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

31 January - 01 February 2012, Anchorage, AK

This report summarizes the 25th 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. Appendix 1 contains a list of SRG recommendations to the NMFS and the FWS. A list of SRG members and observers present or participating via teleconference is provided in Appendix 2. The final agenda is included as Appendix 3.

1) Adoption of agenda

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

2) Update on minutes from January 2011 meeting

The draft minutes from the February 2011 SRG meeting were not ready for distribution to the SRG. Dee Allen was hoping to have the draft minutes from the 2012 and 2011 meetings distributed to the SRG within the next few months so they can be adopted and finalized.

3) Administration, travel, membership

Allen addressed the issue of travel reimbursement for SRG members, and encouraged members to turn in papers as soon as possible for reimbursement.

4) Introductions and Membership

Individual introductions were made to the group, including SRG members and observers. Several members have been planning to step off the SRG. Three potential new SRG members were identified at the previous meeting: Tom Loughlin, Kate Stafford, and Bob Small. The SRG membership and attendance has become low, and the SRG may want to consider additional candidates for membership. The SRG expressed concern about the number of members and funding to support an adequate membership level. Adequate support for the SRG is necessary, particularly given members are volunteering their time and expertise; the SRG agreed to recommend to NMFS that they have more support in order to conduct the scientific review successfully. The SRG intended to discuss membership at the end of the second day of the meeting. Sam Simmons suggested looking at how other SRGs divide up stock review assignments so as not to overburden any individual member.

Robert Suydam informed the SRG of his intention to step down as Chair immediately, but will continue his position as a member of the SRG. Lloyd Lowry expressed his willingness to Chair the 2012 meeting and offered to take over as Chair. The SRG accepted Lowry's offer, and Lowry and the SRG expressed their gratitude to Suydam for serving as Chair. Mathews nominated

Robert Suydam as Chair of the SRG, who was unanimously approved by the SRG, and the nomination was accepted by Suydam.

5) Update on issues and outcomes from the Marine Mammal Commission (MMC) meeting (Suydam)

Suydam provided the SRG with an update on issues discussed and outcomes from the Marine Mammal Commission meeting held in January 2012 in Anchorage. This meeting focused on Alaska marine mammal issues; there were a lot of potential topics to discuss, but not enough time to discuss all issues. The meeting topics included species of concern, including bowhead whales and the IWC setting quotas for harvest. Sea otters, walruses, and ice seals were also discussed. An Unusual Mortality Event (UME) was declared for ringed seals and walruses on the North Slope; nearly one-half of the animals stranded showed signs of disease, including lesions and disrupted molting. Numerous samples were collected, and it was determined these animals had a bacterial infection, which some veterinarians believe is a secondary infection. Serology and viral testing was inconclusive. Hairlessness is not a new finding, but many of the other symptoms seem to be new. Some spotted and bearded seals are showing similar signs, but they have not been included in the UME. Jason Harriman first noticed symptoms in ringed seals he was tagging.

Lowry was recently asked to be a member of the UME working group. The UME was declared based on advice from the group. Lowry expressed that he is impressed with the individuals who are members of this group. Many of the tests have been inconclusive. There have been reports of animals showing signs and symptoms all the way east into Canada and extending west into Russia. It remains uncertain how many other species will be affected, and there is some concern that foxes and other terrestrial animals may become affected, as suggested by preliminary findings of lesions by a veterinarian in the North Slope.

Suydam mentioned that there are plans to continue monitoring into 2012. Cooperation and collaboration has been great, and even human health workers are getting involved. Beth Mathews inquired whether the working group is communicating with the hunters. Suydam responded that the information is getting out there; hunters are continuing with traditional practices, if the animal looks really sick, don’t eat it. Few people and dogs have eaten seals showing signs and symptoms of being ill, and there had been no signs or symptoms observed in the consumers.

Karl Haflinger inquire whether this was a new disease finding. Suydam responded that in 2010, some hairless seals had been observed; however, signs have never been seen to this extent before. It is still unclear what happened in 2011 to cause this outbreak. Lowry mentioned he recalled 3 occurrences of hairless seals being observed before, but this is a different presentation with different symptoms. The working group has discussed the tsunami in Japan as a significant event occurring in 2011, and there have been some radio-isotopes testing and other testing.

Suydam mentioned that the MMC also focused on the Arctic and other issues such as Cook Inlet belugas and sea otters. On the fourth day, a broad discussion of marine mammal conservation took place, including global health. Prioritization of marine mammal conservation issues is

necessary in the current environment of limited budgets. Some folks suggested a using phylogenetic approach, with some stocks being considered a higher priority, while others suggested a risk approach, or population size. Perhaps a shift in focus is needed in DC, emphasizing that marine mammal conservation creates jobs and is good for the economy.

Dennis Heineman added that co-management was also discussed during the first session and repeatedly discussed throughout the meeting. Climate disruption in the Arctic was another topic of interest. Attendees were allowed to comment during a session and nearly a third of the comments were about co-management, including where it has failed, a call for MMC assistance to improve the system, the importance of co-management. Another session was on the effects of shipping in the Bering Sea and Arctic waters. Simmonds added that a few other species of special concern were discussed. There is not a lot of opportunity for public comment on the MMC actions, so the public appreciate the opportunity to comment on issues of concern from the public perspective.

Mathews inquired whether there were any major concerns regarding co-management. Suydam said there were concerns as to whether the current system is really considered co-management. Concerns regarding funding and budgets were also expressed; groups are being ask to do more with less resources, so other sources of funding were discussed, including the possibility of Alaska Native organizations contributing more funding for co-management purposes. Simmons agreed to send Allen the MMC meeting agenda for distribution to the SRG. Lowry noted that MMC staff with be available throughout the SRG meeting if any additional questions arise.

6) Updates on research related to SARs from FWS

Lowry introduced the next topic, updates from the Fish and Wildlife Service (FWS) on research related to their stock assessments. Jenifer Kohout introduced herself; she is on a temporary 4-month detail to fill in since Rosa Meehan retired. Deb Pierce will be joining their office shortly from the east coast and will be Meehan's permanent replacement. Kohout mentioned there is a push for FWS to catch up with reviews of several candidate species. FWS is expecting to issue a proposed rule on the walrus listing in 2017. Jim MacCracken provided an update on walruses. FWS was petitioned in 2008, and a substantial information finding in 2009. Public comments, a status review, and threat assessment occurred in 2010, and it was determined a status review was warranted in 2011. A decision on the status review is expected to take place in 2017.

FWS activities included determining major threats, running a Bayesian Belief Network model around listing factors, and developing scenarios for various models. The definition of foreseeable future was considered, and each factor varies depending on how far into the future the models are projected. Ice model projections were summarized at mid-century and late century; late century assessments showed more uncertainty, particularly in forecasting effects of many threats.

Habitat modification was also considered. The loss of summer sea ice has resulted in large haulouts on land in Russia and the U.S. The biggest concern with these large haulouts is an increase of calf mortality due to stampedes if the group is disturbed. Winter and spring sea ice changes less than summer. Ocean acidification and temperature change are environmental effects that may influence walrus prey, although this effect has not yet been observed. Overutilization is

another factor of concern; takes are currently at sustainable levels, but this could change. Co-management is emphasized under the MMPA, so harvest monitoring is needed in combination with the collection of data that would support estimating effects, trends, and composition of walrus harvest. There are some local ordinances on harvest, and trip limits were enacted in 2010. A Tribal Wildlife Grant was awarded in 2011, which enforces ordinance; there is a greater than 80% compliance rate.

Disease and predation are relatively minor factors affecting the walrus stock, and both are predicted to remain at low to moderate levels. Other factors that could impact the walrus stock include oil and gas development, the potential for opening new areas to commercial fisheries, and increased shipping. International commercial shipping will be challenging to regulate. It is a complex problem given there are little to no data on walruses, but the process is necessary and FWS staff are using their best professional judgment. The BBN Model for Listing Factors includes considering habitat modification, overutilization, disease and predation, as well as other man-made factors. The model output has been consistent with expectations based on past conditions, and the model output for current conditions varied little among the scenarios. The best-case scenarios suggest reductions in haulout mortalities and harvest can be effective. Habitat changes resulted in sub-optimal conditions; the population will decline, but the uncertainty is very high.

