

**FISH AND WILDLIFE AND SENSITIVE ENVIRONMENTS ANNEX II
TO THE REGION 8 REGIONAL CONTINGENCY PLAN**

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1.0 INTRODUCTION

1.1 PURPOSE

The Oil Pollution Act of 1990 (OPA), mandates that Area Contingency Plans (ACP) identify and prioritize sensitive areas and species within the area. This Fish and Wildlife and Sensitive Environments Annex (FWSEA) to the Region 8 Regional Contingency Plan (RCP) identifies sensitive areas and species and provides resources for evaluating risk, establishing protection priorities, and planning mitigation strategies. The goal of this FWSEA is to reduce the overall ecological impact of a spill event and impacts associated with response activities.

This FWSEA is intended for use by On-Scene Coordinators (OSC) during the initial phase of a spill event, to assist them in ascertaining presence and location of spill-sensitive biological and cultural resources, services, and users. This FWSEA does not attempt to assist the OSC in evaluating impacts that may result from a spill; nor does it prioritize resources for subsequent response efforts. More detailed and current data should be available from on-scene resource experts when they engage with the response. Identifying relative priorities among resources and resource uses for a particular area requires considerable coordination and discussion among resource management agencies. Prioritization must occur on an incident-specific basis.

1.2 SCOPE

As required by OPA, this FWSEA establishes procedures and policies for meeting the objectives set forth in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and should be used to aid responders and planners in prioritizing and evaluating the effects of response techniques in various freshwater environments and shoreline habitats. General scopes are presented in the list below:

- This FWSEA offers a general overview of the sensitive areas and provides the OSC with information to assist in identification of sensitive environments. The task of identification and prioritization of every environmentally sensitive area within Region 8 is not viable as incident specific conditions may change the analysis or prioritization. Site-specific information should be obtained from Natural Resource Trustees. Identifying response capabilities and options before a spill/release occurs is imperative for a coordinated, immediate, and effective response;
- This FWSEA aids in selection of appropriate spill protection, recovery, and cleanup techniques that will reduce ecological and economic impacts;
- This FWSEA will aid the Regional Response Team (RRT) in identifying special areas of concern. Special areas of concern may be evaluated in more detail by the RRT or during the sub-area contingency planning process;
- This FWSEA will aid oil storage facilities in development of Facility Response Plans (FRP) required by OPA, as defined in 40 *Code of Federal Regulations* (CFR) 112.20; and

- This FWSEA assists Federal OSCs and Incident Commanders in protecting threatened and endangered (T&E) species and supporting habitats from the effects of response measures, and in fulfilling their consultation responsibilities under the Endangered Species Act, implementing regulations, and the *Interagency 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* (Endangered Species Act Memorandum of Agreement [ESA MOA]), Annex III of the RCP.

To adequately define sensitive resources and their geographic locations requires use of area-specific field observations and data available from published and non-published sources. Data from federal and state Natural Resource Trustees were used to develop this document. However, there may be additional information not referenced. Much of the data used to develop this FWSEA is available on T.E.R.A. at:

<https://r8.ercloud.org/R8Response/Login?ReturnUrl=%2fR8Response%2findex.aspx&embed=true&config=viewer-TERA>

1.3 OBJECTIVES

The NCP (40 CFR 300.210(c)(4)(i)) delineates the objectives of the FWSEA. The objectives have been organized into four general sections:

1.3.1 Prioritize Resources at Risk

Natural resources, other sensitive resources, and the associated Natural Resource Trustees are identified in Section 2.0. Agencies to be notified and consulted in establishment of incident-specific priorities for protection of these resources are identified in Annex I of the RCP. Sensitive resources identified include sensitive species (including T&E species), environmentally sensitive lands, freshwater environments, areas of historic or archeological significance, and areas of economic significance.

1.3.2 Determine Environmental Effects of Response and Countermeasures

Methods for determining and approving appropriate response techniques for specific environments and for monitoring effectiveness of response activities are outlined in Section 3.0.

1.3.3 Identify Fish and Wildlife Response Requirements

State and federal response capabilities and the contacts for obtaining permits for wildlife rescue and rehabilitation are outlined. Section 4.0 discusses arranging and acquiring the appropriate response equipment, personnel, mutual aid agreements, and training requirements defined by the Occupational

Safety and Health Administration (OSHA) for workers and volunteers assigned to assist with fish and wildlife rescue efforts.

1.3.4 Evaluate the Interface Between the FWSEA and Non-Federal Plans

Section 5.0 discusses compatibility of this FWSEA with non-federal response plans regarding issues affecting fish, wildlife, and their habitats or sensitive environments.

2.0 IDENTIFICATION AND PRIORITIZATION OF RESOURCES AT RISK

It is critical for responders to realize that an immediate, but inappropriate, response could be more damaging than waiting for mobilization of a proper response.

