WILDLIFE RESPONSE PLAN

Incident/Exercise Name

Date

Prepared by

Maine Department of Inland Fisheries and Wildlife

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

Tri-State Bird Rescue & Research, Inc.







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# Authorizations

|  |  |
| --- | --- |
| PLANNING SECTION CHIEF / ENVIRONMENTAL UNIT LEADER | |
| Name (printed): |  |
| Signature: |  |
| Date: |  |

|  |  |
| --- | --- |
| OPERATIONS SECTION CHIEF / WILDLIFE UNIT LEADER | |
| Name (printed): |  |
| Signature: |  |
| Date: |  |

|  |  |
| --- | --- |
| INCIDENT COMMANDER | |
| Name (printed): |  |
| Signature: |  |
| Date: |  |

|  |  |
| --- | --- |
| OTHER | |
| Name (printed): |  |
| Signature: |  |
| Date: |  |

# Background

* What happened
* Where it happened
* When it happened
* Potential amount and type of product that might be released
* Estimated amount and type of product released
* Estimated extent of impact to wildlife (how many, what species, special concerns, etc.)
* Responding wildlife agencies/organizations

# Relationship to Other Response Plans

* Maine/New Hampshire Area Contingency Plan, 2014
* Canada-US Joint Inland Pollution Contingency Plan, Atlantic Regional Annex, 2016
* Maine Marine Oil Spill Contingency Plan, 2011
* Maine Department of Inland Fisheries and Wildlife – Oiled Wildlife Response Plan, 2019
* Tri-State Bird Rescue & Research, Inc. – Oiled Wildlife Response Plan
* Incident Action Plan
* Primary Care Center Facility Plan

# Legal Authority & Permits

## Memorandums/Agreements

* Maine Department of Environmental Protection (DEP) & MDIFW – this Memorandum of Understanding (MOU) describes responsibilities in oil spill response and support for the MDIFW Oil Spill Response Coordinator position and MDIFW’s spill response-related equipment. The MOU is valid through June 30, 2021. Signed copies are retained by both MDIFW and DEP.
* Primary Care Center – valid through…
* Stabilization Facility – valid through…

## Contracts

* Oiled Wildlife Response Organization
* Primary Care Center (use of facility)

## Permits

* Permits issued by the U.S. Fish and Wildlife Service
* Permits issued by Maine Department of Inland Fisheries and Wildlife
* Permits issued by Canadian Wildlife Services
* Other

# Objectives

* Ensure human health & safety during a response
* Establish a Primary Care Center for oiled wildlife
* Assess unoiled wildlife and recover oiled wildlife
* Prevent unoiled wildlife resources from becoming oiled
* Minimize negative impacts of response operations on wildlife and habitat
* Establish a facility (or facilities) to stabilize impacted wildlife prior to transportation to the Primary Care Center as needed
* Transport impacted wildlife to the Primary Care Center
* Manage volunteers assisting with the wildlife response
* Rehabilitate impacted wildlife
* Release rehabilitated wildlife
* Manage evidence of impacts to wildlife resources
* Demobilize wildlife response resources
* Complete wildlife response documentation and other reporting for the incident
* Conduct Natural Resource Damage Assessment & Restoration

## Ensure Human Health & Safety

### Job Hazard/Safety Assessments

| Table 1. Wildlife responder job codes used in Table 2. | |
| --- | --- |
| AA | Assessment – Aerial |
| ABM | Assessment – Boat, Motorized |
| ABN | Assessment – Boat, Non-motorized |
| AS | Assessment – Shore (foot, ATV) |
| D | Drying |
| EC | Evidence Custodian |
| FM | Facility Maintenance (includes building cages, etc.) |
| H | Husbandry |
| HDM | Hazing/Deterrence – Boat, Motorized |
| HDN | Hazing/Deterrence – Boat, Non-motorized |
| HDS | Hazing/Deterrence) – Shore (foot, ATV) |
| ICP | Incident Command Post staff (or anyone else working in an office setting) |
| IP | Intake/Processing |
| RBM | Recovery – Boat, Motorized |
| RBN | Recovery – Boat, Non-motorized |
| RS | Recovery – Shore (foot, ATV) |
| V | Veterinarian (includes vet assistants/technicians) |
| VC | Volunteer Coordination |
| W | Washing |
| WT | Wildlife Transport |

