



Section 9310

Northwest Wildlife Response Plan

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Northwest Wildlife Response Plan

9310.1 Introduction and Background

The purpose of this Wildlife Response Plan is to outline the responsibilities of the Wildlife Branch within a Unified Command structure during an oil spill, describe the procedures to be used, and identify the personnel and equipment necessary to meet wildlife protection responsibilities of the responsible party (RP) and the federal and state governments during a spill. The mission of the Wildlife Branch is to minimize the adverse impacts of oil spills and oil spill response on wildlife.

The Northwest Area Wildlife Response Plan (Plan) contains:

- Statutory, policy, and procedural bases for Wildlife Branch operations;
- Activation criteria and factors to consider when developing response actions; and
- Organizational infrastructure for wildlife response operations.

When oil spills occur, the Incident Command System (ICS) is used as the organizational structure to coordinate the response actions. The ICS organizational structure typically includes the Unified Command and the Operations, Planning, Logistics, and Finance Sections. The actual response organization will grow to fit the level of response necessary for a specific incident. Response actions concerning the protection, identification, rescue, processing, and rehabilitation of oiled or threatened wildlife are performed by the Wildlife Branch within the Operations Section.

It is the policy of the Northwest Area Committee (NWAC) that representatives of the United States Fish and Wildlife Service (USFWS) will assume the positions of Director and Deputy Director of the Wildlife Branch. Representatives from state fish and wildlife departments will assume these positions if designated by a USFWS representative or if a USFWS representative is not available. If there is a significant marine mammal response component to an incident, a representative from the National Marine Fisheries Service (NMFS) may be appointed to the position of Deputy Director. A USFWS representative or designee may appoint other parties, including RP representatives, to one or both of these positions at any time during an incident for such periods of time as may be deemed appropriate. Unless otherwise indicated by USFWS, the Wildlife Branch Director position will be delegated to the Washington Department of Fish and Wildlife (WDFW) for spills that occur within the legal boundaries of Washington State. The remaining positions within the Wildlife Branch will be staffed as appropriate to the incident and may include representatives of state and federal agencies, tribes, the RP,

professional wildlife response organizations, aquaria, community groups, specialized wildlife interest groups, contractors, and the public.

Within the Wildlife Branch, there are three groups who report to the Wildlife Branch Director: the Wildlife Reconnaissance Group, the Bird Recovery and Rehabilitation Group, and the Marine Mammal Recovery and Rehabilitation Group. The roles, responsibilities, and duties of these groups and individuals within these groups are described in detail in the Wildlife Branch Positions and Responsibilities section of this document.

Clear and effective communication between the Wildlife Branch, the Environmental Unit, the Situation Unit, and the Joint Information Center is critical. Wildlife Branch field staff perform reconnaissance by land, boat, and air. Environmental Unit staff gather information regarding wildlife impacts through aerial overflights, field observers, and on-the-ground Shoreline Cleanup Assessment Teams. The Wildlife Branch and the Environmental Unit share this information so that it can be used by the Planning and Operations Sections to aid in strategic assessment and planning of response strategies. The Wildlife Branch Director is responsible for keeping the Unified Command informed, through the Operations Section Chief and the Situation and Environmental Units in the Planning Section, regarding the status of affected wildlife during the response. The Wildlife Branch maintains a Wildlife Liaison position to ensure effective communication and coordination among these different groups.

While the organizational structure, roles, and responsibilities remain the same regardless of the location and type of material spilled (e.g., oil or hazardous material, marine or inland environments), some functions may be altered as appropriate. This plan applies to the Pacific Northwest Region covering Washington, Oregon, and Idaho and was developed jointly by a working group of government agencies and interested parties to meet portions of the Northwest Area Contingency Plan's (NWACP) Fish and Wildlife and Sensitive Environments Plan requirements set forth in the National Contingency Plan, 40 Code of Federal Regulations (CFR) 300.210(c)(4).

9310.2 Federal and State Law Mandates

The Federal Oil Pollution Act of 1990, incorporated into the National Contingency Plan, requires that a Fish and Wildlife and Sensitive Environment Plan be developed in consultation with USFWS, the National Oceanic and Atmospheric Administration (NOAA), and other interested parties, including state fish and wildlife agencies (33 United States Code [USC]§ 1321(d)(2)(M)). The plan must include “immediate and effective protection, rescue, rehabilitation of, and the minimization of risk of damage to fish and wildlife resources and habitat that are harmed or that may be jeopardized by a discharge.” Additionally, 40 CFR 300, Section 300.210(c)(4) sets forth the requirements for this plan as an annex to Area Contingency Plans. This Wildlife Response Plan has been written in conjunction with other sections of the NWACP to address the federal requirements. Certain other federal and state laws also apply to oil spill response.

Of particular concern is compliance with the Migratory Bird Treaty Act, the Marine Mammal Protection Act (MMPA), the Endangered Species Act (ESA), and state wildlife rehabilitation rules.

9310.2.1 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (16 USC 703-711) protects most bird species in the United States and requires specific authorization (or exemptions) to conduct activities that may result in a “take” of migratory birds. “Take” is defined as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct.” Most response actions that would result in a take are permitted by issuance of a Migratory Bird Rehabilitation Permit (50 CFR 21.31). A rehabilitation permit authorizes recovery, temporary possession, transport, and rehabilitation of oiled migratory birds. The permit provisions also allow authorized individuals to euthanize migratory birds that are medically determined to have poor prospects of survival.

The Migratory Bird Rehabilitation Permit has two stipulations that are specific to oil spill response. The permit regulations specify that wildlife rehabilitators must be authorized to work on a specific oil spill incident by USFWS and the Federal On-scene Coordinator (FOSC). The purpose of the stipulation is to ensure that wildlife rehabilitators utilized during an oil spill incident are qualified and experienced in caring for oiled wildlife.

The Migratory Bird Rehabilitation Permit (50 CFR 21.31) also stipulates that specific authorization to remove dead oiled birds must be obtained from the USFWS Division of Law Enforcement for each spill incident. Collected oiled carcasses will be retained per appropriate chain-of-custody protocols until released for disposal by the Wildlife Branch. See NWACP Section 9405 for additional carcass disposal information.

The Wildlife Branch Director will ensure that the necessary authorizations are obtained from USFWS for each incident response. In addition to the permit requirements described above, USFWS also mandates that minimum care standards for oiled-birds be utilized. The USFWS (2003) document *Best Practices for Migratory Bird Care During Oil Spill Response* describes widely accepted operational guidelines and care standards for conducting oiled-bird response activities and is incorporated into the NWACP Wildlife Plan by reference. (http://www.fws.gov/wafwo/publications/best_practices.pdf)

9310.2.2 Endangered Species Act

The ESA (16 USC 1531-1543) has strict permit requirements for the handling of threatened and endangered species (listed species). Permitting requirements apply (with a few exceptions) for any species listed as threatened or endangered. A Migratory Bird Rehabilitation Permit (see above) authorizes the recovery, temporary possession, transport, and rehabilitation of oiled threatened and endangered species of migratory birds with no additional ESA permits required.

In the event of an oil spill or hazardous substance release, the ESA must be considered in the development of federal response activities and actions during an oil spill response (Section 4314 of NWACP). As the spill response occurs, the FOSC must consult with the natural resource trustees as laid out in Section V.B of 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). The Environmental Unit, as outlined in the ESA MOA, will address ESA Section 7 Consultation requirements. However, the Wildlife Branch will be instrumental in documenting the effects of response actions on listed species. Coordination between the Wildlife Branch and the Environmental Unit is critical to accomplishing this task.

Deterrence actions may be utilized by the Wildlife Branch to keep oiled wildlife away from oil. No federal permits are required for non-lethal deterrence of migratory birds (50 CFR 21.41). However, this exemption does not apply to eagles and endangered species. The ESA does not specifically authorize deterrence and preemptive capture of endangered species. The Wildlife Branch, in consultation with the appropriate trustee agencies, may develop response strategies for deterrence and preemptive capture of endangered species for a specific spill incident. "Take" of endangered species resulting from approved response actions will be deemed incidental to the primary action of the spill response and will be covered by the ESA Section 7 Emergency Consultation process, unless otherwise authorized by a permit.

Oil spill-related deterrence actions that involve southern resident killer whales are subject to the MMPA and the ESA. There is a contingency under the MMPA that gives a waiver for the "take" of marine mammals by federal or state employees for the health and safety of the animals or for human safety. There is no such exemption under the ESA, but a scientific research and enhancement permit (No. 932-1489) held by NOAA's Marine Mammal Health and Stranding Response Program covers oil spill-related actions under the MMPA and ESA in Puget Sound.

9310.2.3 Marine Mammal Protection Act

Under the MMPA (16 USC 1361-1407), federal, state, and local government officials, or designees of the relevant Secretaries of the Departments of the Interior and Commerce, may take marine mammals during the course of official response duties if such taking is for the protection or welfare of the mammal, the protection of public health and welfare, or the non-lethal removal of nuisance animals (16 USC 1379 Section 109(h)(1)). Government contractors conducting officially authorized oiled wildlife spill response-related activities and acting under the direct supervision of the Wildlife Branch Director are regarded as spill response employees and may take marine mammals *if* the Wildlife Branch is activated and the Wildlife Branch Director is authorized pursuant to Section 109(h) of the MMPA and implementing regulations (USFWS, NMFS, state wildlife agency) or is designated by the NOAA Administration Regional

Administrator under 16 USC 1382 Section 112(c)). “Take” is considered appropriate for the purposes of recovery and transport of marine mammals (live or dead) to a designated location, rehabilitation by an authorized facility, return to the wild, or the collection of evidence. If oiled wildlife spill response field personnel are contract employees of a non-government agency and not otherwise authorized pursuant to Section 109(h) or 112(c) of the MMPA, authorization to take oiled marine mammals during spill response activities must be obtained directly from the appropriate federal trustee (USFWS or NMFS). Likewise, if the Wildlife Branch is not activated, authorization to take oiled marine mammals must be obtained directly from the appropriate federal trustee (USFWS or NMFS) pursuant to 16 USC 1382 Section 112(c). There are a number of research organizations in the Northwest that are permitted to work with marine mammals. These groups and their resources will be coordinated by the Wildlife Branch where appropriate.

Sea otters in Washington State are not currently protected under the ESA but are protected by the MMPA. USFWS is the lead federal trustee agency with responsibility for protection and management of sea otters. USFWS and WDFW will work with the Wildlife Branch to develop appropriate response actions for sea otters within the legal framework of the MMPA and to authorize individuals to collect, transport, and rehabilitate oiled sea otters (16 USC 1379(h) and 1382(c)). Spill responders will comply with the *Washington Sea Otter Response Handbook*, which is incorporated as a requirement of the NWACP. This Wildlife Response Plan adopts the operational guidelines as well as the standard of care requirements of the *Washington Sea Otter Response Handbook* (<http://wdfw.wa.gov/publications/pub.php?id=00302>).

9310.3 Natural Resource Trustees for Wildlife

Trustee agencies provide input into the selection of response methods so that wildlife operations comply with each trustee’s governing laws and their obligations to preserve and protect wildlife and habitat. During a spill response, the wildlife trustee agencies will advise the Wildlife Branch Director about local wildlife resources, sensitive species or habitats, logistical considerations, and other issues that arise.

The following federal trustee agencies are most likely to participate in Wildlife Branch decisions and response activities:

- Department of the Interior
 - Bureau of Indian Affairs
 - Bureau of Land Management
 - National Park Service
 - USFWS
- Department of Commerce
 - NOAA, Office of Response and Restoration
 - NOAA, NMFS

- NOAA National Marine Sanctuaries
- Department of Agriculture
 - Forest Service
- Department of Defense (military lands)

The United States Coast Guard and United States Environmental Protection Agency are not trustee agencies for natural resources but are the primary lead federal agencies during a spill response and also participate in Wildlife Branch decisions. In any spill, the potentially responsible party or discharger is responsible to federal and state resource trustees, to federally recognized Indian Tribes, and to foreign trustees, all of whom are empowered to assess impacts and seek compensation for injuries to natural resources that have been caused by a discharge of oil. State trustee agencies that are most likely to participate in Wildlife Branch decisions and response activities will vary by state and may include the following:

Washington

- WDFW
- Washington State Department of Natural Resources (Tidelands)
- Washington State Parks & Recreation

Oregon

- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife

Idaho

- Idaho Department of Fish and Game

Indian Tribes

Indian Tribes retain sovereign authority to manage wildlife resource issues within reservation boundaries. Consultation and coordination is necessary with Tribal governments whose lands may be impacted by an oil spill. Regardless of whether an oil spill occurs directly on tribal lands or moves onto or through tribal lands, tribes have an important role in developing wildlife response actions affecting tribal resources. Tribes may have additional natural resource interests related to retained rights outside of reservation lands. In such circumstances, the Wildlife Branch will work in coordination with affected tribes to develop appropriate wildlife response strategies to address wildlife and tribal concerns, in compliance with Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), Department of the Interior Secretarial Order 3206, USFWS Native American Policy, as well as compliance with Section 1615 of the NWACP.

9310.4 Agreements Regarding Wildlife Response Activities

To provide an efficient and coordinated response, principal federal and state fish and wildlife trustees may enter into cooperative agreements regarding a variety of issues that arise during spills of oil and toxic substances. These issues include agency response roles, reconnaissance, capture, treatment, rehabilitation, and release of injured wildlife.

Because oil spills can occur across state and national borders, agreements have been established with all western states and British Columbia. The states of Alaska, California, Hawaii, Oregon, and Washington, and the province of British Columbia, entered into a Memorandum of Cooperation in June 2001. This memorandum was developed by the Pacific States–British Columbia Oil Spill Task Force to ensure effective coordination between the states and British Columbia in the event of a spill. The Pacific States/British Columbia Oil Spill Task Force Mutual Aid Plan (Revised 2009 version) can be implemented to support wildlife operations by requesting equipment and personnel from adjoining states. The Wildlife Branch Director will make recommendations to the Unified Command when additional assistance (mutual aid) is needed.