Suydam inquired about updates on research related to SARs. The SARs need abundance estimates, trends, mortality estimates, PBR estimates, etc. Suydam inquire about FWS's plans for new approached to counting walruses, particularly since there were problems with the previous estimates. MacCracken responded that a workshop will be held in March with Russian colleagues. They also plan to take advantage of the large haulouts occurring in the Fall and conduct land-based counts, aerial surveys over haulouts, and genetic mark-recapture studies. Only one commercial fishery is known to incidentally take walruses, which averages only a couple of takes annually. Jan Straley inquired whether ships strikes over walruses are ever reported; MacCracken was not aware of any. Lowry inquired that given the focus in ice hunting whether there is now a concern regarding hunts taking advantage of these large haulouts. MacCracken responded that communities have been fairly good about not overharvesting and taking advantage of the large haulouts. The herd is monitored while it is hauled out, and carcass monitoring surveys are conducted. There will be another workshop in Barrow in February to talk with the communities about haulout "ownership". Lowry stated it is great to have some cooperation with the communities, and inquired as to whether aircraft are an issue with these haulouts. MacCracken responded that the FAA closed air space over a major haulout last year; they diverted flight paths, and the USCG notified mariners to avoid the area, so these methods seem to be working. Lowry commended the FWS on the work they were doing. Suydam mentioned that NMML presented at the MMC meeting on their intention to count walruses while conducting their aerial surveys for ice seals during the Spring; it would be good if NMML cooperates with FWS to collect data counts as well. Lowry expressed some concern with multi-species counts and survey; if the survey is not specifically focused on a particular species, it may not be surveying to the full extent. Karl Haflinger commented that the Arctic Fisheries Management Plan is in place, so it will be difficult for any groundfish fisheries to open in the Arctic anytime in the near future.

Kohout continued with FWS updates on sea otter stocks. FWS decided to not update the polar bear stock because no new information was available on polar bears. Suzann Speckman will provide an update on sea otters. Mathews inquired about the reasoning behind the 5-year delay in making a listing decision on walruses, to which Kohout responded there were other higher priority activities that needed the attention of staff. Suydam inquired about FWS's process regarding updating the SARs; some of the NMFS SARs have little to no updates, but SARs for strategic stocks and non-strategic stocks are still distributed to the SRG for review every year or every three years, respectively. Speckman mentioned that this review would require a notice in the Federal Register (FR). Allen mentioned that NMFS typically includes the FWS SARs as an appendix in the SARs Technical Memorandum and inquired about the possibility of preparing a multi-agency FR notice. Perhaps the FWS stocks could be appended to the NMFS FR notice for the SARs. Shannon Bettridge was not certain whether this approach was possible; NMFS typically states in the FR notice which FWS SARs are included in the Tech Memo, but NMFS does not typically request public comment on the FWS SARs. Bettridge inquired who she could work with to see if this was possible, and Kohout responded to make her initial inquiry with her. Suydam added that this would support the MMC's recommendation to "do more with less" by combining efforts of the two agencies.

Speckman continued discussion of the south central sea otter SAR and mentioned she tried using the new GAMMS III guidelines. Speckman inquired whether it is acceptable to use trend data from the western Aleutians and apply this trend analysis to the eastern Aleutian population, which seems to be the approach the GAMMS III is recommending. Speckman also inquired about when GAMMS III guidelines will be applied to the SARs, to which the group responded not until 2013 at the earliest; the workshop report and guidelines still need public review. Simmons clarified that Speckman's inquiry addresses two distinct questions: 1) should the data be used for an abundance estimate, and 2) should the data be used for trend and Nmin calculation. Lowry responded that this is a good example where the guidelines recommended from GAMMS III workshop could be put to good use; the SRG does not write the SARs, so FWS can decide what to do. The SRG reviews whether the science fits with the approach to stock assessment.

Lowry inquired whether anyone received any SAR reviews from Lance Barrett-Lennard or George Noongwook. Allen and Suydam responded that they had not, but Suydam tried to pick up a few more SAR review assignments in their absence. Suydam reiterated Speckman's inquiry regarding the data for the southwest Alaska sea otter. Grey Pendleton commented that the data are greater than 8 years old, so the FWS should be consistent with NMFS SAR guidelines, which suggest not to calculate a PBR if the data used for the abundance estimate are greater than 8 years old. Lowry added that the new GAMMS III would change that approach, but this is a recurring problem with all SARs under the current guidelines; once the data are older than 8 years, they cannot be used anymore. ***Pendleton recommended that if a number is considered to no longer be reliable, then it should not be presented in the SARs; neither Nmin nor PBR should be calculated from abundance estimates greater than 8 years old. Lowry agreed with this suggestion; it is acceptable to present an abundance estimate that is aged since those data are real, but calculations should not be made from this number that is no longer considered reliable.*** Speckman inquired whether information from one area could be applied to another area. Lowry responded that this approach could be used, but only with a strong scientific justification

for doing so. Haflinger inquired whether combining data from surveys was acceptable and whether the SRG makes recommendations to the SAR authors on this approach. Lowry responded affirmatively, that the SRG channels all recommendation through Allen who will then notify the individual SAR authors. Suydam suggested the SRG should make a recommendation on how the agency deals with combining data from surveys conducted over multiple years. Lowry inquired how estimates from small area surveys that do not cover the entire range of a stock are used in the SARs. Both Allen and Simmons responded that these data are not used consistently in the SARs. Lowry suggested that Nmin should be based on the most current survey data and **recommended that NMFS and FWS not calculate an Nmin or PBR if the survey data are older than 8 years; both agencies should be clear about the data that are available and what year they were collected.** Suydam inquired about the guidelines on the age of data used to calculate a trend in abundance. Simmons stated from the MMC's perspective, it would be useful to include all historical trend data that are available. Lowry added it would be good to recommend examining overall trend data including all historical data, then focusing on "current" trend, although the question arises regarding what would be considered "current" – 10 years? Dennis Heinemann commented if good trend data are available, then this will give a better idea of OSP and interpreting Rmax if a historical trend is known. Suydam inquired whether there are differences in trends for sea otters in different areas. Speckman responded the central and western Aleutians experienced decline; the eastern end of the stock seems to be stable or increasing, although the observed increase may still be a recover from the fur trade. Suydam responded that this explanation is better than using "continual decline" in the SAR and suggested explaining that different trends are seen in different areas within this stock. Lowry also suggested using 0.5 for the recovery factor for a threatened stock, not the recovery factor for an endangered stock, even though PBR cannot be calculated because the data are too old. Pendleton suggested documenting where the unpublished data can be accessed. Suydam inquired whether killer whale predation was a contributing factor on the decline of this stock and suggested that should be mentioned. Pendleton inquired about the guidelines used for making injury determinations since all the sea otters that were caught in fishing nets and released were listed as not being seriously injured. Lowry stated that new injury guidelines are now available; however, Allen added that no FWS stocks are included in NMFS's injury determination policy. Pendleton noted that the SARs are concluding that fisheries mortality and serious injury are not significant; if there is not information available on a fishery then the impact of that fishery is unknown, and the SAR should state this. The number of unmonitored fisheries that exist in the area of occurrence that could potentially interact with sea otters should be indicated.

Verena Gill presented on the southeast sea otter SAR. The survey data are more recent for this stock and can still be used to calculate PBR. Lowry noted that the SAR indicates the population is increasing because the abundance estimate is greater than what was previously presented in the SAR; however, these numbers should be listed. The statement regarding tankers posing little threat to sea otters is questionable and should have a reference associated. Haflinger inquired whether the subsistence data from the state of Alaska differed from the data held by FWS. Gill and Pendleton both responded affirmatively; FWS data is collected from a tagged program for skulls, furs, etc., whereas the state data were from surveys of communities.

