Annex H

Natural Resource Trustees

Version

1

REGIONAL RESPONSE TEAM 4

Response Technology Committee

Natural Resources Trustees Annex

RRT4 RESPONSE TECHNOLOGY COMMITTEE

Natural Resources Trustees Annex

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Section 1

Natural Resource Trustees

Trustees and trusteeship are defined in CERCLA and the Clean Water Act as amended by OPA 90.

Trustee Designation

Federal officials designated by the President who act on behalf of the public as trustees for natural resources when there is injury to, destruction of, loss of, or threat to natural resources as a result of a release of a hazardous substance or a discharge of oil.

- Secretary of Commerce (delegated to NOAA)
- Secretary of the Interior
- Secretary of Agriculture
- Secretary of Defense (includes the Corps of Engineers)
- Secretary of Energy

For natural resources not otherwise described the trustee shall be the head of the federal agency authorized to manage or control those resources.

- Tennessee Valley Authority
- NASA

State officials designated by the Governor of each State to act as trustee for natural resources within the State's boundaries or for resources belonging to, controlled by, or appertaining to the State.

- Alabama

  Commissioner, Department of Conservation & Natural Resources
  Director, Department of Environmental Management
  State Geologist, Oil and Gas Board

- Florida

  Secretary, Florida Department of Environmental Protection

- Georgia

  Commissioner, Department of Natural Resources

- Kentucky

  Commissioner, Natural Resources & Environmental Protection
  Cabinet, Department for Environmental Protection

- Mississippi

  Executive Director, Department of Natural Resources

- North Carolina

  Secretary, Dept. of Environment, Health, & Natural Resources

- South Carolina

  Commissioner, Department of Health & Environmental Control
  Director, Department of Natural Resources
  Office of the Governor

- Tennessee

  Commissioner, Department of Environment & Conservation

Indian officials designated by the governing body of any Indian Tribe may act as trustee on behalf of the tribe. The Department of the Interior may act as trustee if requested by a tribe.

- Catawba Indian Nation
- Eastern Band of Cherokee Indians
- Miccosukee Tribe of Indians of Florida

- Mississippi Band of Choctaw Indians
- Poarch Band of Creek Indians
- Seminole Tribe of Florida

Appendix 1 provides the point-of-contact, office location and phone numbers for the natural resource trustees.

Trust Natural Resources

Natural resources are defined as land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the U.S. (including the resources of the exclusive economic zone), any State or local government, Indian Tribe, or any foreign government. Federal, State and Indian Tribes may, and often are co-trustees for the same natural resource.

Examples of resources under the trusteeship of designated trustees include:

Department of Agriculture

- Federal rangeland;
- Federally-managed fisheries;
- Federally-owned or managed farmland;
- Land enrolled in the Wetlands Reserve Program; and
- National forest land.

The following offices within the USDA are responsible for the management and/or protection of the resources listed above: Forest Service; Natural Resources Conservation Service; and Conservation Reserve Program.

Department of Commerce

- Coastal environments, including salt marshes, tidal flats, estuaries, or other tidal wetlands;
- Designated Estuarine Research Reserves or Marine Sanctuaries;
- Endangered marine species;
- Marine mammals; and
- Rivers or tributaries to rivers which historically support or presently support anadromous fish.

The Secretary of Commerce delegated trustee responsibility to the Administrator of the National Oceanic and Atmospheric Administration (NOAA). The following offices or groups within NOAA have responsibilities which include the protection and management of natural resources: National Marine Fisheries

Service; Office of Ocean and Coastal Resource Management; Office of Oceanography and Marine Services; and the General Counsel.

Department of Defense

- The Secretary of Defense (DOD) has trusteeship over the natural resources on all lands owned by DOD or the Army (including lands and facilities managed by the Corps of Engineers), Navy, Air Force, and Defense Logistics Agency. These lands include military bases and training facilities, research and development facilities, and munitions plants.

Department of Energy

- The Secretary of Energy (DOE) has trusteeship over natural resources under its jurisdiction, custody, or control. DOE's land-holdings include national research and development laboratories, facilities, and offices.

Department of the Interior

- Certain anadromous fishes and marine mammals and supporting ecosystems;
- Certain threatened and endangered species and supporting ecosystems;
- Federal minerals;
- Migratory birds and supporting ecosystems;
- Units of the National Wildlife Refuge and Fish Hatchery System;
- Units of the National Park System;
- Public lands;
- Water resources stored or regulated by Interior projects; and
- Tribal resources, in cases where the U.S. acts on behalf of the Indian Tribe.

The following offices within DOI are responsible for the management and protection of the resources listed above: Bureau of Indian Affairs; Bureau of Land Management; Bureau of Reclamation; Fish & Wildlife Service; Minerals Management Service; National Park Service; and U.S. Geological Survey. The Office of Environmental Policy and Compliance coordinates and promotes consistency in carrying out the Department's roles and responsibilities under the NCP.

Tennessee Valley Authority

- TVA has trusteeship over natural resources on the Tennessee River System under their management and includes about 50 power plants and 100 public recreation areas.

NASA

- NASA has trusteeship over natural resources on lands and facilities at the Kennedy Space Center, FL, the Marshall Space Center, AL, and the Stennis Space Center, MS.

