

ANNEX G: WILDLIFE PROTECTION GUIDELINES

WILDLIFE PROTECTION GUIDELINES FOR ALASKA

This annex includes the *Wildlife Protection Guidelines for Alaska*. The guidelines focus on tiered response strategies to protect migratory birds, marine mammals, and terrestrial mammals following an oil discharge in Alaska (including offshore waters), when those wildlife may be, or have been, oiled. Response strategies include (but are not limited to), controlling the release or spread of oil and/or the removal of oiled carcasses from the environment (primary response strategies); keeping wildlife away from oiled areas through pre-emptive capture and/or use of deterrent techniques (secondary response strategies); and/or the capture and treatment of oiled wildlife (tertiary response strategies).

The guidelines were developed in accordance with the National Contingency Plan by the Alaska Regional Response Team (ARRT) Wildlife Protection Working Group and were approved by the ARRT. Guideline revisions are developed by the Wildlife Protection Working Group and approved by the ARRT. The current version of the guidelines is available on the ARRT website at: <http://www.akrrt.org/UnifiedPlan/G-Annex.pdf>. The guidelines are also posted on the ADEC website at <http://dec.alaska.gov/spar/perp/plans/uc.htm>.

Questions regarding the guidelines may be directed to:

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ENDANGERED SPECIES ACT MEMORANDUM OF AGREEMENT

Refer to Annex K for a copy of this document entitled the “Inter-Agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act’s National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act,” which was approved by the U.S. Coast Guard, Environmental Protection Agency, U.S. Department of the Interior (Office of Environmental Policy and Compliance and U.S. Fish and Wildlife Service), and National Oceanic and Atmospheric Administration (National Marine Fisheries Service and National Ocean Service). The agreement is used to identify and incorporate plans and procedures to protect listed species and designated critical habitat during spill planning and response activities.

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Annex G

Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan, Volume 1)

Wildlife Protection Guidelines for Alaska

Alaska Regional Response Team, Wildlife Protection Committee

Revision 5 – October 2012

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I. Introduction

A. Background

The coastline of Alaska and its offshore areas provide seasonal feeding, breeding, reproducing, and staging grounds for large numbers of migratory birds and marine and terrestrial mammals. In some cases, the major portion of the world's population of a particular species may be present. Moreover, these wildlife populations include important subsistence resources.

Because of their interdependence with the marine environment, during an oil spill that affects offshore or coastal areas, wildlife can contact oil on the water surface and/or along shorelines, marshes, or tide lands. The number of individuals and species affected will depend on several variables, such as the location and size of the spill, the characteristics of the oil, weather and water conditions, types of habitats affected, and the time of year the spill occurs.

In 1987, the Alaska Regional Response Team (RRT) recognized that guidance for dealing with oiled wildlife was not specifically provided in either the *National Oil and Hazardous Substance Pollution Contingency Plan (NCP)* or the *Alaska Region Oil and Hazardous Substances Pollution Contingency Plan (Alaska Region Contingency Plan)*. At the request of the Alaska RRT Co-Chairs, a working group was established in September 1987 to develop guidelines that Federal On-Scene Coordinators (OSCs) could use during a federally-funded oil spill response.

B. Objectives

Initially, the objectives of the working group focused on developing guidelines for capturing and treating oiled wildlife. As information relative to the guidelines was collected, these objectives were expanded to encompass three strategies that could be taken (when feasible) to protect wildlife during an incident involving the discharge, or potential discharge, of petroleum products (hereafter referred to as an “oil spill”)¹. Those wildlife-protection strategies are summarized below and described in more detail in Section II.

Primary response strategies for protecting wildlife emphasize controlling the release and spread of spilled oil to prevent or reduce contamination of potentially-affected species and/or their habitat. Primary response strategies can include, for example, mechanical cleanup, protective booming, *in situ* burning, and/or dispersant use. Primary response strategies also include the removal of oiled debris, particularly contaminated food sources (such as oiled wildlife carcasses) both in water and on land. Secondary response strategies emphasize keeping potentially-affected wildlife away from oiled areas through the use of deterrent techniques. Secondary response strategies also include the pre-emptive capture and subsequent handling, transportation, short-term holding, and release of unoiled wildlife. Tertiary response strategies, which are considered “last resort” strategies for oiled wildlife, include capturing, handling, transporting, rehabilitating, holding, and releasing rehabilitated wildlife.

¹ While these guidelines focus on wildlife response-related activities for incidents involving the discharge or potential discharge of oil, the guidelines also provide helpful guidance for wildlife response-related activities for incidents involving a hazardous substance release or potential releases.

Based on response-related experiences including (but not limited to) the 1989 T/V *Exxon Valdez* Oil Spill, the 1996 M/V *Citrus* Oil Spill, and the 2004 M/V *Selendang Ayu* Oil Spill, the guidelines were expanded to include general wildlife protection considerations that will need to be taken into account as part of incident response activities. The objective of these “general considerations” is to help ensure that overall incident response activities are conducted in a manner that minimize or prevent (to the extent possible) adverse effects to wildlife. This includes actions to prevent: (1) the introduction of rats to “rat free” islands; (2) unnecessary or illegal disturbance to sensitive species and habitats such as nesting raptors, seabird rookeries, and marine mammals haul-outs and pupping areas; (3) potential injury and/or disturbance of bears by spill-related response personnel; (4) illegal collection of wildlife parts by spill-response personnel; and (5) wildlife exposure to cleaning agents and/or bioremediation substances used for shoreline treatment.

C. Scope of Wildlife Protection Guidelines for Alaska

1. Geographic Area

In 1994, the Alaska RRT promulgated the *Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance Discharges/Releases (Unified Plan)*, which fulfilled the requirements of the *Alaska Region Contingency Plan* as set forth by the *NCP*. Consistent with the *Unified Plan*, The “Wildlife Protection Guidelines for Alaska (Guidelines)” apply to both coastal marine and inland freshwater areas of Alaska. However, because of the potential for significant effects when oil spills occur in a marine environment, the Guidelines focus on wildlife species that inhabit offshore and coastal areas. It should be noted, however, that most of the information presented on response strategies for migratory birds applies to birds in general. In addition, information is presented on selected terrestrial mammals that could be affected by an oil spill in coastal and inland areas, including spills from the Trans-Alaska Pipeline.

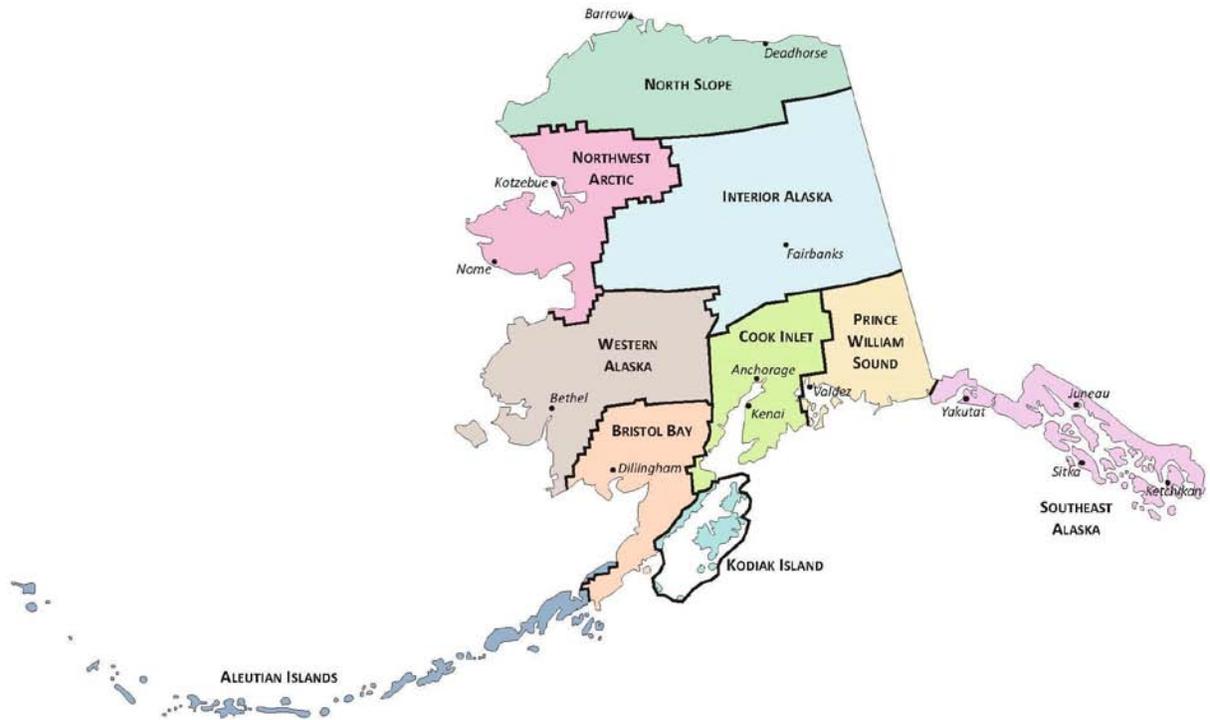
Under the *Unified Plan*, Alaska is divided into 10 subareas for contingency planning purposes. These subareas are shown on Figure 1. Information on species of concern in Appendices 2, 3, and 4 is organized by these planning areas. In 1997, a Pribilof Islands Wildlife Protection Subgroup was created to develop wildlife protection guidelines specific to migratory birds and fur seals in the Pribilof Islands that tier off the Guidelines. The resulting “Wildlife Protection Guidelines: Pribilof Islands (Pribilof Guidelines),” which were first approved in August 1998, are part of the contingency plan for the Aleutians Subarea. The current version of the Pribilof Guidelines is found on the internet at:

[http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7\(June%202011\).pdf](http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7(June%202011).pdf)

In 1999, a joint Canada/U.S. Dixon Entrance (CANUSDIX) Wildlife Response Working Group was established to develop a wildlife response plan focusing on migratory birds and sea otters in the Dixon Entrance trans-boundary area between Alaska and British Columbia. The working group included U.S. and Canadian federal, state, and provincial wildlife resource agency representatives. The resulting “Canada-United States Marine Spill Pollution Contingency Plan CANUSDIX Annex-Operation Appendix: Wildlife Response Guidelines (CANUSDIX Guidelines)” were first approved in 2003. The wildlife protection strategies included in the

Figure 1

Subarea Contingency Plan Boundaries



CANUSDIX Guidelines, which includes a portion of Southeast Alaska Subarea, are consistent with the Guidelines. The current version of the CANUSDIX Guidelines is found on the internet at: http://www.akrrt.org/CANUS_DixonEntrance/.

2. Wildlife Resources

The Guidelines focus on the following wildlife resources at risk due to an oil spill in offshore and/or coastal waters and along the Trans-Alaska Pipeline; namely, migratory birds, marine mammals, and terrestrial mammals. Migratory birds discussed in the Guidelines include waterfowl, seabirds, diving birds, shorebirds, raptors that prey on marine birds, and selected species of upland birds. Marine mammals include sea otters, pinnipeds, cetaceans, and polar bears. Terrestrial mammals include bears, ungulates, wolves, and furbearers. See Appendices 2, 3, and 4 for a list of species of concern and their location by subarea.

3. Wildlife Resource Agencies

For the wildlife resources addressed in the Guidelines, under federal statutes, the U.S. Department of the Interior (DOI)-Fish and Wildlife Service (FWS) has responsibility for managing and protecting migratory birds, walruses, sea otters, and polar bears; the U.S. Department of Commerce (DOC)-National Marine Fisheries Service (NMFS) has responsibility for managing and protecting cetaceans and pinnipeds, except walruses. Under State of Alaska statutes, the Alaska Department of Fish and Game (ADF&G) is mandated to manage and protect all wildlife resources and has joint statutory responsibilities with NMFS and FWS. FWS also has joint statutory responsibilities with ADF&G for wildlife on all federal lands in Alaska (i.e., national park system units, national wildlife refuges, national forest system lands, military reservations, and other DOI- and federally-managed public lands).

DOC, through NMFS, is responsible for the administration of the Endangered Species Act (ESA) as it applies to certain cetaceans and pinnipeds in Alaska as noted in Appendix 3. DOI, through FWS, is responsible for the administration of the ESA as it applies to remaining marine mammals and bird species in Alaska as noted in Appendices 3 and 2, respectively. Both NMFS and FWS are also responsible for administration of the Marine Mammal Protection Act for the marine mammals under their respective authorities. FWS also has responsibility for the administration of the Migratory Bird Treaty Act and the Bald Eagle Protection Act.

D. Committee Organization and Development of Guidelines

1. Committee Organization

The Wildlife Protection Committee (Committee) was initially called the Oiled Wildlife Working Group. It included six representatives from four federal and state agencies; namely, ADF&G; DOC-National Oceanic and Atmospheric Administration (NOAA); U.S. Coast Guard; FWS, and DOI-Office of Environmental Policy and Compliance (OEPC), whose representative chairs the working group). A representative of NMFS was added in 1989; a representative of the Alaska Department of Environmental Conservation (ADEC) was added in 2010. These agencies all have representation on the Alaska RRT.

As a result of a public contact program, in 1988, the Oiled Wildlife Working Group invited one representative from each of three stakeholder groups; namely, environmental and Native groups and the oil industry, to provide input to the working group from their respective interests. In 1990, the Oiled Wildlife Working Group was renamed the Wildlife Protection Working Group. In 1992, the Prince William Sound and Cook Inlet regional citizens' advisory councils were invited to identify a representative to provide input representing RCAC interests. In 2009, representatives of each of the 229 federally-recognized tribes were invited to identify a representative to provide input to the working group from their respective interests. In addition, Alaska-based oil spill response organizations (OSROs) were also invited to identify a representative to provide input representing OSRO interests.

The Alaska RRT adopted its first charter in 2010. In accordance with the Alaska RRT's charter, the Wildlife Protection Working Group prepared its own charter, which was subsequently approved by the Alaska RRT in 2012. The working group was renamed the Wildlife Protection Committee (Committee). Committee members include DOI-OEPC (who continues to provide the committee chairperson), DOI-FWS, DOC-NMFS, and ADF&G. Other members of the Alaska RRT (e.g., USCG, U.S. Environmental Protection Agency[EPA], ADEC, and DOC-NOAA) and representatives of federally-recognized tribes and stakeholder groups (e.g., the environmental community, regional citizens' advisory councils, wildlife rehabilitators, oil industry, and oil spill cooperatives) may also each identify an individual to provide advice and input to the Committee from their respective interest.

2. Development of Guidelines

Background research for the Guidelines was begun after the Oiled Wildlife Working Group was organized in October 1987. Contacts were made in person or by telephone with approximately 45 representatives from oil industry and environmental and Native groups and the oil industry. Technical experts with relevant knowledge also were contacted and secondary source materials were utilized.

The Guidelines were prepared and submitted in draft form to members of the Oiled Wildlife Working Group, which as stated above, included federal and state agencies with statutory requirements to protect wildlife resources, and to technical experts, oil industry representatives, and members of the Native and environmental communities. The revised Guidelines were then presented to the Alaska RRT, which distributed them for public and agency review. Following incorporation of appropriate comments, the final Guidelines were adopted by the Alaska RRT on December 13, 1988.

E. Relationship to National Planning Requirements and Guidance

As required in Title IV, Section 4201 of the Oil Pollution Act of 1990, the *NCP* set forth requirements in 300.210(c)(4)(i) for Area Contingency Plans (which in Alaska is the *Unified Plan*) to include "...coordinated, immediate and effective protection, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat." In Alaska, the *Unified Plan* serves as the Area Contingency Plan.

In November 2003, the FWS adopted as national policy, *Best Practices for Migratory Bird Care During Oil Spill Response*. These Guidelines, which are contained herein, fulfill the NPC requirements regarding wildlife response planning. In addition, the Guidelines are consistent with the *Best Practice for Migratory Bird Care During Oil Spill Response*, which is available on the internet at: http://www.fws.gov/contaminants/OtherDocuments/best_practices.pdf.

F. Procedures for Revisions and Updates

The Guidelines are reviewed and updated, as appropriate. The review and revision process is coordinated by the Committee chairperson. Following a review of proposed changes by Committee members and representatives of other interested Alaska RRT members, federally-recognized tribes, and stakeholders, and subsequent agreement on the proposed changes by Committee members, the revised Guidelines are submitted to the Alaska RRT for approval. Revision 1 of the Guidelines was approved by the Alaska RRT in February 1991; Revision 2 was approved in December 1993; Revision 3 was approved in January 1997; Revision 4 was approved in June 2002. Revision 5 was approved in October 2012 and is provided herein.

In 1994, the Guidelines were included in the *Unified Plan*. Since that time, the Guidelines are included in the public review process for the *Unified Plan*, which is overseen by the USCG, Environmental Protection Agency, and ADEC. Any comments received on the Guidelines during revisions to the *Unified Plan* are provided to the Committee Chairperson for consideration during the next Guideline revision. For the current version of the Guidelines, see: <http://dec.alaska.gov/spar/perp/plans/uc.htm>.

II. Response Activities

A. Wildlife Resource Agency Notification and Input

As outlined in the *Unified Plan*, oil spills and/or hazardous substance releases are reported in accordance with existing regulations to the USCG or the EPA and the ADEC. In turn, information on the incident is provided by the USCG or EPA and ADEC to appropriate pre-identified federal and state natural resource trustees. For a current list of these contacts, see: http://alaskarrt.org/files/Trustee_Emergency_List_Oct2011.pdf.

Information on wildlife resources at risk, sensitive habitats, and recommendations for appropriate wildlife response strategies and/or other activities to help minimize, or eliminate, impacts to wildlife will be provided to the Federal and State OSCs through representatives of appropriate wildlife resource agencies. If an Incident Management Team is established, FWS, NMFS, and/or ADF&G representatives, as appropriate, will provide their input to the Federal and State OSCs, respectively, as an agency representative through the Liaison Officer within the Command Section or through the Environmental Unit in the Planning Section. In the event field-based activities are authorized and conducted, FWS, NMFS, and/or ADF&G representatives, as appropriate, will also work in the Operations Section in the Wildlife Branch. For incidents with significant effects, or the potential for significant effects, on migratory birds, marine mammals, and/or terrestrial mammals under Federal wildlife resource agency management, FWS and/or NMFS have the option of each providing input directly to the Unified Command.

If wildlife response activities are approved and initiated for migratory birds and/or marine mammals, FWS and/or NMFS will assume lead responsibility, as appropriate, for wildlife under their respective jurisdiction; ADF&G will assist on a case-by-case basis. If wildlife response activities are approved and initiated for terrestrial mammals, ADF&G will assume lead responsibility on state and private lands; on federally-managed lands, ADF&G will be co-lead with the federal land manager.

In the event there is no Responsible Party identified for an incident, the appropriate wildlife resource agency representatives will take the lead in directing local experts for the activities described in Section II.B. In the event there is a Responsible Party, the Responsible Party, with direction and oversight by the appropriate wildlife resource agency representatives can be authorized to conduct one or more of the wildlife response strategy activities described below in Section II.B.

B. Wildlife Response Strategies

1. Primary Response Strategies

Primary response strategies for protecting wildlife emphasize controlling the release and spread of spilled oil at the source to prevent or reduce contamination of potentially-affected species and/or their habitat. Primary response strategies can include, for example, mechanical cleanup, on-water recovery, protective booming, *in situ* burning, and/or dispersant use. Primary response strategies also include the removal of oiled debris, particularly contaminated food sources (such

as oiled wildlife carcasses) both in water and on land. Appendices 6, 7, and 8 provide information on primary response strategies for each wildlife species included in the Guidelines.

As outlined above, in the event of an oil spill, or the threat of an oil spill, Federal and State OSCs will receive input from representatives of appropriate wildlife resource agencies regarding sensitive habitats, wildlife resources at risk, and wildlife concentration areas that need to be protected. Since wildlife concentration areas can change with weather and seasons, this input can require on-scene observations by appropriate wildlife resource agency representatives. In the event that *in-situ* burning and/or dispersant use is considered, wildlife resource agency representatives will provide input to the Federal and State OSCs, as appropriate, via the process outlined in Appendix F of the *Unified Plan*.

If an oil spill results in wildlife mortality, oiled carcasses will need to be removed from the environment as soon as possible to minimize, or prevent, secondary contamination of scavengers, including raptors, polar bears, and terrestrial mammals. The collection of oiled wildlife carcasses will need to be performed in such a manner so resulting information can be used for law enforcement and/or, natural resource damage assessment (NRDA) purposes. The use of carcasses for other scientific purposes may also be considered.

FWS, NMFS, and/or ADF&G representatives, who are overseeing wildlife response activities, will develop, when appropriate, incident-specific protocols for oiled-carcass collection in conjunction with appropriate FWS, NMFS, and/or ADF&G investigative/law enforcement personnel, federal and state agency NRDA representatives, and wildlife resource agency scientists. Appendix 11 provides guidelines to be used by wildlife resource agency representatives to develop incident-specific protocols; Appendix 11A provides an example of a Carcass Tag (Evidence Identification Tag); Appendix 11B provides an Example Carcass Collection Form; Appendix 11C provides an example of a chain-of-custody form (Evidence Seizure Tag); Appendix 11D provides an example of a Chain-of-Custody Record for FWS; Appendix 11E provides an example of a Chain-of-Custody Record for NMFS; and Appendix 11F provides an example of an Evidence Storage Log. It is important to note that some information in Appendix 11 is subject to change by wildlife resource agencies on an incident-specific basis. When completed, incident-specific protocols will be submitted to the Federal and State OSCs by FWS, NMFS, and/or ADF&G representatives for approval and inclusion in the Incident Action Plan.

In the event primary response strategies are proposed in locations where migratory birds and/or marine mammals are (or may be) present, the Federal OSC will need to immediately consult with FWS and/or NMFS (as appropriate) regarding the proposed strategies to ensure compliance with the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, Marine Mammal Protection Act, and/or Endangered Species Act (see Section II.C. 2 for additional information).

2. Secondary Response Strategies

Secondary response strategies for protecting wildlife emphasize keeping potentially-affected wildlife away from oiled areas through the use of deterrent techniques. These techniques can include, but are not limited to, visual methods (e.g., placing floating or stationary human effigies

or helium-filled balloons on or near beaches) and auditory methods (e.g., firing propane cannons and audio-visual alarms). Secondary response strategies also include the pre-emptive capture and subsequent handling, transportation, short-term holding, and release of unoiled wildlife. Appendices 6, 7, and 8 provide information on secondary response strategies for each wildlife species included in the Guidelines. Only individuals trained and certified should conduct these activities.

a. Deterrence Activities

Appendices 6, 7, and 8 provide information on deterrence activities for each wildlife species included in the Guidelines. All responders who wish to receive approval to conduct wildlife deterrence activities for species that are not marine mammal species and are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities is found in Appendix 15. Any wildlife deterrence activities for species that are listed under the Marine Mammal Protection Act or as threatened and/or endangered under the ESA will be addressed via Federal OSC consultation with FWS and/or NMFS as appropriate.

Only individuals trained and certified in bird deterrence techniques by the U.S. Department of Agriculture, Animal and Plant Health Inspection Service will be authorized to conduct migratory bird deterrence activities. Required oversight for migratory bird deterrence activities will be conducted by FWS or ADF&G, as appropriate. Any wildlife deterrence activities for species that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC consultation with FWS and/or NMFS as appropriate.

A list of suggested equipment and materials for a deterrent kit for migratory birds is found in Appendix 16. A list of entities in Alaska with equipment and materials stockpiled for deterring migratory birds is found in Appendix 20.

b. Pre-Emptive Capture

Preemptive capture includes the capture, handling, transportation, short-term holding, and release of healthy, uncontaminated wildlife. Appendices 6, 7, and 8 provide species-specific information on pre-emptive capture.

All responders who wish to receive approval to conduct pre-emptive capture of wildlife species that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Appendix 1 provides a list of considerations to be taken into account by appropriate wildlife resource agency representatives when making recommendations to the Federal and State OSCS via Appendix 25 regarding the pre-emptive capture of wildlife. Information on wildlife resource agency permits required for conducting the pre-emptive capture of wildlife is found in Appendix 15. Any pre-emptive capture-related activities for species that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS and/or NMFS as

appropriate. A list of entities in Alaska with equipment and materials stockpiled for the pre-emptive capture of migratory birds and for holding polar bears is found in Appendix 20.

Appendix 13 provides a suggested action-item checklist for representatives of wildlife resource agencies during the first 24 hours on-scene, and Appendix 14 provides a list of suggested office equipment, supplies, and documents to take on-scene.

3. Tertiary Response Strategies

Tertiary response strategies for protecting wildlife include capturing, handling, transporting, rehabilitating, holding, and releasing oiled wildlife. Appendices 6, 7, and 8 provide information on tertiary response strategies for each wildlife species included in the Guidelines.

All responders who wish to receive approval to conduct capturing, handling, transporting, rehabilitating, holding, and releasing oiled wildlife species that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Appendix 1 provides a list of considerations to be taken into account by appropriate wildlife resource agency representatives when making recommendations to the Federal and State OSCS via Appendix 25 regarding the capture of oiled wildlife and rehabilitation. Information on wildlife resource agency permits required for conducting oiled wildlife capture and rehabilitation is found in Appendix 15. Any capture-related activities for species that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS and/or NMFS as appropriate.

If a capture and rehabilitation program for oiled birds and/or marine mammals is approved, FWS and/or NMFS will assume lead responsibility, as appropriate, for wildlife resources under their respective jurisdiction and ADF&G will assist on a case-by-case basis. To be considered complete, an oiled capture and rehabilitation program will need to include: equipment and materials for capture, handling, transportation, stabilization, and rehabilitation; appropriate stabilization and rehabilitation facilities²; and written plans for capturing, stabilizing, rehabilitating, and releasing affected wildlife. The lead wildlife resource agency will monitor any wildlife rehabilitators for permit compliance and provide oversight of all capture and rehabilitation operations. In addition, the lead wildlife resource agency will ensure that information from wildlife response activities (e.g., number of species affected and number of species of live oiled wildlife collected and treated) is provided to the Federal and State OSCs on a routine basis and that a final report is prepared at the close of the program.

² The selection and location of oiled migratory bird stabilization and rehabilitation facilities will vary depending on the spill location and resources available within local communities. Appropriate locations will be identified with the assistance of local community leaders. Potential facilities may include: armories, school buildings, community centers, or canneries. Since spills may cover large areas, the establishment of more than one stabilization center and/or treatment facility may be more efficient and better for affected wildlife. The most likely scenario would include identification and use of a local facility for bird stabilization, transport of stable, oiled birds to the Anchorage Bird Treatment Center, and then transport of healthy birds to an appropriate release site.

Appendix 13 provides a suggested action-item checklist for representatives of wildlife resource agencies during the first 24 hours on-scene and Appendix 14 provides a list of suggested office equipment, supplies, and documents to take on-scene.

Appendix 12 provides copies of capture forms for live oiled wildlife. Appendix 17 provides a list of equipment and materials required for capture/stabilization kits for oiled migratory birds. Appendix 18 provides a list of equipment and materials required for oiled migratory bird stabilization modules. Appendix 19 provides a list of equipment for capture, handling, and rehabilitating oiled sea otters. Appendix 20 provides information on entities in Alaska with equipment and materials stockpiled for capturing and rehabilitating oiled migratory birds and sea otters and for holding oiled polar bears. Appendix 21 provides facility requirement for the rehabilitation of oiled migratory birds. Appendix 22 provides guidance for facility requirements for rehabilitating oiled sea otters.

FWS will determine the adequacy of bird capture and rehabilitation programs based on policy set forth in the *Best Practices for Migratory Bird Care During Oil Spill Response*.

C. General Wildlife Protection Considerations

Direct and indirect impacts to wildlife, including injury and death, can occur as a result of response activities. As stated in Section I.B, depending on the location and type of response activities to be conducted following an oil spill, or threat of an oil spill, wildlife resource agency representatives can provide recommendations to the Federal and State OSCs on how those activities can be performed in a manner that minimizes or eliminates (to the extent possible) adverse impacts on wildlife. This includes actions to prevent: (1) the introduction of rats to “rat free” islands; (2) unnecessary or illegal disturbance to sensitive species and habitats such as nesting raptors, seabird rookeries, and marine mammals haul-outs and pupping areas; (3) potential injury and/or disturbance of bears by spill-related response personnel; (4) illegal collection of wildlife parts by response personnel; and (5) wildlife exposure to cleaning agents and/or bioremediation substances used for shoreline rehabilitation.

