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26 February 2009 F/AKC3:bsf

MEMORANDUM FOR: The Record

FROM: Brian Fadely, National Marine Mammal Laboratory

SUBJECT: Minutes of 2009 Steller sea lion research coordination workshops held in Anchorage, Alaska and Seattle, Washington

Researchers conducting field and captive studies on Steller sea lions (*Eumetopias jubatus*) meet at least annually to coordinate research plans and field work. In addition to updating research findings, these meetings provide a direct means to minimize potential disturbance to sea lions in the field, and maximize collaboration and sharing of samples or data. During the past several years a coordination meeting has been held in Anchorage associated with the Alaska Marine Science Symposium because most researchers conducting Steller sea lion studies in Alaska attend. This year a second meeting was held in Seattle, which focused on the eastern distinct population segment (eDPS) in Washington, Oregon and California. Because applications for new permits to conduct Steller sea lion research authorized under the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) are due in February, most of the time during meetings was dedicated to permit application issues and discussions towards ensuring proposed research would directly address recovery and conservation priorities. Though these meetings primarily address U.S. research, studies conducted in Russia and Canada were also included in discussions.

### *Alaska*

A coordination meeting held on January 23, 2009, in association with the Alaska Marine Science Symposium was attended by 25 people representing federal, state, academic, Alaska Native, private and non-profit groups (Appendix 1). In contrast to past years, relatively little time was spent discussing 2009 field plans, but instead focused on permit application scheduling, issues and logistics, and planning and coordination of studies during the next five years (Appendix 2).

Investigators permitted to conduct research in Alaska were asked to outline their 2009 plans for field studies occurring prior to August 1, the expiration date of current permits. No overlap in study locations was identified, with the exception that some studies will be underway at the time of the June-July pup abundance aerial survey conducted by the National Marine Mammal Laboratory (NMML). It was noted that there will thus be several opportunities to observe animal behavior in response to research activities at Lowrie, Marmot, and Ugamak Island field camps, as well as through remote video images at Chiswell Island. Studies



are focused on Steller Sea Lion Recovery Plan priority 1 and 2 research tasks of population and vital rates estimation, food habits determination, health and condition assessment, and effects of natural and anthropogenic factors (Table 1).

Michael Payne, Chief of the National Marine Fisheries Service (NMFS) Office of Protected Resources Permits Division (PR1) presented an overview of the 2009 Steller sea lion and northern fur seal permitting process, which included a review of the application, review, revision and issuance schedule for new permits. Applications are due on Sunday, February 15, and will be internally reviewed from February 16 to March 31. Section 7 ESA consultation and writing of a Biological Opinion will be conducted during February 17-July 30. If additional information is needed, applications will be returned on April 1 with revisions due back to the permit office by April 17. A 30-day public comment period will be held May 15 to June 15 and applicants will have from June 16 to July 16 to work with NMFS PR1 to respond to comments. On July 31 NMFS will release a new Record of Decision and new permits will be issued during the week of August 3. During this process is the URS Corporation will update the Steller sea lion and northern fur seal research Environmental Impact Statement (EIS). Several parts of the applications and review process requiring attention were highlighted. Because the Potential Biological Removal (PBR) level has declined for the western distinct population segment (wDPS), PR1 is concerned that estimated serious injury and mortality rates of the combined requested studies could potentially exceed limits suggested as acceptable in the EIS. Therefore it remains important to justify the numbers of takes and frequency of activities in an application. To facilitate addressing animal welfare concerns applicants should submit signed approval letters and comments from Institutional Animal Care and Use Committee (IACUC) if such review is required by their institution. The MMPA requires that permit holders be in compliance with all other statutes, and the burden is on the applicant, not the permits division, to ensure that this is occurring. Collectively addressing how research activities are integrated among applicants and support Recovery Plan research priorities is also important. Permits can be issued for up to five years, and up to three major amendment requests can be made over that period, but not in the first or last year of a permit. Each amendment generates a six to nine month review process.

