

**APPENDIX VII: FISH AND WILDLIFE ANNEX TO THE U.S. EPA
REGION 5 REGIONAL/AREA CONTINGENCY PLAN**

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INTRODUCTION

Part I of this Annex provides guidance for spill response planning and Part II provides guidance for spill response activities.

Objectives of the Fish and Wildlife and Sensitive Environments Plan

Agencies with fish and wildlife responsibilities need to be informed of the course of events during a spill and first responders need to be aware of environmentally sensitive areas in the vicinity of the spill. The purpose of this Fish and Wildlife Annex is to provide information that will allow spill responders to quickly recognize threats to fish, wildlife, and their habitats, (i.e. sensitive environments) and to minimize the effects of both the spill and response activities on these natural resources.

Overview of Fish and Wildlife Response Issues

The On-Scene-Coordinator (OSC) should promptly notify natural resource trustees of spills. The OSC should also coordinate response activities with the appropriate natural resource trustees, including the selection of a removal action. When the OSC becomes aware that a release may affect any endangered or threatened species, or their habitats, the OSC shall consult with the appropriate natural resource trustee. For Federally listed endangered or threatened species the appropriate trustee is the Department of the Interior (DOI), acting through the U.S. Fish and Wildlife Service (USFWS). The appropriate USFWS contact for each State is included in this Annex.

The designated State official normally assumes responsibility for notifying the State trustee of natural resources affected/potentially affected by the incident. However, the OSC should not hesitate to contact the State wildlife agency independently for technical assistance. Appropriate State fish and wildlife agency contacts are listed in this Annex.

For inland waters, the fish and wildlife resources for which the Federal government is primarily responsible include migratory birds and Federally listed endangered and threatened species. Migratory birds include most species of wild birds except certain introduced species and nonmigratory game birds. Federal agencies also are responsible for wildlife on Federally owned land. The States have primary responsibility for all other species of wildlife and fish, as well as some shared responsibility for migratory birds and Federally listed endangered and threatened species. Federally listed endangered and threatened species are listed by county in this Annex.

Lands (Federal, State, and locally owned) that should be presumed to contain high quality fish and wildlife habitat include parks, designated wildlife areas and refuges, and forests. Most surface waters and wetlands should also be presumed to be high quality fish and wildlife habitat. Spills which impact large areas of surface water will likely threaten protected species of wildlife. Lands designated as critical habitat under provisions of the Endangered Species Act of 1973 (ESA) are specific land parcels and are identified in this Annex.

The seasonal timing of a spill may affect the degree of damage to fish and wildlife resources. For example, spills to some surface waters will pose a greater threat to waterfowl during the spring and fall migration periods. In the spring, oiled waterfowl (and other wildlife) may also return to their nests and contaminate eggs or chicks, thus multiplying the impact. A very minute amount of oil on an egg can be enough to kill the developing embryo. Waterfowl and other wildlife that

become oiled can transport oil residues to distant locations and impact wildlife concentration areas several miles away.

An oil spill affecting wildlife can involve agencies such as the USFWS and State wildlife agencies, private wildlife rehabilitators such as Tri-State Bird Rescue or International Bird Rescue Research Center (IBRRC), and volunteers. Wildlife rehabilitation activities may last well beyond completion of the cleanup. For those States which have developed a trained and organized network of volunteer wildlife rehabilitators (<http://www.tc.umn.edu/~devo0028/contact.htm>), information on how to mobilize the network is presented in this Annex. A general list of appropriate wildlife agency contacts, and other wildlife contacts, is also included.

The Occupational Safety and Health Administration (OSHA) requires that those responding to spills be properly trained and that the hazards of the spilled material be known. This can result in wildlife not being rehabilitated if the spilled materials are unknown or if they present an unacceptable health risk to rehabilitators. There will also be delays in wildlife rehabilitation if volunteers have not been trained. USFWS resources available for spill response are generally very limited. The assistance of State wildlife agencies and professional and volunteer wildlife rehabilitators will be critical to the success of any wildlife cleaning and rehabilitation operation.

PART I. PLANNING GUIDANCE FOR SPILL RESPONSE

1.0 REGULATORY AND STATUTORY AUTHORITIES AND OBLIGATIONS

1.1 Federal Statutory Regulations

Authority and guidance for wildlife response following oil spills is contained in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP 1968) which recognized the need to utilize Federal agency expertise during responses to oil spills and releases of hazardous substances.

1.1.1 Department of the Interior, U.S. Fish & Wildlife Service

The Department of the Interior (DOI) has trustee responsibility for migratory birds under the Migratory Bird Treaty Act (16-USC 703-722) and for threatened and endangered species under the Endangered Species Act (16 USC 1531-1544). The DOI and Department of Commerce share trustee responsibility for anadromous fish under the Anadromous Fish Conservation Act (16 USC 7571-757f).

As a manager of trust natural resources delegated under DOI, the U.S. Fish and Wildlife Service (USFWS) has the responsibility to conserve, enhance, and protect fish and wildlife and their habitat. The USFWS role during prespill planning, "removal" activities, and "preassessment" activities has been enhanced and formalized by the new responsibilities identified in the Oil Pollution Act of 1990 (OPA) and the mandated amendments to the Federal Water Pollution Control Act (FWPCA) ("Clean Water Act") which revised the NCP.

Specifically, USFWS personnel are responsible for protecting trust natural resources from the threat of injury or injury caused by a discharge of oil. Additionally, they are responsible for assisting in the identification of sensitive environments in advance of discharges, assisting the OSC during the response phase, assessing injuries, determining damages, and overseeing wildlife rehabilitation during actual discharges. (For more specific roles and responsibilities of the USFWS during a spill, please refer to Part II, Section 1.2.1.).

The following list briefly summarizes the primary authorities which direct the USFWS in carrying out its responsibilities related to oil spill response and contingency planning:

1.1.1.1 Migratory Bird Treaty Act

Prohibits the taking or possession of any migratory birds, except as permitted by certain regulations which are enforced by the USFWS. Prosecutions under this law apply to oil spill situations which result in migratory bird mortality. Rehabilitation of oiled migratory birds is also subject to permitting regulations under this Act.

1.1.1.2 Endangered Species Act

Provides for the conservation of threatened and endangered species of fish, wildlife, and plants. The USFWS has lead authority for the Secretary of the Interior within the geographic area covered by this Area Plan to prohibit unauthorized taking or possession of Federally listed endangered species (Also see Part I, Section 4).

1.1.1.3 Bald and Golden Eagle Protection Act

Provides for the protection of the bald eagle and the golden eagle by prohibiting the taking, possession and commerce of such birds. The USFWS has lead authority for the Secretary of the Interior within the geographic area covered by this Area Plan to prohibit unauthorized taking or possession of bald or golden eagles.

1.1.1.4 National Wildlife Refuge System Administration Act

Provides directives for the administration and management of all areas (lands and waters) in the National Wildlife Refuge System. The USFWS is responsible for ensuring that all uses of these areas are compatible with the major purposes for which such areas were established.

1.1.1.5 Anadromous Fish Conservation Act

Authorizes the Secretary of the Interior to enter into cooperative agreements with the States and other non-Federal interests for conservation, development, and enhancement of anadromous fish, including those in the Great Lakes.

Also authorizes the USFWS to conduct studies and make recommendations to U.S. EPA concerning measures for eliminating or reducing polluting substances detrimental to fish and wildlife in interstate or navigable waters, or their tributaries.

1.1.1.6 Fish and Wildlife Coordination Act

Requires consultation with the USFWS and State fish and wildlife Agencies in instances in which diversions or other modifications to water bodies are proposed, authorized, permitted, or licensed by a Federal agency under a Federal permit or license. It recognizes the vital contribution of fish and wildlife resources to the Nation and requires coordination and equal consideration of fish and wildlife conservation with other water resources development objectives.

1.1.1.7 Oil Pollution Act of 1990

Requires the USFWS to assist in the development of Area Contingency Plans, including fish and wildlife response plans; assist in preparation of damage assessment regulations; and, if necessary, conduct natural resource damage assessments.

1.1.1.8 Comprehensive Environmental Response Compensation and Liability Act (Superfund)

Requires the USFWS to protect and restore trust resources injured by uncontrolled releases of hazardous materials. Authorizes the USFWS to conduct assessments to establish injury and the dollar equivalent of that injury for collection of damages from parties responsible for releasing hazardous materials.

1.1.2 Department of the Interior, National Park Service

1.1.2.1 National Park Service Organic Act (16 U.S.C. 1 et seq.) Establishes the National Park Service within the Department of the Interior and directs the NPS to “... *promote and regulate the use of the Federal areas known as national parks, monuments, and reservations hereinafter specified... to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.*”

1.1.2.2 General Authorities Act of 1970 (16 U.S.C. 1a-1 and 1a-8) Combines all areas administered by the NPS in one National Park System and amends the Organic Act to specify that the National Park System shall include any area of land and water now or hereafter administered by the Secretary of the Interior through the NPS for park, monument, historic, parkway, recreational, or other purpose.

1.1.2.3 The National Park Resources Protection Act of 1996 (16 USC 19jj) Any person who causes the loss of, or injures a park system resource is liable to the United States for response costs and damages.

1.1.2.4 Wilderness Act (Public Law 88-577) Section 4(c) States that “...within any wilderness area designated by this Act and, except as necessary to meet *minimum requirements* for the administration of the area for the purpose of this Act (including measures required in emergencies involving the health and safety of persons within the area), there shall be no

temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area.

1.1.2.5 National Historic Preservation Act In 1997, the National Response Team completed a Programmatic Agreement on Protection of Historic Properties during Emergency Response under the National Response Plan. This agreement provides an approved procedure to meet the consultation requirements of the regulations for implementing Section 106 of the National Historic Preservation Act.

1.1.3 Department of the Interior, Bureau of Indian Affairs

[To be provided]

1.1.4 Department of Commerce, National Oceanic and Atmospheric Administration

[To be provided]

1.1.5 Department of Agriculture, Forest Service

[To be provided]

1.2 State Regulations

[To be provided]

2.0 NOTIFICATION OF NATURAL RESOURCE TRUSTEES

(NCP sec. 300.300(b)(c)(d), NCP sec. 300.210(c)(4)(ii)(G))

When an oil spill occurs, any person in charge of a vessel or facility, or any other person, shall immediately notify the National Response Center (NRC) of the discharge at 1-800-424-8802. (Alternatively, if direct notification to the NRC is not possible, notification may be made to the U.S. Coast Guard or the U.S. EPA predesignated OSC, or the nearest Coast Guard Unit.) The State or Federal OSC, when notified by the NRC, should then notify the Office of Environmental Compliance (OEPC) and the State natural resource agencies. In addition, contacts may be made with the local USFWS Ecological Services Field Office. Primary contacts for the USFWS and State Natural Resource Agencies are listed in Part II, Section 3. Only one contact per agency is necessary; the persons initially contacted will notify other personnel within their respective agencies, such as law enforcement staff and refuge managers. The USFWS will provide responders with information concerning the presence of trust natural resources, as well as technical assistance concerning the effects of oil on these resources. The USFWS may help coordinate wildlife recovery and rehabilitation efforts in conjunction with the State fish and wildlife agencies.