1. Prevention of Introduction of Rats to “Rat Free” Islands

Most of Alaska’s islands and remote locations are “rat free.” The introduction of rats, which has occurred on approximately 30 Alaska islands, typically results in the decimation of the islands’ seabird colonies, since the rats prey on nesting birds and their eggs. Once they are established on an island or remote location, rats are extremely difficult to eradicate.

The most likely pathway for rats to be introduced as a result of an oil spill is through the grounding of a vessel onshore or grounding or sinking of a vessel sufficiently close to shore that rats aboard the vessel could swim to shore. It is also possible for rats to drift to rat-free islands onboard vessel debris. In addition, vessels and aircraft responding to an oil spill could inadvertently transport rats to the islands. In the event of an oil spill that includes the use of response-related vessels or aircraft that may contain rats, FWS representatives will provide the Federal OSC with rat prevention information that will, in turn, be provided to appropriate spill response-related vessel and aircraft operators.

If a vessel experiences an emergency that results, or may result, in the vessel going aground or sinking close to shore, FWS representatives or a designated representative will seek, with the assistance of the Federal OSC, information from the vessel operator/owner on whether rats are onboard. With the concurrence of the Federal OSC, FWS representatives, or a designated FWS on-scene representative, will conduct an onboard inspection of the vessel to determine if rats are present. If rats are known or suspected to exist onboard the vessel, FWS representatives, or a designated FWS on-scene representative, will deploy rodent traps and/or poisons on the vessel, if possible, prior to, or following, the vessel grounding.

In the event it is not possible to conduct onboard rat inspection and prevention activities prior to a vessel going aground, FWS representatives will develop a rat prevention plan specific to the incident for approval by the Federal and State OSCs. The plan will include, but not be limited to, the deployment of rat trap and poison stations in appropriate locations on the vessel and the island, individuals authorized to deploy and monitor the stations, and a station monitoring plan.

2. Prevention of Unnecessary or Illegal Disturbance to Sensitive Species and Habitats

Field activities associated with oil spills (particularly those using for example, helicopters, low-flying aircraft, vessels, and/or on-site work crews) have the potential for causing unnecessary and illegal disturbance to sensitive species and habitats. This disturbance can affect the survival of young wildlife and/or can result in wildlife becoming oiled.

The Bald and Golden Eagle Protection Act specifically prohibits the disturbance of eagles. Any action that causes harassment or death of migratory birds is prohibited under the Migratory Bird Treaty Act. The Marine Mammal Protection Act prohibits the “taking” of sea otters, polar bears, seals, sea lions, walruses, whales, dolphins, and porpoises. “Taking” includes harassing or disturbing these animals as well as actual harming or killing. Section 109(h) of this act allows a “taking” by a federal or state governmental official during their official duties, provided the “taking” is for the welfare and protection of the animal. Therefore, the FOSC will need to consult with FWS and/or NMFS representatives (as appropriate) to determine the potential impacts of response actions on migratory birds (including eagles) and/or marine mammals. The FWS and/or NMFS will then assist the FOSC in identifying any impacts or potential impacts, mitigating those impacts, and determining if a “take” has occurred as the result of one or more response activities.

The ESA, as amended, provides protective measures for species listed as threatened or endangered and their designated critical habitats. The ESA prohibits federal agencies from jeopardizing the continued existence of listed species and, unless otherwise authorized, prohibits all parties from “taking” listed species. According to the ESA, the term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such manner.

Section 7 of the ESA requires any federal agency that authorizes, funds, or carries out activities that may affect listed species or critical habitat to consult with DOI (through FWS) and/or DOC (through NMFS). Therefore, the Federal OSC will need to immediately consult with FWS or

NMFS whenever a response may affect these resources. The ESA and its implementing regulations provide special provisions for consultation during emergencies such as an oil spill. In addition, the “Inter-agency Memorandum of Agreement Regarding Oil Spill Planning and Response Activities Under the Federal Water Pollution Control Act’s National Oil and Hazardous Substances Pollution Contingency Plan and the Endangered Species Act (ESA MOA)”, which was signed in 2001, provides special provisions for “emergency consultation” during an oil spill that may (or has) affected listed species and/or their critical habitat. [A copy of the ESA MOA is available on the internet at:

[http://www.dec.state.ak.us/spar/perp/plans/uc/mou/ky-ESA%20MOA\(2001\).pdf](http://www.dec.state.ak.us/spar/perp/plans/uc/mou/ky-ESA%20MOA(2001).pdf)] In both cases, FWS and/or NMFS can make recommendations to the Federal OSC to avoid the “taking” of listed species and/or to otherwise reduce response-related impacts. Formal consultation between the Federal OSC and FWS and/or NMFS (as appropriate) will need to occur immediately after the incident if adverse effects, including incidental take, of response activities on listed species are not eliminated through implementing consultation recommendations.

To prevent unnecessary disturbance to wildlife, FWS, NMFS, and/or ADF&G representatives (as appropriate) will provide, through the Federal Aviation Administration and USCG, notices to aircraft and/or notices to mariners for areas affected by an oil spill (see Appendix 9 for an example). These advisories can request pilots and vessel operators to remain a certain distance from wildlife concentration areas and critical habitats. Such areas include, but are not limited to, marine mammal haul-outs and pupping areas, migratory bird concentration areas, seabird rookeries, and raptor nests. Copies of any advisories will need to be provided by the Federal and State OSCs to all federal and state agency and agency-contracted on-site personnel. In addition, a news release will need to be prepared by FWS, NMFS, and/or ADF&G representatives (as appropriate) on this subject for distribution by the Federal and State OSCs to appropriate news media representatives (see Appendix 9).

During a response to an oil spill, appropriate wildlife resource agency representatives will evaluate the potential for response activities to negatively affect sensitive wildlife species and/or their habitats. As a result, wildlife resource agency representatives can recommend to the Federal and State OSCs that response activities in or adjacent to sensitive species or areas be completed prior to or following critical biological periods. If that is not possible, wildlife resource agency representatives can further recommend to the Federal and State OSCs that agency on-site monitors accompany near-shore and/or shore-based activities to help minimize or eliminate unacceptable levels of disturbance.

3. Prevention of Potential Injury and/or Disturbance to Bears

When response workers are conducting on-shore activities, the potential exists for interaction with brown, black, and polar bears. In addition, polar bears may also be present offshore in frozen or broken ice conditions. Appropriate FWS and/or ADF&G representatives will coordinate with the Federal and State OSCs to determine when stationing qualified bear guards (i.e., individuals with expertise in avoiding bear/human conflicts) with response-related work crews is necessary to help minimize injuries to both workers and bears. Bear guards will need to have specialized training in deterring bears away from an area, removing crews from an area (to eliminate having to shoot a bear), and for shooting a bear if there is a threat to human life. In

addition, activities affecting polar bears will also be addressed via Federal OSC ESA consultation with FWS.

4. Prevention of the Collection of Wildlife Parts for Personal Use

Policies for response-related personnel will include prohibitions on the collection of whole or partial remains of wildlife for personal use. Wildlife remains include, but are not limited to, bones, feathers, teeth, ivory, and pelts. FWS and/or NMFS (as appropriate) will provide information on prohibitions on the collection of whole or partial wildlife remains for personal use to the Federal and State OSCs, as appropriate. (See Appendix 10 for an example). The Federal and State OSCs will then provide this information to all response parties, and federal and state agency and agency-contracted on-site personnel.

5. Prevention of Wildlife Exposure to Shoreline Treatment Chemicals

It is possible that wildlife can be exposed to cleaning agents and/or bioremediation substances used for shoreline treatment. The potential for wildlife exposure and resulting irritation, injury, or death will be evaluated by appropriate FWS, NMFS, and ADF&G representatives, who will then provide recommendations to the Federal and State OSCs on any appropriate avoidance measures and deterrent measures to be included in any application plans and procedures.

D. Funding

Federal and/or state wildlife resource agency representatives can request monies through the Federal OSC from the Oil Spill Liability Trust Fund (OSLTF) to pay for incremental costs of agency personnel who are providing wildlife response-related assistance to the Federal OSC, which the Federal OSC has approved (prior to the conduct of those activities) via a Pollution Funding Request Authorization. Additional expenses associated with wildlife response-related activities (e.g., hiring bird capture and rehabilitation contractors and/or acquiring wildlife response equipment, materials, and supplies) will be paid by the USCG via the OSLTF or by the Responsible Party. For more specific information on use of the OSLTF for response activities, see <http://www.uscg.mil/npfc/Response/default.asp>.

Appendix 1

Wildlife Resource Agency Considerations for Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife

NOTE: The following considerations are not presented in any order of relative importance and may be modified, as appropriate, on an incident-specific basis. Each consideration will be taken into account and documented by appropriate wildlife resource agency representatives prior to making their recommendation (in accordance with Appendix 25) to the Federal On-Scene Coordinator and State On-Scene Coordinator regarding initiating the pre-emptive capture of unoiled wildlife and/or the capture and rehabilitation of oiled wildlife.

- Species appear in Appendix 2 (Migratory Birds), Appendix 3 (Marine Mammals), or Appendix 4 (Terrestrial Mammals):
 - Species has special status. *[NOTE: Species listed as threatened or endangered will be addressed via Federal On-Scene Coordinator Endangered Species Act Section 7 consultation with the Fish and Wildlife Service and/or National Marine Fisheries Service as appropriate.]*
 - Species population status is of international, national, or regional significance.
 - Percentage of the total population affected has been estimated.
 - Species are a subsistence resource.
- Activities proposed are appropriate for the species.
- Activities can be conducted in a safe manner.
- Sufficient and appropriate logistical support (e.g., transportation, personnel, equipment) is available.
- Adequate holding and/or rehabilitation facilities exist:
 - Wildlife will be maintained in an environment that has low risk of disease.
 - Subsequent release of rehabilitated wildlife poses no (or acceptable) risk of disease, social disruption, and/or mortality to wild animal populations.
- Effective rehabilitation of oiled animals has a high probability of success (i.e., anticipate good survival rate).
- Funding for the estimated cost of the program is available.
- Sufficient facilities exist (if necessary and appropriate) for keeping captive, wildlife that cannot be released back into the wild.
- Appropriate wildlife resource agency(ies) will assume oversight for all components of a wildlife pre-emptive capture and/or capture and rehabilitation program(s).

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Appendix 2

Species of Concern by Subarea: Migratory Birds

The designation of migratory birds as "species of concern" in these Guidelines is based on the following criteria: (1) the population of the species in the planning subarea represents a significant proportion of the species' total world population; (2) the species, or species group, is known to be particularly vulnerable to impacts from an oil spill; (3) the species has been given a special status (as noted below) by state or federal agencies; and/or (4) the species is an important subsistence resource.

The major group to which each species belongs is indicated as follows: waterfowl (WF), seabird (SE), and other diving bird (DB), shorebird (SH), raptor (RA), and upland bird (UB). Under the Endangered Species Act (ESA), "endangered" (denoted as "ES") means a species is in danger of extinction throughout all or a significant portion of its range; "threatened" (denoted as "TS") means a species is likely to become endangered within the foreseeable future. In addition, under the ESA, "candidate species" (denoted as "CS") are species for which the FWS has enough information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. A species or subspecies of birds is considered endangered (denoted as "SES") by ADF&G when the Commissioner of ADF&G determines that its numbers have decreased to such an extent as to indicate that its continued existence is threatened.

Appendix 2, Cont.

Species	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Yellow-billed Loon (DB)	P(CS)	P(CS)	P(CS)	P(CS)	P(CS)	--	--	P(CS)	P(CS)	--
Loons (other) (DB)	P	P/S	P/S	P	P	P	P/S	P/S	P/S	P
Grebes (DB)	P	P	P	P	P	P	--	P/S	A	P
Trumpeter Swans (WF)	U	P/S	P/S	A	A	A	A	R	--	P/S
Tundra Swans (WF)	P	P/S	P/S	P	P	P/S	P/S	P/S	P/S	P/S
Greater White-fronted Goose (WF)	U	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S
Snow Goose (WF)	U	P	P/S	P/S	P	P/S	P/S	P/S	P/S	P/S
Emperor Goose (WF)	A	U	U	P/S	P/S	P/S	P/S	P/S	R/S	P/S
Black Brant (WF)	U	P	P/S	P/S	P	P/S	P/S	P/S	P/S	A
Canada Goose (WF)	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S
Aleutian Canada Goose (WF)	--	--	--	--	P	--	--	--	--	--
Cackling Canada Goose (WF)	--	--	--	--	S	S	P/S	--	--	P/S
Dusky Canada Goose (WF)	--	P	--	--	--	--	--	--	--	--
Long-tailed Duck (WF)	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S
Greater Scaup (WF)	P/S	P/S	P/S	P/S	P	P/S	P/S	P/S	U/S	P/S
Common Merganser (WF)	P	P/S	P/S	P	P	P	R	R	--	R
Red-breasted Merganser (WF)	P	P	P	P	P/S	P/S	P/S	P/S	R/S	R
Northern Pintail (WF)	P/S	P/S	P/S	P	P	P/S	P/S	P/S	P/S	P/S
Bufflehead (WF)	P/S	P/S	P/S	P	P/S	P/S	R/S	R/S	A	P/S

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; A = Accidental; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species

Appendix 2, Cont.

Species	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Goldeneye (WF)	P/S	P/S	P/S	P	P/S	P/S	U/S	U/S	A	P/S
Canvasback (WF)	U	U/S	U	R	R	R	R	R	A	P/S
Northern Shoveler (WF)	U	P	P	R	R	R	U/S	U	R	P/S
Spectacled Eider (WF)	A(TS)	A(TS)	A(TS)	R(TS)	R(TS)	P(TS)	P(TS)	P(TS)	U/S(TS)	--
Steller's Eider (WF)	R(TS)	R(TS)	P(TS)	P(TS)	P(TS)	P(TS)	U(TS)	U(TS)	U/S(TS)	--
King Eider (WF)	R	U	U	P	P/S	P	P	P/S	P/S	--
Common Eider (WF)	R	U	U	P	P/S	P/S	P/S	P/S	P/S	--
Harlequin Duck (WF)	P/S	P/S	P/S	P/S	P/S	P/S	U/S	U/S	R	U
American Widgeon (WF)	P/S	P/S	P/S	P	P	P/S	P/S	P/S	U/S	P/S
Green-winged Teal (WF)	P/S	P/S	P/S	P	P/S	P/S	P/S	P/S	U/S	P/S
Scoter (WF)	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	U/S	P/S
Mallard (WF)	P/S	P/S	P/S	P	P/S	P/S	P/S	P/S	R/S	P/S
Bald Eagles (RA)	P	P	P	P	P	P	R	R	A	P
Northern Goshawk (RA)	U	U	U	U	U	U	R	R	--	P
Queen Charlotte Goshawk (RA)	CS	--	--	--	--	--	--	--	--	--
Osprey (RA)	R	R	R	R	R	R	R	R	A	R
American Peregrine Falcon (RA)	P	P	P	P	P	U	P	--	--	P
Arctic Peregrine Falcon (RA)	P	P	P	P	P	P	P	P	P	P
Peale's Peregrine Falcon (RA)	P	P	P	P	P	--	--	--	--	--

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; A = Accidental; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species

Appendix 2, Cont.

Species	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Snowy Owl (RA)	R	U	U	U	U	U	U	U	U/S	R
Sandhill Crane (SH)	P/S	P/S	P/S	P	P	P/S	P/S	P/S	U/S	P/S
Wandering Tattler (SH)	U	P	P	U	U	U	U	U	A	U
Bristle-thighed Curlew (SH)	A	A	A	R	R	R	U	U	R	A
Eskimo Curlew (SH)	--	--	--	--	--	--	?/ES/SES	--	--	?/ES/SES
Oystercatcher (SH)	P	P/S	P	P	P/S	P/S	/S	--	--	--
American Golden Plover (SH)	U	P	P	P	P	P	P/S	P/S	P	P
Semipalmated Plover (SH)	P	P	P	P	P	P	P/S	P/S	U	P
Aleutian Tern (SE)	A	U	U	U	R	U	U	U	A	--
Arctic Tern (SE)	P/S	P/S	P	P	P	P	P/S	P/S	U	P
Gulls (SE)	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P
Murres (SE)	P	P	P	P	P/S	P	P/S	P/S	P/S	A
Guillemots (SE)	P	P	P	P	P	P	P	P	U	A
Murrelets (SE)	P	P	P	P	P/S	P/S	U/S	U	R	--
Marbled Murrelet (SE)	P	P	P	U	U	U	A	A	--	--
Kittlitz's Murrelet (SE)	U/CS	P/CS	P/CS	U/CS	U/CS	U/CS	U/CS	U/CS	R CS	--
Auklets (SE)	U	U	U	P	P/S	P	P/S	P/S	--	--
Puffins (SE)	U	P	P	P	P/S	P/S	P/S	P/S	R	--
Northern Fulmar (SE)	U	P	P	P	P	P	P	P	R	--
Red-legged Kittiwake (SE)	--	R	R	P	P/S	P	R	R	--	A
Black-legged Kittiwake (SE)	U/S	P	P	P	P/S	P	P/S	P/S	P	A

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; A = Accidental; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species

Appendix 2, Cont.

Species	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Cormorants (SE)	P	P/S	P	P	P/S	P	P/S	P/S	R	A
Short-tailed Albatross (SE)	A/O/ES/SES	A/ES/SES	A/ES/SES	A/ES/SES	A/ES/SES	A/ES/SES	A/ES/SES	A/ES	--	--
Grouse (UB)	P	U/S	U/S	R	R	R/S	R/S	R/S	--	P/S
Ptarmigan (UB)	P	P/S	P/S	P	P	P/S	P/S	P/S	P/S	P/S

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; A = Accidental; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species

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Appendix 3

Species of Concern by Subarea: Marine Mammals

The designation of marine mammals as a "species of concern" in these Guidelines is based on the following criteria: (1) the population of the species in the planning subarea represents a significant proportion of the species' total world population; (2) the species, or species group, is known to be particularly vulnerable to impacts from an oil spill; (3) the species has been given a special status (as noted below) by state or federal agencies; and/or (4) the species is an important subsistence resource.

Under the Endangered Species Act (ESA), "endangered" (denoted as "ES") means a species is in danger of extinction throughout all or a significant portion of its range; "threatened" (denoted as "TS") means a species is likely to become endangered within the foreseeable future; "proposed" (denoted as "PS") means a species is proposed for listing. In addition, under the ESA, "candidate species" (denoted as "CS") are species for which the FWS has enough information on their biological status and threats to propose them as endangered or threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. Species of Concern (denoted as "SC") are species about which the NMFS has some concerns regarding status and threats, but for which insufficient information is available to indicate a need to list the species under the ESA. A species or subspecies of marine mammals is considered endangered (denoted as "SES") by ADF&G when the Commissioner of ADF&G determines that its numbers have decreased to such an extent as to indicate that its continued existence is threatened.

Appendix 3, Cont.

Species*	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Sea Otter	P/S	P/S	P/S/TS	P/S/TS	P/S/TS	P/S/TS	--	--	--	--
Polar Bear	--	--	--	--	--	--	--	P/S/TS	P/S/TS	--
Northern Fur Seal	O	O	O	U (nearshore) O	P/S	O (Gulf side)	--	--	--	--
Steller Sea Lion	P/S/TS	P/S/ES	P/S/ES	P/S/ES	P/S/ES	P/S/ES	U/S/ES	U/S/ES	--	--
Ringed Seal	--	--	--	--	--	U/S/PS	P/S/PS	P/S/PS	P/S/PS	--
Harbor Seal	P/S	P/S	P/S	P/S	P/S	P/S	U/S	--	--	--
Spotted Seal	--	--	--	--	P/S	P/S	P/S	P/S	P/S	--
Bearded Seal	--	--	--	--	U/S/PS	U (w/ice)/ S/PS	P/S/PS	P/S/PS	P/S/PS	--
Pacific Walrus	--	--	--	--	P/S/CS	P/S/CS	P/S/CS	P/S/CS	P/S/CS	--
Ribbon Seal	--	--	--	--	O	--	O	P (pack ice)/ S/SC	P (pack ice)/ S/SC	--
Bowhead Whale	--	--	--	--	U/ES	--	P/ES	P/S/ES	P/S/ES	--
Gray Whale	P/ES	P/ES	P/ES	P/ES	P/ES	P/ES	P/ES	P/ES	P	--
Fin Whale	P/ES	P/ES	O (not in CI) /ES	P/ES	P/ES	--	P/ES	U/ES	U/ES	--
Humpback Whale	P/ES/SES	P/ES/ SES	P/ES/SES	P/ES/SES	P/ES/SES	P/ES/ SES	O/ES/SES	O/ES/SES	U/ES	--
Minke Whale	P	P	P	P	P	P	P	P	U	--

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species PS = Proposed Species

* FWS has responsibility for managing and protecting sea otters, polar bears, and Pacific walruses; NMFS has responsibility for managing and protecting all other marine mammals in this appendix.

Appendix 3, Cont.

Species*	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Beluga Whale	P/S	--	P/S/ES	--	--	P/S	P/S	P/S	P/S	--
Killer Whale	P	P	P	P	P	P	P	P	P	--
Harbor Porpoise	P	P	P	P	P	P	P	P	P/S	--
Dall's Porpoise	P	P	P	P	P	P	P	R (to 65°N)	--	--
Pacific White-Sided Dolphin	P	O	O	U (nearshore) O	U (nearshore) O	--	--	--	--	--
Blue Whale	O/ES/SES	O/ES/SES	O/ES/SES	O/ES/SES	P/ES/SES	--	U/ES/SES	U/ES/SES	--	--
North Pacific Right Whale	O/R/ES/SES	O/R/ES/SES	O/R/ES/SES	O/R/ES/SES	R/ES/SES	P/ES/SES	R/ES/SES	R/ES/SES	--	--
Sei Whale	O/ES	O/ES	O/ES	P/ES	P/ES	--	--	--	--	--
Sperm Whale	O/ES	O/ES	O/ES	O/ES	P/ES	--	P/ES	O/R/ES	--	--
Baird's Beaked Whale	O	O	O	O	P	--	--	--	--	--
Cuvier's Beaked Whale	O	O	O	O	P	--	--	--	--	--
Stejneger's Beaked Whale	O	O	O	O	P	--	--	--	--	--
California Sea Lion	U	R	--	--	--	--	--	--	--	--
Northern Elephant Seal	O	O	O	O	P (nearshore) O	--	--	--	--	--

P = Present; U = Uncommon; R = Rare; O = Pelagic (well offshore); S = Subsistence Species; CS = Candidate Species; TS = Threatened Species; ES = Endangered Species; SES = State Endangered Species PS = Proposed Species

* FWS has responsibility for managing and protecting sea otters, polar bears, and Pacific walruses; NMFS has responsibility for managing and protecting all other marine mammals in this appendix.

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Appendix 4

Species of Concern by Subarea: Terrestrial Mammals

The designation of marine mammals as a "species of concern" in these Guidelines is based on the following criteria: (1) the population of the species in the planning subarea represents a significant proportion of the species' total world population; (2) the species, or species group, is known to be particularly vulnerable to impacts from an oil spill; (3) the species has been given a special status (as noted below) by state or federal agencies; and/or (4) the species is an important subsistence resource.

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Species	Subarea									
	Southeast	Prince William Sound	Cook Inlet	Kodiak	Aleutians	Bristol Bay	Western Alaska	Northwest Arctic	North Slope	Interior
Brown Bear	P/S	P/S	P/S/	P	P/S	P/S	P/S	P/S	P/S	P/S
Black Bear	P/S	P/S	P/S	--	--	P/S	P/S	P/S	P/S	P/S
Caribou/Reindeer	--	P/S	P/S	P	P/S	P/S	P/S	P/S	P/S	P/S
Moose	P	P/S	P/S	--	--	P/S	P/S	P/S	P/S	P/S
Muskoxen	--	--	--	--	--	--	P/S	P/S	P/S	--
Bison	--	P	--	--	--	--	P	--	--	--
Mountain Goat	P/S	P/S	P/S	P	--	--	--	--	--	--
Dall Sheep	--	P/S	P/S	--	--	P/S	P/S	P/S	P/S	P/S
Sitka Black-tailed Deer	P/S	P/S	P/S	P/S	--	--	--	--	--	--
Wolf	P	P/S	P/S	P	P/S	P/S	P/S	P/S	P/S	P/S
Arctic Fox	--	--	--	--	P/S	P/S	P/S	P/S	P/S	--
Red Fox	P	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S
Aquatic Furbearers (e.g., beavers, muskrats, and river otters)	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S	P/S

P = Present; S = Subsistence Species

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Appendix 6

Wildlife Protection Information: Migratory Birds

General Considerations

Bird Species of Interest

There are approximately 167 species of marine birds in Alaska (7 loons and grebes, 60 seabirds, 60 shorebirds, and 35 species of waterfowl). Although no overall list of species priorities will be provided within this guidance document, protection priorities for certain species may be established on an incident-specific basis. Species may also be prioritized for pre-emptive capture or tertiary response activities. In many cases, priorities will be accorded to special types of habitat areas as identified under "Primary Response" below, rather than to species; vulnerable species will be protected if special habitat areas are given priority. Nonetheless, the species listed in Appendix 2 will need to be given special consideration in the event that an oil spill affects them. Most of those species have small populations and a restricted geographic range. Since each of the species listed in Appendix 2 are very similar to one or more common species, Fish and Wildlife Service (FWS) and/or Alaska Department of Fish and Game (ADF&G) representatives (as appropriate) will need to provide assistance to the Federal and State On-Scene Coordinators (OSCs) in identifying birds.

There are five groups of migratory birds included in the guidelines:

- Seabirds (such as puffins, murres, auklets, petrels, shearwaters, kittiwakes, cormorants, albatrosses, and gulls) – found on the oceans from the coast to the high seas; most are on shore only during nesting season
- Waterfowl (geese, swans, and ducks) – use shorelines and bays
- Shorebirds (such as sandpipers and turnstones) – occupy tidal mudflats and rocks
- Diving birds (such as loons, grebes and sea ducks) – use nearshore waters
- Raptors (such as bald eagles and peregrine falcons) – prey on marine and other birds and therefore can become oiled

Except for most seabirds, all of these birds also commonly occur inland during the breeding season.

When an oil spill occurs within migratory bird habitat, every effort will need to be made to prevent birds from becoming oiled. If left untreated, birds exposed to oil will most likely die. When birds' feathers become oiled, their ability to thermoregulate is compromised and they become hypothermic. In the cold waters of Alaska, this can prove deadly to birds in the marine environment. Birds can also suffer toxic effects through dermal contact and ingestion of spilled oil depending on the type of oil and its toxicity. When oiled birds are captured alive and taken to

Appendix 6, Cont.

rehabilitation centers, they can often be cleaned and released back into their natural habitat. One of the keys to survivorship of oiled birds is ensuring a bird capture and rehabilitation program is initiated in a timely manner.

Birds exhibit obvious immediate behavioral changes in response to exposure to oil. In particular, they preen excessively to clean oil from their feathers. As a result, normal activities such as feeding, nesting, and migrating are abandoned causing birds to weaken and become more vulnerable to exposure and predation. Marine birds will abandon the water surface, which is their natural habitat, and move to land, if possible. However, on land, they become more vulnerable to predation. Oil on breeding birds' feathers can be transferred to birds' eggs resulting in nest failure. Dermal contact with oil can cause burns and lesions, which in turn, can compromise birds' feather structure resulting in hypothermia. Ingestion of oil while preening can affect birds' metabolic processes. These can result in long-term or chronic effects depending on the amount of preening and duration of exposure.

The severity of oiling impacts on birds will depend on many factors including, but not limited to:

- degree of oiling and length of exposure,
- health of the birds prior to exposure,
- natural hardiness of the species,
- toxicity of the product spilled, and
- distribution of the spilled product in the environment.

Based on their physiology and behavior, different bird species exhibit different levels of susceptibility to oiling as shown below:

Species Group	Susceptibility to Oiling
Alcids (murre, puffins)	High
Ducks, geese and swans	High
Sea and bay ducks	High
Grebes	High
Loons	High
Cormorants	Medium
Gulls	Medium
Waders (herons, egrets, bitterns)	Medium
Cranes	Low
Plovers, sandpipers	Low
Songbirds	Low
Raptors	Low
Pelagic birds (albatross, petrels, fulmars)	Low

Appendix 6, Cont.

Response Strategies

FWS will be the lead agency for all migratory bird response activities; ADF&G will assist on a case-by-case basis.