To minimize impacts of a spill on sensitive species and environments, resources should be identified prior to a spill event. The OSC and Responsible Party (RP) must be aware of the sensitive environments to ensure that appropriate measures are taken to minimize effects of a spill on ecologic and economic resources. Response strategies and protection prioritization is largely achieved at the SACP level but also depends on the material released and the location of the spill. An understanding of the aquatic environments and habitats is imperative when selecting a response strategy. It is also important to recognize the value and importance of any historic properties/sites that may be affected by response activities.

2.1 NOTIFICATION OF AND CONSULTATION WITH NATURAL RESOURCE TRUSTEES

Notification and consultation with the Natural Resource Trustees and other natural resource management agencies is required during a response to an oil spill or hazardous materials incident. Their expertise can be utilized in identifying and protecting sensitive environments, and Trustees may advise the OSC of specialists who should be consulted.

Pursuant to Subpart G of the NCP, the following agencies have been designated as Natural Resource Trustees for Region 8. Numerous ancillary entities have land and resource management responsibilities and/or expertise within each of the designated Natural Resource Trustee agencies. The Trustee will advise the OSC of the appropriate entities to consult regarding removal actions and site-specific information. These ancillary entities are *italicized* in the list below.

Federal

- U.S. Department of the Interior (DOI)
 - *U.S. Fish and Wildlife Service (USFWS)*
 - *Bureau of Land Management (BLM)*
 - *National Park Service (NPS)*
 - *Bureau of Reclamation (BOR)*
 - *Bureau of Indian Affairs (BIA)*
- U.S. Department of Agriculture (USDA)
 - *United States Forest Service (USFS)*
 - *Animal and Plant Health Inspections Service-Wildlife Services (APHIS-WS)*
- U.S. Department of Defense (DOD)
- U.S. Department of Energy (DOE)

State

- Colorado
 - Colorado Department of Public Health and Environment (CDPHE)
 - Colorado Department of Natural Resources (CDNR)
 - *Division of Parks and Wildlife*
 - Colorado Department of Law (Attorney General)
- Montana
 - Department of Environmental Quality (MT DEQ)
 - Department of Fish, Wildlife, and Parks (MFWP)
 - Department of Natural Resources and Conservation (DNRC)
- North Dakota
 - North Dakota Department of Health (NDH)
 - Game and Fish Department (NDGFD)
- South Dakota
 - South Dakota Department of Environment and Natural Resources (SDDENR) (Natural Resource Trustee)
 - Department of Game, Fish, and Parks
- Utah
 - Utah Department of Environmental Quality (UDEQ)
 - Utah Department of Natural Resources (UDNR)
- Wyoming
 - Wyoming Department of Environmental Quality (WDEQ)

- Wyoming Game and Fish Department (WGFD)