3.0 MECHANISMS FOR TIMELY IDENTIFICATION OF PROTECTION PRIORITIES

(NCP 300.210(c)(4)(ii)(B))

3.1 During a Spill

A threat to fish, wildlife, or important habitat may be reported by any Federal, State, Local agency, or individual with pertinent information. During a spill, the timely identification of protection priorities for fish, wildlife, and their habitats shall be accomplished through coordination between the representatives of the USFWS, the State agency with responsibility for fish and wildlife resources, and the OSC or his representative. This coordination shall be initiated by the party that first becomes aware of a threat to high priority natural resources.

Some natural resources that, at any given time or location, may warrant a high level of protection include the following categories of lands and species:

- (a) Federally listed endangered and threatened species, designated critical habitat, and other habitats known to be utilized by these species;
- (b) migratory birds including waterfowl, raptors, songbirds, and most other bird species and their habitats;
- (c) State listed endangered and threatened species and their habitats;
- (d) designated areas of high quality fish and wildlife habitat such as Federal and State wildlife refuges and wildlife management areas, State and Federal fish hatcheries, natural area preserves, parks, and forests;
- (e) surface waters in general including rivers and streams, ponds and lakes, and wetlands;
- (f) other species of fish and wildlife (game and non-game) and their associated habitats.

Information about the location of these environmentally sensitive areas will be developed by the Area Committee as part of the spill planning process. Knowledge of these areas may need to be refined or augmented during an actual spill. Sources of information about environmentally sensitive areas may include commercially available Local maps and State atlases, National Wetland Inventory maps, U.S. Geological Survey quadrangle maps, maps developed by the Area Committee, maps and information developed as part of facilities plans, maps and information developed by various government agencies, and computer GIS information. Detailed computerized GIS maps of sensitive areas that could be accessible from the field using laptop computers would be beneficial to response personnel.

3.2 Prior to Application of Chemical or Other Countermeasures

(NCP 300.210 (c)(4)(ii)(C) and (D))

The OSC must obtain the concurrence of the Department of the Interior (DOI) before use of chemical countermeasures that could be destructive to fish, wildlife, or their habitats (chemical dispersants, emulsifiers, cleaning agents, agents to accelerate burning, etc.). The OSC must obtain concurrence from DOI before an in-situ burn countermeasure may be implemented. Containment and removal should be the first priority countermeasures.

Prior to response activities in wetlands and other sensitive environments, especially operations involving heavy machinery, the OSC should coordinate with the USFWS and State fish and wildlife agency. Identification of areas sensitive to physical modification or perturbation will have been identified to the extent possible by the Area Committee. In general, these will include the same areas identified as sensitive environments. The location of disposal and staging areas may require refinement during a spill, and this planning should be coordinated with the USFWS and State fish and wildlife agency.

4.0 THREATENED AND ENDANGERED SPECIES

4.1 Federally Threatened and Endangered Species Within U.S. EPA Region 5

Threatened and endangered (T&E) species inhabit, or live near, almost every body of water in the Region. USFWS Field Offices provide an annually-updated list of Federal T&E species, by county.

Federal and State listed T&E species and their designated critical habitat(s) (Federal) are given high priority for fish and wildlife protection. The Federally protected species that reside within U.S. EPA Region 5, and their habitat descriptions, are listed at:

http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

4.2 Endangered Species Act of 1973

The ESA requires Federal agencies whose actions may affect a listed species or their critical habitat to consult with the USFWS regarding the proposed action. OPA and CERCLA require the U.S. EPA to develop contingency plans for inland areas for accidental discharges of oil and other hazardous materials. Implementing these mandates incurs responsibility under the ESA because (1) development and approval of potential response activities is a Federal action subject to the consultation requirements of section 7(a)(2) of the ESA; and (2) if it is determined that actual spill control methods to be used during OPA/CERCLA-mandated activities may adversely affect Federally listed species, then appropriate actions to minimize such effects must be incorporated into Area Plans.

4.2.1 Section 2 - Purpose

Fish, wildlife, and plant species have aesthetic, ecological, educational, historical, recreational, and scientific value to the U.S.; some species have become extinct or are threatened with extinction. Section 2 of the ESA describes the purposes of the Act as:

1. Providing a means to conserve the ecosystems upon which endangered and threatened species depend
2. Providing a program for the conservation of such species
3. Taking steps to achieve purposes of existing treaties and conventions affecting wildlife, fish, and plants

4.2.2 Section 3 - Definitions

Section 3 of the ESA provides definitions for the purposes of the Act. Following are definitions that may be pertinent to this Fish and Wildlife Annex:

Action describes all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the U.S.

Biological Opinion is a document stating the opinion of the USFWS, as to whether or not a Federal action is likely to jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of its critical habitat.

Critical Habitat is habitat that has been determined to be critical to the conservation of the species. It has legal standing and is protected under the ESA just as the species is. This must be published in the Federal Register and is subject to public review.

Endangered Species means any species which is in danger of extinction throughout all or a significant portion of its range.

Essential Habitat is habitat needed by a species to survive or recover, however, it is not officially designated as "critical habitat". Essential habitat is not a synonym for critical habitat.

Fish or wildlife means any member of the animal kingdom, including without limitation any mammal, fish, bird, amphibian, reptile, mollusk, crustacean, arthropod or other invertebrate, and includes any body part, product, egg, or offspring thereof, or the dead body or parts thereof.

Plant is described as any member of the plant kingdom, including seeds, roots, and other parts.

Proposed species is any species of fish, wildlife, or plant that is proposed in the Federal Register to be listed under Section 4 of the ESA.

Take is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct".

Harass is further defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.

Harm is further defined as an act which actually kills or injures wildlife. Such acts may include significant habitat modification or degradation when it actually kills or injures wildlife by significantly impairing essential behavioral patterns including breeding, feeding or sheltering.

Threatened Species is any species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

4.2.3 Section 7 - Interagency Cooperation

Section 7(a)(1) requires Federal agencies to use their authorities to further the conservation of listed species. Section 7(a)(2) prohibits Federal agencies from undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or modify critical habitat. For additional guidance, see the July 2001 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 (<http://uscg.mil/d5/msafety/rrt/rcp/ADMIN/ESAindex.html>).

4.2.4 Section 9 - Prohibited Acts

This section of the ESA prohibits take (see definitions, Part 1 Section 2.2.2) of listed threatened or endangered species or alteration of critical habitat. An incidental take statement provided for in Section 7 constitutes an exemption from the Section 9 prohibition against take. It applies to the Federal action agency as well as to the permit applicant.

4.2.5 Section 10 - Exceptions

Section 10 of the ESA provides for exceptions to the Section 9 prohibitions. The USFWS can issue permits to take listed species for scientific purposes, or to enhance the propagation or survival of listed species. The USFWS can also issue permits to take listed species or modify habitat that is incidental to otherwise legal activities, such as that provided through the Section 7 process.

5.0 POTENTIAL ENVIRONMENTAL EFFECTS FROM RESPONSE ACTIVITIES

(NCP sec. 300.210(c)(4)(ii)(C))

Removal actions or countermeasures may have adverse effects on fish and wildlife, their habitats, as well as other sensitive environments. In most situations it will be important that the advantages and disadvantages of various removal or countermeasure techniques be carefully evaluated to ensure the achievement of a net environmental benefit.

The following is a brief description of adverse effects of various actions associated with oil spill cleanup:

<u>Countermeasure/Response</u>	<u>Potential Adverse Effects</u>
1) No removal	a) excess oil would remain in habitat indefinitely; b) residual oil may be naturally weathered, but may be toxic to biota and would cause habitat degradation
2) Protective/sorbent, boom deployment	a) excess oil would remain in habitat indefinitely; b) residual oil may be naturally weathered, but may be toxic to biota and would cause habitat degradation
c) Protective/sorbent, boom deployment + mechanical pumping/skimming	a) potential physical disturbance of habitat/biota; b) resuspension/dispersion of oiled sediments
d) In-situ burning	a) smoke plume air quality concerns; b) riparian habitat may be permanently or temporarily damaged
e) Mechanical pumping/skimming	a) potential physical disturbance of habitat/biota; b) resuspension/dispersion of oiled sediments

Based on the above, the following generally applicable prioritized countermeasure and removal actions may be recommended:

<u>Countermeasure/Response</u>	<u>Potential Adverse Effect(s) Minimized</u>
1) Booms	a) physical disturbance of sensitive areas/habitats b) disturbance, illegal taking of fish and wildlife c) limited wildlife contact with cleaning/ bioremediation agents
2) Mechanical pumping	a) physical disturbance of sensitive areas/habitats b) limited wildlife contact with cleaning/ bioremediation agents
3) Mechanical	a) limited wildlife contact with skimming agents cleaning/ bioremediation
4) In-situ burning	a) physical disturbance of sensitive areas/habitats b) limited wildlife contact with cleaning/bioremediation agents

Movement/transport of oiled debris to the following habitats may pose a substantial threat to fish and wildlife and sensitive environments:

1. Riverine backwaters
2. Wetlands
3. Fish/shellfish spawning/nursery areas
4. Waterfowl/migratory bird foraging/breeding areas

To completely reduce risk to sensitive resources, oiled debris should not be placed in such habitats.

6.0 COUNTERMEASURE EVALUATION AND METHODS TO MINIMIZE THE IMPACTS OF RESPONSE ACTIVITIES

(NCP 300.210 (c)(4)(ii)(B-D))

Section 300.210 (c)(4)(ii)(B-D) of the NCP mandates that the Fish and Wildlife Annex provide a mechanism for expeditious evaluation and appropriate consultations on the effects to fish and wildlife, their habitat, and other sensitive environments from the application of various countermeasures.

Among other considerations, decisions regarding appropriate countermeasures should take into account the relative impact of various response methods on fish and wildlife and sensitive areas. Informed decisions can be made on the deployment of appropriate countermeasures through consulting with the appropriate natural resource agency for sensitive area information and by utilizing the spill response and sensitive area guidance in contingency plans. When deciding on an appropriate response method, the most important considerations are the efficient removal of the oil threat and the effective protection of essential habitats.