The Canada-United States Joint Marine Pollution Contingency Plan (CANUSPAC) is intended to facilitate international cooperation during a marine spill response in the Pacific Northwest (http://www.ccg-gcc.gc.ca/folios/00025/docs/canadaus_pub-eng.pdf). This plan contains a robust Annex on managing wildlife issues during a transboundary response. The Canada-United States Joint Inland Pollution Contingency Plan (CANUSWEST) provides for similar coordination in the inland areas (<http://www.canuswest.com/files/canuswest.pdf>).

9310.5 Response Planning

The primary purpose of the Wildlife Branch is to provide the best achievable care for impacted wildlife and to minimize wildlife losses, which includes preventing injury to wildlife or habitats from both the oil and the implementation of response countermeasures. However, undertaking an effective response requires planning and preparation before the need to respond to an actual incident.

State and federal trustees are encouraged to work with the oil industry and Northwest Area wildlife recovery and rehabilitation organizations to prepare an adequate response capability for Wildlife Branch operations. Preparation involves assessing potential impacts to wildlife; ensuring that adequate equipment, personnel, and wildlife response protocols are available; and practicing the planned response through oil spill exercises. In particular, oiled wildlife rehabilitation requires large amounts of space, water, and personnel, and these resources are not readily available without prior planning. The Wildlife Task Force of the Regional Response Team/NWAC will continue to work with state and federal trustees to develop a list of trained personnel and existing and needed equipment.

9310.6 Response Personnel

Worker safety must be considered before any wildlife response effort is conducted. Therefore, all Wildlife Branch activities must conform to the Site Safety Plan for the response. All workers must be current in Occupational Safety and Health Administration information and training that relates to the safety of working in an environment with uncontrolled oil products. Additional safety requirements may be included in an incident-specific Wildlife Branch and/or Site Safety Plan. All personnel involved in Wildlife Branch operations must have appropriate job-specific safety training for the tasks to be performed, as well as utilize appropriate personal protection equipment. Those involved with animal handling should be trained in techniques that ensure worker safety and present the least amount of stress to wildlife. Appropriate biosecurity measures will be utilized to reduce the risk of transmission of infectious diseases between wildlife and personnel during an oiled wildlife response.

An oiled wildlife response requires personnel with specialized training and experience to effectively recover and rehabilitate oiled animals. The number of people required is largely determined by the number of animals impacted, the location of the spill, and the duration of the spill. Personnel are needed for the initial wildlife impact assessment, reconnaissance, recovery, field stabilization, transport, and rehabilitation as well as to manage and support the response. Management and support positions are generally located in the Command Post and are responsible for supporting the various wildlife response activities that occur in the field or at the rehabilitation center(s).

Wildlife response personnel can come from various state and federal agencies, the RP, professional oiled wildlife response organizations, aquaria, community groups, specialized wildlife interest groups, and the public. Consistent with ICS principles, positions should be assigned to individuals and/or organizations based on their experience and skills. The only positions within the Wildlife Branch that are pre-determined are those of the Branch Director and Deputy (see Section 9310.8). Specific position descriptions and duties can be found later in this document.

9310.7 Activation of the Wildlife Branch

Every spill will be assessed for potential impacts to wildlife. The Wildlife Branch will be activated when either a federal or state trustee agency, RP, or the Unified Command determines that an oil spill is in the vicinity of wildlife resources (mammals or birds), or has a trajectory that puts wildlife resources at risk. Once this determination has been made, the Operations Section Chief and the Unified Command will be notified when the Wildlife Branch is operational. As described in the **Response Actions** section below, the Wildlife Branch will be developed to appropriately respond to the anticipated magnitude of wildlife impacts.

9310.8 Designation of Wildlife Branch Director and Deputy

It is the policy of the Northwest Area Committee (NWAC) that representatives of the United States Fish and Wildlife Service (USFWS) will assume the positions of Director and Deputy Director of the Wildlife Branch. Representatives from state fish and wildlife departments will assume these positions if designated by a USFWS representative or if a USFWS representative is not available. If there is a significant marine mammal response component to an incident, a representative from the National Marine Fisheries Service (NMFS) may be appointed to the position of Deputy Director. A USFWS representative or designee may appoint other parties, including RP representatives, to one or both of these positions at any time during an incident for such periods of time as may be deemed appropriate. Unless otherwise indicated by USFWS, the Wildlife Branch Director position will be delegated to the Washington Department of Fish and Wildlife (WDFW) for spills that occur within the legal boundaries of Washington State. The remaining positions within the Wildlife Branch will be staffed as appropriate to the incident and may include representatives of state and federal agencies, tribes, the RP, professional wildlife response organizations, aquaria, community groups, specialized wildlife interest groups, contractors, and the public.

9310.9 Wildlife Branch Organizational Structure

The Wildlife Branch directs the operations of the wildlife response with the Operations Section. Within the Wildlife Branch, three groups report to the Wildlife Branch Director (see Figure 9310-1):

- Wildlife Reconnaissance – Provides ongoing aerial, ground, and on-water reconnaissance of wildlife (as appropriate) in support of wildlife search and recovery efforts.
- Bird Recovery and Rehabilitation – Provides search, recovery, transport, field stabilization, rehabilitation, documentation, and deterrence of birds.
- Marine Mammal Recovery and Rehabilitation – Provides search, recovery, transport, field stabilization, rehabilitation, documentation, and deterrence of mammals.

To ensure that Wildlife Branch objectives are achieved with maximum efficiency, the Wildlife Branch coordinates and manages the activities of all personnel in the Wildlife Branch who fall under the authority of the Unified Command during a spill response. These include federal, state, and local agencies, along with commercial and nonprofit organizations responsible for wildlife. The Wildlife Branch Director will manage all personnel and equipment supplied by the potentially responsible party to the Wildlife Branch. The Wildlife Branch Director is responsible for appointing the Deputy Wildlife Branch Director and all Group Supervisors. Group Supervisors are responsible for appointing the various staff positions within their Group. Position descriptions can be found in Chapter 9313.

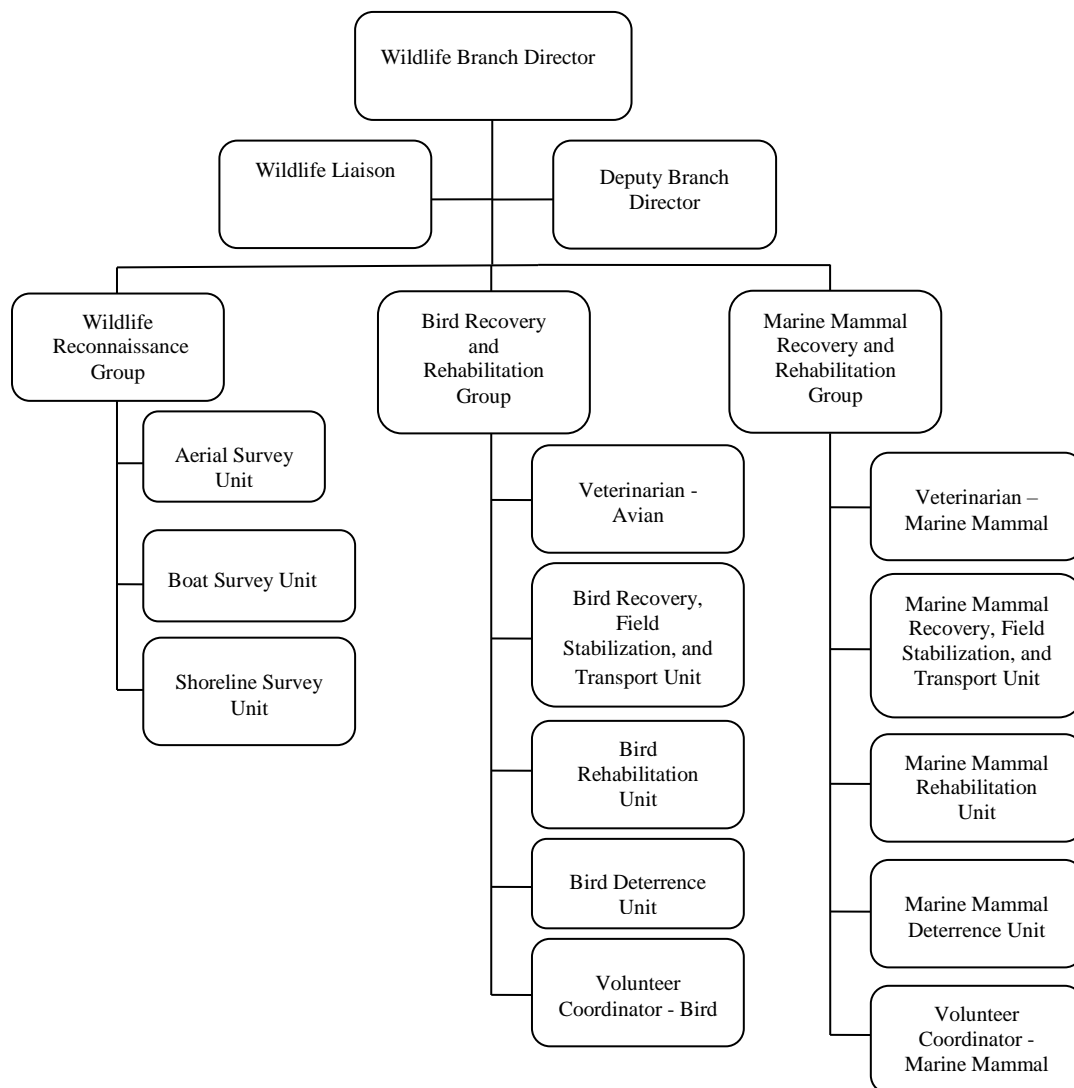


Figure 9310-1 Wildlife Branch Organizational Structure

9310.10 Wildlife Branch Operations

9310.10.1 Duties and Responsibilities

Once activated, the Wildlife Branch Director is responsible for ensuring that the appropriate protocol and process are followed during the search, recovery, and rehabilitation of impacted wildlife. The Wildlife Branch Director will make recommendations to the Unified Command through the Operations Section Chief regarding the need for additional Wildlife Branch resources based on anticipated wildlife impacts and associated field operations.

As noted above, the Wildlife Branch includes the following groups, which operate under direction of the Wildlife Branch Director: Wildlife Reconnaissance, Bird Recovery and Rehabilitation, and Marine Mammal Recovery and Rehabilitation. This organizational structure is expanded beyond the structure described in the

2006 *Incident Management Handbook* (USCG COMDTPUB P3120.17B), which includes only the Wildlife Recovery Group and Wildlife Rehabilitation Center.

The Wildlife Branch, working for the Operations Section Chief, will develop operational strategies, tactics, and resource needs for operations activities for the branch in the Incident Action Plan (IAP). The Branch Director or one of the branch staff will work closely with the Safety Officer or one of the Safety Assistants to develop a section of the Site Safety Plan specific to wildlife response activities. Operations activities can include oiled wildlife impact assessment, wildlife deterrence, oiled wildlife search and recovery, field stabilization, transportation of oil-impacted wildlife, rehabilitation, and decontamination of oiled wildlife, and release of rehabilitated wildlife. The Wildlife Branch Director will implement the operational guidelines as well as the standard of care requirements of the [USFWS Best Practices for Migratory Bird Care During Oil Spill Response](#), [Washington Sea Otter Response Handbook](#), and the [Killer Whale Hazing and Monitoring Plan](#) in all aspects of Wildlife Branch operations.

Wildlife Branch activities affect and interact with numerous other sections of the Incident Command, and it is important that good communications are established and maintained between the Wildlife Branch and other responders. In particular, coordination between the Wildlife Branch and the Environmental Unit, a part of the Planning Section, is essential. The Planning Section may assign a Wildlife Technical Specialist to help with coordination. The Wildlife Branch Director is responsible for keeping the Operations Section Chief and Unified Command informed about the status of branch operations.

The Wildlife Branch is responsible for providing information to the Unified Command, the Planning Section, and the Public Information Officer/Joint Information Center relative to the daily numbers of live and dead animals and their status. During a spill response, the Wildlife Branch will develop a Wildlife Branch Plan that will be included in the IAP. The Wildlife Branch Plan describes the wildlife response activities that will occur within a designated operational period. The Wildlife Branch Plan is routed through the Planning Section for inclusion in the IAP. At the direction of the Operations Section Chief, the Wildlife Branch Director or a member of the branch staff will attend tactics meetings, planning meetings, and Unified Command briefings. The branch will also coordinate with Air Operations regarding wildlife over flights, and coordinate with the Logistics Section in accordance with existing Incident/Unified Command policy for any materials needed. The Wildlife Branch is also responsible for working with the Planning Section, Demobilization Unit to develop the Wildlife Branch Demobilization Plan.

9310.10.2 Response Actions

Activities associated with the activation of the branch will be appropriate to the size of the spill. Activation of personnel and equipment is based primarily on anticipated adverse effects on wildlife. Therefore, depending on the size of the incident, the Wildlife Branch may range in size from just the Branch Director

position to full activation of the organization displayed in Figure 9310-1, including the associated equipment and personnel resources. Development of Wildlife Branch operations is an iterative, dynamic process that calls for good information, knowledge, experience, and judgment. It is important to understand that “activation” of the branch does not mean that a full-scale wildlife response will be mounted. The level of response is completely dependent on the number of animals that may potentially be impacted.