Tribal

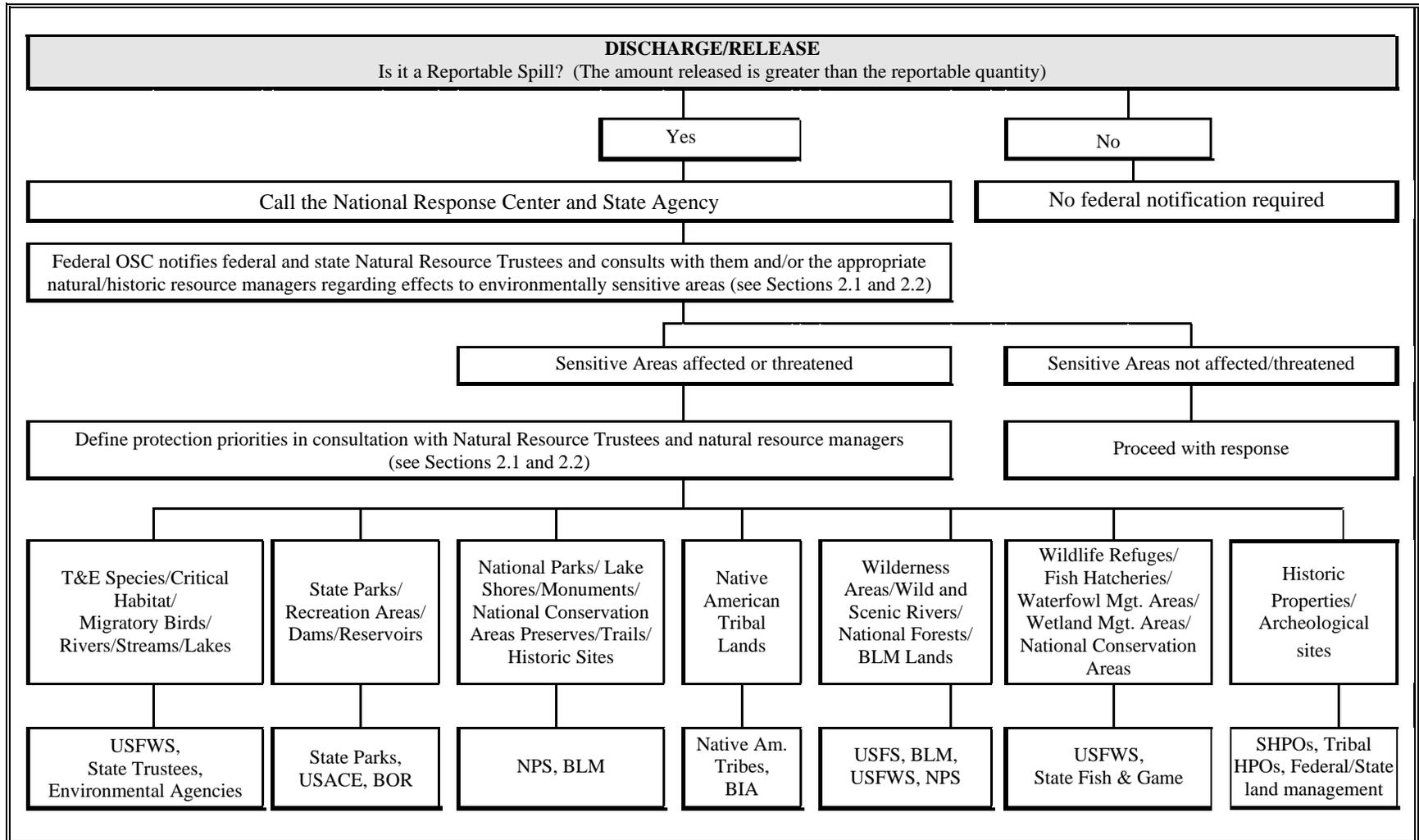
- Each of the 27 federally recognized Native American Indian Tribes in Region 8

Contacts within the state and federal agencies as well as a list of Native American Tribal leaders and environmental contacts are listed in Annex I of the RCP.

2.2 CONSULTATION WITH NATURAL RESOURCE MANAGERS

Figure 1 is a spill notification and Resource Trustee consultation flow chart.

FIGURE 1
NOTIFICATION AND CONSULTATION FLOW CHART



2.3 SENSITIVE NATURAL RESOURCES

The Natural Resource Trustees and other natural resource management agencies have identified many environmentally sensitive species and areas within Region 8. On or near rivers and lakes of Region 8 are many wildlife refuges, hatcheries, wild and scenic river reaches, waterfowl management areas, wetland management areas, national and state parks, monuments, preserves, recreational areas, primitive archaeological and historical sites, heritage program areas, and other important resources. Attachment D provides a summary of these by sub-area and the data layers used are available in The Emergency Response Application (T.E.R.A.) and Information for Planning and Consultation (IPaC). However, Attachment D may not detail the most current information so the appropriate Natural Resource Trustees should always be contacted immediately for guidance and incident specific considerations. Included in Annex I of the RCP are the telephone numbers of Natural Resource Trustee management entity contacts who are to be consulted if a spill has impacted or threatens to impact any of the resources listed. Natural Resource Trustees will provide additional information regarding natures and locations of sensitive areas and species.

2.3.1 Threatened and Endangered Species

T&E species live in or near almost every major body of water in the Region. See IPaC or <https://www.fws.gov/mountain-prairie/es/endangered.php> for USFWS data. Each state also has a Natural Heritage Program that provides updated state and federal listings of T&E species. Additional information on compliance with the Endangered Species Act, implementing regulations, and the ESA MOA is in Section 4.5. Information about freshwater environments and shoreline habitats is provided in Attachment A and relevant statutory authority in Attachment B.

2.4 AREAS OF ECONOMIC SIGNIFICANCE

Responders must recognize and protect areas of economic importance. Economically sensitive areas are broken down into three separate categories: critical infrastructure, water dependent commercial, and recreational areas. A discharge of oil or other hazardous materials could adversely impact public drinking water intakes, industrial water users, aquaculture sites, and agricultural water users. Water intakes in shallow lakes and rivers are at greatest risk from an oil spill. Timely procedures by responders to identify and notify water users of an oncoming spill are imperative. With prompt notification, water intake/diversions can be shut down or boomed off. Numerous agricultural, industrial, and municipal water users still must be identified. OSCs must be aware that this list is not complete. Annex I of the RCP lists state and

federal contact agencies that administer water use. Facilities preparing FRPs must locate all water diversions within their downstream planning distances and plan accordingly.