States

- State forest lands;
- State-owned minerals;
- State parks and monuments;
- State rare, threatened, and endangered species; and

- State wildlife refuges and fish hatcheries.

Indian Tribes

- Ground and surface water resources on Tribal lands; and
- Any other natural resources found on Tribal land.

Section 2

Trustee Notification and Coordination

Notification of the trustees and coordination of response actions are essential to an effective response.

The OSC shall ensure that all natural resource trustees be promptly notified of all discharges or releases. The OSC shall also coordinate and consult with the affected natural resource trustees regarding the response activities and communicate the appropriate action for the removal of discharged oil. The OSC and trustees are to coordinate assessments, evaluations, investigations, and planning regarding removal actions. The trustees will provide timely advice concerning recommended actions with regard to trustee resources potentially affected.

The OSC should seek the concurrence of natural resource trustees during pollution response operations, whenever practicable, *before* actions are taken that could impact resources under the trustees management. Additionally, as stated in the NCP, *"*the OSC and the trustees shall coordinate assessments, evaluations, investigations and planning with respect to the appropriate removal actions.*"*

Natural resource trustee notification should be made immediately to allow the trustees to determine if trust resources will be affected and to ensure that trustees can provide timely advice on recommended actions to minimize the impact to the environment. When a discharge of oil may affect any threatened and/or endangered species or their habitat, the OSC shall consult with the Department of the Interior and NOAA and, if appropriate, the cognizant federal land managing agency. The consultation process is explained in Section 4, "Compliance with Section 7 of the Endangered Species Act."

OSCs should immediately notify both the Department of the Interior and NOAA whenever any of the following criteria are met:

- Anytime the OSC needs the expertise of DOI, DOC or any other designated natural resource trustee.
- A discharge of oil is equal to or greater than 1,000 gallons.
- The release of a hazardous substance is equal to or greater than the reportable quantity.
- When the release or discharge impacts or has the potential to impact DOI managed lands, such as National Parks and National Wildlife Refuges, and/or DOC resources, such as National Marine Sanctuaries and National Estuarine Research Reserves.
- When the release or discharge impacts or has the potential to impact known sensitive resources, including:

  Threatened and endangered species and designated habitat

  Raptor nesting sites (e.g. ospreys)

  Bald eagle nesting sites

  Bird rookeries (e.g. herons, egrets, wood storks)

  Rafting birds (e.g. ducks, loons)

  Coral Reefs

  Mangroves

  Marine Mammals

  Anadromous fish

  Marine fishery resources (essential fish habitat).

For the Department of the Interior, notification should be made to the Atlanta Regional Environmental Officer, office number – 404-331-4524, 24-hour number – 404-909-0537. In the event the REO cannot be contacted the primary alternate point-of-contact will be as follows:

Philadelphia Regional Environmental Officer
215-597-5378 (office)
215-597-5012 (24-hour)

MSO Paducah	Kentucky
MSO Louisville	East Tennessee – east of I24
MSO Savannah	North Carolina
MSO Charleston	South Carolina
MSO Wilmington	Georgia

Albuquerque Regional Environmental Officer
505-563-3572 (office)
505-766-3565 (24-hour)

MSO Memphis	Alabama
MSO Mobile	Mississippi
MSO Tampa	West Tennessee – west of I24
MSO Miami	Florida
MSO Jacksonville	

For NOAA, notification should be made to the NOAA HAZMAT Regional Response Team Representative, office number – 206-526-6949, 24-hour number 206-526-6329.

Section 3

Wildlife Protection and Response

The roles and responsibilities of emergency response participants and how wildlife response and protection fits into the ICS/UC

The Area Contingency Plan (ACP) is the primary source for guidance regarding natural resource protection during a spill. Key portions of the ACP that will be used to identify wildlife and habitat protection concerns include, but not limited to, sensitive site summaries and strategies, geographic response plans, and the environmental sensitivity index (ESI) maps. See Appendix 2 for a listing of available ESI maps.

Trustee Participation in ICS/US

Federal land and resource managing agencies have statutory responsibilities to protect their lands and resources that may affect their actions and recommendations during an oil discharge or hazardous substance release. These laws may authorize them to take protective actions with or without OSC concurrence and to recover their costs from the responsible party.

Depending on the nature of the incident, trustee representatives, acting as natural resource or land managers, may participate in one or more ICS units. Each trustee agency may have a different approach to participation in ICS.

Planning: Trustee representatives can provide information about sensitive resources and appropriate response techniques through this section. Planning is likely to be the most common location for trustee participation in the ICS. Trustee representatives should participate and assist in activities affecting lands and resources under their jurisdiction. For example, trustee representatives may identify changes in protection priorities or response activities that could prevent or minimize adverse effects to natural resources.

Operations: Trustee representatives should participate and assist in implementation of

wildlife response efforts. This is particularly important to ensure these efforts are in compliance with relevant laws. Trustee representatives should participate and assist in activities affecting lands and resources under their jurisdiction.

Command: For incidents with significant effect or the potential for significant effect on trust resources (e.g., critical habitat for threatened and endangered species), having a trustee representative in Command would help to ensure that information on these resources is available to and used appropriately in decision making. For incidents that threaten or affect Federal lands or resources, depending on the management agency and the laws it operates under, it may be advisable to have a representative from the affected agency as part of Command. This representative could provide guidance/concurrence on response and protection strategies commensurate with the special status of the affected or threatened lands or resources.