Federal law prohibits the use of a chemical to control oil on water, unless specifically authorized by a Federal OSC (FOSC). The FOSC may authorize use of any chemical product if its use is necessary to prevent or substantially reduce a hazard to human life. In situations where a human hazard is not present, the OSC must receive the concurrence of the RRT co-chair, the RRT representative(s) of the affected State(s) and the DOI before authorizing the use of a chemical product to control oil on water. The OSC and/or responsible party must also consult the appropriate Federal and State natural resource trustees and land management agencies in regard to the following concerns:

- (a) physical disturbance of wildlife, their habitat, and other sensitive areas;
- (b) illegal or inadvertent taking of live fish and wildlife or disturbance of carcasses by response personnel;
- (c) the use of cleaning or bioremediation agents in fish and wildlife habitat and environmentally sensitive areas;
- (d) the movement of oiled debris into fish and wildlife habitat and other sensitive environments.

Many of the issues dealing with appropriate response methods will be addressed in detail in Sub-Area Planning. Response sections of Sub-Area Plans may include:

- "Identification of specific areas of concern throughout the subarea, pre-planning for the materials most commonly spilled, and the locations where spills are most likely to occur;

- "Response methods for habitats and sensitive areas using the API/NOAA guidance, Options for Minimizing the Environmental Impacts of Freshwater Spill Response;
- "Pre-approval of appropriate removal actions, including the use of chemicals and dispersants, in accordance with 40 CFR 300.900-920, Subpart J - Use of Dispersants and Other Chemicals; and
- "Locations of access points, staging areas, and boom anchor points."

7.0 MONITORING PLANS TO EVALUATE THE EFFECTIVENESS OF REMOVAL ACTIONS OR COUNTERMEASURES

(NCP 300.210 (c)(4)(ii)(E))

Formal quantitative monitoring by the USFWS will be done as required on a case-by-case basis. The USFWS may rely in large measure on the information developed by State agencies because formal quantitative monitoring on the part of the USFWS may not always be feasible on a routine basis.

Specific monitoring plans to evaluate the effectiveness of different countermeasures or removal actions on wildlife may be developed in the sub-area plans. The effectiveness of the removal action or countermeasure, with regard to wildlife, will be judged on the basis of the welfare of fish and wildlife remaining in the affected area after cleanup. When no new animals are becoming fouled with oil or otherwise being injured by the spill or countermeasures, the cleanup will have been successfully completed.

The assessment of aquatic biota will, in some instances, be left to the State environmental agency or State fish and wildlife agency. Evaluation of spill effects on fish and wildlife, during and after cleanup, will be the responsibility of both the USFWS and the State fish and wildlife agency.

8.0 PLANNING FOR THE ACQUISITION AND UTILIZATION OF NECESSARY FISH AND WILDLIFE RESPONSE CAPABILITIES

(NCP sec. 300.210(c)(4)(ii)(F))

8.1 Overview

The USFWS and State natural resource agency have the responsibility to oversee spill response activities being conducted relative to their effects on fish and wildlife resources. These oversight responsibilities are coordinated with the OSC. In some instances, the Federal and State agencies will participate in activities such as hazing, capture, relocation, and release of wildlife. Those natural resource agencies, however, typically do not conduct treatment of injured trust resources. The USFWS and State natural resource agency(ies) may recommend that the responsible party(ies) or OSC (in the case of an unknown or uncooperative responsible party) contract with an experienced Qualified Wildlife Rehabilitator (QWR). In all cases where a QWR is utilized, the USFWS and State natural resource agencies will maintain an oversight role. Oversight responsibilities include, but are not limited to, the notification of a QWR, the supervision of deterrence, collection, handling, proper veterinary care, provisions for adequate rehabilitation

facilities, assurance that proper cleaning procedures are being followed, wildlife release, review of appropriate permits, review of record keeping practices, and identifying appropriate disposition of carcasses to labs and evidence storage.

A successful rehabilitation effort depends on proper planning, management and equipment, experienced response personnel and trained volunteers. Effective rescue and rehabilitation of contaminated animals requires expert knowledge and experience in the areas of volunteer and staff training, human health hazard recognition, liability issues, disposal of wastewater, and media relations. Wildlife rehabilitation also requires specialized medical expertise and stockpiles of specially designed equipment.

Therefore, consultation and coordination with Federal, Tribal, and State natural resource agencies during both pre-spill planning and spill response is essential to adequately identify, understand and address natural resource concerns.

8.2 Permit Requirements

(NCP sec. 300.210(c)(4)(ii)(G))

Federal and State permits are required to collect, transport, possess, rehabilitate, euthanize, release, or band migratory birds and threatened and endangered species.

8.2.1 Federal Permits

If rescue and rehabilitation efforts are deemed to be necessary and worthwhile, the following Federal permits may apply:

8.2.1.1 Migratory Bird

Banding or Marking: 50 CFR 21.22. A permit is required before any migratory bird is captured for the purpose of banding or marking. Official bands are issued by the U.S. Geological Survey (USGS) Biological Resources Division (BRD) Bird Banding Laboratory (BBL) for this purpose. Any rehabilitation group that participates in the wildlife response and bands birds is required to possess this permit.

Special Purpose: On November 26, 2003, the USFWS established a new category of migratory bird permit, namely bird rehabilitation (50 CFR Parts 17, 21 and 22). Rehabilitation permits take the place of the old special use permits for rehabilitation by specifically authorizing migratory bird rehabilitation, including rehabilitation of migratory bird species listed as threatened or endangered under the Endangered Species Act. The new permits, applicable to approximately 2500 bird rehabilitators nationwide (veterinarians are exempt), set specific requirements to take, temporarily possess, or transport any migratory bird for rehabilitation purposes. However, any person who finds a sick, injured, or orphaned migratory bird may, without a permit, take possession of the bird in order to immediately transport it to a permitted rehabilitator.

Prior to entering the location of an oil or hazardous material spill, a permitted rehabilitator must obtain authorization from the FOSC and a designated representative of the USFWS. All activities within the spill location are subject to the authority of the FOSC. The USFWS is responsible for overseeing migratory bird rehabilitation by permitted organizations, such as Tri-State Bird Rescue and Research or International Bird Rescue. Facilities used in migratory bird rehabilitation should conform as closely as possible to facility specifications contained in the USFWS policy *Best Practices for Migratory Bird Care During Oil Spill Response* (http://www.fws.gov/contaminants/OtherDocuments/best_practices.pdf).

8.2.1.2 Eagle Permits

50 CFR 22. These permits are authorize the taking, possession, or transportation of bald eagles or golden eagles, or their parts, nests, or eggs for scientific or exhibition purposes. They may be required for the possession of such birds during rehabilitation. The USFWS must be notified within 48 hours of acquisition. Directions will be given at that time as to disposition and/or location of continued treatment.

8.2.1.3 Endangered Species

50 CFR 17.22. Permits are for scientific purposes, enhancement of propagation or survival, or for incidental take. The 30 day comment period for this type of permit may be waived by the USFWS Director during emergency conditions, where the life and health of a specimen is threatened and there is no alternative available. This permit is required by rehabilitators participating in wildlife responses that include endangered species.

8.2.1.4 Authorities for Permits

The specific Federal laws and regulations that require such permits are as follows:

- a) 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 by Federal regulations in 50 CFR. A valid permit, issued by the provisions of 50 CFR Part 21 and 50 CFR Part 13 is required for the collection, salvage, and possession of any migratory bird. Enforcement authority and penalties for violations are provided.
- b) Bald Eagle and Golden Eagle Protection Act (Eagle Act) of 1940, as amended (16 U.S.C. 668 et seq.). Although the USFWS recently delisted the bald eagle as a federally designated threatened species, bald eagles continue to be protected under the Eagle Act and the Migratory Bird Treaty Act by prohibiting killing, selling or otherwise harming them, their nests or eggs. The Eagle Act also protects eagles from disturbance. "Disturb" means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle; 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior; or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior. Recommendations contained in the USFWS

National Bald Eagle Management Guidelines will help FOSCs avoid or minimize disturbance to eagles (<http://www.fws.gov/migratorybirds/baldeagle.htm>). In general, potentially disruptive activities should be kept as far away from nest trees as possible during the breeding season. During an oil or chemical spill, eagles should be monitored and kept out of oiled areas.

- c) 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 any endangered species except as permitted under the terms of a valid permit issued by the USFWS pursuant to 50 CFR 17. Enforcement authority and penalties for violations are provided.

All inquiries regarding Federal Migratory Bird permits and criteria for qualified wildlife rehabilitators are to be directed to the following:

Migratory Bird Permit Office
U.S. Fish and Wildlife Service
P.O. Box 45
Bishop Henry Whipple Federal Building
1 Federal Drive
Fort Snelling, MN 55111-0045

(612) 725-3776

In a spill situation, response and rehabilitation permit needs for endangered species will be determined by the USFWS on an emergency case-by-case basis administered under 50 CFR 17.21, 22, 31, and 32.

8.2.2 State Permits

State permits may be obtained through the applicable State agency office listed below:

ILLINOIS	Illinois Department of Natural Resources: 217/782-6384
INDIANA	Indiana Department of Natural Resources: 317/232-8160
MICHIGAN	Michigan Department of Natural Resources: 517/373-9329
MINNESOTA	Minnesota Department of Natural Resources: 612/296-3344
OHIO	Ohio Department of Natural Resources: 614/264-6046
WISCONSIN	Wisconsin Department of Natural Resources: 608/266-2193

8.3 Selection of a Qualified Wildlife Rehabilitator (QWR)

An effective wildlife rehabilitation effort for oil contaminated wildlife requires direction by people with demonstrated field experience in oil spill response. Specific information on obtaining a Federal rehabilitation permit can be obtained through the U.S. Fish and Wildlife Service Region 3 Migratory Bird Office (see above for address and phone number).

8.3.1. Recognized Professional Rehabilitators

Two organizations, Tri-State Bird Rescue and Research, Inc. and International Bird Rescue, have become recognized experts in oiled bird rehabilitation:

Tri-State Bird Rescue and Research, Inc.
110 Possum Hollow Road
Newark, Delaware 19711
Telephone: 302-737-7241
Fax: 302-737-9562
24-hour 800-710-0695 or 0696

International Bird Rescue Research Center
699 Potter Street
Berkeley, California 94710
Telephone: 510-841-9086
Fax: 510-841-9089

Both organizations have extensive experience in bird rescue and rehabilitation and have worked with both government and industry. Other local bird rehabilitation organizations may also have comparable capabilities. Veterinarians, researchers, and biologists from the USFWS, other Federal agencies, State wildlife agencies, and universities may also be able to provide assistance and expertise during wildlife rehabilitation efforts.

