

**North Pacific Fishery Management Council  
Steller Sea Lion Mitigation Committee Meeting  
June 27-29, 2006  
Alaska Fisheries Science Center, Seattle**

**Minutes**

The Steller Sea Lion Mitigation Committee (SSLMC) convened at the Alaska Fisheries Science Center on June 27-29, 2006. Committee members present were: Larry Cotter (Chairman), Jerry Bongen, Julie Bonney, Kevin Duffy, John Gauvin, John Henderschedt, Dan Hennen, Sue Hills, Frank Kelty, Terry Leitzell, Dave Little, and Mel Morris (alternate for Art Nelson). Also present were Bill Wilson (Council staff), Doug DeMaster (NMFS AFSC), Melanie Brown (NMFS SF), Kaja Brix and Shane Capron (NMFS PR), Kristin Mabry (NMFS AK Region staff), Bob Small (ADF&G), Farron Wallace (SSC Member), and several other NMML and AFSC staff.

Chairman Cotter reviewed the agenda (attached), the work schedule for the coming several days, and Bill Wilson reviewed the handout materials provided to each committee member. John Bickham could not attend the meeting; his presentation will be made by Greg O'Corry-Crowe. A new presenter, Peggy Merritt, will review an approach for decision making under multiple objectives (a procedure for evaluating proposals) during this meeting. The minutes from the last meeting were approved. Kristin Mabry noted that a new CD containing the presentations, reports, and links to other information from the last SSLMC meeting as well as new reports and other information will be provided to the Committee this week. The SSLMC web site links to all of this information also ([www.fakr.noaa.gov/sustainablefisheries/sslmc](http://www.fakr.noaa.gov/sustainablefisheries/sslmc)).

Mr. Cotter reviewed the progress made by the Tradeoff Tool Subcommittee during its meeting on June 26. That subcommittee discussed the SSC's recommendations for further development of a trade off tool (TOT), which include consideration of involving Peggy Merritt who has expertise in multi objective decision making. Dr. Merritt will give an overview of this methodology during the SSLMC's meetings later this week; after this presentation, the SSLMC may determine how best to proceed. The goal will be to develop an acceptable TOT so that the SSC can review it during their upcoming special meeting in mid August.

The SSLMC discussed how the Call for Proposals process will fit the schedule for developing a TOT. The Committee also discussed how to integrate economic tradeoffs in the proposal review process. This discussion will continue during Dr. Merritt's presentations.

Mr. Wilson provided an overview of handouts available for the Committee. These included:

- Recent Council actions from the June Council meeting in Kodiak
- A revised SSL literature compendium recently completed by Drs. Tagart and Loughlin (includes some additional references recommended by the SSC)
- Letters from NMFS that initiate the formal FMP consultation and the final list of ESA-listed species that will be the subjects of that consultation

## DRAFT

- Proposals before the Alaska Board of Fisheries for their October work sessions; some of these proposals may affect the work of the SSLMC
- Status of the Humane Society lawsuit on research permitting and the recent court order vacating most SSL research permits
- The List of Fisheries for 2006
- Future SSLMC meeting schedule – to be discussed later in this meeting.

The remainder of the meeting largely consisted of presentations related to the work of the Committee. Presenters handed out documents, copies of their PowerPoint presentations, or referenced publications that might be of interest to the Committee. Those documents will be added to the CD and will be posted on the SSLMC's web site.

### Aleutian Islands Cooperative Acoustic Pollock Surveys

Dr. Steve Barbeaux, AFSC, presented an overview of the 2006 acoustic surveys of pollock biomass in the Aleutian Islands. This is a cooperative study involving the AFSC, the Aleut Corporation, and the fishing vessel *F/V Muir Milach*. This study is allowed under an Exempted Fishing Permit to enable fishing to occur in some SSL closed areas in the AI region. The objective is to determine the feasibility of conducting abundance-based assessments of pollock biomass prior to fishing and to determine effects of fishing on biomass. The 2006 study indicated that such an approach to fishery management in the AI area appears feasible. A second trial is being planned for 2007.