Suydam suggested the use of walrus vs. walruses as a pleural term should be consistent within the SAR. Suydam also mentioned it would be good to include additional information if two

individual winter populations exist. This could indicate sex or age composition segregation in areas, or some variation within the stock if there is some site fidelity to these wintering areas. Lowry inquired whether genetics data on walruses had been collected since what is reported in the SARs. MacCracken responded that samples have been collected and analyzed, but those data are not available yet. Lowry **recommended FWS do more genetics analysis and get data on genetics from the various concentrations of walruses**. Suydam requested clarification on how the abundance estimate fits in with the various PBR calculation approaches, as well for more explicit language indicating this is not a direct count since the entire range was not covered. Lowry suggested adding confidence limits on the estimates, as well as variation within the estimates. Suydam inquired whether subsistence harvest contributed to the decline, whether the population had reached carrying capacity, whether environmental factors would contribute to a population decline, and which rate FWS was using for maximum productivity rate. Suydam also noted that the SAR indicates no mortality or serious injury resulted from research on haulouts; however, he had heard that some trampling of pups occurred due to stampeding in response to research activities. FWS should check this information and update accordingly. MacCracken added that there was one suspected mortality as a result of research activities, which should be stated in the SAR. Lowry inquired whether anyone had confirmed no mortalities in Russia that were associated with the large haulouts that occurred in 2008; Suydam mentioned there were probably none in the Chukchi that year. It should also be noted that there was no ice in the area during the time of occurrence of these large haulouts on land. Mathews inquired about the statement regarding 52 orphaned walrus calves and whether this was common or an indication that something different may be occurring. MacCracken responded that it is not unusual; numbers of orphaned animals can vary, and it happens naturally.

7) Review of NMFS SARs

Bowhead whale

Suydam commented that the 2011 ice-based census of bowhead whales was successful, and results are forthcoming. The sight/ resight data from 2003-2004 aerial surveys should be added to the table and used as the most current abundance estimate, but a footnote should be added that this survey used different field techniques. The current Nmin is based on the 2001 estimate; however, it seems more appropriate to use the 2004 mark/ recapture estimate of 12,500 whales, even though the confidence interval is fairly large. Lowry inquired whether the two different bowhead whale surveys could be combined on a trend line, and whether the 2004 survey appropriately surveyed the population. Suydam confirmed the latter and stated the 2004 estimate would be the best estimate to use. Suydam suggested the habitat concerns section could include more information on oil and gas activities and agreed to send more data on bowhead whale sensitivity to sounds; the climate change information should be updated with more current information and references. The information on designation of critical habitat is outdated; however, retaining it demonstrates that this critical step was done for an ESA-listed species. Lowry noted the 5-year review is overdue; Bettridge responded that a 5-year review typically occurs in conjunction with a recovery plan. Suydam did not recall a status review ever being done for bowhead whales and suggested removing the statement about a status review and recovery plan. Bettridge agreed to update with language explaining the reason a status review was never done. The SRG suggested listed all bowhead subsistence takes with historical data in a

table. Lowry commented that tables of fisheries would be good for all SARs as well; perhaps this should be included in GAMMS III. Simmons reminded the group that the GAMMS III report is out and open for public comments, and Bettridge added the SRG can either comment as a group or as individuals; the comment period closes 26 March 2012.

Western Steller sea lion

Lowry suggested the subspecies name recognized by the Society for Marine Mammalogy should be used for this stock. Lowry also questioned the use of survey data from segments of the population in different years for the abundance estimate. The statement regarding breaking out 6 commercial fisheries into 22 fisheries is old information and should be removed from all individual SARs. Several SRG members discussed whether old data from fisheries takes should be used; data from the 1990's should not be used. However, the use of old data is a national consistency and was discussed at GAMMS III; the old data should still be used for fisheries with low observer coverage or those with no observer coverage currently. Heineman suggested retaining this information, but having subsections for data that are historical, recent, or incomplete, and indicate with data are being used to estimate mortality and serious injury. Haflinger recommended collapsing the fisheries take information into tables. Lowry added an appendix for fisheries take tables would be useful, but this should be delayed until the GAMMS III are used. Pendleton mentioned new data may suggest there is not a strong distinction between animals from the eastern and western stock, and suggested toning down the information regarding sex differences and stock distinctiveness for animals in the mixing zone between the two stocks. Haflinger added the DeMaster memo cited in the SAR should be made available and suggested clarifying the information regarding which counts were used in the abundance estimate.

Eastern Steller sea lion

Haflinger and Lowry noted the information in the text and tables regarding population counts of trend sites of eastern Steller sea lions was confusing and suggested the data be clarified in the SAR. Lowry and Suydam suggested deleting the table, which is confusing and does not match with the text, and keeping the figure in the SAR. Lowry recommended condensing the stranding data presented in the SAR, and Suydam added that a statement should be included indicating why subsistence data are no longer being collected. Suydam noted the information on lethal removal of animals at Bonneville Dam should be moved to a new paragraph and not included with the research take data.

Northern fur seal

Pendleton noted some confusion in the text regarding counts versus estimates, which should be clarified. Pendleton mentioned there was a poster presented at the AMSS that suggested carrying capacity for Bogoslof Island may be very different for St. Paul, which included information suggesting weight gain of pups on Bogoslof Island was great, although this information may be too recent to include in the SARs. Heineman commented that statements within the SAR such as "we believe that…" should be removed.

Harbor seal

Mathews commended NMFS on recognizing 12 stocks of harbor seals instead of 3 and on the development of the SARs for these stocks. Editorial details of the SAR were discussed. Mathews suggested clarifying which surveys were conducted by NMFS and those conducted outside of NMFS. Pendleton inquired about the survey methods in areas where ice is present and how seals are accounted for in areas with ice. Allen added that trend data are currently being analyzed for harbor seals stocks and are not available for the SARs yet. Lowry noted that different recovery factors, which are based on trend, are being used; if trend is unknown for all stocks, then a consistent recover factor should be used. The SRG approved the format of including all 12 stocks in a single document and recommended NMFS retain this format. Pendleton suggested including a note that in some years subsistence harvest takes exceeded PBR for a single year for appropriate stocks. Lowry mentioned takes should be assigned to particular stocks, if possible. Lowry also noted that this SAR needs a Habitat Concerns section, and commented that the harbor seal SARs overall looked good.

Cook Inlet beluga whale

Suydam mentioned there are recent data that suggest a sixth beluga stock and inquired of the group whether the text on beluga stocks should be updated to include mention of preliminary information that suggests Kotzebue Sound may be a separate stock according to Greg O'Corry-Crowe. The group decided it was best to wait until all belugas stocks are up for review and more data are available. Suggestions on minor editorial updates were made. Suydam inquired whether any additional information was available on the live entangled beluga that had be resighted over the past year and whether this line can be attributed to a specific fishery. Mathews and Suydam suggested changing "zero" incidental fisheries takes to "unknown", although that number is likely low. Suydam suggested removing the harvest table since no harvest is allowed, and recommended adding a statement that the recovery team is drafting a recovery plan for belugas.

AT1 killer whale

Only very minor edits were suggested on the AT1 killer whale SAR, which will be mailed to Allen.

Pacific white-sided dolphin

The SRG noted the age of the abundance estimate for Pacific white-sided dolphins and added this number will change under GAMMS III. Mathews inquired whether sightings of Pacific white-sided dolphins exist that would be useful for updating abundance. Haflinger expressed some concern about using opportunistic sightings to generate abundance estimates rather than systematic surveys. Pendleton suggested not calculating a PBR for this stock since the data are too old.

Harbor porpoise, Southeast Alaska

Straley commented that abundance estimates and PBR will not be calculated for Southeast Alaska harbor porpoises; Alex Zerbini is working on analyzing trend data and collaborating with researchers in the southeast on survey design and surveying other areas.

Harbor porpoise, Gulf of Alaska

Wynne noted Nmin and PBR are unknown for this stock given the age of the abundance estimate. Mathews and Pendleton suggested using either an observed or adjusted abundance estimate, not both, and make the biases in the calculation of abundance evident. Wynne added that the CVs suggested strong confidence in the data; however, from experience, confidence in whether a harbor porpoise was actually sighted is often low.