2.5 AREAS OF HISTORIC/ARCHEOLOGICAL SIGNIFICANCE

As required under the *Programmatic Agreement on Protection of Historic Properties During Emergency Response under the National Oil and Hazardous Substances Contingency Plan (Programmatic Agreement)*, plans shall ensure inclusion of information on consideration of historic properties. This should be developed in consultation with the appropriate parties for immediate and effective protection of, and minimization of risk of damage to, historic properties that may be jeopardized by a discharge. Specific requirements are outlined in sub-sections below and Annex IV of the RCP.

2.5.1 TECHNICAL EXPERTISE AND ASSISTANCE

During a response, historic resource managers/specialists can provide technical assistance and expertise regarding potential effects of oil on sensitive archeological and/or historic environments within the impacted area. They are familiar with the area and are able to recommend the best locations for staging areas and access points. They will recommend specific protective measures and provide advice on response actions to be taken. They can assist in development of a monitoring plan and subsequent collection of data.

2.5.2 HISTORIC/ARCHEOLOGICAL RESOURCES RESPONSE

Although the NCP does not include language specific to protection of historic properties, several laws require consultation to prevent impacts on these resources. Additionally, numerous federal agencies including EPA, DOI, USCG, NOAA, DOE, DOD, and USDA signed the *Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Oil and Hazardous Substances Contingency Plan*. This Agreement ensures that historic properties are taken into account in planning for and conducting emergency responses. Many states also have laws defining and protecting historic properties. Consultation with the State Historic Preservation Officer (SHPO), Indian Tribes, or other state and federal land management agencies during pre-emergency response planning and/or in the course of an emergency response will enable the Federal OSC to avoid or minimize impacts on these important resources (See Annex IV of the RCP for a copy of the *Programmatic Agreement*).

2.5.3 HISTORIC SITE PROTECTION

When a discharge or release occurs, historic resource managers can provide timely advice on necessary measures to avoid exposure of protected sites to oil or hazardous substances, and priorities and timings of such measures. Protective measures are often site-specific.

Applicable laws and regulations governing historic property protection include, but are not limited to:

- **Historic Sites Act (HSA) of 1935** – established NPS as the Federal Government’s paramount historic preservation advocate.
- **Archaeological Resources Protection Act (ARPA)** – prohibits unauthorized excavation, removal, or defacement of archaeological resources on federal and Indian lands. “Archaeological resources” are comprehensively defined to include archeological sites, structural remains, artifacts, bones, debris, etc. The ARPA imposes stiff penalties for violators and spells out permit requirements (uniform regulations jointly issued by DOI, USDA, and DOD).
- **American Indian Religious Freedom Act (AIRFA)** – is a joint Congressional resolution declaring that the U.S. Government will protect the inherent rights of Indian Tribes to free exercise of their traditional religions. Generally, this requires agencies to consult with Tribes when any action is contemplated that might affect practice of traditional religion.
- **Executive Order 13007** – requires agencies to avoid, to the best of their abilities, physical damage to Indian sacred sites on federal and Indian land.

3.0 DETERMINING THE ENVIRONMENTAL EFFECTS OF RESPONSE AND COUNTERMEASURES

Response decisions should account for the relative impact of various response methods on sensitive areas. Information collected from downstream sensitive areas and utilization of spill response guidelines can aid in decision making regarding the deployment of appropriate protective measures. In a decision on a method of response, the most important consideration should be to balance effectiveness of each method available in removing spills of oil or other hazardous materials with effectiveness in protecting affected habitats.

3.1 IMPACTS OF RESPONSE METHODS ON SENSITIVE ENVIRONMENTS AND HABITATS

NOAA and API collaborated on a study of methods for responding to inland oil spills. Their findings were finalized in May 1994. This was the first comprehensive guidance for responding to freshwater inland oil spills. NOAA/API classified specific oil response methods and their relative impacts on given environments and habitats in the absence of oil. Physical, chemical, and biological response methods are

discussed, and response impacts on the environment are classified as a low, moderate, or high, and ineffective or inapplicable. Low, medium, and high impacts as defined by NOAA/API are as follows:

- **Low** – Physical damage to the substrate and vegetation is minimal. Toxic impact is likely to be of limited areal extent and short duration. Re-stabilization or repopulation of the habitat is likely within 6 months.
- **Moderate** – Physical damage to the substrate and vegetation may occur, with increased erosion potential in sedimentary habitats. Toxic impact is such that re-stabilization or repopulation of the habitat may take 6 to 12 months.
- **High** – Physical damage to the substrate and vegetation is expected. Erosion potential may be high from the technique. The ecosystem may be adversely affected. Re-stabilization or repopulation of the habitat may take more than 12 months.

Table 1, taken from the NOAA/API manual, includes findings regarding impacts of response methods on freshwater environments and shoreline habitats.

