Maryland-National Capital Area Contingency Plan (MNCR-ACP)

Fish and Wildlife

Annex C

May 2021.3

Record of Changes

Change Number	Change Description	Part Number	Change Date	Name
1				
2				
3				
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5				
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Oiled Wildlife Response Quick Reference Guide

Oiled Wildlife Response Organization Contact Information		
*Note: These numbers should only be used regarding oil spill responses or drills/exercises		
Tri-State Bird Rescue & Research, Inc. (Newark, Delaware) 1-800-261-0980	**International Bird Rescue** (Los Angeles & San Francisco, California) 1-888-447-1743	**Focus Wildlife International** (Anacortes, Washington) 1-800-578-3048

Initial Wildlife Response Steps to Take Within the First 24 Hours of an Oil Spill Response

*Note: These steps should be taken even if no wildlife impacts are readily apparent.
*See Initial Response Actions section for a more extensive list of initial steps.

1. Notify appropriate wildlife trustees that a spill has occurred.
    a. See here for the list of applicable trustees.
2. Alert an Oiled Wildlife Response Organization (OWRO) to notify them that a spill has occurred.
    a. This should be done even if a Wildlife Branch has not been established and the response is not yet ready to contract an OWRO. Early notification allows for more efficient deployment if an OWRO is needed as the response develops.
    b. **Identify who in the response will be authorized to sign a contract if activation of an OWRO is needed.** (See Oiled Wildlife Response Organization Activation section for more details)
3. The Environmental Unit (EU) should initiate a wildlife impact field assessment.
    a. Identify who will carry out the assessment – possibilities include an OWRO, SCAT team, wildlife trustee agencies, etc.
    b. The EU should fill out an ICS 232 Resources at Risk form to identify environmentally sensitive areas, wildlife at risk, and archeo-cultural and socio-economic issues near the spill site.
4. Decide if hazing and deterrence is needed to prevent wildlife from becoming oiled.
    a. Identify who will carry out the hazing and deterrence and ensure they have the proper authorization (see Hazing and Deterrence section for more details).

What Not to Do

1. Do not allow any untrained/unpermitted personnel to capture or disturb wildlife.
2. Do not attempt to decontaminate any oiled wildlife.
3. Do not hire a group to care for oiled wildlife without checking that they meet the requirements described in this annex.

1000 Introduction

This Fish and Wildlife Annex was developed to provide information outlining the responsibilities and actions of the Wildlife Branch during an oil spill response within Sector Maryland-NCR. The information in this section is pertinent even for oil spill situations where wildlife impacts are not readily apparent; oil releases almost always have some effect on wildlife, even if oiled animals are not immediately visible at the spill site.

This contingency plan covers the protocols and guidelines for initiating and sustaining an oiled wildlife response. This contingency plan may be used as a reference by the contracted Oiled Wildlife Response Organization (OWRO); however, it does not replace the years of experience necessary to successfully manage and carry out an oiled wildlife response. This contingency plan will meet the following objectives to facilitate effective and efficient oiled wildlife responses within the Area of Response (AOR) of Sector Maryland-NCR:

- Ensure human health & safety in all aspects of the oiled wildlife response.
- Define what qualifications an OWRO needs to effectively manage an oiled wildlife response.
- Identify species and habitats at risk of harm from oil spills in the AOR of Sector Maryland-NCR.
- Identify facility requirements for oiled wildlife response and identify specific sites that meet those requirements in the AOR.
- Identify roles and responsibilities of individuals in the Wildlife Branch and Environmental Unit according to the Incident Command System.
- Outline initial response actions to ensure a timely and effective wildlife response is initiated, including appropriate notifications to regulatory agencies and key response personnel.
- Describe documentation procedures.
- Describe operations procedures and requirements.
- Describe the process of demobilizing the Wildlife Branch.

This Fish and Wildlife Annex functions as a contingency plan as part of the Sector Maryland-NCR Area Contingency Plan (ACP); in the event of an oil spill an incident-specific Wildlife Management Plan (WMP) should be established according to the specific needs of the response. The WMP should be written by the Environmental Unit of the Planning Section in conjunction with the Wildlife Branch in the Operations Section.

2000 Human Health and Safety

During oiled wildlife response operations, responder safety is paramount. A thorough site survey and hazard assessment should be conducted before the commencement of any operations and an incident-specific Site Safety Plan should be developed (See Section 2200 of the Sector Maryland-NCR ACP). This plan will include a physical description and map of the site and identify hazards, key staff, security procedures, emergency contacts, and required personal protective equipment (PPE).

2100 PPE

All workers must be trained on the proper use and limitations of required PPE prior to using the equipment. Working with oiled wildlife requires the use of PPE specific to the contaminant, such as coveralls, nitrile gloves, and safety glasses. In addition to hazards from oil, other physical hazards may be associated with wildlife rescue activities. For example, additional PPE may be required to protect against bites and scratches, such as leather gloves.

2200 Zoonoses

Zoonoses are diseases that are transmissible between animals and humans, posing risks to the health and safety of humans as well as wildlife patients in care. Examples include rabies, toxoplasmosis, and coccidia. Responders with compromised immune systems, pregnant responders, and elderly responders are more susceptible to these diseases. Steps necessary to mitigate the risks include wearing proper PPE and washing hands thoroughly after handling animals and performing animal husbandry. **Wildlife responders who may come into contact with mammals must have received the pre-exposure rabies vaccine**.

A wildlife veterinarian should be consulted when forming the incident Site Safety Plan and the Wildlife Management Plan to appropriately assess the risk of zoonotic diseases for each response. The veterinarian can help identify appropriate PPE as well as quarantine protocols for the animals in care. Special considerations may need to be taken in times of an outbreak of a wildlife disease, such as Highly Pathogenic Avian Influenza (HPAI).

2300 Job Health and Safety Risks

The following tables identify health and safety risks for the jobs that wildlife staff could perform during an oiled wildlife response. See the Oiled Wildlife Response Organization Qualifications section for additional information on safety training.

Table 1. Job-specific risks for wildlife staff during an oiled wildlife response.

	ICP	Field Operations									Primary Care Center						
		Assess/ Recover				Hazing											
Risk	WBD, Wildlife Spec.	Aerial	Motorized Boat	Canoe\Kayak	Shoreline	Motorized Boat	Canoe\Kayak	Shoreline	Stabilization Facility	Transport	Evidence Mgmt.	Intake/Processing	Washing	Drying	Husbandry	Facility Mgmt.	Volunteer Mgmt.
GENERAL																	
Dehydration	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fatigue/Exhaustion	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stress/Tension	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WORKING IN AN ENCLOSED, POPULATED SPACE																	
Electrocution from power cords	X												X	X			
Excessive noise	X	X	X			X			X	X	X	X	X	X	X	X	X
Eye strain from poor lighting, digital monitors	X										X						
Restricted ability to move/evacuate	X	X	X	X		X	X		X		X	X	X	X	X	X	X
Ergonomic strain	X	X	X	X		X	X		X	X	X	X	X	X	X	X	X
Trip hazards (cords, equipment, etc.)	X								X		X	X	X	X	X	X	X
WORKING OUTDOORS																	
Challenging terrain			X	X	X	X	X	X									
Debris			X	X	X	X	X	X									
Getting lost			X	X	X	X	X	X		X							
Hypothermia			X	X	X	X	X	X	X	X						X	
Incidental wildlife encounters			X	X	X	X	X	X									
Insect bites/stings			X	X	X	X	X	X	X							X	
Lightning		X	X	X	X	X	X	X	X	X		X	X	X		X	
Overheating	X	X	X	X	X	X	X	X	X	X						X	

	ICP	Field Operations								Primary Care Center						
		Assess/ Recover				Hazing										
Risk	WBD, Wildlife Spec.	Aerial	Motorized Boat	Canoe\Kayak	Shoreline	Motorized Boat	Canoe\Kayak	Shoreline	Stabilization Facility	Transport	Evidence Mgmt.	Intake/Processing	Washing	Drying	Husbandry	Facility Mgmt.	Volunteer Mgmt.
Poisonous plants			X	X	X	X	X	X									
Precipitation			X	X	X	X	X	X		X						X	
Sunburn/windburn		X	X	X	X	X	X	X		X						X	
WORKING ON/NEAR WATER																	
Cold-water immersion		X	X	X	X	X	X	X		X							
Currents		X	X	X	X	X	X	X		X							
Drowning		X	X	X	X	X	X	X		X							
Eye strain from glare		X	X	X	X	X	X	X		X							
Fast-moving/powerful water		X	X	X	X	X	X	X		X							
Slippery surfaces		X	X	X	X	X	X	X		X							
Splash/spray		X	X	X	X	X	X	X		X							
Tides		X	X	X	X	X	X	X		X							
WORKING ON AN AIRCRAFT OR BOAT																	
Crash/collision		X	X	X		X	X			X							
Capsizing			X	X		X	X			X							
Hazardous operating area		X	X	X		X	X			X							
Incapacitated pilot		X	X	X		X	X			X							
Motion sickness		X	X	X		X	X			X							
Working around unfamiliar equipment		X	X	X	X	X	X			X							

	ICP	Field Operations								Primary Care Center						
		Assess/ Recover			Hazing											
Risk	WBD, Wildlife Spec.	Aerial	Motorized Boat	Canoe\Kayak	Shoreline	Motorized Boat	Canoe\Kayak	Shoreline	Stabilization Facility	Transport	Evidence Mgmt.	Intake/Processing	Washing	Drying	Husbandry	Facility Mgmt.	Volunteer Mgmt.
WORKING WITH WILDLIFE																	
Getting hit, bit, clawed, scratched, etc.			X	X	X				X	X		X	X	X	X		
Zoonoses			X	X	X				X	X	X	X	X	X	X	X	
SPECIAL OPERATIONS																	
Cuts, burns, shocks from equipment/tools														X		X	
Explosives/flammables						X	X	X									
Ingestion of petroleum products			X	X	X	X	X	X	X		X	X	X		X		
Inhalation of petroleum fumes			X	X	X	X	X	X	X	X	X	X	X		X		
Skin contamination by petroleum products			X	X	X	X	X	X	X		X	X	X		X		
Working in a confined space		X	X			X			X	X							
Working in Level D PPE			X	X	X	X	X	X	X		X	X	X	X			

Table 2. PPE to provide for oiled wildlife responders in the field, during transport, and at the stabilization or primary care center.