Many concerns were raised by the group, in particular that current policies could cap research for up to five years and thus create a group of researchers 'grandfathered-in' with exclusive access to Steller sea lions, and no clear procedure as to how other researchers may be accommodated or notified in advance of such potential restriction. It was noted that in the experience of the researchers present, IACUC review requires necessary federal or state permits to be issued prior to IACUC approval, so unless the research was similar to previously reviewed and permitted activities, new IACUC approvals would not be available to submit with a new application.

To help highlight how studies are integrated among researchers and related to Recovery Plan research tasks, a spreadsheet was developed for each applicant to complete and submit with their application. This spreadsheet was based on the Steller Sea Lion Recovery Plan (NMFS 2008) Section G, 'Recovery Action Implementation Schedule' Plan Task priority table for the wDPS (no similar table exists for the eDPS). The information from these spreadsheets will be compiled during the permit review process by NMFS, though it was noted that projecting five years out

may be difficult given unknown budgets and potentially shifting priorities, and there may be an appearance that much more activity would occur than actually transpires. It was suggested that NMFS should annually review actual activities and takes to compare with levels authorized in the permitting process. This review could also potentially facilitate accommodating field studies by new applicants.

Lisa Rotterman, the Steller Sea Lion Recovery Coordinator from NMFS Alaska Regional Office Protected Resources Division (AKR) provided a Regional Office perspective on priorities and management needs. She noted that the final revised Recovery Plan for Steller Sea Lions was released in March of 2008. This plan contains, among other things, an assessment of threats to the recovery of Steller sea lions. It also contains a recovery action outline, a recovery action narrative, and a recovery action implementation schedule in which recovery tasks are prioritized and linked to specific threats. These recovery tasks include research tasks. She recommended that, as possible, researchers should link their proposed research activities to Recovery Plan recovery priorities. If studies are proposed that do not clearly fall within one of the tasks identified in the Recovery Plan, she recommended that applicants present relevant background material to support the proposed studies, and in particular to link how scientific research can address issues discussed in the threats assessment section of the Recovery Plan. AKR is undertaking a new ESA Section 7 consultation on potential effects of groundfish fisheries in Alaska on Steller sea lion populations, which will result in a new Biological Opinion. Though there are uncertainties, potential competition with commercial fisheries, environmental variation, and killer whale predation are all considered relatively high threats to Steller sea lion recovery based on the Recovery Plan, whereas exposure to toxic substances is considered to be a relatively medium risk. In contrast potential effects of scientific research on the Steller sea lion wDPS is viewed as a relatively minor threat. No threats were identified for the eDPS, and the Recovery Plan recommends this stock should be considered for delisting. Some researchers expressed concern that some of the methods listed in the Recovery Plan to address recovery priorities may be too narrow in scope. Dr. Rotterman noted that the Recovery Plan is a planning and guidance document not meant to limit methods that may be utilized in research to address recovery needs. If researchers feel that their proposed research does not clearly fall under an identified recovery task, she recommended that they describe why their research design and specific methodologies are being proposed to obtain information needed to guide management and to facilitate recovery. While the Recovery Plan identifies 78 substantive actions needed to achieve recovery of the wDPS of Steller sea lions, the Plan highlights four actions that are especially important to the recovery program for the western DPS. One of these tasks is especially relevant to current research: continue population monitoring and research on key threats potentially impeding sea lion recovery. Adaptive management type studies that would greatly increase the amount of fish being removed from Steller sea lion feeding areas (above that amount approved under the current FMP) are currently on hold pending the outcome of analysis in the biological opinion on the impacts of groundfish fisheries in the Gulf of Alaska, Bering Sea and Aleutian Islands. Experiments that reduce prey removals would not be similarly constrained. Dr. Rotterman stated that NMFS needs good research on Steller sea lions in order for effective management to ensure recovery. There is a current critical management need for data from adult females in the western stock, especially of females in the western and central Aleutian Islands.

