

NSB/Shell Baseline Studies Program

Steering Committee Meeting

Pike's Waterfront Lodge, Fairbanks Alaska

December 12 -13, 2011 1:30 pm

MINUTES

December 12, 2011 Teleconference

PURPOSE OF MEETING: Develop recommendations for baseline studies for 2012.

Members Present:

Name	Representing	Name	Representing
Robert Suydam	NSB	Craig George	NSB
Tom Weingartner	Independent Scientist	Victoria Broje	Shell
Enoch Oktolik	Alternate Wainwright	Qaiyaan Harcharek	City of Barrow
Danny Pikok Jr.	Alternate Pt. Lay	Willard Neakok	Primary Pt. Lay
Ransom Agnasagga	Primary Wainwright	Michael Macrander	Shell
Hajo Eicken	Independent Scientist	Brandon Southall	Independent Scientist

Members Not Present

Name	Representing	Name	Representing
Don Nungasak	City of Barrow	Harry Lord	Kaktovik
Sue Moore	Independent Scientist	Samuel Kunaknana	Nuiqsut
Vacant	Pt. Hope		

Others Present:

Name	Representing	Name	Representing
Linda Agnasagga	Wainwright	Malissa Langley	NSB Wildlife
Kamalei Hepa	NSB Wildlife		

Suydam, Interim Chair, called the meeting to order.

Brandon Southall dialed in for the meeting from California.

Neakok provided the invocation.

All members, alternates and guests introduced themselves.

Suydam welcomed everyone and provided some back ground history about the NSB/Shell Baseline Research Agreement and more specifically about the Steering Committee. This background was intended for all new members and guests.

The meeting was delayed because of weather and the delay of planes. The agenda was revised accordingly and all members agreed to the following changes:

1. Discuss the roles of alternates;
2. Not deal with minutes, instead postpone their approval until the next meeting;
3. Only discuss the decision making aspect of the Bylaws and postpone the discussion about the rest of the bylaws until the next meeting;
4. Briefly talk about getting shipping containers, for storage of scientific equipment and supplies, in the villages;
5. Review the 2012 budget;
6. Talk about the status of 2011 projects; and
7. Spend the bulk of the remaining time talking about projects for 2012.

Role of Alternates:

The committee agreed that all members, primary and alternates, and guests will be allowed to contribute to the discussions of the Steering Committee. Only the primary members will vote, if a vote is necessary, unless the primary member is absent and then the alternate will cast a vote. This was accepted by all members and asked the Interim Chairperson to add them to the Bylaws.

Bylaws:

The Steering Committee had not seen the draft bylaws until this meeting. Suydam pointed out that that the members needed time to review the details of the Bylaws. However, progress could be made with some discussion about the decision making components of the Bylaws. Many of these were part of the NSB/Shell agreement. The agreement dictates that the Committee should operate by consensus, whenever possible. If consensus can't be reached, a decision will be made by a 2/3 majority of the members present. In some cases, decisions will not be simply a "yes or no". An example is setting priorities. It is unlikely that the entire committee will be able to reach consensus with identifying or ranking possible projects. Instead, the committee could rank projects as high, medium or low. For possible 2012 projects, Suydam suggested that committee members rank the proposals with 1/3 of them as being High, 1/3 being Medium, and 1/3 being Low. A summary of the results of those rankings will help the Committee to agree on which studies should be funded and conducted in 2012 and which should be considered in the following year.

The Committee will continue a discussion about the Bylaws at the next meeting.

Storage Containers:

At the previous meeting, Bill Tracey suggested that the Baseline Studies program might be able to purchase connex or storage containers for each village. The containers could be used for the storage of scientific or camping equipment, sampling gear, or other supplies.

All Members agreed that having two containers in each village, or at least Wainwright, Pt. Lay and Pt. Hope, would be helpful. One would be possibly for equipment storage and one for

storing sampling gear or samples. There was some concern expressed about who might have access to the containers. Equipment, supplies, and samples could possibly be compromised. Langley and Hepa were asked to research the issue of renting or purchasing containers.

2012 Budget:

Suydam provided a summary of the proposed budget for 2012. The budget includes funding for personnel (i.e., biologists, Administrative Assistant, Division Manager) and fringe benefits, office rent, honoraria and loss of pay for committee members, contractual for projects, and equipment (i.e., a vehicle to have in Barrow). A budget of approximately \$3.3 million was identified directly for science. NSB indirect costs were also included. The total budget is \$5,000,000.

Macrander mentioned a possible concern. The way the budget was written, it appears that ~40% of the budget is dedicated to the management of the program versus the actual conduct of science. He stated that it might be difficult to get approval from Shell management for that breakdown. He suggested that the committee should have a better understanding of how much of the budget is dedicated to science and support of the program. Keeping program support to approximately 20 or 25% of the budget would be preferable.

