Minutes of the Twenty-first Meeting of the Alaska Scientific Review Group

09 - 10 January 2008, Monterey, CA

This report summarizes the 21st meeting of the Alaska Scientific Review Group (SRG). This document is intended to summarize the main points of the discussion and does not attempt to repeat everything that was said during the meeting. The revised agenda is included as Appendix 1 and the list of SRG members and observers present is provided in Appendix 4. Appendix 2 and 3 contain lists of SRG recommendations and topics for the 2009 Alaska SRG meeting, respectively.

1) Adoption of agenda

The agenda was reviewed and, after some discussion, adopted.

2) Adoption of minutes from January 2007 meeting

The Alaska SRG adopted the draft final minutes from the January 2007 SRG meeting

Robyn Angliss stated that she has received comments on the 2007 minutes from two individuals so far. She is missing some information from Sue Hills, but will proceed with finalizing the minutes regardless. Angliss welcomes additional comments on the draft 2007 meeting minutes from SRG members, provided it can be provided very soon.

3) Membership

Several significant membership changes occurred within the last year. Beth Mathews is serving her first year as Chair of the Alaska SRG, and she recognized the collective effort of existing and new members in the review process. Mathews mentioned how both membership and chairmanship provide a good opportunity to stay on top of recent marine mammal science in Alaska, and she encouraged members to consider new candidates for the role of chair. In addition, Mathews reminded the group that many individuals have been on the SRG since it's inception in 1994 and have not yet taken a turn as chair. These individuals should consider stepping up before volunteering one of the new members to chair the group in the future.

Individual introductions were made to the group and new members welcomed. Robert Suydam, Grey Pendleton, and George Noongwook have received their official Alaska SRG membership appointment letters from the Director of the Office of Protected Resources (OPR), National Marine Fisheries Service, Headquarters (NMFS, HQ), and they have all accepted the invitation. Noongwook was planning to attend the meeting, but had to cancel at the last minute. John Gauvin was not in attendance, and is considering stepping off the Alaska SRG. Gauvin agreed at the last meeting to not step down until the he or the Alaska SRG finds a comparable replacement for him, and the SRG is in search of a candidate with a similar background. Recommendations of alternatives to Gauvin will be considered; Brendan Kelley recommended Carl Haflinger, who is working with bycatch reduction. Lowry mentioned that Gauvin will be difficult to replace; it will be difficult to find a single representative who is generally knowledgeable about many commercial fisheries. The SRG was in agreement to keep Gauvin on as a member as long as possible.

4) Administration, travel, membership

Angliss addressed the issue of travel reimbursement for SRG members, and encouraged members to turn in papers as soon as possible for reimbursement. Angliss also mentioned that there are a few issues with travel paperwork from last year that will be cleared up soon.

5) Summary of letters sent by the Alaska SRG in 2007

Mathews summarized the responses to letters sent in 2007 from the SRG to NMFS. The following three letters were identified:

1) Ice Seals – The SRG recommended that NMFS increase studies of ice seals. This letter received a response from Bill Hogarth. In his response, Hogarth stated that ice seals are listed as non-strategic stocks; therefore, limited resources were provided to support studies of ice seals.
2) Alternative methods for measuring incidental takes – The SRG recommended that alternative methods for measuring incidental takes should be explored. Given the low level of observer coverage, incidental takes are currently estimated from observed takes. This letter received a response from Jim Balsiger, Alaska Region (AKR) Director, which stated that NMFS is interested in considering alternative methods for measuring incidental takes; however, it is still necessary to derive numbers using the current method. This letter was sent to Bridget Mansfield because she wanted input from the SRG on the observer program. Angliss recommended sending future letters to the Assistant Administrator for NMFS to ensure that HQ, the Alaska Fisheries Science Center (AFSC), and the AKR were all in the loop in the response. In addition, bringing issues to the attention of an individual higher up in the agency may help ensure that the agency pays attention to the letter.
3) Harbor seal abundance estimates - There was no response to letter on harbor seal abundance estimates.

Mathews recommended allowing the SRG member who drafted the letter to review the final version of the letter before it is sent out from the SRG.

6) Update on National Marine Mammal Laboratory (NMML) research funding

John Bengtson provided a summary of NMML funding. During the Joint SRG meeting, the FY 2008 budget was presented by Tom Eagle. An Omnibus spending bill was signed in late December. The budget is still tied up, so the NMML budget is still unknown for FY08. There has been an annual reduction in funding from 2005 to 2007; the Omnibus bill has an additional decrease in funding. There are several opportunities for budget cuts before funding trickles down to NMML. Bengtson is hoping that NMML will only sustain an 11% cut in funding, but it could be more.

Bengtson reported that NMML does not know the budget yet, but this is what NMML projects it will have for science operations in FY08.

FY2005	FY2006	FY2007	FY2008	
			Senate	Omnibus

Funds	6.2M	7.7M	4.4M	4.2M	3.9M?
Cuts:	---	-24.20%	-6.40%	-4.50%	-11.4%?

Bengtson clarified that his presentation pertains only to science operations at NMML, not staffing costs. These figures do not include Alaska Department of Fish & Game (ADF&G) and other pass-throughs. There are other science funds earmarked in Department of Commerce (DOC); however, some traditional earmarks from the past are not included, so it is uncertain how this will be reflected in the final budget. There is a potential shortfall in NMFS funds in general, so it is uncertain how this will affect marine mammal funding.

Kelly inquired about how much FY08 funding will be passed on to folks working within Alaska. Kaja Brix responded that traditionally, several million has gone to the Alaska SeaLife Center, $3-4 million to the North Pacific Universities Marine Mammal Research Consortium, $1.5 million to Alaska Native co-management groups; $400K to the North Slope Borough, etc.. These funds come through National Oceanic and Atmospheric Administration (NOAA), but simply pass through the AKR to the designee. Bengtson also included that there are several other Federal contributors to funding at NMML, including Office of Naval Research (ONR), Mineral Management Service (MMS), etc. Kelly inquired whether Alaska, specifically is getting a major funding hit or whether this is an across the board decrease for all NMFS regions. Brix responded that Alaska fairs well in regard to budget pass-throughs. Both Brix and Bengtson indicated that there is a national shift to lump money, meaning there are not so many line items in the budget.

Bob Small included that there is a huge budget cut to ADF&G, which means they may not have enough funding to support most research operations. Small commented that ADF&G has a sea lions and seals line item of $1.5 million for this year, which will result in essentially shutting down all field operations and the need to make some hard decisions about staff.

Bengston added that the base funding he presented covers most of the salaries and operations at NMML; any shortcomings may result in a decrease in funding for research. The distribution of operations funds is usually by species. For example, there are some beluga funds, a small amount of small cetacean funds for harbor porpoise surveys, and killer whale studies receive relatively more funding.

The breakdown of NMML funding is:

2008 Senate mark	**Funds (x 1000)**	
Steller sea lions	1,642	
Northern fur seals	597.3	
Harbor seals	590.8	
Ice seals	418.3	
Beluga whales	118.8	
Small cetaceans	15	(Cobb, SEAK work)
Killer whales	375	

Large cetaceans	68.5

This breakdown of funding does not show that much more funding was actually made available for Cook Inlet beluga late last year; some of the funds from FY07 were used to pay for expenses in FY08.

Mathews inquired whether NMML receives less ship time than other AFSC research groups and other centers. Bengtson explained that there are 3 NMFS vessels available for conducting research in Alaska: the *R/V Freeman*, the *R/V Dyson*, and the *R/V Cobb*. The *R/V Cobb* is a small vessel in Southeast Alaska, which is used for near-shore research. The other 2 vessels are ocean-going vessels. There is not as much dedicated mammal work on these vessels as there is in other regions with other ships; however, NMML has made recent progress in bidding for ship-time. NMML was awarded time on the *R/V Dyson* for research on ice seals and North Pacific right whales. Mathews inquired whether it would be possible to get more ship time to do multi-species surveys from a NOAA vessel. Bengtson responded that it is possible to get more ship time for mammal surveys; however, ship time is tight and must compete with fisheries research. Most of the cost for conducting killer whale surveys is due to hiring charter vessels, so it is a positive step that NMML is making progress in getting more ship-time on NOAA vessels. In the case of the right whale surveys conducted by NMML but funded by the MMS, the NMFS in-kind contribution was ship-time, but unfortunately this was taken away at the HQ level.