8.3.2 Volunteers

While most wildlife rehabilitators and veterinarians cannot make the commitment of time needed to develop the resources to respond to major oil spills, many rehabilitators, veterinarians, and staff and volunteers from environmental organizations may be able to make significant contributions to spill-related wildlife rehabilitation efforts. The QWR should be able to identify each person's or organization's strengths and incorporate them into the rehabilitation effort. The USFWS in U.S. EPA's Region 5 has sponsored a series of apprenticeship workshops for wildlife rehabilitators, veterinarians, and biologists. The workshop participants are in the initial stages of being trained to offer professional assistance (as volunteers or part-time staff) to a QWR during major oil spills.

In major wildlife rehabilitation efforts, there may be two or three shifts per day, with a shift utilizing over 50 volunteer workers. Volunteers must be appropriately trained, precisely scheduled for suitable tasks, and must be supervised at all times.

8.4 Health and Safety Concerns in Wildlife Rescue and Rehabilitation

(NCP sec. 300.210(c)(4)(ii)(H))

Health and safety concerns in wildlife rescue and rehabilitation should be considered in all plans. Please refer to Part I, Section 9 for a more comprehensive narrative.

8.5 Identification of Facilities and Equipment Necessary for Deterring, Capturing, Cleaning, Rehabilitating, and Releasing Oiled Wildlife

(NCP sec. 300.210(c)(4)(ii)(F))

8.5.1 Facility Requirements

Facility needs usually focus on the majority of species affected by a petroleum discharge, which are generally birds. Facility requirements can vary significantly, depending on overall size of response, species and age of wildlife contaminated, the type of contaminant, the season/weather, the location of the spill, and the rehabilitation effort. The facility needed will vary according to the needs of the specific spill situation, and should be determined by a QWR experienced in oil spill response work.

Because facility requirements can vary significantly, a permanent facility is not always advisable, and may actually be an impediment in providing the appropriate facility design for the situation. A suitable facility must have a large open space on the ground floor that can easily be configured and reconfigured to accommodate the changing needs of this unique form of wildlife rehabilitation. All rehabilitation efforts should be accommodated under one roof. Experience has taught that multiple buildings or a tent situation are inefficient and unsuitable. A warehouse, armory, motor pool or convention hall that is accessible to a trained labor force, is within reasonable distance from hotel accommodations, and has adequate parking and exterior grounds could meet this requirement. If a facility is situated in a secure site, i.e., military installation or refinery, accommodations for a fluctuating volunteer work force need to be addressed. The facility may be located up to 3-4 hours from the spill site, provided that on-scene stabilization is administered prior to transport. An oil spill stabilization site can be located at the time of a spill.

It is recommended that a list be assembled of potential real estate within the identified high risk areas, and that the sites be physically reviewed by a representative of a wildlife response group with major spill response experience. Once acceptable facilities have been identified, all costs, availability, and contract information should be reviewed on a yearly basis.

The following list represents minimum facility needs for rehabilitating 100-150 oiled wildlife.

8.5.1.1 Space Requirements

- Front Desk/Admissions – 300 sq. ft.
- Operations Office – 300 sq. ft.
- Kitchen/Food Storage – 300 sq. ft.
- Husbandry Area (large central room) – 2800 sq. ft.
- Supplies/Storage – 500 sq. ft.
- Wildlife Cleaning Area 1 – 750 sq. ft.
- Medical Treatment/Exam – 300 sq. ft.

Pathology/Lab/Cold Storage – 150 sq. ft.
Isolation Ward – 300 sq. ft.
Volunteer/Worker Rest Area – 300 sq. ft.
Bathrooms, Decontamination, Changing – 200 sq. ft.
Outside Pool Areas @ one 10' x 15' x 2' pool for 15 birds, plus access and maintenance space
– 3300 sq. ft.
Nonhazardous and regulated (medical and oily) trash
Indoor 100 sq. ft.
Outside 400 sq. ft.
Outside area for oily wastewater 300 sq. ft.
Loading Dock/Parking for 50 (opposite side of building from outside cages) – 5000 sq. ft.
Total interior sq. ft. – 6300 sq. ft.
Total exterior sq. ft. – 9000 sq. ft.
Total sq. ft. – 15,200 sq. ft.

Note: If an existing wildlife rehabilitation center were to be used, it would require the above space in addition to the space allocated for any existing caseload. Animals impacted by an oil spill must be cared for separately from the in-house population.

8.5.1.2 Hot/Cold Water Capacity

When selecting a wildlife response facility, it is important that the water supply not be contaminated by the oil spill. For preplanning purposes, potential facility locations should be selected in areas of low oil spill probability. All oily waste water must be collected and disposed of in accordance with Federal and municipal regulations, however, the large quantities of rinse, pool, and general use water is permissible for discharge to most municipal systems. It is therefore inadvisable to select a location that relies on a septic system to handle waste because this large volume of water can exceed the design capacity of most septic systems. Ideally there should be external access to cold water supplies for filling pools.

Due to the nature of wildlife rehabilitation, large amounts of water are used in many locations throughout the facility. It is therefore advisable that the facility has floors that can tolerate being wet, with drains at least in the areas dedicated to cleaning activities.

Cold Water Volume (pools and general use) – 23,360 gal./day
Hot Water Volume (animal cleaning only) – 450 gph @ 104 degrees F.
(6750 gal/day @ 15 hrs.)
Water Pressure (animal cleaning only) – 50-60 psi.
Water Hardness (animal cleaning only) – 2.5-3.5 grains/gallon

A suitable facility in terms of size, availability and location should not be discounted due to hot water and hardness capacities. Provided that there is an adequate cold water supply, mobile hot water and treatment systems can be retrofitted into existing equipment without much difficulty.

8.5.1.3 Electrical/Lighting

The electrical needs of a wildlife response facility are very similar to those of a conventional manufacturing/industrial operation in so far as there is a need for general and task lighting, with an adequate number of separately circuited outlets throughout the space capable of providing 20 amp protection. Because of potential risk of electrical shock in wet areas, the addition of GFI circuit breakers in those areas is desirable.

In addition to lighting and the HVAC system, electric power will be used for freezers, refrigerators, heat lamps, pet dryers, office and medical equipment, pool pumps and filters, power tools, etc.

200 amp 120/240 volt 3-wire single phase service with minimum of ten (10) 20 amp circuits in addition to the lighting and HVAC needs, with the ability to expand.

8.5.1.4 HVAC Systems

The three main concerns regarding air quality are:

- 1) Eliminating the thermal stress to debilitated animals by providing a stable, draft free inside air temperature between 70-80 degrees F.;
- 2) Minimizing human exposure to petroleum volatiles; and
- 3) Minimizing animal exposure to pathogenic organisms (bacterial and fungal).

Air within a wildlife response facility should be exchanged 6 times per hour within office areas, 10 times per hour within large open spaces involving animal care, and 20 times per hour within critical care and/or surgical areas.

Typical HVAC systems used in industrial space are often forced air or closed recirculating systems which by themselves will not meet the above requirements. These systems will need to be augmented with portable filtration (HEPA) and air exchange units. The design of these systems should be determined by the wildlife response group once the facility has been selected, and the particulars of the animal caseload is known.

Air quality in systems that employ return air filtration can be enhanced through the replacement of the existing filters with an electrostatic type. This will not, however, preclude the need for HEPA type filtration and regular air exchanges as outlined above.

8.5.1.5 Communications

A minimum of three (3) telephone lines (public, private, fax/modem) are necessary with the ability to add more if needed.

8.5.2 Equipment, Training and Personnel Needed For Field Retrieval

8.5.2.1 Equipment

- Boats
- Safety protection/floatation gear
- Personal protective clothing
- Different types of netting
- Transport containers (boxes, ventilated)
- Transport vehicles (to and from spill site)
- Adequate communication (cellular phones, etc.)
- If stabilization is necessary at spill site (prior to transportation to rehabilitation facility), need rehabilitators to have necessary training and equipment available for stabilization

8.5.2.2 Training

- OSHA training
- Coast Guard boat training
- QWR wildlife rescue and rehabilitation training
- QWR wildlife handling training

8.5.2.3 Personnel

- Natural resources trust agencies personnel
- QWR trained field retrieval personnel
- QWR trained rehabilitation personnel
- Enforcement personnel
- Boat handlers
- Rehabilitators trained by QWR (both aspects of rehabilitation and handling)
- Personnel to handle 1-800 # calls for potential oiled wildlife sightings

If wildlife retrieval must begin prior to the QWR arrival, there is a need to specify where the wildlife would be taken for rehabilitation and who would be handling them. Please refer to Part I, Section 9 for further narrative.

8.6 Drills and Exercises

(NCP sec. 300.212)

The State natural resource agency, the USFWS, and the QWR should be incorporated into appropriate drills and/or exercises involving oil spill response situations which may potentially impact wildlife. By including these groups as part of the exercise, the OSC will fully understand and appreciate the vital role that wildlife rehabilitation plays in the overall success of the response strategy.

Since the majority of this work occurs during the first 24-36 hours of a spill incident, early involvement of the QWR in drills and exercises is imperative. The QWR should provide a daily end-of-day report to the incident commander, outlining all communication and response efforts

made by the QWR. This information should be incorporated into the daily drill documents. The QWR participating in the drills/exercises should be included in the final critique of the drill/exercise to help ensure a complete and accurate assessment is made regarding the ability of all participants to respond to wildlife at risk.

9.0 SAFETY AND TRAINING

(NCP sec. 300.210(c)(4)(ii)(H))

9.1 Requirements for OSHA and U.S. EPA training

The annex should identify and secure the means of providing, if needed, the minimum required Occupational Safety and Health Administration (OSHA) or U.S. EPA training for volunteers, including those who assist with injured wildlife. Training should precede actual work in hazardous environments.

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

- 1) The OSHA standard for Hazardous Waste Operations and Emergency Response (HAZWOPER) (29 CFR 1910.120) applies to organizations or individuals involved directly in retrieval or clean-up efforts. In addition, each State may have its own worker safety requirements. Coordination with the appropriate State agency should be conducted to ensure those requirements are also met.
- 2) The Hazard Communication Standard (29 CFR 1910.1200), also known as "Right-to-Know Law" or "HazCom", requires that all chemicals in the work place be fully evaluated for possible physical or health hazards and that all information relating to these hazards be made available to all workers. HazCom applies to rehabilitation organizations because petroleum is considered to be a hazard to human health.