On every spill response, the first action of the Wildlife Branch must be to deploy skilled and experienced observers to the vicinity of spill location to conduct an initial wildlife impact assessment, in order to determine the extent of the initial and potential wildlife impacts in a timely manner. The ability to effectively determine the size and scale of the wildlife response is highly dependent on skilled observers arriving on scene quickly. These initial observers must be able to identify oiled wildlife behaviors because the impact of oil and other hazardous materials on wildlife is not always obvious to the average responder. Oiling from light petroleum products, unlike heavy petroleum products, can be especially difficult to determine without the use of a trained observer. Unless heavily oiled, impacted wildlife may be mobile and may not remain at the site of the initial oiling.

Results of the initial wildlife impact assessment will determine the initial size and complexity of the Wildlife Branch and the subsequent deployment of personnel and equipment. This involves establishing the Wildlife Branch organizational structure (Figure 9310-1), contacting wildlife recovery and rehabilitation organizations, notifying the appropriate federal and state trustees, and determining rehabilitation facility needs. The number of animals affected, or potentially affected, will determine the number and type of personnel and equipment resources that are needed. The Wildlife Branch will work with Logistics to obtain and bring in resources, personnel, and equipment. Deterrence, search and recovery, field stabilization, rehabilitation, and release activities will proceed as deemed necessary and appropriate by the Wildlife Branch Director, with approval of the Unified Command.

Wildlife response actions can be summarized as discrete and separate actions, all with the goal of minimizing adverse effects of oil on wildlife and maximizing the release rate and survival of rehabilitated animals. The distinct components of wildlife response actions are as follows:

- 1) An initial Wildlife Impact Assessment: typically conducted shortly after a spill notification is received. This short-term operation (one to two days) gathers information about the potential types and numbers of oil-impacted wildlife—and the areas where they are located—to help establish the early operational needs of the Wildlife Branch (see Table 9310-1 for staffing guidelines).
- 2) Wildlife Reconnaissance: conducted to obtain location information regarding oiled wildlife in order to direct search and recovery team efforts (see Table 9310-2 for staffing guidelines).

- 3) Oiled Wildlife Recovery (i.e., search and recovery): conducted to recover and transport oiled wildlife to the field stabilization unit or response rehabilitation facility as appropriate. Recovery teams may work by boat, all-terrain vehicle (ATV), vehicle or on foot, depending on the location of the spill.
- 4) Field Stabilization: the initial care provided to animals after recovery and prior to transport to the primary care (rehabilitation) center. Field stabilization generally occurs close to the point of recovery and is intended to ensure that recovered wildlife is sufficiently stable for transport. Initial care may include fluid therapy and warming (or cooling) the animal as appropriate. Field stabilization may not be utilized in all spills, depending on the location and circumstances of the incident.
- 5) Rehabilitation: involves providing specialized care to oiled animals with the goal of ultimately returning them to the wild. In general, the principal phases of the rehabilitation process include medical stabilization, the removal of the product, waterproofing, and pre-release conditioning.
- 6) Release into the wild after rehabilitation: all previously oiled animals must be completely cleaned of contaminants, be fully waterproof, and pass a standardized species-specific set of baseline medical and health criteria prior to being deemed ready for release. Release activities must be coordinated with USFWS and appropriate state trustees and media agencies. Wildlife will be released into approved sites, and release is to be considered only after the threat of re-oiling has been eliminated or minimized. USFWS may require or recommend that wildlife be banded, tagged, or otherwise permanently individually identified prior to release.
- 7) Deterrence: operations that utilize a variety of techniques to move animals away from areas where they are at risk of becoming oiled. The specific circumstances associated with any given response scenario will determine the need for, and ultimately the effectiveness of, any deterrence activities. All deterrence operations will be coordinated by the Wildlife Branch.

During oil spill responses involving wildlife, various state and federal agencies, nongovernmental organizations, and volunteers may become involved in wildlife-related activities. It should be noted, however, that the majority of any reconnaissance, search and recovery, and animal handling within the rehabilitation center will usually be conducted by personnel associated with oiled wildlife response organizations—especially during small to medium level responses. These professional organizations (which may or may not be “for profit”) have the training, experience, and personnel required to provide the specialized services necessary for the successful recovery and care of oil-impacted wildlife. Personnel that are not associated with these oiled wildlife response organizations will typically be used to fulfill more supportive roles within the Wildlife Branch.

The following sections describe the response structure, personnel, and equipment needed to conduct an oiled bird response, an oiled sea otter response, and killer whale deterrence and monitoring.

9310.10.2.1 Oiled Bird Response

Birds are the wildlife most commonly impacted by oil spills, especially those that spend the majority of their time on or near the water's surface (marine birds, waterfowl, shorebirds, etc.). When a bird's feathers become contaminated, the feathers lose their capacity to insulate its skin from the water. Once the cold water comes in contact with the bird's skin, the bird becomes hypothermic, lethargic, and unable to feed and preen. Eventually, the birds attempt to escape the cold water by beaching themselves. Oiled birds are prime targets for predatory and scavenging animals. Because this scavenging activity then leads to secondary oiling and further spread of the oil, it is important to retrieve as many live and dead birds as possible.

The success of oiled wildlife recovery and rehabilitation operations depends greatly on mounting an immediate and fully supported response and using appropriate personnel and facilities. Table 9310-3 provides a general guide for the number of personnel per shift needed when planning for an oiled bird recovery and rehabilitation operation. The personnel resources for each specific spill should be developed on a case-by-case basis and the size of the Wildlife Branch will adjust as more accurate information about the spill incident and wildlife impacts becomes available.

Guidelines for the staffing of mobile rehabilitation units (MRUs) have been provided in Table 9310-5. These guidelines, based on the original assumptions used in the development of the MRUs, also indicate the recommended experience levels for each of the various position assignments listed. It should be noted that the staffing guidelines shown in this table are based on the days when the highest numbers of animals are present within each specific phase of the rehabilitation process. The actual number of individuals required on a given day within the rehabilitation center can vary significantly depending on the number of animals in care and the ability of staff to fulfill multiple assignments concurrently. For planning purposes, it is recommended that 20 to 25 staff per shift (ideally at least half of which are highly trained in the various aspects of oiled-wildlife rehabilitation) should be identified and requisitioned for operations involving either of the Level 3 MRUs currently located in this region.

The Wildlife Branch will notify the Operations Section Chief promptly of needed changes in the deployment of personnel and equipment.

Table 9310-1 Suggested Wildlife Branch Command Post Staffing¹

Positions	Response Level IV (1–15 birds or 1–9 otters)	Response Level III (16–100 birds or 10–49 otters)	Response Level II (101–500 birds or 50–99 otters)	Response Level I (>500 birds or >=100 otters)
Wildlife Branch Director	1	1	1	1
Deputy Wildlife Branch Director	0	1	1	1-2
Wildlife Branch Liaison Specialist	0	1	1	1+
Wildlife Branch Documentation Specialist	0	1	1–2	2+
Oiled Wildlife Reporting Specialist	0	1	1–2	2+
Spill Management Software Specialist	0	1	2	2+
Oiled Wildlife Technical Specialist	0	0	1	1
Initial Wildlife Assessment Team¹				
Impact Assessment Team (3 staff per team)	1	1	1	1

¹First 1–2 days only.

Table 9310-2 Suggested Wildlife Reconnaissance Group Staffing

Position Assignments	Response Level IV (1–15 birds or 1–9 otters)	Response Level III (16–100 birds or 10–49 otters)	Response Level II (101–500 birds or 50–99 otters)	Response Level I (>500 birds or >=100 otters)
Group Supervisor (at ICP)	0–1	1	1	1
Group Support Staff (at ICP)	0	0–1	1	2
Aerial Survey Unit Lead ¹	0	0–1	1	1
Aerial Survey Teams ² (1–3 staff per team)	0	0–1	1	1
Boat Survey Unit Lead ¹	0–1	1	1	1
Boat Survey Teams ² (2–3 staff per team)	0–1	1–3	3–5	5+
Shoreline Survey Unit Lead ¹	0–1	1	1	1
Shoreline Survey Teams ² (2–3 staff per team)	0–1	1–3	3–5	5+

¹If field teams are utilized.

²As required for the scenario.

Table 9310-3 Suggested Bird Recovery and Rehabilitation Groups Staffing¹

Position Assignments	Response Level IV (1–15 birds)	Response Level III (16–100 birds)	Response Level II (101–500 birds)	Response Level I (>500 birds)		
Group Supervisor	0–1	1	1–2	2		
Deputy Group Supervisor	0	0	1	2		
Group Support Staff (at ICP)	0	1	1–2	2		
Veterinarian – avian	1	1	1–2	1–2		
Volunteer Coordinator - birds	0–1	1	1	1		
Volunteer Coordinator Support Staff	0	0–1	1–2	2–3		
Bird Recovery, Field Stabilization, and Transport Unit						
Unit Leader	6-12	12-25	1	1		
Deputy Unit Leader			1	3		
Unit Support Staff (at ICP)			2	3		
Boat Search and Collection Team Coordinator (per team)			1	1		
Boat Search and Collection Team Staff (per team)			1	1		
Number of Boat Teams			3-5+	5+		
Land Search and Collection Team Coordinator (per team)			1	1		
Land Search and Collection Team Staff (per team)			1	1		
Number of Land Teams			10+	20+		
Air (helicopter) Search and Collection Team Coordinator (per team)			1	1		
Air (helicopter) Search and Collection Team Staff (per team)			1	1		
Number of Air Teams			0–2	0–4		
Bird Field Stabilization Site Coordinator (per stabilization site)			0–1	0–1		
Bird Field Stabilization Site Staff (per stabilization site)			3–5	5–10		
Number of Field Stabilization Sites			1–2	2–3		
Bird Transport Team Coordinator (per transport team)			1	1		
Bird Transport Team Staff (per transport team)			1	1		
Number of Transport Teams			2-4	5+		
Bird Rehabilitation Unit						
Unit leader			2–6	6–25	2	4
Deputy Unit Leader	1–2	1–4				
Unit Support Staff (at ICP)	2	2				
Intake Coordinator	3	4				
Intake staff	8	20				
Holding Area Coordinator (pre and post wash)	2	4				
Holding Area Staff (pre and post wash)	20	60				
Wash/rinse Coordinator	2	4				
Wash/rinse Staff	20	50				
Conditioning Area (pools) Coordinator	2	3				
Conditioning Area (pools) Staff	10	15				
Food Preparation	5	8				

Table 9310-3 Suggested Bird Recovery and Rehabilitation Groups Staffing¹

Position Assignments	Response Level IV (1–15 birds)	Response Level III (16–100 birds)	Response Level II (101–500 birds)	Response Level I (>500 birds)
Cage Cleaning			6	10
Laundry			4	8
Support Roles			3	6
Administration			2	3
Mechanical			2	2
Maintenance			2	2
Morgue			5	8
ICU/Lab			5	10
Bird Deterrence Unit				
Unit Leader	0–1	0–1	0–1	0–1
Unit Support Staff (at ICP)	0	0	0	0–1
Bird Deterrence Team Coordinator (per deterrence team)	0–1	1	1	1
Bird Deterrence Team Staff (per deterrence team)	0–2	1–2	1–2	1–2
Number of Bird Deterrence Teams	0–1	0–2	0–4	4+

¹ The staffing numbers in the tables above are based on the following assumptions: a worker's shift lasts 12 hours; a worker can work four days in a row before having two days' rest; smaller spills tend to allow for the repurposing of staff, thus reducing overall staff numbers; and the rehabilitation needs of birds are similar to those of a common murre with moderate oiling across the entire body with heavy oil and that are easily accessible. The size of birds and degree of oiling may require substantially different personnel and equipment resources. The staffing numbers in the tables above are based on the following assumptions: a worker's shift lasts 12 hours; a worker can work four days in a row before having two days' rest; smaller spills tend to allow for the repurposing of staff, thus reducing overall staff numbers; and the rehabilitation needs of birds are similar to those of a common murre with moderate oiling across the entire body with heavy oil and that are easily accessible. The size of birds and degree of oiling may require substantially different personnel and equipment resources.

Table 9310-4 Suggested Marine Mammal Recovery and Rehabilitation Group Staffing

Position Assignments	Response Level IV (1–9 otters)	Response Level III (10–49 otters)	Response Level II (50–99 otters)	Response Level I (>=100 otters)
Group supervisor	0–1	1	1	1
Deputy Group Supervisor	0	1	1	1
Group Support Staff (at ICP)	0	0	1	1
Veterinarian - Mammals	1	2	1	4
Sea Otter Recovery, Field Stabilization, and Transport Unit				
Unit Leader	1	1	1	1
Deputy Unit Supervisor	0	0	1	1
Unit Support Staff (at ICP)	1	2	2	
Sea Otter Capture Team Coordinator	1	2–4	4–8	10
Sea Otter Capture Team Staff	4	8–16	16–32	40
Sea Otter Transport Team Leader	1	1	2	2
Sea Otter Transport Team Staff	2–3	3–6	6–10	10
Mort Recovery Team Coordinator	0	1	1	1
Mort Recovery Team Staff	0	4	4	4
Morgue Coordinator	1	1	1	2

Table 9310-4 Suggested Marine Mammal Recovery and Rehabilitation Group Staffing

Position Assignments	Response Level IV (1–9 otters)	Response Level III (10–49 otters)	Response Level II (50–99 otters)	Response Level I (>=100 otters)
Sea Otter Rehabilitation Unit				
Unit Leader	0–1	1	1	1
Deputy Unit Leader	0	1	1	2
Unit Support Staff (at ICP)	0	1	2	2
Primary Care Facility Coordinator	1	2	2	2
Maintenance Team	2–3	4	8	12
Intake Team (Doctor of Veterinary Medicine + 2 animal handlers + recorder)	4	4	8	8
Wash Team (Anesthesia + 3 to 5)	4–6	8–12	12–16	16–24
Primary Care Facility Animal Husbandry Team	4	4–12	12–20	20+
Animal Food Preparation Team (15 lbs of food per day/otter)	2–4	4–6	6–8	8–10
Conditioning Site Coordinator	0	1	1–2	2–3
Conditioning Site Animal Husbandry Team	0	4–12	12–20	20+
Conditioning Site Animal Food Preparation Team	0	4–6	6–8	8–10
Conditioning Site Maintenance Team	0	4	8	12
Pre-release Facility Coordinator	1	1	1	1
Pre-release Construction Team	4	8	12	12
Pre-Release Animal Husbandry Team	4	4–12	12–20	20+
Pre -release Maintenance Team	4	8	12	12
Pre-release Animal Food Preparation Team	2–4	4–6	6–8	8–10
Sea Otter Deterrence Unit¹				
Unit Leader	**	**	**	**
Deputy Unit Leader	**	**	**	**
Unit Support Staff (at ICP)	**	**	**	**
Sea Otter Reconnaissance²				
Reconnaissance Group Supervisor	0–1	1–2	2–3	2–3
Aerial Survey Unit Leader	0–1	0–1	1	1
Aerial Survey Unit Staff	1	1–2	2–4	5+
Boat Survey Unit Leader	0–1	0–1	1	1
Boat Survey Unit Staff	0–2	2+	5+	10+
Shoreline Survey Unit Leader	0–1	0–1	1	1+
Shoreline Survey Unit Staff	3	6	8	15
Killer Whale Deterrence				
Killer Whale Helicopter Deterrence Team (2 staff per team)	As needed	As needed	As needed	As needed
Killer Whale Okomi Pipe Team (4 staff per team)	As needed	As needed	As needed	As needed
Killer Whale Seal Bomb Team (3 staff per team)	As needed	As needed	As needed	As needed

¹ Deterrence to be considered on a case-by-case basis for marine mammals (staffing dependent on method selected).