Bengtson presented and overview of external funding for NMML science operations.

External funding:

Steller sea lions – Pollock in Aleutian Islands	NPRB*
Harbor seals – Cook Inlet	MMS
Bearded seals – Chukchi	MMS
UAS/ice seals	NOAA
Cetacean surveys – Pollock	NPRB
Bowhead feeding ecology	MMS
Bowhead surveys	MMS
NP right whales	MMS

Adds up to approximately $4.8M

*North Pacific Research Board (NPRB)

Bengtson capped off the discussion by stating that funding for FY08 could potentially be very bad, and indicated that the budget should be determined within the next month.

Lloyd Lowry expressed the SRG's appreciation to Bengtson for spreading NMML funding where possible. Lowry inquired about the process for setting funding priorities and how it is determined which projects are cut when there is a budget cut. Lowry also inquired whether there is anything the SRG could do to assist NMML on making decisions about funding priorities. Bengtson clarified that there is no discretion for certain funds and that most funds are allocated for a specific purpose. For example, much of the external funding is essentially a contract for specific projects, and there is no discretion over how the funds are spent. Much of the other

funding priorities are based on history. Line items, such as funding for Stellers sea lions, Northern fur seals, large whales, etc., have specific topics and cannot be reallocated. There is very little discretion for reallocating either appropriated funding or external funding. When NMML needs funding, they can make an appeal to HQ. To get funding in out-years, NMML has to submit a funding request through the Planning, Programming, Budgeting, and Execution System (PPBES). NMML has submitted multiple requests annually and to our knowledge have never received any funds through this process. Angliss noted that if NMML gets funds through the "Loss of Sea Ice" initiative put through the PPBES system, it will be the first time we would have been successful in using this approach.

Kelly inquired about the process NMML follows for setting funding priorities, proposing funding priorities, and the level of influence NMML has in such decisions. Bengtson explained that NMML can appeal to HQ with proposed funding and priorities. The process is typically that NMML examines what needs to be done, and based on that, priorities are listed and a budget proposed. Lowry expressed concern that NMML has very little flexibility and indicated there is the potential for favoritism when funds are allocated. For example, although fur seal research could make productive use of 3 times the budget allocated, even the limited funds allocated to fur seals could probably be put to better use elsewhere, such as towards ice seal or Arctic beluga whale research, given the high abundance of fur seals. Lowry suggested that the SRG and other Alaska researchers may rate other areas or topics as higher priority for funding, and recommend that funding be shifted to other projects receiving no funding or to alternative studies. Bengtson stated that outside comments and recommendations can certainly influence a shift in funding priorities. Once funds are allocated, they cannot be shifted; however, the SRG recommendations could go a long way to directing funding priorities.

7) AFSC's proposed Loss of Sea Ice Program (LOSI)

Angliss presented a brief overview of NOAA's proposed Loss of Sea Ice (LOSI) Program. LOSI is a concept and an initiative of AFSC's Habitat and Ecological Processes Research (HEPR) Program. LOSI is designed to monitor changes in the Bering Sea due to loss of sea ice. The HEPR team lead is Mike Sigler (AFSC-Juneau), who put the initiative through the system. LOSI is in the President's budget for FY2008 at a greatly reduced budget, but it is still viable.

Most information on this initiative can be found on the web at:
http://www.afsc.noaa.gov/HEPR/LOSI.php

The website has details on LOSI. This program will support fish, groundfish, and marine mammal surveys, collection of oceanographic data, zooplankton sampling, etc. Components of this program will also be applying for MMS funds. In FY2009, there will probably be approximately $2 million available for this program; the final budget from the President should be announced to Congress within the next 30 days. Teri Rowles said that this is a positive sign, as not many NOAA requests for funding ever make it out of HQ. Bengtson added that the loss of sea ice has been occurring over a long temporal and large spatial scale, and we're not getting enough resources allocated to study it. As a result, we're missing the changes, and we're trying to get our voices heard about this problem. NMML had three separate ice seal cruises last year: one dedicated ice seal cruise and two collaborative cruises. NMML is trying to find funding to support more ice seal research, and any ideas from SRG would be appreciated. Kate Wynne inquired whether NMML is also working with other programs within NOAA (e.g., weather

service) and suggested trying to ride the shirt-tails of the non-biological programs conducting studies on loss of sea ice. Bengtson responded that NMML is doing just that, and Rowles added that the proposals that are getting funded are those that are cross-disciplinary among line offices within NOAA. Angliss identified NOAA's new Unmanned Aerial Systems (UAS) program as a good example of a program that includes all NOAA line offices and has been successful at finding funding support.

Suydam mentioned that a fishery management action plan is being developed for the Bering Sea by the North Pacific Fishery Management Council. With the loss of sea ice, fishing operations may move from the Bering Sea into the Chukchi Sea and Arctic. Is this something the SRG should be concerned about? Angliss responded that the draft fishery management plan will most likely prohibit all commercial fishing north of Bering Strait. Suydam expressed concern that if they find exploitable populations of commercially valuable fish during fish surveys in the Chukchi Sea, there may be an interest to move fisheries into the higher latitudes.

8) Role of SRG: scientific review or advisory?

Kelly brought up the topic of the role of the SRG – is it scientific review or advisory? Kelly has always viewed the SRG's role as not to advise, but to review the quality of the science being done by the agency. Is the SRG a scientific review group solely, or should it have more of an advisory role?

There was some discussion regarding the role of the SRG, and Suydam suggested that it would be good to review a Charter for the SRG if one existed. Angliss and Lowry stated that the Marine Mammal Protection Act (MMPA) sufficiently defines the role of the SRG, and Lowry recommended that the SRG should focus on being a scientific review group. Kelly expressed concern if the SRG were to develop the reputation for being something other than a scientific review group; there is already a misperception by some other groups (e.g., Alaska Natives) regarding the role of the SRG. Angliss presented the SRG charges as stated in the letter of invitation to new members, which is included below and repeats language in the MMPA almost word-for-word:

> *The purpose of the review groups is to advise NMFS and the U.S. Fish and Wildlife Service on the following concerns:*
>
> > *(a) population estimates and the population status and trends of marine mammal stocks;*
> >
> > *(b) uncertainties and research needed regarding stock separation, abundance, or trends, and factors affecting the distribution, size, or productivity of the stock;*
> >
> > *(c) uncertainties and research needed regarding the species, number, ages, gender, and reproductive status of marine mammals;*
> >
> > *(d) research needed to identify modification in fishing gear and practices likely to reduce the incidental mortality and serious injury of marine mammals in commercial fishing operations;*
> >
> > *(e) the actual, expected, or potential impacts of habitat destruction, including marine pollution and natural environmental change, on specific marine mammal species or stocks, and for strategic stocks, appropriate conservation and management measures to alleviate such impacts; and*

(f) other issues the Federal agencies or the groups consider appropriate.

Lowry stated that a new fishery management plan may be something the SRG should look into if there are new fishing areas, new gear being used, new fisheries listed, etc that may affect marine mammals. Barb Taylor recommended that if the SRG/ NMFS knows that a new fishery is coming down the line, it is important to determine the stock structure in that area if future development and new fisheries are anticipated before it becomes an economic interest; the Pacific has learned from experience. Rowles supported this statement and emphasized the importance of stock identification and building infrastructure in that area; it is better to fix something before it becomes routine. Kelly pointed out that two NMFS staff just made recommendations to SRG when it should be the SRG making recommendations to NMFS. Suydam supported the idea of recommending that the SRG weigh in on potential new activities and development in the area where loss of sea ice is occurring, and agreed to keep the SRG informed of activities in the Chukchi Sea area as they develop. Both Kelly and Suydam support an SRG recommendation to NMFS to start thinking ahead about future activities in this area.

