

**North Pacific Fishery Management Council
Steller Sea Lion Mitigation Committee Meeting
April 25-27, 2006
Alaska Fisheries Science Center, Seattle**

Minutes

The Steller Sea Lion Mitigation Committee (SSLMC) convened at the Alaska Fisheries Science Center on April 25-27, 2006. Committee members present were: Larry Cotter (Chairman), Jerry Bongen, Julie Bonney, Sam Cotten, Ed Dersham, Kevin Duffy, John Gauvin, John Henderschedt, Frank Kelty, Dave Little, Steve MacLean, Max Malavansky, and Art Nelson. Also present were Bill Wilson and Chris Oliver (Council staff), Doug DeMaster and Lowell Fritz (NMFS AFSC), Sue Salveson (NMFS SF), Kaja Brix and Shane Capron (NMFS PR), Jon Pollard (NOAA GC), Kristin Mabry and Scot Miller (NMFS AK Region staff), and Mel Morris (Alaska Board of Fisheries).

Committee members were introduced and members of the public attending the meeting were acknowledged. Mr. Cotter reported that Dr. Daniel Hennen has been appointed to the committee by NPFMC Chair Stephanie Madsen. Dan is a biometrician with the Alaska Sea Life Center. Mr. Cotter also noted that Frank Kelty has been appointed to replace Dustan Dickersen.

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. A library of documents that the committee members will need during their work will be maintained at the Alaska Fisheries Science Center to minimize the need to transport heavy documents back and forth to future meetings (to be held at the AFSC).

Mr. Cotter suggested that following the May 16-18 meeting, the SSLMC will need to meet again to receive additional briefings, probably the last week of June. The dates for this meeting will be June 27-29; this meeting will begin at 8:30 am on June 27 and will be held at the AFSC.

Mr. Wilson discussed the Council's charge: to track the FMP consultation process and to call for and review proposals for regulatory changes, and make recommendations to the Council. The Committee discussed the proposal process, and were advised that the next several meetings are to provide information briefings for the Committee on scientific information on the ESA-listed species that will be subjects of the consultation; these briefings are organized around so that the updated information focuses on the principal hypotheses of factors that contributed to the decline in abundance of Steller sea lions in the North Pacific.

Dr. DeMaster discussed the trade off tool and what kind of input will be required from this Committee. The trade off tool would be used by the SSLMC to evaluate proposals in light of potential effects of each proposal on SSLs and their habitat. Mr. Cotter suggested that a subcommittee of the SSLMC might do the work to assemble the trade off tool, although the weighting factors would be developed by the whole committee. The trade off tool will be discussed in detail in a future meeting.

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The Committee discussed the schedule for the process of reviewing proposals and how that will mesh with the schedule for development of the draft Biological Opinion (BiOp) and the trade off tool. It was generally agreed that a call for proposals should be made soon so that proposals can be reviewed and compiled prior to publication of the draft BiOp so that the Committee can be prepared to compare the content of the BiOp against the proposals received, thus saving time in what many consider to be an already ambitious schedule for completing the consultation.

Handout materials provided to each committee member included:

- The 2000 FMP level BiOp
- The 2001 project level (Atka mackerel, Pacific cod, and walleye pollock) BiOp
- The 2003 supplement to the 2001 BiOp
- The Endangered Species Act
- The Marine Mammal protection Act
- A synopsis of SSL research conducted at the Alaska Sea Life Center
- Schedules for the April 25-27 and May 16-18 SSLMC meetings
- November 7, 2005 memorandum on NMFS guidelines for application of the Adverse Modification standard under Section 7 of the ESA
- March 13, 2006 NMFS memorandum requesting assistance on the FMP consultation
- April 19, 2006 NMFS memorandum transmitting the Biological Assessment and request to reinstate the FMP consultation

Consultation Process Update

Shane Capron provided a status report on the FMP consultation. The Biological Assessment (BA) has been completed by NMFS SF and provided to NMFS PR (April 19, 2006 letter – handout). Once NMFS PR determines that the BA and accompanying documents are complete, this will start the consultation process. It is anticipated that all necessary information will be in hand at NMFS PR very soon, including the information requested in the NMFS PR letter of March 13, 2006. No change in schedule is anticipated at this time. The draft BiOp will then be prepared, with a target date for public review of the end of August 2006.