Dr. Rotterman also noted the importance of notifying the AKR of field work plans prior to embarking into the field, as stipulated in permits, particularly so she can respond to public or enforcement enquiries if activities are observed in closed areas. It would also be helpful for AKR to have copies of issued permits, either sent directly from PR1 or from applicants attached to their research plan notification letters.

Each group presented a brief summary of which research priorities should be addressed, or that will be addressed with the next permit application round:

- Alaska Region (Rotterman): Key management concerns are to continue to estimate population trends for pups and non-pups, the continuing declines in the western Aleutian and western-central Aleutian Islands, to obtain estimates of reproductive rates and data relevant to understanding potential impacts on female condition, health, foraging and reproduction throughout the wDPS, and continued monitoring of population abundance, trends, vital rates, and incidental take by fisheries in Russia because it is a sub-region in the wDPS.
- ADFG (Rea): Continuing estimation of vital rates in areas where branding has occurred, particularly Prince William Sound and Southeast Alaska; capture adult females to assess habitat use and condition, particularly in areas of potential oil and gas development such as Bristol Bay and the North Aleutian Basin Planning Area.
- NPUMMRC (Trites): Maintain the captive sea lion program to study diving physiology, stable isotope determination of diet, DNA scat analysis techniques, reproductive endocrinology, refine anesthesia techniques, and test stomach pH/temperature instruments as indicators of prey ingestion; continue scat collections and brand resights with ADFG.
- ASLC/NMML (Andrews/Burkanov): In Russia continue vital rates and reproductive performance studies by branding pups at three rookeries in the Kuril Islands, maintaining field camps and observing as at many islands as possible; if financially possible continue foraging behavior studies of adult females.
- NMML-AEP (Gelatt): Continue population abundance and trend surveys, vessel-based and field camp observations of branded animals for vital rates estimation, pup branding to maintain sample size available for vital rates estimates, scat collections, and captures of adult females for foraging behavior and health studies; in general pup handling will be reduced because the need for ground counts to estimate pup production has been supplanted by aerial survey techniques at most sites.
- ASLC (Maniscalco): Use remote video observation for studies of reproductive performance and maternal care, killer whale predation, and long-term effects of research and tourism disturbance; probably will not brand pups in 2009, but will in subsequent years to increase number of uniquely-identifiable animals at Chiswell Island.
- UAF (Atkinson): East-west comparison of sea lion diets in relation to vital rates and fish stock composition in the northern Gulf of Alaska.
- OSU (Horning): Continue determination of spatial and temporal mortality patterns and expand further into western and eastern DPS areas, especially as may be attributable to predation and link to forcing of top-down versus bottom-up controls, and secondarily explore emigration patterns, continue development of technical capabilities of life-history implant transmitters and analytical models; attendance patterns and health condition assessment (Oregon).

- ASLC (Mellish): 1. collection of baseline health parameters of sea lion pups and juveniles; 2. monitoring of foraging and diving behavior via external satellite tag attachment; 3. temporary captivity for research purposes for up to 12 sea lions/year (facilitates data collection for 4-7, below); 4. validation of the use of non-invasive tools (e.g., thermal imaging, 3D imaging) for the determination of health and condition; 5. calibration studies for nutritional baseline analyses (e.g., stable isotopes); 6. estimation of survival rates and causes of mortality via LHX implantation; 7. post-release monitoring via visual resight (e.g., hot-brand, flipper tag).
- ASLC (Polacek): Captive breeding to study maternal body condition, energy transfer to offspring, reproductive and stress endocrinology, bio-telemetry testing, and reproductive biology.