Primary Response. The primary response for protecting birds from an oil spill is to prevent the oil from reaching areas where birds are concentrated. This can be accomplished through the use of mechanical cleanup, on-water recovery, booms, *in situ* burning, and/or dispersant use, as appropriate. The use of booms and skimmers and *in situ* burning are preferable near concentrations of birds because dispersants reduce the insulating value of birds' plumage, and therefore, can cause bird mortalities. Spraying dispersants directly into large concentrations of birds near, or adjacent to, a targeted oil slick will need to be avoided. After dispersants have mixed with water, their danger to birds is reduced, although not eliminated.

Oiled debris and oiled wildlife carcasses will need to be removed from the environment as soon as possible to prevent secondary contamination of scavengers, including raptors. Secondary contamination can occur through (1) ingestion of oily carcasses, and (2) physical contact with oil on carcasses, or other oiled debris, by unoiled feathers. See Section II.B.1 for additional information on carcass collection.

Birds concentrate in various areas, depending on the species and season. If possible, the following types of areas where birds concentrate in the spring and fall will need to be protected following an oil spill:

- Migration stopovers ("staging areas"): Some migratory birds form immense flocks during spring and fall migrations. Shorebirds and waterfowl gather at lagoons and estuaries to feed. Critical areas in the spring (in approximate order of priority) include: Copper River Delta, Izembek Lagoon, Kachemak Bay, parts of Cook Inlet and Prince William Sound, Bristol Bay estuaries, and the Stikine River Delta. Critical areas in the fall include: Izembek Lagoon, Bristol Bay estuaries, parts of the Yukon-Kuskokwim Delta and Cook Inlet, and lagoons of the Beaufort and Chukchi Sea coasts. In addition, migrating seabirds are concentrated at Unimak Pass and waterfowl (e.g., spectacled eiders) are concentrated in Ledyard Bay during the spring and fall.
- Seabird colonies: Alaska seabirds nest in over 1,300 colonies in the spring and summer. The number of seabirds in these colonies ranges from a few dozen to several million birds. Birds are vulnerable to oil contamination when they are in large flocks on the water near the colony. Highest priority will need to be given to colonies containing rare species, the largest colonies in a region, and those with higher species diversity.
- Major feeding areas of seabirds: Most seabirds obtain their food at sea away from land. While they may feed in areas that are close to land or more than 100 miles offshore, they are often concentrated in small areas. As a result, the presence of oil in some feeding areas could negatively affect the majority of seabirds in the region. Feeding areas shift

Appendix 6, Cont.

with the tides and seasons, so the position of large flocks fluttering over, or sitting on, the water will need to be noted during reconnaissance flights and avoided, if possible, when applying dispersants.

- Wintering areas of marine birds: These include the sheltered ice-free inlets of southern Alaska, especially around Kodiak Island, Prince William Sound, and southeastern Alaska; localized parts of the Aleutian Islands and Bering Sea; and the edge of the ice pack as well as open leads in the pack ice. Concentrations of birds vary during the winter; locations of large flocks will need to be recorded during reconnaissance flights and avoided, if possible, when applying dispersants.

In addition, other important coastal habitats such as marshes, estuaries, and lagoons are sensitive to oil contamination and will need to be protected even when no birds are present.

In the event primary response strategies are proposed in locations where migratory birds (including eagles) are (or may be) present, the Federal OSC will need to immediately consult with FWS regarding the proposed strategies to ensure compliance with the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and Endangered Species Act.

Secondary Response. Secondary response strategies emphasize keeping potentially-affected birds away from oiled areas through the use of deterrent techniques. Secondary response strategies also include the pre-emptive capture and subsequent handling, transportation, short-term holding, and release of unoiled birds.

Deterrence Activities

A deterrent technique can be used to discourage birds from landing in or near an oil-contaminated area. If warranted, deterrence activities will need to be initiated as soon as possible following an oil spill to prevent birds from establishing or continuing regular use patterns within a contaminated area.

Deterrent devices used to disperse birds include both visual and auditory techniques, typically using a variety of devices based on the unique habits of different bird species, seasonality, surrounding environments, and the spill situations. Because the techniques require frightening birds to keep them away, in many cases, birds will need to be deterred from contaminated areas repeatedly and frequently. Any deterrence activity must ensure there is nearby clean, safe habitat to which birds may be hazed.

Bird deterrence includes both passive hazing and active hazing methods. Passive hazing employs the use of visual devices such as human effigies and predator models, and flags, balloons, and reflective tape that depend on wind-generated movement to create a disturbance. These devices can be deployed and left unattended for short periods of time. Active hazing includes noise-generating devices such as gas-operated exploders, pyrotechnics, and electronic sound generators, and use of boats, aircraft, and All Terrain Vehicles. Active hazing generally requires more on-site attendance.

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The choice of an appropriate method will depend on incident-specific considerations, such as: the type of oil spilled, time of year, species in the area, and availability of appropriate equipment, materials, and trained personnel. A summary of deterrent methods including a discussion of their effectiveness, and their limitations, can be found in the FWS policy document, *Best Practices for Migratory Bird Care During Oil Spill Response*.

All responders who wish to receive approval to conduct migratory bird deterrence activities (for species that are not listed as threatened and/or endangered under the ESA) will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting migratory bird deterrence activities is found in Appendix 15. Only individuals trained and certified in bird deterrence techniques by the U.S. Department of Agriculture Animal and Plant Health Inspection Service will be authorized to conduct migratory bird deterrence activities. Required oversight for migratory bird deterrence activities will be conducted by FWS or ADF&G, as appropriate. Any deterrence activities for migratory birds that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS.

A list of suggested equipment and materials for a deterrence kit for migratory birds is found in Appendix 16. A list of entities in Alaska with equipment and materials stockpiled for deterring migratory birds is found in Appendix 20.

Preemptive Capture

Preemptive capture includes capturing, handling, transporting, short-term holding, and releasing healthy, uncontaminated wildlife. In general, this response strategy has limited application based on species-specific criteria. Its greatest utility would likely be during migration when large flocks of birds are present and during flightless (molting) periods when bird deterrence is not likely to be successful. Considerations when conducting preemptive capture are human safety, bird safety, and minimizing transportation and holding times. In addition, prior to beginning a preemptive capture, appropriate release location(s) will need to be identified and approved.

All responders who wish to receive approval to conduct pre-emptive capture of migratory birds that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting the pre-emptive capture of migratory birds is found in Appendix 15. Any pre-emptive capture-related activities for migratory birds that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS. A list of entities in Alaska with equipment and materials stockpiled for the pre-emptive capture of migratory birds is found in Appendix 20.

Tertiary Response. Tertiary response strategies will be considered when efforts to protect birds are unsuccessful and birds become oiled. Tertiary response includes capturing, handling,

Appendix 6, Cont.

transporting, rehabilitating, holding, and releasing oiled birds. The FWS policy document *Best Practices for Migratory Bird Care During Oil Spill Response* provides detailed information for tertiary response activities.

A bird capture and rehabilitation program will need to be implemented as early as possible in a spill response effort to increase the survival rate of birds. The effectiveness of rescue efforts will be influenced by factors such as time of year, type and amount of material spilled, species involved, local terrain, tides, and weather. A variety of capture methods and techniques (e.g., including dip nets, net guns, mist nets, foot traps, and spotlighting) will typically be used to maximize capture success. Captured birds will need to be stabilized, receiving medical evaluation and preliminary treatment as quickly as possible. Stabilization will likely occur at a remote location prior to transporting birds to a distant center for rehabilitation and care.

The goal of rehabilitating oiled birds is the release of a healthy bird back into its natural environment. Release will likely involve transporting birds from the rehabilitation center to a location near the initial capture site. In the event birds that are captured and rehabilitated may be harvested for subsistence use, prior to their release, an “OILED-TREATED” band will be placed on the birds.

All responders who wish to receive approval to conduct capture and rehabilitation of migratory birds that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25. Information on wildlife resource agency permits required for migratory bird capture and rehabilitation is found in Appendix 15. Any capture-related activities for migratory birds that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS.

Appendix 17 provides a list of equipment and materials required for capture/stabilization kits for migratory birds. Appendix 18 provides a list of equipment and materials required for migratory bird stabilization modules. Appendix 20 provides information on entities in Alaska with equipment and materials stockpiled for capturing and rehabilitating migratory birds. Appendix 21 provides facility requirements for the rehabilitation of migratory birds.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for migratory birds.

Manuals: Deterring, Capturing, and Rehabilitating

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Appendix 6, Cont.

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Appendix 7

Wildlife Protection Information: Marine Mammals

General Considerations

In contrast to a spill response for migratory birds, the response to potentially-affected marine mammals will need to recognize that capturing and cleaning certain oiled marine mammals will generally be more complicated.

The sensitivity of marine mammals to spilled oil is highly variable. It appears to be most directly related to the relative importance of fur and blubber to thermoregulation. However, direct exposure to oil can also result in reversible conjunctivitis; ingestion of oil can result in digestive tract bleeding in addition to liver and kidney damage. Ingestion of oil is of greater concern for species that groom themselves with their mouth, such as polar bears and sea otters. Inhalation of hydrocarbon volatiles can result in nerve damage and behavioral abnormalities.

For species and groups of species discussed in this appendix, information is also provided on age classes that are most sensitive to oiling, special considerations relative to response procedures during a spill, and information on the feasibility of the type of response that could be used.

Marine mammals may carry zoonotic diseases. Proper equipment should be used when handling marine mammals to protect responders against this potential factor. In addition, marine mammals may become infected with diseases in captivity during cleaning, potentially preventing their subsequent release.

Response Strategies

The Fish and Wildlife Service (FWS) will be the lead agency for all sea otter, polar bear, and walrus response activities; the National Marine Fisheries Service (NMFS) will be the lead agency for all other marine mammal response activities; the Alaska Department of Fish and Game (ADF&G) will assist FWS and/or NMFS on a case-by-case basis.

Primary Response. The primary response strategy for all marine mammals emphasizes controlling the release and spread of spilled oil to prevent or reduce contamination of the potentially-affected species and/or their habitats. Priority will need to be placed on protecting pinniped haul-out and rookery beaches, particularly for those species that form male-harem bonds and strong territorial attachment to specific rookery sites (i.e., Northern fur seals and Steller sea lions).

For those species, using secondary or tertiary response strategies is probably not feasible during periods, such as the breeding season, when territorial bonding is strong.

Species of pinnipeds that do not form male-harem bonds often haul out in more protected, lower-energy shoreline areas or on ice, which could be more susceptible to oiling and less likely to be cleaned by natural forces. Areas where large numbers of these species are known to haul out

Appendix 7, Cont.

will need to be protected from oiling, if possible. If oil does contact shorelines or ice in important haul-out areas, those shorelines or ice will need to be afforded a high priority for cleaning with consideration given to pupping and molting schedules.

All other response activities will need to be conducted as far from marine mammals as possible to prevent disturbance, especially at pinniped haul-out and rookery beaches. Disturbance of haul-out and rookery beaches can result in mass stampedes of the animals, particularly into the ocean, followed by abandonment of the beaches. This disturbance can result in severe effects, including direct physical injury to newborn, small, or weak animals; separation of mothers and pups; disturbance of established social hierarchies; and movement to less favorable areas. The distance at which disturbance occurs is variable and depends on the level of response activities, local conditions of visibility, and the species.

Primary response strategies also includes removal of oiled carcasses from the environment to prevent marine mammals, such as polar bears, from ingesting oil as they scavenge for food. See Section II.B.1 for additional information on carcass collection.

In the event primary response strategies are proposed in locations where marine mammals are (or may be) present, the Federal OSC will need to immediately consult with FWS and/or NMFS (as appropriate) regarding the proposed strategies to ensure compliance with the Marine Mammal Protection Act (MMPA) and the Endangered Species Act (ESA).

Secondary Response. Secondary response strategies emphasize keeping potentially-affected wildlife away from oiled areas through the use of deterrent techniques. For marine mammals, this includes herding animals away from oil on the water and/or from oil-contaminated near-shore and beaches areas. This is most feasible for pinnipeds at haul-out and rookery areas during the period when territorial bonding is weakest (i.e., before pupping and after weaning). It also may be possible to deter polar bears when they are swimming.

A difficulty with using deterrent techniques for marine mammals, particularly sea otters, is that they habituate very easily to noise or other distractions.

All responders who wish to receive approval to conduct wildlife deterrence activities for marine mammals that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting marine mammal deterrence activities is found in Appendix 15. Any deterrence activities for marine mammals, including those that are listed as threatened and/or endangered under the ESA, will be addressed via Federal OSC ESA consultation with FWS and/or NMFS as appropriate.

Secondary response strategies also include the pre-emptive capture and subsequent handling, transportation, short-term holding, and release of unoiled wildlife. This is potentially the most viable deterrent strategy for sea otters. In addition, it may also be an option for small numbers of fur seals, polar bears, and/or other pinniped species. The principal factor to be considered before

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using this strategy is the risk of the animal contacting oil. The danger of shock and stress to an animal from being captured and relocated may far outweigh an animal's potential for being oiled.

All responders who wish to receive approval to conduct pre-emptive capture of marine mammals that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting the pre-emptive capture of marine mammals is found in Appendix 15. Any pre-emptive capture-related activities for marine mammals that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS and/or NMFS as appropriate. A list of entities in Alaska with equipment and materials stockpiled for holding polar bears is found in Appendix 20.

Tertiary Response. Tertiary response strategies include capturing, handling, transporting, stabilizing, rehabilitating, and releasing oiled animals. This should be performed only by people with experience in capturing and handling the subject species. Due to the size and the remoteness of many areas in Alaska, capture and cleaning of marine mammals may not be practical or beneficial due to a lack of proper equipment, trained personnel, and facilities. Safety of the animals and the human handlers should be taken into consideration. Only if it is determined that the probable survival of the oiled marine mammals is very low, and the likelihood of successful rehabilitation is high should tertiary response strategies be considered, and only after primary and secondary strategies have been employed.

All responders who wish to receive approval to conduct the capture, handling, transportation, stabilization, rehabilitation, and release of oiled marine mammals species that are not listed as threatened and/or endangered under the ESA will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting marine mammals capture and rehabilitation is found in Appendix 15. Any capture-related activities for marine mammals that are listed as threatened and/or endangered under the ESA will be addressed via Federal OSC ESA consultation with FWS and/or NMFS as appropriate.

Additional information can be found in the NOAA National Guidelines “Marine Mammal Oil Spill Response Guidelines” at this web address: <http://www.nmfs.noaa.gov/pr/health/>.

Agency Contacts

Contact information for wildlife resource agencies for each marine mammal species and groups of species is included in Appendix 26.

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Sea Otters

General Considerations

Of the marine mammals, the sea otter is the most sensitive to the effects of oiling. This fact – plus its relatively small size – has resulted in the development of techniques for capturing and rehabilitating oiled sea otters. The southwest Alaska Distinct Population Segment of the northern sea otter was listed as threatened under the Endangered Species Act in 2005. Sea otters are also protected under the Marine Mammal Protection Act. The statewide population of sea otters is believed to number around 65,000 animals.

The sea otter is considered to be equally vulnerable to spilled oil during all stages of its life cycle. Following an oil spill, sea otters are susceptible to a number of deleterious physiological effects. Because sea otters do not have layers of blubber, they rely on their fur for insulation. As a result, oiling of more than a small portion of their fur can result in rapid death from hypothermia. If oil contamination of the fur is not severe enough to cause death from hypothermia, sea otters will spend a great deal of time grooming in an attempt to remove the oil and maintain their fur. Sea otters have high metabolic requirements and the additional time spent grooming can increase metabolic needs, thereby reducing foraging time and leading to a lowered metabolic efficiency. If unresolved, this condition will result in starvation and death. Ingestion of hydrocarbons during the grooming process or through feeding on contaminated prey items can result in digestive-tract irritation, neurological effects and physiological changes, which in turn, can lead to organ injury, dysfunction, and death. Aromatic hydrocarbons can cause inhalation injury and death before either hypothermia or ingestion injuries affect the animals.

Response Strategies

FWS will be the lead agency for all sea otter response activities; ADF&G will assist on a case-by-case basis.

Primary Response. Primary response strategies need to be emphasized for sea otters because of their sensitivity to oiling and stress. The goal is to prevent oil from reaching areas where sea otters are concentrated, such as haul-outs, pupping and feeding areas (sensitive areas). Because sea otters react differently to disturbance, care will need to be taken to prevent response-related disturbance from driving sea otters into oiled areas.

The use of appropriate primary response strategies for protecting haul-outs will require determining whether available technologies are capable of working adequately in each haul-out area. Technology may not be available for protecting haul-outs located in high energy/exposed coastline areas.

Pupping areas are difficult to define and protect because the majority of sea otters give birth in either open water or near kelp beds which have undefined boundaries. If pupping areas are identified, booms will need to be placed far enough away to minimize disturbance and prevent driving sea otters into oiled areas.

Appendix 7, Cont.

Sea otters forage in rocky substrate and soft bottom communities, as well as in and around kelp. Special emphasis will need to also be placed on feeding areas containing intertidal and shallow subtidal prey species utilized by sea otters. Any low- to moderate-energy beaches with mussel beds or prey resources utilized by sea otters should receive priority protection.

Primary response strategies will need to also include carcass collection. To prevent oil from getting into the food chain, all sea otter carcasses will need to be retrieved and delivered to collection or morgue sites in accordance with an incident-specific carcass collection plan developed by appropriate wildlife response agencies representatives and approved by the Federal and State OSCs. See Section II.B.1 for additional information on carcass collection.

If primary response strategies are proposed in locations where sea otters are (or may be) present, the Federal OSC will need to immediately consult with FWS regarding the proposed strategies to ensure compliance with the MMPA and ESA.

Secondary Response. Pre-emptive capture is potentially the most viable deterrent strategy for moving sea otters away from areas contaminated by an oil spill. Pre-emptive capture and relocation of sea otters may be feasible if small numbers of animals are in danger of being oiled. The potential for sea otters to be oiled need to be high before this technique is recommended. Principal concerns when capturing and handling sea otters are minimizing transportation and holding times. The single most important factor to a successful capture operation is adequate communication. Marine band, single sideband, and handheld radios, as well as cellular phones can all be used if they are compatible with base station and relay equipment.

Sea otters must be regarded as dangerous in a captive situation and will need to be handled as little as possible during response operations. Handling will need to be conducted by qualified personnel who have been trained in FWS-approved courses.

Safety of sea otters will need to primarily be focused on stress reduction. Stress to sea otters is minimized by:

- having the equipment necessary to handle and transport animals as quickly and efficiently as possible;
- reducing the number of vessels used to capture animals in a given area;
- avoiding unnecessary noise and disturbance;
- never pursuing a sea otter to the point of exhaustion; and
- reducing contact with animals, except to provide veterinary care.

All responders who wish to receive approval to conduct pre-emptive capture of sea otters (where their population segments are not listed as threatened under the ESA) will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting the pre-emptive capture of sea otters is found in Appendix 15. Any pre-emptive capture-related activities for sea otters in areas where sea otter population segments are listed as threatened under the ESA will be addressed via Federal OSC ESA consultation with FWS.

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The use of deterrence (e.g., auditory, visual, olfactory, and/or herding) as a means to either attract or disperse sea otters has been found to be ineffective because sea otters habituate readily to noise and other distractions associated with human activity. Although slight behavior modifications have been observed, the modification and duration of effect were inadequate for protecting sea otters from potential impacts of an oil spill. Of the list of possible deterrent techniques, auditory deterrence such as propane cannons may have some application for short-term attempts to keep sea otters off oiled haul-outs.

All responders who wish to receive approval to conduct deterrent activities for sea otters where their population segments are not listed as threatened under the ESA will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting the pre-emptive capture of wildlife is found in Appendix 15. Any pre-emptive capture-related activities for sea otters in areas where sea otter population segments are listed as threatened under the ESA will be addressed via Federal OSC ESA consultation with FWS.

Tertiary Response. This response may be feasible under certain conditions and was first initiated in Prince William Sound and the Gulf of Alaska following the March 24, 1989, T/V *Exxon Valdez* Oil Spill. Sea otter capture and rehabilitation techniques used during this spill are described in reports prepared by R.W. Davis and T.M. Williams, which are listed below. Sea otter rehabilitation facilities/modules are available in Prince William Sound (through Alyeska Pipeline Service Company’s Ship Escort/Response Vessel System) and in Cook Inlet (through Cook Inlet Spill Prevention and Response, Inc.) .

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled sea otters, where their population segments are not listed as threatened under the ESA, will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting sea otter capture and rehabilitation is found in Appendix 15. Any capture-related activities for sea otters in areas where sea otter population segments are listed as threatened under the ESA will be addressed via Federal OSC ESA consultation with FWS.

A list of equipment for capture, handling, and rehabilitating oiled sea otters is found in Appendix 19. Information on entities in Alaska with equipment and materials stockpiled for capturing and rehabilitating sea otters is found in Appendix 20. Guidance for facility requirements for rehabilitating sea otters is found in Appendix 22.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for sea otters.

Appendix 7, Cont.

Manuals: Deterring, Capturing, and Rehabilitating

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Appendix 7, Cont.

Pinnipeds

General Considerations

In general, capture and rehabilitation of oiled pinnipeds should only be attempted by trained handlers. Adult male pinnipeds, especially Steller sea lions and Northern fur seals, may be too aggressive to safely capture and clean. While cleaning shorelines or beaches of pinniped rookeries is not recommended during the pupping and breeding seasons, cleaning of heavily oiled haul-out beaches may be recommended by appropriate wildlife resource agencies to help prevent pinniped oiling.

The following is a list of pinniped species that are discussed in the remainder of this appendix:

- Northern fur seals
- Steller sea lions
- Ringed seals
- Harbor seals
- Spotted seals
- Bearded seals
- Ribbon seals
- Pacific walruses

Northern elephant seals are reported only occasionally in Alaskan waters during the summer, primarily from Southeast Alaska to Prince William Sound. Northern elephant seals do not breed in Alaska. Therefore, because of its limited presence in Alaska and the very low probability of the species being threatened by oil spills in Alaskan waters, Northern elephant seals are not discussed in the following sections.

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Northern Fur Seals

General Considerations

The Pribilofs provide breeding grounds for approximately 50 percent of the world's population of northern fur seals. Hundreds of thousands of these animals return to the Pribilofs each summer to give birth and breed. The world population of the northern fur seal is estimated at 1.1 million. The U.S. population of northern fur seals has declined by over 60 percent in recent decades from over 2 million in the 1970s, to an estimated 687,000 in 2006. The species is currently listed as depleted under the Marine Mammal Protection Act. The Pribilof fur seal population has declined about 5 percent annually during the last decade. Northern fur seals also breed on Bogoslof Island in the central Aleutian Islands and their population has grown significantly in the past decade. Almost 20,000 northern fur seal pups were born on Bogoslof Island in 2011 and the total population may be near 100,000 individuals occupying the island during the summer and fall.

Northern fur seals are highly migratory and range along a broad arc across the north Pacific from the Sea of Japan through the southern Bering Sea to the Channel Islands (i.e., San Miguel Islands) off southern California. With the exception of the San Miguel breeding population, the animals migrate north in the spring to several Bering Sea and North Pacific breeding islands. Each year, the majority of these animals use several discrete shoreline locations on the Pribilofs for mating, pupping, and non-breeding landing sites. Together these sites are referred to as rookeries.

Important rookeries on St. Paul Island are found from Zapadni Point to Tolstoi Point (i.e., English Bay rookeries), along the shoreline of the peninsula south of the City of St. Paul (i.e., Reef Point rookery) and an offshore rock (i.e., Sea Lion Rock rookery), from the north side of Black Bluffs to north of Lukanin Point (i.e., Kitovi and Lukanin Rookeries), along the eastern shoreline near Polovina Point (i.e., Polovina Rookeries), and along both shorelines of the northernmost tip of the island (i.e., Northeast Point Rookeries). St. George Island also has several important northern fur seal rookeries found along the north coast from First Bluffs to the City of St. George (i.e., Staraya Artil and North Rookeries), east of the city toward Tolstoi Point (i.e., East Rookeries), and along the southwest coast from the harbor directly south (i.e., Zapadni and South Rookeries). It should also be noted that non-breeding northern fur seals also land at Otter and Walrus Islands. See Environmental Sensitivity Index maps for rookery locations on St. Paul and St. George Islands:

http://www.asgdc.state.ak.us/maps/cplans/aleut/PDFS/ESI_DATA/PRIBILOF.PDF

These animals have fur for insulation and only relatively thin blubber layers. Oiled fur can result in the loss of insulation. As a result, this species is the most sensitive to oiling of all of the pinnipeds. While fur seals do not groom with their mouths, they nibble their pelage with their teeth and can ingest oil while grooming. It is also possible that juvenile northern fur seals can ingest oil while nursing.

Appendix 7, Cont.

The greatest risk to northern fur seals from an oil spill is when they are on the breeding rookeries in the Pribilof Islands from May through November. At that time, approximately 80 percent of the world's northern fur seal population breeds and pups on the Pribilof Islands. Except for the breeding period, the northern fur seal remains at sea, feeding on mid-water fish and squid. During an oil spill, pups would be the most sensitive to the effects of oiling, while adults would be the most difficult to handle.

More detailed information on the characteristics of northern fur seals and potential oil spill impacts is found in the “Wildlife Protection Guidelines: Pribilof Islands,” which are on the internet at:

[http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7\(June%202011\).pdf](http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7(June%202011).pdf)

Response Strategies

Primary Response. Specific primary response strategy information for Northern fur seals in the Pribilof Islands is found in the “Wildlife Protection Guidelines: Pribilof Islands.” Primary response strategies will be emphasized for this species, since both secondary and tertiary responses are generally not feasible during most of the period when the animals are present on rookeries or hauled out. If primary response strategies are proposed in locations where Northern fur seals are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. No attempts should be made to drive breeding bulls, breeding females, and/or nursing pups during mid-May through mid-September. Territorial bulls cannot be driven during this time, and their belligerent behavior could result in great risk to individuals trying to drive them. In addition, disturbance of rookeries during this period can result in pup mortality due to pup abandonment and trampling. Specific secondary response strategy information for Northern fur seals in the Pribilof Islands is found in the “Wildlife Protection Guidelines: Pribilof Islands.”

All responders who wish to receive approval to conduct wildlife deterrence activities for Northern fur seals will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting Northern fur seal wildlife deterrence activities is found in Appendix 15. Pre-emptive capturing and relocation may be feasible, if only a small number of fur seals are in danger of being oiled. However, the potential for northern fur seals to be oiled will need to be high before this technique is used.

Driving northern fur seals away from an oiled beach would be feasible only for nonterritorial, non-breeding juvenile males (i.e., 3-to-4-year old animals may be driven from one beach area to another or they may be driven from a low beach area to higher ground and held for a period of time); and all animals before the breeding season begins (i.e., before mid-May) or after the breeding season ends (i.e., after mid-September).

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Tertiary Response. Specific tertiary response strategy information for Northern fur seals in the Pribilof Islands is found in the “Wildlife Protection Guidelines: Pribilof Islands.”

[http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7\(June%202011\).pdf](http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7(June%202011).pdf).

Capturing and cleaning oiled, northern fur seals is generally not feasible. The females spend part of the time nursing their young on the rookery and approximately one week at a time feeding at sea. This behavior increases their chance of contacting oil, particularly if it is near a rookery. Pups are most vulnerable to oiling when returning females transfer oil they have picked up to their young or when oil is washed onto rookery beaches. Since females nurse only their own pup, a cleaned pup would have to be returned to the rookery for its mother to find, which could expose the pup to re-oiling. Capturing and rehabilitating oiled pups is not recommended because of the danger to personnel from territorial bulls and problems associated with separating a pup from its mother. Furthermore, oiled adult northern fur seals would be extremely dangerous to handle even if they were partially debilitated.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled Northern fur seals will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting Northern fur seal capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for northern fur seals. See the “Wildlife Protection Guidelines: Pribilof Islands” for wildlife resource agency contact information for northern fur seals:

[http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7\(June%202011\).pdf](http://dec.alaska.gov/spar/perp/plans/scp_al/al_PribilofWildlifeGuidelines-Revision7(June%202011).pdf).

Appendix 7, Cont.

Steller Sea Lions

General Considerations

The Steller sea lion is the largest member of the family Otariidae, which includes sea lions and fur seals. Steller sea lion distribution extends along the Pacific Rim with its center of abundance in the Aleutian Islands and Gulf of Alaska where, historically, nearly three-quarters of all Steller sea lions in U.S. territory were found. Steller sea lions haul out on land to mate, bear their young, nurse, avoid predators and disturbance, and rest. Steller sea lions are generally considered non-migratory although some individuals, particularly juveniles and adult males, may disperse widely outside the summer breeding season. Pupping occurs at discrete sites (rookeries) from mid-May through mid-July. Sites classified as haul-outs may be also used throughout the year. Molting periods normally extend from June through August, during which time Steller sea lions can remain out of water for extended periods.