Logistics: When trustees have significant equipment, vehicle resources and/or facilities to contribute to the response, it may be useful to have trustee representatives in this section. This might be the case when a spill occurs on or threatens Federal land.

Finance/Administration: If there is significant trustee agency participation in the response, a trustee representative in this section could assist in supporting trustee personnel. This could involve dealing with time-record documents for personnel and equipment, handling cost estimates and records for trustee agency personnel, etc.

Trustee Activities in Emergency Response

Identify/Prioritize Resources at Risk: Trustees can supplement the OSC's information on sensitive resources found in the ACP. The trustees provide local expertise and up-to-date information relevant to the specifics of the incident. Trustees also assist the OSC in priorities in the ACP for sensitive habitat and resources requiring protection.

Evaluate Protective Measures and Clean-up Strategies: Trustees can advise the OSC on determination of cleanup end-points (i.e., how clean is clean). For Federal lands or resources, the land/resource manager should have an integral role in determining the cleanup endpoint.

Participate in Team Assessing Clean-up (Shoreline Clean-up Assessment Team SCAT in coastal areas): Trustees can provide resource experts to assist in assessment of clean-up activities. For Federal lands or resources, representatives of land/resources manager(s) should participate in clean-up assessment. Observations relevant to natural resource injury determination made by members of the clean-up assessment team should be provided to trustee representatives with NRDA responsibility.

Participate in Post Clean-up Inspection (Sign-off Team): Trustee participation on

inspection teams at proposed completion of cleanup activities can assist the OSC in determining adequacy of cleanup. For Federal lands or resources, a representative of the land/resource manager should participate on the sign-off team.

Wildlife Rehabilitation: Trustee representatives participate through the ICS regarding appropriate response actions for injured wildlife. Trustee representatives ensure proper rehabilitation organizations are contacted and necessary permits have been obtained. They provide oversight to ensure wildlife response plans are implemented appropriately. Trustees also maintain chain of custody for wildlife that cannot be rehabilitated. Trustee representatives are responsible for development and implementation of wildlife release protocols.

Natural Resource Protection

The Protection of Trust Natural Resources during Response Operations. During a response to spilled oil or hazardous material, the protection, retrieval, and rehabilitation of affected wildlife is the jurisdiction of the Department of the Interior (DOI), the National Oceanic and Atmospheric Administration (NOAA), and the affected state resource trustees. Only permitted and trained individuals (Qualified Wildlife Responders - QWR) are allowed to directly handle the affected wildlife. QWRs are familiar with a wide range of actions that can be taken to minimize the adverse effects of spilled oil on fish and wildlife resources and their habitats.

However, decision-makers and QWRs are not always familiar with the effects that various oil spill products and technologies may have on different wildlife resources. Applied oil spill products and technologies are listed under the National Contingency Plan (NCP) Product Schedule (40 CFR § 300.317) and are the focus of the Selection Guide for Oil Spill Applied Technologies. The Selection Guide can be found at http://www.response.restoration.noaa.gov/oilaids/ARTES/guide.html. These applied oil spill products and technologies are relatively unknown and most decision-makers have limited experience in their use. To facilitate greater understanding of these products and technologies, the Selection Guide assists the decision-maker to evaluate the various spill response products and technologies for potential or suspected impacts to the environment, workers, and natural resources.

Of particular interest is the evaluation of the use of various oil spill response technologies, taking into account possible effects on the wildlife resources that might be present at sea, nearshore, on land, or in riverine/lake spill locations. The Selection Guide has decision-makers consider wildlife when evaluating potential response options and promotes the involvement of the Planning Section's wildlife personnel in the review of strategies and options for a response.

As part of the national preparedness efforts for oil spill response, a decision-making tool, the Selection Guide for Oil Spill Applied Technologies was developed to provide information and guidance on the use of oil spill response technologies and actions that may be unfamiliar to Federal or state on-scene coordinators or local incident commanders. The Selection Guide allows decision-makers to quickly evaluate response options for special circumstances or niches where conventional response technologies may not be the most appropriate option.

As part of the national response priorities, On Scene Coordinators (OSCs) are directed to employ all necessary containment and removal countermeasures in a coordinated manner to ensure a timely and effective response that minimizes adverse impacts to the environment (40 CFR § 300.317), including the use of products listed on the NCP Product Schedule. To facilitate greater understanding of these products and technologies, the Selection Guide was developed to further evaluate the technologies and identify appropriate uses of these potential response options.

The Selection Guide provides the OSCs/decision-makers with an easy-to-use source of technical information on spill response countermeasures that are regulated by the NCP, including: sorbents, bioremediation agents, dispersants, elasticity modifiers, emulsion treating agents, *in situ* burning on land and on water, shoreline pre-treatment agents, solidifiers, surface collecting agents (herders), surface washing agents, and the use of fire-fighting foams as well as potential response strategies for "unusual" spill response conditions (e.g., fast-water booming strategies, non-floating oil strategies, oil-in-ice situations, water intake monitoring, and pyrolytic oil strategies). The Selection Guide facilitates easy comparison among product categories, as well as aiding the decision-maker in determining the best response strategy or product for a particular issue that "traditional" response tools do not add value and may cause additional harm.