9) Overview of Alaska Marine Mammal Observer Program activities to quantify marine mammal takes in Category II fisheries

Brix provided an overview of the NMFS observer program, and requested clarification on the SRG's letter to the agency regarding quantifying incidental takes. Wynne suggested Brix provide the SRG with an update of the program: what did it do this year, where is it heading, and what are the alternatives to the current practices.

Brix noted that the Yakutat observer program was implemented in 2007 and will be returning to Yakutat in 2008. Brix did not have numbers on observed takes, although there were not many. Southeast AK has been identified as an SRG and regional priority for observer coverage; however, resources may be too limited for an observer program, and there are other priorities, such as the Bristol Bay salmon gillnet fishery, which would be even more expensive to observe. Yakutat surveys were conducted in 2007 and 2008 in part because they were affordable. NMFS is interested in observing all Category II fisheries in Alaska, so NMFS is doing what is affordable. NMFS is now in a position to look at alternative methods for monitoring incidental takes. The SRG letter made suggestions on how to do things differently. One option proposed by the SRG was to eliminate the observer program and to focus funds on conservation. This option may not be feasible or legal; NMFS needs to observe Category II fisheries and document incidental takes. NMFS is open to suggestions of how to implement observer programs differently and in a more cost effective manner.

There was some discussion regarding determining the classification of fisheries, and Brix inquired about alternative methods for assessing observer coverage in a statistically significant manner. Previously, there have been attempts to use logbooks and fisher self-reports of takes, however, these two methods were both determined to be unreliable, which is why they are using observers. Lance Barrett-Lennard commented that British Columbia is using video surveillance on trawlers, but agreed that this method would not be welcomed in Alaska. Fishermen do report catches, but these data are confidential. There are other struggles with using video surveillance, but which could probably be explained by others who have been more involved in discussions. Wynne added that boat size and type of fishery can preclude such a technique.

Lowry inquired whether there was a permit issued to the state of Alaska for state managed fisheries that take endangered species. Lowry added that the state of Hawaii has applied for permission to take endangered species in their state managed fisheries.

Suydam inquired about the reliability of logbooks and self reports. Angliss responded that Vicki Cornish et al. examined logbook data reliability and determined that the data recorded by fishers in logbooks often did not match data recorded by observers, even if an observer was placed onboard a vessel and recording the same information as the fisher. Ray Outlaw recently reviewed Alaska records and compared observer take with self-reported takes; there was no correlation between self-reports and observer programs. There is very little compliance, and many takes are not being reported. It has been some time since the agency has pushed the issue and reminded fishers that it is mandatory to report incidental takes. As NMFS has not done any outreach on this for a long time, it is possible that the fishers do not know this is still required, do not have the forms, or do not know where to submit them.

Suydam inquired whether there is a correction factor for logbook and self-reported takes, and whether there could be a push to acquire better self-reports. This could perhaps enhance incidental take information. Lowry responded that even with well-intended, honest fishers, incidental take reporting can become such a low-priority given all other activities on a vessel that takes do not get reported. Wynne considered the idea of viewing logbooks as an indicator for mortality hot-spots for focusing observer program effort. Mathews suggested examining mortality rates in comparable fisheries in other regions to highlight fisheries with potentially high levels of takes in Alaska. There are problems with this method due to variability in fishing practices, gear types, habitat, etc. Mathews also inquired about the possibility of determining a "best guess" of mortality based on a known density of stocks in the area. Fishers may determine such a method to be unreliable, or perhaps they might respond that they want accurate numbers and increase effort to obtain accurate numbers.

Angliss commented that in the List of Fisheries, some fisheries are classified as Category II because they use similar methods and are a similar fishery as another Category II fishery. This comparison between fisheries is already being done qualitatively, but we may not want to do so quantitatively because the fisheries are pretty different in methods and areas. Wynne suggested using a method proposed by Doug DeMaster in which a species is selected and a calculation made to assess how much observer coverage would be necessary to be confident that the take rates for a particular stock would meet the zero mortality rate goal.

Barrett-Lennard inquired whether it is sufficient to use the approach of stating that the incidental take mortality level is below PBR level without determining an exact number for mortality rate. Angliss responded that she could not recall any situation where there are hypothesized incidental takes that are set above PBR, resulting in the stock being classified as strategic.

Mathews commented on being uncomfortable with certain stocks where the take is set at zero when there is a high probability of unobserved or unreported takes occurring, and suggested examining the Pacific's method of determining a best estimate of takes. Wynne recommended that NMFS and the SRG be very cautious in making comparisons between fisheries because, although fisheries may appear similar, they can actually be very different in practice.

10) Status of listing of the Cook Inlet beluga whale

Brix reported on the status of the listing of the Cook Inlet beluga as endangered under the ESA. The Cook Inlet beluga population estimate increased in 2007. Surveys are planned in 2008, and if the estimate continues to increase, there may be recruitment to the population occurring. The proposal to list Cook Inlet belugas is receiving favorable attention. The decision to list Cook Inlet beluga will be made by Hogarth (or Acting Director of NMFS).

11) Status of petition to list the ribbon seal

Brix reported on the Center for Biological Diversity (CBD)'s petition to list ribbon seals as endangered under the ESA. This petition was received by the region in late December 2007 and is still in the review process. Brix described the review process as allowing 90 days for NMFS to review the petition in order to determine if the petition is warranted. If the petition is determined to be warranted, NMFS conducts an evaluation of petition, and after 90 days makes a finding. If the petition reaches this stage, NMFS will move forward with the process from there. NMFS will be coordinating discussions with United States Fish and Wildlife Service (USFWS) since they are currently dealing with a petition to list polar bears and many of the arguments made by the petitioners regarding the causes of the declines in the species are similar.

Jan Straley and Lowry asked, given this pattern to propose listing high latitude species, which species is next, and why the petitioner might pick ribbon seals over other ice seals. Brix commented on the agency's lack of data on ice seals, which could make an extinction risk determination impossible. This situation is different from polar bears because there is more data on polar bears from which to make a determination. Lowry expressed an interest in the fact that a petition to list a species must be based on substantial scientific evidence and inquired whether the threat to the species was being attributed to habitat decline; if no data exist, how can the argument be supported with scientific data?

Eagle remarked that the executive summary of the petition seems to suggest the argument is based more on life history data. Ice is necessary for pup rearing in life history of the ribbon seal; therefore, if the ice is disappearing, reproduction is at risk. Bengtson noted that these alarm bells can also be good thing – they bring public awareness to an issue that should be looked at for many reasons.

12) Status of petition to list polar bears

Mathews commented that the USFWS representatives could not discuss the polar bear listing because the final decision was due out today, but the deadline was pushed back. Mathews provided a summary of the current situation: the CBD petitioned the USFWS in 2005 to list polar bears as threatened, and in December 2006, FWS decided that the review was warranted. In the spring and summer of 2007, the United States Geological Survey (USGS) was put under pressure to publish reports summarizing recent science. Nine reports on polar bears were published on the status of ice and polar bears, and USGS was heavily in favor of listing. This support for listing was sent forward in summer 2007. The governor of Alaska and ADF&G argued the science was flawed. The Department of Interior secretary will delay making a determination for a month in the hopes that the model used will be used for some other species as well. The USFWS was also sued for not having an updated polar bear stock assessment report available. The SRG has not reviewed USFWS SARs for a long time. These reports should be out next

December, and both the Beaufort and Chukchi Sea stocks of polar bears will very likely become strategic stocks.

Kelly expressed concern over the time and resources demands required by the litigation process by petitioning to list species one species at a time. Mathews added that there is no Nmin for the Chukchi sea stock of polar bears, so the data may not be good enough to support listing this stock as strategic if a PBR cannot be calculated.