Under the ESA, the species is described by two distinct population segments (DPSs); the eastern DPS is listed under the ESA as a threatened species, while the western DPS (west of 144°W longitude) is listed as an endangered species. The western DPS has shown dramatic declines in the last several decades. At many sites, the number of Steller sea lions has declined by more than 80 percent since the mid to late 1970s, and at some sites, sea lions have all but disappeared. By contrast, the eastern DPS has been increasing in abundance at over 3 percent overall for about 30 years, more than doubling in Southeast Alaska, British Columbia, and Oregon.

A spill (depending on many variables such as amount and type of product spilled) could affect the health, survival and/or the reproduction of affected Steller sea lions. Steller sea lions can also be impacted by response activities, such as helicopter activity and/or vessel activity near rookeries or haul-outs. Steller sea lions are highly susceptible to disturbance when on haul-outs and rookeries. The marked sexual dimorphism in size within the species and the large size of adults, especially adult males, are both features of Steller sea lion morphology that are important to consider when evaluating their vulnerability to certain threats that can cause disturbance when the animals are hauled out on land. Smaller animals are vulnerable to injury or even death if trampled by adults, especially by large males. The large size of Steller sea lion adults also makes the capture, handling, salvage, and thus the monitoring and study of this species, more challenging than many other pinnipeds. A spill (again depending of type and size) could have effects on any sea lions that inhale vapors from fresh oil, especially if they are already in a weakened physiological state. Inhalation of high concentrations of volatile components of crude oil can damage the mucous membranes of the body, including those of the airways, can lead to lung congestion and, with high-enough concentrations, can cause hemorrhagic bronchopneumonia and pulmonary edema. Ingestion of crude oil can lead to diarrhea, increase passage time of food through the intestinal tract, and decrease the nutritional value of food. Skin irritation and conjunctivitis could result from prolonged exposure to oil. Such conditions can increase an individual's physiological stress and increase the likelihood of death of individuals that are highly contaminated or already weakened.

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Like Northern fur seals, Steller sea lions are easily disturbed when on haul-outs and rookeries. However, Steller sea lions are less susceptible to adverse effects of oil than are Northern fur seals. Unlike Northern fur seals, adult Steller sea lions have a thick layer of fat, and do not rely on their fur for insulation. The absence of grooming behavior in Steller sea lions lessens the chance of ingestion of oil. However, oil could be ingested through oiled food, or by pups during nursing.

Within the Steller sea lion population, females and pups have the greatest risk of oiling. During the pupping and breeding season, females spend part of their time on the rookery and part of their time feeding at sea. Steller sea lion pups, which are generally weaned one year after birth, have less subcutaneous fat than adults and are likely to be more sensitive to the effects of oiling. In addition, pups can ingest oil from their mothers while nursing.

Response Strategies

Primary Response. Primary response strategies, which prevent Steller sea lions and/or their habitat from becoming oiled, should be emphasized. Because some sea lion haul-outs and rookeries are seasonally occupied, it may be possible to access all or portions of those areas to remove surface oil prior to the arrival of Steller sea lions. However, since many of these sites may be occupied year-round, it will be important to coordinate closely with NMFS to avoid or minimize effects from response activities. To avoid causing disturbance related-injury or death, aircraft, especially helicopters, should avoid flying near Steller sea lion terrestrial sites. Responders will need input from NMFS on whether removal efforts would be appropriate for unoccupied sites, since many of those sites are exposed to significant wave action and may not retain oil. Whenever Steller sea lions are present on a haul-out or rookery, efforts to remove oil from the site are likely to harass the animals, leading to possible injury or death. In those cases, deflection booming (if possible) or other primary response strategies will be considered to prevent oil from reaching the site. Responders will need to work in close consultation with NMFS to ensure response actions do not unintentionally harass sea lions. It may be necessary to establish minimum approach distances for response personnel and equipment. If primary response strategies are proposed in locations where Steller sea lions are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA and ESA.

Secondary Response. Deterrence of Steller sea lions, in the water or on land, will not be attempted. In-water acoustic deterrence has not proven to be more than temporarily effective, and can actually attract Steller sea lions. Likewise, the use of boats for deterrence is ineffective. Any attempt to deter Steller sea lions from a rookery or haul-out can create panic or a stampede that may result in Steller sea lion injury or death, particularly to pups. It can also result in pup mortalities due to abandonment by their mothers. In addition, territorial Steller sea lions, particularly bulls, are large and dangerous animals that can pose a significant risk to personnel. It should also be noted that Steller sea lions, which are by nature inquisitive, may haul out on floats, vessels, or other response-related equipment. In those cases, it may be necessary to deter the animal(s). Because of its status under the ESA, any deterrence-related activities for Steller sea lions will be addressed via Federal OSC ESA consultation with NMFS.

Appendix 7, Cont.

Tertiary Response. Capturing and cleaning oiled adult Steller sea lions may not be feasible due to concerns for both the safety of the animals and the human handler. Unless the probability of survival for an oiled animal was considered very low, and the likelihood of successful rehabilitation was very high, tertiary response strategies will not be used. Capture and rehabilitation of adult sea lions would likely require administering anesthesia in the field, logistical difficulties in collection and transport of the animal to a suitable facility (with attendant danger to response personnel), rehabilitation, and release. Pups and juveniles can be small enough to capture and rehabilitate, however this is not recommended due to disruption of the mother/pup bond and danger to personnel from adult sea lions present on the site should be considered. Because of its status under the ESA, any capture-related activities for Steller sea lions will be addressed via Federal OSC ESA consultation with NMFS.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for Steller sea lions.

Appendix 7, Cont.

Ringed Seals

General Considerations

Arctic ringed seals have been proposed for listing as threatened under the ESA due to projected loss of sea ice habitat. Ringed seals have a thick blubber layer for insulation, and no grooming behavior, which lessens the chance of ingesting oil. However, pre-weaned pups probably are much more sensitive to the effects of oiling because they rely primarily on lanugo (i.e., a thick layer of white hair) for insulation and have little or no blubber layer at birth. Therefore, oiling of lanugo could result in the loss of insulation, which could be fatal to pre-weaned pups. March to June is the critical period for pups, which are born in March and April and are weaned by June. By the time the pups are weaned, they have a well-developed blubber layer for insulation.

Ringed seals do not establish breeding rookeries, and males do not form harems. Rather, pups are born and reared in subnivean (under snow) lairs constructed by their mothers. These lairs are scattered over the shorefast ice, and stable pack ice where sufficient snow has accumulated, minimizing the threat of a single oil spill to large proportions of the ringed seal population. During the breeding season, breeding adults are thought to dominate the shorefast-ice zone; non-breeding sub-adults apparently dominate the flow zone; and all ages of ringed seals occur in the pack ice.

The most immediate threat to ringed seals would be direct oil contamination of subnivean lairs and pre-weaned pups, or indirect oil contamination resulting from the transport of oil into lairs by adults. The extent of injury could be determined only by locating and opening lairs. It is possible to locate ringed seal lairs through the use of specially-trained dogs.

Response Strategies

Primary Response. Primary response strategies are emphasized for ringed seals. During the most sensitive period (i.e., the breeding period), the application of secondary and tertiary response techniques would be the most difficult. The process of locating and estimating any oil-related effects on subnivean lairs would be slow and labor intensive. If primary response strategies are proposed in locations where ringed seals are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. This response would be feasible only during periods, when animals are using ice floes for hauling out and conditions are not suitable for construction and occupation of lairs. It probably is not possible to catch ringed seals on ice floes, and chasing them into the water would likely result in negative, rather than positive, effects.

All responders who wish to receive approval to conduct ringed seal deterrence activities will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled

Appendix 7, Cont.

Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting ringed seal deterrence activities is found in Appendix 15.

Tertiary Response. There are challenges in attempting to capture and rehabilitate oiled pre-weaned ringed seals. Pre-weaned pups may not be able to be returned to the wild. After cleaning, pups would have to be returned to the oiled subnivean lair so their mothers could provide nourishment; mothers might abandon disturbed lairs, or they might re-contaminate the pups with oil. Attempting to capture and rehabilitate post-weaned ringed seal pups would be more feasible, however, if an animal, regardless of age, moves into the water when approached, it should be left alone.

It may not be possible to return treated ice seals, including ringed seals, back into the wild following capture and treatment, due to subsistence and disease concerns.

All responders who wish to receive approval to conduct ringed seal capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for ringed seals.

Appendix 7, Cont.

Harbor Seals

General Considerations

Harbor seals have a thick blubber layer for insulation and no grooming behavior, which lessens the chance of oil ingestion. However, pre-weaned pups are probably much more sensitive to the effects of oiling because they rely primarily on a fur coat for insulation and also because oiling could result in a pup's loss of insulation. Pups have little or no blubber layer at birth.

Harbor seals do not exhibit the bull-harem territorial behavior characteristic of fur seals and sea lions. Furthermore, pup production does not appear to be restricted to a few major rookeries, as is the case for sea lions.

Hauled-out harbor seals are easily disturbed. Adults and pups haul out on tidal rocks and lower portions of beaches near the water's edge, thus making them particularly likely to contact oil that comes ashore after a spill. Adult females readily enter the water when disturbed, leaving pups on the shore. Oil-cleanup crews should not pick up what appear to be abandoned pups because females probably will return; however, prolonged cleanup in harbor seal rookeries can result in permanent pup abandonment by females.

Response Strategies

Primary Response. Primary response strategies, which prevent harbor seals from becoming oiled, should be emphasized. If primary response strategies are proposed in locations where harbor seals are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. This response is feasible for swimming harbor seals and known harbor seal haul-out and rookery beach areas. The presence of cleanup crews on oiled beaches can keep animals away from affected areas. In areas of oiled beaches frequented by hauled-out harbor seals, it may be feasible to use noisemaking devices (such as propane cannons) to keep animals away until cleanup begins. Detering with predator or companion sounds may be effective.

All responders who wish to receive approval to conduct harbor seal deterrence activities will need to follow the requirements outlined in Appendix 24 "Approval Request Form: Unoiled Wildlife Deterrence Activities." Information on wildlife resource agency permits required for conducting wildlife deterrence activities for harbor seals is found in Appendix 15.

Tertiary Response. Attempting to capture and clean harbor seals may be possible. If a harbor seal is moribund and does not try to escape when approached, it is likely feasible to capture the animal and attempt to treat it. Only if it is determined that the probable survival of the oiled marine mammals is very low and the likelihood of successful rehabilitation is high, should tertiary response strategies be considered.

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All responders who wish to receive approval to conduct harbor seal capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for harbor seals.

Appendix 7, Cont.

Spotted Seals

General Considerations

Spotted seals have a thick blubber layer for insulation and no grooming behavior, which lessens the chance of oil ingestion. Pre-weaned pups are probably the most sensitive to the effects of oiling because they rely primarily on hair for insulation and have little blubber and also because oiled hair could result in the loss of a pup's insulation. The most critical period for this species is when pupping begins in late March and until weaning ends in June.

Spotted seals are similar in appearance and behavior to harbor seals, hauling out on ice floes in the spring and early summer and coastal beaches during ice-free months. Response techniques that apply to ringed and harbor seals also should apply to hauled-out spotted seals.

From late fall through spring, spotted seal habitat use is closely associated with sea ice. Spotted seals use sea ice starting with its formation in the fall, and often concentrate in large numbers on the early ice that forms near river mouths and estuaries. In winter, as the ice thickens and becomes shorefast along the coasts, spotted seals move seaward to areas near the ice front with broken floes. As spring approaches in the Bering Sea, spotted seals mainly inhabit the southern margin of the sea ice, where beginning in late March, sea-ice floes are used for pupping, nursing, and weaning. Male-female, male-female-pup, and female-pup groups usually are distributed over ice floes. While non-breeding animals usually are clumped into large groups, these groups of spotted seals typically are spread over relatively large areas.

Response Strategies

Primary Response. Primary response strategies will be emphasized for spotted seals. If primary response strategies are proposed in locations where spotted seals are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. During ice-free periods, spotted seals move into coastal haul-out areas. The presence of cleanup crews on oiled beaches can keep animals away from affected areas. In areas of oiled beaches frequented by hauled-out spotted seals, it may be feasible to use noisemaking devices (such as propane cannons) to keep animals away until cleanup is begun. Using deterrence during ice seasons may or may not be feasible depending on logistical access to the ice front. Deterring with predator or companion sounds may be effective.

All responders who wish to receive approval to conduct spotted seal deterrence activities will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for spotted seals is found in Appendix 15.

Tertiary Response. Assuming that they can be reached, attempting to capture and rehabilitate

Appendix 7, Cont.

spotted seals may be feasible. If an animal, regardless of its age, takes to the water when approached, it should be left alone. If the spotted seal is moribund and does not try to escape when approached, it may be feasible to pick up the animal and attempt to treat it.

It may not be possible to return treated ice seals, including spotted seals, back into the wild following capture and treatment, due to subsistence and disease concerns.

All responders who wish to receive approval to conduct spotted seal capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for spotted seals.

Appendix 7, Cont.

Bearded Seals

General Considerations

The Beringia Distinct Population Segment (DPS) of bearded seals, which includes Alaska, has been proposed for listing as threatened under the ESA due to projected loss of sea ice habitat. Bearded seals have thick blubber layers for insulation and no grooming behavior, which lessens their chance of ingesting oil. Pre-weaned pups probably are much more sensitive to the effects of oiling because they rely primarily on hair for insulation and have little blubber and also because oiled hair could result in the loss of a pup's insulation.

Unlike most Alaskan pinnipeds, bearded seals are bottom feeders. Thus, their distribution is limited to shallow areas, where water depth does not exceed approximately 200 meters. Bearded seals are closely associated with sea ice; and their seasonal movements are generally related to sea ice advance and retreat. Bearded seals typically avoid areas of continuous, thick, shorefast ice. During winter and spring, bearded seals in Alaska are widely distributed in the broken, drifting pack ice ranging from the Chukchi Sea south to the ice front in the Bering Sea. As the ice retreats in mid-April through June, most adults are thought to move into the Chukchi and Beaufort seas where they spend the summer and early fall near the wide, fragmented margin of multiyear ice. A small number of mostly immature individuals remain near the coasts, and can be found in bays, river mouths, and traveling up some rivers.

Most bearded seal pups are born on ice floes in the Bering Sea from mid-March through early May, with peak pupping occurring in the Bering Strait and northward during the last one-third of April and southward typically earlier in April. Wintering and pupping bearded seals are also known to occupy coastal leads in the Bering and Chukchi seas, and low densities of pupping females also occupy intermittent shore leads deep into the winter pack ice of these seas.

Bearded seal pups are most vulnerable to the effects of oiling from mid-March through June. Research suggests an extended lactation period of about 24 days. Among Arctic phocid seals, bearded seal newborns are relatively large and grow comparatively quickly.

Response Strategies

Primary Response. Primary response strategies will be emphasized for bearded seals. If primary response strategies are proposed in locations where bearded seals are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. The use of deterrence may or may not be feasible depending on logistical access to the ice front. Deterring with predator or companion sounds may be effective.

All responders who wish to receive approval to conduct bearded seal deterrence activities will need to follow the requirements outlined in Appendix 24 "Approval Request Form: Unoiled

Appendix 7, Cont.

Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for bearded seals is found in Appendix 15.

Tertiary Response. The bearded seal is the largest phocid seal in Alaska. Capture and treatment of adults may be difficult due to safety concerns for both the animals and the human handlers. In some situations capture and cleaning may be possible; however, if an animal, regardless of age, moves into the water when approached, it should be left alone. If the bearded seal is moribund and does not try to escape when approached, it would be feasible to pick up the animal and attempt to treat it.

It may not be possible to return treated ice seals, including bearded seals, back into the wild following capture and treatment, due to subsistence and disease concerns.

All responders who wish to receive approval to conduct bearded seal capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for bearded seals.

Appendix 7, Cont.

Ribbon Seals

General Considerations

Ribbon seals are a pelagic species, have a thick blubber layer for insulation and no grooming behavior, which lessens the chance of oil ingestion. Pre-weaned pups probably are much more sensitive to the effects of oiling because they rely primarily on hair for insulation and have little blubber, and also because oiled hair could result in the loss of a pup's insulation.

Ribbon seals are associated with the Bering Sea ice front during the winter and spring. It has been observed that ribbon seals tend to be most abundant in the northern part of the ice front. As the ice melts in the spring, ribbons seals become more concentrated with at least part of the Bering Sea population moving towards the Bering Sea Strait and the southern part of the Chukchi Sea. Unlike bearded seals, individual ribbon seals do not appear to follow the ice front as it retreats northward during the summer; they instead remain widely distributed offshore during the summer in the Bering, Chukchi, and Beaufort seas.

Ribbon seals do not haul out on land; rather they use ice floes for haul-out and pupping areas. However, due to the scattered distribution of ribbon seals, an oil-spill threat to a large proportion of the population is rather remote. The period before pups are weaned, when ribbon seals are most vulnerable, is late March through early June. The period between birth and weaning is approximately three to six weeks.

Response Strategies

Primary Response. Primary response strategies will be emphasized for ribbon seals. If primary response strategies are proposed in locations where bearded seas are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. The use of deterrence may or may not be feasible depending upon logistical access to ice fronts. Deterring with predator or companion sounds may be effective.

All responders who wish to receive approval to conduct ribbon seal deterrence activities will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for ribbon seals is found in Appendix 15.

Tertiary Response. Assuming that they can be reached, capturing and cleaning ribbon seals may be feasible. If an animal, regardless of age, takes to the water when approached, it should be left alone. If a ribbon seal pup is moribund and does not try to escape when approached, it may be feasible to pick up the animal and attempt to treat it.

Appendix 7, Cont.

It may not be possible to return treated ice seals, including ribbon seals, back into the wild following capture and treatment, due to subsistence and disease concerns.

All responders who wish to receive approval to conduct ribbon seal capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for ribbon seals.

Appendix 7, Cont.

Pacific Walruses

General Considerations

Walruses are nearly circumpolar with the Pacific walrus inhabiting the shelf waters of the Bering and Chukchi seas and extending into the eastern East Siberian and western Beaufort Seas. Alaska's population of Pacific walruses has increased steadily from the 1950's through the 1970's to near historic population levels. Surveys of the Pacific walrus population since the mid-1970's indicate that the population level is relatively steady or is decreasing slightly (i.e., 221,360 in 1975; 246,140 in 1980; and 201,039 in 1990).

In January, February and March, Pacific walruses are usually found in two areas, southwest of St. Lawrence Island and in outer Bristol Bay. From late March until December/January, walruses move north, then south, following ice reduction and growth. Walruses spend about one-third of their time hauled out on ice (which they prefer) and land.

Walruses are very gregarious and occur as small groups at sea or haul out in groups up to several thousand. Like fur seals and sea lions, Pacific walruses are extremely susceptible to disturbance at haul-out areas. Stampingeding can result in the injury or death by trampling of the pups and, to a lesser extent, juveniles and adults.

Since the record loss of sea ice in the Chukchi Sea in September 2007, walruses have been hauling out in large numbers in Alaska along the coast. Haul-outs were reported from several areas in 2007 with estimates of several hundred to thousands of animals depending on the location. In 2008, enough remnant ice persisted through the summer and fall that large haul-outs did not occur in Alaska. However, in 2009, a haul-out of about 3,000 animals formed at Icy Cape. Moreover, a haul-out formed just north of the village of Point Lay on the barrier island in 2007, 2009, 2010, and 2011. This haul-out numbered from a few hundred to a few thousand walruses in 2007 and 2009, peaking at more than 30,000 walruses in 2010, and decreasing to an estimated 20,000 animals in 2011. (It should be noted that estimates are from aerial overflights, rather than from formal counts. Haul-outs have formed earlier each year and persist for about four to six weeks. Walrus movement studies by the U.S. Geological Survey indicate that the animals along the Alaska coast eventually make their way to the Russian coast and then move south with the advancing sea ice in the fall.

These animals have thick skin and blubber layers for insulation and no grooming behavior, which lessens their chance of ingesting oil. However, nursing pups will be at risk due to ingestion of oil from contaminated teats. Adult walruses' thermoregulation abilities are probably not affected by direct contact with oil, since heat loss is regulated by control of peripheral blood flow through the animal's skin and blubber. There is evidence that short-term oil-induced irritation to the eyes (i.e., conjunctivitis) is reversible.

There can be long-term chronic effects as a result of migration through oil contaminated waters or as a result of hauling out onto oil contaminated land and ice, and there may be the possibility

Appendix 7, Cont.

of consuming contaminated prey items. Adult walrus may not be severely affected by the oil spill through direct contact; however, they are extremely sensitive to any habitat disturbance by response activities.

FWS will be the lead agency for all walrus response activities; ADF&G will assist on a case-by-case basis.

Primary Response. Primary response strategies will be emphasized for Pacific walrus. If primary response strategies are proposed in locations where Pacific walrus are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA.

Secondary Response. Herding animals away from an oil spill site may be feasible for Pacific walrus already in the water. However, hauled-out animals should be left alone due to the risk of trampling if stampeding occurs.

All responders who wish to receive approval to conduct Pacific walrus deterrence activities will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for polar bears is found in Appendix 15.

The following is a general summary of deterrent methods, their effectiveness, and their limitation.

Visual Methods

- There are no data indicating that visual methods are effective in keeping walrus away from a specific site.

Auditory Methods

- The use of propane cannons and other firearms may be effective for short-term deterrence of walrus that are already in the water; however, this method will not be used in the vicinity of haul-out sites.

Other Methods

- Herding walrus with vehicles, boats, or aircraft has not been demonstrated to be successful.

Tertiary Response. Attempting to capture and rehabilitate Pacific walrus generally is not feasible because of their sensitivity to disturbance and the potential danger to personnel posed by the walrus’ large size and belligerent behavior.

Appendix 7, Cont.

All responders who wish to receive approval to conduct Pacific walrus capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for Pacific walruses.

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Appendix 7, Cont.

Cetaceans (Baleen and Toothed Whales)

General Considerations

Research on the susceptibility and sensitivity of small, warm-water cetaceans to oil indicates that if directly exposed to oil for short periods of time, transient effects to the skin will occur. In addition, short-term effects on feeding by baleen whales may occur but would be reversed within a few days after the whales moved into clean waters. Furthermore, bioaccumulation of petroleum hydrocarbons may occur, but its long-term effects are unknown.

The above considerations would apply in areas of open ocean where exposure would be relatively short-term. However, if oil is trapped within an ice lead, the duration of exposure and associated effects might be increased for whales (such as bowheads or belugas) that use the ice lead as a migration pathway.

Response Strategies

Primary and secondary response strategies are generally the only feasible response strategies for this group of marine mammals. Some species, particularly large whales (such as bowheads), will avoid areas of intensive human activity and could possibly be steered away from a spill site. Likewise, harbor porpoise generally avoid ships and human activity. Other species, such as Dall's porpoise, are attracted to ship traffic and human activity and might be attracted to a spill.

If primary response strategies are proposed in locations where cetaceans are (or may be) present, the Federal OSC will need to immediately consult with NMFS regarding the proposed strategies to ensure compliance with the MMPA and ESA.

Deterrence techniques have been developed for killer whales in Washington state and may be appropriate for killer whales in Alaska:

http://response.restoration.noaa.gov/sites/default/files/whale_response.pdf

All responders who wish to receive approval to conduct cetacean deterrence activities for species that are not listed as endangered under the ESA will need to follow the requirements outlined in Appendix 24 "Approval Request Form: Un-oiled Wildlife Deterrence Activities." Information on wildlife resource agency permits required for conducting wildlife deterrence activities for cetaceans is found in Appendix 15. Any deterrence-related activities for cetacean species that are listed as endangered under the ESA will be addressed via Federal OSC ESA consultation with NMFS.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for cetaceans.

Appendix 7, Cont.

Manuals: Deterrence and Capturing

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Appendix 7, Cont.

Polar Bears

General Considerations

Two populations of polar bears (*Ursus maritimus*) occur in Alaska: (1) the Southern Beaufort Sea population which is shared with Canada, and (2) the Chukchi/Bering seas population, which is shared with Russia. Based on recently conducted mark/recapture studies from 2001-2006, the Southern Beaufort Sea population has approximately 1,500 bears and is currently thought to be declining. Although accurate estimates of the Chukchi/Bering seas population are unavailable, the best available information suggests that there may be about 2,000 bears and that the population is declining. In 2008, the polar bear was listed as a threatened species under the Endangered Species Act. The polar bear is also protected under the Marine Mammal Protection Act.

Polar bears are migratory in that they move in association with the arctic ice pack. Polar bears tend to occur in low densities over large areas and generally do not concentrate. They tend to be solitary animals or family groups following the annual variations in seal distributions, which are associated with fluctuations in the ice conditions and water depth. Polar bears' preferred prey are ringed seals (*Phoca hispida*), whose populations may be more at risk to oil contamination than polar bears. Polar bears along the North Slope of Alaska will tend to gather in areas where ringed seal pups occur during the spring. Polar bears may concentrate where an abundance of beach-washed marine mammal carcasses is available. There have been occasional observations of 20 to 50 polar bears associated with whale carcasses and whale butchering sites in Eskimo villages.

There is no single critical period for polar bears, although bears are most sensitive to disturbance during denning. Denning is initiated by late November with family groups emerging during late March and early April. Recent studies in the Beaufort Sea indicate that greater than 80 percent of the dens in this area are located on sea ice, primarily thick multiyear ice plates. Denning locations for the western stock are not as well documented, although a high density of dens is known to be located on Wrangell Island in Russia.

Polar bears are most sensitive to disturbance from oil spill clean-up activities and oiling of female bears prior to denning (October-April). In addition, weather conditions and care of young during winter months create great energy demands on polar bears which could lead to a highly stressed physiological state, if they coincide with an oil spill. Cleanup operations that disturb a den could result in death of cubs through abandonment, and perhaps death of the sow as well. In spring, females with cubs of the year that denned near or on land and migrate to offshore areas may encounter oil (Stirling *in* Geraci and St. Aubin 1990). Other family groups with yearlings or two-year-old cubs as well as other sex/age classes may also be exposed if feeding or traveling near shore.

Oil spills occurring in areas where polar bears are concentrated, such as feeding areas, can correspondingly affect a greater proportion of the population. Areas of open water, such as leads

Appendix 7, Cont.

or polynyas, and areas where beachcast marine mammal carcasses occur may concentrate polar bears. An oil spill in an area where polar bears are concentrated could have negative population effects.

Polar bears rely on blubber, guard hair, and a dense under fur for insulation. Once the animal's fur is contaminated with oil, vigorous and continuous grooming occurs, which can result in renal failure and dysfunction of red blood cell production. While large quantities of oil may be tolerated by polar bears if the oil is rapidly excreted from the gastrointestinal tract, only a few milliliters of aspirated oil are fatal.

Response Strategies

FWS will be the lead agency for all polar bear response activities; ADF&G will assist on a case-by-case basis.

Primary Response. Primary response strategies will be emphasized for polar bears. The goal is to prevent the oil from reaching sensitive areas such as denning sites, feeding sites, or areas where polar bears are concentrated. Cleanup methods that disturb a den would probably result in the death of a cub, and perhaps the sow. Areas where dens are located should be avoided by all personnel at all times.

Oiled carcasses and other debris from open water or the shoreline will need to be collected regularly. Debris removal will minimize the potential for oiling of polar bears through scavenging or contact with contaminated flotsam. To prevent oil from getting into the food chain, all polar bear carcasses will need to be retrieved and delivered to collection or morgue sites in accordance with an incident-specific carcass collection plan developed by appropriate wildlife response agencies representatives and approved by the Federal and State OSCs. See Section II.B.1 for additional information on carcass collection.

If primary response strategies are proposed in locations where polar bears are (or may be) present, the Federal OSC will need to immediately consult with FWS regarding the proposed strategies to ensure compliance with the MMPA and ESA.

Secondary Response. Secondary response strategies focus on deterring polar bears from areas contaminated by an oil spill. This response is appropriate under all circumstances and can be incorporated with primary response strategies. The degree of risk associated with the animal actually contacting oil before secondary response strategies are initiated need to be considered. If the spill occurs when polar bears are believed to be present, an aerial survey will need to be conducted to locate potentially-affected animals.