| Table 2. Job-specific Hazards (see Table 1 for explanation of job codes; ALL = all wildlife responders). | |
| --- | --- |
| Capsizing | ABM, ABN, HDM, HDN, RBM, RBN |
| Challenging terrain | ABN, AS, HDN, HDS, RBN, RS |
| Crash/collision | AA, ABM, AS, HDM, HDS, RBM, RS, WT |
| Debris | ABN, AS, HDN, HDS, RBN, RS |
| Dehydration | ALL |
| Electrocution | D, W |
| Equipment/tool-caused injury | D, FM |
| Ergonomic strain | ALL |
| Explosives/flammables | AA, ABM, FM, HDM, HDN, HDS, RBM |
| Eye strain | ALL |
| Fast-moving/powerful water | ABM, ABN, AS, HDM, HDN, HS, RBM, RBN, RS |
| Fatigue/exhaustion | ALL |
| Getting lost/stranded | AA, ABM, ABN, AS, HDM, HDN, HDS, RBM, RBN, RS, WT |
| Hazardous operating area | AA, ABM, ABN, HDM, HDN, RBM, RBN |
| Hypothermia | ABM, ABN, AS, HDM, HDN, HDS, RBM, RBN, RS |
| Immersion/drowning | ABM, ABN, AS, HDM, HDN, HS, RBM, RBN, RS |
| Incapacitated pilot | AA, ABM, HDM, RBM |
| Incidental wildlife encounters | ABN, AS, HDN, HDS, RBN, RS |
| Ingestion of petroleum product(s) | EC, IP, RBM, RBN, RS, V, W |
| Inhalation of petroleum fumes | ABM, ABN, AS, EC, HDM, HDN, HDS, IP, RBM, RBN, RS, V, W, WT |
| Insect bites/stings | ABM, ABN, AS, HDM, HDN, HDS, RBM, RBN, RS |
| Lightning | AA, ABM, ABN, AS, FM, HDM, HDN, HDS, IP, RBM, RBN, RS, WT |
| Motion sickness | AA, ABM, ABN, HDM, HDN, RBM, RBN |
| Noise (excessive) | ALL |
| Overheating | ALL |
| Poisonous plants | ABN, AS, HDN, HDS, RBN, RS |
| Precipitation | AA, ABM, ABN, AS, FM, HDM, HDN, HDS, IP, RBM, RBN, RS, WT |
| Restricted ability to move/evacuate | ALL |
| Skin contamination from petroleum product(s) | EC, IP, RBM, RBN, RS, V, W |
| Slippery surfaces | AA, ABM, ABN, AS, FM, H, HDM, HDN, HDS, RBM, RBN, RS, W, WT |
| Stress/tension | ALL |
| Sunburn/windburn | AA, ABM, ABN, AS, FM, HDM, HDN, HDS, IP, RBM, RBN, RS |
| Tidal changes | ABM, ABN, AS, HDM, HDN, HS, RBM, RBN, RS |
| Trip hazards | ALL |
| Wildlife-caused injury (getting bit, clawed, scratched, etc.) | D, H, IP, RBM, RBN, RS, V, W |
| Working around unfamiliar equipment | AA, ABM, ABN, AS, HDM, HDN, HDS, RBM, RBN, RS, WT |
| Working in Level D PPE | ABM, ABN, AS, EC, HDM, HDN, HDS, IP, RBM, RBN, RS, V, W |
| Zoonoses | D, H, IP, RBM, RBN, RS, V, W |

### Site Safety Plans

* Aerial Assessment
* Boat Assessment & Recovery
* Ground Assessment & Recovery
* Stabilization Facility
* Transport Operations
* Primary Care Center

### Training

The wildlife responders addressed by this plan include OWRO and MDIFW staff, local wildlife rehabilitators, and their volunteers. Wildlife responders will only enter contaminated areas to search for and recover impacted animals, not to clean up oil. They will rely on information from the Federal/State On-Scene Coordinator, the Safety Officer, or hazardous material experts from the Maine DEP, U.S. Environmental Protection Agency, or U.S. Coast Guard to identify contaminants and threats at a given site, not determine that themselves. Because oiled animals often are mobile, wildlife responders often work in nearby, uncontaminated areas.

#### OWRO Staff

#### MDIFW Staff

MDIFW conducts an annual, 8-hour minimum training for its staff that includes Personal Protective Equipment (PPE), ICS, and general safety. It also focuses on different aspects of a potential response such as cold-weather operations, inland vs. coastal sites, working from boats, or in a Stabilization Facility/Primary Care Center each year. MDIFW staff must have completed three of the last four annual trainings to participate in the response. MDIFW staff who do not meet this requirement will either receive additional on-site training or be assigned less hazardous duties appropriate to their current level of training.

#### Local Wildlife Rehabilitators/Volunteers

MDIFW and the OWRO contracted by the state of Maine have provided a two-day training session every other year for local wildlife rehabilitators (Avian Haven, Center for Wildlife, and The Raptor Trust) and their volunteers.

### Personal Protective Equipment (PPE) Requirements

Personal Protective Equipment (PPE) will vary between the different wildlife response tasks, species involved, weather, terrain, and other nearby operations (Table 2). Changes to PPE or specific instructions on PPE use will be disseminated during daily safety meetings led by Group Supervisors and/or Team Leaders. MDIFW has stocks of the PPE required for field and transport operations and some of the PPE required for cleaning oiled animals. This PPE is stored in the MDIFW Oil Spill Response Trailer based in Bangor. Some also has been distributed to MDIFW regional offices.

|  |  |  |  |
| --- | --- | --- | --- |
| Table 3. Personal Protective Equipment (PPE) not routinely used by MDIFW staff that may be required during an oiled wildlife response. MDIFW staff are only trained to use Level D PPE1. | | | |
| PPE Type | Area of Operations / Response Task | | |
| FIELD2 | TRANSPORT | STABILIZATION OR PRIMARY CARE CENTER3 |
| 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 (DuPontTM Tychem Chemical Resistant) | X | X | X |
| Fire-resistant Clothing | X | X | X |
| Personal Flotation Device | X | X |  |

1. Tasks requiring Level A, B, or C PPE will not be performed by MDIFW staff.

2. Assessing, hazing, or capturing wildlife.

3. Cleaning, medical, husbandry, rehabilitation activities.

### Zoonoses

Zoonoses are diseases that are transmissible between animals and humans (Table 3). As wildlife professionals, MDIFW staff are aware of the risks posed by zoonoses and the steps necessary to mitigate them such as wearing proper PPE and washing hands thoroughly after handling animals.