Appropriate available training offered by U.S. EPA (through their Environmental Response Training Program in Cincinnati, Ohio) includes the following:

- a) Hazardous Materials Incident Response Operations (165.5) 40hrs. (This course meets OSHA's requirement (29 CFR 1910.120) for a minimum of 40 hours of classroom safety training for hazardous waste site workers.)
- b) Emergency Response to Hazardous Materials Incidents (165.15) 40hrs. (This course meets and exceeds OSHA's requirement (29 CFR 1910.120 paragraph q) for a minimum of 24 hours of training for a hazardous materials technician.)

Rehabilitation organizations are legally required to educate and protect all employees, including volunteers, in accordance with OSHA standards. Individuals working with oiled animals must receive information concerning all potential hazards associated with the handling of these

animals. The following requirements should be applied to wildlife rescue and rehabilitation personnel, including volunteers:

- a) Wildlife rescue and rehabilitation management personnel - This is the core team of rehabilitators who will direct operations. These people must have 24-hours of classroom training in hazardous waste operations and emergency response.
- b) Rehabilitation facility volunteers - These volunteers work under the direction of the management team. Persons in this category must receive four hours of training at the HAZWOPER Awareness level, or have sufficient equivalent training or proven experience in specific competencies, before they can begin work. Additional training would be necessary before volunteers would be allowed on scene.
- c) Retrieval volunteers - These volunteers work under the 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 four and eight hours of HAZWOPER training (Awareness level) and site safety training before they can begin work.

9.2 Wildlife Response Training

A contracted private source may be responsible for training volunteers on site. Additionally, USFWS may be interested in providing periodic training in preparation for spills.

9.2.1 Training Topics

1. General overview of the external and internal effects of oil on wildlife
2. Current treatment protocols
3. Facility needs
4. Human health and safety

9.2.2 Training Goals

- 1) Clarify the duties and the responsibilities of the spiller, cleanup contractor, State and Federal agencies, volunteers and the general public
- 2) Improve the treatment and the release rates for affected wildlife
- 3) Enhance speed and quality of a response involving wildlife following an oil spill event
- 4) Reduce wildlife response costs by making efforts more cost-effective
- 5) Help to insure the safety of all those working in a wildlife response

9.3 Wildlife Risks

Specific human health and safety concerns in handling wildlife will vary with the species of animal involved, but the following safeguards apply universally:

- 1) Wearing gloves while cleaning animal cages and food bowls, washing hands with a disinfectant soap, wearing gloves and surgical mask while performing necropsies (post-

mortem examinations), and providing for adequate room ventilation will help reduce the risk of contracting wildlife transmitted diseases.

- 2) Protective eyewear should be worn when working with birds having long, pointed beaks, and towels (for entire body control) or gloves should be used to restrain feet of all birds.
- 3) All individuals who will be handling oiled wildlife must be trained in proper capture and restraint techniques. The head (beak or teeth) and feet (talons or claws) of most animals can cause serious injuries if the handler has received improper or incomplete training.
- 4) Animals should be held at or below waist-height, away from human faces. At least two people should be present for any prolonged handling (examinations, washing, etc.). Aggressive mammals should be controlled with nets or snare poles, and should be sedated for any prolonged handling.
- 5) Any worker handling wildlife should have a current tetanus shot, and only individuals who have received prophylactic rabies vaccinations should handle wild mammals.

Diseases which can be transmitted from animals to humans pose a potential risk to oil/hazmat spill responders during the rescue, rehabilitation and release of wildlife. Although this list may not be inclusive, the following diseases are of particular concern:

9.3.1 Birds

- Aspergillosis--a fungal disease causing respiratory problems in humans.
- Chlamydiosis--a bacterial disease causing flu-like symptoms in people. Potentially fatal.
- Salmonellosis--a bacterial disease causing diarrhea in humans.
- Avian Tuberculosis--a bacterial disease causing skin lesions and occasionally respiratory problems in humans.
- Histoplasmosis--a fungal disease causing pneumonia in humans.

9.3.2 Mammals

- Rabies--a viral disease causing central nervous system (CNS) disorder in humans. Fatal if untreated.
- Giardia--a protozoal disease causing diarrhea.
- Baylisascaris--a parasite causing CNS disorder & death in humans.
- Campylobacteriosis--a bacteria causing diarrhea in humans.

- Cryptosporidiosis--a protozoal disease causing diarrhea in humans.
- Toxoplasmosis--a protozoal disease which may cause CNS disorder in humans.

If responders are likely to come into contact with captured wildlife during a spill event, the site safety officer (or a contracted veterinarian) should be consulted to determine appropriate prevention measures. Volunteers should contact medical professionals if they become ill during or after potential exposure to wildlife diseases.

Medical professionals may also wish to consult the National Biological Discipline, National Wildlife Health Center in Madison, Wisconsin (<http://www.nwhc.usgs.gov/>), NWHCweb@usgs.gov) at (608) 270-2400 for wildlife disease diagnostic assistance.

9.4 Safety Equipment

Appropriate equipment is important for safe spill response activities. Necessary equipment will vary according to the particular situation, and may depend on such circumstances as the size of the spill and types of resources affected. For individuals not involved directly in on-site (hot zone) retrieval or cleanup efforts (exposed only to Level D hazards), personal protective equipment may include the following:

1. coveralls
2. gloves
3. boots/shoes, leather or chemical resistant, steel shank and toe
4. safety glasses or chemical splash goggles
5. hard hat with face shield
6. escape mask

Where sampling includes aquatic sites, personal protective equipment should include:

1. knee, hip, or chest waders in good condition
2. long rubber gloves

Life jackets are required for work in boats or over water. Safety equipment may also include specially designed respiratory equipment and/or ear protection.

9.5 Product Risks

Petroleum products in, on, and around wildlife may present a hazard to human health and safety. Various components in certain petroleum products can damage skin, conjunctivae of eyes, lungs, or the gastrointestinal tract (if inadvertently ingested). Chronic and/or prolonged exposure may cause damage to the central nervous system and some cancers, such as skin cancer and leukemia. Fetal defects have been documented in laboratory animals. Individual risk factors such as pregnancy or history of liver disease should be taken into consideration in allowing volunteers and staff to work in contaminated areas. Personal hygiene must be stressed during the

decontamination process. Protective measures should always be taken to avoid and/or minimize oil exposure throughout spill response activities.

9.6 Watercraft Safety

Airboats or boats propelled by outboard motors are effective for hazing waterbirds and for searching for sick or injured wildlife. Small, noisy, shallow-draft aluminum boats are particularly effective for hazing, and can be used as platforms for shell crackers during the day and for propane exploders or bright lights at night. Although relatively ineffective for herding diving birds, boats may be used for herding young or molting waterfowl that are incapable of flight.

Response personnel will ensure that all watercraft operations are conducted in accordance with local laws and regulations of the U.S. Coast Guard and OSHA, as well as any applicable internal agency regulations.

Response leader responsibilities should include the following:

- 1) Ensure that all workers who operate or work in watercraft have received first aid instruction in artificial respiration.
- 2) Ensure that personnel who operate watercraft have completed a recognized boating or water safety course.

Each watercraft will be required to have personal protective equipment (personal flotation devices), firefighting equipment, and other safety equipment (distress signaling devices, bailing devices, and emergency position indicating radiobeacons, running lights, radio, fog horns, navigational aids, anchor and anchor line), and undergo periodic inspections as required by USCG and OSHA regulations.

9.7 Aircraft Safety

Aircraft, especially helicopters, are effective in hazing migratory birds from large areas because of the combination of loud noise and rapid approach from above. Helicopters may also be used to herd flightless birds (young and molting birds). Aircraft can also be utilized for reconnaissance and transportation of personnel, equipment, and accessing injured wildlife.

Aircraft are considered to be especially useful during the early stages of cleanup and hazing operations. They are more effective if used in combination with other devices such as shell crackers and propane exploders. Because of their maneuverability and noise, helicopters are more effective than fixed-wing aircraft.

Established aviation safety programs and aircraft accident prevention programs within each organization will be complied with at sites at which such response measures are anticipated.

10.0 COMPATIBILITY OF NON-FEDERAL RESPONSE PLANS

(NCP Sec. 300.210(c)(4)(ii)(I))

Section 300.210(c)(4)(ii)(I) of the NCP mandates that the Fish and Wildlife Annex to the ACP define the requirements for evaluating compatibility between this Annex and non-Federal response plans on issues affecting fish and wildlife, their habitat, and sensitive environments. Facility owners or operators must determine the maximum distance at which a worst case oil spill from their facility could cause injury to fish and wildlife and sensitive environments and develop a plan for mitigating that discharge's potential adverse effects. Facility plans must be consistent with the requirements of the NCP, the National Response Framework (NRF), RCP and this ACP Annex. Pipeline plans in the Region will be reviewed and approved by DOT.

Depending on the location of the spill, it may also be appropriate for responders to consult the Upper Mississippi River Spill Response Plan and Resource Manual (<http://www.umrba.org/hazspills/umrplan.pdf>). This document is consistent with the Regional Contingency Plans and Area Contingency Plans of Regions V and VII and provides response information tailored to the Upper Mississippi River and the surrounding basin.

11.0 NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA)

At the same time response efforts to contain and remove oil and undertake wildlife rescue and rehabilitation are occurring, natural resource trustees may pursue NRDA activities. These activities constitute a preliminary assessment, or preassessment, of natural resource injuries. While preassessment activities are generally different from removal/response activities and in most instances are conducted simultaneously. The removal/response activities are controlled by the OSC, while the components of the damage assessment process are directed by the trustees. There is a procedural linkage of the funding mechanisms (both are funded by the Oil Spill Liability Trust Fund) and it becomes necessary for natural resource managers to distinguish between the removal and preassessment activities.

NRDA regulations, authorized by OPA and other Federal laws, presume trustees will seek economic damages from responsible parties for injuries to natural resources from oil discharges. Trustees include Federal landowners, Federal natural resource managers, States, Indian tribes, and foreign governments. Damages collected must be used to restore, replace, or acquire natural resources equivalent to injured natural resources and to reimburse assessment costs.

11.1 Authority

NRDA is authorized by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), the Clean Water Act (CWA), and the OPA. To facilitate compliance with OPA, the Department of Commerce (DOC) promulgated 15 CFR Part 990 - Natural Resource Damage Assessment Regulations for discharges of oil. The final rule for these regulations was published in the Federal Register on January 5, 1996 with February 5, 1996 as the effective date of the final rule.