TABLE 1

RELATIVE IMPACTS OF RESPONSE METHODS IN THE ABSENCE OF OIL

RESPONSE METHOD	WATER ENVIRONMENT				SHORELINE HABITAT							
	Open Water	Small Lakes/Ponds	Large Rivers	Small Rivers/Streams	Bedrock	Man-made	Sand	Vegetated Shores	Sand and Gravel	Gravel	Mud	Wetlands
PHYSICAL RESPONSE METHODS												
Vegetation Removal	L	H	M	H	-	-	-	H	-	-	-	H
In-situ Burning	L	M	L	M	L	L	M	M	M	M	H	M
Natural Recovery	-	-	-	-	-	-	-	-	-	-	-	-
Booming	L	L	L	L	-	-	-	-	-	-	-	-
Skimming	L	L	L	L	-	-	-	-	-	-	-	-
Barriers/Berms	-	-	-	H	-	-	-	-	-	-	-	-
Physical Herding	L	L	L	L	-	-	-	-	-	-	-	-
Manual Oil Removal/Cleaning	L	H	L	M	L	L	L	H	M	M	H	H
Mechanical Removal	L	H	H	H	-	M	M	H	M	M	H	H
Sorbents	L	L	L	L	L	L	L	L	L	L	M	M
Vacuum	L	L	L	L	L	L	L	M	L	L	H	M
Debris Removal	-	L	L	L	L	L	L	L	L	L	M	M
Sediment Reworking	-	H	-	H	-	-	M	H	M	M	H	H
Flooding	-	-	-	-	L	L	L	L	M	L	L	L
Low-Pressure, Cold-Water Flushing	-	-	-	-	L	L	M	L	L	M	H	L
High-Pressure, Cold-Water Flushing	-	-	-	-	L	L	H	H	H	H	H	H
Low-Pressure Hot-Water Flushing	-	-	-	-	M	L	H	H	M	M	H	H
High Pressure, Hot-Water Flushing	-	-	-	-	M	L	H	H	H	H	H	H
Steam Cleaning	-	-	-	-	M	L	H	H	M	M	H	H
Sand Blasting	-	-	-	-	H	M	-	-	-	-	-	-
CHEMICAL RESPONSE METHODS												
Dispersants	L	H	L	H	-	-	-	-	-	-	-	-
Demulsifiers	L	L	L	M	-	-	-	-	-	-	-	-
Visco-Elastic Agents	L	M	L	L	-	-	-	-	-	-	-	-
Herding Agents	L	M	L	H	-	-	-	-	-	-	-	-
Solidifiers	L	L	L	L	L	L	M	M	M	L	M	M
Chemical Shoreline Pretreatment	-	-	-	-	I	I	I	I	I	I	I	I
Shoreline Cleaners	-	-	-	-	M	L	M	I	M	M	M	I
BIOLOGICAL RESPONSE METHODS												
Nutrient Enrichment	L	M	L	L	L	L	L	L	L	L	L	L
Natural Microbe Seeding	I	I	I	I	I	I	I	I	I	I	I	I

Source: API/NOAA 1994 L = Low M = Moderate H = High I = Incomplete Information - = Ineffective or Inapplicable for Habitat

3.2 APPROPRIATE RESPONSE METHODS FOR SPECIFIC SENSITIVE ENVIRONMENTS AND HABITATS

In Region 8, mechanical removal methods (e.g., booms, skimmers, sorbent, excavation, etc.) have been historically used and are preferred in most cases. In situ burn also may be a good alternative, especially in remote areas. Removal of shoreline vegetation poses long-term effects to the surrounding environment such as increased shoreline erosion and turbidity. There are no preauthorizations for chemical countermeasures and, past experience has shown these are typically not necessary/useful in fast water environments.

For additional information on developing response strategies, please refer to *Guidelines for the Development of Sensitive Area Protection Strategies*, prepared by NOAA and the U.S. Coast Guard (USCG). This document provides guidance for prioritizing resources at risk and developing site-specific protection strategies. It also includes resource priority worksheets, site summary sheets, and field verification checklists for locating and defining sensitive areas to be protected.

3.3 MONITORING RESPONSE EFFECTIVENESS – MONITORING PLANS

An oil spill is dynamic and cleanup efforts must adapt as conditions change. Over time, the oil will spread, move downstream, and deteriorate. Climatic conditions may also change. A continual monitoring program is essential to ensure maximum removal of oil and protection of the environment throughout the cleanup.