Some believe this kind of study is a good opportunity to learn more about pollock fishery effects on pollock abundance and school characteristics and this could facilitate better pollock fishery management in the AI region. The goal is to conduct abundance-based management of a species (pollock) that is patchy in distribution and difficult to survey with conventional approaches. The cooperators intend to investigate this further and gain Council support and determine if this may offer additional information that will be helpful for future management of SSLs and how fisheries may affect pollock in the AI region.

### Opportunistic Acoustic Data for Investigating Pollock Distribution

Dr. Barbeaux also reported on the results of a study using commercial fishing vessel acoustic data to document pollock abundance and distribution over time during the pollock fisheries in the eastern Bering Sea (EBS). This study determined that this approach is feasible in showing possible fishery effects on pollock schools and pollock abundance, but this may be confounded by other factors such as lunar or day/night effects, pollock movement and spawning behavior, other fishing vessel (non-survey vessel) fishing activities, and oceanographic effects.

### Draft Revised SSL Recovery Plan

Shane Capron, NMFS AK Region, and Bob Small, ADF&G, presented an overview of the recently-completed draft revised SSL Recovery Plan. This plan was prepared by the SSL Recovery Team and is out for public review. The Council recently received a briefing on the draft revised Recovery Plan and will have its SSC review the plan and

## DRAFT

prepare comments during a special SSC meeting likely to be held in Juneau in mid August. The Council has requested an extension of the comment period; NMFS will likely approve an extension of time to September 1, 2006.

The draft revised SSL Recovery Plan provides recovery information for the threatened eastern DPS of SSL (eSSL) and the endangered western DPS of SSL (wSSL). The draft plan contains information on the population status and ecology, a summary of current conservation activities, a threats assessment, criteria for down listing or delisting, recommended recovery actions, and estimates of time and cost for recovery of both DPSs.

The threats assessment part of the draft Recovery Plan stimulated considerable discussion and questions from the SSLMC. The threats assessment is a combination of a retrospective look at impacts on SSLs and an assessment of the current threats in light of uncertainty and the relative impacts on SSLs from each threat with a recommendation of feasible mitigation recommendations for reducing or removing these threats. The draft plan suggests that the highest (potentially high) threats to the wSSL are killer whale predation, environmental variability, and competition with commercial fisheries. The feasibility of mitigating these threats, however, is low for the former two and high for the latter one. The draft plan concludes with a recovery strategy for the wSSL: maintain current (or equivalent) fishery conservation measures, implement an adaptive management program to evaluate those measures, and continue population monitoring and research on the key threats. The draft plan provides criteria for down listing or delisting the wSSL and eSSL, respectively.

SSLMC discussion included how the threats assessment was conducted and what rationale the Recovery Team used for ranking the threats. Discussion also included:

- The role of predation in the wSSL decline
- The current status of killer whale abundance and dietary preferences of transient killer whales
- The threats ranking for commercial fishery effects and the effects of current fishery mitigation measures on SSLs
- To what extent a change in fishery management or SSL protection measures would align with the recommendations in the draft plan

Mr. Capron presented information on how the Agency views the process for integrating information in the draft revised Recovery Plan with the upcoming revised FMP Biological Opinion on the groundfish fishery. Mr. Capron noted that the rationale for the determination in the revised FMP BiOp regarding jeopardy and adverse modification of CH will be based partially on the recovery criteria provided in the final revised Recovery Plan. He noted that the Recovery Plan is more of a policy document that provides recommendations and a strategy for recovery of the SSL population in the North Pacific, while the BiOp will be a legally binding document with required actions that will influence how SSLs will be managed in future years.

The SSLMC discussed adaptive management and legal constraints on how adaptive management experiments might be carried out. Some believed that a working definition of “adaptive management” should be developed before proceeding further with this

concept. Others believed that adaptive management experiments in our fisheries are ongoing at present; still others believed we need to do something more specific (e.g., more in line with the recommendations of the NRC panel on causes of declines in Steller sea lions).