Volunteers, particularly those not affiliated with a local wildlife rehabilitator, may be less aware of zoonoses. People with certain medical conditions including a compromised immune system and/or over the age of 60 are more susceptible to these diseases. MDIFW staff supervising volunteers during an oiled wildlife response must ensure they are adequately informed of the potential risks from zoonoses and how to minimize them.

| Table 4. Zooneses most likely to be encountered during an oiled wildlife response. | | |
| --- | --- | --- |
| Zoonosis | Description/Symptoms | Transmission |
| Algal Bloom1 | Respiratory problems/rash | Contact with water contaminated with cyanotoxins |
| *Brucellosis* | Infectious disease caused by *Brucella* bacteria. Fever, sweats, malaise, anorexia, headache, muscle/joint pain, fatigue. | Carried by whales and seals. Contact with an open wound or inhalation. |
| Calicivirus | Family of viruses that occur in both domestic and wild animals and cause acute gastroenteritis in humans. Vomiting, diarrhea. | May be carried by seals. |
| *E. coli* | Pathogenic *E. coli* is a bacterial infection of the intestines causing stomach pain/cramps | Contact with undercooked food and animal feces (especially if ingested) |
| Fish Handler’s Disease/Seal Finger | Develops a few days after infection and can be visible as a red-purple scar around the wound. Pain, itching, swelling, joint stiffness and/or lymph node swelling. May be fatal. | *Mycobacterium marinum* transmitted through a bite or contact with an open wound with fish, shellfish, or piscivorous species carrying the bacteria. |
| Giardia | Diarrhea | Land-based airborne pathogen (inhalation of spores or contact with an open wound) |
| Herpes |  | Beluga whales |
| Influenza A, B; Avian Flu | Coughing, runny/stuffy nose, sneezing, sore throat, fever, headache, fatigue, chills, body aches | Ingestion/inhalation of contaminated water vapor expelled by birds and seals. |
| Lyme Disease | Rash, fever, arthritis, heart & nervous system abnormalities | Tick bite (deer ticks) |
| Mycobacteriosis | Pulmonary tuberculosis: night sweats, fatigue, weight loss, and chronic productive cough. | Direct contact with an infected marine mammal that is shedding *Mycobacterium* in aerosols, mucosal secretions, feces, or urine. |
| Psittacosis | Flu-like symptoms | Contact with bodily fluid/feces |
| Q Fever (Coxiellosis) | Caused by the bacteria *Coxiella burnetii.* Fever, chills/sweats, fatigue, headache, muscle aches, nausea, vomiting, diarrhea, chest/stomach pain, weight loss, non-productive cough. | Carried by seals. Inhalation of contaminated air. |
| Rabies | Fever, headache, rash, muscle spasms or aches and/or a confused mental state. May be fatal. | Virus transmitted through a bite or contact with saliva |
| Rocky Mountain Spotted Fever | Rash, fever, arthritis, heart & nervous system abnormalities | Tick bite (deer ticks) |
| *Salmonella* | Diarrhea, fever, nausea, dehydration | Bacteria transmitted through contact with feces or uncooked foods |
| Sarcosporidiosis | Anorexia, nausea, abdominal pain, distension, diarrhea, vomiting, dyspnea, tachycardia. | Ingestion of undercooked meat |
| Tetanus1 | Lockjaw, general muscle stiffness, fever, headache, and/or seizure | Bacteria transmitted through an open, usually puncture wound from a contaminated object |
| Valley Fever (Coccidioidomycosis) | Caused by the fungus *Coccidioides*. Fatigue, cough, fever, shortness of breath, headache, night sweats, muscle aches, joint pain, rash on upper body or legs. | Inhalation of fungal spores carried by whales and seals. |
| West Nile Virus | Fever, rash, diarrhea, and aches and pains. Many people are asymptomatic but in others the central nervous system can be affected (brain inflammation) and fatal. | Mosquito bite |

1. Not a zoonoses but a disease of potential concern during a wildlife response.

Additional resources:

<https://www.cdc.gov/about/facts/cdcfastfacts/zoonotic.html>

[www.merckvetmanual.com/mvm/public\_health/zoonoses/zoonotic\_diseases.html](http://www.merckvetmanual.com/mvm/public_health/zoonoses/zoonotic_diseases.html)

<https://www.webmd.com/a-to-z-guides/wilderness-fish-handlers-disease>

<http://mainelakessociety.org/lakesmart-learning/cyanotoxins/>

## Establish a Primary Care Center (PCC) for Rehabilitating Oiled Wildlife

* Location
* Operational Status
* Staffing
* Capacity

## Assess & Recover Oil-Impacted Wildlife

Wildlife handling, recovery, and care will be conducted by staff from the following agencies/organizations:

* Maine Department of Inland Fisheries and Wildlife
* U.S. Fish and Wildlife Service)
* Tri-State Bird Rescue & Research (Oiled Wildlife Response Organization)

or by trained personnel supervised by those staff and will comply with all established agreements, permits, and relevant regulations.