13) Summary of 2006 walrus survey and current status of analysis

Suzann Speckman presented and overview of the 2006 walrus survey conducted by the USFWS. This project was a joint project between the United States and Russia with the objective of surveying the size of the Pacific walrus population with enough precision to estimate abundance. Thermal imagery, photography, and group size estimates were used to determine abundance, and correction factors were applied for small groups. These vessel based operations included satellite tagging. A crossbow was used to deploy tags, and data from 3 years of tagging (2004 – 2006) were combined to derive a preliminary population model. This model considered covariable environmental conditions that may affect haul out behavior; therefore, population estimates were made from aerial survey data.

Russian aerial surveys were conducted and involved taking photographs of every hot spot in the thermal imagery. Visual observations were collected concurrently. These surveys were conducted from the Bering Strait to the Kamchatka Peninsula. United States aerial surveys were conducted by sending a plane with thermal imagery ahead of a plane with aerial photography equipment, with the thermal plane directing the photo plane to particular sites based on imagery data.

A total of 120,000 km^2 were flown in this study. Results suggest two high concentrations of walruses: one on the Russian side of the research area, and one just south of the Bering Strait. Walrus counts were estimated by a thermal signature. Counts were dependent on temperature, improved counts occurring during warmer temperatures. A population estimate resulting from these surveys is expected in June 2008 after several internal review processes. In late 2008, these data should be available to the general public, during which time the USFWS will also discuss the results with the Alaska Native hunting communities.

Lowry suggested that the USFWS might want to consider ensuring that people view this estimate as the first count using these methods and not to compare these results with previous estimates derived from other survey methods. Historically, walrus stock assessment reports listed Nmin as 170,000; the current report has no Nmin. Speckman commented that 170,000 seems to be an arbitrary number and that she could not find a source from which this number was determined. Lowry suggested the number came from the first joint survey in 1975. Kelly noted that people are going to want to compare counts to determine whether the estimate increased or decrease and inquired how the USFWS intends to deal with this issue. Speckman responded that the USFWS will probably use previous data to some capacity, but there is no intention to compare the abundance estimates. Lowry commented that he participated in the 1991 survey and it is his opinion that these are not good data. Lowry recommended that it should be stated that the abundance estimate derived from the 2006 walrus survey number is not a continuation of

previous work; this is a new survey using new survey methods. Speckman expressed that there is some concern regarding the reaction to the abundance estimate by the hunting communities.

It is uncertain whether these surveys will be repeated, primarily due to costs. The 2006 survey cost approximately $2 million. Bengtson inquired about what proportion of walrus population haul out, to which Speckman responded is believed to be around 100%. There seems to be many more walruses at haul out sites and new haul out sites are being used. Lowry commented that spotted seal haulout sites are also where the walrus sites occur, and spotted seals will not haul out when walrus are present, so this could present a problem in the future.

14) Follow-up from Joint SRG meeting

Lowry expressed some confusion as to whether individuals will be assigned to develop text for the recommendations made during the outcome of the joint SRG meeting. Lowry also questioned whether the Alaska SRG will assign individual members to develop text for those joint recommendation that pertain to Alaska SRG or in response to how it overall recommendations will specifically influence Alaska. Eagle responded that recommendations would go from the Joint SRG to the agency.

Angliss addressed the Serious Injury Workshop. The Alaska SRG was very interested in having the agency hold a Serious Injury Workshop, and this was a recommendation made by the SRG at several previous meetings. Since this workshop how now been held, Angliss sought input from the SRG as to whether the workshop addressed the issues of interest to the SRG and requested an overall assessment of the workshop from the SRG's perspective.

Straley, who attended the Serious Injury Workshop, supported the agency's plan to incorporate gray areas into determinations of serious injury, and noted interest in the lack of consensus among veterinarians regarding determinations of serious injury. Another interesting outcome from the Serious Injury Workshop is that the unanimous votes really were unanimous in assessing serious injury. This suggests improvement regarding standardized methods and interpretations among individuals assessing serious injury. There were several incidents where serious injury could not be determined, and these incidents need to be followed up on. Cases potentially involving capture myopathy may be subjective, as this condition is difficult to assess. While there will still be some variability in serious injury assessment of gray areas, Straley felt this workshop resulted in improvement of the serious injury determination guidelines. The serious injury determinators will need to review the reports in order to make an assessment, and a group would make serious injury determinations, not a single person. The Alaska SRG will make a recommendation to NMFS encouraging NMFS to review and adopt the Serious Injury Workshop assessment table and will commend the agency for holding the workshop.

The Alaska SRG inquired of Eagle (who was present at this time) whether a report from Joint SRG Meeting will be generated. If a report is generated, there was question as to whether the format will be a summary of the meeting minutes or a more formal report. The SRG was in agreement that some type of a report should be generated from the joint SRG meeting summarizing the recommendations of the SRGs combined.

It was also suggested that recommendations stemming from the Joint SRG meeting that pertain specifically to Alaska be documented in both a letter to NMFS as well as in the meeting minutes

or report. Angliss agreed to work with the agency on getting this accomplished given the interest expressed by the SRG.

15) Review of first day's recommendations.

Strategic stocks are updated and reviewed annually; non-strategic stocks are updated and reviewed every 3 years. The USFWS stocks do not meet the required update and review schedule, and the SRG is in agreement that these should be updated.

Beth Mathews presented on new information available in a PhD dissertation by Jason Herrman. This thesis presents a different approach to determining stock structure for harbor seals and new results of stock structure analysis. This work suggests more movement between Glacier Bay, but it was unclear what the differences are and how it will affect current stock structure. Mathews recommended assigning individuals to read and review this thesis, and will put this on the agenda to discuss at next year's SRG meeting. Lowry suggested that the SRG might want to wait until this work is presented in a peer-reviewed publication, and Small added that a manuscript has been submitted for review. Mathews recommended that the SRG should be prepared and have read the thesis to assess whether this is paper that will affect stock assessment reports. **Mathews and Barrett-Lennard agreed to review Herrman's thesis and any resultant publications.**

Angliss presented an overview of the previous day's recommendations (See Appendix 2). In addition to the recommendations listed, Wynne brought up the issue that old bycatch numbers, including some from the 1990's, are still being used in assessing overall bycatch from fisheries, and whether these numbers should continue to be used. Mathews added the concern with listing incidental takes as zero when it is highly probable that takes are occurring. Pendleton suggested using a one-sided confidence interval to examine bycatch. This would result in listing overall takes as being probably less than so-many percent based on a 90% confidence level. **Angliss recommended Pendleton write down this method and test it on Steller sea lions, and send out his result to the SRG with an explanation of the method.** Mathews added that Debi Palka's talk during the joint meeting addressed the issue of low observer coverage, and recommended referring to Caswell et al., 1988, examined the level of coverage that is needed. Taylor recommended that the SRG contact Karin Forney to learn more about the approach used to address the problem of low observer coverage in the Pacific. **Mathews recommended holding a special session at SRG meeting next year on quantifying observer coverage and fisheries takes.**

Straley noted that the set net fishery, which is a re-established state fishery, has taken a humpback each year in last 2 years. Straley inquired whether there is any mechanism for NMFS to receive notification from the state that there are new or re-established fisheries that may incur incidental takes of endangered marine mammals (which should then have an incidental take permit under the Endangered Species Act (ESA)), and recommended that the agency obtain better information from the State on state fisheries. Angliss responded that the agency makes periodic updates to the list of state fisheries in the List of Fisheries; however, the Federal Register may not be the best method for receiving updates on state fisheries. It was suggested that the Board of Fish may be the best source for this information and that **the SRG should send a letter recommending NMFS receive timely updates on new and re-opened state fisheries**. Lowry stated that the key is being proactive; NMFS needs to consider the effects of opening and

re-opening a new fishery. Lowry also stated that it is worth the effort to attempt to get this information to NMFS in a timely manner due to the obligation of the agency. The PBR includes mortalities from both state and federal fisheries; therefore, NMFS needs better data on state fisheries. Wynne suggested that assessing mortality rate makes a better argument for obtaining state fisheries information than competition of fisheries with marine mammal prey source. Small agreed to consult with the state fisheries staff to try to routinely get information on new state fisheries that may incur incidental takes of endangered species; this recommendation was made in the past, but since there have been no takes recently, gaining authorization for takes of is not perceived as a problem. Brix added that via Section 10 of the ESA, states can be issued an incidental take permit; however, the state of Alaska has never applied for such a permit so there is no coverage for legal take of endangered species by state fisheries; therefore, there are no repercussions if an endangered species is taken.