### *Washington-Oregon-California*

On January 27, 2009, 14 researchers representing seven organizations met in Seattle, Washington (Appendices 3 and 4). After a review of permit application timelines based on information received from PR1 at the Anchorage meeting (described above), discussions were held regarding IACUC review of new permit applications. Both Oregon Department of Fish and Wildlife (ODFW) and the Washington Department of Fish and Wildlife (WDFW) currently do not have IACUCs or policies. Both groups are investigating the applicability of the Animal Welfare Act, but though such committees are being contemplated they would not be in place in the foreseeable future. Several options of incorporating their activities into other IACUC reviews were explored, including using an IACUC to be formed at the Alaska Fisheries Science Center in 2009. *(Since this meeting NMML, ODFW and WDFW agreed to combine their Washington, Oregon, and California activities into one permit application to be included with NMML Alaska activities).*

A discussion of research priorities and how these priorities would be addressed by permit applicants followed. For ODFW research in Oregon these include 1) studies of eDPS sea lions to use in comparison or as a control group for Alaska and wDPS studies; 2) monitoring population status and trends (MMPA stock assessment requirements); and 3) seasonal distribution with respect to human activities, including fisheries. A significant conservation concern is an apparent increase of white sturgeon consumption by Steller sea lions in the Columbia River near the Bonneville Dam. This is the primary breeding stock of white sturgeon, and those being consumed by sea lions are 6-10' long and 30-40 years old. The predation is primarily by medium to large male sea lions that also haul out near the Bonneville Dam. Of the fish consumed by Steller sea lions at the Bonneville Dam, 95% are white sturgeon, whereas 95% of the fish killed by California sea lions are salmon. The abundance of Steller sea lions has increased here in the past five years, and so this problem will likely get worse. Thus a study of foraging ecology needs to be conducted, perhaps in year 3 or 4 of a five-year permit. While it is very possible to catch Steller sea lions in the lower Columbia River floating pens, it is less likely that such could be accomplished at the Bonneville Dam.

Research conducted through Oregon State University by Markus Horning includes studies that will be split among two parts of the eDPS. In southeast Alaska, boat-based captures at two locations will be used to continue determination of spatial and temporal mortality patterns through the use of life history transmitter implants. Land-based photogrammetry of condition is

planned for two sites in wDPS and eDPS locations. Additional Oregon work will include: 1) Sea Lion Caves remote-imaging work; 2) Cascade Head remote-imaging installation; 3) carcass validation of life history transmitter implants; and 4) monitoring sea lion use of Cape Arago.

Priorities of WDFW in Washington include 1) use of Columbia River by Steller sea lions (tagging large Steller sea lions); 2) fishery interaction issues (shared with British Columbia), particularly troll fishing along the northern coast, depredation and gear entanglement. The Makah Tribe (reported by Jon Scordino) supports the state and federal efforts to achieve the objectives already discussed, and participate in brand-resight surveys and population counts. In British Columbia aquaculture net pen entanglements may continue to be a concern, however, the Department of Fisheries and Oceans Canada (DFO) is working with groups to mitigate pinniped-aquaculture interactions.

There were discussions regarding interrelationships between research activities and those related to MMPA sections 109 and 120. It would potentially be useful to mark Steller sea lions interacting with sturgeon at Bonneville Dam, and captures at Ballard and Astoria incidental to California sea lion captures have yielded excellent information on Steller sea lion movements and should be continued.

The Recovery Plan identifies no threats to recovery for the eDPS, and recommends delisting. There is considerable interest among the NMFS regional offices (NWR/AKR) and state governments (WA/OR) to proceed with this process. Thus a prominent research priority is to collect data necessary to complete a status review and prepare for post-delisting monitoring. Updated central California counts will be critical to this effort. There are several sites between Año Nuevo Island and Cape Mendocino that are not regularly monitored. An aerial survey will be the best way to accomplish this as the Farallon Islands and Año Nuevo Island are problematic to observe from land. Thus, a coordinated aerial survey of California/Oregon/Washington during the late June-early July breeding period is needed. Washington will be covered in 2009 and Peter Olesiuk (DFO-Canada) reported that British Columbia will be surveyed in 2010. *(Since this meeting, Tom Gelatt has contacted Mark Lowry at SWFSC regarding survey activities in California and surveys will be pursued in 2009 and/or 2010 dependent on available funding.)*

Investigators permitted to conduct research in Washington, Oregon, and California were asked to outline their plans for 2009 field studies to be conducted prior to August 1, the expiration date of current permits. Field activities in 2009 (Table 1) that involve the potential for disturbance are all conducted under authority of two permits (ODFW and NMML) by investigators working together on all the projects. Activities by OSU are not expected to result in any direct animal interactions or disturbance.