Harbor porpoise, Bering Sea

Mathews suggested Nmin should be unknown instead of calculated since the survey data are 13 years old. Suydam commented that harbor porpoises are the most abundant small cetacean seen on industry surveys and will try to provide Allen with data from these summer surveys. Mathews suggest adding a statement summarizing which fisheries could potentially interact with this stock and which of those fisheries have been monitored. Suydam noted that every year there seems to be one or two porpoises getting caught in subsistence fishing nets. Wynne inquired whether any calves are being seen in the Chukchi. Suydam did not recall any calves being reported, but there have definitely been mature females. Suydam recommended adding a statement that the habitat could be changing; porpoises seem to be moving north and incidental takes in subsistence gear are more common. Pendleton inquired whether more genetic samples existed than what is reported in the SAR and suggested checking with the SWFSC. Mathews recalled this was a recommendation that was made to NMFS when she was SRG Chair; however, this recommendation was sent directly to Phil Clapham. Perhaps the SRG should revisit this recommendation and also recommend more research be focused into the potential change of habitat for this stock. Suydam and Pendleton suggested effects from oil and gas activity be added to the Habitat Concerns section. Lowry suggested putting all three harbor porpoises stocks into a single SAR document like what was done for harbor seals; Suydam supported that suggestion since the information could be more clearly presented, and it would be easier to review since there are fewer SRG members.

Sperm whale

Straley mentioned the SAR needs more information pertaining to the Mesnick et al. (2011) paper on North Pacific sperm whale genetics. Pendleton inquired as to whether it is believed that most of the sperm whales occurring in Alaska waters are male and if so, whether it is appropriate to consider them a separate stock. Straley responded that females also occur in Alaska waters. Suydam inquired whether the IWC definition of sperm whale stocks has been considered when NMFS designated the existing stocks. Straley added that sperm whale stock definition is very complicated, and there are still many unknowns about stock structure in the North Pacific. Straley offered to provide addition text regarding sperm whale depredation on sablefish longlines; they are finding that sablefish catch is greater in areas where more sperm whales occur, so sperm whales are present in those areas also considered to be good fishing areas.

Straley also noted that sperm whales have been sighted in inland waters around Chatham Strait. Wynne questioned the statement indicating "there are no habitat concerns for this stock" and suggested updating this to include concerns such as noise, vessel activity, and other concerns. Lowry recommended transferring the North Pacific sperm whale SAR to the Pacific SARs since the SWFSC has the most data on this stock.

Fin whale

Wynne noted that the SAR incorrectly states there are three fin whale stocks in the U.S., which should actually state there are 3 stocks in the U.S. Pacific waters. Pendleton questioned the use of an Nmin based on survey data from a portion of the range, which combines estimates from several surveys. In the minke whale SAR, it states no Nmin was calculated because only a portion of the area was surveyed. Also, there is a PBR calculated for fin whales but not for minke whale, yet they are based on the same surveys. The SRG recommended stating PBR for fin whales is unknown because survey data are greater than 8 years old.

Minke whale

There were no comments made specifically on the minke whale SAR. Suydam did note that there is a lot of debate about minke whale stock structure within the IWC and suggested NMFS update the stock definition and geographic range section of the SAR to reflect this.

DAY 2:

8) Updates on research related to SARs from NMFS

Angliss provided a list of science updates from NMML staff. Updated abundance estimates from aerial surveys in the Bering Sea should be available by approximately 2014. Ice seal distribution data from tagging studies should be available around 2013. Harbor seal trend data are currently being analyzed and should be available by 2014. New genetics data on Alaska killer whales is being analyzed and should be released by 2014, in addition to information on distribution of resident and transient killer whales from tagging studies. New information on Cook Inlet beluga feeding behavior should be available in 2013. There is a possibility NMML may not be continuing annual aerial surveys for Cook Inlet belugas due to budget cuts, and NMFS is exploring other methods for obtaining abundance estimates. Age estimation of Cook Inlet beluga from teeth is also underway. Updates from the Arctic cetacean surveys funded by the Bureau of Ocean Energy and Management (BOEM) should be available in the next year or two. There is also new information on sperm whale movements from tag data, as well as sightings distribution on sei whales, both which should be available in 2013.

New information on historical Soviet takes of right whales is being summarized, and data from the BOEM-funded right whale surveys is being analyzed. Analysis of relative abundance and trends for Southeast Alaska harbor porpoises is underway, as is an analysis of Dall's porpoise abundance and trends. Counts of Steller sea lions and northern fur seals continue.

Lowry inquired about the harbor porpoise trend data availability and suggested the SARs should indicate that these data are currently being analyzed and an approximate availability date. Mathews added that it would be helpful to have an opportunity to review the harbor seal SARs again in 2013 once the trend data are available. Pendleton noted that a new publication on trend sites of harbor seals around Prince William Sound should be available next year. Straley inquired whether any field work for harbor seals will be conducted in 2012. Angliss responded that NMML is canceling some field projects due to budget cuts; funding is approximately half of what is typically available, and it has been a challenge for the AFSC to make payroll.

9) GAMMS III workshop summary

Jeff Moore provided a summary of the key recommendations from the GAMMS III workshop. The GAMMS III workshop report was published in final form approximately a month ago, and there is currently a 60 day public comment period open. NMFS is anticipating input from the SRGs, MMC, and other groups. This is the third revision on the GAMMS. Moore presented slides on the nine broad categories of guidelines. These categories included: 1) estimating PBR when no abundance estimates are available; 2) improving stock definition; 3) assessment of very small and endangered stocks, and classifying stocks as strategic; 4) apportioning PBR across feeding aggregations; 5) clarifying reporting of mortality and injury incidental to commercial fishing; 6) evaluating when stock status should be considered "depleted"; 7) Assessing stocks without estimates of abundance of PBR; 8) characterizing uncertainty in key SAR elements; 9) whether to expand SARs to include non-serious injuries and disturbance.

Moore discussed the proposed guidelines for calculating PBR level from outdated abundance estimates. Currently, PBR level is considered "undetermined" after 8 years without a new abundance survey. The workshop reconsidered what NMFS should do in the 9th year from the survey and beyond. The abundance estimate from the single point estimate is not changing over time, but the confidence in that estimate is decreasing over time. In the case where negative trend in Nmin is observed for a stock, it is recommended for years 1-8 to use the more conservative projected Nmin. After 8 years, the worst-case scenario should be used. In stocks where a positive trend in Nmin is observed, a time-weighted average of the projected Nmin would be used. As with the former case, the worst-case scenario would be assumed after 8 years with no new abundance estimate. Suydam commented that some trend data are better than others and inquired how that would be considered in this approach. Moore responded that the workshop participants tried not to be prescriptive about that; it is up to the SARs authors. The analyst should work with good models, so the assumption is that the SAR authors are using best practices.

Moore used the bowhead whale as an example. The abundance estimate is from 2001 and the CV is small, so the estimate is precise. Assume a single abundance estimate and that no other estimates have been done, and assume there is no information on trend with an annual mortality estimate of 41. The trend model suggests there is an increase in abundance, thus the worst case scenario is not realistic. Therefore, the SAR authors would have to use some sort of judgment call on trend and justify why the worst case scenario is not being used. Suydam said in the example given with bowhead whales, if 5,000 bowheads suddenly dropped out of the population, it would be known – they would wash up on the beach, the hunters would alert the scientists. This model does not seem to help much in the case of bowheads. Moore responded that bowhead

whales may be one of those exceptions where SAR authors would have strong justification for not following the guidelines; even if the abundance estimate is outdated, the bowhead whale population is monitored enough that NMFS could justify why the model suggested in the guidelines would not be used. Suydam added that this guideline also assumes NMFS is doing their job and accurately assessing populations; this seems unfair to the hunters and other whose quota is based on current abundance estimates. Wynne questioned whether divergence can the guidelines is allowed. Moore responded affirmatively, if there is enough information, SAR authors can divert from the guidelines with justification. Bettridge added that SARs are reviewed by the SRGs, the Science Centers address the SRG comments, and the draft SARs are reviewed by HQ before being released for a 90-day public comment period. The Science Centers then respond to the public comments, modify the SARs as necessary, and the final SARs are reviewed again by HQ before being made final. Wynne expressed concern that these guidelines are not resolving the problems with outdated data. Moore responded that there will be an opportunity for the SRG to comment on the proposed guidelines via a letter to the agency as well as during the open public comment period. Lowry expressed concern with stocks in which different portions of the range were surveyed in different years and questioned whether each portion of the estimate will be reduced at a different rate; if so, this process could be messy.