11.2 Natural Resource Trustees - NRDA Roles and Responsibilities

Section 1006(b) of OPA provides for the designation of Federal, State, Indian Tribe, and foreign natural resource trustees to determine if injury to, destruction of, loss of, or loss of use of natural resources and services has resulted from an incident, to assess damages for those injuries, to present a claim for damages (including the reasonable costs of assessing these damages), to recover damages, and to develop and implement a plan for the restoration, replacement, or acquisition of the equivalent of the injured natural resources and services under their trusteeship. The DOI is the Federal trustee for migratory birds, certain anadromous fish, endangered species, and DOI-managed lands such as National Parks and Recreation Areas and Wildlife Refuges. The DOI Office of Environmental Policy and Compliance (OEPC) is the initial contact for notification and for overall coordination of trustee activities. The USFWS, a bureau of DOI and the program manager for migratory birds, endangered species, anadromous fish, and lands in the National Wildlife Refuge System, will likely be among those involved for DOI in spill incidents because of their responsibility for these resources. In instances where other Federal agency lands or resources are involved, those agencies (e.g. Department of Defense, U.S. Department of Agriculture, National Oceanic and Atmospheric Administration [NOAA]) may serve as co-trustees with DOI. At the time of a spill, the trustees will agree upon one agency to act as Federal lead administrative trustee and will convene a trustee group in cooperation with State, Indian, and foreign trustees, as appropriate, to ensure the best possible coordination of natural resource trustee activities such as data gathering, damage assessment, and negotiations with the responsible parties.

11.3 Process

The NRDA process in the final rule includes 3 phases as outlined below:

- 1) preassessment
- 2) restoration planning
- 3) restoration implementation.

11.3.1 Preassessment Phase

When notified of an incident involving oil, trustees must first determine threshold criteria that provide their authority to begin an NRDA, such as applicability of OPA and risks to natural resources under their trusteeship. Based on early available information, trustees make a preliminary determination whether natural resources or services under their authorities have been, or are likely to be, injured. Through coordination with response agencies, trustees next determine whether response actions will eliminate the threat of ongoing and future injuries. If injuries have occurred and/or are expected to continue, and feasible restoration alternatives exist to address such injuries, trustees may proceed with the assessment.

Preassessment phase activities will likely be conducted simultaneously with removal/response activities. The intent of the preassessment phase activities is generally to acquire data and materials that are likely to be lost if not collected during or immediately after a spill has occurred. Such field sampling and data collection is generally limited to:

- 1) Samples necessary to preserve perishable materials likely to have been affected or to contain evidence of the oil. These samples will generally consist of biological material that is either dead or which has been visibly affected by the oil.
- 2) Samples of other materials which exhibit ephemeral conditions, such as surface water, sediments, soil, or the oil itself, which are necessary for identification of released product and measurement of concentrations. If not collected immediately, such information could otherwise be lost due to product dilution, movement, decomposition, or leaching.
- 3) Counts of dead or visibly injured organisms which, if delayed, may not be possible due to factors such as decomposition, scavenging, sinking, or movement from the spill site by currents.

Other types of activities that may be involved in assessment initiation include release detection and notification, trustee identification and notification, site characterization, and identification of pathways, exposed areas, and potentially affected resources. In very specific circumstances, a natural resource trustee may also undertake emergency restoration efforts to prevent or reduce the immediate migration of oil onto or into a trust resource. Emergency restoration is only undertaken if the responsible party or U.S. EPA cannot or does not conduct response actions within the time frame that natural resource trustees deem necessary to protect trust resources.

Because certain NRDA activities (e.g. collection of water and sediment samples) may be identical to those conducted by others as part of the response, all sampling and field work conducted by the natural resource trustees should be coordinated with the lead response agency so as to minimize duplication of sampling and data collection efforts. Work performed for response purposes is reimbursable by the OSLTF under response costs. Activities performed that are not response-related may be reimbursable by the OSLTF under assessment initiation costs.

11.3.2 Restoration Planning Phase

The purpose of the Restoration Planning Phase is to evaluate potential injuries to natural resources and services, and to use that information to determine the need for and scale of restoration activities. The Restoration Planning Phase provides the link between injury and restoration. The Restoration Planning Phase has two basic components; injury assessment and restoration selection.

11.3.2.1 Injury Assessment

The purpose of injury assessment is to determine the nature and extent of injuries to natural resources and services, thus providing a technical basis for evaluating the need for, type of, and scale of restoration actions. Under the final rule, injury is defined as an observable or measurable adverse change in a natural resource or impairment of a natural resource service. Trustees must determine that there is: 1) exposure, a pathway, and an adverse change to a natural resource or service as a result of an actual discharge; or 2) an injury to a natural resource service as a result of response actions or a substantial threat of a discharge. Trustees must also quantify the degree and spatial and temporal extent of injuries. Injuries are

quantified by comparing the condition of the injured natural resources or services to baseline, where necessary.

11.3.2.2 Restoration Selection

Once injury assessment is complete, trustees must develop a plan for restoring the injured natural resources and services. Acceptable restoration actions include any of the actions authorized under OPA (restoration, rehabilitation, replacement, or acquisition of the equivalent), or some combination of those actions.

11.3.3 Restoration Implementation Phase

The Final Restoration Plan is presented to responsible parties to either implement or to fund the trustees' costs of implementing the plan, thus providing the opportunity for settlement of damages claims without litigation. Should responsible parties decline to settle a claim, OPA authorizes the trustees to bring a civil action for damages in Federal court or seek an appropriation from the OSLTF for such damages.

PART II. EMERGENCY SPILL RESPONSE GUIDANCE

1.0 ROLES AND RESPONSIBILITIES OF NATURAL RESOURCE TRUSTEES

(NCP sec. 300.210(c)(4)(I) and 300.615)

1.1 Overview

When a spill occurs, impacts to the ecosystem are usually unavoidable. However, such impacts can be minimized through proper planning and coordination with State and Federal natural resource trustees and managers both before and during a spill. Consultation and coordination with natural resource managers during the pre-spill planning phase aids in identifying and understanding potential natural resource concerns and issues as a result of spills in general. Consultation and coordination during a spill is also essential to ensure that site-specific resource concerns are addressed.

1.2 Spill Response

The DOI has statutory responsibilities for protecting migratory birds and Federally-listed threatened and endangered species. In addition, DOI shares trustee responsibilities with the Department of Commerce for anadromous fish. These DOI responsibilities at the field level have been delegated to the USFWS. During a spill event, the USFWS will normally serve as the lead agency for trustee response, coordinating with other trustees and providing oversight for a qualified wildlife rehabilitator (QWR).

If wildlife other than migratory birds, Federally-listed threatened or endangered species, or anadromous fish are found injured, the responsible trustee agency would typically be the State wildlife agency.

During a spill response, natural resource trustees and managers can provide the OSC with technical assistance and expertise on potential effects of oil on fish and wildlife and their habitats (for Notification numbers, see Part II, Section 3). They are frequently familiar with the habitat in the path of the spill and can provide recommendations concerning the best locations for equipment staging, access points, or boom anchors. They can recommend specific habitats where protective actions should be taken and provide advice on specific response measures. They can assist in the development of a monitoring plan and subsequent collection of data. Finally, the USFWS and State natural resource agencies will direct or provide oversight for the protection, rescue, and rehabilitation of wildlife.

When a spill occurs, natural resource trustees or managers will provide advice on the measures necessary to minimize or prevent the exposure of wildlife to oil, as well as the priority and timing of such measures. Protective measures may include one or more of the following:

- preventing the oil from reaching areas where migratory birds and other wildlife are located by either containing or recovering the oil
- deterring birds or other wildlife from entering areas affected by oil by using wildlife hazing devices or other methods.

If exposure of birds and other wildlife to oil cannot be prevented, an immediate decision must be made regarding whether to rescue and rehabilitate oiled birds and other wildlife. The decision must be made in consultation with the applicable Federal (USFWS) and State natural resource management agencies, since State and Federal permits are required by law (please refer to Part I, Section 8). Rehabilitation services for contaminated wildlife can be contracted for by the Responsible Party, the OSC, or Federal and State designated trustees. However, full authority regarding protection, rescue and rehabilitation of wildlife and fish remains with the trustees.

Following a spill, natural resource trustees may have the additional responsibility of assessing injury to the environment as a result of the spill. Natural Resource Damage Assessment (NRDA) is the process (refer to Part I, Section 11) 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 trust resources and compensate for lost use as a result of injury) and to seek recovery of those damages from the responsible party. The initiation of a NRDA is typically begun while response activities are still being carried out.

1.2.1 Specific Responsibilities of Federal Natural Resource Trustees During a Spill Response

1.2.1.1 U.S. Department of the Interior, U.S. Fish and Wildlife Service

The USFWS is the lead agency for the DOI in the management of migratory birds (co-trustee with State natural resource agencies), Federally-listed endangered and threatened species, and USFWS lands (such as National Wildlife Refuges, Waterfowl Production Areas, and fish

hatcheries) within this ACP planning area. During a spill response, USFWS personnel (biologists, law enforcement officers, refuge and fisheries managers) have the following responsibilities:

- a) ensure notification of all necessary USFWS personnel, and establish a response protocol delineating roles of each USFWS office. Coordination protocol with the State natural resource agency and other trustees will also be established.
- b) provide the OSC with specific fish and wildlife habitat information for USFWS lands. USFWS will also provide recommendations for preventing or minimizing spill impacts to USFWS lands, as well as consult on the best locations for response staging areas and access points.
- c) provide the OSC with critical habitat information for Federally-listed threatened and endangered species. USFWS will also provide recommendations for preventing or minimizing spill impacts to these species, as well as advise on the best locations for response staging areas and access points in the vicinity of endangered species critical habitat.
- d) provide the OSC with fish and wildlife habitat information for locations other than Federal lands within the area potentially affected by the spill (in coordination with the State natural resource agencies and other trustees).
- e) provide the OSC with technical assistance and expertise on potential effects of oil on fish and wildlife and their habitats or on other sensitive environments that can be found in the potentially impacted area.
- f) provide the OSC with assistance in coordination of wildlife rescue and rehabilitation efforts (in conjunction with the State natural resource agency and other trustees). NOTE: It is critical that properly licensed and qualified rehabilitators be contacted as soon as it is determined that such services are necessary. The USFWS and State natural resource agencies have joint responsibility for overseeing any activity involving the handling of wildlife. Because such activities may impinge upon the Natural Resource Damage Assessment (NRDA) responsibilities of the trustees, any decision to rescue and rehabilitate oiled and injured wildlife during a spill response must be made in coordination with the USFWS and State natural resource agency.
- g) initiate a Natural Resource Damage Assessment (NRDA) (in conjunction with other natural resource trustee agencies), if applicable. Such activity usually involves acquiring data both during and after a spill event to document: (1) evidence of the oil in water, sediments, soil, and organisms; (2) effects on fish, wildlife, and/or their habitat; (3) exposure pathways, and; (4) the potential need to undertake emergency restoration efforts to prevent or reduce the immediate migration of oil onto or into a trust resource. Because activities associated with NRDA initiation may be identical to those conducted as part of the response, all sampling and field work conducted by the natural resource trustees should be coordinated with the lead response agency.