#### *Literature Cited*

National Marine Fisheries Service. 2008. Recovery Plan for the Steller Sea Lion (*Eumetopias jubatus*). Revision. Silver Spring, MD. 325 pp

Table 1. Outline of Steller sea lion field studies through August 1, 2009 associated with institutions permitted in the U.S.

**Alaska**

Alaska Department of Fish and Game (Permit 358-1888)

May 15-July 4	Lowrie Island field camp land-based observations for vital rates and reproductive behavior.
June 23-July 7	Southeast Alaska branded animal resight vessel-based observations for vital rates estimation. Two vessels, conducting 14-d cruises each, one to north-SE and one to southern-SE.
July 7-27	Land-based observations for estimates of vital rates at Sugarloaf Island.
July 15-27	Prince William Sound vessel-based observations for vital rates estimation.

Alaska SeaLife Center (Permit 881-1890-02)

May 12-17	Capture cruise in PWS/Resurrection Bay scheduled for 12-17 May 2009. It is expected 6 animals will be captured for TJ work at ASLC. Protocols for a study of effects on sea lions of branding and surgery for implanting tags to monitor survival will be completed. This project is in collaboration with Markus Horning (OSU) and LHX transmitters will be implanted into transient juvenile sea lions (Mellish). A behavior study with collaborators at UBC will also be completed. Animals will be held for 3 months, with scheduled implantation in mid-July and release the final week of July.
May-August	Chiswell Island and Kenai Peninsula (Maniscalco): <u>Continuing work:</u> <ul style="list-style-type: none"> <li>• Determine long-term reproductive (natality) rates of individual females</li> <li>• Monitor maternal care and foraging cycles for interannual and long-term changes to determine how environmental variability may affect these things and ultimately sea lion survival</li> <li>• Monitor pup and juvenile mortality to determine what factors are most affecting survivorship of young animals</li> <li>• Monitor population trends in Kenai Fjords through daily (year-round) census counts and brand resightings</li> <li>• Monitor disturbance effects of tourism, vessel traffic, and research activities</li> <li>• Opportunistic collection of carcasses, aborted fetuses, and placentae to determine causes of mortality and contaminant loads</li> </ul> <u>Tentative work:</u> <ul style="list-style-type: none"> <li>• Brand, morphometrics, and health assessment of pups at Chiswell Island</li> <li>• Brand pups at Outer Island</li> <li>• Collect scat for diet or hormonal studies that may relate to other remote monitoring work</li> </ul>

Possible experimental work

- Test a remotely monitored scale for opportunistic weighing of all age-classes of sea lion
- Test laser morphometrics and 3D photogrammetry for estimating size of all age-classes of sea lion and growth of pups

Russian sea lion surveys (Andrews). Continue branding and resighting partnership with NMML to survey selected rookeries and haul-outs in the Russian Far East to monitor population trends, vital rates, and certain elements of the foraging ecology of those animals, information that is crucial to future ESA listing determinations for the Western Stock.

Captive breeding: Lori Polasek is coordinating the development of a science plan and permit application for studies associated with the possible breeding of the sea lions at the ASLC. This entails numerous protocols, the full suite of which is contingent on available funding at ASLC and from elsewhere.