The SSLMC also discussed the draft revised Recovery Plan's population viability analysis (PVA) and how this was used to develop the recommended recovery criteria. This discussion included concerns over the status of the carrying capacity of the North Pacific for SSLs, and how this might relate to future growth of both the eSSL and wSSL populations. Some question whether fisheries may have affected carrying capacity for SSLs (reducing prey fields), while others were concerned that we don't know what the carrying capacity is for this population and therefore couldn't evaluate how fishing might affect SSL population dynamics. In addition concerns were raised regarding the ability of the wSSL population to recover relative to the criteria proposed in the draft revised Recovery Plan, given all of the uncertainty regarding factors that control the dynamics of this population. The Committee also discussed the importance of the 1985-1989 period of steep decline in the wSSL population and how assumption on the reasons for this decline affect the outcome of the PVA and the nature of the recommended recovery criteria.

Discussion continued on the process or protocol the Agency would use for evaluating the merits of downlisting or delisting the wSSL DPS and how the Recovery Team arrived at the criteria provided in the draft plan. Mr. Capron outlined scenarios for down- or delisting. The discussion also included how the listing factor threats are dealt with in the down or delisting process. The plan also provides a summary of what recovery actions the agency believes are of highest priority: 1) continued SSL surveys, and 2) adaptive management to test the efficacy of conservation measures in mitigating the potential effects of the groundfish fishery in the BSAI and GOA on the recovery of the wSSL DPS.

The Committee discussed the PVA modeling and how it was used to help define the down- and delisting criteria. Dr. Small noted that the Recovery Team evaluated alternative hypotheses for explaining the SSL decline and how these hypotheses were viewed by the Team. Mr. Capron reported that the next steps are for the Agency to receive comments from the public and to finalize the revised Recovery Plan. The Agency then will likely initiate a status review of the wSSL and eSSL. Depending on the results of the status review for the eSSL DPS, a draft proposal by the Agency to delist that DPS could follow.

Public comment: Andrew Trites reported that several other SSL PVA modeling exercises have been published. Nonetheless, the Recovery Team relied most heavily on the results reported in the Goodman PVA. Trites suggested that the final revised Recovery Plan might include a more in-depth summary of each of the PVAs and a more comprehensive comparison of the different assumptions and findings in each of the PVAs. Capron noted that the Goodman PVA was specifically contracted for the purpose of providing advice to the Agency and the Recovery Team and that it was not surprising that the Recovery Team relied heavily on this report. Dave Fraser noted that the Plan provides little rationale for why the Recovery Team included the Goodman PVA (as an appendix) and

not the other PVAs. Mr. Capron noted that the Plan does provide such rationale (see pages 115-116 in the draft Plan), but perhaps additional rationale would clarify this issue. Beth Stewart noted that there was a general lack of rationale in the draft revised Recovery Plan for many of the recommendations and findings and that this could be used in court to further disadvantage fishermen.

Additional discussion of the draft revised Recovery Plan included:

- The significance of this Recovery Plan in driving the content of the FMP consultation BiOp and the importance of reviewing comments from the SSC and the public prior to preparation of the draft BiOp
- The influence of the Goodman PVA on the listing criteria included in the plan
- Whether the peer review comments on the draft plan would be made available to the SSLMC or the public. Capron noted that the Agency would likely make those comments available upon request
- The schedule for reviewing comments on the draft Recovery Plan, and how this meshes with the process for preparation of the BiOp, the BOF proposal review, and the SSLMC's proposal review process

Mr. Capron reported that NMFS will likely accept comments on the draft revised Recovery Plan until September 1, 2006. NMFS also is required to have a draft BiOp completed at that same time. The schedules for these two events do not mesh well and require that the draft BiOp be completed before the comments on the draft revised Recovery Plan are reviewed and the plan revised. The BiOp would likely benefit if there were time to use the SSC and public comments on the draft revised Recovery Plan during preparation of the draft revised FMP BiOp. Some members of the SSLMC noted that the draft BiOp should be prepared after the Recovery Plan comments are evaluated, but it was acknowledged that the existing consultation schedule would not allow for this. The Committee generally agreed that the process should move forward, that proposals will be reviewed later this summer, and if schedules of other processes change then this Committee should be "flexible" and change its schedule and process as necessary to accommodate potential change.