1.2.1.2 Department of the Interior, National Park Service

The National Park Service (NPS) may provide access, advice and participation in emergency response activities affecting any of the 22 National Park System lands within Region 5, including National Parks, Lakeshores, Monuments, Scenic Trails, Recreation Areas, Memorials, Historic Sites and Canals. It may also offer assistance for spill incident responses that may impact units of the National Wild and Scenic Rivers System and properties on or eligible to be listed on the National Register of Historic Places. The NPS Midwest Regional Office is located in Omaha, Nebraska.

1.2.1.3 Department of the Interior, Bureau of Indian Affairs

The Bureau of Indian Affairs (BIA) may assist in coordination of emergency response activities affecting Indian lands, and in identifying Indian tribal government Officials. The BIA may also assist in obtaining access to Indian land areas as needed for response action, and may also coordinate with the incident Public Information Office Director to ensure that pertinent information is made available to tribal authorities on a timely basis. Currently, there are 35 federally recognized tribes in Region 5, all located in Minnesota, Wisconsin and Michigan. The BIA's Midwest Regional Office is located in Fort Snelling, Minnesota.

1.2.1.4 Department of Commerce, NOAA

This section provides NOAA's element of the Fish and Wildlife and Sensitive Environments Annex to the U.S. EPA Region 5 RCP/ACP

The NCP requires a Fish and Wildlife and Sensitive Environments Annex to the NCP, RCPs, and ACPs. The Annex is intended to provide for coordinated, immediate, and effective protection, rescue, and rehabilitation of, and minimization of risk of injury to, fish and wildlife resources and habitat.

Following is a summary of how NOAA contributes to these goals and objectives:

- 1) NOAA and the American Petroleum Institute (API) developed the manual Options for Minimizing Environmental Impacts of Freshwater Spill Response (also known as the Freshwater Manual). It provides a framework for identification of appropriate countermeasures in the Great Lakes region. It contains information to assist contingency planners and field responders with selecting appropriate protection, response, and cleanup techniques, both before and after an oil spill. The guide provides information on 29 response methods and classifies their relative environmental impact on 12 freshwater environments and habitats in combination with 4 oil types. Spill topics of special concern in freshwater settings are also discussed including: public health, conditions under which oil might sink in freshwater, and oil behavior in ice conditions. The manual is available through the NOAA HAZMAT Scientific Support Coordinator (SSC) assigned to U.S. Coast Guard District 9 in Cleveland, Ohio.

- 2) NOAA developed Environmental Sensitivity Index (ESI) Maps for the Great Lakes. The ESI maps include information for three main components: shoreline habitats; sensitive biological resources; and human-use resources. Shoreline habitats are ranked from 1 to 10 (10 being most sensitive) based on their relative sensitivity to oil spills, potential biological injury, and ease of cleanup. Four major categories of biological resources were considered during the production of the ESI maps; birds, fish, plants, and mammals. The human-use features include: airports, boat ramps, Coast Guard units, marinas, national parks, State parks, water intakes, and wildlife areas. A complete set of ESI maps for the Great Lakes is maintained by the NOAA HAZMAT SSC, USCG District 9 Marine Safety Division, USCG District 9 Civil Engineering Unit, and U.S. EPA Region 5 Emergency Response Branch. USCG District 9 Marine Safety Offices have ESI Maps for their area of responsibility.
- 3) NOAA maintains an extensive library and database of resources at risk in the Great Lakes and remainder of the U.S. This information is available through the NOAA SSC for contingency planning and during incident response.
- 4) NOAA and U.S. EPA Region 4 developed a strategy for meeting OPA 90 mandates for sensitive area mapping in oil spill contingency plans. The strategy compliments the ESI system noted above. The Reach Sensitivity Index (RSI) provides a sensitivity index classification system for small rivers and streams. This RSI also compliments the ongoing U.S. EPA Region 5 mapping of the Mississippi River. Reference NOAA/HAZMAT Report 96-11, A strategy for Mapping Sensitive Resource of Rivers and Streams in U.S. EPA Region 4, July 1996.
- 5) In the spirit of the intent of the Fish and Wildlife and Sensitive Environments Annex, the NOAA SSC has assisted USCG Sector Offices with the development of ACP appendices including: "Sensitive Areas", "Response and Protection Priorities and Strategies", and "Countermeasures and Removal Techniques".

1.2.2 Specific Responsibilities of State Natural Resource Trustees During a Spill Response

The State natural resource agencies are trustees (or co-trustees depending on the State) for the natural resources of the State and co-trustees with the USFWS concerning the management of migratory birds and some Federally threatened and endangered species. The State natural resource trustee has management authority over all State lands, parks, timber, waters, minerals, and wildlife. This includes the protection, preservation, and propagation of fish and wildlife resources of the State. In response to a spill event, State natural resource agency personnel (biologists, conservation officers, managers) have the following responsibilities:

- a) notify other appropriate State natural resource agency personnel and establish a response protocol describing the role of responders;
- b) coordinate efforts with other participating natural resource trustees, such as the USFWS.

- c) provide the OSC with specific fish and wildlife habitat information within the area concerning all lakes, streams, wetlands, and rivers. The State agency will also consult with the responders as to the best locations for staging and recovery areas as well as access points.
- d) provide the OSC with critical habitat information for State-listed threatened and endangered species as well as information on sensitive natural communities and special concern species found in the area.
- e) provide the OSC with technical assistance and expertise on potential effects of oil and hazardous substances on fish and wildlife and their habitats.
- f) provide the OSC with assistance for coordination of wildlife rescue and rehabilitation efforts in cooperation with the USFWS.
- g) assess damages to natural resources during (as circumstances allow) and after a spill. Data acquired would be used to determine the extent of injury to natural resources, to develop restoration or replacement strategies, and to develop and submit a claim for damages to the responsible party(ies).

2.0 IDENTIFICATION AND PRIORITIZATION OF NATURAL RESOURCES REQUIRING PROTECTION

(NCP sec. 300.210(c)(4)(ii)(A)&(B))

Sensitive environments and species are identified in order to provide for coordinated, immediate, and effective protection of fish, wildlife, and their habitats that may be affected by a discharge of oil or hazardous material. Identification of sensitive natural resources allows priority to be placed on protection of these resources prior to a discharge (through pre-spill planning of appropriate countermeasures and pre-staging of response equipment), as well as during a spill event (by focusing attention and response resources on the most critical areas).

2.1 Identification

Because natural systems are dynamic, the best available information on the identification and distribution of sensitive resources will be obtained through the Federal and State natural resource biologists/managers. The experience of these professionals, as well as their ability to provide the most up-to-date information, cannot effectively be utilized without the event-specific conditions of a discharge, such as the location, season, weather, type and amount of material involved. Because of the importance of coordinating with natural resource biologists and managers at the time of a spill, a list of Federal and State agency personnel most familiar with the resources has been assembled (see Part II, Section 3.). Once alerted, these personnel will provide event-specific technical assistance to the Federal or State OSC.

Clearly, there is a need for prior identification of sensitive natural resources to guide those responding to discharges during initial phases of response (i.e., before the consensus opinions of

natural resource managers can be obtained). Therefore, a list of high priority natural resources is provided below (see Section 2.3: Categories for Resource Protection Prioritization).

2.2 Prioritization

Because of the diversity and extent of sensitive natural resources in the ACP region, it is important to reach a consensus, to the extent possible, on the highest resource priorities in order to provide for time-sensitive, coordinated, and effective protection, rescue, and restoration.

Although prioritization is difficult, several criteria that may be used in making this determination have been identified:

- relative abundance or scarcity of a particular resource
- relative diversity and abundance of resources at a particular site
- fecundity of biological resources
- vulnerability to spills
- sensitivity to the product discharged
- amenability to restoration or remediation
- protection by Federal and State laws
- economic importance

2.3 Categories for Resource Protection Prioritization

In general, natural resources are most at risk from oil spills when:

- 1) large numbers of individuals are concentrated in a relatively small area, such as bays where rafts of waterfowl concentrate during migration and overwintering;
- 2) areas important to specific life stages or migration patterns, such as foraging and overwintering sites, are impacted by oil;
- 3) the species are threatened or endangered;
- 4) early life stages of birds and anadromous fish are present in somewhat restricted areas;
- 5) specific areas are known to be vital sources for propagation, such as shellfish beds;
- 6) a significant percentage of the population is likely to be exposed to oil; and
- 7) wildlife come ashore for resting, molting, or birthing.

The above factors lead to categories of natural resources that should be considered of high priority for protection and remediation:

2.2.1 Priority 1

- Federally listed or proposed Endangered and Threatened Species and their Designated Critical Habitat (DOI/FWS/NPS)

2.2.2 Priority 2

2.2.2.1 Migratory birds (waterfowl, wading birds, shorebirds, raptors, diving birds, songbirds) and their habitats (DOI/FWS)

- Migratory Bird Nesting Sites (DOI/FWS)
- Colonial Waterbird Nesting Sites (DOI/FWS)
- Migratory Concentration Areas for Migratory Birds (DOI/FWS)
- Seasonal Concentration Areas for Migratory Birds (DOI/FWS)

2.2.2.2 Anadromous Fish Spawning Areas (DOI/FWS/NOAA)

2.2.2.3 National and State Protected Areas:

- National Wildlife Refuges and Waterfowl Production Areas (DOI/FWS)
- National Wilderness Areas (DOI/FWS/NPS; USDA/FS)
- National Parks (DOI/NPS)
- National Preserves (DOI/NPS)
- National Forests (USDA/FS)
- National Fish Hatcheries (DOI/FWS; NOAA/NMFS)
- Clean Lakes Program Critical Areas (U.S. EPA)
- Tribal Lands (appropriate Tribal Contact)
- State Parks
- State Refuges
- State Wildlife Management Areas
- State Forests

2.2.2.4 State-listed or proposed Endangered and Threatened Species

2.2.2.5 High quality priority freshwater wetlands (other than included above) identified by Local, State, regional, or Federal levels of Government (U.S. EPA; COE; DOI/FWS/NPS; USDA/FS)

2.2.2.6 Federal and State Species of Concern (DOI/FWS/NPS)

2.2.2.7 Outstanding National Resource Waters/Outstanding Resource Value Waters (if not listed above):

- National Wild and Scenic Rivers (DOI/NPS; USDA/FS)
- Critical areas under the Clean Lakes Program (U.S. EPA/States)
- Sites within Joint Venture Project Areas under the North American Waterfowl Management Plan (DOI/FWS)
- Sites under the RAMSAR Treaty on Wetlands of International Importance (DOI/FWS)

- State Scientific and Natural Areas
- Calcareous Fens
- State Wild and Scenic Rivers
- Trout streams

2.2.3 Priority 3 - Sensitive Recreation Areas

- Heritage Program Sites
- Cultural Sites (Archeological, Historical, Monuments)
- Recreational Areas (Boating, Fishing, Swimming)

PLEASE NOTE: Fish and wildlife agency concerns are intensified with the above species and specified areas at specific times of the year (e.g., breeding and migration season). Should an oil spill occur within these designated areas, the USFWS and State(s) natural resource agencies should be contacted immediately to assist in determining the routing direction of the spill as well as other aspects of the cleanup effort.