Moore addressed the next few guideline topics. In the case of improving stock identification, it was recognized that it is likely that many stocks are not currently defined, that more stock structure may exist than is reflected by designated stocks. In these cases, the recommendation from the workshop was that this should be mentioned in the SARs. The workshop discussion around the assessment of very small stocks addressed the concern that human-caused mortality estimates are highly prone to small-sample bias for stocks with very low PBR. Pendleton questioned why PBR is calculated in these instances if the numbers are small and the data are questionable. Lowry responded that it is required legislatively to calculate PBR. Moore addressed the next major workshop topic regarding apportioning PBR across feeding aggregations and allocating mortality for mixed stocks. In data-rich situations, mortality would be allocated in proportion to the percentage mixture of each stock in an area; in data-poor situations, it is recommended to assign total human-caused mortality and serious injury in an area full to both or all stocks occurring within that area. Pendleton expressed confusion about calculating PBR for feeding areas given that stocks are defined by breeding areas. Moore clarified that the PBRs calculated for feeding areas are not “official” PBRs, but it gives NMFS a monitoring tool. Lowry added that this approach would not have regulatory consequences, but it would highlight management areas that should be addressed.

Moore summarized the next several GAMMS workshop topics. Guidelines were recommended for clarifying the reporting of mortality and injury occurring incidental to commercial fishing in attempt to get consistency within the agency and within the SARs in how these data are being reported. Recommended guidelines also addressed evaluating when the stock status should be considered “depleted”. Some stocks are being designated as strategic based on evidence of decline, not necessary based on the definition in the statute. Lowry commented that this might be the case with Cook Inlet beluga. Another guideline addressed assessing stocks without estimates of abundance or PBR. Wynne noted that this condition applies to many of the Alaska stocks. Lowry added that the summary provided to the workshop by the Alaska SRG on this issue was very well received. Lowry suggested that the SRG should go back and review all stocks up for

review in 2012 and not only make recommendations on Nmin and PBR, as was done yesterday, but also make a recommendation as to whether the SRG would consider a stock status to be strategic or not. Moore presented the next workshop guideline pertaining to characterizing uncertainty in key elements within each SAR. The workshop participants recommended NMFS should convey whether or not enough information is available to adequately evaluate each component of a SAR and to overall assess a stock. Moore presented the final topic of the workshop, which was whether to expand the SARs to include non-serious injuries and disturbance. Lowry commented that the SRG will take some time to review and comment on the GAMMS III workshop report. There are a lot of data gaps in the Alaska SARs that are known to the SRG and NMFS, but may not be apparent to the general public when reading the SARs. These guidelines will aid in improving the transparency regarding what is not known.

10) Eastern Pacific gray whale - research updates

Several participants and observers called in from the NMFS NWRO, SWFSC, and Makah Tribe, WA for the discussion pertaining to the eastern Pacific gray whale. In 2011, NMFS proposed switching the eastern Pacific gray whale SAR from the Alaska SARs to the Pacific SARs, with the exchange in authorship responsibility going from AFSC to SWFSC. This transfer was accepted by both the Alaska and Pacific SRGs.

John Calambokis from Cascadia Research Collective was invited to present current findings on gray whales off the coast of the U.S. Pacific Northwest region. Photo identification analysis suggests a group of seasonal resident gray whales exist in the area off Vancouver Island. This group has been referred to under several names, but it is collectively known as the Pacific Coastal Feeding Aggregation (PCFA). Studies include photo-id of live and stranded gray whales, and resighting rates of individuals were examined by month. Sightings from March, April, and May had the lowest portion of resights due to the northbound migration, so 01 June was used at the starting point for considering whales as potential “resident” whales with a few migrants observed. Suydam noted that the data presented showed there are no sightings in January and February and inquired whether this is a reflection of effort or whether zero sightings occurred. Calambokidis responded this is a result of no effort during these months. Calambokidis stated that some animals were only seen in a single year even using the 01 June cut-off, but there are several seen over multiple years. Nearly 50% of the whales in the entire year-round gray whale catalog have only been seen in 1 year; however, using the 01 June cut-off, only about 5% of the whales have only been sighted in a single year. Calambokidis also presented data on the proportion of whales seen in different regions throughout the species range that have also been seen in the waters off northern Washington. It appears the gray whales observed in this region from June through early October are moving around in an inconsistent manner, possibly looking for feeding areas. Calambokidis also noted that Mate et al. (2010) presented a paper at IWC that shows movements of 18 satellite-tagged gray whales which seemed consistent with the small-scale, regional movements suggested by the photo-id data analysis. Trends in abundance based on mark-recapture studies seemed fairly consistent.

Aimee Lang presented results from genetic analyses of gray whales. Early genetic studies did not support the PCFA as an isolated population. In 2010, the IWC implemented a review of eastern North Pacific gray whales in which new information became available. Sequences of mtDNA

were analyzed from the PCFA. Frasier et al. (2011) reported high levels of genetic diversity within the PCFA and concluded maternal lineages were a separate subpopulation. The IWC agreed accepted these findings of the PCFA as a separate subpopulation. Lang et al. (2011) conducted a mtDNA study with the goal of assessing stock structure among gray whales utilizing the feeding grounds in the eastern North Pacific. Approximately 200 samples were collected on gray whale feeding grounds and divided into northern strata and southern strata. The Pacific Coast Feeding Group (PCFG) is defined by the IWC. The number of haplotypes is smaller in the PCFG than in the northern feeding areas, but still relatively high. There is a small but significant difference in mtDNA haplotype frequency between the PCFG and those whales that feed in more northern areas, and some recruitment is observed.

Suydam commented that presumably gray whale went through some sort of bottleneck history and inquired if it is known whether they have come back into Hardy-Weinberg equilibrium. Aimee responded affirmatively, but whether gray whales have reached genetic equilibrium is still in question. Calambokidis clarified that this is in respect to recruitment. Haflinger inquired about the reliability of photo-identification of calves. Calambokidis responded that calves have a higher rate of change in appearance, but confirmed that individual calves can be identified. Dave Weller added that the SWFSC has had success tracking individual calves over time from the age of 1 up to as old as 18 years so far. John Scordino directed a question to Calambokidis: at the Pacific SRG meeting, Calambokidis presented data supporting a match of an individual whale sighted among the PCFG as well as near Barrow; Scordino inquired how many matches have been made so far between the PCFG and those in the northern feeding area. Calambokidis affirmed the match between the PCFG area and Barrow, but needed to check the data for a more specific answer on the number of matches that have occurred between these areas. The discussion continued between Scordino and Calambokidis pertaining to gaps of sightings of individuals over time, movements of individual whales between feeding areas, and several examples of animals occurring well outside of this feeding area were noted. Lowry thanked the participants for reporting on the new and informative biology being revealed by these studies and redirected the SRG's focus on reviewing the SAR.