Members of the SSLMC discussed what might be an appropriate role of the Committee regarding the review process of the draft revised Recovery Plan. Some members suggested that the Committee should submit comments to the Council; others suggested that this is not an appropriate role of the SSLMC, unless so directed by the Council.

#### Correlation Studies of SSL Protection Measures and SSL Population Response

Dan Hennen presented an overview of six published studies that looked at the relationships between imposition of SSL protection measures and the response of the wSSL population. These studies are: Loughlin and Merrick 1988, Trites and Larkin 1992, Ferrero and Fritz 1994, Sampson 1995, Dillingham et al. 2006, and Hennen 2006. Of the six, five found no correlation between the SSL declines and fishing activities while Hennen 2006 did find a correlation. Dr. Hennen reported on the assumptions, data bases, and procedures used by the various authors. He noted that his study provides no suggested reasons for the correlation, but during discussion the Committee and Dr. Hennen discussed some possible reasons including restrictions on fishing benefited SSLs,

DRAFT

intentional shooting ceased and SSLs rebounded, or a climate regime shift occurred that improved environmental conditions for SSLs. During discussion, some Committee members suggested additional analyses that might be pursued including a closer look at the sequential nature of how SSL protection measures were imposed on fisheries (how the results might look if correlations looked at several time periods) and how the inclusion of the last five years of sea lion count data and fisheries catch data would affect the analysis.

#### Recent Council Action on Pacific Cod Management

Nicole Kimball, NPFMC Staff, provided an overview of the Council's recent decision to implement Amendment 85 to the BSAI FMP. Ms. Kimball reported that the Council's action was in two parts: the Council only implemented part 1 which provided a new fishing sector split of P. cod apportionments; part 2 will be the subject of a separate analysis and a future decision on splitting the P. cod apportionments between the Aleutian Islands and the Bering Sea. Ms. Kimball noted that the Council's actions were made deliberately to comport with the current SSL protection measures for P. cod seasonal apportionment – an overall 70%/30% A versus B season apportionment requirement. The Council chose to mimic the status quo seasonal apportionments as much as possible in order to conform to the intent of current SSL protection measures.

Regarding part 2 of the recent Council action, Ms. Kimball presented the problem statement and a series of alternatives that may be considered during the analysis phase. The Council is scheduled to receive a discussion paper on a P. cod apportionment split between the Bering Sea and the Aleutian Islands during the October meeting.

During Committee discussion, some questioned the impetus for pursuing the split. Is there strong industry interest – some believe there is not a compelling interest to pursue this. Some suggested that perhaps a BS and AI P. cod split could benefit SSLs, but that may not become evident until the draft BiOp is published. Others believe that P. cod management might be improved if the fishery were split into a BS and an AI apportionment (P. cod stock conservation might benefit). Some questioned whether this Committee should weigh in and provide recommendations to the Council. The Committee generally concluded that in the future, P. cod harvest should be proportional to the biomass present in each area. And more information is needed on the SSL aspects of this issue before additional comments can be made.

The Committee also discussed the 70/30 split requirement for SSL protection. Some questioned whether this will continue to be required. Some also noted that there are allocational issues associated with a BS from AI split, and this may also have SSL ramifications. More analysis will be required to better characterize the SSL issues.

Since the Council has approved Amendment 85, this will now become part of the status quo. Since the Council generally retained SSL protection measures in Amendment 85 by adhering to the 70/30 seasonal apportionment, it is likely that the consultation on Amendment 85 will be informal and the new sector splits will be part of the status quo for the new FMP consultation.

## SSLMC Comments on the Draft SSL Recovery Plan – A Discussion

The Committee discussed what role it should play in developing Council comments on the draft revised Recovery Plan. The Council has asked its SSC to review the Plan and provide comments; then the Council will review the SSC recommendations and prepare its comments. Should the SSLMC also weigh in? Committee members provided the following comments:

- There is concern over language in the draft Plan that states that the Agency should maintain current fishery conservation measures. Perhaps more appropriate language would be to maintain appropriate conservation measures. Committee members engaged in considerable discussion of the semantics of various words in this part of the draft Plan.
- Many committee members believe that there should be clearer explanation of how the Goodman PVA was used, that the other three PVAs should be better described and why they were not used, and perhaps that the Goodman PVA should not be included as an appendix.
- Some believe the list of research priorities is too long and that the list could be better structured to provide clearer guidance on how research can lead to eventual down- or delisting.