16) Discussion of ANHSC letter to Alaska NMFS Regional Office regarding use of genetics data

Brix presented on a letter the Alaska NMFS Regional Office received from Alaska Native Harbor Seal Commission (ANHSC) regarding use of genetics data in determining stock structure. The letter states genetics data is not good enough to differentiate stocks, and recommends that the agency stop using genetics data as a management tool for differentiating stocks. Alaska Native community representatives from ANHSC stated in this letter that "the use of genetic data as management tool is not a policy that we support at this time".

It was suggested that this stance was probably driven by concern that Alaska Native harvest will be regulated if a high number of harbor seals are taken from stocks with a low abundance estimate. This idea is based on discussions with the ANHSC and broad-based discussion among the Alaska Native community. Lowry mentioned that the use of genetics data has received support from the Alaska BelugaWhale Committee, as well as several other Alaska Native groups. Suydam added that there were concerns with regard to using genetics data to determine bowhead stock structure historically at the International Whaling Commission (IWC) meetings; initially the Alaska Native community on the North Slope did not support using strictly genetics data, but they are warming up to it now. Suydam inquired whether other data, such as from telemetry and other field studies, were corroborating results from genetics data. Brix responded that NMFS is proposing stock structure based on telemetry, distribution, traditional knowledge about harbor seal movements, not genetics data alone. Lowry commented that the agency may be failing to provide the necessary level of protection needed for harbor seals by managing large-scale stocks; NMFS should use a finer scale approach because some animals are very site-specific. Straley asked whether the agency can be firm and state genetics data will be incorporated into determining stock structure. Mathews suggested that the agency might want to respond with a letter clarifying that not solely genetics used in determining stock structure, and include in this letter that other Alaska Native groups do support the use of genetics data in determining bowhead and beluga stocks. **Both Lowry and Barrett-Lennard suggested that the SRG should respond to the ANHSC's letter to NMFS explaining that genetics is a useful tool for determining stock structure.** This is a scientific argument, not politics. The SRG will also send this letter to NMFS, and it will go up to the Director of NMFS.

17) Discussion of draft SARs for 2007

Beluga - Cook Inlet stock

There was some discussion regarding whether the Yakutat beluga should be a separate stock from the Cook Inlet beluga. The Yakutat belugas are not shown to be different from Cook Inlet belugas because they share the same haplotype. Barrett-Lennard suggested waiting on the nuclear data results before making a determination.

Several anecdotal reports exist about small populations of beluga. Small added that some hunters had reported sighting beluga off Sitka. If these small populations exist, they should probably not be considered their own stock.

The abundance estimate for Cook Inlet beluga is based on unpublished data. If these data are unpublished, there needs to be more information about how these numbers were obtained and what test was used to derive the numbers. There was also a request to ask Rod Hobbs to run the numbers using the Bayesian model developed by Dan Goodman.

Beluga - Beaufort Sea stock

The SRG addressed the problems with dated abundance estimates and undetermined PBR for beluga stocks. Suydam commented that the IWC reduces the quota on a whale stock as the population estimate gets dated. This same reasoning could be applied to PBR level. The abundance data for beluga are greater than 8 years old. Lowry commented that the problem in dealing with stocks with a large population estimate is that NMFS is less likely to do another abundance survey solely so a PBR level can be calculated if it is believe to be a large population with a low level of takes. Lowry expressed concern with ratcheting down the PBR as the abundance estimates become dated. This method might suggest a problem to a reader of the SAR who is unfamiliar with the method, even if no problem exists. **The SRG agreed to recommend that the agency develop a new method for dealing with dated abundance estimates, as well as investigate a new strategy for determining PBR for these stocks aside from setting PBR at undetermined.** Lowry commented that setting the PBR level as undetermined does not have an advantage from a conservation standpoint. Belugas, harbor porpoises, humpbacks, and other stocks all have dated abundance estimates. **The SRG proposes to write a letter to NMFS stating the need for more surveys for abundance estimates.**

Lowry commented on a recommendation made during the joint SRG meeting to make confidence intervals wider as abundance estimates age. Lowry suggested not changing the PBR for beluga to undetermined because the 8-year rule will be revisited by the joint SRG as a result of this meeting. Barrett-Lennard remarked that if there is an old rule, it should be applied until a new rule is made. Lowry added there are several options for handling stocks with dated mortality and abundance data - set the PBR as zero, set the PBR at undetermined, set status of the stock at undetermined. The agency should strive for consistency between regions. Barrett-Lennard suggested another approach that could be used for Alaska is to leave the old PBR in the SARs text but state that because these data are greater than 8 years old, the rule is to set the PBR at undetermined, and list the PBR as undetermined in the table in the appendix.

An SRG member suggested that there may be more beluga sightings data available from the Canadians, or from input from hunters. Mathews expressed concern with getting views of trends

by locals of very specific regions; they are not viewing and quantifying overall stock trends. Suydam agreed to check on Beaufort Sea beluga harvest information from 2006.

Barrett-Lennard added that all beluga SARs need a habitat concerns section added recognizing potential effects of seismic activities from oil and gas exploration and shipping.

An SRG member suggested it might be a good idea to incorporate an appendix summarizing the SRG's overall review of data quality for the data presented in the individual SARs.

Eastern Chukchi Sea beluga:

Suydam reported that there is some evidence suggesting Kotzebue Sound beluga may be genetically different from those that go into Kaselaguk Lagoon. O'Corry-Crowe is currently working on genetics samples, and it appears there may be stock differentiation. In the mid-1980s, beluga disappeared from Kotzebue Sound.

Suydam agreed to assist with editing the text on geographical distribution of all beluga stocks based on recent tagging evidence and a MMS report. Suydam reported that beluga are occasionally taken in personal use fishing nets on the North Slope, and suggested that a sentence should be added to both the Chukchi Sea and Beaufort Sea SARs indicating so.

Eastern Bering Sea beluga:

Lowry addressed the fact that abundance data for the eastern Beaufort Sea beluga are rather outdated; the Alaska Beluga Whale Committee has shown no interest in doing surveys. Lowry also expressed concern with the use of maximum counts with a correction factor for deriving population estimates; correction factors should be applied to mean counts, not maximum. Lowry suggested using mean counts and correction factors for 2004 and 2005 data (or just 2005) and including new information on the rate of increase of the population. Lowry also suggested using a combined CV for 2004 and 2005 when calculating the Nmin.

Lowry commented that the status for beluga (and other stocks with a similar issue) should be set at undetermined because the take level is unknown and it is pretty reasonable that takes occur. Angliss responded that this would result in a pretty drastic change to a lot of SARs. A member commented that it is probably not worth the effort to focus resources on observer coverage if the population is increasing. The Cook Inlet observer program did do beach surveys concurrently with net monitoring, which resulted in several assessments of carcasses where fishery interaction could not be determined.

In response to a question from Angliss about the stock identification of the Kuskokwim harvest, Lowry recommended that this harvest should be in both the Bristol Bay and East Bering Sea beluga SARs, consistent with the method used for reporting humpback whale takes. Lowry commented that the agency needs to decide if belugas need to be listed as a strategic stock if the population is increasing.

SSL – eastern

Angliss indicated that new stranding/entanglement data are not available from the Alaska Region for 2006 so were not updated in the SAR. **A recommendation was made for the SRG to write**

a letter to the region to get stranding and entanglement data to the center in timely manner for incorporation into the SARs. Pendleton informed the group that the ADF&G has a database on live animals from field photo-id; this database includes observed entanglements, hooks, and flashers, etc. Pendleton will look into sharing these data with NMFS for incorporation into the SARs.