The OSC, in consultation with the Natural Resource Trustees and the RP, will monitor effectiveness of response activities in protecting sensitive habitats and removing discharges of oil or releases of hazardous substances. The OSC will consult with Natural Resource Trustees and natural resource agency managers to determine need for and methods of implementing an incident-specific, long-term monitoring plan. Efforts to control, contain, and remove oil typically involve multiple methods of containment and recovery that may include booms, barriers, skimmers, sorbents, chemical agents, and manual recovery. Because each method has limitations, continued monitoring is necessary to ensure a successful cleanup. Monitoring activities may include visual observation, sampling, data collection and evaluation, and removal and replacement of saturated or defective material. Monitoring of ecological impacts associated with the response actions will also be necessary to ensure that the response does not cause more harm than good. Consultation with the appropriate natural resource agencies is essential to minimize injury to fish and wildlife and their habitats or to other sensitive environments.

Section 300.210(E) of the NCP requires that the FWSEA provide monitoring plan(s) to evaluate effectiveness of different countermeasures or removal actions in protecting the environment. An example monitoring plan outline is included in Annex VII of the RCP. However, specific plans for each response must be developed in consultation with Natural Resource Trustees and natural resource agency managers.

4.0 FISH AND WILDLIFE RESPONSE CAPABILITIES

The OSC/RP must consult and coordinate with Natural Resource Trustees and other natural resource management agencies during the pre-spill planning phase and the response are essential to identify and understand potential natural resource concerns. Categories of fish and wildlife response capabilities include technical expertise and assistance, wildlife protection, wildlife rescue and rehabilitation, and health and safety concerns.

4.1 TECHNICAL EXPERTISE AND ASSISTANCE

During an oil spill response, Natural Resource Trustees and natural resource managers will provide technical assistance and expertise regarding potential effects of oil on fish and wildlife and their habitats or on other sensitive environments within the affected area. Natural Resource Trustees and natural resource managers are familiar with the area and habitats affected, and should be able to recommend the best locations for staging areas, access points, or anchor locations. Natural Resource Trustees and natural resource managers will recommend specific habitats where protective measures should be taken, and will provide advice on response actions to be taken. They can assist in development of a response monitoring plan and subsequent collection of data. In addition, USDA APHIS-WS has extensive operational and technical capabilities to assist with proper humane capture, handling, hazing, transport, and other issues that typically arise in spill situations. A list of USDA APHIS-WS State Offices is accessible on the [USDA APHIS Website](#), or see Annex I of the RCP. Finally, USFWS and the state wildlife agency will direct or oversee protection, rescue, and rehabilitation of fisheries and wildlife.

4.2 WILDLIFE PROTECTION

When an oil spill occurs, Natural Resource Trustees or natural resource managers will provide timely advice on measures necessary to protect wildlife from exposure to oil, as well as priorities and timing of such measures. Protective measures may include one or more of the following:

- **Preventing** oil from reaching areas where migratory birds and other wildlife are present by either containing or recovering the oil;

or

- **Deterring** birds or other wildlife from entering areas affected by oil via use of wildlife hazing devices or other methods.

Wildlife hazing devices or methods are generally grouped as either visual or auditory, or a combination of both. In an emergency, USFWS, APHIS-WS, the state wildlife agency, a local animal damage control agent, or the RP may locate and provide this equipment.

4.3 WILDLIFE RESCUE AND REHABILITATION

If exposure of birds and other wildlife to oil cannot be prevented, an immediate decision must be made regarding whether to capture and rehabilitate oiled birds and other wildlife. DOI has statutory responsibilities for protecting migratory birds and federally listed T&E species. These responsibilities are delegated to USFWS. If animals other than migratory birds or federally listed T&E species are found injured, the responsible agency would typically be the state wildlife agency. The decision to rescue and rehabilitate oiled wildlife **must** be made in consultation with the applicable state and federal natural resource management agencies, because state and federal permits are required by law. Guidelines for selection of a wildlife rehabilitator are provided in Attachment C.

State and federal permits are required to collect, possess, treat, or band migratory birds and T&E species. The laws and regulations that require such permits are as follows:

- **Migratory Bird Treaty Act of 1918, as amended, (16 U.S.C. 703 et seq.)** – This Law stipulates that no person shall take, possess, import, export, transport, sell, purchase, or barter any migratory bird, or the parts, nests, or eggs of such bird, except as permitted under the terms of a valid permit issued by USFWS pursuant to the provisions of 50 CFR 21 and 50 CFR 13. Enforcement authority and penalties for violations are provided.
- **Bald Eagle Protection Act of 1940, as amended, (16 U.S.C. 668 et seq.)** – This Law stipulates that no person shall take, possess, or transport any bald eagle or any golden eagle, or the parts, nests, or eggs of such birds, except as permitted under the terms of a valid permit issued by USFWS pursuant to 50 CFR 22 and 50 CFR 13. Enforcement authority and penalties for violations are provided.
- **Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.)** – This Law makes it unlawful for any person to commit, attempt to commit, solicit another to commit, or cause to be committed, the import or export, taking, possessing, sale, or offering for sale of any endangered species except as permitted under the terms of a valid permit issued by USFWS pursuant to 50 CFR 17. Enforcement authority and penalties for violations are provided.