Deterrent Activities

A deterrent is any method or device used to keep bears away from a particular location. To be effective, the best deterrence requires early detection. [Detection methods, which may be used in

Appendix 7, Cont.

conjunction with deterrents, can include bear monitors, trained dogs, trip wires, and motion sensors. If polar bears are detected near a spill area or response operation, all personnel in the area will need to move to a designated safe location. Procedures for retreating and designated safe places will need to be established as soon as the response operation is initiated.

The following information on deterrent techniques is based on information presented by Dick Shideler, ADF&G, in *Guidelines for Oil and Gas Operations in Polar Bear Habitats* (1993).

Deterrent Techniques: Visual or Olfactory

There are no data indicating that visual or olfactory deterrent methods are effective in keeping polar bears away from specific sites. Artificial light, such as the electric lighting system at industry sites, may deter some bears at night but may not be effective in fog or white out conditions and should not be relied on solely as a deterrent.

Deterrent Techniques: Auditory

Use of auditory deterrence such as the firing of propane cannons or warning shots is effective for short-term deterrence, but the animals may habituate to this method. Starting and revving a vehicle engine may be sufficient noise to deter bears from entering or moving toward a spill site. In Canada, test results indicated that polar bears may be deterred by electronically synthesized polar bear aggressive “roars” broadcast at over 120 decibels from loudspeakers.

Additional noisemakers, such as cracker shells, screamers, firecrackers, sirens, and air horns are designed to produce a loud noise that will scare a bear. These noisemakers, as well as sirens and air horns, can be effective on some bears but not others. In addition, some bears may habituate to noise, especially if used repeatedly without an accompanying physical deterrent action. Adverse weather such as high winds or cold temperatures may minimize the effectiveness of noisemakers.

Deterrent Techniques: Physical Stimuli

Auditory deterrence used in combination with physical stimuli could enhance the effectiveness of the deterrent action. Projectiles, such as plastic bullets (usually fired from a 12-gauge pump shotgun) and rubber batons have been successfully used to deter polar bears.

Because of the insular value of snow, ice, and thick fur of the bear, no electric fence design has been effectively employed to deter polar bears on snow or ice. Electric fences may be used in a snow-free environment, but will need to be grounded in order to operate properly.

Appendix 7, Cont.

Deterrent Techniques: Herding or Hazing

Herding or hazing (dispersal of) polar bears with vehicles, boats, and aircraft has been successfully demonstrated. These methods may be effective when oil is confined to a small area and can be regularly patrolled.

Because of its status as threatened under the ESA, any deterrence-related activities for polar bears will be addressed via Federal OSC ESA consultation with FWS.

Pre-emptive Capture

Pre-emptive capture should only be initiated if all other methods under the secondary response strategy are ineffective in deterring bears from a spill site. Pre-emptive capture and relocation of polar bears is only feasible if small numbers of animals are in danger of being oiled and suitable relocation sites are nearby. The potential for polar bears to be oiled will need to be high before this technique is initiated.

Capture operations should only be conducted by or with oversight from a FWS representative. Personnel safety is a priority during polar bear capture, holding and release operations. Capture and release operations will not be conducted when weather, ocean, or other conditions jeopardize human safety.

Because of its status as threatened under the ESA, any pre-emptive capture for polar bears will be addressed via Federal OSC ESA consultation with FWS.

A list of entities in Alaska with equipment and materials stockpiled for holding polar bears is found in Appendix 20.

Tertiary Response. Tertiary response strategies include capturing, handling, transporting, rehabilitating, holding, and releasing polar bears. While this response may be feasible on a small scale, little is known about the potential effects of capturing oiled polar bears. However, rehabilitation of individual animals may be considered on a case-by-case basis, with pregnant females and sows with cubs given priority. Careful consideration should be made of the added handling stress and the potential for spreading diseases.

Because of its status as threatened under the ESA, any capture and rehabilitation of polar bears will be addressed via Federal OSC ESA consultation with FWS.

A list of entities in Alaska with equipment and materials stockpiled for holding polar bears is found in Appendix 20.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for polar bears.

Appendix 7, Cont.

Manuals: Deterring, Capturing, and Rehabilitating

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Schwiensburg, R.E., I. Stirling, M. Shoesmith, F. Juck, R. Engelhardt. December 1985. Action Plan for Protection of Polar Bears in the Event of a Major Oil Spill. Report to the Federal/Provincial Polar Bear Administrative Committee.

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http://www.alaska.boemre.gov/reports/1990rpts/93_0008.pdf

Stirling, I. 1990. Pages 223-234 *in* Sea mammals and oil: confronting the risks. J.R. Geraci and D.J. St. Aubin, eds. Academic Press. San Diego, CA.

Appendix 8

Wildlife Protection Information: Terrestrial Mammals

General Considerations

Little research has been done on the effects of oil on terrestrial mammals or on their susceptibility to oiling in the wild. However, it is possible to extrapolate potential oil spill impacts based on an examination of existing studies and observations of the behavior, food preferences, and habitat requirements of individual species.

Given that marine oil spills are statistically the most likely source of wildlife contamination, terrestrial species that spend a great deal of time feeding or traveling in intertidal areas and nearshore waters are at the greatest risk of contacting oil. Bears, foxes, wolves, marten, and wolverines commonly scavenge for carcasses in intertidal areas and are at high risk due to the likelihood of their encountering oiled carcasses. Mink and river otters are also at risk due to their frequent association with coastal habitats. Ungulates tend to spend a smaller percentage of their time in coastal areas, although deer and caribou do utilize these areas on a fairly consistent, seasonal basis.

Intertidal areas are used throughout the year, although use is particularly high for many terrestrial species during winter and early spring since beaches often provide the easiest routes for travel as well as a food source when other sources are scarce.

Inland oil spills along the Trans-Alaska Pipeline are most likely to impact animals utilizing rivers, streams, and wetland areas, since significant transport and spread of inland oil spills generally occurs via water. In addition to virtually all the species mentioned above, beavers, muskrats, and moose spend considerable time in or around inland waters. Muskoxen, bison, Dall sheep and mountain goats are also present in the Trans-Alaska Pipeline corridor and could be affected by terrestrial spills or cleanup activities.

Oil-related mortalities generally occur due to internal injury resulting from ingestion of oil, dermal absorption of oil, or as a result of hypothermia caused by oiling and matting of fur. Animals spending a great deal of time in the water will frequently groom to maintain insulating properties of their fur and therefore can be expected to encounter problems due to both ingestion and hypothermia. Experience with oiled sea otters supports this. Injuries associated with ingestion of oiled food will probably be the primary impact to mammals such as bears, foxes, wolves, marten, and wolverines, which feed in intertidal areas but do not commonly swim in the water.

Young animals may have lower tolerances to the toxic effects of oil. In addition to coming into direct contact with oil, young animals still being fed by parents could potentially be contaminated by parents bringing oil back to the nest or den on their fur or on food. Parents can also expose nursing young to petroleum hydrocarbons passed on in their milk.

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Response Strategies

The Alaska Department of Fish and Game (ADF&G) will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies for emphasize mitigating the release and spread of spilled oil to prevent or reduce contamination of potentially-affected species and/or their habitat. Primary response strategies can include, for example, mechanical cleanup, protective booming, *in situ* burning, and/or dispersant use. The most effective primary response strategy is to prevent oil from reaching the shoreline. In many cases, shoreline protection may be the only viable response strategy.

Another primary response strategy involves the removal of oiled carcasses from beaches. This strategy minimizes the chances of opportunistic feeders (such as bears, wolves, and foxes) ingesting oiled carcasses. See Section II.B.1 for additional information on carcass collection. Similarly, removal of oiled kelp from intertidal areas, especially during the winter and spring, would eliminate a source of oil contamination for foraging Sitka black-tailed deer. However, removal of live seaweed from intertidal zones should be undertaken only after careful consideration of potential negative impacts on the intertidal community. If a decision is made to remove live oiled kelp, only the upper portion of the oiled leaves should be removed. The stipe and basal portion of the kelp leaves will need to be left to regenerate.

Secondary Response. Secondary response strategies involve keeping animals away from oiled areas. These strategies will be evaluated on a case-by-case basis, since they are likely to be labor intensive, stressful, dangerous to the animals, and may only be effective for a short time, if at all.

Techniques for deterring birds (which are described in Appendix) may be applicable to terrestrial mammals in some cases. This could include the use of visual and auditory deterrence such as aircraft and ground vehicles. Various species will respond differently and habituate more or less rapidly than others.

All responders who wish to receive approval to conduct wildlife deterrence activities will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for terrestrial mammals is found in Appendix 15.

Tertiary Response. Tertiary response strategies involve capturing, handling, transporting, stabilizing, rehabilitating, and releasing oiled animals. This option is not recommended as a viable response strategy for minimizing oil spill impacts on populations of terrestrial mammals. The effects of drugging or physically restraining animals, in addition to stress induced by handling, can actually increase mortalities. Another important consideration is the potential for an animal to contract and/or spread diseases while in captivity.

Appendix 8, Cont.

If the health of the animal is not closely monitored, diseased animals can be released, potentially spreading infections among wild populations. Therefore, severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols. In some cases, however, rehabilitation of individual animals can be considered for humane reasons. In the event that a tertiary response is initiated, information on capturing, handling, and rehabilitating terrestrial mammals is included or referenced in this document.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Terrestrial Mammals of Interest

The wildlife descriptions in the remainder of this appendix focus on terrestrial mammals that frequent coastal and/or inland areas subject to petroleum contamination. Species covered include ungulates (caribou, muskoxen, moose, Sitka black-tailed deer, Dall sheep, bison, and mountain goats), brown and black bears, wolves, and furbearers (red foxes, Arctic foxes, river otters, mink, muskrats, beavers, wolverine, and marten).

Appendix 8, Cont.

Ungulates

Ungulates addressed in this appendix include caribou, muskoxen, moose, Sitka black-tailed deer, bison, mountain goats, and Dall sheep.

General Considerations

Ungulates do not generally utilize intertidal and nearshore habitats as intensively as many other terrestrial species. However, Sitka black-tailed deer frequently forage on the beach during the winter and spring and will occasionally swim short distances. Arctic and Alaska Peninsula caribou also frequent coastal areas during the summer to avoid insect harassment. Muskoxen occasionally feed in coastal areas.

All ungulates, with the exception of deer, could be impacted by inland spills along the Trans-Alaska Pipeline, especially if the oil spill enters rivers and streams. As with all animals, cleanup activities associated with inland spills can also create significant disturbances.

Deer, moose, and caribou could potentially swim or wade through oil and subsequently ingest oil by licking it off their fur. All ungulates are subject to ingesting contaminated vegetation, although, as mentioned above, deer are probably most subject to this risk due to their winter feeding habits. Ingestion of oil would probably be more harmful than external oiling alone since hypothermia resulting from oiled fur is unlikely to occur. Potential internal injuries include those to the liver, kidneys, lungs, tissues around the eyes and nose, and the lining of the digestive tract. Internal injuries would be difficult (or impossible) to treat effectively.

Response Strategies

The Alaska Department of Fish and Game (ADF&G) will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies should emphasize keeping spilled oil away from ungulate habitat.

Secondary Response. Secondary response strategies will be evaluated on a case-by-case basis, keeping in mind that deterrence can be labor-intensive, stressful, and dangerous to individual animals, and perhaps only effective for a short time, if at all.

All responders who wish to receive approval to conduct deterrence activities for ungulates will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for ungulates is found in Appendix 15.

Appendix 8, Cont.

Tertiary Response. Capturing and rehabilitating ungulates is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled ungulates will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

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Caribou

General Considerations

Several caribou herds are found throughout Alaska. All four Alaskan Arctic herds (Western Arctic, Teshekpuk Lake, Central Arctic, and Porcupine), the North and South Alaska Peninsula herds, and caribou on Unimak and Adak islands could potentially encounter oil in coastal areas. On the Arctic Slope and Alaska Peninsula, during the post-calving/insect relief season (mid-June to early August), thousands of caribou may be distributed along the coast, especially on river deltas, points, and other promontories to seek relief from mosquitoes and flies. Arctic caribou also commonly wade or swim to barrier islands for the same reason.

Herds that could potentially encounter oil spilled in the Trans-Alaska Pipeline corridor include the Western and Central Arctic herds, and the Ray Mountains and Nelchina herds. The Kenai Lowlands herd could also potentially encounter inland spills resulting from Kenai area industrial operations or the Swanson River field.

Ingestion of oil can result from animals licking oil off their fur or eating oiled food. However, there is less opportunity for ingestion via feeding because caribou do not commonly eat beach-cast forage such as kelp. However, laboratory evidence indicates that reindeer will eat foods contaminated with oil, especially if the food is of a preferred type, such as lichen. Caribou are also potentially subject to disturbance from oil spill response and cleanup operations.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response should emphasize keeping spilled oil away from caribou habitat. For example, caribou that are harassed by insects commonly aggregate in large groups on the windward side of deltas and promontories. These same sites can be where oil accumulates along the shoreline. Therefore, the primary response in both coastal and inland areas should be to prevent oil from reaching caribou gathering areas.

Secondary Response. Secondary response strategies will be evaluated on a case-by-case basis, keeping in mind that deterrence can be labor-intensive, stressful, and dangerous to individual animals, and perhaps only effective for a short time, if at all. During periods of insect harassment, caribou responses to hazing or herding are likely to be unpredictable. Pregnant cows moving to calving areas may be difficult to deter.

All responders who wish to receive approval to conduct deterrence activities for caribou will need to follow the requirements outlined in Appendix 24 "Approval Request Form: Unoiled Wildlife Deterrence Activities." Information on wildlife resource agency permits required for conducting wildlife deterrence activities for ungulates is found in Appendix 15.

Tertiary Response. See previous discussion under "Ungulates" in this appendix.

Appendix 8, Cont.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for caribou.

Appendix 8, Cont.

Muskoxen

General Considerations

Muskoxen occur most commonly around Cape Thompson, in the Arctic National Wildlife Refuge (ANWR), and on Nunivak Island. In addition, musk ox herds have extended their range west from ANWR. Small herds are also present in the Sagavanirktok River corridor on a year-round basis. These animals can be affected by an oil spill from the Trans-Alaska Pipeline.

Individual or small numbers of muskoxen may occasionally frequent coastal areas, especially river deltas, apparently to feed on salt-rich coastal terrestrial plants. Storms could potentially bring oil into these areas where it could contaminate vegetation and then be ingested.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for muskoxen.

Appendix 8, Cont.

Moose

General Considerations

Moose are present throughout most of Alaska, with the exception of Kodiak Island, the Aleutian Islands, and islands in Southeast Alaska. Moose are generally found in inland habitats and do not often venture into intertidal areas. They prefer marshy areas, streams, and lakes and are commonly concentrated along river corridors on a year-round basis.

While moose are found all along the Trans-Alaska Pipeline corridor (except at the higher elevations in the Brooks, Alaska, and Chugach Ranges) they are most abundant between Pump Stations 7 and 12. As a result, moose are susceptible to ingesting aquatic vegetation contaminated by inland spills from the Trans-Alaska Pipeline. Since moose also enter fresh water to seek relief from insects during the summer, they could become externally oiled by contaminated water.

At the end of severe winters, many moose are likely to be close to starvation. When moose are in a weakened state, every effort should be made to avoid forcing them to move as a result of cleanup and response activities.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for moose.

Appendix 8, Cont.

Sitka Black-Tailed Deer

General Considerations

Sitka black-tailed deer are present on the Kodiak Archipelago, throughout Prince William Sound, and in Southeast Alaska. They tend to be found closer to the shoreline during the winter and early spring and to follow the receding snow line to higher elevations in the summer.

Sitka black-tailed deer are susceptible to oil ingestion and external oiling. They often forage for kelp and beach grasses in intertidal areas during the winter and spring when other food sources are scarce. This behavior probably poses the greatest risk of mortality, especially since deer are often in poor physical condition at that time of the year. Deer have also been observed to swim short distances and could become externally oiled, if the water is contaminated with oil.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies should emphasize keeping spilled oil away from deer habitat. Removal of oiled kelp from beaches should be considered during winter and spring months. However, care should be taken to determine whether the removal of live kelp will result in a net ecological benefit. If kelp is removed, only the upper portion of the oiled leaves should be removed. The stipe and basal portion of the kelp leaves should be left to regenerate.

Secondary and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for Sitka black-tailed deer.

Appendix 8, Cont.

Bison

General Considerations

While several herds of bison are found throughout the state, only the Delta herd is likely to encounter spilled oil since it is present year-round in the Trans-Alaska Pipeline corridor between Big Delta and Pump Station 10. Bison are migratory and generally graze on grasses and forbs.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for bison.

Appendix 8, Cont.

Mountain Goats

General Considerations

Mountain goats are found throughout Southeast Alaska and in rugged terrain of the Chugach, Wrangell, and Alaska Ranges. They are, however, most likely to encounter oil spills along the Trans-Alaska Pipeline corridor where it passes through the Chugach Mountains.

Potential disturbances resulting from oil spill cleanup operations could create more problems than if mountain goats contacted oil. Mountain goats are particularly subject to disturbance when kids are born (late May to early June) and during breeding season (November and December). Kids are especially vulnerable to injury when panicked in rough terrain.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for mountain goats.

Appendix 8, Cont.

Dall Sheep

General Considerations

Dall sheep occur in many of the mountainous areas above 2,500 feet along the Trans-Alaska Pipeline corridor. In particular, they are found from Slope Mountain through the upper Dietrich River in the Brooks Range; near Black Rapids, south of Delta, in the Alaska Range; and in the area around Pump Station 12 in the Chugach Range. They prefer ridges, steep slopes, and alpine meadows and are rarely found below the treeline. Sheep also gather at mineral licks which occur near the pipeline at Slope, Table, and Snowden Mountains and Snowden Creek.

Dall sheep could potentially be oiled by an oil spill originating from the Trans-Alaska Pipeline, although the disturbance created by spill cleanup operations would probably be of more concern than any actual contact with oil. Dall sheep are particularly subject to disturbance during lambing season (late May to early June) and breeding season (late November to early December). Lambs are especially vulnerable to injury when panicked in rough terrain.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Ungulates" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for Dall sheep.

Appendix 8, Cont.

Brown and Black Bears

General Considerations

While "brown" and "grizzly" bears are classified as the same species, in popular usage, "brown bear" refers to those individuals living along the coast, while "grizzly bear" refers to individuals living in interior areas. "Brown bear" will be used here to refer to both coastal and inland populations.

Brown and black bears can be found in coastal and inland areas throughout most of the state. Brown bears are present in many riparian corridors, such as the Sagavanirktok Valley, and are therefore subject to encountering oil spilled from the Trans-Alaska Pipeline into those areas. Brown bears are not found on islands south of Frederick Sound in Southeast Alaska, the Aleutian Islands west of Unimak Island, and the Yukon-Kuskokwim Delta. While black bears are distributed throughout most of the forested areas of the state, they are not generally found in areas covered by tundra or muskeg (e.g., in areas north of the Brooks Range or on the Seward Peninsula). Moreover, black bears do not occur on Kodiak, Montague, or Hinchinbrook Islands or on the Alaska Peninsula beyond Lake Iliamna. Black bears are present in Southeast Alaska, except on Admiralty, Baranof, Chichagof, and Kruzof Islands.

Most brown and black bear activity along the coast occurs during the spring and summer and consists of scavenging for carcasses and feeding on intertidal invertebrates, such as razor clams. Brown bears have been observed to feed on beached carcasses of marine mammals, especially in the northern areas of the state. Brown bears would also be likely to feed on large terrestrial animals, such as caribou and moose that were disabled or killed by oiling. It is important, therefore, to locate and safely dispose of all oiled carcasses. See Section II.B.1 for additional information.

Bears are especially active during the salmon season and will congregate along salmon streams throughout the state to feed on live and dead fish. In the early spring, they also forage for emergent vegetation in wetland areas. Therefore, they can ingest oil in the process of feeding or incidentally to grooming. Bears are also capable of swimming and can become externally oiled.

Bears do not appear to avoid oil, and in some cases can be attracted to it. Although there is little specific information available about the sensitivity of brown or black bears to oil, evidence from polar bears suggests that bears may be extremely sensitive to ingested oil and to skin contact with oil.

There is no literature on rehabilitating oiled brown and black bears, although information for polar bears, cited in Appendix 7, may be applicable. For example, brown and black bears, like polar bears, may be especially susceptible to hemorrhagic enteritis induced by the stress of capture and transport.

Appendix 8, Cont.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies should emphasize keeping spilled oil away from bear habitat and should include removal of oiled carcasses. See Section II.B.1 for additional information on carcass collection.

Secondary Response. Secondary response strategies will be evaluated on a case-by-case basis, keeping in mind that deterrence can be labor-intensive, stressful, and dangerous to individual animals, and perhaps only effective for a short time, if at all.

All responders who wish to receive approval to conduct deterrence activities for bears will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for black and brown bears is found in Appendix 15.

Tertiary Response. Capturing and rehabilitating bears is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases. While rehabilitation techniques have not been developed specifically for brown or black bears, information on rehabilitating oiled polar bears in Appendix 7 is likely to be relevant to black bears.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for brown and black bears.

Appendix 8, Cont.

Wolves

General Considerations

Wolves occur throughout mainland Alaska as well as on Unimak Island, and on major islands in Southeast Alaska (except for Admiralty, Baranof, and Chichagof Islands). Wolves are susceptible to oil ingestion and external oiling. Ingestion of oil would probably pose the greatest risk to wolves, since they are opportunistic feeders and will consume carcasses found along the beach as well as terrestrial mammals disabled or killed by oil contamination. Anecdotal accounts suggest that wolves can be attracted to oil.

Wolves in the northern, western, and southwestern areas of the Alaska have been observed to carry rabies.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies should emphasize keeping spilled oil away from wolf habitat and should include removal of oiled carcasses. See Section II.B.1 for additional information on carcass collection.

Secondary Response. Secondary response strategies will be evaluated on a case-by-case basis, keeping in mind that deterrence can be labor-intensive, stressful, and dangerous to individual animals, and perhaps only effective for a short time, if at all.

All responders who wish to receive approval to conduct deterrence activities for wolves will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for wolves is found in Appendix 15.

Tertiary Response. Tertiary response strategies are not recommended, since wolves occasionally carry rabies. Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for wolves.

Appendix 8, Cont.

Furbearers

Furbearers addressed in this appendix include red foxes, Arctic foxes, mink, river otters, muskrats, beavers, wolverine, marten, and miscellaneous small mammals.

General Considerations

Aquatic furbearers such as river otters, mink, muskrats, and beavers, spend large amounts of time in the water and rely on their fur for insulation. If externally oiled, these animals could become hypothermic and die. In addition, these species tend to groom frequently to maintain the insulating properties of their fur. This behavior places them at additional risk of ingesting oil. Arctic foxes, while they do not commonly enter the water, likewise rely heavily on their fur for insulation and groom extensively.

Many, but not all, furbearers are opportunistic scavengers. This includes foxes, river otters, mink, wolverine, and marten. They often search intertidal areas for carcasses, especially during the winter and spring. This behavioral characteristic places those species at risk of ingesting oiled food. Animals like river otters and mink, which spend considerable time in the water and feed on carcasses, are in the highest risk group. If oil cannot be contained before it comes ashore, the best strategy is to focus on removing oiled carcasses from habitats used by scavenger species.

There are no manuals on rehabilitating oiled terrestrial furbearers. However, manuals developed for sea otters include in Appendix 7, information that is likely to be relevant to aquatic furbearers.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies should emphasize keeping spilled oil away from furbearer habitat and should include removal of oiled carcasses. See Section II.B.1 for additional information on carcass collection.

Secondary Response. Secondary response strategies will be evaluated on a case-by-case basis, keeping in mind that deterrence can be labor-intensive, stressful, and dangerous to individual animals, and perhaps only effective for a short time, if at all.

All responders who wish to receive approval to conduct deterrence activities for furbearers will need to follow the requirements outlined in Appendix 24 “Approval Request Form: Unoiled Wildlife Deterrence Activities.” Information on wildlife resource agency permits required for conducting wildlife deterrence activities for furbearers is found in Appendix 15.

Appendix 8, Cont.

Tertiary Response. Capturing and rehabilitating oiled furbearers is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added, handling stress and the potential for spreading diseases.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled wildlife will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

General References for Effects of Toxic Substances on Furbearers

Novak, M. et al. 1987. Wild Furbearer Management and Conservation in North America.

Chapman, J.A. and D. Pursley (eds). 1981. Worldwide Furbearer Conference Proceedings.

Appendix 8, Cont.

Red Foxes

General Considerations

Red foxes are found throughout the state, except for the western Aleutian Islands, Prince William Sound, and some islands in Southeast Alaska. Red foxes feed on a wide variety of coastal organisms and can be expected to scavenge whatever they find (including carcasses), especially during the winter and spring. Foxes, like many other mammals, often utilize beaches for travel routes, particularly when the snow is deep. Therefore, red foxes can ingest oil as well as become oiled externally following an oil spill in those areas.

Red foxes are one of the primary vectors for rabies in northern, western, and southwestern Alaska.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Tertiary response strategies are not recommended, since red foxes occasionally carry rabies. Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for red foxes.

Appendix 8, Cont.

Arctic Foxes

General Considerations

Arctic foxes are ubiquitous in treeless coastal areas of the state. Their range extends from the Arctic Slope, through western and southwestern Alaska, and onto the Aleutian chain. Their numbers are subject to severe natural fluctuations. Although foxes are mostly solitary, concentrations of tens to hundreds have been observed scavenging around large food sources, such as whale carcasses, polar bear kills, or dumps.

Arctic foxes are particularly susceptible to oil contamination because they: (1) inhabit coastal areas as well as the pack ice that could be oiled, (2) spend a considerable amount of time scavenging and could contact oiled carcasses, (3) groom extensively and could ingest oil, and (4) break into ringed seal lairs to hunt for newborn seals and could encounter oil brought to the lair by an oiled seal. Since an Arctic fox's chief protection against the cold is a thick coat that traps air, it is subject to hypothermia if its coat becomes matted by oil.

Arctic foxes are one of the primary vectors for rabies in northern, western, and southwestern Alaska.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Tertiary response strategies are not recommended for any reason since Arctic foxes occasionally carry rabies. Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for arctic foxes.

Appendix 8, Cont.

Mink

General Considerations

Mink are found throughout the state, except for Kodiak Island, the Aleutian Islands, and most of the Arctic Slope. Mink commonly occur in both coastal and inland riparian areas. Mink living in coastal areas frequently cross the intertidal zone and spend large amounts of time swimming and diving for food. They also scavenge for carcasses, especially during the spring. Consequently, contamination of mink fur by oil could occur, which would result in a loss of insulation and hypothermia. Mink also groom frequently and could ingest oil by grooming or eating oiled food. Due to these behavioral characteristics, mink are one of the furbearing species at greatest risk from an oil spill.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Capturing and rehabilitating mink is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases. The manuals on cleaning sea otters in Appendix 7 are generally applicable to cleaning mink and other aquatic furbearers.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled mink will need to follow the requirements outlined in Appendix 25 "Approval Request Form: Pre-Emptive Capture of Un-oiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife." Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for mink.

Appendix 8, Cont.

River Otters

General Considerations

River otters occur throughout Alaska, except for the Aleutian Islands and the area north of the Brooks Range. Like mink, river otters spend a great deal of time swimming and diving in nearshore and inland riparian areas for food. While they generally prefer live prey, river otters are also opportunistic feeders and will eat carcasses found in intertidal areas. While in the water or traversing the intertidal zone, their fur can become oiled, resulting in a loss of insulation and hypothermia. River otters also groom frequently and can ingest oil as a result. Along with mink, river otters are one of the furbearing species at greatest risk during an oil spill.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Capturing and rehabilitating river otters is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases. The manuals on cleaning sea otters in Appendix 7 are generally applicable to cleaning river otters and other aquatic furbearers.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled beavers will need to follow the requirements outlined in Appendix 25 "Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife." Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for river otters.

Appendix 8, Cont.

Muskrats

General Considerations

Muskrats occur throughout most of the Alaska mainland, except for the southern Alaska Peninsula and areas north of the Brooks range. Muskrats live in and around wetland areas and generally feed on aquatic vegetation, invertebrates, and fish. Therefore, they are subject both to ingesting oil on their food and external oiling. Once their fur becomes oiled, it rapidly loses its insulating properties and muskrats can become hypothermic. Muskrats also groom frequently and can ingest oil as a result. Significant muskrat mortalities have been noted following past oil spills in inland waters.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Capturing and rehabilitating muskrats is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases. The manuals on cleaning sea otters in Appendix 7 are generally applicable to cleaning muskrats and other aquatic furbearers.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled muskrats will need to follow the requirements outlined in Appendix 25 "Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife." Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for muskrats.