² May not need to duplicate staff likely in place for bird reconnaissance.

** Deterrence to be considered on a case by case basis for sea otters (staffing dependent on method selected)

Table 9310-5 Suggested Wildlife Mobile Rehabilitation Unit (MRU) Staffing and Experience Guidelines¹

Position Assignments ²	Experience Level			Position Unit Staffing
	Professional/ Highly Skilled	Skilled Technician	Other Staff	All Types
Rehabilitation Unit Leader	1	--	--	1
Veterinarian (may be located off site)	1	--	--	1
Intake staff	2	--	--	2
Pre-wash stabilization staff	3	--	--	3
Intensive Care Unit (ICU)/Medical Lab staff	1	--	--	1
Conditioning staff	2	--	--	2
Wash/Rinse staff	2	2	1	5
Food Prep staff	--	1	1	2
Facility Support (construction/maintenance/electricity/plumbing)	2	2	--	4
Miscellaneous Support (administration/cleaning/laundry/etc.)	1	--	3	3
Transport staff	--	--	1	1

¹These numbers presume that the MRU is being used at its modeled capacity (Level 3–100 common murre, moderately oiled, and over a 30-day response).

²Individuals may fill multiple assignments concurrently, depending upon the changing requirements during a response.

9310.10.2.2 Marine Mammals – Monitoring and General Plan for Oil Spill Response

This section gives general guidance on how to respond if marine mammals are encountered during oil spill response. As many as 31 species of marine mammals may visit the coastal waters of the Pacific Northwest, but many of these species are only occasional visitors. Many of these species live primarily offshore and do not frequent nearshore habitats. Several pinniped species (harbor seal, California sea lion, Steller sea lion, and northern elephant seal) and a few cetacean species (harbor porpoise, Dall's porpoise, killer whale, and gray whale) inhabit nearshore and inland waters seasonally or year around. In addition, a reintroduced population of northern sea otters has been established on the outer coast of Washington. All of these species could be impacted during an oil spill, but perhaps the most vulnerable to negative impacts, and likely to elicit the most urgent calls for response, are southern resident killer whales and sea otters because of their small population size, distribution, and life history. Sections 9310.10.2.3 and 9310.10.2.4 of this plan address sea otters and killer whales in detail.

This section will inform activities in the Wildlife Branch, including Marine Mammal Recovery and Rehabilitation Groups, as well as appropriate personnel to serve in the Wildlife Reconnaissance Branch. It is important that knowledgeable individuals with advanced understanding of the biology and behavior of marine mammals be employed to evaluate the behavior and condition of the animals detected in or near oil spills and to determine the need for and practicality of conducting deterrence, capture, and rehabilitation activities. If a marine mammal is reported alive or dead, there are specific protocols that should be followed. Systematic search and recovery, transportation, processing, and treatment of all oil-affected wildlife are critical for guiding response actions. The RP is obligated to fund the activities of this program during a spill or to alternatively duplicate the existing system and operate in accordance with the Marine Mammal Oil Spill Response Guidelines established by NOAA, which are currently being updated.

9310.10.2.2.1 Oil Spill Threats to Marine Mammals

The [Marine Mammal Oil Spill Response Guidelines](#) offer a thorough introduction to marine mammals and their sensitivity to spilled oil. See Table 9310-6 for a summary of response actions for oiled marine mammals. For pinnipeds, fur and blubber aid thermoregulation, and direct contact with oil may cause dermal injury and conjunctivitis. Thermal insulative value is of particular concern for fur seals since they do not rely on a thick blubber layer for insulation, and this may result in hypothermia. For both pinnipeds and cetaceans, ingestion of oil may cause gastrointestinal ulcers, liver and kidney damage, and behavioral abnormalities. Oil spill responders must consider that capturing, holding, treating, and release places stress on the animal, and the consequences of capture and captivity may be a greater risk to its well-being than contacting oil. Pinnipeds with adequate mobility after contacting oil may subsequently shed the oil through abrasion against the substrate (sand, rocks etc.) when hauling out if uncontaminated shoreline areas

are available. Heavily oiled pinnipeds, abandoned or moribund young pups of any species, and species that rely on fur for thermal insulation are the most likely candidates to require temporary care for cleaning or rehabilitation if they lack sufficient mobility to avoid capture.

Table 9310-6 Suggested Summary of Response Actions for Oiled Marine Mammals

Pinnipeds	Monitor	Recover Dead	Attempt intervention on live oiled:		Haze
			Stranded	Free Swimming	
Harbor Seals	Yes	Yes	Case-by-case	No	Case-by-case
Northern Elephant Seal	Yes	Yes	If exposed during molting or impaired juveniles	No unless impaired	Case-by-case
California Sea lions	Yes	Yes	No unless impaired	No unless impaired	Case-by-case
Steller Sea Lions	Yes	Yes	No unless impaired	No unless impaired	Case-by-case
Guadalupe Fur Seal	Yes	Yes	Case-by-case	No unless impaired	Case-by-case
Northern Fur Seal	Yes	Yes	Case-by-case	No unless impaired	Case-by-case
Small Cetaceans					
Dall's Porpoise	Yes	Yes	Case-by-case	No	Case-by-case
Harbor Porpoise	Yes	Yes	Case-by-case	No	Case-by-case
Pacific White Sided Dolphin	Yes	Yes	Case-by-case	No	Case-by-case
Large Cetaceans					
Gray Whales	Yes	No ¹	On-site treatment or euthanasia if appropriate	No	Case-by-case
Humpback Whales	Yes	No ¹	On-site treatment or euthanasia if appropriate	No	Case-by-case
Minke Whales	Yes	No ¹	On-site treatment or euthanasia if appropriate	No	Case-by-case

¹On-site necropsy if possible

9310.10.2.2.2 Dead Marine Mammal Considerations

All dead marine mammals must be collected, identified, documented, preserved, and not disposed of until approved by the trustees. Large whale carcasses may be secured at the stranding site so proper data, measurements, and samples can be collected. All carcasses found within a spill area must be treated as evidence and should be handled according to established chain of custody protocols. Each carcass should be labeled with the date, time, location, species, and collector's name. A designated storage location will be identified by the Wildlife Branch, and each carcass will be logged into the Dead Marine Mammal Log form. Necropsies

should be performed within 24 hours if possible; if that is not feasible, the carcass should be frozen for later examination. Carcass removal, storage, and disposal expenses should be reimbursed to the Stranding Network Participant. Additional information about response to dead marine mammals during a spill can be found in the NOAA Technical Memorandum, Marine Mammal Oil Spill Response Guidelines.

Collected oiled carcasses will be retained per appropriate chain-of-custody protocols until released for disposal by the Wildlife Branch. See NWACP Section 9405 for additional carcass disposal information.

9310.10.2.2.3 Live Marine Mammal Rescue Considerations

Decisions to assist oiled and/or injured marine mammals are dependent on the size of the animal, habitat, biology, degree of perceived oiling or impact, and nature of the marine mammals involved, as well as available resources. This plan will address three distinct marine mammal groups: pinnipeds, small cetaceans (length ≤ 10 feet), and large cetaceans (length > 10 feet). If rehabilitation is an option, the primary goal should be to treat and then release healthy animals back into their natural environment. Facility capacity varies throughout the region, and a limited number of facilities are located in various cities in Washington and Oregon. If longer-term holding and/or treatment of large numbers of pinnipeds is needed, temporary facilities may need to be identified or built at a suitable upland site. Any marine mammals identified as needing treatment and taken in by the Marine Mammal Recovery and Rehabilitation Group will be transported, housed, and treated in accordance with the [Best Practices for Marine Mammal Stranding Response, Rehabilitation, and Release](#). The specific protocol for cleaning marine mammals of oil can be found in the Animal Washing and Continued Care section of the [Marine Mammal Oil Spill Response Guidelines](#).

Following treatment and rehabilitation, the attending marine mammal veterinarian must determine whether individual animals are suitable for release. The determination must be submitted to the Office of Protected Resources for approval prior to release. Considerations for release of the animal include the risk to the wild population (potential to infect wild populations with diseases contracted during treatment), its health, behavior, ability to sustain itself in the wild, and the availability of suitable oil-free habitat.

9310.10.2.3 Oiled Sea Otter Response

Sea otters can be found scattered along the outer coast of Washington and into the Strait of Juan de Fuca. Any oil spill that reaches the near-shore environment may impact sea otters. Early reconnaissance of potentially impacted sea otters should be completed as soon as possible. Unlike most marine mammals that possess a thick layer of insulating blubber, sea otters are highly vulnerable to oil because they depend on their fur for insulation. When sea otter fur becomes oiled, there is an immediate loss of thermal protection. Success of sea otter response will depend largely on the ability to quickly implement the response actions outlined in this plan.

Sea otters fall under the jurisdiction of USFWS, are listed as endangered on Washington's Species of Concern List, and are protected by the MMPA. Wildlife Branch recommendations to implement sea otter response actions will be fully coordinated with USFWS and WDFW.

Oiled sea otter capture and rehabilitation is very difficult and requires specialized staff and equipment. Due to the potentially dangerous environments where otters live, safety of the responders is of paramount concern. Only trained and experienced personnel will be utilized in capture of sea otters. An incident-specific health and safety plan may be required for capture and transport of sea otters, which will be coordinated with the incident Safety Officer and included in the IAP Site Safety Plan.

Preemptive capture of sea otters before they become oiled may be an option. However, it is unlikely that it will be utilized as a response option in the Pacific Northwest due to the logistics involved, the dangers to the animals themselves during the capture, and the dangers to personnel involved with capture efforts. The outer coast of Washington is remote, logistically challenging, and not an ideal location to attempt the capture of healthy sea otters.

Oiled sea otters will be located and recovered by reconnaissance and capture teams and transported as quickly as possible, preferably by air, to a primary treatment facility. Once the animals are waterproof and in good condition, they will be transferred to a pre-release facility, where they will remain until USFWS determines when and where they can be released. As there is not currently a dedicated primary treatment facility for oiled otters, their rehabilitation is heavily dependent on the assistance of northwest aquaria. Specific protocols that will be followed when dealing with oiled sea otter capture, transport, and husbandry can be found in the *Washington Sea Otter Response Handbook* (<http://wdfw.wa.gov/publications/pub.php?id=00302>).

9310.10.2.3.1 Sea Otter Organizational Structure

Oiled sea otter response requires specialized personnel and resources. The following chart provides the organizational structure to be established under the Mammal Recovery and Rehabilitation Group. The number of personnel required to accomplish the duties of this group will be determined by the size of the incident. Specific responsibilities and duties can be found in the *Washington Sea Otter Response Handbook*.