PPE Type	FIELD	TRANSPORT	STABILIZATION OR PRIMARY CARE CENTER
Full Face Shield			X
N95 Face Mask		X	X
Safety Glasses/Goggles	X		X
Hard Hat	X		X
Hearing Protection	X		X
PVC Vinyl Apron			X
Nitrile Gloves	X	X	X
Nitrile Gauntlet Gloves			X
Tyvek© Coveralls (DuPont™ Tychem Chemical Resistant)	X	X	X
Fire-resistant Clothing	X	X	X
Personal Flotation Device	X	X	

3000 Species and Habitats at Risk during Oil Spills

3100 Species

Many wildlife species in Sector Maryland-NCR's AOR are at particular risk of harm from oil spills, especially considering the area's position in a major bird migration flyway. This section focuses on species at risk according to input from local wildlife trustees and their status on the federal and/or state Threatened & Endangered (T&E) lists.

Key species are listed in the following table. For a full list of federally listed and state-listed species at risk, including National Marine Fisheries Service (NMFS) species, within Sector Maryland-NCR, click the following links (these lists are subject to change):

Sector Maryland-NCR AOR IPAC List (December 2024)
Maryland Rare, Threatened, and Endangered Species Animal List
Maryland Rare, Threatened, and Endangered Species Plant List
Maryland State Wildlife Action Plan: Maryland's Wildlife and Species of Greatest Conservation Need

Table 3. Key species at risk in the Sector Maryland-NCR AOR.

SPECIES	STATUS
Mammals	
Indiana Myotis (*Myotis sodalis*)	State and Federally Endangered
Northern Long-eared Bat (*Myotis septentrionalis*)	State and Federally Endangered
Delmarva Fox Squirrel (*Sciurus niger cinereus*)	In Need of Conservation
Allegheny Woodrat (*Neotoma magister*)	State Endangered
Appalachian Cottontail (*Sylvilagus obscurus*)	In Need of Conservation
Eastern Small-Footed Myotis (*Myotis leibii*)	State Endangered
Southern Rock Vole (*Microtus chrotorrhinus carolinensis*)	State Endangered
Southern Water Shrew (*Sorex palustris punctulatus*)	State Endangered
Birds	
American Bittern (*Botaurus lentiginosus*)	State Threatened
Coastal Plain Swamp Sparrow (*Melospiza georgiana nigrescens*)	In Need of Conservation
Black Rail (*Laterallus jamaicensis*)	State and Federally Endangered
Royal Tern (Thalasseus maximus)	State Endangered
Common Tern (*Sterna Hirundo*)	State Endangered
Black Skimmer (*Rynchops niger*)	State Endangered
Gull-Billed Tern (*Gelochelidon nilotica*)	State Endangered
Loggerhead Shrike (*Lanius ludovicianus*)	State Endangered
Mourning Warbler (*Geothlypis Philadelphia*)	State Endangered
Nashville Warbler (*Oreothlypis ruficapilla*)	State Threatened
Piping Plover (*Charadrius melodus*)	State Endangered, Federally Threatened
Sedge Wren (*Cistothorus platensis*)	State Endangered
Short-Eared Owl (*Asio flammeus*)	State Endangered

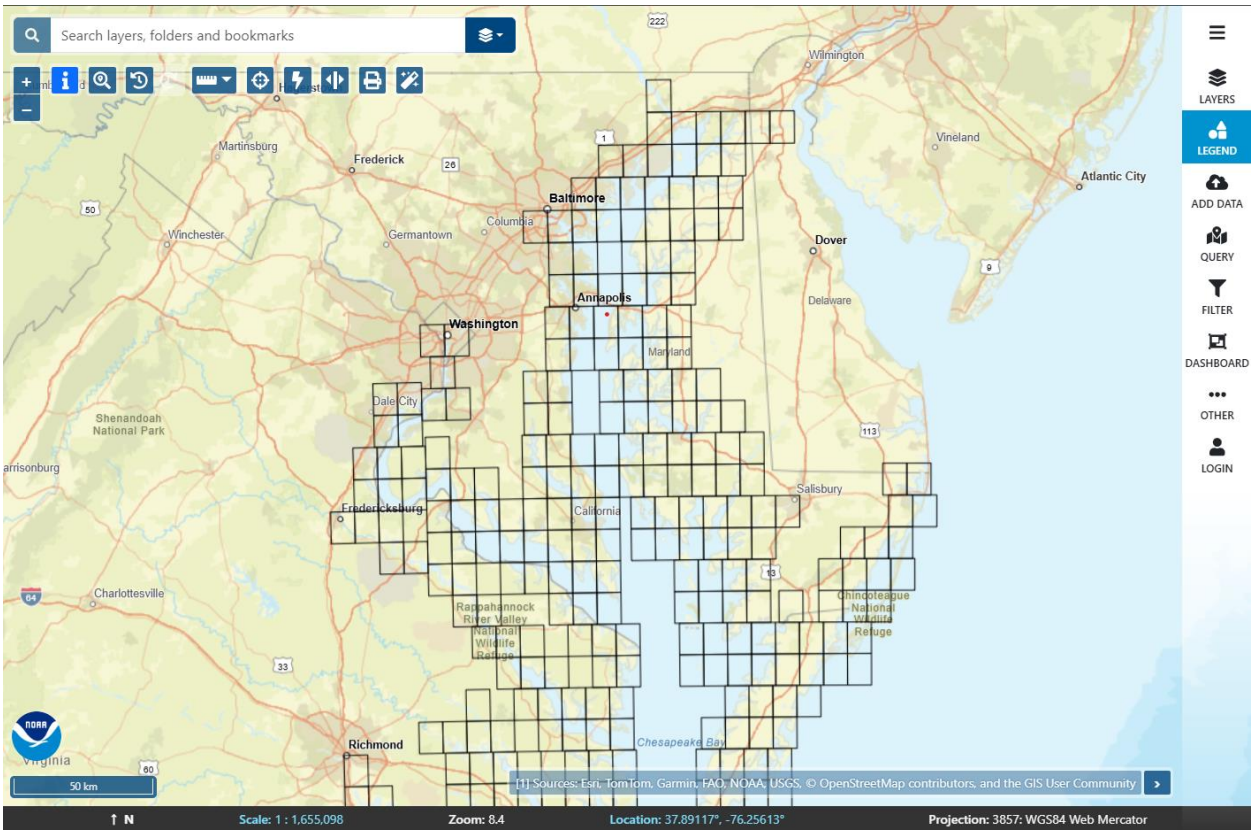
Swainson's Warbler (*Limnothlypis swainsonii*)	State Endangered
Upland Sandpiper (*Bartramia longicauda*)	State Endangered
Wilson's Plover (*Charadrius wilsonia*)	State Endangered
Reptiles	
Bog Turtle (*Glyptemys muhlenbergii*)	State and Federally Threatened
Eastern Spiny Softshell (*Apalone spinifera*)	In Need of Conservation
Kemp's Ridley Sea Turtle (*Lepidochelys kempii*)	State and Federally Endangered
Loggerhead Sea Turtle (*Caretta caretta*)	State and Federally Threatened
Mountain Earthsnake (*Virginia valeriae pulchra*)	State Endangered
Rainbow Snake (*Farancia erytrogramma*)	State Endangered
Northern Coal Skink (*Plestiodon anthracinus*)	State Endangered
Northern Map Turtle (*Graptemys geographica*)	State Endangered
Amphibians	
Mountain Chorus Frog (Pseudacris brachyphona)	State Endangered
Barking Treefrog (*Hyla gratiosa*)	State Endangered
Eastern Hellbender (*Cryptobranchus alleganiensis*)	State Endangered
Eastern-Narrow Mouthed Toad (*Gastrophryne carolinensis*)	State Endangered
Green Salamander (*Aneides aeneus*)	State Endangered
Fishes	
American Brook Lamprey (*Lethenteron appendix*)	State Threatened
Atlantic Sturgeon (*Acipenser oxyrinchus*)	State and Federally Endangered
Chesapeake Logperch (*Percina bimaculate*)	State Threatened
Blackbanded Sunfish (*Enneacanthus chaetodon*)	State Endangered
Flier (*Centrarchus macropterus*)	State Threatened
Glassy Darter (*Etheostoma vitreum*)	State Threatened
Ironcolor Shiner (*Notropis chalybaeus*)	State Endangered
Pearl Dace (*Margariscus margarita*)	State Threatened
Shortnose Sturgeon (*Acipenser brevirostrum*)	State and Federally Endangered
Stonecat (*Noturus flavus*)	State Endangered
Stripeback Darter (*Percina notogramma*)	State Endangered
Striped Shiner (*Luxilus chrysocephal us*)	In Need of Conservation
Insect	
Rusted Patched Bumblebee (*Bombus affinis*)	State and Federally Endangered
Northeastern Beach Tiger Beetle (*Cicindela dorsalis dorsalis*)	State Endangered, Federally Threatened
Puritan Tiger Beetle (*Cicindela puritana*)	State Endangered, Federally Threatened