Appendix 8, Cont.

Beavers

General Considerations

Beavers are present throughout most of the forested areas of the state, including Kodiak Island. They inhabit inland ponds, lakes, and streams and rely on their fur for insulation. Accordingly, they are at risk from external oiling, which could result in hypothermia. Grooming behavior and consumption of contaminated aquatic plants could also result in oil ingestion.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Capturing and rehabilitating beavers is not recommended as a viable alternative for minimizing impacts on a population. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases. The manuals on cleaning sea otters in Appendix 7 are generally applicable to cleaning beavers and other aquatic furbearers.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of oiled beavers will need to follow the requirements outlined in Appendix 25 "Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife." Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for beavers.

Appendix 8, Cont.

Wolverine

General Considerations

Wolverine are present throughout most of mainland Alaska and are found in both inland and coastal areas. Wolverine may be attracted to coastal areas to feed on carcasses of all types, including marine mammals, fish, and birds. As a result, wolverine could ingest oil and/or become oiled externally. They frequently tend to scavenge in intertidal areas during the winter and spring. In addition, they often use beaches as winter and spring travel routes.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary and Secondary Responses. See previous discussion under "Furbearers" in this appendix.

Tertiary Response. Tertiary response strategies are not recommended due to the extreme difficulty in capturing and handling wolverines. Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for wolverine.

Appendix 8, Cont.

Marten

General Considerations

Marten are present throughout most of the forested portions of Alaska. Marten live along inland bogs and streams as well as in coastal areas. They commonly feed on birds and small rodents. Since marten are opportunistic feeders, they could potentially scavenge oiled carcasses, including salmon.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary, Secondary, and Tertiary Responses. See previous discussion under "Furbearers" in this appendix.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for marten.

Appendix 8, Cont.

Miscellaneous Small Mammals

General Considerations

Small mammals, such as ground squirrels, voles, lemmings, and hares are ubiquitous throughout the state, and undergo large fluctuations in numbers.

Response Strategies

ADF&G will be the lead agency for all terrestrial mammal response activities on state and private lands. On federally-managed lands, ADF&G will be the co-lead with the federal land manager.

Primary Response. Primary response strategies need to emphasize keeping spilled oil away from small mammal habitat.

Secondary Response. Secondary response strategies are not recommended.

Tertiary Response. Tertiary response strategies are not recommended. Rehabilitation of individual animals can be considered for humane reasons on a case-by-case basis. Careful consideration should be made of the added handling stress and the potential for spreading diseases.

All responders who wish to receive approval to conduct capture, handling, transporting, stabilizing, rehabilitating, and releasing of other oiled small mammals will need to follow the requirements outlined in Appendix 25 “Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife.” Information on wildlife resource agency permits required for conducting wildlife capture and rehabilitation is found in Appendix 15.

Severely oiled individuals should be euthanized and their carcasses disposed of in accordance with incident-specific carcass collection protocols.

Agency Contacts

See Appendix 26 for wildlife resource agency contact information for miscellaneous small mammals.

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Appendix 9

Example of Wildlife Protection Advisory for Response-Related Aircraft and Vessel Traffic and the News Media

[Insert Appropriate Agency Letterhead or Banner Here]

NOTICE

Harbor seals and Steller sea lions haul out to rest and have their pups on traditional sites in Prince William Sound. Some of the most important areas are circled below. The areas circled should not be approached any closer than ½ mile horizontally or 1,000 feet vertically to avoid any additional stressing of these species. Disturbance from May through July may result in abandonment of pups. Harassment of harbor seals and sea lions is prohibited by the Marine Mammals Protection Act. Steller sea lions are further protected by the Endangered Species Act. Questions regarding this notice should be directed to National Oceanic and Atmospheric Administration Fisheries at 835-5524 or Alaska Department of Fish and Game at 835-5453.

[Insert Appropriate Map Here]

Appendix 9, Cont.

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Seal Advisory

Cleaning of harbor seals haul-outs will stop by May 15. After that date, unauthorized persons may not approach within ½ mile of seal or sea lion haul-out or rookery areas. Aircraft may not fly lower than 1,000 feet over such areas. Disturbance of seal rookeries or haul-outs is a violation of Federal law.

Because of the large number of cleanup personnel working at various sites across Prince William Sound and the Gulf of Alaska, newborn seal pups may be encountered in unexpected areas. Seals which are not in distress are to be left alone. ONLY heavily-oiled pups should be captured without prior discussion with NMFS personnel. If pups are encountered that are heavily oiled, they should be observed at some distance for at least 30 minutes to confirm that they are in fact oiled. If the pups appear to be abandoned, they should be observed for 24 hours to determine if they are in fact abandoned before any capture attempt is made. Indications of abandonment are lone pups which are not associated with a female for extended periods of time, emaciated appearance, and continuous crying. Pups which are only lightly-oiled and are still being attended by females should not be captured, as their likelihood of long-term survival is greater in the wild. However, if pups are moderately oiled or the observer is unclear about their degree of oiling they should contact NMFS staff for consultation prior to any action.

If pups are determined to be either heavily-oiled and/or abandoned after extended observations, they should be captured and immediately transported to the Sea Otter Rehabilitation Centers in Valdez (835-4512), Seward (224-7041), or the Alpine Veterinary Clinic in Anchorage (345-1515). No attempts should be made to clean or feed pups unless transport will be delayed beyond 12 hours.

Appendix 10

Example of Information Bulletin on Prohibitions on the Collection of Wildlife Parts

[Insert Appropriate Agency Letterhead or Banner Here]

This fact sheet addresses frequently-asked questions about beach found marine mammal parts collected by non-Alaska Natives. Similar Fact Sheets addressing Alaskan Natives and marine mammals are also available.

Who May Collect Beach Found Parts?

Federal regulations allow the collection of parts by Non-Natives (and Natives) from some dead marine mammals found on the beach or land within 1/4 mile of the ocean (including bays and estuaries), depending on land ownership.

Where Can Beach Found Parts Be Collected?

Regulations vary depending on land ownership. It is the collector's responsibility to know whose lands they are visiting. Collectors should check for additional regulations established by individual landowners (Federal, State, or private) before removing any resource. Collection of all animal parts (including marine mammals) is prohibited on National Park Service lands.

What Parts May Be Collected?

Skulls, bones, teeth or ivory from beach found sea otter, polar bear and walrus may be collected. The skins, meat and organs from these animals may not be collected. Animal parts (including marine mammals) of an archeological or paleontological origin may not be collected from Federal or State lands. Most large whales (more than 25 feet in length) and Cook Inlet Beluga whales are endangered and parts cannot be collected.

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Appendix 11

Carcass Collection Guidelines

This appendix describes information to be included in incident-specific carcass collection protocols, which will be prepared by appropriate wildlife resources agencies; i.e., Fish and Wildlife Service (FWS), National Marine Fisheries Service, and/or Alaska Department of Fish and Game. It is important to note that the information in this appendix is subject to change by wildlife resource agencies, including on an incident-specific basis.

Carcass collection-related activities will be conducted by wildlife resources agencies or other parties authorized by those agency(ies). While the majority of carcasses collected during an oil spill are expected to be birds, information in this appendix may also be applicable to terrestrial mammals and marine mammals. A separate incident-specific carcass collection protocol will be developed by appropriate wildlife resource agencies for terrestrial and marine mammals.

Procedures for Collection of Wildlife Carcasses by Wildlife Resource Agencies:

Search and Collection Teams:

- Search and collection teams will consist of at least two personnel. It is preferred that at least one member of the team has previous carcass search and collection experience.
- Each collection team will be issued a carcass collection kit (which includes carcass-collection-related equipment, materials, supplies, and forms) and be given search location assignments.

Search Locations and Search Procedure:

- Search locations should be well defined and documented so they are easily repeatable.
- Search locations may be identified as shoreline segments as defined and provided by the Incident Command Center. If shoreline segments are not provided, then search locations should be described using latitude/longitude from a Global Positioning System (GPS), or using descriptions of unique geographic features that can be easily relocated.
- Searches should be conducted carefully and as thoroughly as time allows. Search efforts should also be documented by noting the date, time, and GPS location (or other location description) at the beginning and end of each search on a white Evidence Seizure Tag (see Appendix 11C for an example) and a Carcass Collection Form (see Appendix 11B for an example).

Appendix 11, Cont.

Collection Procedure:

- Begin each new search location by filling out the top portion of a Carcass Collection Form. Information on individual carcasses should be added as they are found. Also, at this time, assign a white Evidence Seizure Tag to this new search location. The Evidence Seizure Tag is imprinted with a unique Seizure Tag Number. Enter the INV (incident-specific) number, date and start time, and search location/shoreline segment.
- When a carcass is located, complete a blue Evidence Identification Tag (see Appendix 11A for an example). One blue Evidence Identification Tag is used to identify a single carcass and should be filled in to include: the INV (incident-specific) number, the white Evidence Seizure Tag number for that search location (e.g., shoreline segment), an item number (assigned sequential number; i.e., 01, 02, 03, etc), name of the collector, date and time, and the species (if known)).
- Photograph the carcass with the completed blue Evidence Identification Tag visible next to the carcass.
- Wear nitrile gloves when handling carcasses. (Note: A new pair of gloves should be donned at the start of each new search location.)
- Fill in the carcass information on the bottom portion of the Carcass Collection Form including: species identification (if known), blue Evidence Identification Tag item number (assigned sequential number), photograph number, and amount/description of oiling. Determinations on carcass condition, scavenging, and emaciation should be made in the field by experienced personnel as time allows. Fill out forms by printing legibly using a waterproof pen or pencil.
- Place the carcass into a paper bag; then place the paper-bagged carcass into a plastic bag and securely tie the completed blue Evidence Identification Tag to the outside of the plastic bag. Note: It is important that oiled carcasses do not touch plastic bags, and that used gloves are not placed into the bag with the carcass.
- At the end of each search location (e.g., shoreline segment), record the stop time and stop GPS location information and estimate the width of the search area on the Carcass Collection Form.
- Complete the white Evidence Seizure Tag with information from all of the blue Evidence Identification Tags associated with each carcass found at this location. One white Evidence Seizure Tag should be used to represent (i.e., tag) all carcasses collected within a defined search location (e.g., shoreline segment). After the search of a specific location has been completed and carcasses have been appropriately bagged and tagged, the accompanying white Evidence Seizure Tag should be filled in to include: the stop time, number of carcasses collected, blue Evidence Identification Tag item numbers associated with each carcass, and the name of collector.
- Determine which member of the collection team (collector) should be responsible for that collection and record their name on the white Evidence Seizure Tag.

Appendix 11, Cont.

Turn in the Carcasses:

- At the end of the search day, the carcass collector whose name is recorded on the white Evidence Seizure Tag should take the carcasses to a pre-established and secure carcass collection facility and sign them over to the incident-designated carcass custodian (e.g., wildlife resource agency). If circumstances are such that no designated carcass collection facility has been established, then the carcass collector should receive guidance and assistance from the wildlife resource agency, who is serving as the incident-designated carcass custodian.

Carcass Custodian:

- The carcass custodian will complete the chain-of-custody information on the back of the white Evidence Seizure Tag before logging the carcasses into the Evidence Storage Log (see Appendix 11F for an example). The carcass custodian will log the carcasses into storage on the Evidence Storage Log, with the following information included: sequential log number, INV (incident-specific) number, date and time, description of the evidence, Evidence Seizure Tag number, and carcass custodian's signature.
- At the end of each day, the carcass custodian should compile the number and species of oiled carcasses collected and logged, and transmit that information to the appropriate wildlife resource agency at the Incident Command Center.

Carcass Photographs:

- At the end of each day, photographs from each day's collection and the original copy of the Carcass Collection Forms should be presented by the carcass collector to the carcass custodian.

Chain-of-Custody

- Any time carcasses are transferred from one person to another, chain-of-custody procedures must be maintained. This may be accomplished by using the back of the white Evidence Seizure Tag or by using a Chain-of-Custody Record (see Appendix 11D for an example). A Chain-of-Custody Record will be filled out for each white Evidence Seizure Tag (i.e., batch of carcasses with blue tags associated with that white Evidence Seizure Tag). When there are only small numbers of carcasses, more than one white Evidence Seizure Tag may be included on a single Chain-of-Custody Record, if all the listed items are transferred at the same time. The information from the white Evidence Seizure Tag(s) should be listed in the appropriate section on the Change-of-Custody Record, including all associated blue Evidence Identification Tag item numbers. Information and signatures of both the transferee and the receiver must be included on the form. The Change-of-Custody Record must remain with the carcasses and be transferred to the carcass custodian.
- If carcass transfers to the carcass custodian occur by means other than a person-to-person transfer (i.e., via helicopter, plane, or mail), the carcass custodian should describe how the carcasses were delivered on the Change-of-Custody Record. Note: All shipments must be sealed (preferably using evidence tape) and signed to ensure that the shipment has not been tampered with during transfer.

Appendix 11, Cont.

Procedures for Collection of Bird Carcasses by Parties Authorized by Wildlife Resource Agency(ies):

NOTE: If a marine or terrestrial mammal carcass is located during spill response activities, non-wildlife resource agency personnel should be directed to mark and document the location and immediately report this information to a Supervisor or the Incident Command Center.

Birds:

Operations Teams

- All field operations teams, including live, oiled-bird capture and rescue teams, shoreline protection teams, and clean-up crews, who are unaccompanied by FWS personnel, should be directed to collect bird carcasses when they find them.
- All field operations team leaders should be provided with carcass collection kits and appropriate, incident-specific instructions for collecting carcasses. Instructions should include information on maintaining chain-of-custody.
- Team leaders should be directed to designate a single individual as the carcass collector.
- Incident-specific arrangements should be made to ensure appropriate transfer of collected carcasses from the field to the pre-designated carcass collection facility or designated FWS representative(s) in the field.
- Carcass Collection Forms should be provided to all field teams and collectors should be directed to complete this information, as appropriate.

Carcass Collection Procedures

- Wear nitrile gloves when handling carcasses. (Note: A new pair of gloves should be donned at the start of each new search location.) When a carcass is found, place the carcass into a paper bag; then place the paper-bagged carcass into a plastic bag and tie securely. Note: It is important that oiled carcasses do not touch plastic bags, and that used gloves are not placed into the bag with the carcass.
- Tag the plastic bag with the following information: date, time, location, and collector's name.
- If time permits, Carcass Collection Forms should be completed (as completely as possible) by the carcass collector.
- All carcasses collected should remain with the carcass collector, until transferred using chain-of-custody procedures.

Carcass Transfer and Chain-of-Custody

- Any time carcasses are transferred from one person to another, chain-of-custody procedures must be maintained. The chain-of-custody may be maintained by using the Change-of-Custody Record found in the kit.

Appendix 11, Cont.

- At the end of each day, each carcass collector should transfer all collected carcasses to the pre-designated carcass custodian (who will be from a wildlife resource agency) at the collection facility or to a designated FWS representative(s) in the field. The carcass custodian at the facility or the designated FWS representative(s) in the field, is responsible for ensuring that chain-of-custody procedures are established and maintained when carcasses are transferred.

Carcass Custodian

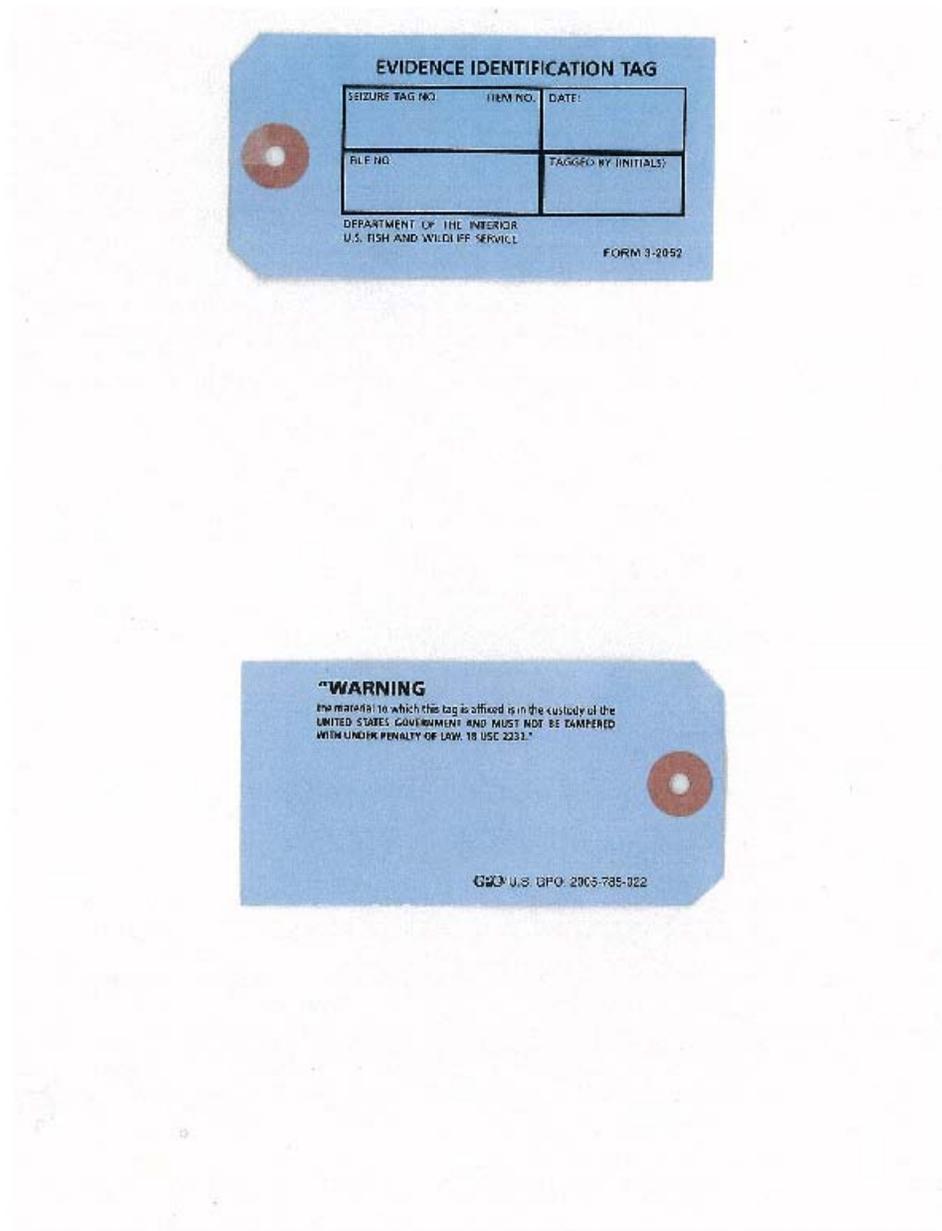
- Upon receipt of carcasses collected by non-agency personnel, the carcass custodian or FWS representative(s) in the field will tag each carcass with a blue Evidence Identification Tag and enter each individual's collection onto a white Evidence Seizure Tag that the carcasses were received from a non-agency collector.
- The carcass custodian at the carcasses collection facility or FWS representative(s) in the field should also prepare a Carcass Collection Form (if this has not been completed by the carcass collector) to include all information provided by the carcass collector with a time and date of receipt.

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Appendix 11A

Example of Carcass Tag Using an Evidence Identification Tag

(Front and Back)



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Appendix 11B

Example of Carcass Collection Form

Carcass Collection Form		INV:	Activity Code:
		Evidence Seizure Tag:	
Date:	Collectors' Names:		Page: of
Location:		Shoreline Segment:	Search Width (est. feet):
Time Start:	GPS Start:	Time Stop:	GPS Stop:
Shoreline type:		Shoreline back:	
General Notes:			

Species	Item#	Photo#	Oil	Condition*	Emaciation*	Scavenging*	Comments

Appendix 11B, Cont.

(Back)

INV: Incident-specific assigned number	Evidence Seizure Tag: Number imprinted on white Evidence Seizure Tag
Activity Code: 1=Carcass Collection 2=Wildlife Capture Team 3=Operations Task Force (protection, cleanup) 4=LE Activity 5=RAT Survey 6=SCAT Survey 7=NRDA Activity 8=Other (define) _____	
ATTENTION: RECORDING THE START/STOP TIME & GPS, AND ESTIMATING SEARCH WIDTH IS CRITICAL IN FUTURE ANALYSIS OF SEARCH EFFORT	
Shoreline type: wave-cut platform in bedrock, rocky shore, large rock/cobble beach, riprap, gravel beach, mixed sand/gravel beach, sand beach, tidal/mud flat, marsh. Shoreline back: habitat type, i.e., bluff/cliff, hillside, sand dune, marsh, upland meadow, forest, urban.	
General Notes: For example, you could note how many eagles you see in the vicinity of your search location; note observations of actual predation; note tracks or other evidence of mammalian predators on beaches (fox, mink, bears, etc.); note number of live birds seen on nearshore waters; how many of those appear to be lethargic, sickly, or obviously oiled; note evidence of other unusual mortality (e.g., fish, urchins or bivalves) or ocean conditions (plankton bloom, water temperatures, recent storms, etc.).	
*Condition codes: 'A'= fresh specimen (possibly still damp, eyes still intact, dead less than a day). 'B'= dead less than a week (somewhat desiccated, eyeballs present but sunken, perhaps partially buried by sand/debris, but body still limp and flexible). 'C'=week to a month old (desiccated, body rigid, eyeballs gone or sunken and completely hardened, parts missing). 'D'=very old (more than a month, completely desiccated, brittle, may be just parts like wings and breastbone only).	
Degree of oiling codes: 0 =no obvious oil on body. 1 =light spots of oil. 2 =moderate patches over body. 3 =heavily oiled all over.	*Degree of scavenging codes: 0 =no evidence of scavenging. 1 =light scavenging (skin broken, some guts removed). 2 =heavy scavenging (guts completely eviscerated, breast meat consumed).
*Emaciation codes (for birds in 'Condition A or B' only): To assess whether birds were starving or not, feel the breast muscles. L =Lifeboat (normal): the breast is rounded like a lifeboat and you can barely feel the keel of the breastbone. R =Roof (slightly emaciated): the breast slopes evenly away from an obvious keel like the roof of a house. S =Sailboat (very emaciated): the breast is concave inwards from a sharply defined keel like the hull of a sailboat.	
Item#: Item No. on blue Evidence Identification Tag	Photo#: Digital photo #

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Appendix 11D

Example of Chain-of-Custody Record: Fish and Wildlife Service

DEPARTMENT OF THE INTERIOR U.S. FISH AND WILDLIFE SERVICE DIVISION OF LAW ENFORCEMENT			CHAIN OF CUSTODY RECORD		FILE NO. INV.
DATE AND TIME OF SEIZURE:		REGION	EVIDENCE/PROPERTY SEIZED BY:		
SOURCE OF EVIDENCE/PROPERTY (person and/or location): <input type="checkbox"/> TAKEN FROM: <input type="checkbox"/> RECEIVED FROM: <input type="checkbox"/> FOUND AT:			CASE TITLE AND REMARKS		
ITEM NO.	DESCRIPTION OF EVIDENCE/PROPERTY (include Seizure Tag Numbers and any serial numbers):				
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA:	
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	<input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA:	
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	<input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA:	
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	<input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:	

FORM 3-2003 (3-99)

ADDITIONAL TRANSFERS ON REVERSE SIDE

Appendix 11D, Cont.

(Back)

**CHAIN OF CUSTODY RECORD
(continued)**

FILE NO.
INV.

ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	
ITEM NO.	FROM: (PRINT NAME, AGENCY)	RELEASE SIGNATURE	RELEASE DATE	DELIVERED VIA: <input type="checkbox"/> U.S. MAIL <input type="checkbox"/> IN PERSON <input type="checkbox"/> OTHER:
	TO: (PRINT NAME, AGENCY)	RECEIPT SIGNATURE	RECEIPT DATE	

★ U.S. G.P.O.: 2000 592-561

Appendix 11E

Example of Chain-of-Custody Record: National Marine Fisheries Service

 <b style="font-size: 1.2em;">CHAIN OF CUSTODY RECORD 		Case Number: <div style="border: 1px solid black; height: 30px; width: 100%;"></div>			
DATE AND TIME OF COLLECTION:		AGENCY/FACILITY AFFILIATION:		SEIZED/COLLECTED BY:	
SOURCE OF EVIDENCE/PROPERTY (person and/or location) TAKEN FROM: RECEIVED FROM: FOUND AT:				DEFENDANT/COMPANY NAME AND REMARKS:	
ITEM NO:	DESCRIPTION OF EVIDENCE/PROPERTY/SAMPLE (include seizure tag numbers, field/stranding identification numbers, facility identification name/number, and species)				
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:	
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:		
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:	
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:		

Appendix 11E, Cont.

(Back)

ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	
ITEM NO:	FROM: (PRINT NAME, AFFILIATION)	RELEASE SIGNATURE	RELEASE DATE:	DELIVERED VIA: FEDEX U.S. MAIL IN PERSON OTHER:
	TO:(PRINT NAME, AFFILIATION)	RECEIPT SIGNATURE	RECEIPT DATE:	

Appendix 11E, Cont.

(back)

DEPARTMENT OF THE INTERIOR
U.S.FISH AND WILDLIFE SERVICE
DIVISION OF LAW ENFORCEMENT

EVIDENCE STORAGE LOG

FORM 3-2065 (3/90)

Appendix 12

Capture Forms: Live Oiled Wildlife

Appendix 12, Cont.

 <h2 style="margin: 0;">Live Bird Capture Form</h2>	INV:
	Bird Number: Rehab Facility Use Only

CAPTURE TEAM INFORMATION	
Capture Team:	Crew Leader:
Bird Reference Number:	Recorder:

BIRD CAPTURE INFORMATION		
Date: (MO/DA/YEAR)	Time: AM PM	Location Name: LATITUDE: LONGITUDE:
Reason for Capture: OILED <input type="checkbox"/> INJURED <input type="checkbox"/> PREEMPTIVE <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Bird Location Prior to Capture: ON LAND <input type="checkbox"/> IN WATER <input type="checkbox"/>		
Bird Behavior Prior to Capture: FLYING <input type="checkbox"/> SWIMMING <input type="checkbox"/> RUNNING <input type="checkbox"/> STILL/LETHARGIC <input type="checkbox"/> PREENING <input type="checkbox"/> FEEDING <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Capture Method: DIP NET <input type="checkbox"/> MIST NET <input type="checkbox"/> OTHER _____		Pursuit Time:
Notes:		

BIRD DESCRIPTION		
Species:	Age: ADULT ___ JUVENILE ___	Sex: MALE ___ FEMALE ___
Bird Behavior After Capture: LETHARGIC <input type="checkbox"/> ALERT <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> PREENING <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Bird Care Provided in Field:		
Disposition: DIED <input type="checkbox"/> ESCAPED <input type="checkbox"/> RELEASED <input type="checkbox"/> (explain in notes below) TRANSFERRED <input type="checkbox"/>		
Notes:		

BIRD TRANSFER		
Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Bird Behavior At Time of Transfer: LETHARGIC <input type="checkbox"/> ALERT <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> PREENING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Captor's Name/Signature:		Receiver's Affiliation/Name/Signature:

Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Bird Behavior At Time of Transfer: LETHARGIC <input type="checkbox"/> ALERT <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> PREENING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Transferor's Name/Signature:		Receiver's Affiliation/Name/Signature:

Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Bird Behavior At Time of Transfer: LETHARGIC <input type="checkbox"/> ALERT <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> PREENING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Transferor's Name/Signature:		Receiver's Affiliation/Name/Signature:

Appendix 12, Cont.