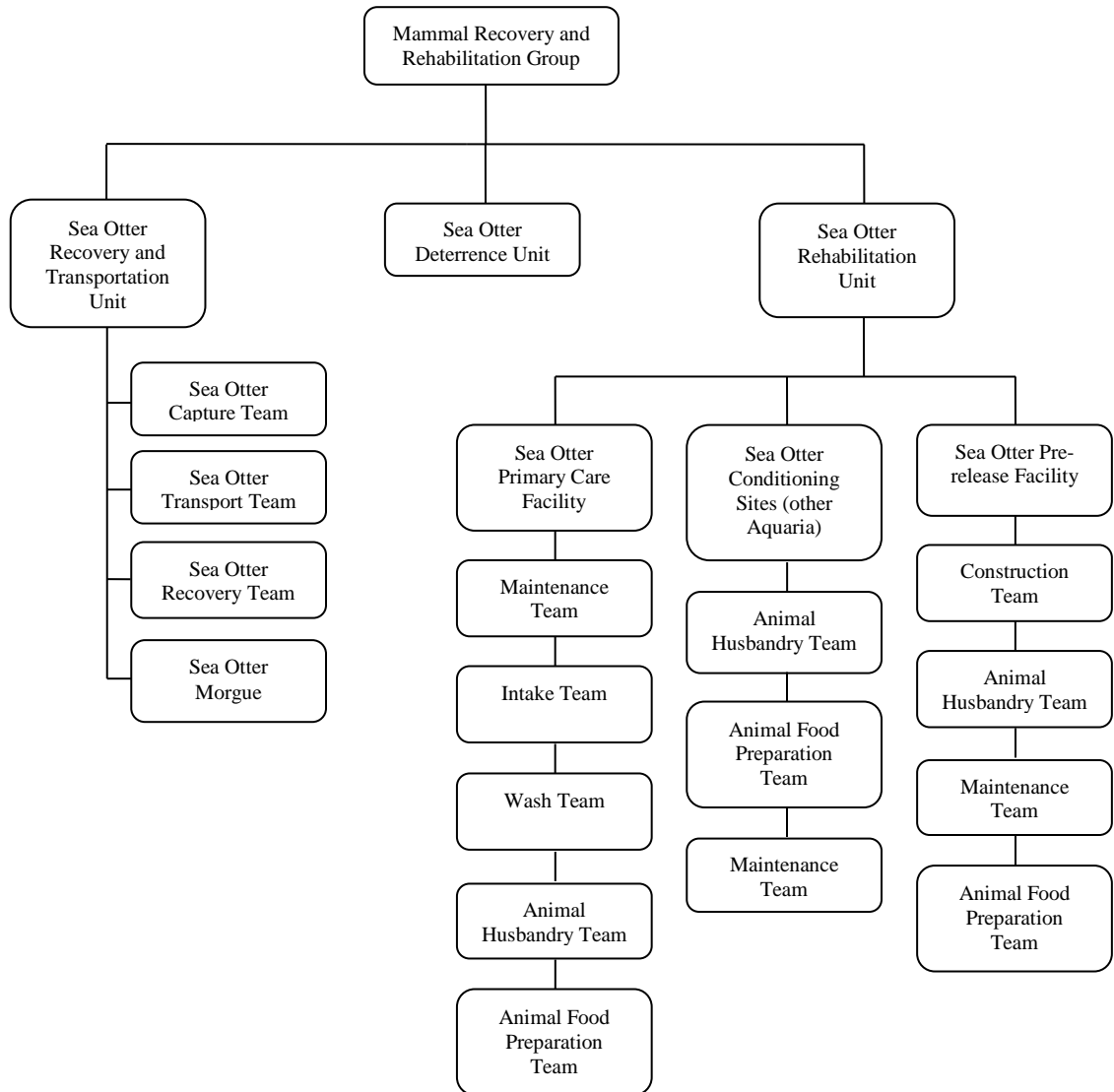


Figure 9310-2 Sea Otter Response Organizational Structure

9310.10.2.3.2 Sea Otter Response Levels

The size of the spill and, more importantly, the number of sea otters affected will determine the numbers of staff that are needed to perform the functions identified above. The numbers of personnel needed for various levels of sea otter impacts are listed by function in Table 9310-7. The levels are as follows:

Level I	more than 100 sea otters
Level II	50 to 99 sea otters
Level III	10 to 49 sea otters
Level IV	1 to 9 sea otters

Table 9310-7 identifies the estimated equipment that would be required to mount a response appropriate to the levels listed above. It is probable that an oil spill on the outer coast would impact both sea otters and marine birds. Consequently, some response personnel may serve dual function for both birds and otters. These positions include the Wildlife Branch Director and the Wildlife Reconnaissance Group. See Table 9310-4 for minimum staffing guidelines for the Marine Mammal Recovery and Rehabilitation Group.

Table 9310-7 Suggested Equipment Needs for Sea Otter Collection and Rehabilitation by Response Level

Response Level	Response Level IV (1-9 otters)	Response Level III (10-49 otters)	Response Level II (50-99 otters)	Response Level I (>= 100 otters)
EQUIPMENT				
Capture and Transport Equipment				
Dip net	1	2-4	4-8	10+
Bite pillow	2	4-8	8-16	20+
Herding boards	3	6-12	6-9	10+
Restraint box	1	2-4	4-8	10+
Vehicle - Recovery (pick-up or cargo van)	2	4-8	8-16	20+
Vehicle - Transport	2-3	2-3	2-3	3+
Coolers of ice	1	2-4	4-8	10+
Boat - Capture	1	2-4	4-8	10+
ATVs (if approved for use)	1	2-4	4-8	10+
Helicopter on call for land/water recovery	0-1	0-1	1-2	1-2
Fixed wing aircraft on call for otter transport	0-1	0-1	1-2	1-2
Sky kennels for capture and transport	6	12	24	24+
Field stabilization facility (optional)	0-1	0-1	1	1
Treatment Equipment				
Holding cages (for drying critical care monitoring) 4 per wash station	4	8-16	20-32	40+
Temp controlled holding area (approximate)	10x10	10x100	50x100	50x100 +
Wash rinse dry station - permanent or temporary (i.e., 53-foot response trailer)	1	1-2	3-4	5-7
Post Wash Holding (2 otter pens) or suitable segregated available space in non-display tanks	1-5	5-16	17-27	27 plus

Table 9310-7 Suggested Equipment Needs for Sea Otter Collection and Rehabilitation by Response Level

Response Level	Response Level IV (1–9 otters)	Response Level III (10–49 otters)	Response Level II (50–99 otters)	Response Level I (>= 100 otters)
Freshwater maximum daily consumption (wash and holding in 2-otter cages)	39,600	122,400	208,800	225,600
Post waterproofing holding pools (circular 14-foot-diameter, 4 feet deep) hold 6 compatible animals	2	9	9–15	16+
Saltwater daily maximum consumption (gallons)	441,600	1,987,200	3,312,000	3,753,600
Towels for drying otters (per day)	60	120	240	250
Pet dryers (one per cage)	4	8–16	20–32	40+
Food preparation capacity per day in pounds	135	150–735	750–1,485	1,500+
Vehicle to pick up food supplies	1 car	1 pick-up	1 pick-up	1 van
Sea otter Conditioning sites	1	1–2	2–4	4
Pre-Release Facility Equipment				
Pre-release Pen (10x18 feet net pen plus floats) 8 otters, each with pad for special grouping i.e., mother with	1–2	6–8	12–14	14+
Staff support facility (building or boat to shelter and support sea otter monitoring and care staff)	1	1	1	1
Food preparation facility (not needed if food prepared at Primary Care Facility and shipped daily)	1	1	1	1
Boats	1–2	1–2	1–2	1–2
Transport cages (Likely the same ones used for collection)	6	12	24	24+

9310.10.2.4 Killer Whale Response

The southern resident killer whale population is listed as endangered under the ESA and is also protected under the MMPA. Evidence suggests that killer whales are unlikely to detect and avoid spilled oil, and exposure can result in population-level impacts (Matkin et al. 2008). Specific deterrence methods (if any) recommended at the time of a spill will be those that have the greatest chance of success depending on current conditions and information. Whether or not killer whales can be deterred from entering an oil spill is directly related to the degree to which the whales are attracted to an area. No single deterrence technique will work in all situations. Deterrence and monitoring activities are the only mitigation measures possible during an oil spill, as capture and rehabilitation of killer whales is improbable. Killer whale response activities will comply with guidelines in the document “[Supporting Information for the Killer Whale section of the Northwest Wildlife Response Plan](#)”. Additional information on deterrence techniques and the availability of equipment and trained personnel can be found at [NOAA’s Office of Response and Restoration webpage](#).

9310.10.2.4.1 Killer Whale Deterrence Activities

In situations where immediate action is necessary to prevent killer whales from entering oil, NOAA Fisheries has given the Wildlife Branch pre-approval through the FOSC to implement the following deterrence activities: use of Oikomi pipes, use of seal bombs deployed from vessels, and use of helicopters to attempt to herd or move whales. Every reasonable effort will be made to contact NOAA Fisheries

prior to attempting these methods, but it is recognized that this might not always be possible. Use of any deterrence mechanisms other than the three methods listed above will require consultation with NOAA Fisheries prior to implementation. Any deterrence actions taken, as well as the results of those actions, will be reported to NOAA Marine Mammal Health and Stranding Program as soon as possible. If the nature of the threat to killer whales is not imminent, the Wildlife Branch Director will consult with the NOAA Marine Mammal Health and Stranding Program prior to taking action.

A deterrence program will be considered any time killer whales are reported in or near an oil spill. The Wildlife Branch Director will determine whether or not to activate the Mammal Deterrence Unit to implement the deterrence program. There is not a single deterrence technique that will work in all situations. The Reconnaissance Group is responsible for collecting information on the effectiveness of deterrence activities. Spills of persistent oils or spills that are likely to cover large areas and that occur in the following areas and times will be given high priority for the development of deterrence plans/strategies:

- Haro Strait and Strait of Georgia up to Canadian Border off Point Roberts: May through September;
- Admiralty Inlet and central Puget Sound: October through January; and
- Local Alert Areas (Examples include Hood Canal during extended transient killer whale incursions in 2003 and 2005 or an event like the extended stay of southern resident killer whales in Dyes Inlet in 1997).

9310.10.2.4.2 Killer Whale Monitoring Activities

Killer whale activity will be monitored to determine if whales will be exposed to oil or have been exposed to oil and to evaluate the effectiveness of deterrence activities. Observers, who are coordinated by the Wildlife Branch, should be familiar with the differences between the behavior of the transient and resident whale populations in order to better predict their potential movements. Observers should photographically document all whales that are observed. Photos should be taken from the side with a clear view of the dorsal fin and saddle patch to identify the individual animal.

9310.10.2.4.3 Killer Whale Strandings and Mortalities

Regional marine mammal stranding networks should be alerted by NOAA Fisheries when a spill occurs that may impact killer whales. If a carcass is found and NOAA Fisheries authorizes a necropsy, the necropsy should follow the established killer whale necropsy protocol ([Raverty and Gaydos 2014](#)) and NOAA's [Marine Mammal Oil Spill Response Guidelines](#) and be coordinated with NOAA Fisheries.

9310.10.2.5 Pinnipeds

Seals and sea lions access shoreline sites in the Northwest Region. If an oil spill were to occur near a haulout, pinniped populations may be affected. Sea lions, harbor seals, and elephant seals rely on their thick blubber layer for insulation,

making them less susceptible to hypothermia when they become externally oiled. Depending on the extent of exposure, toxicity, the volume ingested or inhaled, and clinical signs, some pinnipeds may not need to be captured and rehabilitated. For pinnipeds that regularly haul out, this is an opportunity for oil to be abraded, and many of these species do not preen their pelt, further reducing the risk of oil ingestion. Geographic response plans contain booming strategies to protect known haulouts when spill trajectories indicate likely impact at these sites. The [Washington Department of Fish and Wildlife Atlas of Seal and Sea Lion Haulout Sites](#) (2000) in Washington contains a thorough list of haulout sites. In Oregon, a list of seal and sea lion haulout sites can be obtained from the Oregon Department of Fish and Wildlife, Marine Mammal Program in Corvallis. If oil is likely to impact haulout sites, deterrence methods should be discussed to keep animals from using the site. Little is known about the results of deterrence of pinnipeds in the event of an oil spill, and this method will be considered on a case-by-case basis. Deterrence options for pinnipeds can be informed by NMFS guidance on seal and sea lion deterrence at: http://www.westcoast.fisheries.noaa.gov/publications/protected_species/marine_mammals/pinnipeds/sea_lion_removals/112515_potential_deterrence_methods.pdf. If haulouts are impacted, reconnaissance assets should be deployed to assess the impact of the oil on local pinniped populations. Priority should be given to minimizing beaching of oil at the haulout and secondarily to cleaning the haulout if immediate re-oiling will not occur. More information on individual species risk factors and treatment considerations are listed below.

9310.10.2.5.1 Oiled Pinnipeds, Capture, and Handling Techniques

In cases of light to moderate oiling of animals on shore, they should be monitored by individuals knowledgeable in pinniped biology and behavior to see if they can clear themselves of the oil or to detect deterioration in their health status that requires intervention. Moribund pinnipeds that have been impacted may be candidates for euthanasia, and this will be determined on a case-by-case basis. *In-situ* treatment on the beach can be considered if it is feasible to capture, anesthetize, clean, and release the animals on site. Pinnipeds should be considered for washing and immediate release at or near the capture sight if the threat of re-oiling is minimal (Gales and St. Aubin 1995) (Geraci and Lounsbury 2005). Pinnipeds generally tolerate short-term capture and transport and do not seem to be highly susceptible to capture myopathy (Gales and St. Aubin 1995). Heavily oiled and obviously oil-impaired pinnipeds may be considered for capture and cleaning. Temporary holding pens filled with absorbent sphagnum moss may be an option for heavily oiled pinnipeds; this would reduce handling, absorb oil from the pelt of the animal, and allow monitoring of the animal's overall health. In a large spill and/or when oil is expected to persist in the environment frequented by pinnipeds, it may be necessary to capture, rehabilitate, and hold pinnipeds until their health and the environmental conditions improve and re-oiling is unlikely.

The Marine Mammal Oil Spill Guidelines are a thorough guide to wildlife recovery and transportation and should be referenced when pinniped capture is

being considered. A decision to capture should consider such factors as sex, age, reproductive state, size of the individual animal, and location with respect to other marine mammals. The potential benefits of capture must outweigh potential negative consequences, and capture is to be conducted in accordance with the Wildlife Recovery and Transportation section of the [Marine Mammal Oil Spill Response Guidelines](#). Top priority is personnel safety; capture and transportation of oiled marine mammals should be performed only by qualified personnel who have received the appropriate safety training, as well as marine mammal handling and restraint training. Local marine mammal stranding network responders and biologists are instrumental in this task, and a list of trained responders can be obtained from the Northwest Marine Mammal Stranding Network Coordinator within NOAA Fisheries.