### Summary of Operations to Date

On date/time, the Joint Information Center issued an announcement advising the public not to touch or harm potentially impacted wildlife but to report any sightings of potentially impacted animals to the Oiled Wildlife Hotline (1-877-OIL-BIRD) or using an online reporting form.

* Reports of impacted wildlife
* Number and type(s) of species captured/collected so far (live vs. dead)
* Number and type(s) of species that have been rehabilitated
* Number and type(s) of species that have been released
* Number and type(s) of species that died or were euthanized
* Location of assessment/recovery operations
* Number of people/teams involved in these operations
* Equipment (e.g., boats, planes) involved in these operations

### Ground

Ground-based operations to assess and recover impacted wildlife will be conducted jointly (i.e., the same Teams will both assess and recover impacted wildlife) or separately (i.e., different Teams will be used to assess versus recover impacted wildlife) and coordinated by Group Leader Name from location.

Each Bird Team will consist of three people; two in specialized PPE to handle oiled animals (e.g., leather gloves/gauntlets over nitrile gloves) and a third “clean” person (i.e., with standard Level D PPE) to record data, handle communications, and provide other support. Appendix 8.5 provides a detailed protocol for handling oiled wildlife. Each Marine Mammal Team will consist of four authorized responders; two people trained to handle seals and whales and two people to coordinate data and logistics.

Ground teams will search their assigned areas for both oiled and unoiled wildlife, capture live oiled animals, and collected dead ones. All staff operating within 6 ft of the water will wear a Personal Floatation Device (PFD). Staff will rely on safety messages from the Federal/State On-Scene Coordinator, Safety Officer, or from hazardous material experts from the Maine DEP, U.S. EPA, or U.S. Coast Guard to determine if it is safe to operate in a specific area in Level D PPE. Before entering a contaminated area, the Team will make a plan for exiting the area, where to decontaminate, and how to dispose of their contaminated PPE.

Ground teams will carry two-way radios or cell phones to communicate with the Group Leader. If direct communication during a survey is not possible, then Ground Teams will report back to the Group Leader as quickly as possible. Information collected by Teams will be relayed to the Incident Command Post via the Oiled Wildlife Hotline.

Ground Teams will initiate a Chain-of-Custody form (Appendix 8.6) for each recovered animal, live or dead, which will be signed each time the animal changes hands. Transport Teams will collect recovered animals from Ground Teams and transport them to the Stabilization Facility/Primary Care Center.

### Air

Aerial assessment is an efficient way to estimate numbers and locations of most species of oiled/unoiled wildlife across the incident area. Skilled wildlife observers (two per flight, one on each side of the aircraft) will make these estimates from a low-flying (e.g., 500 ft. AGL) small fixed-wing aircraft or helicopter operating from airport/landing site. Aerial surveys will be conducted daily and coordinated with the Air Operations Group.

An Unmanned Aerial Vehicle (UAV) will/will not be used for aerial assessments.

### Boat

On-water operations to assess and recover impacted wildlife will be conducted jointly (i.e., the same Teams will both assess and recover impacted wildlife) or separately (i.e., different Teams will be used to assess versus recover impacted wildlife) and coordinated by Group Leader Name from location. Boats will be launched from location and will only operate in the types of water/weather for which they are rated. Oiled boats will be decontaminated at location. All Team members will wear a PFD and have appropriate boat training including coastal navigation.

#### Motorized

Motorized Boat Teams will have at least four people; two trained staff in specialized PPE to handle oiled animals, a third “clean” person (i.e., with just Level D PPE) to record data and uncontaminated equipment, and a trained and licensed boat operator.

#### Non-Motorized

Canoes/kayaks will be used to assess impacted wildlife near shore and/or to survey shorelines. They also may assist with recovering impacted wildlife (usually in coordination with a motorized boat).

### Coordinating Information

All data collected during wildlife assessment and recovery operations will be managed in compliance with the incident information management plan.

#### Reporting Wildlife Sightings

The following information will be collected for each wildlife sighting:

* Date/Time of report
* Name, phone number, and/or email of person making the report
* Date/Time animal(s) seen
* Number/Type (species) seen
* What the animal(s) were doing
* Extent of oiling/what part of the animal was oiled
* Whether animal(s) were injured
* Whether the animal was mobile (able to escape)
* Whether any photos were taken
* Location (GPS coordinates, physical address, or site description)

#### Hotline(s) for Reporting Oiled Wildlife

The number 1-877-OIL-BIRD (645-2473) will be used for reporting wildlife sightings (this existing hotline will be forwarded to the ICP or wildlife Primary Care Center) and monitored 24/7.