10) Eastern Pacific gray whale - SAR review

Lowry noted that the AK SRG had an opportunity to review the Pacific SRG's comments on the draft gray whale SAR. Suydam inquired how NMFS was planning to deal with information regarding movements of the western North Pacific gray whales into areas within the range of the eastern North Pacific gray whale with regard to the SARs. Lang responded that this is certainly on the radar of the SWFSC. There is currently no SAR on the western stock; however, one may need to be developed in the future. NMFS has not decided yet how this information will be incorporated, but it will need to be addressed. Suydam noted that it is difficult to review the SAR and make comments on the SAR without knowing specifically what the intentions are of the Makah tribe. Suydam expressed concern, given the data supporting a PCFG and the movements of some western gray whales, that the Makah might inadvertently take a western gray whale or PCFG gray whale. Scordino responded that the Makah tribe has petitioned to take 20 whales (no more than 5 in a single year), and added that details are available in an associated paper that has been provided. Barb Taylor added that western gray whales are coming through U.S. waters and confirmed that it will be necessary for NMFS to prepare a SAR for this stock. Weller noted that

the previous version of the SAR did not mention western gray whales, so the SWFSC is building upon that document; there is a large body of data out there that has yet to be incorporated. Calambokidis commented that the Pacific SRG was not completely comfortable with using the language "prospective stock" for the PCFG in the SAR. Haflinger questioned what happens in a case of a gray whale mortality that occurs within Alaska waters, but that individual was sighted at least twice within the area of the PCFG, whether that mortality would get assigned to the PCFG or the eastern Pacific stock. Haflinger added that this could present a problem for commercial fisheries if a mortality or serious injury occurs of an animal that is presumed to be a part of the PCFG, which would have a very low PBR, simply based on being sighted twice in this area. Lowry confirmed that this presents a valid concern if an animal is being assigned to a small stock based on the criterion of being sighted twice within the area of the PCFG. Lowry polled the Alaska SRG whether they support the Pacific SRG's concerns against calling the PCFG a "prospective stock", and it was unanimously decided that the AK SRG agreed with the Pacific SRG's concerns. **The AK SRG recommended NMFS not make the PCFG of gray whale a separate stock at this time, and recommended that NMFS not refer to this group as a "prospective stock".** The SRG agreed to provide their individual comments to both Allen and Lang.

10) Serious Injury Policy Update

Allen provided an update on NMFS marine mammal injury policy and procedural directives for distinguishing serious from non-serious injuries. This policy became effective 27 January 2012. The injury determination guidelines are not being implemented in the draft 2012 SARs; these determinations have already been made and are being presented in the draft SARs. The new guidelines will be implemented in the 2013 SARs, and the most recent 5-years of data will be analyzed (or re-analyzed) using the new injury categories and review process. Allen presented slides on the background of the injury determination process and the 1997 and 2007 serious injury technical workshops, as well as the background on the development of NMFS two-part national policy consisting of a policy directive and a procedural directive. Several new items were addressed included NMFS' interpretation of the regulatory definition of serious injury ("any injury that is *likely* to result in mortality"), in which injury is "more likely than not" to result in death, and the injury has a greater than 50 percent change of causing death. The objective of the policy is to promote a consistent and transparent process for distinguishing serious from non-serious injuries, as well as provide a systematic process for assigning injuries as serious or non-serious. A new step in the injury determination process is the additional step of a cross-center review of all determinations during which determination staff from each Science Center exchange preliminary injury determinations. The purpose of this step is to improve national consistency in interpreting severity of injuries. This policy also reduces the number of cases where the severity of an injury has been considered "cannot be determined" previously. Allen reminded the group of the new large whale determination categories, which are prorated based on known-outcome cases. Allen reviewed the timeline of the policy becoming final as well as the steps of the determination and review process. All injury determinations will be summarized and made available in a report. The SRG commended NMFS on this process and was pleased to see it finalized and soon to be implemented.

11) Updates from HQ – management issues (ice seal listing, humpback status review, blue whale recovery plans, UME)

Bettridge provided an update on several marine mammal management issues. The ribbon seal status review was conducted and in 2008, a final rule was released that listing ribbon seals under the ESA was not warranted. Status reviews of ringed and bearded seals are underway, and final rules are expected to be available in early 2013. The listing decisions on ice-dependent seal species are premised on projected loss of sea ice over time. A status review of the eastern DPS of Steller sea lions is currently being conducted, and a proposed rule on whether eastern Steller sea lions should remain listed as threatened or delisted under the ESA should be available in late spring of 2012. Bettridge added that the humpback whale status review is still in the process of being finalized. Bettridge also updated the group on recovery plans in progress. The blue whale recovery plan is currently being revised, and the North Pacific right whale recovery plan is in the process of being finalized. Lowry expressed the SRG's appreciation for the update and for NMFS's all the work dedicated to the various stages of the management decision process.

12) Continuation of SAR reviews

Dall's porpoise

The SRG commented that the Dall's porpoise is another stock with outdated survey data and noted that only the publication date of the abundance estimate is given, not the survey date. The SRG suggested including some shading on the map to indicate what area was being surveyed. Although the abundance data are no longer reliable enough to calculate Nmin and PBR, the SRG inquired whether these data would be useful for a trend analysis. Nmin is calculated in this draft SAR and the SRG recommended removing this calculation since the survey data are outdated. The SRG also noted that other observer programs have occurred since those listed in the SAR; the Cook Inlet, Kodiak, and Yakutat observer programs should be included, and it should be added that no takes were observed in these programs. It should also be mentioned that some observed fisheries had zero takes. Mathews inquired whether anyone had looked at other areas to see if any trend areas were apparent. Wynne responded that they may be data available on Dall's porpoises from other surveys (e.g., SPLASH). Straley inquired about the IWC cruise that was conducted in the Gulf of Alaska. Allen confirmed this cruise occurred, but to the best of her knowledge was operating primarily in international waters; she will confirm this. Wynne added there are also Navy observers working in the Gulf of Alaska who might have some data on Dall's porpoises. Haflinger noted there had been prior mention of acoustic surveys and inquired whether those surveys also had visual observers recording cetacean sightings, or whether additional data can be collected from trawl surveys, platforms of opportunity, or by piggybacking on other research projects. Mathews encouraged the collection of more genetics samples from this stock. Lowry pointed out that Dall's porpoise is one of those stocks where there is no Nmin and no PBR, yet the status of the stock states that the stock is not considered a strategic stock. Lowry suggested more clarification justifying the decision to not designate Dall's porpoise as a strategic stock.

North Pacific right whale

Wynne made several general editorial comments on the SAR where the text could be condensed or reworded, and noted some text that was not fluid. Wynne also questioned the calculation of a

PBR and suggested PBR should be zero given that the population is extremely small. Wynne noted the habitat concerns section should include information on potential effects of climate change and the possibility of fisheries moving around as a result. Pendleton commented on the statement pertaining to 10% of PBR, which should be updated since reliable numbers are known: 10% of zero is zero. Suydam recommended changing the tense on the lease area information; this lease are was being considered, but is no longer, hence why BOEM funded the right whale surveys.

Western North Pacific humpback whale

Suydam noted the statement pertaining to genetics samples that will be analyzed has been in the SAR for an extended period; this should be updated to indicate the status of the analysis of these samples. Pendleton inquired whether new stock structure for humpbacks will be forthcoming. Angliss responded affirmatively, NMFS staff said they plan to update the humpback whale stocks in the next year or two and new stocks will be defined. Straley followed up with information on on-going genetics and photo-id research and mentioned it is likely there will be 5 humpback whale stocks in the North Pacific. Pendleton inquired whether there should be any mention of habitat concerns in the Chukchi. Suydam confirmed that humpbacks have been sighted several times in the Chukchi, and oil and gas as well as climate change issues should be included among the habitat concerns. Straley inquired whether the single take of a humpback in the pollock fishery was assigned to both stocks. Allen agreed to check on the location of the take. Suydam suggested increased shipping through the Bering Strait should be added to the habitat concerns. Wynne noted that it was mentioned that no interactions were observed historically while the AMMOP observer program was in place; the level of interactions very well increase, so it would be good to document there has been no history of take.

Central North Pacific humpback whale

Straley suggested the map could be updated to more clearly represent the migratory patterns. Straley commented that a new population estimate and trend was available for southeast Alaska; the paper was just accepted, but this estimate includes estimates from British Columbia and questioned whether the abundance estimate would be reported in the SAR as only the whales occurring in Alaska or if it would include those in BC. Moore responded that under the new GAMMS recommendations, BC abundance estimates and mortalities would be included. Straley agreed to write some text for the SAR pertaining to the feeding aggregations in southeast Alaska. Straley also noted that a paper by Janet Neilson et al. has details on serious injury reports, including ship strikes, which are not included in the SARs. It would be good to compare the SARs with the Nielson et al. paper.