Pinniped handling and capture requires communication equipment, specialized vehicles, boats, cages and transport boxes, herding boards, and personal protection equipment. A list of local resources for pinniped capture can be found in Section 9312 of the NWACP. Permanent care and rehabilitation facilities are very limited in the Pacific Northwest, so, for longer term holding and/or treatment of large numbers of pinnipeds, temporary facilities may need to be identified or built at a suitable upland site. In general, no rescue will be initiated on free-swimming or stranded pinnipeds in the vicinity of an oil spill unless the animal is in obvious distress and the resources are available to intervene.

9310.10.2.5.2 Harbor Seals

Harbor seals, which are full time residents and broadly distributed in marine, coastal, and estuarine habitats, are the most likely pinnipeds to be affected by an oil spill in the Pacific Northwest. Harbor seals use hundreds of sites to rest or haul out along the coast and inland waters and can be found year round. Harbor seal pupping timeframes vary throughout the region and should be taken into consideration when an oil spill occurs. Harbor seal pups nurse for four to six weeks, and suckling may increase the risk of oil ingestion for the pup. Pups do not have a thick protective blubber layer and thermoregulation capability may be compromised by oiling. These additional concerns may warrant intervention on a case-by-case basis. If oiled harbor seals are reported to the Wildlife Branch, detailed observations on the animals' location, behavior, age class, overall condition, and availability of rehabilitation resources will all be considered before intervention. Intervention on free swimming harbor seals is unlikely to be successful unless the animal in question is debilitated, making capture more feasible. If intervention is warranted, harbor seals should be recovered and treated by responders with marine mammal skill and experience. The number of animals that can be processed currently depends on the availability of space at local rehabilitation facilities with a letter of authorization from NMFS to handle, house, and rehabilitate harbor seals.

9310.10.2.5.3 Northern Elephant Seals

Northern elephant seals are the largest pinniped species found in the Pacific Northwest, and individuals are seen throughout the Washington and Oregon

coasts. Following both their winter breeding season and annual molt cycles, individuals disperse northward along the coasts. It is common for juvenile northern elephant seals to go through a four- to five-week molting cycle in the region. During this process, the animal will be observed with large areas of missing skin. It can be difficult for untrained people to determine the difference between a molting animal and one with actual skin lesions and open wounds. If the animal is exposed to oil during the molting process, cleaning or temporary rehabilitation should be considered. Elephant seals can be washed in thermal-neutral water and soap applied and rubbed on the fur until the oil is visibly removed. Extreme care must be taken while washing molting elephant seals since the molt is replacing several upper layers of the epidermis. Intervention on free swimming elephant seals will not be initiated unless the animal in question is in obvious stress and capture is feasible. The capture and rehabilitation of juveniles is an option in the region, depending on facility availability.

9310.10.2.5.4 California and Steller Sea Lions

California sea lion and Steller sea lion numbers vary seasonally in Oregon and Washington. Steller sea lions are resident with concentrations found on offshore rocks and islands on the outer coast and smaller numbers found in the Salish Sea. In the Pacific Northwest, Steller sea lions breed in Southern Oregon and off the coast of British Columbia during the summer and numbers at regular haulout sites tend to decline during the breeding season except at breeding rookeries. Haulout sites can be found throughout the Pacific Northwest on jetties, offshore rocks, and coastal islands. If sea lions are oiled, the decision to capture or intervene will need to consider factors like sex, age, reproductive state, size of an individual animal, and location in respect to other marine mammals. Intervention on free swimming sea lions will not be initiated unless the animal in question is in obvious stress and capture is feasible. The capture and rehabilitation of large sea lions present significant challenges and should only be attempted if the animals are heavily oiled or showing obvious behavioral signs of impairment from the oiling. Adult pinnipeds that are capable of avoiding capture by rapidly entering the sea should generally not be captured (Gales and St. Aubin 1995). Their larger surface to volume ratio and generally abundant quantity of blubber that offers both insulation and significant calorie reserves gives these animals greater resistance to thermoregulatory problems when oiled (as compared to fur seals and otters) and consequently more energy reserves to rely on while convalescing. This may allow oiled animal to survive until natural processes such as water movement and molting remove the oil.

9310.10.2.5.5 Northern Fur Seals and Guadalupe Fur Seals

Northern fur seals are pelagic and spend seven to ten months of the year at sea, coming ashore only to breed, primarily on rocky beaches on isolated islands. Adult northern fur seal females and pups from the Pribilof Islands migrate into the North Pacific Ocean and are commonly sighted off Oregon and California. Guadalupe fur seal presence has increased dramatically in the Pacific Northwest since 2007. Juveniles are commonly sighted off the coasts of Washington and Oregon and strand regularly throughout the summer months, with a primary cause

of death being emaciation and malnutrition. Guadalupe fur seals are pelagic and spend a majority of their time in the open ocean, only coming ashore almost exclusively to Guadalupe Island in Baja California during the breeding season. There are currently no breeding areas in Washington or Oregon for Northern fur seals or Guadalupe fur seals.

Northern and Guadalupe fur seals have a thin subcutaneous fat layer and a thick pelage that thermally insulates them, and they can easily experience thermoregulatory problems if they are externally exposed to oil. If fur seals are visibly oiled, capture and intervention should be seriously considered. Additional considerations must be made for Guadalupe fur seals since they are listed as threatened under the ESA. Adult and sub-adult fur seals can be difficult to handle due to size restrictions and behavioral aggression, which may make intervention infeasible. If a case is presented and intervention is deemed necessary, fur seals are washed using a thermal neutral washing detergent solution and require salt water for long-term care. Fur seals, which depend on their coat for thermoregulation, may need to be placed in a drying enclosure and will need additional monitoring for dehydration, hyperthermia, hypothermia, and alertness.

9310.10.2.6 Small Cetaceans (Body length \leq 10 feet)

Small cetaceans most likely affected by an oil spill in the Pacific Northwest include Dall's porpoise, harbor porpoise, and Pacific white-sided dolphins. Risk factors specific to these animals and special considerations for their treatment are provided below. Many additional small cetaceans frequent offshore waters in Washington and Oregon and may be impacted if a spill occurs in the open ocean. Deterrence of small cetaceans is unlikely but will be considered on a case-by-case basis.

9310.10.2.6.1 Oiled Small Cetaceans, Capture, and Handling Techniques

Small cetaceans are highly mobile (traveling tens of miles per day), and with the exception of Harbor and Dall's porpoise, only frequent offshore water, which poses less likelihood of them staying in contact with surface oil. Most cetaceans are not highly sensitive to the mechanical or toxic effects of oil on the skin (Geraci 1990); thus, the value of intervention is greatly reduced compared to the stress and risk of injury associated with capture.

If a small cetacean strands alive, intervention and treatment should be considered. Beached cetaceans should not be pushed back out to sea without first being examined by an NMFS-approved marine mammal veterinarian and the action approved by NMFS. Responders should follow the Live Cetacean Stranding Protocol provided by the Northwest Marine Mammal Stranding Network within NOAA Fisheries. This protocol outlines how to respond to a live cetacean stranding and options for release, how to keep the animal comfortable on shore if it cannot be moved, transport and rehabilitation options, and euthanasia considerations. Prior to being returned to the open ocean, cetaceans should be marked with an NMFS-approved brand or tag.

Intervention on free-swimming cetaceans will generally not be initiated because of the risks associated with capture. Due to their speed and maneuverability, small cetaceans are very difficult to catch and may suffer stress and exhaustion during the capture that could cause permanent injury or death. The social structure of these groups may also cause undue stress on healthy pod members when capture techniques are used to catch injured individuals. If special circumstances warrant intervention, the decision to capture should consider such factors as sex, age, reproductive state, and size of the individual animal, and the potential benefits of capture must outweigh potential negative consequences. Small cetaceans are physiologically adapted to be suspended in water at all times, requiring special handling procedures to capture and transport them. A holding facility must be identified prior to capture. With the exception of the Vancouver Aquarium, facilities with capacity to treat and hold small cetaceans do not currently exist in the Northwest Region. If capture of small cetaceans is attempted, it is to be conducted in accordance with the Wildlife Recovery and Transportation section in the Marine Mammal Oil Spill Response Guidelines.

The method of capture may vary according to species and situation, and each intervention will be assessed on a case by case basis. Personnel safety is the top priority; capture and transportation of oiled marine mammals should be performed only by qualified personnel who have received the appropriate safety training, as well as marine mammal handling and restraint training. Small cetacean handling and capture requires communication equipment, specialized vehicles, boats, transport boxes, slings, and personal protection equipment. A list of local resources and veterinarian contacts for cetacean capture can be found in Chapter 9312 of the NWACP.

9310.10.2.6.2 Dall's and Harbor Porpoise

Dall's porpoise and harbor porpoise frequent inland and coastal waters of Washington and Oregon. Harbor porpoise favor coastal waters such as shallow bays, estuaries, and tidal channels and are frequently sighted within Puget Sound. Dall's porpoise distribution and abundance varies considerably at both seasonal and inter-annual time scales as oceanographic conditions vary. Little is known about current population trends for both species, and available Stock Assessment Reports are not current. Both Harbor and Dall's porpoise are of manageable size for field teams to remove from the site for health assessments, euthanasia if necessary, or thorough necropsies. Harbor porpoises rarely survive rehabilitation, and this should be taken into consideration when determining if intervention is necessary.

9310.10.2.6.3 Pacific White-sided Dolphins

Recently, the number of Pacific white-sided dolphins has been increasing in coastal waters, particularly in the Strait of Juan de Fuca and sounds of northern Washington. Groups of 10 to 50 individuals are frequently sighted throughout the region, and larger groups form temporarily. Off of the coast, Pacific white-sided dolphins have been seen primarily in shelf and slope waters, and sightings suggest

seasonal north-south movements, with animals found primarily off California during the colder water months and shifting northward into Oregon and Washington as water temperatures increase in late spring and summer. No long-term trends in abundance or net productivity rates are available.

9310.10.2.7 Large Cetaceans (Body length > 10 feet)

Large cetaceans most likely affected by an oil spill in the Pacific Northwest include killer whales, gray whales, humpback whales, and Minke whales. Many other large cetaceans frequent offshore waters in Washington and Oregon and are listed in the Supporting Information for the Marine Mammal section of the Northwest Wildlife Response Plan (in revision). Large cetaceans are highly mobile, and the likelihood of these animals staying in contact with surface oil is likely limited for most spill situations. If large cetaceans are reported to be moving through oiled areas, detailed observations and monitoring of the animals should take place. Deterrence of large cetaceans is unlikely but will be considered on a case-by-case basis. Deterrence options for large cetaceans may be informed by the Supporting Information for the Killer Whale section of the Northwest Wildlife Response Plan.

9310.10.2.7.1 Oiled Large Cetaceans, Capture, and Handling Techniques

If large cetaceans are found beached, responders should follow the Live Cetacean Stranding Protocol provided by the Northwest Marine Mammal Stranding Network within NOAA Fisheries. This protocol outlines how to respond to a live cetacean stranding and options for release, how to care for the animal on shore if it cannot be moved, transport and rehabilitation options, and euthanasia considerations. Any beached cetacean should not be released without first being examined by an NMFS-approved marine mammal veterinarian and the action approved by NMFS. Prior to being returned to the open ocean, cetaceans should be marked with an NMFS-approved brand or tag. If a large whale strands in moribund condition (as determined by an NMFS-approved marine mammal veterinarian), euthanasia may be considered and decision making should be coordinated with NOAA Protected Resources Division. Facilities to house large cetaceans are not available in the Pacific Northwest, and treatment options are limited, so euthanasia may be the most humane option to reduce pain and suffering. In addition, capture of oil-impacted large cetaceans is not feasible for free-swimming individuals.

9310.10.2.7.2 Gray Whales

Gray whales migrate along the coast of Washington and Oregon and are frequently sighted within Puget Sound in the spring. Several hundred eastern North Pacific gray whales spend the spring, summer, and fall foraging in coastal waters between northern California and the Gulf of Alaska. While in Puget Sound, gray whales feed in shallow areas near shore, which prompts public reporting to local marine mammal sighting networks. Gray whales feed primarily on benthic crustaceans by scooping up sediments from the sea floor and filtering the contents. If a spill occurs in a known gray whale feeding area, ingestion of oil

from contaminated sediment may be likely, and steps should be taken to monitor feeding in those areas. Gray whales are well documented within the region, and Cascadia Research Collective catalogs individual gray whales that have been sighted in Northern Puget Sound. Photographically identifying individual gray whales proximal to a spill would be beneficial for long-term studies and/or impacts to specific individuals.

9310.10.2.7.3 Humpback Whales

Humpback whales also migrate off the coast of Washington and Oregon and are sighted regularly. Sightings of humpback whales have been increasing in inland waters of Washington State. Humpback whales are cataloged and photographically identified by Cascadia Research Collective. Recent studies of humpback whales in the entire North Pacific conducted under the Structure of Populations, Levels of Abundance, and Status of Humpbacks (SPLASH) project have revealed a complex population structure and growth of overall abundance at 4–7% per year and through 2006, numbered about 20,000 (Calambokidis et al. 2008). Special considerations should be made for humpback whales as they are listed as endangered under the ESA.

9310.10.2.7.4 Minke Whales

Minke whales are frequently sighted within the Strait of Juan de Fuca and are considered to be a relatively common whale of the Pacific Northwest. Individuals are typically sighted alone and can be difficult to spot; no estimates have been made for the number of Minke whales in the entire North Pacific.

9310.11 Wildlife Branch Positions and Responsibilities

Duties and issues that relate to a specific position are listed under that position in the sections that follow. Not all positions will be staffed at each spill; therefore, the duties described below need to be distributed to staff on hand.

The following responsibilities apply to all personnel in the Wildlife Branch:

- Check in and out of duty each day;
- Attend incident and safety briefings;
- Obtain/review ICS Form 201 (Incident Briefing) for current spill response status;
- Obtain/review ICS Form 202 (Incident Objectives); and
- Maintain individual log (ICS Form 214a).