If rescue and rehabilitation efforts are deemed necessary and worthwhile, a federal permit is required for handling oiled migratory birds. Another federal permit is required for handling oiled T&E species. Each of these permits may encompass more than one species. If a species is considered a migratory bird, but is also a T&E species, it should be listed under the T&E species permit.

USFWS personnel will handle all federal permit activities through the field office having jurisdiction for the area where the spill occurs. State permits must be obtained through the appropriate state agency office.

Permits for migratory birds are issued at the Migratory Bird Permit Office in Denver, Colorado, for EPA Region 8. Permits for T&E species are issued at the Ecological Services Division of each USFWS Field office in the applicable state. The USFWS Field office will verify need for a permit and contact the regional office before a permit is issued (see Annex I of the RCP).

4.4 HEALTH AND SAFETY CONCERNS IN WILDLIFE RESCUE AND REHABILITATION

The NCP 300.210 8 II (H) states that the FWSEA will identify the minimum required OSHA/EPA training for volunteers, including those who assist with injured wildlife.

Two OSHA regulations address most of the occupational health and safety issues encountered during wildlife rescue and rehabilitation:

- The OSHA standard for Hazardous Waste Operations and Emergency Response (HAZWOPER) (29 CFR 1910.120) regulates organizations or individuals involved directly in on-site (hot-zone) retrieval or clean-up efforts. In addition, each state may have its own worker safety requirements. Coordinate with the appropriate state agency to ensure these requirements are also met.
- The Hazard Communication Standard (HAZCOM) (29 CFR 1910.1200), also known as Right-to-Know Law, requires full evaluation of all chemicals in the work place for possible physical or health hazards, and availability of all information relating to these hazards to each worker. HAZCOM does apply to rehabilitation organizations because petroleum is considered a hazard to human health.

Rehabilitation organizations are legally required to educate and protect all employees, including volunteers, in accordance with the OSHA standards. Individuals working with oiled animals need information regarding all potential hazards associated with handling said animals. The following minimum requirements should be applied to wildlife rescue and rehabilitation personnel, including volunteers:

- **Wildlife rescue and rehabilitation management personnel** – This is the core team of certified rehabilitators who will direct operations. Each individual must have 24 hours of classroom training in hazardous waste operations and emergency response.
- **Rehabilitation facility volunteers** – These volunteers work under direction of the management team and are not allowed on scene or in the hot-zone unless additional training is provided (see retrieval volunteers). Volunteers in this category must receive 4 hours of training at the HAZWOPER Awareness level or have sufficient training or proven experience in specific

competencies before they can begin work.

- **Retrieval volunteers** – These volunteers work under direction of the search and rescue management team, and are allowed on scene, but not in the hot zone. Volunteers working in this category must receive between 4 and 8 hours of HAZWOPER training (Awareness level) and an additional 8 hours of site-specific safety training before they can begin work.
- **Hot-zone retrieval of animals** – An individual conducting this must have 40 hours of classroom safety training for hazardous waste workers, and 24 hours of supervised field experience that meets OSHA guidelines, including 8 hours of annual refresher training, if applicable.

The OSC, in consultation with OSHA’s representative to the RRT, is responsible for assessing which training requirements are applicable.

In addition to chemical hazards, mechanical, physical, and biological hazards may also be present during rescue and rehabilitation activities. Workers must be trained on site-specific hazards as well. In addition to the above, training elements may include the following:

Facility concerns:

- Behavior of oiled birds;
- Proper animal restraint;
- Personal protective equipment and clothing to protect workers from blood-borne pathogens and zoonoses;
- Proper heavy lifting techniques;
- Safe working practices, (e.g., no slippery or messy floors); and
- Electrical safety.

Field concerns (in addition to the above):

- Climatic conditions (e.g., cold, heat);
- Terrain;
- Proper retrieval methods;
- Vehicle safety (including boats);
- Water hazards; and
- Other response operations hazards.

Other safety concerns may apply to either the spill site or the rehabilitation facility. These concerns should be addressed on a site-specific basis.

4.5 ENDANGERED SPECIES ACT CONSULTATION

For detailed information on Endangered Species Act consultation requirements and procedures for NCP response related work, see Annex III to the RCP.

4.6 LAW ENFORCEMENT

The USFWS Office of Law Enforcement (OLE) is responsible for investigating suspected and alleged violations of federal wildlife laws including the Migratory Bird Treaty Act, 16 USC 703 *et seq.*; the Endangered Species Act, 16 USC 1538 *et seq.*; the Eagle Protection Act, 16 USC 668a *et seq.*; the National Wildlife Refuge Act, 16 USC 668dd *et seq.*; and several others.