#### Web-based Reporting Form

A web-based form (URL) will also be available for reporting wildlife sightings.

#### Wildlife Sightings Database

Information collected through the Oiled Wildlife Hotline, web-based reporting form, and other sources will be entered as soon as possible into a GIS database shared throughout the ICP and Primary Care Center.

## Prevent Unoiled Wildlife and Habitat from Becoming Oiled

The best way to protect wildlife and habitats from the impacts of an oil spill is to prevent them from becoming oiled.

### Protection Strategies

#### Environmental Vulnerability/Sensitivity Index (EVI/ESI) Maps

The EVI maps developed by the Maine DEP using data from MDIFW will be used to guide/prioritize protection strategies. MDIFW staff in the Planning Section Environmental Unit will provide updated information as needed. ESI maps are like EVIs but produced at a regional scale by NOAA. They show the same MDIFW data that the EVI maps do but may not be as current.

#### Bird Oil Vulnerability Index (BOVI)

Birds differ in their vulnerability to oil. The BOVI assesses each species’:

* risk of becoming oiled (based on behavior, habitat use, etc.)
* tolerance to the effects of oil
* tolerance to being handled and held in captivity
* tolerance to response activities
* potential for recovery
* seasonal population size
* reproductive potential
* seasonal movements
* geographic distribution, and
* the proportion of the regional population that occurs in Maine.

BOVI scores for Maine’s coastal bird species are included in the EVI maps and incorporated into MDIFW’s protection prioritization.

#### Geographic Response Strategies (GRS)

Maine’s GRSes are based partly on wildlife resources at risk and provide a good starting point for an initial response.

#### Prioritization for Protection

The GRSes identify areas most vulnerable to an oil spill. MDIFW has ranked and prioritized them based on the vulnerability of the different species and habitats in each GRS and on the amount of each resource a GRS could protect relative to that resource’s distribution in Maine. MDIFW has developed a statewide prioritization map to similarly evaluate areas beyond the GRSes.

### Hazing/Deterrence

Hazing (encouraging unoiled animals to leave an area) and deterrence (discouraging unoiled animals from entering an area) will not be used because:

* there is no need for it
* it is unlikely to be effective
* there are no suitable unoiled areas to move animals to
* the stress caused by these operations could be more detrimental than the possibility of animals becoming oiled.

The following methods will be used to haze/deter wildlife:

* Propane cannons
* Shotguns loaded with “cracker” shells (blanks)
* Visual hazing/deterrents
* Other audio hazing/deterrents
* Other methods

All hazing/deterrence operations will be approved by the Wildlife Branch Director and evaluated each Operational Period to determine if they are still effective and necessary. Impacts to endangered/threatened species will be approved/permitted by MDIFW or USFWS as appropriate.

Each Hazing/Deterrence team will consist of 1-2 MDIFW/USFWS staff. Operations will be conducted….

### Pre-emptive Capture

The following methods will be used to pre-emptively capture unoiled animals to prevent them from becoming oiled:

* Targeted species
* Location
* Methods
* Where captured animals will be held
* Release plan

This plan to pre-emptively capture unoiled wildlife has been approved by all responding wildlife agencies with jurisdiction over the proposed species.

## Minimizing Negative Impacts of Response Operations

Wildlife Subject Matter Experts will advise Operations on potential negative impacts of response tactics on wildlife and will be embedded in the following field teams:

* Boom Deployment
* SCAT
* Shoreline Cleanup
* Dispersant Application

## Recovering Oiled Carcasses

Dead, oiled wildlife will be removed from the environment as quickly as possible to minimize secondary contamination of scavengers. Oiled carcasses or any potentially spill-related mortalities will be collected and tagged following the USFWS Carcass Collection Protocol, version 7-7-2010 (Appendix 8.6). Carcasses will be stored in a locked freezer in a secured area at the Primary Care Center.

## Establish Wildlife Facilities for the Response

|  |  |  |
| --- | --- | --- |
| Facility | Location | Manager/Contact |
| Staging Area |  |  |
| Field Command Post |  |  |
| Stabilization Facility |  |  |
| Primary Care Center |  |  |
| Rehabilitation Center |  |  |

## Transport Wildlife

Oiled animals (both live and dead) will be transported to the Primary Care Center by teams of two people each; a driver and second person to monitor the condition of the live animals. Contaminated animals will be kept in an enclosed part of the vehicle providing protection from the elements and separate from the people to minimize fume hazards.

## Volunteers

All volunteers must be over the age of eighteen (18), be willing to sign a waiver, be up to date with common vaccinations, and be in good health. Immunocompromised individuals should not work with wildlife. Most tasks that volunteers might perform will have additional constraints such as the ability to lift heavy objects, use a computer/keyboard, tolerate temperature extremes, etc. Volunteers for the wildlife response will be managed according to the Incident Volunteer Plan and overseen by the OWRO.