In the past, this evaluation was conducted without directly prompting the decision-maker to evaluate an applied technology or strategy relative to its potential and limitations to shoreline and natural resources. As part of the 2002 update, the Selection Guide Development Committee (whose members draw from various federal, state, and local government, industry, and special interest groups) revised the standard evaluation process to prompt the decision-maker to consider the relative impact of a spill response technology relative to wildlife and other natural resources.

Oil spill response decision-makers need to understand the relative benefits and injuries that could result from the use of a particular product or technology. This evaluation will assist the decision-maker in clarifying the potential benefits and appropriate situations for the use of these products and technologies relative to their potential impacts on wildlife resources. An OSC is held accountable for their decision-making and must take into account federal law and agency jurisdictions for wildlife resources when making spill response decisions (Appendix 3). To address this accountability aspect of spill response decision-making, a table was developed that facilitates a general evaluation on the relative impacts of a response technology on wildlife and other natural resources (Appendix 4).

The Selection Guide provides a relative ranking of the effects of applied technologies on six general categories of wildlife resources:

- marine mammals,
- terrestrial mammals,
- birds,
- amphibians and reptiles,
- fish, and
- Shellfish (Appendix 5).

Each of these categories were further subdivided into individual species or species categories based on the mechanism(s) that these resources are impacted by oil spills (e.g., whether their exposure is typically through ingestion, inhalation, wading thru spilled oil, swimming in or under surface slicks, or just being in the general vicinity).

This evaluation is general enough to address situations when the oil spill occurs at sea, in the nearshore waters, on land, or riverine/lake habitats. The "categorizing" of species within a resource category is very generic and attempts to capture the potential impacts to species that have been impacted by oil spill responses in the past, regardless of life stage. This table provides the OSC with a prompt to conduct further evaluations on the potential impacts to the resource and to coordinate all decision-making following consultation with wildlife resource trustees on the potential impacts from the use of a particular product or spill response technology.

This table provides the decision-maker with one of five rankings of potential impacts when evaluating the products and technologies contained in the Selection Guide: "+" = impacts are considered minimal; "?" = potential impacts are possible; "—" = impacts are considered likely and the product or strategy is not recommended for use when the resource is present; "**N/A**" = application not

applicable in this resources' habitat; and "**I**" = insufficient information – impact or effectiveness of the method could not be evaluated.

The impact ranking for each wildlife resource category was developed from previous experiences and handling of wildlife resources during spill responses:

- How the species react to oil in their environment (curiosity, avoidance behavior, etc.);
- Their feeding behavior;
- Life stages that are typically affected during oil spill in their environment;
- Preening habits; etc.

Using this wildlife behavior knowledge, a review of the individual applied oil spill response product or technology categories to determine the likely impacts and benefits from the use of an applied technology category. The Selection Guide provides the decision-maker with a general summary on the following categories for each applied technology: Mechanism of Action; When to Use; General Application Requirements; and Limiting Factors/Environmental Constraints.

This table is not designed to encompass all situations or life stages for a wildlife resource and should not be considered complete. Rather, the table was designed to trigger further discussions between decision-makers and wildlife resource trustees **PRIOR** to decision-making.

This evaluation is by no means complete. Decision-makers need to discuss options with wildlife trustee agencies and keep them involved in the decision-making process. However, in every instance, wildlife experts, preferably from both the state and federal agency (s) involved, should be consulted prior to enacting a response strategy. In order to initiate a well-planned wildlife response during a spill event, wildlife responders need access to the latest information and tools that would allow a timely and efficient response. The Selection Guide helps fill that niche, and allows wildlife responders to make valid decisions and recommendations to the OSC regarding the wildlife impacts associated with response strategies that are suggested by the OSC or Planning Section of the Unified Command during a spill event. The Selection Guide is a relatively easy document to view as the various response strategies and wildlife categories are placed in tabular form and the associated wildlife impacts readily interpreted. At present, presumably due to budget constraints, few states have personnel dedicated to spill planning and response as their primary duties. These duties, particularly spill response, often become the responsibility of individuals that are on hand at the time of the spill

and are thrust into the "fire" having little or no oil spill response experience by their superiors. Although these latter responders may have little or no experience with spill response, the Wildlife section of the Selection Guide and its ease of interpretation provide quick access to information that would allow them to at least consider the potential impacts to wildlife associated with suggested response strategies and provide valuable information to the OSC regarding those impacts. The Selection Guide is an ongoing process and experience is gained from the application of the various response strategies listed in the Guide. The lessons learned from those response strategies employed will be incorporated into periodic updates of the Guide.

The Prevention of Impacts to Trust Resources during the conduct of Response Activities. Additional direct and indirect wildlife impacts include injury and death, may occur in conjunction with response activities. Incident-specific techniques will be identified by appropriate FWS, NMFS, and State(s) representatives and utilized with Federal OSC concurrence to prevent (1) unnecessary or illegal disturbance to sensitive species and habitats, such as nesting and rookery sites; and (2) collection of wildlife parts by spill-response personnel for personal use.

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

The Bald Eagle Protection Act specifically prohibits the disturbance of raptors. Any actions that cause harassment or death of migratory birds are prohibited under the Migratory Bird Treaty Act.