Angliss informed the SRG that Michael Perez, who has been analyzing the marine mammal bycatch data from the federal observer programs, has retired; therefore, bycatch estimates will be delayed by approximately 2 years. In addition, the federal observer program's database is undergoing a drastic change, so there will be some lag time in the analysis. The agency will be able to provide observed takes and highlight whether there are any obvious changes in take rates, but will not be able to provide bycatch estimates in a timely fashion. An SRG member inquired whether the presence of gear, hooks, etc., is considered a "stranding"; Angliss indicated that these records are supposed to be included in the Alaska Region database. Small indicated there are two new studies being conducted to examine illegal Steller sea lion shootings, and agreed to circulate new papers when they become available. Small commented that Marilyn Joyce from Department of Fisheries and Oceans (DFO), Canada, is collecting incidental mortality data of pinnipeds in aquaculture farms, and suggested the agency may want to contact her for data.

The SRG again discussed whether the western Steller sea lion SAR should separate out a "far western" or "Asian" stock, and they were in agreement that there needs to be a little more thought and evidence in regard to genetics data supporting a third Steller sea lion stock before action is taken. Taylor commented that the eastern Steller sea lion is a distinct population segment (DPS), not a stock, and that definition of this stock is a DPS is inconsistent with how stocks are defined elsewhere by NMFS. Taylor added that there is higher genetic diversity in eastern Steller sea lions than in western, which is probably due to a larger population size historically.

Lowry commented that the abundance of eastern Steller sea lions in Alaska are at a historic high level, but in CA they are very low relative to historic levels. Lowry recommended moving information on historical population abundance to the status of stocks section not the trends section.

SSL – western:

Lowry suggested eliminating the mean annual mortality level for western Steller sea lion in the Prince William Sound (PWS) salmon drift gillnet or including some language in the text that states why the data are still acceptable to use. Lowry added that the information regarding the potential for takes provided in the table should be moved to the SARs text. Lowry commented that the incidental take level for the PWS salmon drift gillnet, PWS salmon set gillnet, AK Peninsula salmon drift gillnet fisheries should be listed as undetermined because the data are outdated. Lowry remarked that the fishery takes section needs to be updated.

Barrett-Lennard questioned listing subsistence harvest as having a low impact on the western Steller sea lion population in a table in the SAR when the overall subsistence take is about three-quarters the PBR level. Angliss responded that this table was taken directly from the Steller sea lion Recovery Plan and would remain.

Northern Fur Seal

Wynne questioned the appropriateness of using a life table if this table is not updated with the report, and questioned how juvenile males were assessed.

Wynne noted that a default CV of 0.2 is used in the calculation of Nmin. Wynne suggested that this number seems generous if the CV is really unknown; however, this number was suggested by DeMaster (1998). Wynne questioned the appropriateness in using a 4.5 expansion factor for this population. Wynne also suggested adding a clear, more explicit explanation of how the population size was derived, and providing text justifying the use of the expansion factor.

Wynne made an overall comment that all information given as "pers comm." should have an associated date.

Harbor porpoise:

Mathews commented on the need to obtain good data on harbor porpoise for southeast Alaska. It seems that there are good data supporting one of the harbor porpoise stocks in Alaska and that the definitions of the remaining stocks seem arbitrary. Mathews recommended revisiting stock structure of harbor porpoise in Alaska, and highlighted the need to focus on getting good data to support stock structure. Angliss suggested inserting a disclaimer at top of the harbor porpoise SARs as is done with harbor seals indicating that stock structure is likely to be inaccurate and bears revision. Mathews added that it would be reasonable that there are more harbor porpoise stocks in Alaska: both the Atlantic and Pacific have more harbor porpoise stocks of smaller sizes. Mathews supported including a disclaimer that there is not a lot of information known about harbor porpoises in Alaska. Suydam remarked that it would be more likely that harbor porpoise do have a larger range in some Alaskan waters because they are forced to be migratory given the habitat and ice.

Taylor mentioned that the Pacific only gets harbor porpoise genetics samples upon which to base their stock structure because there is an observer program for the gillnet fisheries. Taylor suggested tagging studies may be appropriate in order to obtain more information on harbor porpoises; it is difficult to get genetic samples. Suydam recommended informing the subsistence hunters of the agency's interest in getting skin samples from subsistence takes over a broad range. Suydam also recommended getting the word out to the community to collect harbor porpoise samples – notify museums, the stranding network, subsistence hunters – in order to obtain samples over a broader range. Straley inquired whether samples will be analyzed if they are obtained. Wynne mentioned that there will be an Alaska state stranding network meeting in February, and will request that samples be collected and sent to Southwest Fisheries Science Center (SWFSC).

Mathews commented that the Hobbs and Waite manuscript is still in rather rough form, and it has been in review for long time. The manuscript attempts to match up data from a 1999 survey with surveys of the same areas conducted in 1991, 1992, and 1993. Mathews suggested that perhaps the data from the various surveys are so different that cannot be matched exactly, but suggested the authors may be able to derive some sort of trend by comparing matching areas from the surveys. Mathews added that harbor porpoise are a concern in other parts of the country, thus determining harbor porpoise stock structure is pretty critical for Alaska.

Wynne inquired how such low CVs can be derived given the difficulty in doing counts for harbor porpoise, and whether the data are really this good. Taylor recommended looking at other CVs of harbor porpoise from SARs in other regions. Aerial surveys for harbor porpoise in California have CVs around 0.4, the Gulf of Maine/ Bay of Fundy CVs are 0.22, although observers in this area believe this CV is too low. Pendleton responded that CVs and variances are all based on assumptions, so if assumptions are all correct, you can get good CVs. The SRG made a general recommendation that the Hobbs and Waite report be finished and published so the agency can move forward with harbor porpoise.

Angliss added that Dalheim received some funding to conduct harbor porpoise surveys in 2006 and 2007, and data from these surveys suggest there are fewer harbor porpoise than there were in 1993. The SRG recommended pushing for observer programs in SE Alaska, and recommended encouraging Dalheim to analyze harbor porpoise survey data and publish on harbor porpoise abundance.

Wynne remarked on the occurrence of known unreported takes of harbor porpoises in gill nets. Mathews expressed concern about not having fisheries mortality data when it is known that mortalities do occur, but noted that harbor porpoises are already listed as strategic. Mathews inquired whether an Rmax could be derived, and Taylor responded that it was decided to go with the default Rmax for the Pacific. Mathews commented on a 2005 SARs guidelines update that states if takes are uncertain due to unobserved fisheries, than the recovery factor needs to be lowered. If this is the case, other stocks will need to be changed as well. These guidelines need to be checked.

Fin whale:

Barrett-Lennard presented comments submitted by Matkin. Matkin noted that the Mizroch et al. (in review) paper seems to suggest that fin whales should be broken into several stocks. Taylor added that results from a pilot study on fin whale stock structure suggest that there are several different stocks in the North Pacific waters; fin whales in the Gulf of Alaska had really different mtDNA from fin whales in the other 2 areas studied. The SWFSC is conducting a large-scale study of fin whale stocks in the north and south Pacific Ocean, and these data will be coming out soon.

It was noted that the problem with IWC data is that it is a snapshot. Bruce Mate has data from satellite tagging for 1 full year, in which the whale spent 70% of the year in Gulf of Alaska waters and traveled over a great distance. It was recommended that the SRG may want to wait a couple of years to make recommendations about fin whale stock structure until recent data are published which may give more information about fin whale stock structure. The SRG agreed to wait a couple years before considering breaking out fin whale stocks.

Wynne noted that historic takes of fin whales from 1999 have been removed; this is inconsistent with other stocks that retain old take data. Angliss explained that due to the high observer coverage in fisheries known to take fin whales, the agency reports on the most recent 5 years as is typically done for incidental take information from observed fisheries.