### Affiliated Volunteers

Volunteers affiliated with a wildlife organization (e.g., local wildlife rehabilitator, Maine Audubon, The Nature Conservancy, veterinary/wildlife students from local universities and colleges, staff from zoos and aquaria, veterinary clinics, or state/county Animal Response Teams) have some wildlife training and potentially even oil spill training. Affiliated volunteers will work in the Primary Care Center, the Stabilization Facility, or on a Transport Team under the supervision of the OWRO doing:

* Animal husbandry (feeding, watering, and other general care)
* Assisting with washing/drying animals
* Assisting with veterinary care
* Transporting animals

They will not be used in field operations to assess, recover, haze, or deter wildlife.

The OWRO has affiliated volunteers with more specialized training who will work in the Primary Care Center as contractors under the supervision of the OWRO (technically these compensated individuals are not volunteers.

### Event-based (Unaffiliated) Volunteers

Event-based volunteers rarely have specialized oil spill/wildlife training and therefore cannot work directly with impacted wildlife but can assist in the Primary Care Center with:

* Managing/filing paperwork
* Photocopying
* Answering phones
* Reading email
* Ordering supplies/services
* Computer/Data Entry
* Monitoring the Oiled Wildlife Hotline
* Construction (carpentry, electrical, plumbing) tasks
* Building cages/pools
* Preparing food for people/animals
* Cleaning cages
* General errands such as getting/delivering supplies, shuttling people, etc.
* LaundRY

## Rehabilitating Impacted Wildlife

Name of organization is the contracted Oiled Wildlife Response Organization (OWRO) for this incident. They will be rehabilitating oil-impacted wildlife at the Primary Care Center (PCC) at location. Their personnel will be assisted by staff from local wildlife rehabilitators and their affiliated volunteers, MDIFW/USFWS staff, event-based volunteers, and other contract staff. The Rehab Group Supervisor will report to the Wildlife Branch Director in the ICP. The rehabilitation process will follow established protocols from the OWRO (list specific policies attached as Appendices) including the following steps:

* Intake/triage – each animal will be processed into the Primary Care Center, including Chain-of-Custody documentation; evaluated; and prioritized for care depending on its medical status and (possibly) whether it is a threatened or endangered species.
* Stabilization – each animal will be given medical treatment, food, water, and time to rest in a quiet, dark, temperature-controlled space to prepare it for the decontamination process. These oiled animals will be kept separate from clean animals.
* Decontamination (wash/dry) – an animal may repeat the wash/dry cycle multiple times—with stabilization rests in between—until it is fully clean.
* Conditioning – once clean, each animal will need time to recondition itself. Birds will spend extensive time preening their feathers until they are fully functional again. Some species will need to be in pools during this phase. This phase may be completed elsewhere, such as at a local wildlife rehabilitation facility—especially if the species has special captivity needs or will require a prolonged conditioning period.
* Pre-release evaluation – a final medical exam with blood work and an assessment of waterproofing and behavior in an outdoor setting will be completed to ensure each animal is as healthy as possible and completely free from contamination before being released.

## Releasing Rehabilitated Wildlife

* Number/species to be released:
* Proposed release date(s):
* Proposed release site(s):
* Post-release monitoring:
* Plan for animals that cannot be released:

## Managing Evidence of Wildlife Impacts

The U.S. Fish & Wildlife Service’s protocol for handling wildlife evidence (Appendix 6.3) will be followed. A Maine Game Warden/USFWS Law Enforcement officer will act as the Wildlife Evidence Custodian. The Custodian and Evidence Storage will be located at the Primary Care Center.

## Demobilization

Wildlife operations usually continue after other Operations Section responders have demobilized because animals may continue to encounter residual oil in the environment after cleanup has ceased and because rehabilitation takes several weeks after an animal is captured. After the last rehabilitated animal has been released or transferred elsewhere, the Primary Care Center will be fully demobilized and the facility will be restored to its pre-spill condition/use. After the last rehabilitated animal has been released or transferred as described in Section 5.11, the Primary Care Center will be deactivated but remain ready for reactivation until Incident Command determines it is no longer needed. The OWRO will develop a demobilization plan for the Primary Care Center that will include:

* A schedule for reducing staff and volunteers
* A plan for what will happen with any animals still in care
* Disposal or redistribution of prescribed medications
* A process to inventory, sanitize, and/or decontaminate remaining supplies and equipment
* A plan to return, redistribute, or warehouse remaining supplies and equipment.

## Documentation & Reporting

At the end of each Operational Period, the Wildlife Branch Director will work with the OWRO to report what resources were used and what was accomplished for each wildlife response objective during that period. A final report will be used to account for reimbursable costs from the Responsible Party and for Natural Resource Damage Assessment and Restoration.

# Appendices

## Definitions/Acronyms

**ACP** – Area Contingency Plan. The U.S. Environmental Protection Agency has divided the U.S. into different areas. Each has developed its own Area Contingency Plan. The area for Maine includes New Hampshire.

**AGL** – Above Ground Level.

**BOVI** – Bird Oil Vulnerability Index; a numeric score reflecting the vulnerability of a bird species to oil including both its potential for becoming oiled and sensitivity to the oil and needing to be decontaminated and rehabilitated.