Suydam clarified that the salaries for the biologists were primarily for the conduct of science and not operation of the program support. Salary for the Division Manager and Administrative Assistant are primarily for administering the program and steering committee. The Subsistence Research Coordinator and the Outreach Coordinator are also primarily about science and science education. Other parts of the budget, other than contractual, are really about supporting the Steering Committee and minor expenses for supplies and NSB travel. The NSB does require a 21% indirect on direct costs, which is much less than many other organizations or universities. In part the budget reflects the need of the NSB to build capacity for managing the program. There is a chance that the indirect could be reduced but those management costs would then need to be carried completely by the NSB.

Committee members discussed the budget, indirect costs, additional positions and what the responsibility of the positions would be regarding the scientific studies. Some of the village representatives recommended that people in the villages be given an opportunity to participate in the studies. They also requested that notice be given to a village when a study would be starting at that village.

Suydam agreed to re-organize the budget so that the expenses for program administration, the steering committee, and science be separated and clearly identified. He will provide that budget to Shell with the assistance of Langley.

2011 projects:

George and Suydam provided a summary:

1. Surface current drifters were intended to be deployed in nearshore waters of Barrow and Wainwright by the NSB's Leandra de Sousa. Weingartner and his group also deployed drifters in off shore areas. Most of these drifters did not function properly. The NSB was reimbursed for the defective drifters that weren't deployed and they are trying to get reimbursed for some that were deployed. Budget was still available from 2011, and there are hopes for more funding, to deploy drifters in 2012.

2. There is a need to development several databases including a meta database for all program projects and a tissue archive database for samples collected from marine mammals.

George mentioned that the NSB is working on an approach and looking for a good contractor. To date a contractor has helped the NSB to set up a subsistence harvest database. The database was working well and can be remotely administered by an expert in Fairbanks. We have also spent time talking about how to organize our various data sets.

Suydam mentioned that some progress has been made bur more is needed. George further mentioned that one of the challenges and decisions was whether to develop custom software or canned software. There are lots of pros and cons for each approach.

3. Bowhead and Beluga Hearing study.

George summarized the extensive preparations needed for launching this project. It will be conducted by our collaborator, Hans Thewiessen, from Northeast Ohio Medical University. He also is one of the world's most leading authorities on whale anatomy. He spent the past year and a half developing the methodology to collect, obtain microscopic sections of the ear, and refining the proper preparations to examine the inner ear. A good method has been developed after a considerable amount of trial and error. Some of this method was recently presented at the biennial marine mammal conference. The presentation was well received. Some bowhead and beluga ears have been collected and the anatomy described. Preliminary efforts will look at hearing pathology to see if there has been any age related and possibly environmental changes have occurred. Some preliminary results are intriguing. We hope to collect samples from animals in different age groups and begin to get some baseline information on the hearing. Part of the project is to attempt to determine if seismic surveys could have caused hearing damage.

4. Stress levels in Bowhead Whales.

The NSB has collected many samples from bowheads during the past ten years that are currently archived in Barrow. This project will look at stress hormones levels in a variety of tissues. In many cases you can look at stress hormones in blood but because the animals are hunted, we expect that hormone levels in the blood will be unrealistically high relative to baseline levels. Information on levels in blood will not be helpful as we are trying to look at the stress levels that the whales are experiencing out there in the ocean. High stress levels could be due to climate change, disease, pregnancy, or impacts from oil and gas activity or shipping. We expect to look at stress hormones in the feces, blubber, and possibly in the baleen. If we are successful with baleen, we may be able to examine stress levels over the past 20 years. We are working closely with New England Aquarium on this project.

5. Satellite tagging of ringed seals.

George provided a brief summary. In 2011, 25 seals were tagged during the summer. During tagging efforts, it was discovered that ringed seals had symptoms of an unknown

disease. This led to the sampling of many seals and eventually to walrus near Point Lay. Some animals in the Bering Sea region also showed symptoms of the sickness. It is still unclear what is causing this disease. The NSB is working with the National Marine Fisheries Service on this issue. It is likely that the agency will declare the sickness an unusual mortality event. This declaration will help provide funds for additional analysis of samples that have been collected and with preparations for a possible resurgence of the disease in 2012. The satellite tracking project helped to identify that there was a problem.

The tagged ringed seals, both healthy and sick ones were tagged, provided good information on movements through the summer and autumn. Few of the seals are still sending signals regularly. Plans are to tag another 25 seals next summer. Hopefully by our next meeting we will be able to provide more details and some good maps about the seal movements.

6. Wainwright Subsistence Study:

Recently, Braund and Associates have developed an approach for documenting harvest areas and over the previous ten years and over the life time of informants. The technique is very systematic and presents data in a very usable format. They are currently finishing up a project on Pt. Lay. They have expressed interest in documenting harvest areas for Wainwright. We expect to receive a proposal in the near future for a Wainwright subsistence study.