National Marine Mammal Laboratory (Permit 782-1889)

- May 27 – July 28 Land-based observations of Marmot and Ugamak Island rookeries for vital rates estimation, breeding behavior, and disturbance monitoring.
- May 27 – June 12 Vessel-based (*Norseman*) resight/scat collections in Eastern Aleutian Islands and Western Gulf of Alaska for vital rates estimation and food habits.
- June 7 – June 15 Land-based resights at Cape St Elias for vital rates estimation.
- June 23 – July 7 Vessel-based (*Tiglux*) pup branding at Ugamak Island, pup count/scat collection at Akun/Billingshead, resight/scat collections at Chirikof, Kodiak, Barrens, and lower Kenai Peninsula for vital rates estimation, health and condition studies, and food habits.
- June 25 – July 15 Alaska-wide aerial pup survey, starting in southeast and progressing through the western Aleutian Islands for abundance and population trend determination.

University of Alaska Fairbanks, Kodiak and Shumagin Islands (Permit 1049-1886)

- Jan - June 2009 Continue periodic (full day, 1-2x per month) land-based observations to document branded SSL on Long Island haul-out, Kodiak area.

No other field activities are planned for this permit in the Kodiak and Shumagin areas; no extension of this permit will be sought.

## Washington, Oregon and California

*National Marine Mammal Laboratory, Oregon Department of Fish and Wildlife, Washington Department of Fish and Wildlife, Humboldt State University, and Makah Fisheries Management (Permits 782-1889 and 434-1892)*

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January-July	Proposed WDF&W, ODFW and DFO ESA Sec 6 funded project to fly aerial surveys from St. George Reef to Cape Scott. Surveys will be flown quarterly per annum in winter, spring, summer and fall.
January-July	Joint WDF&W and DFO-Canada foraging ecology project funded by Pacific Salmon Commission to conduct fall, winter, spring and summer Steller sea lion aerial surveys from Columbia River to Cape Scott.
January-July	Vessel and shore based surveys in California, Washington and Oregon to record the distribution, abundance and brand sightings of Steller sea lions from Rogue Reef and St. George Reef.
January-July	Steller sea lion scat collections at haul out sites on the northern Washington coast and at Rogue Reef and St. George Reef.
January-July	Possible incidental capture and marking of Steller sea lions at haul out traps in Puget Sound and Columbia River.
January-July	Coastal vessel surveys by Humboldt State University in northern California from Arcata to St. George Reef.
April 15-May 1	Install SeeMore Wildlife Cameras at Rogue Reef and video feed to ODF&W Gold Beach Office.
June-July	Aerial surveys in Washington, Oregon and northern California to record distribution and abundance of pups and non-pups.
Mid-July	Branding of up to 200 Steller sea lion pups at Rogue Reef and Pyramid Rock Rookery.
Mid-July	Possible landings at Rogue Reef, Orford Reef and St. George Reef to count live and dead Steller sea lion pups.

### Oregon State University (Permit 1034-1887)

Through July 31	Continue video based behavioral monitoring and brand re-sights of SSL at Sea Lion Caves.
Through July 31	Conduct opportunistic LHX transmitter carcass testing on beaches.
Through July 31	Investigate possibility of and prepare for installation of remote SSL monitoring system at Cascade Head.

Note: none of the above listed activities for OSU are expected to result in any direct animal interactions or even incidental disturbance.

Appendix 1. Participants of the 2009 Steller sea lion research coordination meeting, Anchorage, Alaska, January 23, 2009.