**CANUSLANT** – Canada / U.S. Atlantic (region); for international spill response, areas of North America are divided into regions. The CANUSLANT region contains Maine and New Brunswick.

**Chain-of-Custody Form** – a document used to record the transfer of evidence (e.g., an oiled bird) from one person to another throughout the response to prevent any time during which the location/control of that evidence is unknown.

**Contingency Plan** – a document describing the objectives and implementation strategies for responding to a crisis event such as an oil spill. A Contingency Plan usually lists agency leads, contact information, applicable policies, permits, etc. useful during a spill response.

**Demobilize** – release resources (staff/equipment) from the spill response back to their originating agency/organization.

**DEP** – Department of Environmental Protection (Maine)

**Deterrence** – actions taken to discourage unoiled wildlife from entering a contaminated or potentially contaminated area.

**ESI** – Environmental Sensitivity Index; federal equivalent of EVI.

**EU** – Environmental Unit; part of the Planning Section in the Incident Command Structure.

**EVI** – Environmental Vulnerability Index; a set of maps depicting areas/resources sensitive to an oil spill. Developed by the Maine DEP with extensive input from MDIFW. Used to prioritize spill response.

**FOSC** - Federal On-Scene Coordinator; federal person in charge of the response until an Incident Commander/Unified Commander has been assigned. For coastal spills it is usually the senior U.S. Coast Guard office. For inland spills, it is someone from the U.S. Environmental Protection Agency.

**GRP/GRS** – Geographic Response Plan/Strategy; a map-based plan for implementing a specific protection strategy (booming) to protect a pre-identified sensitive area from becoming contaminated. The Maine DEP has taken the lead role in developing GRPs across the coast. They are approved by the Maine/New Hampshire Area Committee.

**HAZWOPER** - HAZardous Waste Operations and Emergency Response; training recommended by the Occupational Safety and Health Administration (OSHA) for oil spill responders. It is offered at different levels including 40-hour, 24-hour, or 8-hour. A one-time 24-hour HAZWOPER followed by annual 8-hour refreshers is recommended for wildlife responders.

**FRP** – Facility Response Plan. Similar to a Contingency Plan but written for a specific facility.

**Hazing** – actions taken to encourage unoiled wildlife to leave a contaminated (or potentially contaminated) area.

**ICP** – Incident Command Post; the central location from which a spill response is controlled. In very large/international spills, there may be more than one ICP.

**ICS** – Incident Command System; a hierarchical, scalable framework for organizing an incident response. It is used by federal agencies for responding to a wide range of crisis incidents. Similar systems with different names are used by other organizations.

**ICS 213RR** – Resource Request; an Incident Command System form used to requires resources (staff, equipment) to be used in the response.

**JIC** – Joint Information Center; part of the Incident Command System responsible for all public outreach and media interactions.

**Julie N** – a tanker vessel that collided with a bridge in 1996 resulting in the most significant oil spill in Maine since MDIFW began its oil spill response program.

**Maine Bureau of Labor Standards** – Maine equivalent of OSHA that has jurisdiction over safety of Maine state employees.

**Maine Marine Oil Spill Contingency Plan** – the primary oil spill response plan for Maine. It is maintained by the Maine Department of Environmental Protection and contains a section on responding to oiled wildlife.

**Maine/New Hampshire Area Contingency Plan** – interstate plan for the two-state area in responding to a crisis incident.

**MDIFW** – Maine Department of Inland Fisheries and Wildlife.

**MFS** – Maine Forest Service.

**MRSA** – Maine Revised Statutes Amended.

**Natural Resource Trustee** – an agency/organization federally authorized to represent the public’s interest in natural resources relative to a pollution release. A Trustee has legal standing to seek compensation for damages to natural resources from an oil spill. Trustees are federal, state, and/or tribal.

**NCF** – National Contingency Framework

**NCP** – National Contingency Plan

**NOAA** – National Oceanic and Atmospheric Administration

**NRDAR** – Natural Resource Damage Assessment & Restoration; a process defined under the Federal Oil Spill Pollution Act to return a contaminated area to its pre-spill condition or to compensate the public for the natural resource loss resulting from a spill including temporary losses during the cleanup.

**NWR** – National Wildlife Refuge.

**Oil Spill Liability Trust Fund** – a federal source of funding used to help pay for an oil spill response that has been federalized (i.e., involves federal agencies) when a Responsible Party has not been identified or is unwilling/unable to cover response costs. As a state agency, MDIFW would have to request these funds from Incident Commander who could permit or deny them.

**Oil Spill Surface Fund** – Maine version of the Oil Spill Liability Trust Fund. See Section 6.2.4.

**OSHA** – Occupational Safety and Health Administration.

**OSRC** – Oil Spill Response Coordinator (MDIFW).

**OWRO** – Oiled Wildlife Response Organization; a private (usually NGO) organization with staff that specialize in decontaminating and rehabilitating oiled wildlife. There are relatively few of these, particularly OWROs large enough to respond to a major spill incident.

**PCC** – Primary Care Center; a facility where oiled wildlife are decontaminated and rehabilitated prior to release. Also where deceased oiled wildlife are stored as evidence.