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

Section 7 of the Endangered Species Act requires any federal agency that authorizes, funds, or carries out activities that may affect listed species or critical habitat to consult with DOI (through FWS) and/or DOC (through NMFS). Therefore, the Federal OSC must immediately consult with FWS or NMFS whenever a response may affect these resources. The Endangered Species Act and its implementing regulations provide special provisions for consultations during emergencies such as oil spills. See below for guidance on compliance with Section 7.

To reduce disturbance and improve the chances for wildlife survival, FWS, NMFS, and/or State(s) representatives (as appropriate) should provide, through the Federal Aviation Administration and USCG, notices to aircraft and/or notices to mariners for areas affected by an oil spill. These advisories may request pilots and vessel operators to remain a certain distance from wildlife concentration areas and critical habitats. Copies of any advisories should be sent by the Federal OSC to all federal and state agency and agency-contracted on-site personnel. In addition, a news release should be prepared on this subject for distribution by the Federal OSC to appropriate news media representatives.

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

Policies for response-related personnel should include prohibitions on the collection of whole or partial remains of wildlife for personal use. Wildlife remains include, but are not limited to, bones, feathers, teeth, ivory, and pelts. FWS and/or NMFS (as appropriate) will provide information on prohibitions on the collection of whole or partial wildlife remains for personal use to the Federal OSC. The Federal OSC will then provide this information to all response parties, and federal and state agency and agency-contracted on-site personnel. It should be noted that wildlife response activities may include tasks in addition to those listed.

The Prevention of Adverse Secondary Oil Effects. Scavenging of dead oiled wildlife may result in secondary poisoning due to hydrocarbon ingestion. To minimize the secondary impacts of an oil spill, dead oiled wildlife should be removed from the environment as quickly as possible under the authorization of FWS and/or NMFS. FWS and/or NMFS will recommend to the Federal OSC, an appropriate incident-specific approach for the retrieval and disposition of dead oiled wildlife that are their respective responsibility, including information about not collecting animals parts for personal use. The State(s) will assist FWS and/or NMFS on a case-by-case basis.

Trust Resource Protection Information. Information on the feasibility of applying various response strategies to migratory bird species includes their relative sensitivity to oiling, their relative sensitivity to disturbance during critical periods of their life cycles, and general recommendations for minimizing adverse effects during an oil-spill response.

Migratory birds

No overall list of priorities can be made for protecting these species from oil spills. In many cases, priorities should be based on special types of habitat areas rather than to species. In many cases, vulnerable species will be protected if special habitat areas are given priority.

With a few exceptions, most migratory birds occur inland or along coastal shorelines during the breeding season. Migratory birds with habitat requirements associated with water exhibit obvious immediate behavioral changes in response to exposure to oil. In particular, they begin preening to clean oil from their feathers. As a result, normal activities such as feeding, nesting, and migrating are abandoned. In addition, the ingestion of oil due to preening or skin contact may have long-term chronic effects on birds' metabolic processes. The severity of those effects will depend on factors including, but not limited to the species contaminated, health of the birds prior to exposure, type of hydrocarbon, degree and length of exposure, and distribution of the hydrocarbon through the ecosystem.

Most birds that are exposed to oil die before they can be captured due to the toxic effects from ingested oil and/or hypothermia caused by injury to their plumage. Birds captured alive and taken to treatment centers can often be cleaned, and some can be rehabilitated and released. However, mortality following arrival at a treatment center may be high, due to the effects of oil or stresses associated with treatment and captivity. The proportion of birds brought to a treatment center that are eventually released can be expected to vary. Of the birds released, only a portion can be expected to survive. Therefore, every effort should be made to prevent birds from becoming oiled.

To date, a wide variety of migratory birds have been affected by oil spills. The long-term implications of those effects are just beginning to be understood. Seabirds, such as murres and puffins that have low reproductive rates may require decades to rebuild population levels to pre-spill numbers. Endangered species are particularly vulnerable to catastrophic losses.

Strategies for protecting migratory birds from oil include containing the oil before it reaches the birds, hazing them from oiled areas, and capturing and treating oiled birds. Capturing and treating oiled birds is the protection method of last resort. Although methods for cleaning birds are well established, only a small proportion of birds can be saved once their plumage has become oiled.

The primary response in protecting birds from an oil spill should be to prevent the oil from reaching areas where migratory birds are concentrated. This can be accomplished by the use of booms and/or skimmers or, where environmental considerations permit, using chemical dispersants and/or *in situ* burning. Booms

and skimmers and *in situ* burning are preferable near concentrations of birds because dispersants reduce the insulating value of their plumage and therefore may cause mortality to some birds. If possible, spraying dispersants directly into large concentrations of birds should be avoided. After dispersants have mixed with water, their danger to birds is reduced, although not eliminated. In addition, oiled debris--particularly contaminated food sources--should be removed from the environment as soon as possible to prevent scavenging by birds, which results in secondary effects due to the ingestion of oil. Birds concentrate in various areas, depending on the species and season.

The secondary response to protect birds from an oil spill is to deter them from a slick or a contaminated shoreline. A deterrent may be used to discourage birds from landing in or near an oil-contaminated area. Often the techniques require frightening birds to keep them away.

In many cases, birds must be deterred from contaminated areas repeatedly and frequently. The success of deterrent techniques may be low, and hazing may result in some bird mortality. Nonetheless, the drawbacks of hazing techniques are usually more acceptable than allowing bird populations to undergo oil contamination.