3200 Habitats

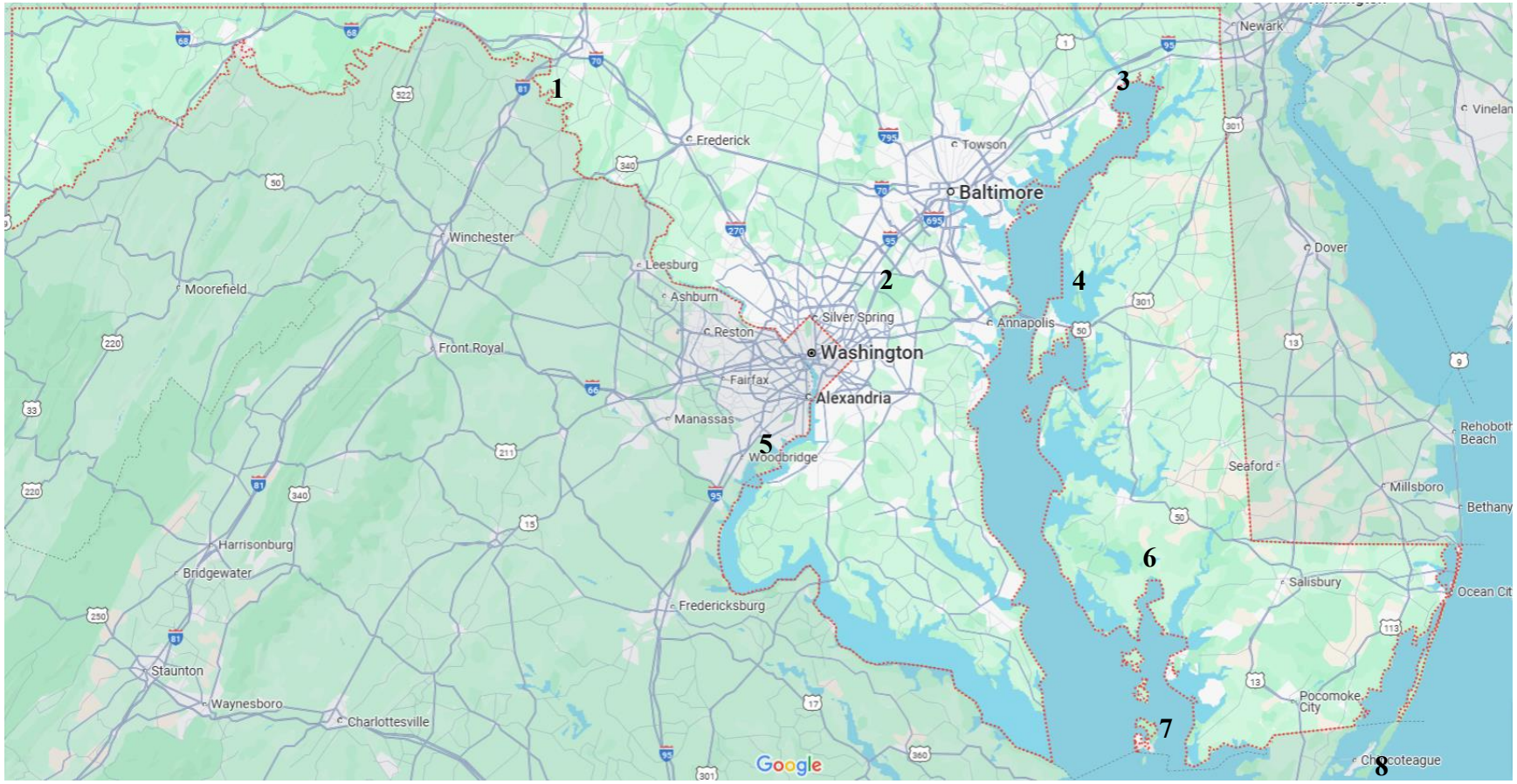
A habitat is considered at risk of harm from oil spills if it is particularly sensitive to damage, hosts a wide variety of organisms, or acts as key habitat for a T&E species. The following maps depict locations that are considered at risk and should be treated with special consideration to prevent damage during oil spills.

More information on Maryland's key habitats can be found in the Maryland State Action Plan: Maryland's Key Wildlife Habitats.

Below is an ESI (Environmental Sensitivity Index) Bio Index map of the Chesapeake Bay from the Environmental Response Management Application (ERMA). An interactive map can be accessed through the ERMA online mapping tool. Each section will produce a PDF with the mapped biological resources, including species and habitat type.

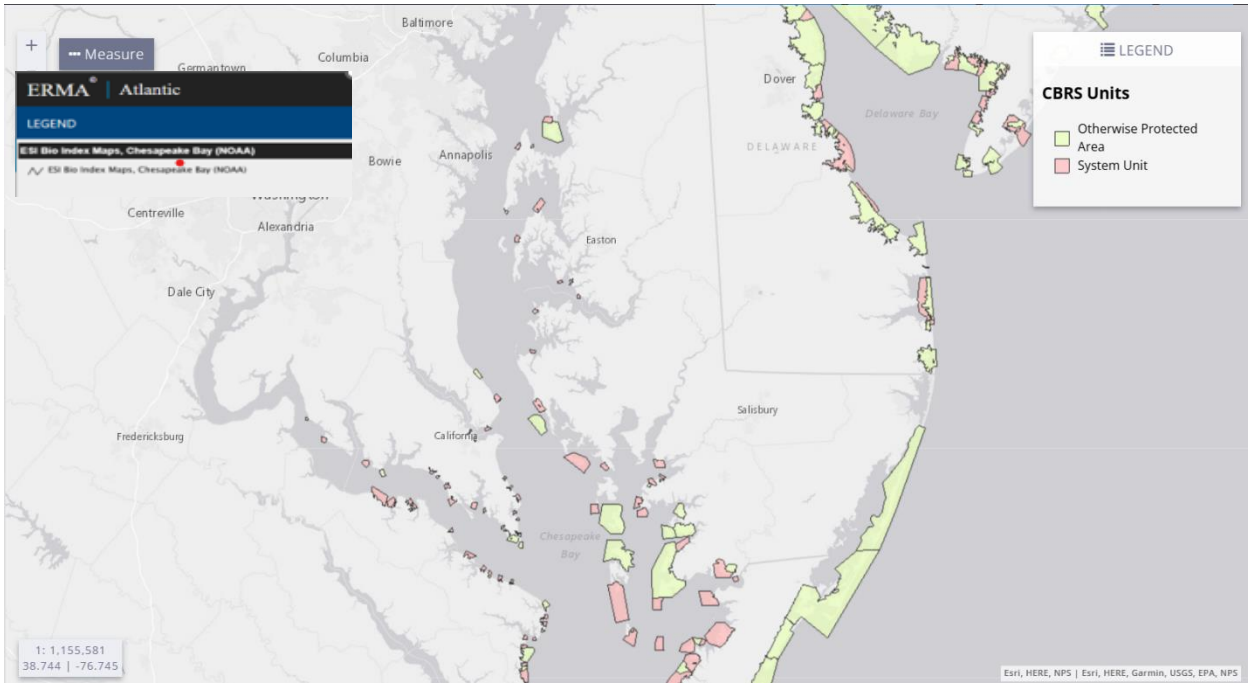


Below is a map of the wildlife refuges within and just outside Sector Maryland-NCR's AOR.



1- National Conservation Training Center	5- Elizabeth Hartwell Mason Neck National Wildlife Refuge
2- Patuxent Research Refuge	6- Blackwater National Wildlife Refuge
3- Susquehanna National Wildlife Refuge	7- Martin National Wildlife Refuge
4- Eastern Neck National Wildlife Refuge	8- Chincoteague National Wildlife Refuge

Below is a map of the approximately 63 coastal barriers in Sector Maryland- NCR's AOR. An interactive map can be accessed through the Costal Barrier Resources System Mapper.



4000 Oiled Wildlife Response Organization Qualifications

Oiled wildlife response requires specific skills, equipment, certifications, and experience to conduct operations safely and effectively. While local wildlife rehabilitators may be an excellent resource during an oil spill because of their expertise with wildlife in the area, most rehabilitators do not specialize in oiled wildlife response. To ensure that the oiled wildlife response goes as smoothly as possible, the Oiled Wildlife Response Organization (OWRO) contracted to manage the response should meet the criteria discussed in this section.

4100 Permits

State and federal permits may be required for various aspects of the oiled wildlife response. To legally carry out the required response activities, the OWRO must either preemptively hold the necessary permits or be granted the permits by the appropriate authority at the time of the spill. See the following tables for specific permit information.