The Committee generally concurred that the final revised Recovery Plan should not contain language that will constrain the Agency's ability to adapt over time to new information on SSLs and fisheries, and allow it to react and implement new strategies that show promise in improving SSL populations and facilitate improved fishery management.

### SSL Population Genetics

John Bickham, a molecular geneticist with Texas A&M University who has completed many studies of SSL genetics, could not attend this meeting. Greg O'Corry-Crowe, a research geneticist with the NMFS Southwest Fisheries Science Center, gave Dr. Bickham's presentation. He also presented his own research on the population genetics of SSLs in the North Pacific. Two major areas of investigation have been initiated on the population genetics of SSLs in the North Pacific. One is more broad-based stock structure studies, and the second are more meso-scale geographic studies within the existing stock boundaries.

From a population-level perspective, Dr. Bickham's work has focused on the differentiation of stocks within the SSL population. This work led to separation of the eastern from the western Distinct Population Segments of SSL and now some geneticists have further characterized the western DPS as being comprised of two possible DPSs: an Asian DPS and a western DPS. Evidence from mitochondrial DNA indicates that the Commander Islands SSL rookeries should be included as part of the western stock.

The western/Asian split may be more recent in the evolutionary scale, while the eastern/western split is more ancient. Using nuclear DNA (microsatellites), Dr. Bickham's results show weaker evidence for the western/Asian split. Dr. Bickham concludes that, at this time, future SSL management should perhaps consider three

management units in the north Pacific: an eastern stock, a western stock that includes the Commander Islands, and an Asian stock.

Studies of finer scale population structure in the North Pacific have looked at SSL dispersal patterns based on the genetic structure of SSL rookeries. Dr. O'Corry-Crowe's work indicates some clustering of the central and western Aleutians SSL group as being separate from the eastern Aleutians and Gulf of Alaska group using mitochondrial DNA markers. This suggests there has been a lack of SSL dispersal between these areas. This break between these two groups aligns with regional differences in SSL abundance trends, SSL diet preferences, and oceanographic conditions (Samalga Pass break). Dr. O'Corry-Crowe concluded that there appears to be two metapopulations within the SSL population that have separate ecological history. This work is in a draft scientific paper submitted for publication in the Canadian Journal of Zoology.

Dr. O'Corry-Crowe also reported on studies of SSL rookery colonization. This work involved several rookeries in southeast Alaska (i.e., the eSSL DPS) that have been colonized in recent years. Genetic studies of the SSLs on these rookeries show that SSLs in the more recent rookeries have some evidence of maternal linkages from rookeries in the western DPS. These kinds of studies show promise in better understanding SSL dispersal, mixing and colonization behavior. Future studies will also include kinship among SSLs on individual rookeries using genetic relatedness, paternity, and colonization studies.

The SSLMC discussed potential use of this information in SSL management and future SSL recovery planning. At present, NMFS will complete the draft revised Recovery Plan using the existing, two DPSs. However, in future SSL stock status reviews, new genetic data will be evaluated to better define SSL management units. This is consistent with the guidelines for updating the status of ESA listed species on a 5-year cycle.

#### Multi Criteria Decision Analysis Methods

Peggy Merritt, with Resource Decision Support and the University of Alaska Fairbanks, provided an overview of the principles of strategic planning and a description of a multi criteria decision analysis process recommended by the SSC. The SSC suggested the SSLMC utilize such an approach for evaluating proposals. Dr. Merritt described the Analytic Hierarchy Process (AHP) which could be used to evaluate proposals. AHP is a technique for examining an issue by structuring the problem into a hierarchy and prioritizing the elements of that problem.