Migrating birds may have a strong tendency to return to staging areas, even if those areas are contaminated. If hazing is effective, but alternate habitats are not available, some migrating birds may not survive due to lack of food or other environmental factors. Decisions are the most difficult when attempting to deter birds near a breeding colony away from oil. Oiled birds are usually unable to raise young successfully, and the death of adult birds is more of a threat to many populations than the loss of young birds.

Mammals

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

Given that marine oil spills are statistically the most likely source of wildlife contamination, terrestrial species that spend a great deal of time feeding or traveling in intertidal areas and nearshore waters are at the greatest risk of contacting oil. Mammals that commonly scavenge for carrion or search for other food sources in intertidal areas are at greater risk due to the likelihood of encountering oil.

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

Inland oil spills are most likely to impact animals utilizing rivers, streams, and wetland areas, since significant transport and spread of inland oil spills generally occurs via water. In addition, beavers and muskrats spend considerable time in or around inland waters.

Oil-related mortalities generally occur due to internal injury resulting from ingestion of oil, dermal absorption of oil, or as a result of hypothermia caused by oiling and matting of fur. Animals spending a great deal of time in the water will frequently groom to maintain insulating properties of their fur and therefore can be expected to encounter problems due to both ingestion and hypothermia. Experience with oiled sea otters supports this. Injuries associated with ingestion of oiled food will probably be the primary impact to mammals such as bears, foxes, mink and otters.

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

The most effective primary response strategy is to prevent oil from reaching the shoreline. This can be accomplished by mechanical means such as booming and skimming or, where environmental and weather conditions permit, by using chemical dispersants or *in situ* burning. In many cases, shoreline protection will be the only viable option. Another, more labor-intensive type of primary response involves the manual removal of oiled carcasses from beaches. This strategy minimizes the chances of opportunistic feeders ingesting oiled carrion.

A secondary response involves keeping animals away from oiled areas. Secondary responses will be evaluated on a case-by-case basis, given the fact that they are likely to be labor intensive, stressful, and dangerous to individual animals, and may only be effective for a short time, if at all.

A tertiary response involves capturing and treating oiled animals and is not recommended as a viable option for minimizing oil spill impacts on populations of terrestrial mammals. The effects of drugging or physically restraining animals, in addition to stress induced by handling, may actually increase mortalities. Another important consideration is the potential for an animal to contract and/or spread diseases while in captivity.

If the health of the animals is not closely monitored, diseased animals can be released, spreading infections among wild populations. Treatment of individual animals may be considered for humane reasons. In the event that a tertiary response is initiated, information on capturing, handling, and treating terrestrial mammals is included or referenced in this document. The treatment of individual animals must be authorized by the appropriate agency.

Wildlife Response

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.) prohibits possession of any bird protected by treaties between the U.S. and Canada, Mexico, Japan, and Russia. Birds covered by the Act are referred to as "migratory birds." Prior to the regulations creating the permit category specifically authorizing migratory bird rehabilitation, persons engaged in providing treatment to sick, injured, or orphaned migratory birds had to obtain a special purpose permit from the U.S. Fish and Wildlife Service under 50 CFR 21.27. The special purpose permit category is used to authorize activities not specifically covered by other existing types of permits.

These permits were tailored to address migratory bird rehabilitation activities by means of Standard Conditions attached to every permit. The Standard Conditions were the basis of the regulatory framework established by the rulemaking which created a new permit category specifically for rehabilitation of migratory birds.

The rule addresses rehabilitation of threatened and endangered migratory bird species and amends 50 CFR 17 (Endangered and Threatened Wildlife) to exempt persons who obtain a rehabilitation permit from having to obtain an additional permit under part 17 to care for threatened and endangered migratory bird species. Accordingly, the rule contains numerous provisions addressing rehabilitation of threatened and endangered migratory bird species, including additional requirements to notify and coordinate with the U.S. Fish and Wildlife Service.

It must be noted that all activities within the location of a spill are subject to the authority of the On-Scene Coordinator. The U.S. Fish and Wildlife Service are responsible for the disposition of all migratory birds, dead or alive.

The U.S. Fish and Wildlife Service's policy titled Best Practices for Migratory Bird Care during Oil Spill Response is available on the NRT web page. These *Best Practices* are to be used in evaluating contractors for bird capture and rehabilitation; making informed choices during spill responses; and evaluating oiled bird rehabilitation activities to improve field practices.

This document is RRT policy in Region 4 for acquiring the best achievable care for migratory birds during an oil spill response. The following criteria will be used when considering and evaluating bird rehabilitators for conducting oiled-bird response.

- Hold all necessary permits for bird-related response activities;
- Experience in the capture, treatment, and care of oiled birds;
- Experience conducting bird-related response activities within the Incident Command System structure;
- Sufficiently trained, equipped, and experienced staff, and ability to train and equip personnel and volunteers for bird-related response during an emergency response;
- Ability to quickly mobilize to perform bird capture, field evaluation, stabilization and transport, including remote locations if necessary;
- Access to appropriate facilities adequate for treating and housing oiled birds;
- Ability to establish and operate bird intake, holding, and isolation areas within 12-24 hours of wildlife response activation; and
- Ability to establish and operate bird cleaning and pre-release areas within 48 hours of wildlife response activation.
- Agreement with a licensed veterinarian, experienced in the treatment of oiled birds, to provide any necessary veterinary medical care; and
- Use of best practices as outlined in the remainder of the *Best Practices* document.