Table 4. Permit information for oil spill response activities: **Migratory birds.**

ACTION	PERMIT NAME	AUTHORIZING LAW OR REGULATION	DETAILS
Hazing/Deterrence	Hazing Permit Incidental Take Permit	Endangered Species Act, Section 10(a)(1)(B)	Special permission is required to "take" endangered species
	Hazing Permit Eagle Take- Associated with, but not the Purpose	Bald and Golden Eagle Protection Act, 50 CFR 22.80	Bald and golden eagles have special protections under this act

	of, an Activity (Incidental Take)		
	Local wildlife trustees should be consulted prior to hazing to ensure the proper protocols, trainings, and certifications are in place.		
Capture and Transport	Migratory Bird Scientific Collecting Permit	Migratory Bird Treaty Act, 50 CFR 21.73	Federal Permit
	Eagle Scientific Collecting Permit	Bald and Golden Eagle Protection Act, 50 CFR 22.50	Federal Permit
	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08	
Decontamination and Rehabilitation	Migratory Bird Rehabilitation Permit	Migratory Bird Treaty Act, 50 CFR 21.76	Federal Permit, including eagles
	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08	
Banding	US Federal Bird Banding and Marking Permit	50 CFR 10 General Provisions, 50 CFR 13 General Permit Procedures and 50 CFR 21 Migratory Bird Treaty Act	No additional state permit needed to band migratory birds in MD

Table 5. Permit information for oil spill response activities: **Terrestrial mammals.**

ACTION	PERMIT NAME	AUTHORIZING LAW OR REGULATION	DETAILS
Hazing/Deterrence	**Local wildlife trustees should be consulted prior to hazing to ensure the proper protocols, trainings, and certifications are in place.**		
	Hazing Permit Incidental Take Permit	Endangered Species Act, Section 10(a)(1)(B)	Special permission is required to "take" endangered species
Capture and Transport	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08, Restriction on Species § 08.03.12.19	
Decontamination and Rehabilitation	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08, Restriction on Species § 08.03.12.19	
Rabies Vector Species	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08, Restriction on Species- § 08.03.12.19,	Must be a Master Rehabilitator with the proper completion of RVS application, RVS workshop, and pre-

		Incorporation by Reference- § 08.03.12.03	exposure rabies vaccines

Table 6. Permit information for oil spill response activities: **Reptiles and amphibians (not including sea turtles).**

ACTION	PERMIT NAME	AUTHORIZING LAW OR REGULATION	DETAILS
Hazing/Deterrence	**Local wildlife trustees should be consulted prior to hazing to ensure the proper protocols, trainings, and certifications are in place.**		
	Hazing Permit Incidental Take Permit	Endangered Species Act, Section 10(a)(1)(B)	Special permission is required to "take" endangered species
Capture and Transport	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08	
Decontamination and Rehabilitation	Maryland Wildlife Rehabilitation Permit	MD Code § 08.03.12.01-24, T&E Species- § 08.03.08	

Table 7. Permit information for oil spill response activities: **Sea turtles and marine mammals**.

ACTION	PERMIT NAME	AUTHORIZING LAW OR REGULATION	DETAILS
Hazing, Capturing, Transporting, and Cleaning Marine Mammals	112(c) Authorization, Stranding Agreements	Marine Mammal Protection Act	NOAA, NMFS Federal Permit
	109(h) Authorization, Rehabilitation	Marine Mammal Protection Act	
	Hazing Permit Incidental Take Permit	Endangered Species Act, Section 10(a)(1)(A) Marine Mammal Protection Act, 16 U.S.C. 1362	Special permission is required to "take" endangered species
Hazing, Capturing, Transporting, and Cleaning Turtles	On land, Endangered Species Permit TE-697823	Endangered Species Act; 50 CFR 222.310 and 50 CFR 223.206	USFWS Federal Permit
	Incidental Take Permit	Endangered Species Act, Section 10(a)(1)(B)	Special permission is required to "take" endangered species NOAA Federal Permit

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4100 Personnel Training and Certifications

In order to work with wildlife that is contaminated with petroleum products, personnel should have the appropriate level of hazardous material training, as defined by 29 CFR 1910.120 and as identified by the incident Safety Officer.

- Personnel working directly with oiled animals, in the field or at a care center, should have a **24-hour Hazardous Waste Operations and Emergency Response (HAZWOPER)** certification, with an annual **8-hour refresher HAZWOPER** course.
- Personnel working in a support or administrative role (i.e. not in contact with any oiled animals) should have a **Hazardous Communications (HazCom)** certification.
- Personnel working remotely do not need a hazardous material certification.

In addition to hazardous material training, personnel should have training and experience relevant to the animal care they will be doing. This includes experience with animal field capture, animal handling, administering medical treatments, performing exams, and decontaminating animals, among many others. See Table 8 for specific trainings that wildlife personnel should have completed prior to the response.

OWRO staff and volunteers who have not had sufficient training prior to responding to an oil spill may receive on-site just-in-time training conducted by an individual with prior response experience, in coordination with the incident Safety Officer; alternatively, these individuals may be assigned less hazardous duties appropriate to their current level of training.

Table 8. Trainings and certifications required or recommended for wildlife personnel.

Training	HAZWOPER	ICS 100-300	Aircraft Safety	Boating Safety	Firearm Safety	First Aid/CPR	Animal Handling	Basic Wildlife Rehabilitation	Animal Washing	Crisis Management
Personnel										
Wildlife Branch Management	R	R	-	-	-	H	H	H	H	H
Initial Field Assessment	R	H	H	H	-	H	-	-	-	-
Hazing and Deterrence	R	H	-	H	H	H	-	-	-	-
Field Capture and Transport	R	H	-	H	-	H	R	H	-	-
Primary Care Center and Stabilization Facility Workers	R	H	-	-	-	H	R	H	H	-

R = Required Training
H = Highly recommended for establishing best practices

4200 Veterinary Requirements

Oiled wildlife response requires the oversight of a licensed wildlife veterinarian because of the host of health issues caused by petroleum exposure; furthermore, Maryland requires permitted wildlife rehabilitators to work with a veterinarian. A veterinarian must have a current Drug Enforcement Administration license in order to use controlled substances, which are often critical

for adequate veterinary care of oiled wildlife. This includes the use of euthanasia solution, which must be readily available during oiled wildlife responses in order to perform humane euthanasia at the discretion of a veterinarian.

Wildlife disease management is also a concern during oiled wildlife responses; involving a wildlife veterinarian in the response can be a critical factor in establishing adequate disease monitoring, prevention, and containment protocols. State wildlife veterinarians may also need to be involved in the response if there is an active outbreak of a disease of concern (for example, HPAI).

4300 Volunteers

Unpaid volunteers may be involved in an oiled wildlife response. These individuals are subject to the same training requirements listed above. Just-in-time or convergent volunteers may be utilized, but they must receive adequate training at the time of the response to meet these requirements. The OWRO should also have adequate liability insurance that includes coverage for volunteers.

4400 Other Requirements

The contracted OWRO should have adequate knowledge and experience with the various aspects of an oiled wildlife response, including the following: ICS positions, facility requirements, documentation and communication within the ICS, identification of oiled wildlife in the field, field capture of oiled wildlife, transporting oiled wildlife, and communicating appropriately with the media, etc.

5000 Facility Requirements and Identification

Oiled wildlife responses require facilities with specific characteristics to effectively stabilize, decontaminate, and rehabilitate contaminated wildlife. This section will discuss the requirements for two types of oiled wildlife facility, a Stabilization Facility and a Primary Care Center, and will list some facilities that meet these requirements in the Sector Maryland-NCR AOR.

5100 Stabilization Facility

A Stabilization Facility may not be needed in every oil spill response. If a Primary Care Center cannot be located within a 2-hour drive of the spill site or if the animals recovered from the spill site are especially debilitated, an on-site or nearby Stabilization Facility will be established. A Stabilization Facility could be in the form of a brick-and-mortar building, a mobile trailer, or a field tent, depending on the incident circumstances (note – the OWRO may need assistance from the Logistics Section to source a Stabilization Facility, especially if a trailer or tent is desired). Stabilization Facilities require the following characteristics:

- Private shelter with protection from the elements and restricted access from the public
- Temperature control
- Ventilation
- Electricity
- Adequate space for patients in their transport carriers
- Adequate space for a treatment area

The goal of a Stabilization Facility is to provide supportive care (i.e. emergency treatments, fluid therapy, normalizing body temperature) for patients who are extremely debilitated and/or will be traveling a long distance to the Primary Care Center. This supportive care can drastically increase a patient's chance of survival, as the initial 24-48 hours of care are most critical for an oiled animal. The Stabilization Facility should be staffed by OWRO personnel or personnel who have been trained by the OWRO to stabilize oiled wildlife.

5200 Oiled Wildlife Response Facility/Primary Care Center

The ideal location for the Primary Care Center is rarely at the spill site; under certain circumstances the center can be located several hours away from the spill site. A facility's ability to safely provide medical and rehabilitative care is more important than its proximity to the spill site. In remote areas or locations where an adequate facility cannot be identified within a 2-hour drive of the spill site, temporary stabilization sites may be required to ensure that appropriate emergency care is provided for wildlife prior to transport (see above).

Primary Care Center requirements can vary significantly, depending on the following:

- Overall scale of the spill and potential wildlife impact
- Species and age of wildlife affected
- Geographic location
- Season/weather
- Type of contaminant(s)

Facility requirements can vary significantly depending on the circumstances of the incident; therefore, a permanent facility (for example, a local wildlife rehabilitator's facility) is not always advisable and may actually be an impediment in providing the appropriate facility design for the situation.

A suitable Primary Care Center will possess the following characteristics:

- A large, open floor space (**~3,000ft^2**)
    - A large, open floor space allows responders to easily reconfigure equipment as the needs of a response change. Plastic sheeting (4 mil) is secured to the floor of the facility with painter's tape in areas where animals will be housed to protect the floor and for ease of clean up during demobilization.
- Adequate HVAC system
    - The HVAC system must be able to maintain the temperature of the open floor space between **70°F and 80°F**. To protect responders and patients from toxic contaminant fumes, an HVAC system capable of up to 10 air exchanges per hour is ideal.
- Reliable water supply
    - A response can use up to **7,000 gallons per day**. Water may be used for drinking water for responders, care for patients, or decontamination. Water used for

decontamination will be contained within a containment berm and pumped into oily waste water containers.