The Committee discussed how AHP could help with development of criteria for judging proposals. One difficulty will be how to weight the different criteria without good knowledge of how each criterion affects SSLs. Dr. Merritt noted that the Committee will need a combination of expertise in SSL biology, fishery management, etc. in the group that develops the weighting. .

Dr. Merritt walked through an example of how AHP might be applied to the SSLMC proposal review process. The steps would include identification of the goal of the process, identification of the factors that influence SSLs and factors that benefit the fishery, and then use of software to combine rankings to determine a score for each



## DRAFT

proposal. AHP provides a transparent process for conducting this ranking and the overall AHP provides a mechanism that the Committee could use to evaluate the extent to which a given scenario (i.e., combination) of conservation measures compares to the existing suit of conservation measures. The Committee may likely have to use the AHP tool to group proposals in a fashion that results in a package that the Committee judges will avoid jeopardy and adverse modification.

Sue Hills noted that this process is not unlike what the Committee has done before; it does provide more structure to that process and a more objective rationale for ranking that is clear and defensible. This approach would likely be supported by the SSC. The Committee might wish to pursue this, develop a procedure, and then present this to the SSC for review at their August meeting in Juneau.

The Committee, after some discussion, agreed that this AHP procedure was appropriate for its purposes and recommends to the Council that we have Dr. Merritt help the Committee develop this tool. The SSLMC plans to meet again July 25-27 to build the tradeoff tool using the AHP procedures. Chairman Cotter recommended that a subgroup from the SSLMC work with Dr. Merritt to assemble some preliminary lists of criteria and potential rankings to jump start the next SSLMC meeting. Chairman Cotter will appoint that group soon.

### Draft SSL Recovery Plan – Should the SSLMC Comment?

The Committee returned to the draft revised Recovery Plan to discuss what would be an appropriate response from this Committee to the Council. Some suggested that the Committee should report to the Council the main concerns with the draft Recovery Plan raised at this meeting, including:

- The PVA should be more clearly explained and the process for how it was used to develop the criteria should be clarified. Some recommended that the appendix be removed; there was not consensus on this recommendation.
- Provide more flexibility in the recovery criteria to respond to future new information on SSLs and fisheries and not lock in to the criteria as presently stated.
- Structure the list of recommended research and management activities into a more clear hierarchy of necessary research and management rather than only reporting a laundry list of activities, although it was recognized that the general guidelines for Recovery Plans require a complete list of activities necessary to promote the recovery of the species. Further, it was noted that the Agency does plan to prepare an implementation plan that will address priorities of activities, as well as the reality of available funding.

The Committee did not fully agree with this list of activities in the draft revised Recovery Plan. After some discussion it was agreed that SSLMC members should read the draft plan carefully and be prepared to discuss comments on the plan at the next meeting in late July. This will still give the Committee time to submit comments to the Council before it takes of the draft plan in late August. The Committee recommended that the Chairman draft a letter outlining the consensus comments discussed at this meeting, circulate that

DRAFT

draft letter, and the Committee will discuss this at the July meeting as well. Chairman Cotter stated that only consensus comments from the entire Committee would be forwarded to the Council.

### Adaptive Management

The concept of adaptive management has been raised in the draft revised Recovery Plan for the SSL. The draft Plan recommends that fishery management measures be considered that would test how fishery activities affect SSLs. The Committee discussed that many scientists and fishery managers have, in the past, attempted to define how to conduct such experiments, with little success. However, since the draft Recovery Plan again makes this recommendation, the SSLMC believes it is necessary to once again investigate possible adaptive management experimental designs for Council and Agency consideration.

Dr. DeMaster recounted that this Committee was asked to develop an adaptive management experiment several years ago based on the recommendations from the National Research Council in their report on the decline of SSLs. The Committee concluded that the best approach would be to develop a Request for Proposals and invite experts in experimental design, who are not currently involved with North Pacific fishery management or SSL research, to bid on this project. That idea was not pursued by the Council because of a lack of available funding.

Dr. Hennen suggested that whatever approach is pursued, a key element would be the need for a way to measure a response in the growth trajectory of the SSL population. Dr. Hennen acknowledged it will be difficult to observe or measure such a signal in the SSL trajectory, but that such an element will be essential to the success of any adaptive management experiment. It was noted that such a signal would require something on the order of six to eight years of count data to be statistically reliable.