Section 4

Compliance with Section 7 of the Endangered Species Act

The Endangered Species Act requires that Federal agencies ensure that their actions do not jeopardize listed species or adversely modify their designated critical habitat.

The *Interagency Memorandum of Agreement Regarding 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* states, "by working proactively to identify potential effects of spill response activities on species and their habitat and develop response plans and countermeasures to minimize or avoid effects, impacts to listed species and/or critical habitat should be reduced or avoided completely."

The agreement coordinates the consultation requirements specified in the ESA regulations, 50 CFR 402, with the pollution response responsibilities outlined in the NCP, 40 CFR 300. It addresses three areas of oil spill response activities: pre-spill planning activities, emergency response activities, and post-spill response activities.

Pre-spill Planning

Actions implemented under Area Contingency Plans may result in effects to listed species. It is essential that the Area Committee engage the Fish and Wildlife Service and the National Marine Fisheries Service during the ACP planning process while developing or modifying the ACP and response strategies. This informal consultation should be used to determine the presence of listed species or critical habitat, and the effects of countermeasures, and to develop measures to reduce or avoid impacts to listed species and critical habitats during oil spill response activities. By consulting on the anticipated effects prior to implementing

response actions, decisions can be made rapidly during the spill, harm from response actions can be minimized, and implementation of response strategies specifically designed to protect listed species and critical habitat can be achieved.

Emergency Response

Guidance concerning compliance with Section 7 recognizes that an emergency may require expedited consultation. Where emergency actions are required that may affect listed species and/or critical habitats, the action agency (EPA or USCG) most likely will not have the time for the administrative work required by the consultation regulations found under non-emergency conditions. Emergency consultations take into account the action agency=s critical mission while ensuring that anticipated actions will not result in violations. Emergency consultation procedures provide for the action agencies to incorporate endangered species concerns into their actions during the response to an emergency, i.e., oil spills. To ensure compliance with Section 7 the following steps should be incorporated during response.

1. The OSC notifies DOI as required by the NCP and the ESA MOA
   a. Outlines response actions taken &/or anticipated
   b. Requests list of T&E species in the spill area

DOI point-of-contact is the Regional Environmental Officer, **office phone number 404-331-4524; 24-hour number 404-909-0537**. The alternate DOI point-of-contact for ESA consultation is the FWS Regional Spills Coordinator, **office phone number 404-679-7094; cell phone number 404-895-7093**

2. DOI contacts FWS for notification of spill event and T&E issues

3. FWS contacts the OSC (and DOI) concerning listed species. *[Note: ESA Section 7 Consultation Handbook, March 1998, suggests written correspondence within 48hrs of initial phone call.]* If no listed species/critical habitat in the spill area, the Section 7 process is ended. The FWS Regional Contaminants Coordinator or the FWS Field Contaminants Specialist will coordinate Section 7 consultation activities with the OSC. The FWS role is to offer recommendations to minimize or avoid the effects of the emergency response action on listed species or their critical habitat.

4. The OSC, as provided by the FWS, will document listed species in the spill area. The OSC will document response actions undertaken and/or anticipated and any observable impacts to listed species. This information should be included in PolReps (Pollution Reports) or other daily incident reports.

If response actions have no effect to listed species or their critical habitat, the Section 7 process is ended.

Post-spill Response

Throughout the spill response, the OSC should have documented all communications, including recommended response procedures and incidental takes. After the emergency response is complete, the OSC and the FWS will jointly review and evaluate the affects of response activities on listed species or critical habitat or both. The consultation process focuses on the *RESPONSE ACTIVITIES,* and *NOT* the oil spill event. Formal consultation only occurs if listed species or critical habitat or both were adversely impacted during the course of the spill response.

1. The OSC, as provided by the FWS, will document listed species in the spill area and identify response actions undertaken or anticipated or both. Any observable impacts to listed species will be identified. This information must be included in PolReps or other daily incident reports.

2. Upon completion of response actions the OSC and the FWS will jointly review and evaluate the affects of response activities on listed species or critical habitat or both.

3. If the OSC determines that response actions resulted in no adverse effects, or were beneficial, to listed species or critical habitat or both, the section 7 consultation process is completed with a concurrence letter signed by the FWS.

4. If the FWS disagrees with the OSC determination, they will notify the OSC that there were affects on listed species or critical habitat or both. The OSC will accept these comments and document in their final report to the FWS why they could not implement the actions required to eliminate them. The FWS will indicate that formal consultation is necessary and initiate the formal consultation process.

5. If the joint review finds response actions resulted in adverse effects to listed species or critical habitat or both, formal consultation is initiated.

6. With the assistance of the FWS, the OSC will compile the following information:

    a. A description of the emergency/oil spill response activities
    b. An evaluation of the emergency response actions and their impacts on listed species and their habitats, including documentation of

how FWS recommendations were implemented, and the results of implementation in minimizing take.

c. Provide information on which FWS recommendations were not followed and the impact that resulted. The OSC will indicate why the recommendation could not be implemented.

d. Provide a comparison of the emergency response action as described above with pre-planned countermeasures and information contained in the ACP.

7. The OSC will submit the above information to the FWS requesting formal consultation.

8. The FWS will make their final determination (Biological Opinion) generally within 135 days of receipt of a complete initiation package. The FWS will forward their determination to the OSC.