Sue Salveson reviewed the findings in the BA and summarized the process for submittal of the BA to NMFS PR. Ms. Salveson noted that NMFS SF concluded that the following ESA listed species are “likely to be adversely affected”(LAA) by prosecution of the GOA and BSAI groundfish fisheries (based on recorded injuries or mortalities during fishing activities): fin whales, humpback whales, northern right whales, sperm whales, and the eastern and western stocks of Steller sea lion. Ms. Salveson explained the “soft trigger” of a LAA determination, which is defined as an adverse effect on an ESA-listed species as a result of an action and the effect is not discountable, insignificant, or beneficial. A LAA determination means that formal Section 7 consultation is required. The BA concludes, however, that no groundfish fishery jeopardizes the continued existence of any ESA-listed species nor adversely modifies or destroys designated critical habitat of

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any ESA-listed species. Ms. Salveson also noted that the State of Alaska will participate in the consultation and that the State has expressed its desire that State parallel groundfish fisheries be included in the consultation. The Committee discussed the implications of this decision by the State and how other State fisheries, including State waters groundfish fisheries, might be affected (these will not be part of the consultation but will be addressed in the BiOp in its Cumulative Effects section).

The Committee discussed issues involved in protection for incidental take of a listed species, specifically provisions in Section 7 or Section 10 of the ESA.

Mr. Capron noted that the anticipated schedule for preparation of the draft BiOp (draft by late August) will potentially allow for an initial review by the Council at its October 2006 meeting; the SSLMC should have time to make an initial review prior to that October meeting. This review by the SSLMC will provide an opportunity to judge how much "room" there may be in changing current protection measures based on conclusions in the BiOp. The SSLMC can then take the period between October and December to make a call for proposals and then review the proposals against the findings and conclusions in the BiOp and make recommendations for further action to the Council at its December 2006 meeting. Some members believed that calling for proposals earlier would give the Committee more time to prepare for how they may be compared with the conclusions in the draft BiOp. The call for proposals process will be discussed by the Committee at its May meeting.

NMFS Guidelines for Adverse Modification

Mr. Capron reviewed the new guidelines for determinations of adverse modification of critical habitat recently issued by NMFS (memorandum from Dr. Hogarth dated November 7, 2005 - handout). These are interim guidelines until NMFS and the US Fish & Wildlife Service develop joint procedures for determining what constitutes adverse modification. Mr. Capron noted that the pending draft SSL Recovery Plan will provide guidelines for what will constitute recovery of the western and eastern stocks of SSL; these recovery standards will further assist the agency when making adverse modification analyses. This is a new process not previously utilized by NMFS.

The Committee discussed the implications of delisting of a currently-listed species. Mr. Capron noted that, even if delisted, the protection measures then in place for species such as the wSSL would likely remain in place since these measures would be viewed as contributing to the delisting; it would not seem logical to remove protections that enabled the agency to delist. In addition, it was noted that the ESA requires a status review five years following delisting to consider whether the delisting action was appropriate.

Federal Preemption

Jon Pollard reviewed the Magnuson-Stevens Act definitions of preemption found in Section 306(b). The SSLMC had previously indicated an interest in reviewing this process, although this is very unlikely and previously has been very rarely invoked in State waters off the U.S. coast.

SSL Recovery Plan

Mr. Capron reviewed the status of the SSL Recovery Plan. The Recovery Team met for a final time in March 2006 and shortly thereafter a subcommittee of the Team redrafted the working draft of the Plan for final approval by the Team. The Team has approved that revised version, and the agency is now reviewing the document. NMFS will likely complete its review and approve it for public review before the June Council meeting. This will provide an opportunity for NMFS to present the Recovery Plan to the Council and allow for SSC and AP review as well. The SSLMC will then have the opportunity to review the plan, but not before the June Council meeting.