- Reliable power
    - Oiled wildlife response can require many pieces of equipment including refrigerators/freezers, medical equipment, power tools, pool pumps, and washers/driers. The facility needs to have an adequate number of outlets and the ability to handle the power draw of running much or all of the need equipment simultaneously.
- Adequate parking
    - Oiled wildlife response is resource intensive and one of the most important resources is people. Personnel needs fluctuate as a response progresses and can be significant. **Parking for up to 50 responders is desirable.**
- Security
    - Security is necessary to restrict/control access to the facility and prevent unauthorized individuals from accessing response operations. This protects unauthorized visitors from hazards associated with spill response, protects responders/patients from unauthorized visitors, and ensures that your property is protected.
    -

5300 Pre-Identified Facilities

Pre-identifying real estate that may be suitable for oiled wildlife response within the AOR will help expedite an oiled wildlife response. Each location should be thoroughly surveyed, ideally by an OWRO, using a *Facilities Checklist* such as the following: Facility Survey Checklist.

As of March 2025, the following facilities have been identified as possible Stabilization Facilities and/or Primary Care Center (please note that response personnel will need to determine the facility availability and establish terms of use with the facility managers at the time of a spill):

- **Allegany County, MD Maintenance Garage.** 701 Kelly Rd, Cumberland, MD 21502. (240) 727-2961. Adam Patterson, adam.patterson@alleganygov.org.
    - Suitable for small-medium scale responses involving birds, reptiles, amphibians, and terrestrial mammals.
- **Tri-State Bird Rescue & Research, Inc.** 170 Possum Hollow Rd, Newark DE 19711. (302) 737-9543.
    - Suitable for small-large scale responses involving birds, reptiles, amphibians, and terrestrial mammals.
    - Note: TSBRR is not within Sector Maryland-NCR's AOR but could be the best option for a Primary Care Center. A Stabilization Facility would likely need to be established closer to the spill site so that animals could receive stabilizing treatments before being transported to TSBRR.

5400 Pre-Release Conditioning

Occasionally the Primary Care Center will not be suitable for long-term care for decontaminated patients that need intensive pre-release conditioning. In these cases, patients will need to be transferred to another facility that suits their long-term needs. See the International Wildlife Rehabilitation Council/National Wildlife Rehabilitators Association *Standards for Wildlife Rehabilitation* for housing, rehabilitation, and conditioning standards for each taxon of wildlife. These standards are particularly important to follow to ensure that aviaries and pools are adequate to condition seabirds for release.

Local rehabilitation facilities within or near the Sector Maryland-NCR AOR are listed below with the taxa they can care for and short or long-term housing capabilities.

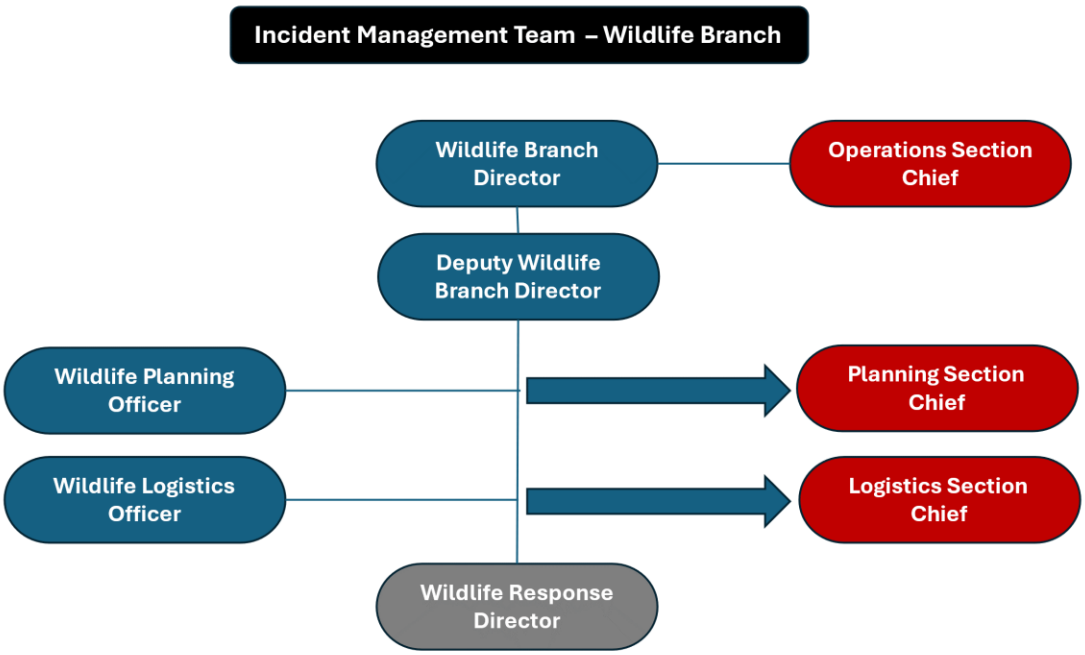
- Tri-State Bird Rescue & Research, Newark, DE
  - Avian[2], Mammal[2], Reptiles[2], Amphibians[2]
- National Aquarium, Baltimore, MD
  - Marine Mammals[1], Sea Turtles[2]
- National Aquarium Animal Rescue Stranding Response Center, Ocean City, MD
  - Marine Mammals[1]
- Marine Education Research and Rehabilitation (MERR) Institute, Lewes, DE
  - Marine Mammals[1], Sea Turtles[1]
- Second Chance Wildlife Center, Gaithersburg, MD
  - Avian[2], Mammal[2], Reptiles[2], Amphibians[2]
- Phoenix Wildlife Center, Baldwin, MD
  - Avian[2], Mammal[2], Reptiles[2], Amphibians[2]

[1]Short-term, [2]Both short-term and long-term

6000 Incident Command Structure

6100 Wildlife Response

In the event of a spill or threat of a spill occurring within Sector Maryland-NCR's AOR impacting or potentially impacting the environment, a Unified Command shall be activated. The Incident Management Team will be responsible for initiating an oiled wildlife response. Wildlife response actions will comply with NIMS-ICS standards and follow a Wildlife Branch organization structure.

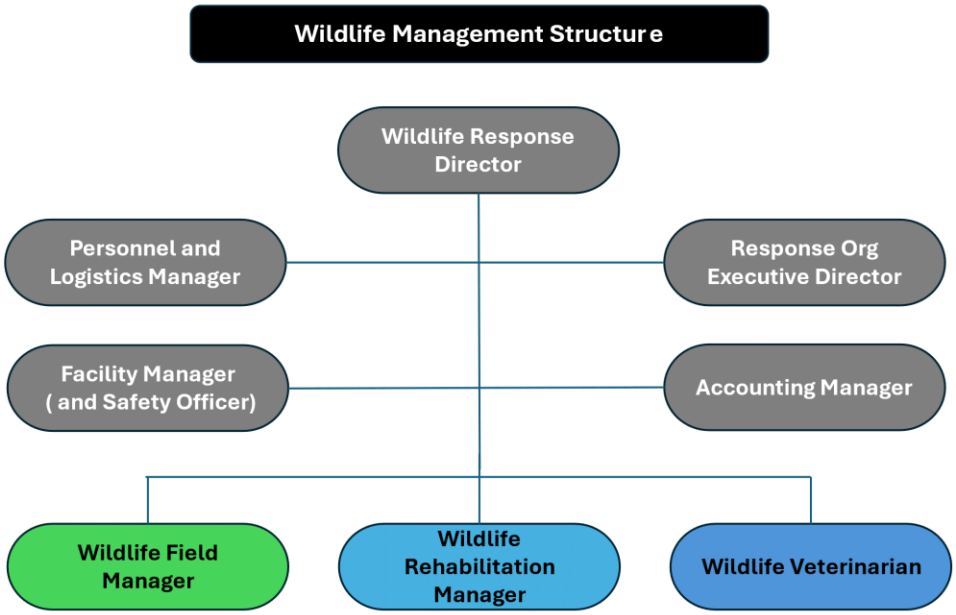


Wildlife Branch staff will coordinate with personnel from the Operations Section, Logistics Section, Planning Section (Environmental Unit), and Finance Section as needed to advocate for and represent Wildlife Branch needs. Resource requests will be submitted through the Logistics Section using ICS 213RR forms. All financial activity will be documented and submitted through the proper channel; this may be through the Finance Section or directly through the RP depending on the structure of the response and how the OWRO was contracted in to the response.