Taylor noted that the Pacific SARs use a recovery factor of 0.4 or 0.5 for fin whales, yet Alaska uses 0.1. In a Taylor et al. administrative report, a recommendation is made to use a recovery

factor of 0.4, not 0.1 if Nmin is greater than 5,000. Straley inquired whether a caveat similar to that proposed for the harbor porpoise SARs (regarding the need to revise stock structure) should be included in the fin whale SARs. Angliss responded that such a caveat is probably less important because there is no pressing conservation concern for fin whales as there is with harbor porpoise.

Bowhead whale:

Barrett-Lennard noted that considering the age at first reproduction (approximately 20 y.o.) and the longevity of the bowhead, the population doesn't seem to behaving as one would project long-lived animal should. Barrett-Lennard recommended adding a sentence or two regarding longevity to the bowhead SAR. Suydam added that the last bowhead census was done in 2001; IWC guidelines state this needs to be updated every 10 years.

Gray whale:

Angliss informed the SRG that data on human caused mortality have not been received, and indicated that these will be updated next year. The SRG questioned the inclusion of the Alter et al. 2007 reference. Angliss responded that NMFS was required to acknowledge that this reference was considered and to respond to it without assessing the validity of the methods because this reference was specifically addressed by a public commenter.

The SRG was in agreement that a section on habitat concerns should be added to the gray whale SAR, and **recommended that the agency added this section to every stock where it is lacking**.

Western North Pacific humpback whale:

It was **recommended that the results of SPLASH be presented to the SRG at next year's meeting**. Straley commented that sightings from the oil and gas industry should be added to the report. Straley also suggested making a request to the Region to produce a report on large whale ship strikes in Alaska. In light of the September 2007 Serious Injury Workshop, Straley inquired whether NMFS will retroactively review large whale human interaction event under the new guidelines established as a result of this workshop. Angliss responded that guidelines discussed at the serious injury workshop will not be used until the agency adopts the new guidelines. It is still uncertain whether cases will be reviewed retroactively, but there will probably be a desire to do so. Barrett-Lennard added that individuals from British Columbia will be meeting next week or next month to develop stranding guidelines and a database for BC. Barrett-Lennard suggested that Angliss might want to work with these folks, as there has been no systematic stranding database for BC so far.

Sperm whales:

Straley noted that there was one unobserved sablefish fishery take of a sperm whale in either 2004 or 2005 that is not included in the SAR. This animal was reportedly captured and released "alive". Straley also noted that the results of the survey of sperm whale depredation on sablefish were very interesting.

Straley also expressed concern that there is no abundance estimate or PBR for sperm whales, yet there are known interactions resulting in mortality. Straley questioned what happens when takes occur; if there is no PBR set, then the take level can never exceed PBR.

Straley recommended adding a separate habitat section to the sperm whale SAR, which should include those concerns listed for other Bering Sea stocks. While sperm whales are found predominantly in the Gulf of Alaska, they are also found in the Bering Sea, so all the habitat concerns (oil & gas, climate change) could affect sperm whales as well.

AT1 Killer whales:

Barrett-Lennard and Matkin suggested using a recovery factor of 0.1 for the AT1 killer whale stock because the stock is nearly extinct. The status should not be listed as unknown because the status of population is known; it will soon be extinct.

North Pacific right whale:

The SRG has little confidence that right whale interactions with humans are unlikely; there is overlap in time and space with fisheries and right whales. Given that scarring indicative of fishing gear entanglement has been observed on right whales in the North Atlantic, and knowing that scarring resulting from line entanglement has been observed on bowheads, an SRG member stated it is highly probable that North Pacific right whale fisheries interactions can and do occur. If such an interaction does occur, it would be significant. The SRG would like such a statement to go in the SAR; Angliss indicated this may go against previous agency analyses & decisions and that the agency may not support including such a statement.

18) Topics for next meeting

Mathews directed a discussion of topics for the next SRG meeting. Mathews commented that the SRG will discuss any letters the SRG decides they want to write to the agency. It will also have to be determined who will present at the next meeting.

Logistics for next meeting were also discussed. The group is considering holding the meeting at approximately the same time next year, and the weeks of Jan 5 or 12 were suggested so the meeting does not conflict with the Alaska Marine Science Symposium. It was agreed up that the meeting should be planned over 2 days, and Mathews proposed that the group continue this discussion over email after everyone has had an opportunity to check schedules.

Other topics to be discussed at the next meeting include having a USFWS representative present on the outcome of the polar bear listing, incorporating uncertainty into mortality estimates, and an update on humpback whale estimates based on the SPLASH outcome.

Given that numerous stocks have low or no abundance estimates, Lowry proposed that the agency compile a document or presentation on which abundance data surveys would be priority if the agency actually had funding to collect abundance data. Until Nmin is obtained for some of these stocks, the SRG has a hard time evaluating the status of stocks. Barrett-Lennard questioned whether the SRG should make a recommendation that this issue should be addressed and incorporated into the MMPA for the next reauthorization, and Lowry proposed writing a letter to the agency. Lowry commented that as a follow-up to a NMFS abundance estimate wish

list presentation, the SRG can follow-up with a letter to the agency with recommendations of obtaining abundance estimates for these stocks.

Angliss commented that this meeting went into a higher level of detail on individual SARs than the SRG meetings usually do, and questioned whether the SRG wants to continue with such a high level of detail for the review, in which case an appropriate amount of time will need to be allotted. The SRG suggested it may be helpful to get drafts of the SARs to the SRG earlier in time for the reviewers to get back to editors before the meeting. The consensus was that the SRG liked the step by step editorial review and agreed to hold a 2.5 day meeting next year if necessary to continue with a detailed review. Holding a 2.5 day meeting opens options for roll-over into the last day or travel.

Mathews inquired whether reviewers should be assigned by common species or based on common issues among stocks. Mathews proposed having more structure with the assignments of stocks to review by assigning individuals stocks to review each year. Another option Mathews proposed is to rotate stocks among reviewers so new eyes are looking at each SAR every year. Mathews is in support of having structure with assignments so individual reviewers know to stay alert of new data. Pendleton inquired whether the SRG should send new stock structure information to NMFS as it becomes available, and whether the SRG can push to get new stock structure data or wait for it to happen. Angliss responded that the SRG can recommend that data are needed.

Angliss reported on acoustic data supporting the presence of blue whales and sei whales in Alaskan waters and whether SARs are needed for these species. The SRG agreed to review the GAMMS guidelines to see how frequently a species needs to be sighted before it is made a stock. Taylor commented that the western population of blue whales is sometimes seen off the western Aleutians, and added that any photos from these whales would be appreciated given that this stock was severely whacked by whaling.

Appendix 1: 2008 SRG meeting agenda

ALASKA Scientific Review Group (SRG) MEETING

AGENDA (6 Jan 2008)
Embassy Suites Hotel, Monterey (Seaside), CA
January 9-10, 2008

Jan. 9, Wed. (Day 2 of overall SRG meeting)

1:00 pm		
1. Introductions		15 min
2. Adoption of agenda		5 min
3. Adoption of minutes from January 2007 meeting		10 min
AKSRG Minutes: proposed timeline for committee review and response		
4. Administration, Travel, Membership		10 min
5. Summary of letters sent by the Alaska SRG in 2007		10 min
Discussion of general intent and procedures for letters		
1:50 pm		
6. Update on NMML research funding	John Bengtson, NMFS	25 min
AFSC's proposed Loss of Sea Ice Program	Robyn Angliss, NMFS	5 min
Questions/Disc		10 min
7. What is the Alaska Marine Mammal Observer Program doing to quantify marine mammal takes in Category II fisheries? Status of listing of the Cook Inlet beluga whale; status of petition to list the Ribbon Seal	Kaja Brix, NMFS	30 min
3:00 pm		
8. Update on Polar Bear ESA listing process	Beth Mathews	10 min
3:10 pm		
BREAK (Viewing of research posters from walrus survey)		20 min
3:30 pm		
9. Brief summary of 2006 walrus survey and current status of analysis	Suzann Speckman, FWS	30 min
Questions/Disc		15 min
4:15 pm		
10. Follow-up from Joint SRG meeting discussion with focus on Alaska-specific topics		
Discussion/Action items for the AKSRG?		25-30 min

11. One to two Stock Assessment reviews, as time allows. 20-30 min

12. Closing comments/discussion/planning 10-15 min

5:30 pm Adjourn for the day

Jan. 10, Thursday Day 3

8:30 am
1. Overview of day's schedule
(We will break for lunch from 12:00-1:00 and have a mid-morning and mid-afternoon break.)