Public Comment

Mr. Cotter provided an opportunity for members of the public to comment on material that was discussed during the day. Paul MacGregor questioned whether any past BiOps have been revised based on the new guidelines for analysis of adverse modification. Mr. MacGregor also asked if rehabilitation of habitat is a consideration in the process. Mr. Pollard noted that it is appropriate to consider rehabilitation of critical habitat, and this is routinely considered for salmon species in the Pacific Northwest. Mr. Capron also noted that it may be appropriate to consider rehabilitation of critical habitat as a mitigation strategy to compensate for losses of non-critical habitat in some cases. Dr. DeMaster stated that in a jeopardy analysis, the main issue is whether an action is doing something that is driving a species to extinction, while in an adverse modification analysis, the main issue is whether the action is doing something that hinders recovery of the species mediated through modification of critical habitat.

SSL Population Status and Trends, Stock Structure, and Vital Rates

Lowell Fritz presented an overview of the status of the western and eastern stocks of SSL, changes in age-specific survival from mark-recapture (branding) studies, and an update on seasonal usage of terrestrial sites (haulouts and rookeries) . See handout (or SSLMC web site) for slides presented. Mr. Fritz noted that analysis of branding data indicated that rates of survival of western stock juveniles is higher since 2000 than it was in the late 1980s, and currently may be similar to western stock rates from the 1970s (stable or decreasing slightly) and eastern stock rates from the 90s (increasing population). The Committee discussion included details of rookery and haulout counts in subregions of the western stock, and that five new rookeries are now identified and four rookeries appear to no longer be breeding sites and are likely used as haulouts at present. Discussion included how this new rookery/haulout structure might affect future analyses that might use a zonal approach. Mr. Fritz provided a summary list of the current rookeries and haulouts.

SSL Population Modeling

Eli Holmes, NMML, presented the results of recent SSL population modeling based on time series of counts and age structure of SSLs in the central GOA from 1975-2004. Dr. Holmes fit a demographic model to the data time series by estimating changes in the rates

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of juvenile and adult survival as well as reproduction (natality). The Committee discussed the terms “fecundity” and “natality”, and Dr. Holmes clarified that natality is the appropriate term in her presentation. Results suggest that the initial CGOA population decline (through 1987) was associated with a steep drop in juvenile survival, and smaller drops in adult survival and natality rates. Since 1987, juvenile and adult survivorship have been increasing (the increase in juvenile survival is supported by the analysis of the branding data) while natality has continued to decline, and may now be only 60% of what it was in the late 1970s. The decline in natality is reflected in the steep drop in the pup to nonpup ratio. While causes of these changes cannot be clarified with the model, Dr. Holmes listed changes in food supply, disease, and contaminants, and the Committee discussed predator effects on SSL behavior as potential factors. Dr. Holmes’ talk and copies of several relevant papers will be provided to the SSLMC and will be made available on the SSLMC web site.

Killer Whales in the North Pacific

Paul Wade, NMML, provided an overview of killer whale population structure in the North Pacific including ecotypes, population abundance estimates by area, and population structure within ecotype based on genetic studies. Dr. Wade also presented information on fatty acids, contaminants, and stable isotope studies, all of which indicate there is a clear differentiation between mammal-eating (referred to as Transient (T) killer whales) and Resident (R) killer whales in the BSAI area. Dr. Wade reviewed data on T killer whale predation observations, movement patterns, and seasonal migration. He noted that the presence of bite marks caused by cookie cutter sharks provided strong evidence that at least some T killer whales were migrating south of the Aleutian Islands on a seasonal basis. Dr. Wade also provided summary data on potential effects of this ecotype on SSL populations, noting that there are lingering questions about what food sources sustain the known population of T killer whales in the North Pacific. Dr. Wade’s presentation as well as publications on relevant killer whale work will be provided to the SSLMC and made available on the SSLMC web site.

Northern Right and Humpback Whales in the North Pacific

Phil Clapham, NMML, provided an overview of the population structure of northern right whales and humpback whales in the North Pacific. Dr. Clapham reviewed the available data on northern right whale declines and the current estimates of abundance. Dr. Clapham also reviewed the rationale for designating proposed critical habitat for this population in the GOA and BSAI. Dr. Clapham also reviewed data on humpback whale movement patterns, photo identification, genetic stock structure, and abundance estimates.