3.0 STATE-BY-STATE NOTIFICATION NUMBERS AND INFORMATION RESOURCES OF FISH AND WILDLIFE RESOURCE MANAGERS

When an oil spill impacts wildlife, or has the significant potential for impact, in addition to contacting the NRC (1-800-424-8802), the State or Federal OSC should immediately notify the DOI POC, State natural resource agency and the appropriate USFWS Field Office in each State. Primary contact points for the agencies are listed under the appropriate State heading. Only one contact per agency is necessary because the person initially contacted will notify other personnel in their agency, such as Law Enforcement staff and Refuge managers. The OSC may also contact any other natural resource agency for help with fish and wildlife issues.

The USFWS is responsible for the management and protection of migratory birds, Federally listed threatened and endangered species (and their critical habitat), and for USFWS lands, including National Wildlife Refuges, Waterfowl Production Areas, and National Fish Hatcheries. The USFWS will provide responders with information concerning these resources, as well as technical assistance concerning the effects of oil on these resources. The USFWS will help coordinate wildlife recovery and rehabilitation efforts in conjunction with the State natural resource trustee.

On-scene-coordinators must also contact Native American community officials if they need technical information/assistance in the protection of fish and wildlife resources on tribal lands. (Please refer to the directory of tribal authorities presented in the ACP/RCP.)

3.1 Information for Spills that Occur in Illinois

3.1.1 Appropriate Staff Contacts for the Designated Officials for Fish and Wildlife Resource Management Agencies

Entities for which contact information may be necessary in the event of a spill include:

3.1.1.1 Illinois

For Fish and Wildlife Service contact information, see

<http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Fish and Wildlife Service Regional Office – Region 3
- Fish and Wildlife Service Illinois (Mississippi River, left and right banks)

Illinois Environmental Protection Agency:

Primary	Alternate
Roger Lauder, Manager	Bud Bridgewater
Office of Emergency Response	Illinois Environmental Protection Agency
Illinois Environmental Protection Agency	1021 North Grand Avenue East
P.O. Box 19276	P.O. Box 19276
Springfield, IL 62794-9276	Springfield, IL 62794-9276
Phone: 215-524-5027	Phone: 217-782-3637
Cell: 217-306-7145	FAX: 217-524-4036
Pager: 800-249-9891	24 hour: 217-782-7860
24 hr: 217-782-7860 (IEMA)	Email: bud.bridgewater@illinois.gov
FAX: 217-782-1431	
Email: roger.lauder@illinois.gov	

For an indexed list of Federal Threatened and Endangered Species, see

http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

3.1.1.2 Indiana

For Fish and Wildlife Service contact information, see

<http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Fish and Wildlife Service Indiana

Indiana Department of Environmental Management ~~Natural Resources~~:

Max Michael, Section Chief
Emergency Response
Indiana Department of Environmental Management
100 North Senate Drive
P.O. Box 6015
Indianapolis, IN 46206-6015
Phone 317-308-3049
24 hr: 317-233-7745
Toll Free: 888-233-7745
FAX: 317-308-3063
Email: mmichael@idem.in.gov

For an indexed list of Federal Threatened and Endangered Species, see http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

3.1.1.3 Michigan

For Fish and Wildlife Service contact information, see <http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Michigan Department of Environmental Quality

Primary
Pete Ostlund
Field Operations, Water Bureau
Michigan Department of Environmental Quality
Constitution Hall, 2nd Floor
525 W. Allegan
P.O. Box 30273
Lansing, MI 48933
Phone: 517-373-1982
24 hr: 517-373-7660 (out of State)
800-292-4706 (in State)
FAX: 517-373-2040
Email: ostlundp@michigan.gov

Alternate
Mitch Adelman
Jackson District Supervisor
Environmental Response Division
MI Dept. of Environmental Quality
Jackson, MI 48909
Phone: 517-780-7852
24 hr: 517-373-7660 (out of state)
800-292-4706
FAX: 517-780-7855
Email: adelmanm@michigan.gov

For an indexed list of Federal Threatened and Endangered Species, see http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

3.1.1.4 Minnesota

For Fish and Wildlife Service contact information, see <http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Fish and Wildlife Service Regional Office – Region 3
- Fish and Wildlife Service Illinois Minnesota

Minnesota Department of Natural Resources:
Minnesota Pollution Control Agency:

Marilyn Danks
Minnesota Department of Natural
Resources
Ecological Services
500 Lafayette Road
St. Paul, MN 55155

Phone: 651259-5087
FAX: 651-296-1811
Stephen Lee
Minnesota Pollution Control Agency
520 Lafayette Road
St. Paul, MN 55155

Phone: 651-297-8610
24 hr: 651-649-5451

FAX: 651-297-8321
Email: Stephen.lee@pca.state.mn.us

For an indexed list of Federal Threatened and Endangered Species, see
http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

3.1.1.5 Ohio

For Fish and Wildlife Service contact information, see
<http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Fish and Wildlife Service Regional Office – Region 3
- Fish and Wildlife Service Ohio

Ohio Department of Natural Resources, Ohio Division of Wildlife

Central Ohio
Dan Huss, Manager
District One
1500 Dublin Rd.
Columbus, Ohio 43215
Phone: 614-644-3925
Fax: 614-644-3931

Northwest Ohio
John Daugherty, Manager
District Two
952 Lima Ave., Box A
Findlay, Ohio 45840
Phone: 419-424-5000
Fax: 419-422-4875

Northeast Ohio
Jeff Herrick, Manager
District Three
912 Portage Lakes Dr.
Akron, Ohio 44319
Phone: 330-644-2293
FAX: 330-644-8403

Southeast Ohio
Mark Hemming, Manager
District Four
360 E. State St.
Athens, Ohio 45701
Phone: 740-589-9930

FAX: 740-589-9999

Southwest Ohio
Todd Haines, Manager
District Five
1076 Old Springfield Pike
Xenia, Ohio 45385-1238
Phone: 937-372-9261
Fax: 937-376-3011

For an indexed list of Federal Threatened and Endangered Species, see

http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

3.1.1.6 Wisconsin

For Fish and Wildlife Service contact information, see

<http://www.fws.gov/midwest/Eco%5FServ/Env%5FCont/ecwho.html>

- Fish and Wildlife Service Regional Office – Region 3
- Fish and Wildlife Service Wisconsin

Wisconsin Department of Natural Resources

Wisconsin Department of Emergency Management

Primary

David Woodbury
Bureau of Law Enforcement
Wisconsin Department of Natural Resources
101 South Webster St.
P.O. Box 7921
Madison, WI 53707-7921
Phone: 608-266-2598
24 hr: 800-943-0003
Pager 608-376-9049
Cell: 608-444-3976
FAX: 608-266-3696
Email: david.woodbury@wisconsin.gov

Alternate

Jerry Haberl
Wisconsin Depart. of Emergency Mgt.
Dept. of Military Affairs
2400 Wright St.
P.O. Box 7865
Madison, WI 53707-7865
Phone 608-242-3213
24 hr: 608-376-1594 (pager)
FAX 608-242-3248
Email: jerry.haberl@wisconsin.gov

For an indexed list of Federal Threatened and Endangered Species, see

http://www.fws.gov/midwest/Endangered/lists/cty_indx.html

References/Acknowledgements

1. Department of Commerce, National Oceanic and Atmospheric Administration, 15 CFR Part 990, Natural Resource Damage Assessment Final Rule. Federal Register Notice, Vol. 61. No. 4, Friday, January 5, 1996.
2. Environmental Protection Agency, 40 CFR Parts 9 and 300, National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule. Federal Register Notice Vol. 59, No. 178, Thursday, September 15, 1994.
3. North Carolina Coastal Areas Wildlife Contingency Plan.
4. U.S. Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants. 50 CFR 17.11 & 17.12. October 31, 1995.
5. U.S. Fish and Wildlife Service Administrative Manual 24 AM 2.
6. U.S. Fish and Wildlife Service Administrative Manual 24 AM 16 - Exhibit A.
7. U.S. Fish and Wildlife Service Administrative Manual 24 AM 16 - Exhibit D.
8. U.S. Fish and Wildlife Service Administrative Manual 24 AM 16 - Exhibit F.
9. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Environmental Response Training Program (Schedule of Courses).
10. U.S. Environmental Protection Agency Region VIII Contingency Plan-Fish and Wildlife Sensitive Environments Annex.

Attachment 1. SAFETY CHECKLIST

PART I. BEFORE FIELD ACTIVITY

1. Employee: _____ Date: _____

2. Site Location: _____

3. Activity Description: Environmental Sampling _____

Reconnaissance _____

Other (describe) _____

4. Type of Response/Site:

Spill _____ Industrial _____ Nonindustrial _____

Rural _____ Suburban _____ Urban _____

Private Lands _____ Refuge _____ Hatchery _____

Other Service Lands _____

5. Site topography:

Mountains _____ River _____ Valley _____

Level _____ Sloping _____

6. Site Accessibility:

Foot only: _____

Road: Good _____ Fair _____ Poor _____

Air: Good _____ Fair _____ Poor _____

7. Suspected chemical(s):

8. Source of chemical(s):

9. First Aid available: Yes _____ No _____

10. If SCBA, identify team members (buddies): _____

PART II. AFTER RESPONSE

1. List possible chemical exposure:

Same as above _____

Other chemicals: _____

Identified or suspected: _____

2. Describe any contact or exposure with chemical: _____

3. Equipment Decontamination: _____

4. Approximate time at site: hr/day _____ for _____ days _____

5. Personal Protective Equipment used:

Gloves _____

Hip Waders _____

Chest waders _____

Other _____

6. Date Part I Prepared: _____

Reviewed by: _____ Date: _____

7. Date Part I Prepared: _____

Reviewed by: _____ Date: _____

Attachment 2. Biological Opinion

Biological Opinion to be provided upon completion.