13) SRG exercise to review the status of stocks based on data available

Lowry commented that the SRG had go through the exercise of reviewing all SARs and making recommendations on whether a stock should be strategic or not based on the data available. Dall's porpoise, Pacific white-side, and minke whales could all have language modified with justification for the designation of not strategic. Pendleton mentioned harbor seals in Glacier Bay have been declining rapidly, roughly a 75% decline has been observed with good survey

coverage of the area. The Glacier Bay/ Icy Strait harbor seal stock should probably be considered a strategic stock based on trend. The Aleutian Islands stock of harbor seals might be another candidate for a strategic stock; the data are not strong, but if the 67% decline is a real trend, then this stock should be considered strategic. The take level of Chatham Strait stock of harbor seals is close to PBR; if there are unobserved fisheries in this area, more takes than those documented in the SAR may be occurring. Given the lack of an observer program on fisheries, the SRG would also suggest making this stock strategic. The Lynne Canal and Prince William Sound stocks of harbor seals use a recovery factor of 0.5; the recovery factor could probably be changed to 1.0, but that will be based on the trend data.

14) Presentation of California/Oregon/Washington fin whale SAR under proposed GAMMS III

Fin whale

Moore presented a draft SAR the SWFSC prepared applying the new GAMMS III guidelines to the California/ Oregon/ Washington stock of fin whales. In the status of stock section, it has been updated to include a statement that it is plausible that there are more stocks of fin whales and provides justification in the text. Abundance estimates from previous surveys are presented then projected forward. A significant amount of text was added to the Nmin section; the SRG recommended NMFS could just reference the GAMMS III report in developing this section. Straley inquired whether the new proposed guidelines have been reviewed by a stock assessment focus group. Moore responded that this has not been done, but thinks it is a good idea.

15) Humpback and fin whale SARs, Pacific or Alaska SRG take the lead?

Lowry introduced the next agenda item to discuss whether the fin whale or humpback whale SARs should be moved from the Alaska SARs to the Pacific SARs. Lowry gave a brief history on the recent transfer of the gray whale SAR from Alaska to Pacific SARs. The SRG has also mentioned sperm whales would be a good candidate to transfer to the Pacific SARs. It makes sense for the labs that are conducting the more research on a stock to be responsible for updating that SAR. Angliss commented that in the future, there will probably not be as many surveys; ship time is getting extremely competitive and charters are very costly. Moore added that there was a big push for SWFSC to get ship time for surveys; the SWFSC surveys may be reducing, but they are still planning for them to happen. Suydam noted that for those stocks that migrate long distances, it might be a good idea to have both SRGs review those SARs or possibly the SRGs could alternate years. Lowry suggested tabling this discussion; it is good for the SRG to think about, but no decisions should be made just yet. Mathews commented that humpbacks have such a presence in Alaska; it makes sense for them to be in the Alaska SARs. Wynne added that one of the issues with fin whale is that there is just not enough known about them. Lowry inquired of the group whether the AK SRG wants to request fin, humpback, and sperm whales be looked at by the PSRG as well, or whether it is best to not complicate the reviews. Suydam agreed with the suggestion to not complicate the review. Straley added that sperm whales would be a good one for the Pacific SRG to look at. Lowry noted the suggestion to request that the PSRG have the opportunity to review the sperm whale and central North Pacific humpback SAR and inquired whether there were any other suggestions.

16) Closing comments, action items and letters; topics for the 2013 meeting; and other items

Recap of FWS review and SRG recommendations

Lowry commented that the SRG had not been writing as many letters to the agencies as they have in the past and offered to write any letters the SRG deemed appropriate. Lowry commended the FWS on their updated SARs and **encouraged FWS to make their SARs available for review under the MMPA scheduled SAR review period (1 year for strategic stocks, 3 years for non-strategic stocks)**. Suydam suggested **FWS and NMFS cooperate more on implementing GAMMS III and consider making the injury determination process consistent between agencies with the new NMFS injury policy and procedure**. Lowry inquired whether the group had any additional recommendations and whether the group wanted to make any recommendations regarding the 2017 walrus listing response or any status reviews. Suydam commented that **genetics mark-recapture success rate is skeptical and suggested encouraging FWS to use other, less logistically difficult, approaches to estimating abundance**. Mathews inquired whether skin sloughing occurs when walruses re-enter the water and suggested this could be a possible method for collecting more samples for genetic analysis. Suydam concurred with this idea and was thinking of a similar approach; snare fences are used to sample polar bear hair for obtaining genetics samples. Suydam added perhaps the SRG should suggest FWS use some caution in planning a genetic mark-recapture study. Lowry noted that researchers have been trying for over 40 years to develop better methods for estimating walrus abundance, none of which have been very successful. Simmons reminded the group of their earlier suggestion that walrus data might also be able to be collected during the ice seal surveys. Angliss added that this might be possible since the ice seal survey plane will have an IR camera, fixed camera, UAVs, etc. Lowry recommended the FWS walrus survey team contact NMFS ice seal survey team regarding collaborating on data collection. Suydam thanked the FWS again for hosting the SRG meeting.

Recap of NMFS review and SRG recommendations

Lowry reminded the group of their discussion on the issue of NMFS strategic stocks, such as harbor porpoises and potentially others, that are lacking effort in collecting more data (there is no TRT, TRP, etc.). Wynne inquired whether anything was discussed at the GAMMS III workshop regarding **alternative mitigation measures for reducing incidental take in commercial fisheries rather than investing significant funds into developing TRTs, TRPs, etc.; fishers in Alaska are willing to try alternative methods, such as pingers, to reduce fishery interactions**. Moore responded that this topic was mentioned and briefly discussed, but it was a bit beyond the scope of the workshop. Lowry noted someone had mentioned harbor porpoises would be a good candidate for preparing mock SARs under the new proposed GAMMS III guidelines. Mathews agreed that harbor porpoises would be a good candidate for this exercise of drafting a SAR under new the guidelines. Angliss added it would be helpful if the SRG sent a message to the Alaska Regional Office with an estimate of the costs for setting up alternative mitigation efforts and cooperative efforts to reduce fisheries interactions. Lowry mentioned the recommendation that **NMFS consider additional opportunities for collecting more information on stocks, such as taking advantage of platforms of opportunity (POP), putting**

marine mammal observers onboard other research vessels, as well as obtaining additional genetics samples for stock structure analysis. Mathews and Wynne brought up the suggestion that NMFS consider additional areas that could be used as trend sites; Wynne suggested the designation of trend sites from POP data if people are collecting the data. Pendleton offered to distribute the paper from Montana State University that uses POP data to examine trends in eastern Steller sea lions. Wynne added the Alaska Marine Highway vessels have someone onboard collecting marine mammal sightings, which is an additional source of data. Angliss commented that Sue Moore might be designing a system for collecting data at Department of Transportation sights. Lowry noted that the SRG is not the first to think about this idea, but no action has been made. Mathews proposed collecting data on designated trawl surveys that cover the same track line over a set period. Lowry inquired whether it is helpful to recommend cooperation between NMFS and FWS. Mathews commended NMFS again on the development of 12 harbor seal SARs. Allen agreed to send Haflinger Appendix 6 from the SARs as well as Brewick's manuscript (in prep) summarizing the methods of analysis of the observer program data. Lowry added the previously discussed recommendation from the SRG regarding the **need for adequate funding from NMFS in order to run the SRG meeting and enough support so as not to overtask individual SRG members in meeting their roles and responsibilities of the SAR review process** to the list of recommendations. Lowry suggested assigned each member to a section of the GAMMS III report for reviewing, commenting, and making recommendations on the proposed guidelines.