Live Bird Capture Form (Back Page)

INV: Incident-specific assigned number or spill incident assigned name.		Bird Number: <i>Facility use only.</i> This number is assigned to each bird as it is checked into the rehab facility.	
CAPTURE TEAM INFORMATION			
Capture Team: Name of the Capture Team (use boat name if working from a vessel).		Crew Leader: Crew Leader's Name	
Bird Reference Number: Sequential number assigned by the capture team to each bird (<i>Ex: KIT001, KIT002, etc.</i>)		Recorder: Name of the person writing the information on this form.	
BIRD CAPTURE INFORMATION			
Date: MO/DA/YEAR (<i>Ex: 06/05/2010</i>)	Time: Record the time and circle AM or PM.	Location Name: Place name where the bird was caught (<i>Ex: Growler Bay</i>) LAT/LONG: GPS point for the capture location. Mark clearly as degrees, minutes, and seconds or decimal degrees.	
Bird Location Prior to Capture: Check one. If oiled, estimate percentage of external oiling. If injured, describe the injury.			
Bird Behavior Prior to Capture: Check one or more as appropriate. If OTHER, explain.			
Capture Method: Check one. If other, list.		Pursuit Time: Amount of time from beginning of stalk with dip net or from time caught in mist net until bird is safely in the pet carrier.	
BIRD DESCRIPTION			
Species, Age, & Sex information: If known, record as appropriate. If unknown, leave blank.			
Bird Behavior While On Boat: Check one or more as appropriate. If OTHER, explain.			
Bird Care Provided in Field: Briefly describe any extra care or treatment administered in the field, on the boat, or during transit.			
Disposition: Check as appropriate. If bird was released, explain why in the notes section.			
BIRD TRANSFER INFORMATION			
Date: MO/DA/YEAR (<i>Ex: 06/05/2010</i>)	Time: Record the time and circle AM or PM.	Transfer to: Check one. "STABILIZATION" and "REHAB" transfers may occur at pre-designated drop-off or pick-up locations and not necessarily at the centers.	
Bird Behavior At Time of Transfer: Check one or more as appropriate. If OTHER, explain.			
Captor's or Transferor's Name/Signature: Print name and sign.		Receiver's Affiliation/Name/Signature: Print affiliation and name and sign.	

Appendix 12, Cont.

 <h3 style="margin: 0;">Live Sea Otter Capture Form</h3>	INV:	
	Sea Otter Number: _____ <small>Rehab Facility Use Only</small>	
CAPTURE TEAM INFORMATION		
Capture Team:	Crew Leader:	
Sea Otter Reference Number:	Recorder:	
OTTER CAPTURE INFORMATION		
Date: (MO/DA/YEAR)	Time: AM PM	Location Name: LATITUDE: _____ LONGITUDE: _____
Reason for Capture: OILED <input type="checkbox"/> LONE PUP <input type="checkbox"/> PREMPTIVE <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Sea Otter Location Prior to Capture: ON LAND <input type="checkbox"/> IN WATER <input type="checkbox"/>		
Sea Otter Behavior Prior to Capture: SWIMMING <input type="checkbox"/> RUNNING <input type="checkbox"/> STILL/LETHARGIC <input type="checkbox"/> GROOMING <input type="checkbox"/> FEEDING <input type="checkbox"/> WITH PUP <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Capture Method: DIP NET <input type="checkbox"/> TANGLE NET <input type="checkbox"/> OTHER _____		Pursuit Time:
Notes:		
OTTER DESCRIPTION		
Age: ADULT <input type="checkbox"/> JUVENILE <input type="checkbox"/> PUP <input type="checkbox"/> MOM & PUP <input type="checkbox"/>		Sex: MALE <input type="checkbox"/> FEMALE <input type="checkbox"/> (if known; otherwise leave blank)
Otter Behavior While On Boat: STILL/LETHARGIC <input type="checkbox"/> ALERT/ACTIVE <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> GROOMING <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Otter Care Provided in Field:		
Disposition: DIED <input type="checkbox"/> ESCAPED <input type="checkbox"/> RELEASED <input type="checkbox"/> (explain in notes below) TRANSFERRED <input type="checkbox"/>		
Notes:		
OTTER TRANSFER		
Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Sea Otter Behavior At Time of Transfer: STILL/LETHARGIC <input type="checkbox"/> ALERT/ACTIVE <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> GROOMING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Captor's Name/Signature: _____		Receiver's Affiliation/Name/Signature: _____
Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Sea Otter Behavior At Time of Transfer: STILL/LETHARGIC <input type="checkbox"/> ALERT/ACTIVE <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> GROOMING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Transferor's Name/Signature: _____		Receiver's Affiliation/Name/Signature: _____
Date: MO/DA/YEAR	Time: AM PM	Transfer to: BOAT <input type="checkbox"/> HELO <input type="checkbox"/> VEHICLE <input type="checkbox"/> STABILIZATION <input type="checkbox"/> REHAB <input type="checkbox"/>
Sea Otter Behavior At Time of Transfer: STILL/LETHARGIC <input type="checkbox"/> ALERT/ACTIVE <input type="checkbox"/> AGGRESSIVE <input type="checkbox"/> GROOMING <input type="checkbox"/> DEAD <input type="checkbox"/> OTHER <input type="checkbox"/> Explain:		
Transferor's Name/Signature: _____		Receiver's Affiliation/Name/Signature: _____

Appendix 12, Cont.

Live Sea Otter Capture Form (Back Page)

INV: Incident-specific assigned number or spill incident assigned name.		Sea Otter Number: <i>Rehab facility use only.</i> This number is assigned to each otter as it is checked into the rehab facility.	
CAPTURE TEAM INFORMATION			
Capture Team: Name of the Capture Team (use boat name if working from a vessel).		Crew Leader: Crew Leader's Name	
Sea Otter Reference Number: Sequential number assigned by the capture team to each otter (<i>Ex: KIT001, KIT002, etc.</i>)		Recorder: Name of the person writing the information on this form.	
OTTER CAPTURE INFORMATION			
Date: MO/DA/YEAR (<i>Ex: 06/05/2010</i>)	Time: Record the time and circle AM or PM.	Location Name: Place name where the otter was caught (<i>Ex: Growler Bay</i>)	
LAT/LONG: GPS point for the capture location in decimal degrees.			
Reason for Capture: Check one. If oiled, estimate percentage of external oiling. If OTHER, explain (<i>i.e., if injured, describe the injury.</i>)			
Animal Location Prior to Capture: Check one.			
Animal Behavior Prior to Capture: Check one or more as appropriate. If OTHER, explain.			
Capture Method: Check one. If other, list.	Pursuit Time: Amount of time from beginning of stalk with dip net or from time caught in tangle net until otter is safely in the pet kennel.		
OTTER DESCRIPTION			
Age and sex information, check as appropriate, if known. If unknown, leave blank.			
Otter Behavior While On Boat: Check one or more as appropriate. If OTHER, explain.			
Otter Care Provided in Field: Briefly describe any extra care or treatment administered in the field, on the boat, or during transit.			
Disposition: Check as appropriate. If otter was released, explain why in the notes section.			
OTTER TRANSFER INFORMATION			
Date: MO/DA/YEAR (<i>Ex: 06/05/2010</i>)	Time: Record the time and circle AM or PM.	Transfer to: Check one. "STABILIZATION" and "REHAB" transfers may occur at pre-designated drop-off locations.	
Otter Behavior At Time of Transfer: Check one or more as appropriate. If OTHER, explain.			
Captor's or Transferor's Name/Signature: Print name and sign.		Receiver's Affiliation/Name/Signature: Print affiliation and name and sign.	

In all "Notes" and "Explain" sections, please add information as you deem necessary and appropriate.

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Appendix 13

Checklist of Suggested On-Scene Wildlife Response-Related Activities for Wildlife Resource Agency Representatives

NOTE: The following checklist is not an exhaustive list of wildlife-response-related activities for wildlife resource agency representatives when they travel on-scene. Information in this checklist may be modified, as appropriate, on an incident-specific basis.

Check in with the U.S. Coast Guard (USCG) Federal On-Scene Coordinator (OSC) or the State OSC or their respective representative (as appropriate):

- Clarify/reiterate respective agency roles (e.g., wildlife response activities vs. natural resource damage assessment activities)
- Determine/identify who will discuss wildlife response activities with Federal and State OSCs and Responsible Party (if applicable) and news media representatives.
- Establish communication link with appropriate field-based personnel.
- Identify preliminary timeframes for providing recommendations to the Federal and State OSCs on any anticipated secondary and/or tertiary wildlife response strategies and other wildlife protection considerations.
- Secure work space, transportation, and lodging (if required).
- Determine feasibility and logistical arrangements for traveling to the affected area.

Evaluate situation:

- Obtain (if possible) on-scene information by visiting the area where wildlife impacts have and could occur.
- Interview other "first responders" who may have knowledge of wildlife impacts (e.g., U.S. Coast Guard, Alaska Department of Environmental Conservation, other wildlife resource agency representatives, and/or local residents).
- Discuss and coordinate information, as appropriate, with representatives of wildlife resource agency representatives and local wildlife experts and wildlife responders.
- Confirm that the Federal OSC has initiated Endangered Species Act Section 7 consultation, if necessary.
- Make recommendation to the Federal and State OSCs on whether to establish a capture and rehabilitation program.

Appendix 13, Cont.

Initiate Wildlife Response Activities:

- Advise and assist Incident Command on appropriate wildlife response strategies.
 - Prioritize sensitive areas for protection and cleanup
 - Prioritize wildlife response activities
- Develop incident-specific procedures for inclusion into the Incident Action Plan.
 - Carcass collection
 - Oiled wildlife search and recovery
 - Other wildlife protection considerations (e.g., rat response, vessel and/or aircraft buffer zones)
- Activate wildlife response contractors, as appropriate.
- Contact owners of wildlife capture and rehabilitation equipment and materials to determine its availability.
- Identify potential wildlife stabilization/rehabilitation facilities through discussions with local decision makers (e.g., mayor, city manager, interest group).
- Conduct inspection of potential stabilization/rehabilitation facilities for adequacy (in person or by phone) using facility requirements information in Appendices 21 and 22.
- Establish a morgue and review procedures for dealing with dead, oiled wildlife already collected and dead, oiled wildlife to be collected.
- Coordinate oiled carcass collection, as appropriate, with FWS, NMFS, and/or ADF&G investigative/law enforcement personnel, federal and state agency NRDA representatives, and wildlife resource agency scientists.
- Establish procedure for dealing with live, oiled wildlife already captured by unauthorized members of the public (if any).
- Approve, if appropriate, proposed secondary and tertiary response strategies.

Appendix 14

Checklist of Suggested Office Equipment, Supplies, and Documents for Wildlife Resource Agency Representatives to Take On-Scene

Word/Data Processing:

- Laptop computer
- Portable printer and printer paper
- Computer disks or thumb drives

Office supplies:

- File folders and file folder box
- Scotch tape, masking tape, and duct tape
- Stapler and staple remover
- Paper clips
- Pencils
- Pens (including waterproof pens)
- Scissors
- Marking pens
- Highlighters
- Cork for bulletin boards
- Push pins
- Clip boards
- Paper for signs
- Yellow pads
- Name tags
- Office log book (bound)
- Field notebooks (bound)

Documents:

- Wildlife Protection Guidelines for Alaska*
- Local Subarea Contingency Plan, Geographic Response Strategies, Environmental Sensitivity Index maps
- National Oceanic and Atmospheric Administration (NOAA) charts
- Copies of instructions on wildlife collection and handling
- Bird and marine mammal identification guides
- Wildlife collection and rehabilitation manuals
- Wildlife data/collection forms
- NOAA spill response job aids
- Blank National Pollution Fund Center forms

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Appendix 15

Wildlife Resource Agency Permits and/or Authorizations Required for Deterring, Collecting or Holding Live Animals¹

Wildlife	Alaska Department of Fish and Game		Fish and Wildlife Service		National Marine Fisheries Service	
	Collect and Hold	Deter	Collect and Hold	Deter	Collect and Hold	Deter
Migratory birds	No ²	Yes ³	Yes ⁴	No ⁵	No	No
Sea otters, walruses, and polar bears	No	No	Yes ⁴	Yes	No	No
Whales, porpoises, seals, and sea lions	No ²	No ²	No	No	Yes ⁴	Yes
Terrestrial mammals	Yes	Yes	No	No	No	No

¹ See Appendix 26 for a list of agency personnel to contact for appropriate permits and authorizations.

² An Alaska Department of Fish and Game (ADF&G) permit is also required to collect, hold, or haze any species on the State endangered species list.

³ Passive hazing (e.g., balloons, scarecrows, Mylar tape) does not require an ADF&G permit.

⁴ Includes salvage of dead, oiled wildlife.

⁵ A Fish and Wildlife Service (FWS) permit is required for deterring eagles and/or migratory bird species listed as threatened or endangered under the Endangered Species Act.

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Appendix 16

Equipment and Materials Suggested for Deterrence Kit: Unoiiled Migratory Birds

Item	Quantity
Frame pack	1
First aid kit	1
Mylar tape	5 rolls
Towels/rags	10
Ear protection	3
Eye protection	3
Binoculars	1
Birds of Alaska Field Book	1
System A¹	
12-Gauge shotgun, single shot	1
Vinyl gun sleeve	1
12-Gauge slugs	1 box of 5
12-Gauge shell crackers	50
Gun cleaning kit	1
System B¹	
15mm launchers	2
6mm caps (.22 caliber)	200
15mm screamers (green)	100
15mm bangers (red)	100

¹ Either system A or B may provide the same net results. Other noise generating devices may also be used if company policy prohibits or restricts the use of firearms.

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Appendix 17

Equipment and Materials Required for Capture/Stabilization Kits: Oiled Migratory Birds¹

Item	Quantity ³
Bird Capture²	
Long-handled nets	4
Cardboard pet carriers (collapsed)(assorted sizes)	50
Vari kennels (assorted sizes)	5
Safety glasses	6 pair
Long rubber fisherman gloves (various sizes)	6 pair
First aid kit	1
Bird identification guide (Alaska)	1
Binoculars	6 pair
Capture form (Appendix 12)	50 forms
Field clip board	3
Bird Stabilization	
Towels	50
Pillow cases	50
Nitrile gloves (assorted sizes)	6 boxes
Chorhexiderm disinfectant 2%	1 gallon
Q-tips	1 box
Cotton balls	1 bag
Thermometers	3
Electrostat	1 pouch
60cc cath tip syringes	50
French feeding tube #8	10
French feeding tube #6	10
Animal care forms (FWS approved)	50
Face mask	24

¹The information in this appendix was obtained from International Bird Rescue.

²This list does not include transportation of bird collectors to the affected area or transportation of birds back to the rehabilitation center. Methods of transportation could include ground vehicles, boats, and fixed- and rotary-wing aircraft.

³This list represents the supplies required for treating 50 oiled birds during the first 24-48 hours of a bird capture and stabilization program. Some of these supplies will be used up with time and will need to be replenished.

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Appendix 18

Equipment and Materials Required for Stabilization Modules: Oiled Migratory Birds¹

Item	Quantity
Saline Eye Flush	2 bottles
Cotton Swabs	3 packages
Vet Wrap 2"	4 rolls
Vet Wrap 4"	4 rolls
Electrolyte Powdered Mix	10 packages (enough for 10 liters mixed)
Feeding catheters 16 fr	12
Feeding Catheters 18 fr	12
Catherter tip 60 cc syringes	12
Thermometer (Digital)	3
KY Lubricant	2 tubes
Heavy Duty Foil	2 rolls
Nitrile Gloves	3 boxes each (S,M,L)
Welder's Gloves	1 pair
Sharpie Pens	6 fine tip
Masking Tape	2 rolls
Animal carriers	Cardboard or corrugated plastic or airline kennels
Battery powered infant scale	Optional for Stabilization Unit
Regular size bath towels	

¹The information in this appendix was obtained from International Bird Rescue.

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Appendix 19

Equipment Used Capturing, Handling, and Rehabilitating Oiled Sea Otters¹

I. Sea Otter Capture: Equipment and supplies for one sea otter capture kit. Each capture boat should have one kit. The quantity of each item is shown in parentheses.	
<ul style="list-style-type: none">• Kennel cages for transport (10, assorted sizes)• Long handled dip nets (4)• Long handled tongs (5)• Plastic totes for thawing frozen food (2)• Knives/cutting board (1 board/2 knives)• Rubber gloves (25)• Ziploc™ bags (200)• Heavy leather gloves (4)• Stuff bag (1)• Squeeze box (1)• Spray bottles (3)• Ice chest (1)• Electronic scale (100 kg range) for weighing otters (1)• Chlorine bleach (1 gal)• Chlorhexidine (1 gal)• Scrub brushes (2)• Cotton towels (2 dozen)• Dawn™ detergent (1 gal)• Sponges (2)• Record forms multi-sheet, pressure paper (100)	<ul style="list-style-type: none">• Indelible markers (10)• Clip boards (2)• Flipper tags (100)• Flipper tag tool (2)• Duct tape (2 rolls)• First aid kit (1)• Flashlights (3)• Hair dryers (2)• Digital thermometer with flexible probe (1)• Cargo totes with lids for storing the kit (3)• Tangle nets (150 ft long, 15 ft deep, 10 in stretch mesh, buoyant rope, 1 in nylon rope instead of a lead line) (2)• Anchor lines for tangle nets (A-3 buoy, 150 ft of 3/8 in nylon rope, 14 lb anchor, 5/16 in galvanized shackles, 6 ft galvanized chain) (2)• Special note: the capture vessel should have a freezer to store 100 lbs of sea food for the otters.

¹ This information in this appendix is from Williams, T.M. and R.W. Davis. 1995. Facilities for oiled sea otters, In: Emergency Care and Rehabilitation of Oiled Sea Otters: A Guide for Oil Spills involving Fur-bearing Marine Mammals. Williams, T.M. and Davis, R.W. editors, University of Alaska Press, Fairbanks, Alaska.

Appendix 19, Cont.

II. Triage And Stabilization: Equipment and supplies for a sea otter triage and stabilization kit. The quantity of each item is shown in parentheses.

- | | |
|---|---|
| <ul style="list-style-type: none"> • Critical care cages with trays (10) • Chest freezer (200 cubic feet) (1) • Kennel cages for transport (series 400) (15) • Long handled dip nets (5) • Stainless steel bowls (10) • Long handled tongs (5) • Food scale (1) • Small plastic totes for thawing frozen food (10) • Knives/cutting board (2) • Rubber gloves (50) • Ziploc™ bags (200) • Leather gloves (welding) (5) • Stuff bags (2) • Squeeze box (1) • Spray bottles (5) • Small ice chest (2) • Electronic scale for weighing otters (1) • Chlorine bleach (1 gal) • Chlorhexidine (1 gal) • Scrub brushes (3) • Cotton towels (3 dozen) • Dawn™ detergent (1 gal) • Hoses (2) • Sponges (5) • Rain coat/pants (5) • Record forms (50) • Indelible markers (10) • Flipper tags (50) • Cork board (1) • Duct tape (5 rolls) • First aid kit (1) • Flashlights (2) • Hair dryers (5) • Marine radio (1) • Cellular phone (1) • Clip boards (10) | <ul style="list-style-type: none"> • <u>Veterinary kit</u> • Lactated Ringer's Solution (12 liters) • Normal saline (12 liters) • 5% Dextrose/Lactated Ringer's (12 liters) • 5% Dextrose (12 liters) • Sterile water for injection (1 liter) • Pedialyte™ (12 liters) • Amoxicillin (10 gm) • Keflex™ (10 gm) • B-complex with B-12 (500 mi) • Vitamin E/Se (500 mi) • Dexamethasone (500 mi) • Cimetidine (30 gm) • Carafate™ (100 gm) • Ophthalmic solution (60 mi) • Irrigating eye wash (16 oz) • Cotton balls (1 pkg) • Isopropyl alcohol (64 oz) • Hivite™ drops (30 ml) • CaI-De-Phos™ Mineral Supplement • Cod liver oil (100 ml) • Syringes (1 ml w/0 needle) (100) • Syringes (3 ml w 20 g x 1.5 in needle) (100) • Syringes (12 ml) (100) • Syringes (20 ml) (100) • Syringes (60 ml) (50) • Needles (19 g x 1.5 in) (100) • Needles (16 g x 1.5 in) (100) • Needles (20 g x 1.5 in) (100) • IV administration sets (20) • Exam gloves (latex, nonsterile) (100) • Thermometers-rectal (6) • Nolvosan™ solution (1 gal) • Nolvosan™ scrub (1 gal) • Betadine™ solution (1 pt) • Blender (1) • Red rubber catheter (16 Fr) (6) • Stethoscope (1) • Plastic case (2) • Vacutainers (red top) (100) • Vacutainers (lavender top) (100) • Vacutainers (grey top) (100) • Vacutainers (green top) (100) • Blood glucose reagent strips (1 pkg) • Blood urea nitrogen reagent strips (1 pkg) |
|---|---|

Appendix 19, Cont.

III. Veterinary Laboratory: Equipment and supplies for a veterinary laboratory in a regional rehabilitation center.	
<p><u>Equipment</u></p> <ul style="list-style-type: none">• Refrigerator (large capacity)• -10°C freezer• -70 OC freezer• Microbiological incubator• Temperature controlled bath• Coulter counter• Blood chemistry analyzer (Corning, Kodak)• Binocular microscope with 4x, 10x, 40x, oil oculars and camera mount (Nikon)• Clinical centrifuge• Hematocrit centrifuge• Refractometer (temperature compensated)• Flame photometer (<i>NajK</i> analysis)• Blood gas analyzer• Glucometer™• Pulse oximeter• EKG portable (LifePac™)• Medical oxygen tank and regulator• Warm water circulating pad• Blender• pH meter• White blood cell differential counter (6 key tally counter of WBC)• WBC counter (single stroke key tally for total WBC)• Water purification system (reverse osmosis and deionization)• Test tube rocker	<p><u>Supplies</u></p> <ul style="list-style-type: none">• Test tube racks• Microscope slide boxes for storage of fixed slides• Microscope slide markers (indelible)• Microscope slides (frosted end and plain)• Microscope slide coverslips• Fecalyzer test kit for conducting fecal test• Fecal flotation solution• Hemacult test kits to test for blood in the feces• Isopropyl alcohol (70%)• 10% formalin (for fixing tissue)• Poly vinyl alcohol (PVA, preservative for giardia, and other parasites)• Methyl alcohol• Stains for differential blood smears: Wright stains #1, #2 (Eosin), #3 (blue), #4 (clear) methylene blue (1%) methylene blue (1%) Giemsa Sudan 3• Gram stain kit for staining bacteria, fungi, and yeast• Coplin jars with lids for holding blood stains• Novalsan™ solution (disinfectant)• Spray fixative for fixing blood smears• Parafilm• Bunsen burner• Transfer pipettes (glass and plastic)• Hematocrit tubes (plain and heparinized), tube reader and tube sealant• Centrifuge tubes

Appendix 19, Cont.

III. Veterinary Laboratory, Cont.	
<u>Supplies Cont.</u> <ul style="list-style-type: none">• Blood collection tubes<ul style="list-style-type: none">Red topped 5 ccRed topped 10 ccPurple topped 2 ccRoyal topped 7 ccGrey topped 5 ccSerum separator tubes 10 cc• Laboratory notebooks• Examination gloves (latex, nonsterile)• Office supplies• Inoculating loop for making smears for gram staining• Unopette WBC/platelet counters for white cell counts• Tissue forceps• Staining rack• RBC sedimentation rate tubes and rack• Safety goggles• Culterettes (aerobic and anaerobic)• Blood culture bottles• Lens paper• Kimwipes™• Chlorhexadine scrub• Povidone iodine solution• Lactated Ringers solution (1 liter bags)• Normal saline solution (1 liter bags)• 5% dextrose/normal saline (1 liter bags)• 5% dextrose (1 liter bottles)• Sterile water for injection• Pedialyte™ (500 mI bottles)• Emofloxacin (22 mg/ml)• Amoxicillin (2 gm bottles)• Mannitol• Furosimide• Dantrolene• Neomycin tablets• Theodur SRTM (aminophyllin)	<u>Supplies Cont.</u> <ul style="list-style-type: none">• Diazepam (5 mg/ml)• Lidocaine™ (2%)• Propanolol• Sodium bicarbonate• Cephalin injection• B-complex with B12 (100 ml bottles)• Seletoc™ (Vit E/Se) (100 ml)• Dexamethasone (4 mg/ml)• Cimetidine (300 mg tablets)• Sucralfate™ (1 gram tablets)• Ivermectin• Praziquantel• Stanozolol• Ophthalmic solution (Bacitracin)• Irrigating eye wash (8 oz)• Cotton balls• Hivite™ drops• Cal-De-Phos™ Mineral Supplement• Cod liver oil• Syringes<ul style="list-style-type: none">1 ml (fB) w/o needle (100/box)3 ml w 20g x 1 1/2" needle (100/box)12 ml (SO/box)20 ml (SO/box)60 ml (20/box)• Needles<ul style="list-style-type: none">19 g x 1 1/2" (10a/box)16 g x 1 1/2" (100/box)20 g x 1" (100/box)• IV administration sets• Red rubber catheter (16 Fr)• Blood glucose reagent strips• Blood urea nitrogen reagent strips

Appendix 19, Cont.

III. Veterinary Laboratory, Cont.

Supplies Cont.

- Necropsy kit
 - Formalin solution (10%)
 - Scalpel handle
 - Scalpel blades
 - Tissue forceps
 - Hemostatic forceps
 - Dissecting scissors
 - Bone saw
 - Specimen jars (assorted sizes)
 - Toxicology specimen vials (2 oz)
 - Xylene
 - Acetone
 - Dichloromethane
 - Aluminum foil (heavy duty)
 - Surgeons gloves

Appendix 19, Cont.

III. Veterinary Laboratory, Cont.	
<p><u>Supplies Cont.</u></p> <ul style="list-style-type: none">• Blood collection tubes<ul style="list-style-type: none">Red topped 5 ccRed topped 10 ccPurple topped 2 ccRoyal topped 7 ccGrey topped 5 ccSerum separator tubes 10 cc• Laboratory notebooks• Examination gloves (latex, nonsterile)• Office supplies• Inoculating loop for making smears for gram staining• Unopette WBC/platelet counters for white cell counts• Tissue forceps• Staining rack• RBC sedimentation rate tubes and rack• Safety goggles• Culterettes (aerobic and anaerobic)• Blood culture bottles• Lens paper• Kimwipes™• Chlorhexadine scrub• Povidone iodine solution• Lactated Ringers solution (1 liter bags)• Normal saline solution (1 liter bags)• 5% dextrose/normal saline (1 liter bags)• 5% dextrose (1 liter bottles)• Sterile water for injection• Pedialyte™ (500 mI bottles)• Emofloxacin (22 mg/ml)• Amoxicillin (2 gm bottles)• Mannitol• Furosimide• Dantrolene• Neomycin tablets• Theodur SRTM (aminophyllin)	<p><u>Supplies Cont.</u></p> <ul style="list-style-type: none">• Diazepam (5 mg/ml)• Lidocaine™ (2%)• Propanolol• Sodium bicarbonate• Cephalin injection• B-complex with B12 (100 ml bottles)• Seletoc™ (Vit E/Se) (100 ml)• Dexamethasone (4 mg/ml)• Cimetidine (300 mg tablets)• Sucralfate™ (1 gram tablets)• Ivermectin• Praziquantel• Stanozolol• Ophthalmic solution (Bacitracin)• Irrigating eye wash (8 oz)• Cotton balls• Hivite™ drops• Cal-De-Phos™ Mineral Supplement• Cod liver oil• Syringes<ul style="list-style-type: none">1 ml (fB) w/0 needle (100/box)3 ml w 20g x 11/2" needle (100/box)12 ml (SO/box)20 ml (SO/box)60 ml (20/box)• Needles<ul style="list-style-type: none">19 g x 11/2" (10a/box)16 g x 11/2" (100/box)20 g x 1" (100/box)• IV administration sets• Red rubber catheter (16 Fr)• Blood glucose reagent strips• Blood urea nitrogen reagent strips• Face masks

Appendix 19, Cont.

III. Veterinary Laboratory, Cont.

Supplies Cont.

- Necropsy kit
 - Formalin solution (10%)
 - Scalpel handle
 - Scalpel blades
 - Tissue forceps
 - Hemostatic forceps
 - Dissecting scissors
 - Bone saw
 - Specimen jars (assorted sizes)
 - Toxicology specimen vials (2 oz)
 - Xylene
 - Acetone
 - Dichloromethane
 - Aluminum foil (heavy duty)
 - Surgeons gloves

Appendix 19, Cont.

IV. Sea Otter Husbandry: General equipment and supplies for husbandry. Numbers of each item will depend on the number of animals to be treated.