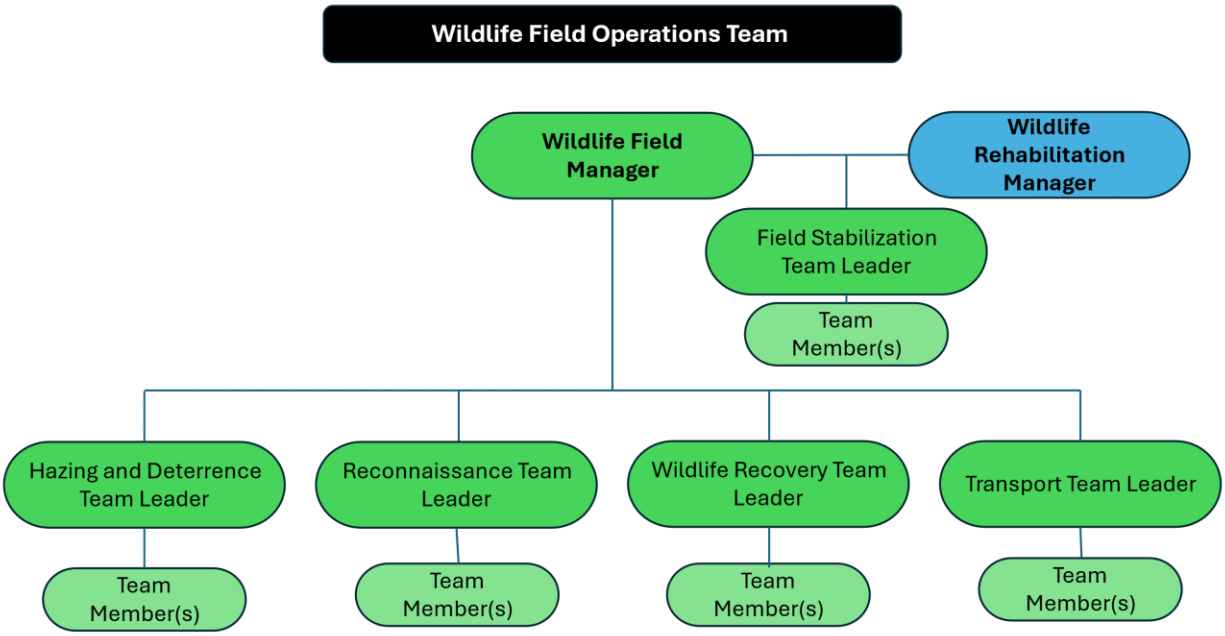
The Wildlife Branch will be part of the Operations Section. Depending on the magnitude of the wildlife response, additional command staff may be required within the Wildlife Branch. Command staff may include:

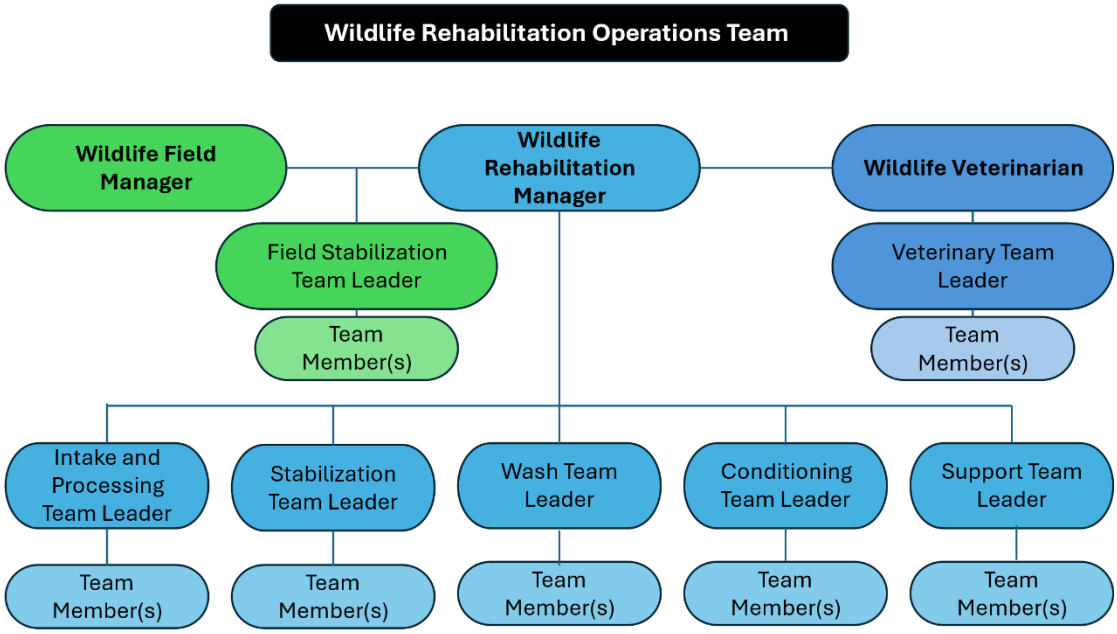
- Assistant Safety Officer for Wildlife
- Assistant Liaison Officer for Wildlife
- Public Information Officer for wildlife-related issues

For smaller and/or simpler responses, the Wildlife Branch Director may also operate as the Wildlife Response Director. For larger and/or more complex responses, both positions may need to be staffed. The Wildlife Branch Director will operate in the Incident Command Post and will direct the Wildlife Planning Officer, Wildlife Logistics Officer, and the optional command staff listed above. The Wildlife Response Director will operate in the Primary Care Center and will direct the individuals shown in the chart below.



The following charts illustrate the structures of the wildlife field operations and wildlife rehabilitation operations. Please note that these structures are scalable and may be adjusted based on the needs of the response; smaller and/or less complicated responses may have individuals fulflilling multiple roles.





7000 Initial Response Actions

7100 Response Priorities

Response activities are prioritized to ensure an effective wildlife response. The following activities shall be initiated within the first 24-48 hours of an incident:

- Conduct notifications to wildlife trustees.
- Mobilize an OWRO.
    - Once mobilized, an OWRO can handle most, if not all, of the rest of these initial response priorities.
- Initiate a wildlife impact assessment, including completing an ICS 232 Resources at Risk form.
    - If endangered species are present within the area of impact, an Endangered Species Consultation must be initiated as according to 50 CFR 402.
- Mobilize and deploy wildlife equipment, supplies, and additional OWRO personnel.
- Develop and implement an incident and species-specific Wildlife Deterrents (Hazing) Plan.
- Develop an incident-specific Wildlife Management Plan.
- Ensure that required federal and state permits are in place or that applications for appropriate permits are submitted.
- Establish a “1-800” oiled wildlife reporting hotline.
- Identify regional resources needed for a wildlife response and initiate establishment of required oiled wildlife care facilities.

- Conduct reconnaissance and recover carcasses to reduce secondary contamination of wildlife.

7200 Notifications

In the event of an oil spill (or other relevant contaminant) that has impacted wildlife, or has the potential to impact wildlife, a representative from Sector Maryland-NCR should ensure notification is provided to the United States Fish and Wildlife Service and any additional local wildlife trustees. These regulatory agencies have authority over wildlife and other resources at risk. Local wildlife trustees in the AOR of Sector Maryland-NCR include:

- Maryland Department of the Environment
- Maryland Department of Natural Resources- Wildlife and Heritage Service
- Administrators for state or federally-managed natural areas affected by the spill
- Department of Interior Regional Environmental Officer
    - John Nelson (PA, DE) – Philadelphia Regional Office, (215) 597-5378
- US Fish & Wildlife Service Regional Spill Response Coordinator
    - Margret Byrne, USFWS Northeast Region 5, (413) 253-8593

7300 Oiled Wildlife Response Organization Activation

There are a few ways to contract an OWRO during an oil spill response.

- The Responsible Party (RP) may contract directly with the OWRO.
    - This is typically the fastest and most efficient method.
- If the RP is not determined and the USCG is opening the Oil Spill Liability Trust Fund, the OWRO will typically be sub-contracted through an Oil Spill Response Organization (OSRO).
    - If the OWRO holds a Basic Ordering Agreement (BOA) with the USCG, the OWRO can be contracted directly through the USCG.
- If an agency (e.g. USFWS, EPA) has requested that an OWRO be activated, then the funding will need to be determined on a case-by-case basis.

To activate Tri-State Bird Rescue & Research's (TSBRR) Oiled Wildlife Response Team, please call the following 24-hour emergency contact hotline: **(800) 261-0980.**

Use this number ONLY to notify TSBRR of an oil spill or oil spill drill/exercise.

For non-emergency situations please contact:

Main Office: **(302) 737-9543 x 121** Email: **oilprograms@tristatebird.org**
The caller shall be prepared to provide the OWRO with appropriate contact information and a synopsis of the incident. This includes the type of contaminant and amount spilled, type and number of animals affected, and type of habitat affected.

The OWRO along with the Environmental Unit and Operations Section Chief will determine the best path forward for wildlife response operations.

7400 Oiled Wildlife Reporting Hotline

An appropriate interface with the public shall be established. In most cases this will be in the form of a Wildlife Observation Reporting Hotline which will collect information on impacted wildlife sightings from the public and receive and record sightings from response personnel.

The Hotline shall be staffed with appropriate personnel representing USCG Maryland-NCR. The Wildlife Branch will provide the Hotline personnel with approved messaging about the wildlife response to convey to callers from the public. Messaging will instruct callers not to attempt capture of the animal due to health and safety concerns for both the individual and the animal. Observation data from callers will be recorded and communicated to the Situation Unit and Wildlife Branch for assessment and subsequent action.

The Wildlife Observation Reporting Hotline number and messaging shall be included in daily work assignments (***ICS-204***) ensuring that observations made by response personnel are reported, documented and communicated to the Wildlife Branch in a similar fashion.

Additionally, appropriate messaging will be developed and provided to the Joint Information Center or Public Information Officer to release as media notices.

8000 Documentation

8100 Data Collection and Chain of Custody Records

All wildlife data collected will be important for documenting ongoing response efforts and meeting evidentiary requirements. These data may also be incorporated into Natural Resource Damage Assessment activities. During the initial phase of a wildlife response the Unified Command, wildlife trustees, and the OWRO shall agree on all the documentation procedures before commencing wildlife recovery efforts. All responders shall adhere to the procedures throughout the response. All team members shall be briefed on appropriate methods to record and store the data they are required to collect.