17) AK SRG membership – closed meeting

The AK SRG held a closed meeting to discuss SRG member, and invited Allen, Bettridge, and Angliss to participate. Lowry noted that the SRG currently has 9 members, some of whom are not always able to attend. The group agreed that the SRG should include a member with a strong understanding of Alaska Native marine mammal issues. Several suggestions were made of individuals with this experience and knowledge. Lowry inquired of Angliss about the budget limitations for holding the SRG meeting. Angliss responded that the NMFS budget has been reduced significantly; the cost of running the SRG meeting cannot exceed what it has cost in the past. Suydam suggested the options of requesting the FWS fund the expenses of one or two SRG members to attend the meeting, as well as some member participating via video conference. Mathews noted that the SRG is lacking someone with a population genetics expertise. Suydam reminded the group that he had previously contacted several potential new members to inquire about their interest in membership; all responded affirmatively. Suydam inquired whether these individuals should be notified that budget cuts limit the SRG from bringing on new members at this stage. Angliss commented that video-conferencing is an option and the SRG can bring on new members; however, there may not be funds available to support every member's travel to meetings. Lowry stated that he felt it was important that new members sit in with the group and be present during the meetings. Mathews expressed her intention of staying on the SRG, and Straley decided to step off the SRG. The SRG members contributed several suggestions of potential new members to invite to the group and indicate which gap in expertise these potential members would fill. The AK SRG decided to extended invitations of membership to Kate Stafford, David Tallmon, Bob Small, and Mike Miller before the 2013 SRG meeting.

Appendix 1: SRG recommendations to FWS and NMFS:

1) The SRG recommended that **NMFS** and **FWS** not calculate an Nmin or PBR for stocks for which the survey data are older than 8 years; both agencies should be clear about the data that are available and what year they were collected.
2) The SRG recommended **FWS** collect more samples for genetics analysis and analyze genetics data from the various concentrations of walruses.
3) The SRG encouraged **FWS** to use other, less logistically difficult, approaches to estimating abundance of walrus along with genetic mark-recapture techniques.
4) The AK SRG recommended **NMFS** not make the PCFG of gray whale a separate stock at this time, and recommended that **NMFS** not refer to this group as a "prospective stock".
5) The SRG encouraged **FWS** to make their SARs available for SRG review under the MMPA scheduled SAR review period (1 year for strategic stocks, 3 years for non-strategic stocks).
6) The SRG recommended **FWS** and **NMFS** cooperate on implementing GAMMS III and consider making the injury determination process consistent between agencies and with the new NMFS injury policy and procedure.
7) The SRG recommended **NMFS** consider alternative mitigation measures for reducing incidental take in commercial fisheries rather than investing significant funds into developing TRTs, TRPs, etc.; fishers in Alaska are willing to try alternative methods, such as pingers, to reduce fishery interactions.
8) The SRG recommended **NMFS** consider additional opportunities for collecting more information on stocks, such as taking advantage of platforms of opportunity (POP), putting marine mammal observers onboard other research vessels, as well as obtaining additional genetics samples
9) The SRG recommended **NMFS** ensure adequate funding is available in order to run the SRG meeting, as well as provide enough support so as not to overtask individual SRG members in meeting their roles and responsibilities in the SAR review process

Appendix 2: List of Participants at 2012 Alaska SRG meeting

Participants:

SRG Members:
Lloyd Lowry (Chair)
Robert Suydam
Beth Mathews
Kate Wynne
Grey Pendleton
Jan Straley
Karl Haflinger
Dee Allen (NMFS-AFSC, AK SRG Liaison)

Observers:
Jim MacCracken (USFWS)
Jenifer Cohout (USFWS)
Verena Gill (USFWS)
Suzann Speckman (USFWS)
Dennis Heineman (MMC)
Samantha Simmons (MMC)
Shannon Bettridge (NMFS-HQ/PR2)
Jeff Moore (NMFS-SWFSC)
Aimee Lang (NMFS-SWFSC)
Robyn Angliss (NMFS-AFSC)
Mark (attorney for Makah Tribe, telecom)
John Scordino (Makah Tribe, telecom)
John Calambokidis (Cascadia Research Collective, telecom)
Donna Darm (NMFS-NWRO, telecom)
Dave Weller (NMFS-SWFSC, telecom)
Barb Taylor (NMFS-SWFSC, telecom)
Lisa Balance (NMFS-SWFSC, telecom)

Appendix 3: 2012 AK SRG Meeting Agenda

ALASKA Scientific Review Group (SRG) MEETING
AGENDA (DRAFT 9 Dec. 2011)
U.S. Fish and Wildlife Service
Gordon Watson Conference Room
1011 E. Tudor Rd., Anchorage, AK
31 January to 1 February 2012

31 Jan. Tues.

8:30 am

1) Welcome and introductions

2) Adoption of agenda (We will break for lunch from 12:00-1:00 each day and have a morning and afternoon break.)

3) Adoption of minutes from February 2011 meeting

4) Administration, travel, and membership (Allen)

9:00:

1) (15 min) Updates on research presented at the AMSS (Wynne, other attendees?)

2) (15 min) Update on issues and outcomes from the MMC meeting (Suydam)

3) (15 min) Updates on research related to SARs from FWS (walrus listing)? (Kohout)

4) (15 min) Update on issues concerning SARs for strategic stocks that are not being updated annually [i.e., polar bears, walruses, SW Alaska sea otters] (Kohout et al.)

10:00 pm

Begin review of SARs (starting with FWS stocks)

12:00 to 1:00 pm: lunch

1:00 pm (and on 1 Feb.)

SRG reviews of revised NMFS Alaska Marine Mammal Stock Assessment Reports (SARs)

(All members are encouraged to contribute to each SAR review, but specific reviewers are expected to have carefully reviewed their specific stocks and to lead those discussions. Please submit word-smithing and typographical corrections on electronic or hard copy. Stock discussion leaders will bring substantive issues to the attention of the group.)

SAR	Reviewer 1	Reviewer 2
USFWS SARs:		
Pacific Walrus	Noongwook	Lowry
Northern Sea Otter: Southwest Alaska	Suydam	Pendleton
Northern Sea Otter: Southcentral Alaska	Pendleton	Wynne
Northern Sea Otter: Southeast Alaska	Lowry	Straley
NMFS SARs		
Steller's sea lion, western U.S.	Lowry	Haflinger
Steller's sea lion, eastern U.S.	Haflinger	Lowry
Northern fur seal, eastern Pacific	Haflinger	Pendleton
Harbor seal, 12 stocks	Matthews	Pendleton
Beluga whale, Cook Inlet	Suydam	
Killer whale, AT1 Transient	Straley	Barrett-Lennard
Pacific white-sided dolphin, North Pacific	Matthews	Barrett-Lennard
Harbor Porpoise, southeast Alaska	Straley	Matthews
Harbor Porpoise, Gulf of Alaska	Wynne	Matthews
Harbor Porpoise, Bering Sea	Matthews	Noongwook
Dall's Porpoise	Wynne	Barrett-Lennard
Sperm whale, North Pacific	Barrett-Lennard	Straley
Humpback whale, western North Pacific	Straley	
Humpback whale, eastern North Pacific	Straley	
Fin whale, northeast Pacific	Straley	Wynne
Minke whale, Alaska	Wynne	Noongwook
Northern right whale, North Pacific	Wynne	Noongwook
Bowhead whale, western Arctic	Suydam	Haflinger

4:30 pm Closing comments/discussion/planning

5:00 pm Adjourn for the day

1 Feb., Wed. Day 2

8:30

1) Overview of day's schedule

8:40

(20 min) Updates on research related to SARs from NMFS? (Angliss)

2) (2 hour) GAMMS III workshop summary (Moore, Lowry, Bettridge)

3) (~20 min – incorporate into GAMMS presentation) Serious Injury Policy Update (Allen/ Bettridge)

11:00 am

4) (45 min) Eastern Pacific gray whale (Lang – SWFSC folks call-in)

5) (15 min) Updates from HQ – management issues (ice seal listing, humpback status review, sei/ blue whale recovery plans, UME (Bettridge/ Mansfield?)

Lunch: 12:00 to 1:00

1) Conclusion of SRG discussion of SARs

2) Humpback and fin whale SARs, Pacific or Alaska SRG take the lead?

3) Closing comments, action items and letters; topics for our 2013 meeting; and other items.

4:30 AKSRG Closed session (if needed).

5:00 Adjourn