2. Scientific reviews of the NMFS's Alaska Marine Mammal Stock Assessments
(All members are encouraged to contribute to each stock assessment review, but reviewers are expected to have carefully reviewed their specific stocks and to lead those discussions.)

Stock	Reviewer 1	Reviewer 2	Reviewer 3
1 . Beluga whale, Cook Inlet	Lance Barrett-Lennard	Lloyd Lowry	
2 . Beluga whale, Beaufort Sea	Robert Suydam	Lloyd Lowry	
3 . Beluga whale, Eastern Chuckchi Sea	Robert Suydam	George Noongwook	
4 . Beluga whale, Eastern Bering Sea	Lloyd Lowry	George Noongwook	
5 . Beluga whale, Bristol Bay	Lloyd Lowry		
6 . Steller sea lion, eastern U.S.	Grey Pendleton	Beth Mathews	
7 . Steller sea lion, western U.S.	Grey Pendleton	Lance Barrett-Lennard	
8 . Northern fur seal	Brendan Kelly	Kate Wynne	
9 . AT1 transient killer whale	Lance Barrett-Lennard	Craig Matkin	
10 . Sperm whale	Jan Straley	Kate Wynne	
11 . Humpback , Western North Pacific	Jan Straley	Grey Pendleton	
12 . Humpback, Central North Pacific	Jan Straley	Lloyd Lowry	
13 . Fin whale	Kate Wynne	Craig Matkin	
14 . Northern right whale	Beth Mathews	Craig Matkin	
15 . Bowhead whale	Robert Suydam	Lance Barrett-Lennard	George Noongwook
16 . Gray whale	Kate Wynne	Jan Straley	
17 . harbor porpoise, Gulf of Alaska	Brendan Kelly	Craig Matkin	Beth Mathews
18 . harbor porpoise, Southeast Alaska	Brendan Kelly	Beth Mathews	
19 . harbor porpoise, Bering Sea	Brendan Kelly	Beth Mathews	

3. Stocks to consider adding to our review for 2009 Robyn Angliss 15 min
Sei whales
Blue whales

4. Closing comments, topics for our 2009 meeting, and assignments 10-20 min

~ 5:00 pm Adjourn

Appendix 2: SRG recommendation to NMFS

Recommendations:

1) SRG was in agreement that some type of a report should be generated from the joint SRG meeting summarizing the recommendations of the SRGs combined. It was also suggested that recommendations stemming from the Joint SRG meeting that pertain specifically to Alaska be documented in both a **letter** to NMFS as well as in the meeting minutes or report. (Angliss agreed to work with the agency on getting this accomplished given the interest expressed by the SRG.)

2) SRG endorses Serious Injury workshop results & recommends that the agency adopt the results as official guidelines for assessing serious injury for purposes of the SARs and List of Fisheries.

3) Draft **letter** from SRG to Board of Fish recommending that NMFS receive timely updates of new and re-opened state fisheries; the agency includes mortalities from both state and federal fisheries in setting PBR levels, so receiving timely information on new and re-opened state fisheries, as well as mortalities from state fisheries, is critical to NMFS's obligation.

4) NMFS should be proactive about highlighting new or reestablished fisheries that move into new areas, especially in the higher latitudes where loss of sea ice is occurring. The SRG would like to be advised of these.

5) Revisit whether the SARs should state that bycatch = 0 when there are no observer programs in some fisheries that may have takes.

6) Consider calculating confidence intervals on estimated fisheries takes, especially in situations with low observer coverage and no observed takes, requiring 1-sided confidence intervals (Pendleton to do a couple of cases for western Steller sea lion and report back next meeting).

7) Hold a special session at SRG meeting next year on quantifying observer coverage and fisheries takes.

8) Develop **letter** from SRG to the ANHSC regarding the use of genetics in conservation and management of marine mammal stocks (Lowry drafts).

9) For old abundance data, calculate PBR level, but say in the SAR that it is undetermined due to the 8 year rule. Include "Undetermined" in the table, but footnote the status information to refer to the text in the SAR. Include something in the status section in the SAR that indicates that, although the PBR level is undetermined, no need to change the status.

10) The SRG proposes to write a **letter** to NMFS stating the need for more surveys of stocks with dated abundance estimates.

11) The AKR should routinely provide stranding/entanglement information for inclusion in the SARs.

12) Recommend to NMML that the SEAK harbor porpoise surveys from 2006 & 2007 be analyzed as soon as possible in light of a possible decline in the local population.

13) Recommend informing the subsistence hunters of the agency's interest in getting skin samples from subsistence takes over a broad range. Also recommend getting the word out to the community to collect harbor porpoise samples – notify museums, the stranding network, subsistence hunters – in order to obtain samples over a broader range.

14) Revisit reducing Fr for Bering Sea harbor porpoise due to high CV for the mortality estimate. If this is done for this stock, it should be considered for other stocks.

15) Consider using Taylor et al. administrative report to justify changing default Fr values.

16) Add a "Habitat Concerns" section to each SAR.

17) Plan to present and have a complete discussion of SPLASH at the 2009 meeting.

18) It seems that there are more ship strikes of humpback whales in Alaska in recent years. Ask that the AKR provide a report on ship strikes & trends in ship strikes at the next meeting.

Appendix 3: Summary of topics for the 2009 SRG meeting (Note: there is some overlap with SRG recommendations):

• Polar bear listing & new USFWS SARs

• SPLASH update

• Incorporating uncertainty into mortality estimates.

• Increasing Nmin confidence intervals over time

• NMFS abundance estimate priority list of stocks for lacking abundance estimates

• Consider using Taylor et al. administrative report to justify changing default Fr values

• Trends in ship strikes in SE AK

• Review Herrman's thesis and any resultant publications (Mathews and Barrett-Lennard)

• Revisit whether the SARs should state that bycatch = 0 when there are no observer programs in some fisheries that may have takes

• Method for using a one-sided confidence interval to examine bycatch will be written up and tested on Steller sea lions; results will be presented to the SRG with an explanation of the method (Pendleton)

• Hold a special session at SRG meeting next year on quantifying observer coverage and fisheries takes.

• Revisit reducing Fr for Bering Sea harbor porpoise due to high CV for the mortality estimate. If Fr is reduced for this stock, then this method should be used consistently with other stocks.

• Plan to present and have a complete discussion of SPLASH at the 2009 meeting.

• It seems that there are more ship strikes of humpback whales in Alaska in recent years. Ask that the AKR provide a report on ship strikes & trends in ship strikes at the next meeting.

• Incorporate data from Marilyn Joyce (DFO, Canada) on incidental mortality of pinnipeds in aquaculture farms.

• Review GAMMS guidelines on how frequently a species needs to be sighted before it is made a stock (in regard to consideration of blue and sei whale stocks for Alaska).

Appendix 4: List of Participants at 2008 Alaska SRG meeting

Participants:

SRG Members:
Beth Mathews (Chair)
Brendan Kelley (day 1)
Grey Pendleton
Robert Suydam
Jan Straley
Kate Wynne
Lloyd Lowry
Lance Barrett-Lennard
Robyn Angliss (NMFS – Executive Secretary)
Dee Allen (NMFS – rapporteur)

Observers:
Barb Taylor
Kaja Brix
Bob Small
John Bengtson
Teri Rowles (day 1)
Suzann Speckman
Tom Eagle (day 1)