8200 Wildlife Field Observations

The wildlife field teams will record animal sightings (both impacted and non-impacted) and any pertinent information about field activities as they relate to wildlife. Wildlife field observations can be recorded on paper (see Figure 1 for a sample field survey) or digitally using the United States Fish & Wildlife Service (USFWS) Wildlife Response Survey through Survey 123. All forms must include the following information:

- Field team members
- Contact information for field team
- Location where the field team worked (GPS coordinates, detailed landmarks)
- Method of survey (e.g. on foot, boat, car, etc.)
- Time and date
- Incident name

Photographic documentation generated during field operations should be submitted to the Documentation Unit daily. When possible, written documentation should accompany photographs (location, description of why photograph was taken, etc.).

8300 Chain of Custody Forms

At the onset of any oiled wildlife response effort local the USFWS Field Spill Response Coordinator (FSRC) should be consulted for incident-specific Chain of Custody procedures. In the absence of immediate input, the following general procedure should be practiced with due diligence.

Once an impacted animal is collected, the recovery team shall begin a chain of custody form. This form should include the following information:

- Field team members
- Contact information
- Location of collection (preferable GPS coordinates)
- Species (if known)
- Time and date animal was collected
- Incident name
- Indication of whether the animal is dead or alive
- Indication of whether the animal is oiled or not

This form must stay with the individual animal at all times. Forms should be placed in a plastic Ziploc® bag and attached to the animal's transport carrier. If possession changes hands, then the form must be signed (signature, date and time) by the person who is relinquishing custody. The person receiving custody must also sign the form (signature, date and time) and his / her contact information must be added to the form. Both parties shall retain a copy of the form. Carcasses should only be given to people with the authority to have possession.

Custody forms for live animals should be filed systematically once the animal arrives at the Stabilization Facility or Primary Care Center. All forms for carcasses should be attached to the carcass, unless asked to do otherwise by the law enforcement agent in charge of evidence. Depending on the species, status, and retrieval location there may be multiple agencies with law enforcement representation. Incident-specific protocols may be amended based on jurisdiction of agencies.

8400 Individual Animal Logs

All live animals recovered by the field teams will be assigned a case number unique to the incident and an individual animal case record will be started for each animal upon arrival at the Stabilization Facility or Primary Care Center. A case number for each animal should be generated from a running tally and recorded on the animal's log. The case number will be the animal's identification while in the rehabilitation facility. The animal's log will follow the progress of the individual from the initial intake through release. Significant information will be recorded about the animal's

health and rehabilitation status; anyone writing on the form is required to sign and date their additions.

Collected carcasses will also receive a unique number generated from a morgue log and will be recorded on the chain of custody form. Any additional information that might be required can be added to the chain of custody form. All individuals adding information to the chain of custody form must sign and date their additions.

8500 Animal Evidence Samples

Evidence samples shall be collected from all animals (live and carcasses) arriving at the facility. Law enforcement representatives with appropriate jurisdiction should be consulted at the onset of wildlife efforts on what samples to collect, who can take the samples, how to label the samples and how to store the samples.

Samples at a minimum should include the following information:

- Date and time of collection
- Sample type
- Incident name
- Species
- Case number
- Collector's name

During the admission process photographs will be taken of each animal or carcass, including a tag with the date, time, species, case number and temporary band ID number, and incident name in large, black letters. The original data cards containing photographs should be given directly to law enforcement or securely stored when not in use. Additionally, data on any card designated for evidence should never be shared or downloaded to another device.

Law enforcement must also approve carcass storage methods. Incident specific protocols may be amended based on jurisdiction of agencies. For more details, refer to the US Fish & Wildlife Service *Best Practices for Migratory Bird Care during Oil Spill Response*.

8600 Daily Reports

Daily summaries are submitted by the OWRO to summarize activities performed, impacted wildlife collected, patients currently in care, patients transferred, patients released, etc. This report is submitted to the members of the Incident Command Post. This report can be used to plan for the next operational period.

Daily briefings will also be conducted prior to every shift at the Stabilization Facility and/or Primary Care Center, typically in the morning and mid-day. The Wildlife Response Director and Site Safety Officer will brief all OWRO personnel on safety considerations, work assignments, and general response updates.

8700 Medical Records

The OWRO will be responsible for medical documentation of all animals collected, live and deceased. They may have their own digital/web-based data/reporting system like *Wildlife Rehabilitation MD (WRMD)* or they may keep paper records for each patient. Patient medical records will follow the animal from their initial exam until final disposition. Medical records should be kept secure whether digital or paper as they may be needed by law enforcement as evidence.

9000 Wildlife Branch Operations

9100 Assessment and Survey

9110 Prioritization of Sensitive Species/Habitats

Oiled wildlife response operations must first start with a thorough assessment of the species at risk and sensitive habitats, as the loss of endangered/threatened species is one of the biggest environmental concerns following an uncontrolled release of contaminants. Assessment strategies are determined based on a combination of the origin/location of the spill, projection of the spill, and sensitive species/habitats at risk (see Species and Habitats at Risk section above). Booming, skimming and physical control of oil acts as the first line of defense, but proper assessment of all species and habitats are necessary for the mitigation and prevention of wildlife impacts by an oil spill. The OWRO will consult with wildlife trustees and/or SCAT (Shoreline Clean-up and Assessment Technique) teams to coordinate viewing of these habitats.

9120 Survey Methods

Reconnaissance surveys should be utilized as soon as possible following the release of a spill so that the number, location, and type of species affected can be determined and relayed to key response personnel, including the Wildlife Branch Director, Environmental Unit Leader, and Situation Unit Leader. The location and number of wildlife (alive, dead, oiled and unoiled) should be plotted on a map; digitized maps are preferred, such as ERMA and Survey123 for multi-agency access to the information obtained during survey operations. The scope and frequency of subsequent surveys will be incident-specific.

Personnel performing surveys must be able to properly identify species, interpret behavioral characteristics that may indicate oiling (e.g. excessive preening, loafing and beaching from exhaustion/hypothermia, etc.), and have local knowledge of habitats and ecology. Utilizing a combination of OWRO staff, skilled observers, and volunteers will ensure an overall successful operation. All survey methods and operations must be authorized and coordinated through the Operations and Logistics Section. Examples of different survey methods are:

- Aerial Surveys – Helicopter, fixed wing aircraft, and drones
- Active Ground Surveys – Automobile, boats, on-foot patrol
- Passive Ground Surveys – Game cameras and monitoring equipment

9130 Data Collection

Data collected from wildlife surveys are essential for determining next steps and tracking numbers and movement of species (both oiled and at-risk of oiling). This information is necessary to

determine the proper implementation of wildlife field operations. After a survey, the information will be relayed to the Wildlife Branch Director, Environmental Unit, and Situation Unit to discuss next steps. This may involve pre-emptive capture of un-oiled but at-risk species, development of a hazing/deterrence plan, and priorities for physical capture of oiled wildlife. See the Documentation section of this annex for more information on data collection.

9200 Hazing and Deterrence

9210 Authorizations

A deterrence plan that employs many different methods of both audio and visual stimuli to dissuade animals from entering an at-risk area can be extremely helpful in prevention of oiled wildlife. The various methods and tools used can require certain permits, licenses, and trained operators. All deterrence activities will require authorization from appropriate natural resource management.

Certain tools, such as pyrotechnics, may require permits from the local Fire Marshall. All workers performing hazing and deterrence must have a minimum of 24-hour HAZWOPER training.

9220 Techniques and Tools

The following factors should be considered when developing a hazing plan:

- Some animals are not candidates for hazing and deterrence, including animals that don't have an escape pathway, currently oiled animals, birds in catastrophic molt, and nesting birds. Pre-emptive capture and relocation may be more appropriate for these animals.
- Consider the environmental impact of chemicals and litter from hazing equipment.
- Avoid dispersing wildlife into areas that might become contaminated, being mindful of oil trajectory projections.

A variety of audio and visual stimuli should be utilized to prevent habituation. Deterrence is most effective if the entire area of concern can be hazed as continuously as possible, with various devices and intervals of disturbance. If this is not possible, careful reconsideration of a hazing program should be discussed before operations begin. Some devices may be operated automatically and can be used when personnel are limited, during bad weather, or overnight.
The following table lists a variety of techniques and tools that can be used for effective hazing/deterrence:

Table 9. Hazing/deterrence tools.

Tools	Audio	Visual	A & V	Exclusion
Bird Bombs, Screamers, Screamer Rocket Bangers	X			
Shell Crackers	X			
CAPA launcher and rockets	X			
Propane Cannons	X			
Distress and Alarm Calls	X			
Phoenix Wailer	X			
Mylar Tape		X		
Scarecrows		X		
Flags		X		
Balloons		X		
Lasers		X		
Lights		X		
Blowy Man		X		
ATV			X	
Aircraft – including drones			X	
Boats			X	
Overhead Lines				X
Netting				X
Fencing				X
Plastic Balls				X
Spikes/coils				X

Note: Utilizing a combination of tools and techniques will further dissuade wildlife by ensuring resistance to habituation. For example, you can use exclusion methods like fencing and netting in addition to audio/visual stimuli like lasers and distress calls to maximize efforts.

9300 Collection and Capture

Wildlife capture should be implemented as safely and early as possible to increase the survival rate of oiled animals. The period of time that oiled wildlife remains in the field is exponentially detrimental to their condition and repeated unsuccessful capture attempts may fatally exhaust an animal, so a well-developed capture plan is critical for animal survival.