John Gauvin suggested that one approach might be to focus on SSL prey fields and attempt to measure how fisheries affect those prey fields. This could be an instructive way to guide future fishery management. The kinds of studies being conducted by Dr., Kate Wynne around Kodiak Island were suggested as a possible model or the FIT studies at the AFSC. One drawback in this approach would be a need to understand the linkage between SSLs and prey fields which may be very challenging and perhaps less robust than measuring a change in the SSL growth trajectory.

The Committee discussed this issue and concluded that since this recommendation is a major feature in the draft Recovery Plan, it cannot be discounted or ignored. An attempt should again be made to pursue the development of some kind of adaptive management experimentation. Chairman Cotter appointed a subgroup of the SSLMC to work on this concept and report back to the full committee at the July meeting. The subgroup includes John Gauvin, Dan Hennen, and Doug DeMaster; the group will seek additional help from Dr. Libby Logerwell with the FIT and other AFSC and AKR staff, as appropriate.

DRAFT

### Future SSLMC Meetings

Chairman Cotter reported that this Committee must meet several times in the near future to accomplish some anticipated work. Mr. Cotter outlined the following meeting schedule:

- July 25 (1:00 pm)-27/28 in Seattle (AFSC) – Tradeoff tool development for SSC review.
- August 28-30 in Seattle (AFSC) – Initial proposal review, hear from proposal proponents, clarify and categorize proposals for initial Council review in October. This meeting will be available to Committee members by teleconference.
- September 12-14 in Seattle (AFSC) – Draft BiOp review.
- October 16-18 in Anchorage (room location TBA) – Review Council’s proposal selections, develop data requests, initiate analyses, initial selection of possible alternatives.
- October 30-November 1 (location TBA) – Finalize alternatives.
- December 3 or 4 in Anchorage – Optional meeting to refine alternatives prior to December Council meeting.

### Adjourn

The Committee adjourned at 4:15 pm Thursday June 29. The next meeting will be at the AFSC on July 25-27 (possibly through July 28), starting at 1:00 pm on July 25.

Bill Wilson

[Bill.wilson@noaa.gov](mailto:Bill.wilson@noaa.gov)

DRAFT

North Pacific Fishery Management Council  
**Steller Sea Lion Mitigation Committee** Meeting  
Alaska Fisheries Science Center, Seattle  
June 27-29, 2006

**AGENDA**

June 27 – 8:30 AM – 5:00 PM

1. Introductions and Opening Remarks, Announcements (Cotter)
2. Minutes of Last Meeting, Update on Call for Proposals, Committee Briefing on Other Issues, Discussion (Wilson)
3. Subcommittee Meeting (June 26) Report - Impact Evaluation Tool Discussion (Cotter, DeMaster, All)
4. Bering Sea Hydroacoustic Surveys of Pollock and Aleutian Islands Update (Barbeaux)
5. SSL Recovery Plan, Overview and Discussion (Capron)

June 28 – 8:30 AM – 5:00 PM

6. SSL Recovery Plan, Overview and Discussion, *Continued* (Capron)
7. Fishing Effects on SSLs – Review of Publications (Hennen)
8. Pacific cod Management and Recent Council Action (Kimball)

June 29 – 8:30 AM – 5:00 PM

9. Updates on SSL and Other Marine Mammal Research:
  - a) SSL Genetics and Stock Structure (Bickham – presentation by O’Corry-Crowe)
  - b) SSL Rookery Genetic Differentiation (O’Corry-Crowe)
10. Multicriteria Decision Analysis Methods (Merritt)
11. Other Presentations TBA

June 30 – 8:30 AM - NOON

12. Committee Work Session
13. Action Items, Closing Remarks, Adjourn (Cotter)

DRAFT

Public comment periods will be provided during the meeting.

Contact Bill Wilson at the Council offices if you have questions (907-271-2809) or [bill.wilson@noaa.gov](mailto:bill.wilson@noaa.gov)