7. Bowhead Ship Strike and Line Entanglement Study:

We are moving ahead and have been surprised that it looks like 10% of whales landed have line entanglement scars on their peduncles or flukes. This preliminary result is a pretty high number of scarred animals. We have examined whales carefully that were landed in Barrow and in Kaktovik and we get the same estimate. Most large animals are scarred. We are not sure what is causing the line scars but it could be a number of things. Extensive crabbing in the Bering Sea may lead to whales being entangled in crab pot gear. There have been ~1/2 dozen whales found dead with gear on them and the most recent one was in Kotzebue. The gear was collected and confirmed to be crab pot gear. The point of this project is to get baseline information of scarring, from lines, ship strikes, or killer whales, well analyzed. This will be especially important prior to possible increases in commercial fishing, crabbing, shipping, and off shore development

8. Beluga contaminants and biomarkers.

For this project, we were hoping to collect samples from belugas taken in the annual hunt at Pt. Lay. Unfortunately, the hunt happened very late and we were not able to get the samples that we wanted. We do have some samples in house that we will be able to analyze. The samples will be analyzed for contaminants, primarily related to hydrocarbons (i.e., oil and gas) but potentially others as well, such as heavy metals, pesticides, and radio nucleotides. The focus will be on contaminants associated with oil

and gas exposure and biomarkers associated with those. We will be working with Mote Marine Lab. Plans are in place to attempt to collect samples in 2012.

NSB/Shell Baseline Studies Program

Steering Committee Meeting

Pike's Waterfront Lodge, Fairbanks Alaska

December 12 -13, 2011 9:00 am

DRAFT MINUTES

December 13, 2011 Meeting at Pike's Landing Fairbanks, Alaska – Alyeska Board Room

PURPOSE OF MEETING: Develop recommendations for baseline studies for 2012.

Name	Representing	Name	Representing
Robert Suydam	NSB	Craig George	NSB
Tom Weingartner	Independent Scientist	Victoria Broje	Shell
Enoch Oktollik	Alternate AIN	Qaiyaan Harcharek	City of Barrow
Danny Pikok Jr.	Alternate Pt. Lay	Willard Neakok	Primary Pt. Lay
Ransom Agnasagga	Primary AIN	Michael Macrander	Shell
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Members Not Present:

Name	Representing	Name	Representing
Don Nungasak	City of Barrow	Harry Lord	Kaktovik
Sue Moore	Independent Scientist	Samuel Kunaknana	Nuiqsut
Vacant	Pt. Hope		

Non Members Present:

Name	Representing	Name	Representing
Kamalei Hepa	NSB Wildlife	Malissa Langley	NSB Wildlife

Suydam called the meeting to order and Neakok gave the invocation.

The main purpose for today's discussion is to go through the proposed projects for 2012. We will talk about the projects and figure out if we like our rankings whether we need to shift them.

All Members ranked the projects and then had discussions regarding the rankings. The summary of the overall rankings were:

1. Marine mammal diets and health assessment
2. Satellite-linked drifters

3. Workshop on currents and sea ice
4. Subsistence workshop to develop priorities
5. Impacts from helicopters to subsistence resources
6. Tagging ringed seals
7. Assess forage fish populations
8. Monitor walrus haul outs
9. Literature review of seismic impacts on prey
10. Supplement Hanna Shoal studies
11. Monitor ship traffic
12. Measure the acoustic soundscape
13. Oil fouling of bowhead baleen
14. Polar Bear hair snare

The Committee felt good about the priority list for projects for 2012. Projects will move forward in the beginning of 2012 once funds are received. The NSB will work on developing or updating proposals for marine mammal health, surface current drifters, subsistence, tagging ringed seals and assessing marine forage fish. Eicken will work on a proposal for a workshop on currents and sea ice. Other projects will be pursued as time and opportunity permit. Some of the projects will take a considerable amount of lead time, such as those that need to charter a large ship for assessing fish populations or projects that need some time to purchase transmitters.

The committee also discussed the possibility of establishing an Emergency Response Fund. This pot of money could be used to respond to an unexpected opportunity or surprising observations, such as the unusual disease event with seals and walruses. The NSB will make sure the budget contains an Emergency Response Fund. The Committee passed a motion to set up such a fund with at least \$25,000.

Next Meeting:

The Committee discussed the location of the next meeting. Barrow or at the Shell Offices in Anchorage in late February or the beginning of March would be good locations and times. Langley will send out a Doodle Poll to decide on the best time and place.

Agenda items to include at next meeting are:

1. 2012 studies update
2. Update of ring seals
3. Working towards a strategic approach for addressing information needs or village concerns.
4. Election of Chair
5. Approve of the Bylaws
6. Approve Minutes

The meeting was adjourn.