9310.11.1 Wildlife Branch Director

The Wildlife Branch Director is responsible for managing all wildlife operations and personnel. Following a spill notification with a potential for wildlife impacts, the Branch Director is responsible for ensuring that an initial wildlife impact assessment is rapidly conducted to appropriately establish the necessary scope and scale of the wildlife response.

The Branch Director activates and supervises wildlife operations in accordance with the IAP and directs its execution, directs the Branch Operations, requests resources, ensures coordination with other sections or units within the Incident Command, and reports to the Operations Section Chief. The magnitude of the event and the potential for wildlife to be impacted will dictate the level of staffing in the Wildlife Branch. Smaller spills will generally have less staff. Under these circumstances, the Branch Director may have to take on additional responsibilities beyond those described below. In addition to the general duties described above, the Wildlife Branch Director's duties include, but are not limited to:

- Attending tactics meetings, planning meetings, and Unified Command briefings;
- Notifying trustee agencies and tribes with interest in oiled wildlife response operations;
- Developing the Wildlife Branch Plan for the IAP for the next operational period;
- Determining Wildlife Branch staffing needs (including the need to request volunteers), in accordance with Unified Command procedures and directives;
- Managing and tracking Wildlife Branch personnel using an appropriate tracking system;
- Overseeing the preparation of work order forms for IAP preparation and logistics tracking;
- Providing updates to the Unified Command, Planning Section, and Public Information Officer/Joint Information Center regarding oiled wildlife issues;
- Ensuring that wildlife samples are collected in coordination with the Sampling Specialist;
- Identifies methods to minimize collateral damage to wildlife and habitat from recovery, transportation, and reconnaissance operations;
- Ensuring that qualified personnel perform wildlife recovery and rehabilitation safely and properly;
- Establishing phone (wildlife hotline), internet, and other reporting mechanisms to enable public reporting of oiled wildlife;
- Ensuring appropriate use, maintenance, and disposition of ICS forms (documentation);
- Maintaining Unit/Activity Log (ICS 214);
- Ensuring that all necessary permits are obtained;
- Identifying resources that can be released; developing and implementing the Wildlife Branch Demobilization Plan; and
- Ensuring that Wildlife Branch personnel have appropriate/required training and certifications.

9310.11.2 Deputy Wildlife Branch Director

The Deputy Branch Director reports to the Branch Director and serves as a key member of the Branch Management Team. Duties of the Deputy Branch Director include, but are not limited to, the following:

- Attending to Wildlife Branch Director responsibilities when the Director is absent;
- Developing and disseminating the branch organization chart;
- Ensuring that Group, Unit, and Team supervisors, leaders, and coordinators are provided with appropriate job descriptions and job aids;
- Developing a Wildlife Branch Safety Plan in concert with the Safety Officer, ensuring that all personnel assigned to the branch receive a daily pre-operational safety briefing and a post-operational de-briefing, and recording a summary each day as part of the Unit Log (ICS 214);
- Coordinating and documenting personnel and logistical support needs with group supervisors, preparing logistical requests (and justification, if needed) for review and approval by Wildlife Branch Director and the Operations Section Chief, and submitting approved requests to the Logistics Section;
- Providing operational updates to the Situation Unit;
- Coordinating the development of standardized evidentiary protocols with USFWS law enforcement, NMFS, enforcement and Natural Resource Damage Assessment representatives, ensuring that the needs of each entity are met;
- Coordinating with the Bird and Mammal Recovery and Rehabilitation Group Leaders to determine logistical needs for:
 - Search and recovery
 - Deterrence of oiled wildlife
 - Field tagging of dead and live animals
 - Transporting dead and live animals
 - Siting and deploying of field stabilization and rehabilitation facilities
 - Veterinary services
- Establishing oiled wildlife reporting mechanisms for the public and spill responders; this can include phone lines, email addresses, and social media sites; and
- Maintaining Individual and Branch Activity Log.

9310.11.3 Wildlife Liaison

The primary responsibility of the Wildlife Liaison is to ensure that all branch activities are coordinated with the various other sections within the Incident Command. A number of Wildlife Branch activities overlap the Environmental Unit, the Joint Information Center, the Logistics Section, Natural Resource Damage Assessment activities, and Safety office. It is important that these groups

maintain continuous communication with one another to avoid overlap and confusion. The Wildlife Liaison is also responsible for ensuring that the various state and federal agencies, tribes, and volunteer organizations coordinate with branch activities, including Canadian provincial and federal agencies in the case of a transboundary spill.

9310.11.4 Wildlife Branch Planning Support Staff

The Wildlife Branch planning staff include the Oiled Wildlife Reporting Coordinator, the Spill Management Software Specialist, and the Documentation Specialist. As the number of animals impacted increases, so does the need for these supporting positions.

9310.11.4.1 Oiled Wildlife Reporting Coordinator

The Oiled Wildlife Reporting Coordinator is responsible for accumulating, coordinating, and distributing reports of oiled wildlife that are received from the public and spill responders. This position ensures that the various groups in the Wildlife Branch receive this information in a timely manner.

Duties of the Oiled Wildlife Reporting Coordinator include:

- Monitoring 1-800 phone lines;
- Monitoring email;
- Monitoring social media sites; and
- Forwarding oiled wildlife reports to the Bird and Mammal Recovery and Transportation Unit Leaders.

9310.11.4.2 Spill Management Software Specialist

Most state and federal agency employees and oiled wildlife response contractors are not proficient with the proprietary software that some of the larger companies use to manage a spill response. When this software is used, a spill management software specialist from the RP or the software vendor should be embedded within the Wildlife Branch.

Duties of the Spill Management Software Specialist include:

- Entering resource requests, general messages, and other information into the spill management software; and
- Monitoring the spill management software to ensure that the information entered is reflected in the system.

9310.11.4.3 Documentation Specialist

Accurate and efficient documentation is required during an oil spill. Managing and tracking the high volumes of documents generated by the Wildlife Branch, particularly in a large event, can be very problematic and requires dedicated staff to be effective.

Duties of the Documentation Specialist include:

- Maintaining copies of all documentation produced within the Wildlife Branch;
- Ensuring that documents (originals, copies, etc.) are distributed appropriately within the Command System; and
- Ensuring that incoming documents are distributed appropriately within the branch.

9310.11.5 Wildlife Veterinarians

The Wildlife Veterinarians report to their respective Recovery and Rehabilitation Group Supervisors (birds and mammals) and are responsible for ensuring that impacted animals receive appropriate medical treatment. It is important to retain the services of a wildlife veterinarian who is experienced with the species that are impacted. During large spills in which high numbers of both birds and mammals are impacted, the service of more than one wildlife veterinarian may be warranted. Additionally, oiled wildlife care is a specialized field; thus, veterinarians who have experience with oiled wildlife are preferred. The Wildlife Veterinarians work with the Branch Director and trustee agencies to develop euthanasia protocols appropriate for each spill incident.

9310.11.6 Wildlife Reconnaissance Group Supervisor

During the initial phase of a response, the Wildlife Reconnaissance Group is responsible for conducting the initial wildlife impact assessment to establish the necessary scope and scale of the wildlife response. Subsequent to wildlife impact assessment, this group is responsible for determining the location and movement of animals that may be, or already have been, impacted. Daily and seasonal movements of birds and mammals necessitate rapid, real-time characterization and reconnaissance of wildlife concentrations. The Wildlife Reconnaissance Group consists of the Aerial, Boat, and Shoreline Survey Units. Each unit may be composed of multiple teams. The Reconnaissance Group is responsible for coordinating surveys that occur in habitat for threatened or endangered species in the National Marine Sanctuary, Congressionally Designated Wilderness Areas, or State Parks. Depending on the spill size, Wildlife Reconnaissance Group teams may be integrated with Recovery and Transportation Unit teams, although this is

usually not desirable because it may over-task the teams. Experienced personnel are essential for effective wildlife reconnaissance and surveillance. Observers should be able to identify wildlife species and behavioral characteristics associated with oil impacts, and be knowledgeable about local ecological factors.

Reconnaissance Group personnel may include professional wildlife biologists, trustee agency representatives, contractors, and other trained people. If specialized surveys for threatened and endangered species are needed, additional wildlife specialists may be called in by the Reconnaissance Group Supervisor or Wildlife Branch Director. These specialists will advise the Branch Director and the Unified Command about threats to listed species, locations and numbers of oiled animals, and the need for capture, deterrence, or other protection strategies. These experts will typically use species-specific observation protocols.

Duties of the Reconnaissance Group Supervisor include:

- Determining the need for reconnaissance activities;
- Developing land, water, and air reconnaissance plans;
- Establishing reconnaissance schedules for land, water, and air effort;
- Identifying and coordinating staff to participate in reconnaissance activities; and
- Ensuring that information gathered by the reconnaissance teams is routed to the appropriate Wildlife Branch and Environmental Unit staff.

9310.11.6.1 Aerial Survey Unit

The Aerial Survey Unit is responsible for conducting oiled wildlife reconnaissance from fixed wing and helicopter aircraft. This survey unit is able to survey large geographical areas quickly. Information gathered from aerial surveys may be used to guide land and water animal recovery efforts.

9310.11.6.2 Boat Survey Unit

The Boat Survey Unit is responsible for conducting oiled wildlife reconnaissance from boats. The crews used in this reconnaissance effort will survey pre-defined areas and report on animal presence and numbers. These crews will only collect oiled animals if this activity does not impede the crew's ability to conduct reconnaissance.

9310.11.6.3 Shoreline Survey Unit

The Shoreline Survey Unit is responsible for conducting oiled wildlife reconnaissance from the land. The crews used in this reconnaissance effort will survey pre-defined areas and report on animal presence and numbers. These crews will only collect oiled animals if the collection of the animal does not impede the crew's ability to conduct reconnaissance.

9310.11.7 Bird Recovery and Rehabilitation Group Supervisor

The Bird Recovery and Rehabilitation Group is responsible for wildlife deterrence, recovering live and dead birds, transporting these animals as appropriate, and providing medical care to impacted animals. Wildlife recovery by any agency or organization must be done under the direction of the Wildlife Branch, with approval of the Unified Command. Recovery and rehabilitation activities must comply with agreements and permits from the appropriate management agencies (i.e., state fish and wildlife agencies and USFWS).

Bird Recovery and Rehabilitation Group personnel are drawn from state and federal trustee agencies and approved contractors. Trained, qualified volunteers may be used in support roles and must comply with the Northwest Area Volunteer Policy, including ensuring that appropriate training requirements and Occupational Safety and Health Administration standards are met. The Bird Recovery and Rehabilitation Group is made up of three units: Bird Recovery and Transportation, Bird Rehabilitation, and Bird Deterrence. Depending on the spill size, each of these units may be staffed by no personnel or by dozens of highly trained individuals.

Duties of the Bird Recovery and Rehabilitation Group Supervisor include:

- Contacting/coordinating migratory bird issues with USFWS and the Wildlife Branch Liaison;
- Ensuring that safety plans are developed and understood by group personnel;
- Estimating the type and number of birds that will be recovered;
- Developing bird reconnaissance (in the absence of a Reconnaissance Group), search and recovery, field stabilization (if needed), transport, deterrence, euthanasia, rehabilitation, and release plans;
- Determining where rehabilitation facilities will be located and procuring resources; and
- Determining waste handling needs (liquid and solids) and incorporating them into the Environmental Unit Disposal Plan.

9310.11.7.1 Bird Recovery, Field Stabilization, and Transport Unit

The Bird Recovery and Transportation Unit is responsible for recovering live and dead oiled birds and transporting them to stabilization units, rehabilitation facilities, and/or morgues as appropriate. Success at recovering impacted birds (especially mobile birds) depends on proper technique and timing. Only skilled and experienced staff should recover live birds. Once recovered, impacted live birds should be transported to the designated field stabilization site or rehabilitation facility as soon as possible. Field stabilization is the initial care provided to animals after their recovery and prior to rehabilitation. Field stabilization generally occurs close to the point of recovery and is intended to increase an animal's chances of a successful rehabilitation. Field stabilization may consist of providing fluids, food, and warming or cooling of the animal,

depending on the circumstances. Field stabilization may not be utilized in all spills, depending on the location and circumstances of the incident.

Appropriate measures must be undertaken by the Wildlife Branch to ensure that dead animals are recovered appropriately, identified, documented and held until the trustees approve disposal, or as directed by appropriate trustee agencies. The prompt removal of disabled and dead oiled animals from the environment can be critical to minimize the effects of secondary oiling (e.g., the impacting of predators and scavengers). The Wildlife Branch, in consultation with the trustee agencies, will develop incident specific protocols and authorizations for removing and handling dead oiled birds for each incident. All oiled animals, both live and dead within the spill area, should be recovered and processed as appropriate or as directed by an appropriate trustee agency. Live unoiled animals will only be collected under special circumstances under the guidance of the Wildlife Branch and in coordination with trustee agencies.

WDFW Field Stabilization Trailer Deployment Considerations

The following deployment site needs should be considered prior to deploying the WDFW Field Stabilization trailer:

- Vehicle access adequate for a semi-tractor and trailer;
- Parking space for one 53-foot semi-trailer;
- Parking spaces for eight personal vehicles;
- On-site fresh water: while an available hydrant is the preferred option, deliveries via truck may be a viable option;
- Ability to deploy perimeter fencing with locking gates;
- A restroom (or Sani can) will be required to be on site;
- Personnel support: Motel and restaurant should be located within reasonable distance of deployment site (assume six persons); and
- Local services: Bulk propane supplier and equipment rental (especially generator and fencing) should be available within a reasonable distance of the deployment site.

