on this and mention the importance of the NSSI being involved.

Jon Kurland said a clear statement on the cumulative effects and climate change should be added.

Gary suggested using the term human interaction in this paper due to the interest of polar bear/human interaction.

John Goll suggested maybe developing a connectivity paper to draw a correlation.

ACTION:

Bill will add specific climate change/cumulative effects statement to this paper.

Bill will have the human interaction element added to this document.

Overall Action:

Bill will reread all the papers and take out language that appears to relate solely to management and not with science challenges associated with that management.

Karla asked the OG for a motion to accept these papers with the agreed upon changes. Doug Vincent-Lang moved to accept them with the cited changes. John added this means the group is accepting them with the knowledge that they are living documents and seconded the motion.

Jon Kurland asked how additional items will be added and how these will be circulated. They would be circulated on the website. The STAP Chair or Executive Director will write a lead comment for the website to present the documents as a preface to the summaries as living documents. They were voted on and accepted unanimously by the group.

All issue summaries will be taken back to their respective leads for further discussion as necessary.

Robert Suydam recalled a question posed yesterday of how the STAP can be helpful to the OG and he cited the following ways:

- Developing a connectivities paper to help see the way forward
- Prioritizing the science among emerging issues as well as the priorities within each one (STAP's scientific opinion, final decision would be the OG's)
- STAP could provide advice on ranking/prioritizing studies the OG is considering funding
- NSSI Conference - STAP could help set objectives, suggest persons to invite.

Leslie posed the question of what the rule sets will be in making these decisions. She suggested coming up with a set of rules to use when suggesting priority status of the issues. Robert agreed and said it is part of the transparency process.

Doug and John expressed some confusion on the second bullet. John further said the STAP would have to avoid the appearance of telling any agency how to spend their funds. Robert said the STAP understands their roles as advisors and realize it may not be adhered to. He sees number two as just providing advice on what the STAP thinks is the most important science to address.

Tom said he felt the STAP had already been through the process of prioritizing the emerging issues. He further thought the advice the STAP would give would be relevant to the money that NSSI was going to spread to the projects, not the agencies.

Bob Winfree said he thought taking the full set of issues and identifying what the most important areas to address are is not necessarily a science question.

Doug feels a lot of the recommendations will fall into place with the creation of connectivities paper.

Bill Streever said the group is excited to develop a connectivities paper and he feels it is broadly supported. As far as prioritizing, they may have difficulty or could run into conflict of interest issues and would have to recuse themselves from the discussion. He suggested not overloading the STAP with too many issues at one time, but at the same time said members of the group would like to be involved in various discussions relating to the emerging issues.

Karla agreed that the connectivities paper would be of value.

John Goll mentioned the upcoming NSSI coordination joint meeting. He suggested having the good results of the 2-day meeting presented to the OG so they could see the major projects that have come out of that effort.

Karla mentioned the recently deceased Arnold Brower, Sr. was a member of the STAP and was very much appreciated for his contribution to NSSI. The group strongly agreed.

A STAP sub-committee will draft up an annotated outline of what the connectivities paper would look like to present to the OG at the next meeting.

Bill will provide John Payne a list of people he wants on the connectivity outline sub-committee.

Revisiting the Operating Plan:

Karla reminded the group that there is not a firm budget at this time for NSSI. She thinks that approval of the budget and, as Doug stated earlier, tiering the projects based on what the actual budget is determined to be is appropriate.

John Goll asked how the overspent amount from FY 09 will be made up and will it need to be deducted by the FY 10 amount. John said that BLM has taken care of the amount.

Gary asked what did not get done in FY 09 due to the shortage. It was landcover and the decision was made in the July meeting not to go forward with it unless funding came through.

Karla asked John to again explain the landcover project to the OG. John said the idea was get consistent landcover information across the North Slope. At one point it was suggested that the national LandFire

database be used. However, when the final LandFire came out in August, it was of poor accuracy because of the spectral imaging used. Ducks Unlimited is to work with LandFire to correct that base to achieve 80-85% accuracy. He reminded the OG of the role of landcover in change detection, that it cuts across many of the emerging issues, and that its completion is specifically endorsed in multiple emerging issue summaries.

Karla asked John to talk to the group about the gauging stations. NSSI has a cost share agreement with USGS to place the gauges in two streams on the Arctic National Wildlife Refuge and that these were the first gauges put in this part of the Arctic.

John Goll asked which agencies would be willing to fund the gauges if NSSI was forced to pull its funds. The group talked about the decreasing priority of having the gauges since the 1002 area is not a development area under the new administration.

Leslie said the 5-year time span was implemented in order to create an accurate model. Her interest in continuing the stream gauging is getting enough information to develop a good modeling approach. The project has already been going for two years.

Doug asked why there are two gauges as opposed to one. Gary said they monitor different types of areas.

John Goll brought up the fact that they are looking at reducing spending by \$130,000 at this point. He cited the savings of taking the Natural Resource Specialist position and related travel out of the budget and reducing the Director's travel costs.

John Payne posed another option of not starting the landcover project; a savings of \$280,000. Karla asked if landcover could be extended and John said it could.

Bill Streever said most of the STAP would put the highest value on coordinating activities through NSSI. He did not like the idea of cutting travel as it promotes coordination.

John Goll proposed each project be discussed and if no agencies commit funding, the project be cut.

John Payne told the group that there are already some collaborations going on with the landcover as well as the water gauging stations.

Tom Lonnie reminded the group that things have changed a lot since the gauging stations began, especially with development in the 1002 area. He further said four years ago he would have been supportive of the gauging stations, but he does not see that now. The entire group would need to agree that it is a priority for NSSI to continue to fund it. At this point, he thinks USGS and USFWS would need to decide if they want to continue the study and fund it accordingly.

Leslie recommended that USGS and USFWS get together on the water gauging issue and discuss it and get back to the OG with the results of their conversation.

Karla summarized the discussion by stating that it seemed the gauging stations are not as important as they were in the past. She agreed with John Goll's idea of cutting an open position, but not travel. John reminded the group that they can wait until January to make the decision as no agreements have been

made yet. This would give the group more time to get the necessary information to make the best choices.

John Goll said the OG could take out the \$280,000 and the vacant position and not allow that spending. They could then come back and revisit the budget again in January. Karla wants to zero the position out for now, but not cut it totally out of the budget plan.

Leslie reminded the group that some of the projects are legacy multiple-year projects.

ACTION:

USGS and USFWS will meet on the gauging stations and then come back to the OG with what their agencies can commit to water gauges and then the OG can decide if NSSI can fund the overage.

John Goll made a motion to limit the operating budget to \$1M by eliminating the Natural Resources position and its related travel and, depending on the amount of money that comes in, the landcover and gauging stations will be ranked for funding. Doug seconded the motion. A vote was taken and was approved unanimously.

Meeting adjourned at 1:33 p.m.