Feeding

- Food freezers
- Stainless steel bowls
- Long handled tongs
- Food scales
- Thawing tubs/totes
- Knives/cutting boards
- Rubber gloves
- Chipped ice maker/storage
- Food storage bags

Restraint/transport

- Leather welders' gloves
- Large dip nets
- Stuff bags
- Squeeze cage
- Shipping kennels with racks
- Slide top cage
- Spray bottles
- Insulated ice chest
- Platform or spring scale

Sanitation

- Chlorine bleach
- Chlorhexidine solution
- Pool nets (debris scoop)
- Scmb brushes/towels
- Foot baths
- Rubber gloves/boots
- Dawn™ detergent
- Hoses
- Rain coat/pants

Recordkeeping

- Record forms
- Indelible/waterproof pens
- Clipboards
- Toe tags
- Binoculars
- Message/location boards
- Waterproof covers
- Copy machine
- Duct tape (temporary 10)

Safety

- First aid kit
- Life jacket/ring
- Flashlights
- Two way radio

Supportive care/other

- Hair dryers/fans
- Feeding tubes/mouth gag
- Net mending equipment
- Rectal thermometer

Appendix 20¹

Entities in Alaska with Equipment and Materials Stockpiled for Deterring Unoiled Migratory Birds, Capturing and Rehabilitating Oiled Migratory Birds and Sea Otters, and Holding Polar Bears

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Deadhorse	Bird deterrence	10 kits	Birds at multiple locations	Lee Majors or Ken Linderman Alaska Clean Seas 659-3207 (ph) 659-2405 (24 hr) 659-2616 (fax) planning@alaskacleanseas.org (email)
	Bird capture/field stabilization	10 kits	100 birds	
	Bird stabilization center	1 module ²	350 birds	
	Bird capture	2 net launchers	1 bird per each launch	
	Bird deterrent buoys	11 Breco buoys	Seabirds at multiple locations	
	Bird deterrence	56 propane cannons	Birds at multiple locations	
	Bear holding	3 cages	3 bears	
	Bear transport cage	1 cage	1 bear	
	Bear stabilization kit	3 totes	3 bears	

¹ Information in this appendix was provided by representatives of the oil industry and their wildlife response contractors. The information has not been verified by wildlife resource agencies. The appearance of wildlife response information in this appendix does not constitute compliance by oil spill contingency plan holders with State of Alaska oil spill contingency planning requirements.

² Module may be transported by Hercules L-100 or C-130 aircraft.

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Prudhoe Bay (Alyeska Pump Station #1)	Bird deterrence	1 kit	Birds at 2 onshore locations	Kate Montgomery or Cathy Girard Alyeska Pipeline Service Company 787-4185 (ph) or 659-1085 (in Deadhorse) 787-4186 (fax) 659-1007 (security - emergencyonly) envirocoordps1-ps4@alyeska-pipeline.com (email)
	Bird stabilization	1 kit	150 birds	
	Bird capture	5 kits	50 birds	
Fairbanks (Alyeska Response Base -Nordale Yard)	Bird deterrence	2 kits	Birds at 2 onshore locations	Dave Schmidt or Ken Wilson Alyeska Pipeline Service Company 787-8908 or 450-5732 (ph) 590-8939 or 322-2799 (cell) 450-5707 (24 hr) 450-5534 (fax) David.Schmidtdr@alyeska-pipeline.com (email) Kenneth.Wilsonk@alyeska-pipeline.com (email)
	Bird stabilization	1 kit	150 birds	
	Bird capture	5 kits	50 birds	
	Bird stabilization	1 module ³	Pass-through facility	
Anchorage	Bird rehabilitation	1 facility	500 birds	Barbara Callahan International Bird Rescue 230-2792 (ph) 1-888-447-1743 (24 hr) 227-4956 (fax) barbara.callahan@ibrcc.org (email)

³ Module may be transported by Hercules L-100 or C-130 aircraft.

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Anchorage	Bird rehabilitation	1 mobile trailer pass through facility ⁴	150 birds	Robert E. Heavilin Alaska Chadux Corporation 348-2365 (24 hr) 348-2330 (fax) bheavilin@chadux.com (email)
	Bird capture and stabilization	4 kits	50 birds/kit	
	Bird deterrence	1 kit	Sustained bird deterrence at 3 onshore locations	
	Sea otter capture	4 capture kits	40 sea otters (capture and holding) ⁵	
	Sea otter holding	3 transportable floating pens	30 sea otters	
Anchorage	Bird stabilization	2 kits	100 birds	David Simmerman Navy Supervisor of Salvage 384-2968 (ph) 229-8859 (24 hr) 384-2969 (fax) DWSimmerman@essmnavy.net (email)
	Sea otter capture	2 capture kits	26 sea otters (capture and holding) ⁶	
	Sea otter holding	2 transportable floating pens	26 sea otters	

⁴ Module may be transported by Hercules L-100 or C-130 aircraft.

^{5,6} Additional sea otters could be captured in a pre-emptive capture and release program.

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Valdez (SERVS Annex)	Bird deterrence	4 kits	Birds at 4 onshore locations	SERVS Duty Officer Alyeska Pipeline Service Company 834-6901 (24 hr)
	Bird deterrent buoy	1 Breco buoy	Seabirds	
	Bird stabilization	1 kit	500 birds	Or
	Bird stabilization	1 module ⁷	Pass-through facility	Ken Wilson Alyeska Pipeline Service Company 450-5732 (ph) 907-322-2799 (cell) 450-5707 (24 hr) 450-5534 (fax) Kenneth.Wilson@alyeska-pipeline.com (email)
	Bird capture	40 kits	400 birds	
	Sea otter capture	4 kits	40 sea otters	
	Sea otter stabilization	1 lab module 1 holding module	100 sea otters	
	Sea otter rehabilitation	1 facility	100 sea otters initially and up to 200 sea otters per day maximum	

⁷ Module may be transported by Hercules L-100 or C-130 aircraft.

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Homer	Sea otter capture	1 kit	25 sea otters	Todd Paxton Cook Inlet Spill Prevention & Response, Inc. 776-7401 (ph) 776-5129 (24 hr) 776-2190 (fax) tpaxton@cipsri.org (email)
	Sea otter holding	1 transportable floating pen, 4 capture cages	25 sea otters	
Nikiski	Bird deterrent	6 kits	Birds at 6 onshore locations	Todd Paxton Cook Inlet Spill Prevention & Response, Inc. 776-7401 (ph) 776-5129 (24 hr) 776-2190 (fax) tpaxton@cipsri.org (email)
	Bird capture	10 kits	500 birds	
	Sea otter capture	2 kits	50 sea otters	
Seldovia	Sea otter holding	6 transportable floating pens, 9 capture cages	72 sea otters (pens)	Todd Paxton Cook Inlet Spill Prevention & Response, Inc. 776-7401 (ph) 776-5129 (24 hr) 776-2190 (fax) tpaxton@cipsri.org (email)
	Sea otter rehabilitation	1 transportable facility, 8 vans	40 sea otters (treat); 80 sea otters (hold)	

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Ketchikan Sitka Juneau Petersburg Skagway Craig/Klawock	Bird deterrence	1 kit per each location	Birds at onshore locations	Dave Owings Southeast Alaska Petroleum Resource Organization 225-7002 (24 hr) 617-2831 (cell) 247-1117 (fax) dave@seapro.org (email)
Sitka	Bird capture and field stabilization	1 kit	50-75 birds	Dave Owings Southeast Alaska Petroleum Resource Organization 225-7002 (24 hr) 617-2831 (cell) 247-1117 (fax) dave@seapro.org (email)
Ketchikan	Bird capture Bird capture and field stabilization	1 kit 3 kits	25 birds 75-100 birds	Dave Owings Southeast Alaska Petroleum Resource Organization 225-7002 (24 hr) 617-2831 (cell) 247-1117 (fax) dave@seapro.org (email)

Appendix 20, Cont.

Location	Response Action	Amount of Supplies	Total Animals to be Assisted with Supplies	Owner/Contact Person/ Contact Information
Barrow Nome Unalaska Kodiak Dillingham Kenai Bethel Valdez	Bird deterrence	1 kit per each location	Sustained bird deterrence at 3 onshore locations	Robert E. Heavilin Alaska Chadux Corporation 348-2365 (24 hr) 348-2330 (fax) bheavilin@chadux.com (email)
St. Paul	Bird capture and stabilization	1 kit	50 birds	Robert E. Heavilin Alaska Chadux Corporation 348-2365 (24 hr) 348-2330 (fax) bheavlin@chadux.com (email)

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Appendix 21

Facility Requirements for Oiled Wildlife Rehabilitation: Migratory Birds¹

Facility Setup

- Establish and operate intake, holding, and isolation areas within 24 hours of wildlife response activation.
- Establish and operate bird cleaning and pre-release areas within 48 hours of wildlife response activation.

Facility Layout (traffic flow)

- Separate contaminated and uncontaminated areas with a de-contamination area, to eliminate cross-contamination from oil and disease.
- Minimize audio and visual stimulus (e.g., human traffic and noise) to reduce stress to birds.
- Facilitate the natural “flow” of birds through the admission, rehabilitation, and release process.

Established Bird Areas (within a Facility)

- Intake
- Holding
- Wash/rinse
- Drying
- Pools/outdoor caging
- Food preparation
- Hospital/isolation
- Morgue/necropsy
- Storage

Facility Temperature

- Air temperature between 65-85°F, adjustable within 2°F increments, in all pre-wash and wash areas, including bird intake, holding, and hospital.
- Ability to warm or cool individual bird enclosures as needed.
- Temperature in all remaining areas to meet human comfort needs.

Air/Ventilation

- Air exchanges via air/ventilation system that ensures healthful air quality (as indicated by low odor levels, prevention of mold/mildew growth, and minimal dust particles). Use of HEPA filters is highly recommended.
Optimal: In bird areas, a minimum of 10 to 15 air exchanges per hour, to minimize disease risk.
Optimal: In human areas, a minimum of 8 air exchanges per hour.

¹The information in this appendix is from FWS. November 2003. Best practices for migratory bird care during oil spill response. U.S. Fish and Wildlife Service, Anchorage Fish and Wildlife Field Office, Anchorage, Alaska.

Appendix 21, Cont.

Electricity

- Sufficient for all electrical needs including heating, lighting, ventilation, air conditioning, water heaters, pet dryers, heat lamps, blenders, freezers, refrigerators, pool filters, computers, and faxes.
- Ground fault Interrupt circuits in all areas where circuits may be exposed to water.

Water Supply

- Temperature: Washing and rinsing water temperatures of 102 to 108°F, with additional hot water supply sufficient for other uses (e.g., laundry, cleaning, food preparation, warm-water pools).
- Pressure: 40-60 psi in wash and rinse area, with sufficient water pressure in other areas (e.g., doing laundry, washing dishes).
- Quantity: Supply line(s) large enough for all areas requiring water simultaneously (e.g., wash/rinse area, pool area, laundry.) The quantity should be sufficient to provide a continuous flow of 4 gallons/minute to all indoor outlets and additional supply for pools.
- Quality: Water hardness of 2-5 grains per gallon for all bird wash and rinse stations and waterproofing pools. Provide a source of potable water for human use.

Waste Water

- Dispose of all oily wastewater in accordance with appropriate federal, state, and municipal regulations.
- Dispose of all gray water (e.g., rinse water, pool overflow) in accordance with appropriate federal, state, and municipal regulations.
- Control storm water and other runoff, as appropriate, to prevent contact with gray water and oily wastewater.

Solid Waste

- Dispose of all solid waste in accordance with appropriate federal, state, and/or local hazardous waste, municipal solid waste, and/or biological waste laws and regulations.
- Dispose of carcasses proceeds under the direction of the designated U.S. Fish and Wildlife Service representative.

Outdoor Areas

- Perimeter of restricted access from the public to outdoor areas.
- Outdoor space typically as large as the footprint of the facility itself (buildings or structures); may be larger depending on the species.
- Pool size as dictated by release criteria and by species (e.g., to demonstrate that grebes can fly, flight space is provided within the outdoor enclosure).
- Minimize visual and auditory stress to birds.
- Vehicle access and parking.

Appendix 21, Cont.

Non-Bird Areas

- De-contamination area.
- Administration area (e.g., sign in, volunteer orientation, training, record keeping).
- Rest areas and rest rooms for workers.
- Sufficient space for human food storage, preparation, and dining.

Security/Visitor Control

- Control access to the facility and any associated outdoor areas (e.g., pools, bird enclosures).
- Coordinate and facilitate all visits by news media through the Joint Information Center within the ICS.
- Limit visitor frequency to no more than 2 per day.
- Limit number of persons per visit to minimize stress to birds.

Pest Control

- Develop and maintain a pest control plan for rodents and insects.
- Develop and maintain a plan for predator exclusion.

Communications

- Adequate access to phones, faxes, and computers with internet access for all rehabilitation personnel.
- Communicate via radio or cell phone, with all fields capture and fields stabilization units

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Appendix 22

Guidance for Facility Requirements for Oiled Wildlife Rehabilitation: Sea Otters

General Requirements that Need to Be Addressed:	
<p>Veterinary hygiene standards must be applied to prevent the transmission of communicable wildlife diseases.</p> <p>Transportation of sea otters from the capture site to the rehabilitation facility and to the holding facilities must be minimal.</p> <p>The number of sea otters in any holding facility (meeting the minimum requirements for space) should contain no more than 25 animals.</p> <p>Approved training needs to be provided by the plan holder or a wildlife contractor for the professionals and volunteers who will be staffing the facilities.</p>	
Rehabilitation Facility Requirements¹:	
<u>Indoor Spaces</u> <ul style="list-style-type: none">Arrival dock and cage cleaningTriage and SedationCleaning²DryingCritical careVeterinary clinic<ul style="list-style-type: none">Clinical laboratorySurgeryDarkroomMicrobiological clean roomFood preparationNurseryNecropsyHot water utility roomAdministrationStaff accommodations	<u>Outdoor Spaces</u> <ul style="list-style-type: none">Sea otter holding pensSea otter poolsPinniped pools and haul-outSeawater treatmentService yardTriage van/boat storageWater tanks and waste water storage <p>NOTE: Facilities, equipment, sea otter response plans, training, and staffing qualifications must be approved by FWS. FWS personnel evaluation for approval will include the "adequate" performance of the plan holder during an oil spill drill or during a practice drill designed to specifically test the response plan.</p> <p>Approved training needs to be provided by the plan holder or a wildlife contractor for the professionals and volunteers who will be staffing the facilities.</p>

¹ The information in this appendix is from Williams, T.M. and R.W. Davis. 1995. Facilities for oiled sea otters, In: Emergency Care and Rehabilitation of Oiled Sea Otters: A Guide for Oil Spills involving Fur-bearing Marine Mammals. Williams, T.M. and Davis, R.W. editors, University of Alaska Press, Fairbanks, Alaska.

² The number of cleaning stations should be based on the numbers of animals required by the planning standards and the estimates of washing and drying time needed to adequately complete the process.

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Appendix 23

Equipment List and Facility Criteria for Handling, Care, and Rehabilitation: Marine Mammals

Detailed information including equipment lists and criteria for facilities and personnel handling, caring for, and rehabilitating marine mammals (excluding polar bears, sea otters, and walruses) can be found in the National Oceanic and Atmospheric Administration's "Marine Mammal Oil Spill Response Guidelines" at this web address: <http://www.nmfs.noaa.gov/pr/health/>.

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Appendix 24

Approval Request Form: Unoiled Wildlife Deterrence Activities*

Responders who have valid permits to conduct wildlife deterrence activities and initiate a deterrence program will need to: (1) follow the terms of their permit, (2) immediately notify the appropriate wildlife resource agency representatives (see Appendix 26) to advise them of actions taken and planned, and (3) submit Sections I-V of this form to the Federal and State OSCs and appropriate wildlife resource agency representatives within 24-hours following the initiation of a wildlife deterrence program.

Responders who do not have valid permits to conduct wildlife deterrence activities as part of a spill response will need to receive authorization from appropriate wildlife resource agencies (e.g., Fish and Wildlife Service and/or National Marine Fisheries Service and Alaska Department of Fish and Game) and the Federal and State On-Scene Coordinators (OSCs) prior to initiating deterrence activities. Responders may apply for authorization to deter wildlife by completing Sections I-V of this form and submitting it to the appropriate wildlife resource agency representatives for consideration.

Responders who do not have valid permits to deter wildlife should note that completing the requested information in this form does not satisfy wildlife resource agencies permitting requirements. Rather, wildlife resource agencies will determine, based on the information submitted to them, whether or not it is appropriate to issue required permits.

*Any deterrence-related activities for species listed as threatened and/or endangered under the Endangered Species Act will be addressed via Federal OSC ESA consultation with Fish and Wildlife Service and/or National Marine Fisheries Service as appropriate.

I. Spill Data	
A. Name of incident:	
B. Date of incident:	
C. Spill location: _____ latitude: _____ longitude: _____	
D. Spill location: land _____; water _____; land and water _____	
E. Distance to nearest water body, if on land: _____ km/mi	
F. Product released: North Slope Crude _____; Diesel #2 _____; Cook Inlet Crude _____; Chevron Residual _____; JP4 _____; Other _____	
G. Estimated volume of product released: _____ gals/bbls	
H. Release status: Stopped _____; Continuing _____; Unknown _____	
I. Is spill: Contained _____; Spreading _____; Unknown _____	

Appendix 24, Cont.

II. Wildlife Data	
Species/Species Groups	Estimated Numbers of Wildlife and Location Relative To Spill Release
e.g., Waterfowl	e.g., 100 common eiders 1 mile northeast from leading edge of spill

Appendix 24, Cont.

III. Primary Response Actions*

Describe any primary response actions underway or previously taken: (1) to protect wildlife and/or wildlife habitat, and (2) which may affect proposed deterrent activities.

* May include (for example) mechanical cleanup, protective booming, *in-situ* burning, dispersant use, and/or removal of oiled debris including oiled wildlife carcasses.

IV. Secondary Response Actions: Deterrence Activities

A. Describe deterrence plan for each species or species group identified in Section II, including objectives, procedures, equipment, number of persons, location(s), and duration:

Appendix 24, Cont.

IV. Secondary Response Actions: Deterrence Activities, Cont.

B. Names of Individual(s) Conducting Deterrence Activities and Date(s) of Training*

* Only individuals trained and currently certified in bird deterrence techniques by the U.S. Department of Agriculture Animal and Plant Health Inspection Service will be authorized to conduct migratory bird deterrence activities.

C. Person in Charge of Deterrent Activities

Name: _____

Affiliation: _____

Address: _____

Deterrence training date and instructor: _____

Telephone number: _____

Fax number: _____

Deterrence permittee: _____

Appendix 24, Cont.

V. Requestor Sign-Off*

Signature of requestor: _____

Printed name of requestor: _____

Title of requestor: _____

Requestor affiliation (i.e., employer): _____

Requestor representing: _____

Sections I-V of this form submitted to the following wildlife resource agency representatives (print names below):

_____, FWS

_____, NMFS

_____, ADF&G

Date, time, and method of submittal to FWS: _____

Date, time, and method of submittal to NMFS: _____

Date, time, and method of submittal to ADF&G: _____

*If request is made by a wildlife resource agency representative (rather than the Responsible Party), the wildlife resource agency representative will sign as the requestor and will then complete the appropriate information in Section VI.

Appendix 24, Cont.

VI. Wildlife Resource Agency Response to Request	
<p>A. Date and time request received by wildlife resource agency representative(s):</p> <p>Alaska Department of Fish and Game (ADF&G) Name: _____ Date: _____ Time: _____ Phone #: _____</p> <p>Fish and Wildlife Service (FWS) Name: _____ Date: _____ Time: _____ Phone #: _____</p> <p>National Marine Fisheries Service (NMFS) Name: _____ Date: _____ Time: _____ Phone #: _____</p>	
<p>B. ADF&G Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) for the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	
<p>C. FWS Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) for the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	
<p>D. NMFS Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) for the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	

Appendix 24, Cont.

VII. Federal and State On-Scene Coordinator Response To Request

A. State On-Scene Coordinator's decision regarding wildlife response program:

Request received by State On-Scene Coordinator:

Time: _____ Date: _____

___ Concur with wildlife resource agencies

___ Do not concur for the following reason(s): _____

Signature: _____ Time: _____ Date: _____

B. Federal On-Scene Coordinator's decision regarding response program:

Request received by Federal On-Scene Coordinator:

Time: _____ Date: _____

___ Concur with wildlife resource agencies

___ Do not concur for the following reason(s): _____

Signature: _____ Time: _____ Date: _____

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Appendix 25

Approval Request Form: Pre-Emptive Capture of Unoiled Wildlife and/or Capture and Rehabilitation of Oiled Wildlife¹

Responders who wish to conduct pre-emptive capture of unoiled wildlife and/or capture and rehabilitation of oiled wildlife as part of a spill response will need to receive authorization from appropriate wildlife resource agencies; e.g., Fish and Wildlife Service and/or National Marine Fisheries Service and Alaska Department of Fish and Game and the Federal and State On-Scene Coordinators (OSCs) prior to initiating those activities. Responders may apply for authorization to conduct pre-emptive capture of unoiled wildlife and/or the capture and rehabilitation of oiled wildlife by completing Sections I-V of this form and submitting it to the appropriate wildlife resource agency representatives for consideration.

It should be noted that completing the requested information on this form does not satisfy wildlife resource agencies permitting requirements. Only permitted wildlife rehabilitator(s) with experience in the capture, rehabilitation, and care of oiled wildlife will be authorized for this activity.

I. Spill Data	
A. Name of incident:	
B. Date of incident:	
C. Spill location: _____ latitude: _____ longitude: _____	
D. Spill location: land _____; water _____; land and water _____	
E. Distance to nearest water body, if on land: _____ km/mi	
F. Product released: North Slope Crude _____; Diesel #2 _____; Cook Inlet Crude _____; Chevron Residual _____; JP4 _____; Other _____	
G. Estimated volume of product released: _____ gals/bbls	
H. Release status: Stopped _____; Continuing _____; Unknown _____	
I. Is spill: Contained _____; Spreading _____; Unknown _____	
J. Estimated volume of product potentially released: _____ gals/bbls	

¹ Any pre-emptive capture-related activities for unoiled wildlife and/or capture- and rehabilitation-related activities for oiled wildlife species listed as threatened and/or endangered under the Endangered Species Act will require Federal OSC to initiate Section 7 consultation with Fish and Wildlife Service and/or National Marine Fisheries Service.

Appendix 25, Cont.

II. Wildlife Data	
Species/Species Groups	Estimated Numbers of Wildlife and Location Relative to Spill Release
e.g., Waterfowl	e.g., 100 common eiders 1 mile northeast from leading edge of spill

Appendix 25, Cont.

III. Primary Response Actions*

Describe any primary response actions underway or previously taken: (1) to protect wildlife and/or their wildlife habitat, and (2) which may affect proposed (a) capture, handling, transportation, holding, and release of unoiled wildlife and/or (b) capture, handling, transportation, stabilization, rehabilitation, and/or release of oiled wildlife.

* May include (for example) mechanical cleanup, protective booming, *in-situ* burning, dispersant use, and/or removal of oiled debris including oiled wildlife carcasses.

Appendix 25, Cont.

IV. Secondary Response Actions: Pre-Emptive Capture of Unhoiled Wildlife*

A. Describe pre-emptive capture plan for each species or species group , including estimated numbers requiring capture; estimated duration of capture activities; location(s) where capture would occur; techniques to be used for capture; estimated number of capture personnel required; equipment, materials and logistics support required; description of holding facility; estimated length of time wildlife would be held; and release plan:

B. Information on Person in Charge of Pre-emptive Capture

Name: _____

Affiliation: _____

Address: _____

Pre-emptive capture training date and instructor: _____

Telephone and fax numbers: _____

Email: _____

Pre-emptive capture permittee: _____

* In accordance with 50 CFR 21.31(f)(1)(i), permitted rehabilitators are authorized to temporarily possess healthy, unaffected wildlife for the propose of removing them from imminent danger. However, those activities will need to be authorized in accordance with procedures outlined in this appendix.

Appendix 25, Cont.

V. Tertiary Response Actions: Capture, Handling, Transportation, Stabilization, Rehabilitation, and Release of Oiled Wildlife

- A. Describe each element of the capture, handling, transportation, stabilization, rehabilitation, and release plan for each species or species including: estimated numbers requiring capture, estimated duration of capture activities; location(s) where capture would occur; techniques to be used for capture; estimated number of capture personnel required; equipment, materials (including “OILED-TREATED” bands for migratory birds that could be harvested for subsistence use) and facility (e.g., stabilization and rehabilitation) requirements; and logistics and other technical support required; estimated length of time wildlife would be held; and release plan:

Appendix 25, Cont.

V. Tertiary Response Actions: Capture, Handling, Transportation, Stabilization, Rehabilitation, and Release of Oiled Wildlife, Cont.

B. Information on Stabilization Facility

Address: _____

Specific location (if not discernible from address): _____

Telephone number: _____

Fax number: _____

C. Information on Rehabilitation Facility

Address: _____

Specific location (if not discernible from address): _____

Telephone number: _____

Fax number: _____

D. Information on Person in Charge of Tertiary Response Activities

Name: _____

Affiliation: _____

Address: _____

Training dates and instructor(s) for tertiary response activities: _____

Telephone and fax numbers: _____

Email: _____

Capture, transportation, stabilization, and rehabilitation permittee(s): _____

Appendix 25, Cont.

VII. Wildlife Resource Agency Response to Request*	
<p>A. Date and time request received by wildlife resource agency representative(s):</p> <p>Alaska Department of Fish and Game (ADF&G) Name: _____ Date: _____ Time: _____ Phone #: _____</p> <p>Fish and Wildlife Service (FWS) Name: _____ Date: _____ Time: _____ Phone #: _____</p> <p>National Marine Fisheries Service (NMFS) Name: _____ Date: _____ Time: _____ Phone #: _____</p>	
<p>B. ADF&G Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) for the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	
<p>C. FWS Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) of the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	
<p>D. NMFS Recommendation/Decision:</p> <p>___ Approve requested program(s) as proposed ___ Approve requested program(s) with the following conditions: ___ Deny requested program(s) of the following reason(s): _____</p> <p>Signature: _____ Time: _____ Date: _____</p>	

* See Appendix 1 for a list of factors to be considered by wildlife resource agency representatives when determining whether to recommend beginning a wildlife capture and rehabilitation program.

Appendix 25, Cont.

VIII. Federal and State On-Scene Coordinator Response To Request

A. State On-Scene Coordinator's decision regarding wildlife response program:

Request received by State On-Scene Coordinator:

Time: _____ Date: _____

Concur with wildlife resource agencies

Do not concur for the following reason(s): _____

Signature: _____ Time: _____ Date: _____

B. Federal On-Scene Coordinator's decision regarding response program:

Request received by Federal On-Scene Coordinator:

Time: _____ Date: _____

Concur with wildlife resource agencies

Do not concur for the following reaon(s): _____

Signature: _____ Time: _____ Date: _____

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Appendix 26

Contact Information for Wildlife Resource Agencies: Migratory Birds, Marine Mammals, and Terrestrial Mammals

Species	Agencies/Contacts	
Migratory birds Sea otters Pacific walruses Polar bears Caribou Muskoxen Moose Sitka black-tailed deer Bison Mountain goats Dall sheep Brown and black bears Wolves Red foxes Arctic foxes Mink River otters Muskrats Beavers Wolverine Marten Miscellaneous small mammals	<p>Fish and Wildlife Service</p> <p><i>Primary contact</i> Catherine Berg Wk: 271-1630 Cell: 244-1529 Fax: 271-2786 Email: catherine_berg@fws.gov</p> <p><i>Alternate contact</i> Philip Johnson Wk: 786-3483 Cell: 242-6893 Fax: 786-3350 Email: philip_johnson@fws.gov</p>	<p>Alaska Department of Fish and Game</p> <p><i>Primary contact</i> Brad Dunker Wk: 267-2541 Cell: 529-6258 Hm: 562-1612 Fax: 267-2499 Email: Brad.Dunker@alaska.gov</p> <p><i>Alternate contact</i> Wk: TBB Fax: TBD Cell: TBD Email: TBD</p>
Northern fur seals Steller sea lions Ringed seals Harbor seals Spotted seals Bearded seals Ribbon seals Cetaceans	<p>National Marine Fisheries Service</p> <p><i>Primary contact</i> Brad Smith Wk: 271-5006 Hm: 770-7633 Cell: 830-0220 Fax: 271-3030 Email: brad.smith@noaa.gov</p> <p><i>Alternate contact</i> Sadie Wright Wk: 907-586-7630 Alt. Wk: 907-586-7235 Fax: 907-586-7012 Email: sadie.wright@noaa.gov</p>	<p>Alaska Department of Fish and Game</p> <p><i>Primary contact</i> Brad Dunker Wk: 267-2541 Cell: 529-6258 Hm: 562-1612 Fax: 267-2499 Email: Bradley.Dunker@alaska.gov</p> <p><i>Alternate contact</i> Wk: TBD Fax: TBD Cell: TBD Email: TBD</p>

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