Safety is paramount for both humans performing the capture and for the wildlife being captured. Field workers should have knowledge of handling requirements for the affected species to protect themselves and the animal; wild animals can be easily permanently injured if handled improperly and are prone to capture myopathy, which may be fatal. Weather and environmental conditions should also be considered before attempting to capture wildlife.
Wildlife capture rules include:

- Safety always comes first.
- Ensure personnel are trained and familiar with wildlife capture and handling.
- Wear appropriate PPE and clothing for the field conditions, contaminant, and target species.
- Never work solo – utilize the buddy system and work in teams.
- Do not pursue wildlife until they are exhausted.
- Report any injuries.

9310 Preemptive Capture

In some situations, pre-emptive capture may be necessary for wildlife that are at-risk and cannot be effectively removed using hazing, deterrence or exclusion from the area of concern. Before attempting preemptive capture, consult the USFWS and state wildlife trustees to obtain permission, particularly for T&E species. If immediate relocation is not appropriate, licensed wildlife rehabilitators may be authorized to temporarily hold and release preemptively captured wildlife.

Consider preemptive capture when:

- Animals cannot physically or behaviorally be removed from an at-risk area.
- Nesting birds and their chicks are at-risk of becoming oiled unless removed (note: pinniped nurseries and seabird rookeries are off limits for any type of capture).

9320 Live Animal Capture

A variety of capture methods and techniques should be employed for successful results. Techniques will vary depending on species natural history and behavior, species priority (i.e. T&E species), weather, and terrain conditions.

Possible capture techniques include the following, among others:

- On-water capture using boats and nets
- Setting traps (e.g. foothold nooses, mammal live traps, pit traps for reptiles and amphibians, etc.)
- On-land capture using nets and sheets
- Corrals

Proper handling of captured wildlife is critical to prevent injury. Grabbing birds by the wings or allowing wings to flap freely can result in fractures, dislocations, or soft tissue damage that may warrant euthanasia. Some species require restraint of the feet and head to prevent handler injury. **Never tape an animal's mouth closed or tape its limbs together.** Never attempt to handle raptors without proper training. Once animals are captured, covering their head with a sheet or pillowcase and immediately placing the animal into a covered transport container will greatly reduce the animal's stress.

Appropriate containers should be available for captured wildlife, with the following characteristics:

- Ample ventilation
- Enough space for the animal to stand and spread their wings/limbs
- Bedding at the bottom of the carrier to secure the animal's footing and provide some absorption of oil
- A visual barrier between the animal and humans to reduce the animal's stress; this can be in the form of a sheet draped over the carrier as long as the sheet is breathable and able to be secured.
- Labelled with appropriate information – see Documentation section.

Most wildlife should be placed in a carrier alone, except for social species or precocial young. Be sure to consider ambient temperature to prevent overheating or hypothermia, ventilation to reduce vapor concentration, and keep carriers in a quiet place to reduce stress.

9330 Carcass Collection

Carcass collection prevents secondary oiling of other animals and ingestion of oil by predators. Carcasses may also act as evidence in investigations about the incident. A carcass collection procedure should be developed as part of the Wildlife Management Plan, including a chain of custody protocol, in coordination with the US Fish & Wildlife Service. See the Documentation section for information about carcass labelling. Carcasses should be wrapped in foil followed by paper bags and locked in a refrigerator or freezer. All carcasses should be processed in the same manner as live animals with recorded observations on the extent of oiling and evidence collection.

9340 Animal Transport

Oiled wildlife that have been captured and labeled should be taken to the nearest care facility as soon as possible. In some cases, wildlife may need field stabilization and others may be able to go directly to a primary care facility; this determination will be at the discretion of the OWRO.

Vehicles that transport oiled wildlife should have adequate ventilation and a separate cab and cargo space so that humans are not enclosed with harmful vapors. Animal containers must be secured to prevent moving around during transport. Transport personnel must be mindful of the ambient temperature in the cargo area to prevent animals from overheating or developing hypothermia and ventilation to reduce vapor concentration.

9400 Rehabilitation

9410 Field Stabilization

OWRO personnel will assess animals in the field and determine if they require stabilizing medical treatments before transport. If needed, a field stabilization station will be set up using trailers or a pop-up tent and heating/cooling elements as appropriate. Only personnel with training in veterinary medicine will perform stabilizing treatments. Field stabilization is provided to animals in critical condition and animals who will remain in the field for longer than 2-3 hours before transport. Field stabilization does not include washing the animals or taking blood samples.

Steps for field stabilization:

- Gross contaminant removal (clearing the eyes, nostrils/nares, and mouth of bulk oil)
- Body temperature regulation

- Fluid therapy
- Minimize stress for the animal

9420 Triage

Oiled wildlife brought to the Primary Care Center will be triaged so that animals are treated according to their condition and species priority. Full examinations will not be performed until the animals are stable. Some patients may require humane euthanasia if injuries are too severe and decontamination and rehabilitation is not possible. The Wildlife Management Plan should include a euthanasia plan developed by the wildlife veterinarian, OWRO, and state/federal wildlife trustees. Euthanasia guidelines may also be found in the federal and state wildlife rehabilitation permits held by the OWRO.

9430 Examination/Initial Treatment and Pre-Wash Care

Each patient will be assigned an ID number, a medical log will be created, and evidence will be collected as described in the Documentation section of this annex. Full physical examinations will be conducted under veterinary supervision, including observations on the animal's behavior, extent of oiling, dehydration, temperature, body condition, and any overt injuries. An ongoing treatment plan will be developed in consultation with the wildlife veterinarian.

Animals typically need 2-3 days of supportive treatments before they are fit to undergo decontamination. Species-specific housing will be provided according to the International Wildlife Rehabilitation Council/National Wildlife Rehabilitators Association *Standards for Wildlife Rehabilitation* and daily husbandry will be provided for all animals in care. OWRO personnel and the wildlife veterinarian will determine when an animal is a candidate for decontamination.

9440 Decontamination

Wildlife decontamination should only be performed by qualified individuals; attempting to wash animals without prior training may lead to human or animal injury, repeat washes (an animal should ideally only be washed once), or even the death of the animal. Proper PPE must be worn in order to protect the wash team, including chemical-resistant coveralls and gauntlet gloves, eye protection, and waterproof boots.

Once patients are deemed stable enough for a wash, OWRO personnel will determine the necessary protocol for decontamination based on the contaminant, degree of weathering, and pre-treatments needed to break down the oil. Wash techniques will vary depending on the type of animal and the degree of the oiling. Some animals may need to be sedated or anesthetized during the wash process at the discretion of the wildlife veterinarian.

The following water conditions are required for successful decontamination:

- Temperature between 104-108°F
- Hardness between 2-5 grains per gallon
- Pressure between 40-60 psi for rinsing

Once patients have been decontaminated and rinsed, they must be given ample time in drying pens.

9450 Pre-Release Conditioning

Once animals have been fully decontaminated, they will need additional supportive care before they are ready for release. Some animals, like frogs and snakes, may be able to be released within

days after decontamination. Other animals, like loons and diving ducks, may need weeks in enclosures with pool access to develop adequate waterproofing for release. A plan for pre-release conditioning will be developed for each animal by OWRO personnel. If the Primary Care Center cannot meet the needs of the animals for pre-release care, the animals will be transferred to an appropriate facility (see Facility Requirements section).

All animals must be thoroughly evaluated before release can be considered. In general, the following criteria must be met for an animal to be released back into the wild:

- Adequate physical fitness and normal behavior for the species and lifestyle
- Full recovery from any injury or illness
- Acclimation to the outdoors – including impeccable waterproofing for birds
- Body weight within 10% of the species normal range
- Normal blood values for the species

9460 Release

The release of any oil-impacted wildlife must be approved through the appropriate federal and state wildlife trustees. A release plan should be created by the OWRO and submitted to the Environmental Unit. If animals do not meet release criteria at the conclusion of wildlife response operations, they may be transferred for additional rehabilitation, euthanized, or placed in a long-term facility. This decision should be made by the OWRO in conjunction with federal and state wildlife trustees.

The Unified Command will give the final authorization and approval for release, but the release site must first meet the following criteria:

- No oil contamination present
- No risk of recontamination
- Same general geographic area of capture, if possible
- Appropriate seasonal range for the species (important consideration during migration periods)
- Available, natural, and uncontaminated food sources
- Minimal human disturbance (including boats and noise from spill response operations)
- Favorable weather conditions/forecast
- Appropriate time of day for the species

Post-release monitoring can provide valuable data to evaluate the success of decontamination and rehabilitation. Methods for post-release monitoring include USFWS bands for migratory birds, auxiliary bands, and GPS or radio telemetry collars/backpacks. These methods typically require additional state and federal permits.

10000 Wildlife Branch Demobilization

As the spill is contained and contaminated areas are cleaned, the potential for additional wildlife to be impacted will decline and the wildlife field operations can be scaled back and eventually

ended. Rehabilitation operations will continue after that until all impacted animals have been rehabilitated and released or transferred/placed. It is not unusual for wildlife operations to demobilize after other Operations Section responders.

The OWRO and the Operations Section will jointly develop a demobilization plan for the Primary Care Center and any Stabilization Facility which will either be returned to their pre-incident condition or put in a stand-by mode if the potential for additional oiling of animals is significant. The demobilization plan will include:

- A schedule for reducing staff and volunteers
- Determination of what will happen with any animals still in care
- Disposal or redistribution of prescribed medications
- A process to inventory, sanitize, and/or decontaminate any remaining supplies and equipment
- A plan to return, redistribute, or store remaining supplies and equipment as appropriate
    - Supplies and equipment may be demobilized before the conclusion of wildlife operations
- Coordination with the Wildlife Branch Director and law enforcement on transferring documentation and evidence from the Primary Care Center.