Name	Affiliation
Russ Andrews	UAF-ASLC
Shannon Atkinson	UAF
John Bengtson	NMFS-NMML
Vladimir Burkanov	NMFS-NMML
Don Calkins	North Pacific Wildlife Consulting
Carole DiPoi	UAF-ASLC
Dave Erikson	URS Corporation
Brian Fadely	NMFS-NMML
Lowell Fritz	NMFS-NMML
Tom Gelatt	NMFS-NMML
Markus Horning	Oregon State University
Jon Isaacs	URS Corporation
Terry Johnson	UAF Marine Advisory Program
John Maniscalco	UAF-ASLC
Jo-Ann Mellish	UAF-ASLC
Mike Payne	NMFS-PR1
Lori Polasek	UAF-ASLC
Lorrie Rea	Alaska Dept. Fish and Game
Michael Rehberg	Alaska Dept. Fish and Game
Julie Richmond	Univ. of Connecticut
Lisa Rotterman	NMFS-AKR-PRD
Bob Spies	ASLC
Alan Springer	UAF-ASLC
Andrew Trites	University of British Columbia
Delta Trumble	Aleut Marine Mammal Commission

Appendix 2. Agenda of workshop in Anchorage, Alaska.

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Steller Sea Lion Research Coordination Workshop Agenda

January 23, 2009; 8 am - noon

Hotel Captain Cook, Anchorage Alaska

Workshop coordinator: Brian Fadely, National Marine Mammal Laboratory, Seattle, WA

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Start: 8:00 am

1. Welcome and introductions
2. Review agenda
3. 2009 field work coordination summary (brief) – Brian Fadely, NMML
3. Permitting process update – Mike Payne, NMFS Office of Protected Resources
4. Alaska Regional Office perspective – Lisa Rotterman, NMFS AK Protected Resources Division
5. 2009 permit application general discussion
  - a. Who are the applicants and what are they doing?
  - b. Will the proposed research address Recovery Plan priorities?
  - c. How best to show coordination of proposed research activities in addressing Recovery Plan priorities?
  - d. Other issues
6. Added items
7. Wrap-up

End: Noon

Appendix 3. Participants of the January 27, 2009 Steller sea lion research coordination meeting for Washington, Oregon and California, held in Seattle, Washington.

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Name	Affiliation
Robin Brown	Oregon Dept Fish and Wildlife
Bob DeLong	NMFS-NMML
Brian Fadely	NMFS-NMML
Lowell Fritz	NMFS-NMML
Pat Gearin	NMFS-NMML
Tom Gelatt	NMFS-NMML
Jeff Harris	NMFS-NMML
Markus Horning	Oregon State University
Steve Jeffries	Washington Dept Fish and Wildlife
Michelle Lander	NMFS-NMML
Brent Norberg	NMFS-Northwest Regional Office-Protected Resources Div.
Jonathan Scordino	Makah Fisheries
Wendy Szaniszlo	Contractor, British Columbia
Bryan Wright	Oregon Dept Fish and Wildlife

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Appendix 4. Agenda of January 27, 2009 meeting in Seattle, Washington.

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Steller Sea Lion WA/OR/CA Research Coordination Workshop Agenda

January 27, 2009; 9 am - noon

National Marine Mammal Laboratory Room 2039, Seattle WA

Workshop coordinator: Brian Fadely, National Marine Mammal Laboratory, Seattle, WA

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1. Welcome, background and introductions
2. Review agenda
3. Summary of Alaska research coordination meeting
  - a. Background
  - b. Permit application/review schedule
    - February 15: applications due to PR1**
    - Feb 16-Mar 31: internal review of applications
    - Feb 17-July 30: ESA Section 7 consultations
    - April 1: applications returned for additional information, as needed
    - April 17: revised applications due to PR1**
    - May 15-June 15: 30-day comment period on applications
    - June 16-July 16: NMFS and **applicants respond to comments on applications**
    - July 31: NMFS signs new Record of Decision
    - Week of August 3: new permits issued
4. 2009 permit application general discussion
  - a. Who are the applicants and what are they doing?
  - b. Will the proposed research address Recovery Plan and other priorities?
  - c. What are WA/OR/CA regional priorities for Steller sea lion research?
  - c. Coordination of proposed research activities in addressing Recovery Plan priorities,
    - Spreadsheet for permit applications developed for wDPS, will it work for eDPS?
5. 2009 field work coordination
6. Other issues, added items and wrap-up