9310.11.7.2 Bird Rehabilitation Unit

The Bird Rehabilitation Unit is responsible for ensuring that all recovered live birds exposed to oil receive the best achievable care and that oiled birds are properly documented, sampled, tracked, and released. The Bird Rehabilitation Unit is responsible for the oversight of all oiled bird rehabilitation facilities, whether they are permanent or mobile. When rehabilitated animals are ready for release, clean, non-oiled release sites should be chosen in consultation with appropriate trustee agencies.

Oiled bird facilities must comply with federal and state regulations and must meet minimum recommendations in *Best Practices for Migratory Bird Care During Oil Spill Response*. Washington State has minimum oiled wildlife facility

infrastructure requirements ([WAC 232-12-841 through 232-12-871](http://apps.leg.wa.gov/wac/default.aspx?cite=232-12) <<http://apps.leg.wa.gov/wac/default.aspx?cite=232-12>>) that must be met in order to serve as an oiled wildlife facility during the course of a response.

Basic oiled bird rehabilitation facilities should include:

- Areas for intake, physical exam, and evidence processing;
- Space for a veterinary hospital with isolation capabilities;
- Indoor bird housing and enclosures;
- Food storage and preparation facilities;
- Animal washing and rinsing areas;
- Indoor drying pens;
- Outdoor pool and pen areas;
- Diagnostic equipment and pathology facilities (e.g., morgue);
- An area with restrooms and separate rooms for eating and volunteer training;
- Administrative offices with multiple phone and fax lines, high-speed internet, and conference space;
- Storage;
- Access to a large parking area; and
- Adequate ventilation, hot and cold water, and climate control.

Mobile Oiled Bird Rehabilitation Unit Deployment Considerations

In general, the following deployment site needs (established for a single MRU) should be considered prior to deploying mobile oiled bird rehabilitation units:

- Interior space: 10,000 square feet of concrete or asphalt (not gravel) under cover, ideally with loading dock. If interior space is not available, then combine this space requirement with Item 2, below.
- Exterior space: 5,000 square feet of concrete or asphalt (not gravel) adjacent to interior space above.
- Parking spaces for six semi-trailers adjacent to above. Two spaces will be designated for fixed-axle (20,000-gallon) water tanks.
- Parking spaces for 40 personal vehicles (staff, visitors, etc.)
- On-site fresh water: hydrant is the preferred option. Water that will be used for wash/rinse or pools must test to (or be adjusted to) 2 to 5 grains hardness. Note: the estimated minimum volume of freshwater required over the duration of a response will be 50,000 gallons total (18,000 in pools, 30,000 for wash/rinse, 2,000 wash down). This assumes that pool water filtration and reuse has been accomplished. If pool water is not reused, a minimum water consumption volume of approximately 600,000 gallons should be used for planning purposes.
- Vehicle access for a semi-tractor and trailer.
- Ability to deploy perimeter fencing with locking gates.

- Security: 24/7 security of site will need to be established.
- Restrooms/break rooms (serving 30 persons) will be required on site.
- Personnel support: A motel and restaurant (serving 30 persons) should be located within reasonable distance of deployment site.
- Local services: bulk propane supplier and equipment rental (especially generator and fencing) should be available within a reasonable distance of the deployment site.

9310.11.7.3 Bird Deterrence Unit

Deterrence is defined as the use of physical, auditory, or visual stimulus that is intended to move or disperse birds or mammals away from an impacted area. This is also commonly referred to as deterrence. The objective of using deterrence mechanisms is to minimize the number of animals that may become oiled.

The Bird Deterrence Unit, in coordination with the Wildlife Branch Director, is responsible for determining if and when bird deterrence operations should take place. The recommendation will be guided by site-specific and species-specific factors present at the time of the oil spill, and availability of proven deterrence techniques. If deterrence is determined to be appropriate, the unit should develop a site-specific deterrence plan in consultation with all appropriate trustee agencies. Deterrence should always be considered in heavily impacted habitats, particularly when clean (not likely to be oiled) sites are present in the surrounding area. Wildlife that has already been oiled should not be dispersed because this can lead to the introduction of oiled animals into uncontaminated areas and populations. Rather, oiled animals should be captured as soon as practical.

It must be stressed that deterrence activities must take place only under the authority and oversight of trustee agencies, in coordination with the Unified Command. Permits and authorizations for deterrence are discussed above in the Federal and State Law Mandate section of this plan. Deterrence recommendations will be guided by site-specific and species-specific factors present at the time of the spill, availability of proven deterrence techniques, and availability of appropriate equipment and experienced deterrence personnel.

Special efforts should be taken to notify appropriate authorities whenever deterrence activities are contemplated near large or small airports. The movement of birds by deterrence operations during an oil spill may create additional problems and conflicts with normal bird control operations at airports. This is especially true in spills near large airports such as in Portland or Seattle. The Port of Portland (Portland Airport) and the Port of Seattle (SEA-TAC Airport) must be included in agency coordination when developing deterrence plans in locations that might affect airport operations. Airport personnel may also be available to assist with planning deterrence operations.

Deterrence devices include both visual and auditory techniques. A variety of deterrence devices are available and can be deployed to meet the situation,

including helicopters, fixed-wing aircraft, propane cannons, shell crackers, bird bombs, screamers, launchers, airboats, ATVs, sonic buoys, Mylar tape, lasers, flags, distress and alarm calls, and effigies. Experience has shown that effective deterrence will require the use of multiple techniques simultaneously in order to move animals away from established feeding or resting areas.

Preemptive capture is another means of keeping wildlife away from oil and cleanup operations. As the term implies, this response action involves capturing animals before they become oiled. It usually is only applicable to a small number of animals in a specific location and will usually only happen under limited circumstances. Decisions to utilize preemptive capture will be closely coordinated with appropriate state and federal trustee agencies.

Deterrence equipment, techniques, and considerations are described in detail in the [Bird Hazing Manual: Techniques and Strategies for Dispersing Birds from Spill Sites](#), published by the California Office of Spill Preparedness and Response and the University of California, Davis. The Bird Hazing Manual is also provided as a link in Chapter 9311 of the Northwest Area Contingency Plan.

Effective deterrence is dependent on utilizing trained and experienced wildlife response personnel to implement a deterrence program. A list of deterrence resources that are available for use in the Pacific Northwest is included in Chapter 9311 of the Northwest Area Contingency Plan. The resources list includes equipment and experienced personnel from wildlife response organizations that are available to be activated if deterrence is determined to be a viable wildlife response action. Experienced deterrence personnel may also be utilized to assist the Bird Deterrence Unit in developing the site-specific deterrence plan.

9310.11.8 Marine Mammal Recovery and Rehabilitation Group

The Marine Mammal Recovery and Rehabilitation Group is responsible for the recovery and rehabilitation of impacted mammals. This involves deterrence, recovering dead or live mammals, transporting them to processing centers, and providing medical and husbandry care to impacted animals. These activities are performed in close coordination with the Unified Command, along with state and federal trustee agencies. Wildlife recovery by any agency or organization must be conducted under the direction of the Unified Command. Their activities must comply with agreements and permits from the appropriate management agencies (i.e., state fish and wildlife agencies, NOAA, USFWS). Although marine mammals are generally associated with oil spills, it is also possible to recover terrestrial mammals such as muskrat, raccoon, and river otter. The Marine Mammal Recovery and Rehabilitation Unit is responsible for all mammals.

Recovery and Rehabilitation Group personnel are drawn from state and federal trustee agencies and approved contractors. Unlike other Wildlife Branch activities, Marine Mammal Recovery and Rehabilitation personnel will include a high proportion of federal trustee personnel, including members of the marine mammal stranding networks. Terrestrial mammal personnel generally will involve

professional wildlife rehabilitators from federal and state approved organizations. Trained, qualified volunteers can be used as long as they comply with the Northwest Area Volunteer Policy, including ensuring that appropriate training requirements and Occupational Safety and Health Administration standards are met.

Duties of the Marine Mammal Recovery and Rehabilitation Group Supervisor include:

- Contacting/coordinating with federal and state agencies as appropriate to species involved;
- Ensuring that safety plans are developed and understood by Group personnel;
- Developing mammal reconnaissance, search and collection, field stabilization (if needed), transport, deterrence, euthanasia, rehabilitation, and release plans;
- Announcing marine mammal stranding contact information (if appropriate);
- Estimating type and number of marine mammals that will be recovered;
- Determining where rehabilitation facilities will be located;
- Determining personnel needs (capture, transport, rehabilitation, facility support/development, security, etc.);
- Determining waste handling needs (liquid and solids) and incorporating them into the Environmental Unit Disposal Plan;
- Developing incident-specific killer whale deterrence and monitoring plans; and
- Developing sea otter response plans.

9310.11.8.1 Mammal Recovery, Field Stabilization, and Transport Unit

The Mammal Recovery and Transport Unit is responsible for recovering live and dead impacted mammals and transporting them to rehabilitation facilities. The Mammal Recovery and Transport Unit evaluates the need to recover impacted mammals on a case-by-case basis. If oiled pinnipeds, sea otters, or cetaceans are determined to be ill and require retrieval, recovery will be instituted by the Mammal Recovery and Transportation Unit, in conjunction with NMFS (for pinnipeds), USFWS (for sea otters), and sufficiently trained and experienced capture personnel (members of the Marine Mammal Stranding Network). Success at recovering mammals depends on proper technique and timing. Trained staff should recover live mammals. Once recovered, impacted live mammals should be transported to the designated field stabilization site or rehabilitation facility as soon as possible. Appropriate measures must be undertaken by the Wildlife Branch to ensure that dead animals are recovered appropriately, identified, documented and held until the trustees approve disposal. The prompt removal of disabled and dead oiled animals from the environment can be critical to minimize the effects of secondary oiling such as poisoning of predators and scavengers. A

Marine Mammal Stranding Report must be submitted for dead marine mammal sightings, as well as upon capture and prior to transport of live marine mammals.

9310.11.8.2 Mammal Rehabilitation Unit

The Mammal Rehabilitation Unit is responsible for ensuring that pinniped, sea otters, cetaceans (limited circumstances), and terrestrial mammals exposed to oil receive the best achievable care and for ensuring that oiled mammals are properly documented, sampled and tracked. Wildlife care includes triage, stabilization, intake/documentation, treatment, rehabilitation and release.

When rehabilitated animals are ready for release, clean, non-impacted release sites should be chosen after consulting the appropriate trustee agency or agencies. While exceptions can be made during spill emergencies, some agencies have specific requirements or policies regarding releasing animals on their properties. As a part of spill response actions, marine mammals are tagged and, in some cases, fitted with telemetry equipment for post-release monitoring. To guide the Mammal Rehabilitation Unit in the treatment of remaining animals, wildlife pathologists may conduct necropsies on selected animals during a spill response. However, the Wildlife Branch Director or his designee must obtain pre-approval from the Unified Command for such examinations. In addition, representatives of the appropriate federal trustee agency may need to be present and have specific samples collected and analyzed.

9310.11.8.3 Mammal Deterrence Unit

The Mammal Deterrence Unit is responsible for determining if and when mammal deterrence operations should take place. Deterrence of mammals is very similar in nature and function to that of birds, as detailed earlier. Deterrence activities must take place only under the authority and oversight of trustee agencies, in coordination with the Environmental Unit. The Wildlife Branch Director will make the deterrence recommendation to the Unified Command through the Operations Section Chief. The recommendation will be guided by site-specific and species-specific factors present at the time of the spill, and availability of proven deterrence techniques. Deterrence activities, observations, and results are to be reported to the Mammal Recovery and Rehabilitation Group Supervisor, who will report to the Wildlife Branch Director and the Planning Section's Environmental Unit Leader. Specific information on killer whale deterrence equipment possessed by WDFW, NMFS, and Island Oil Spill Association (IOSA) can be found in Chapter 9311 of the NWACP.

9310.11.9 Volunteers

Spill incidents that impact wildlife often generate a significant interest from the general public to volunteer their efforts. Section 4326 of the NWACP outlines the guidelines by which volunteers may be incorporated into an incident response. It should be noted that this policy gives preference to persons who possess previous training and are affiliated with an existing volunteer organization.

During a response, the Wildlife Branch Director, in coordination with the Bird and/or Mammal Recovery and Rehabilitation Group Supervisors, will determine whether a need exists to request volunteer assistance. If it is determined that the need for volunteers does exist, the Wildlife Branch Director will communicate this need to Unified Command, and the Area Plan process for managing volunteers will be followed.

It is important that appropriate management and training be provided to any volunteers used during a spill response (whether paid or unpaid). To oversee these efforts, a Wildlife Volunteer Coordinator—reporting to the appropriate Recovery and Rehabilitation Group Leader and coordinating with the overall incident Volunteer Coordinator—will be assigned to oversee volunteer notification, support, training, and duty assignments.

Duties of the Volunteer Coordinators include:

- Coordinating wildlife volunteer needs with the Incident Command;
- Providing logistical support for volunteers such as scheduling, training, personal protective equipment, food, lodging, etc.;
- Communicating the need for volunteers to the Incident Command and general public; and
- Coordinating with organized volunteer organizations.

9310.12 Demobilization of Wildlife Operations

The determination to suspend wildlife operations and demobilize the Wildlife Branch is made by the Unified Command based upon a recommendation from the Wildlife Branch Director and in consultation with other trustee agencies.

The process of cleaning and rehabilitating oiled wildlife may take several weeks to months, and some animals, especially those recovered late during a response, may still require care for a period of time after other response resources have demobilized. For this reason, the wildlife rehabilitation personnel, equipment, and facilities deployed by the Wildlife Branch could be the last resources of the Unified Command to be demobilized following a response.

As animals are released, and fewer animals remain in care, Wildlife Branch personnel and equipment resources will be gradually demobilized as appropriate—following the standard checkout procedures identified through the ICS and the Unified Command.