Groundfish Stock Assessments for the GOA and BSAI

Jim Ianelli, AFSC, provided the SSLMC with an overview of the status of stocks of the target groundfish species of the North Pacific, with emphasis on the principal prey species for SSLs. Much of the information presented is available in the current Stock Assessment and Fishery Evaluation documents produced by the Council in early 2006. Dr. Ianelli focused primarily on Atka mackerel, Pacific cod, and walleye pollock stocks.

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Discussion included data collection and fishery performance assessments, and how modeling produces estimates of spawning biomass, total biomass, and ABC for each groundfish species for each area. The Committee also discussed fishery effects on groundfish stocks, and how SSL protection measures affect some fisheries.

Foraging Energetics of Killer Whales and SSLs

Terrie Williams, University of California at Santa Cruz, presented an overview of her work on both killer whale and SSL energetics. This work focused on killer whale predation of other marine mammals in the North Pacific as well as SSL prey consumption, reproduction, and growth energetics based on laboratory (captive animal) studies and model predictions and calculations. Dr. Williams' work includes SSL seasonal metabolic costs for prey capture and reproduction, and the large cost of lactation. Dr. Williams believes that results from energetics studies can be helpful to the SSLMC as it considers how fisheries may affect SSLs in light of the role of killer whale predation in the North Pacific. She also offered her opinions on possible causes of the SSL decline, the role of nutritional stress and predation on the decline, and the potential role of fisheries; she also offered thoughts on recent suggestions of SSL natality decline. Regarding this last point, several participants in the meeting disputed her rationale. Two papers and a summary of her presentation will be provided to the Committee and made available on the SSLMC web site.

Laboratory Studies of Captive SSLs at the University of British Columbia

David Rosen with the UBC reviewed the work of his colleagues at the Vancouver Aquarium on captive SSL energetics. Dr. Rosen presented how laboratory manipulations are done and what responses are measured. Dr. Rosen also offered insights into the nutritional stress debate and its role in the SSL decline. His presentation was provided to the Committee and will be made available on the SSLMC web site.

Handouts at this Meeting

Bill Wilson will work with Kristin Mabry and Sue Salveson (NMFS AK Region) to develop a web-based repository of relevant documents that will be used by the Committee in future meetings and work sessions. It is anticipated that this web site will be completed prior to the May meeting of the SSLMC. In addition, it was agreed that several of the very large (over 10 MB) documents will be provided to Committee members on CD. More information on this effort will be forthcoming.

The Committee adjourned at 5:00 PM Thursday April 27. The next meeting starts at 8:30 AM on Tuesday May 16 and will continue through Thursday May 18, 2006, at the Alaska Fisheries Science Center, Seattle. The SSLMC also has scheduled a meeting at the AFSC for June 27-29, 2006.

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AGENDA

April 25 – 1:00 PM – 5:00 PM

1. Introductions and Opening Remarks, Announcements, Orientation of New Members (Cotter)
2. Minutes of Last Meeting, Update from April Council Meeting, Discussion (Wilson)
3. Brief Overviews of 2000 FMP BiOp and 2001 BiOp and Supplement (Capron)
4. NOAA Guidelines on Adverse Modification of Critical Habitat (Capron, Pollard)
5. Overview of MSA Section 306(b) (Pollard)
6. Update on SSL Recovery Plan (Capron)

April 26 – 8:30 AM – 5:00 PM

7. Updates on SSL and Other Marine Mammal Research:
 - a) NMML SSL Program (Fritz)
 - b) NMML Whale Programs (Wade, Clapham)

April 27 – 8:30 AM – 5:00 PM

8. Updates on SSL and Other Marine Mammal Research (Continued):
 - a) GOA and BSAI Groundfish Stock Assessments (Ianelli)
 - b) UCSC Marine Mammal Energetics Programs (Williams)
 - c) UBC SSL Energetics and Nutrition Studies (Rosen)
9. Process for Developing a Trade-off Tool (DeMaster)
10. Action Items, Closing Remarks (Cotter)

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)