Wildlife injuries, mortalities, and habitat impacts resulting from spills can constitute violations of OLE-enforced laws. Special Agents of the OLE or Refuge Officers of the Division of Refuges (when USFWS lands are involved) may be required to initiate investigations during the spill response phase to document violations and collect evidence in a timely manner. These law enforcement officers will coordinate their activities with the OSC or other on-scene law enforcement personnel. Additionally, the Special Agents/Refuge Officers will ensure that responders possess the necessary federal permits (Section 6.3), and that wildlife-related response activities are accomplished in accordance with applicable laws and permit provisions.

Many Special Agents and Refuge Officers have detailed knowledge of the local terrain and can provide timely, site-specific information to response personnel. In many cases, the OLE and other USFWS responders have shared and similar interests, and will work cooperatively on collecting or sampling, recording, storage, transportation, and laboratory analysis of injured or dead wildlife. When necessary, additional personnel operating under guidance and direction of the OLE may be brought on scene to assist with wildlife handling or collection.

4.7 OTHER ROLES AND RESPONSIBILITIES OF NATURAL RESOURCE TRUSTEES

In the event of a spill, it may be necessary for Natural Resource Trustees and managers to initiate a Natural Resource Damage Assessment (NRDA). NRDA is the process by which trustees collect, compile, and evaluate data, information, and statistics to determine the extent of injury to natural resources. This information is used to assess damages, the dollar amount necessary to restore injured natural resources and compensate for lost use as a result of the injury, and then to seek recovery of those damages from the RP.

At the same time removal actions occur to contain and remove oil and wildlife rescue, and rehabilitation activities occur, the Natural Resource Trustees may initiate NRDA activities through the Federal Lead Administrative Trustee (FLAT). These activities are usually initiated to acquire data and materials likely to be lost if not collected during or immediately after a spill has occurred. Such field sampling and data collection is typically limited to:

- Samples necessary to preserve perishable materials likely to have been affected by or contain evidence of the oil. These samples will generally be biological material that is either dead or has been visibly injured by the oil.
- Samples of other ephemeral conditions or materials, such as surface water, sediments, soil, or the oil itself, which are necessary for identification and measurement of concentrations. These samples would otherwise be lost because of such factors as dilution, movement, decomposition, or leaching if not collected immediately.
- Counts of dead or visibly injured organisms, which if delayed may not be possible because of factors such as decomposition, scavengers, sinking, or water movement.

Under certain circumstances, a Natural Resource Trustee may undertake emergency restoration efforts consistent with existing authority to prevent or reduce immediate migration of oil onto or into a trust resource. Emergency restoration would be undertaken by the trustee only if the RP does not do it or the EPA is precluded under statutory authority from conducting response and removal actions rapidly enough to protect natural resources.

Because initiation of NRDA activities may occur concurrently with removal actions as part of the response, all sampling and field work by the Natural Resource Trustees must be coordinated with the lead response agency so as to minimize any interference with response operations or duplication of sampling and data collection efforts. Any data collected by the Trustees at sites where a NRDA has or is being performed, will be provided to the OSC for consideration and use during the response as soon as possible. Prior OSC approval is required for any work in support of removal activities and before any associated costs will be reimbursed by the Oil Spill Liability Trust Fund. Other activities that are part of initiation of

damage assessments are reimbursable by the Oil Spill Liability Trust Fund if these activities are submitted to the National Pollution Fund Center by the FLAT and approved in advance by the Fund Center.

5.0 EVALUATING THE INTERFACE OF THE FWSEA WITH NON-FEDERAL PLANS

As mandated by OPA, the final rule on Oil Pollution Prevention for Non-Transportation-Related On-shore Facilities, 40 CFR 112.20, requires facilities with total oil storage capacity exceeding or equaling one million gallons to submit an FRP if the facility is at a location where a discharge of oil could injure fish, wildlife, sensitive environments, or public water intakes. Facilities with capacity to store 42,000 gallons or more, and that transfer oil over water to vessels must also submit an FRP.

Facility owners or operators must determine the distance at which an oil spill could injure fish and wildlife and sensitive environments, and have a plan for mitigating a discharge to reduce adverse effects. Facility plans must be consistent with the requirements of the NCP, RCP, and this FWSEA. EPA reviews and approves FRPs for compatibility with this FWSEA. Pipeline plans in the Region are reviewed and approved by DOT. Figure 2 illustrates relationships among federal plans, the FWSEA, and non-federal response plans. Participation by facilities on the Area and Sub-Area Committees is encouraged. Joint exercises will occur to test FRPs and their interface with this FWSEA.

FIGURE 2

RELATIONSHIPS AMONG FEDERAL AND NON-FEDERAL RESPONSE PLANS