9. Results of the consultation are to be included in a lessons learned system so changes can be made to pre-spill planning documents (ACP), as necessary, for the benefit of future oil spill response actions.

10. If changes are made that modify anticipated effects to listed species or critical habitat or both, the FWS should document such changes and provide the OSC with a letter of concurrence documenting approval of the new measures.

Section

5

Protection of Historic Properties

Federal agencies are to take into account the effects of their undertakings on historic properties listed or eligible for inclusion in the National Register of Historic Places.

Section 106 of the National Historic Preservation Act requires Federal agencies to take into account the effects of their undertakings on historic properties and afford the Council a reasonable opportunity to comment on such undertakings. The procedures in this part define how Federal agencies meet these statutory responsibilities. The section 106 process seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

The *Region 4 Guidelines for the Programmatic Agreement on Protection of Historic Properties during Emergency Response Under the National Oil and Hazardous Substances Pollution Contingency Plan* complement the national *Programmatic Agreement* by providing regional-specific information to OSCs to assist in planning for, and responding to, oil spills and hazardous substance releases within Region 4. These guidelines ensure consistent application and interpretation of the national *Programmatic Agreement* throughout Region 4 by the USCG and EPA OSCs and representatives of supporting entities including DOI, USDA, DOD, and SHPOs.

Appendix 5 contains a listing of the State Historic Preservation Officers (SHPOs) for the eight southeastern states and the Tribal Historic Preservation Officers (THPOs) for the federally recognized tribes.

Appendices

Appendix 1

Natural Resources Trustees

Appendix 2

ESI Map List

Appendix 3

Federal Law and Agency Jurisdictions for Wildlife Resources

Appendix 4

Evaluation on the Relative Impacts of a Response Technology on Wildlife and Other Natural Resources

Appendix 5

Listing of SHPO's and THPO's

Appendix 1

Natural Resources Trustees

Federal, State, Tribal

Appendix 2

ESI Map List

ESI Atlases (available from NOAA)

- Alabama – PDF and GIS formats
- Georgia – PDF and GIS formats
- Mississippi – PDF and GIS formats
- North Carolina – PDF and GIS formats
- South Carolina – PDF and GIS formats
- East Florida – PDF format
- West Peninsula Florida 1 – PDF format
- West Peninsula Florida 2 – PDF format
- West Florida (Florida Panhandle) – PDF format
- South Florida – PDF format

Appendix 3

Federal Law and Agency Jurisdiction for Wildlife Resources

USFWS, NMFS, States

Appendix 4

Evaluation on the Relative Impacts of a Response Technology on Wildlife and other Natural Resources

Appendix 5

Listing of SHPO's and THPO's

SHPO's

Alabama

Dr. Lee H. Warner
State Historic Preservation Officer
AL Historical Commission
468 South Perry Street
Montgomery, Alabama 36130-0900
334-242-3184
lwarner@preserveala.org

Florida

Mr. Frederick Gaske
Actg. State Historic Preservation Officer
Division of Historical Resources
R.A. Gray Building
500 S. Bronough Street
Tallahassee, Florida 32399-0250
850-245-6300
fgaske@mail.dos.state.fl.us

Georgia

Mr. Lonice C. Barrett
State Historic Preservation Officer
Department of Natural Resources
47 Trinity Avenue, SW
Suite 414-H
Atlanta, Georgia 30334-00
404-656-2840
lonice_barrett@mail.dnr.state.ga.us

Kentucky

Mr. David Morgan
State Historic Preservation Officer

Kentucky Heritage Council
300 Washington Street
Frankfort, Kentucky 40601-
502-564-7005
dmorgan@mail.state.ky.us

Mississippi

Mr. Elbert Hilliard
State Historic Preservation Officer
Mississippi Department of Archives and History
P.O. 571
Jackson, Mississippi 39205-0571
601-576-6850
msshpo@mdah.ms.us

North Carolina

Dr. Jeffrey J. Crow
State Historic Preservation Officer
Department of Cultural Resources
Division of Archives and History
4617 Mail Service Center
Raleigh, North Carolina 27699-4617
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jeff.crow@ncmail.net

South Carolina

Dr. Rodger E. Stroup
State Historic Preservation Officer
Department of Archives and History
8301 Parklane Road
Columbia, South Carolina 29223-4905
803-896-6185

Tennessee

Ms. Betsy Child
State Historic Preservation Officer
Department of Environment and Conservation

2941 Lebanon Road
Nashville, Tennessee 37243-0442
615-532-0109

THPO's

Alabama

Poarch Band of Creek Indians
Robert Thrower, Acting THPO
5811 Jack Springs Road
Atmore, AL 36502
251.368.9136 x 2655 phone
251. 698.0835 fax
E-mail: robertthrower@hotmail.com

North Carolina

Eastern Band of Cherokee Indians
Russell Townsend, THPO
Qualla Boundary Reservation
PO Box 455
Cherokee, NC 28719
828.497.1594 phone
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E-mail: russtown@nc-cherokee.com

South Carolina

Catawba Indian Nation
Wenonah G. Haire, THPO and
Director, Catawba Cultural Preservation Project
611 E. Main Street
Rock Hill, SC 29730
803.328.2427 phone
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E-mail: wenonahh@ccppcrafts.com
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