**PFD** – Personal Floatation Device.

**PIO** – Public Information Officer; an ICS role similar to the media spokesperson for a given agency.

**PPE** – Personal Protective Equipment. There are different levels of PPE depending on the potential risks involved. MDIFW staff are only trained to Level D, which includes *Tyvek* coveralls, nitrile gloves, and eye protection.

**RCP** – Regional Contingency Plan.

**RP** – Response Party; the person(s)/organization responsible for spilling the oil.

**SCAT** – Shoreline Cleanup & Assessment Team; a group of responders that rapidly assesses the extent of oiling in an area and makes recommendations for cleanup based on the type/extent of oil and characteristics of the area such as substrate, tides, etc.

**SOSC** - State On-Scene Coordinator; state person in charge of the response (usually the Maine DEP Response Division Director or the senior DEP responder) until an Incident Commander/Unified Commander has been assigned. Depending on the incident, it may also be a local fire chief.

**Stabilization Facility** – a structure/area where oiled wildlife are medically stabilized before being transported to the Primary Care Center for decontamination/rehabilitation. A Stabilization Facility is not established in every incident; it depends on the proximity of the spill relative to the Primary Care Center.

**TSBRR** – Tri-State Bird Rescue & Research, Inc.

**UAV** – Unmanned Aerial Vehicle (drone).

**USCG** – U.S. Coast Guard

**USFWS** – U.S. Fish and Wildlife Service.

**VRP** – Vessel Response Plan

**WBD** - Wildlife Branch Director;an ICS position responsible for overseeing the wildlife response. The role typically would be filled by staff from U.S. Fish and Wildlife Service or MDIFW.

**Zoonoses** – diseases that are transmissible between humans and wildlife.

## Protocol for Handling and Transporting Oiled Wildlife

## U.S. Fish & Wildlife Service Carcass Collection Protocol (July 7, 2010) and Chain of Custody Form

The purpose of this protocol is to describe the methods and materials required to collect wildlife carcasses from the field as part of response and natural resource damage assessment activities during an oil spill incident.

These procedures are considered standard operating guidelines which may be edited and refined to meet incident specific needs. Any changes to these procedures for specific incidents will be made in consultation with the Regional Spill Response Coordinator and a designated Office of Law Enforcement official.

**The search and collection efforts for bird, marine mammal and other wildlife carcasses should be conducted by USFWS personnel whenever possible**.

*Marine mammals have a separate and unique collection protocol as provided under the Marine Mammal Protection Act and should only be collected by a Federal or State agency official, as appropriate.*

**PROCEDURES FOR USFWS PERSONNEL**:

**Search & Collection Teams**:

* Search and collection teams will consist of at least two members. At least one member of the team should have previous carcass search and collection experience, or have completed standardized training.
* Each collection team will be issued a carcass collection kit (listed at the end of this protocol) and be given search location assignments.

**Search Locations & Search Procedure**:

* Search locations should be well defined and documented so that they are easily repeatable.
* Search locations may be identified as shoreline segments as defined and provided by the Incident Command Center. If shoreline segments are not provided, then search locations should be described using lat/long from a GPS, or using descriptions of unique geographic features that can be easily relocated.
* Searches should be conducted carefully and as thoroughly as time will allow. Search effort should also be documented by noting the time at the beginning and end of each search on the “BIRD SEARCH EFFORT and BIRDS COLLECTED DATA FORM” (single form attached to this protocol).

**Collection Procedure**:

* Begin each new search location by filling out the top portion of a “BIRD SEARCH EFFORT and BIRDS COLLECTED DATA FORM”. Information on individual carcasses will be added as they are found. If one or more bird carcasses are found at a search location, assign a white **Evidence Seizure Tag (Form 3-487)** for the respective search location. The Evidence Seizure Tag is imprinted with a unique Seizure Tag Number. Do not fill in the INV number block. Evidence Custodians will fill this in at the intake centers. Enter the date and start time; and search location/shoreline segment.
* Complete a blue Evidence Identification Tag (Form 3-2052) for each carcass that is located. One blue tag is used to identify a single carcass and should be filled in to include: the evidence Seizure Tag Number for that search location (shoreline segment); an item number (assigned sequential number, i.e. 01, 02, 03, etc.); name of the collector; date and time; and the species (if known).
* Photograph the carcass with the completed blue Evidence Identification Tag visible next to the carcass.
* When handling carcasses, wear nitrile gloves. (A new pair of gloves should be donned at the start of each new search location.)
* Fill in the carcass information on the BIRD SEARCH EFFORT and BIRDS COLLECTED DATA FORM including: species identification (if known), blue Evidence Identification Tag item number (assigned sequential number); photograph number; and amount/description of oiling. Determinations on carcass condition, scavenging, and emaciation should be made by experienced personnel as time allows.
* Place the carcass in a **paper bag**. It is important that oiled carcasses **do not** touch plastic bags. Also, do not place used gloves in the bag with the carcass. Place the paper-bagged carcass in a plastic bag and securely attach the completed blue Evidence Identification Tag to the outside of the plastic bag.
* At the end of each search location (shoreline segment), record the stop time and stop GPS location information and estimate the length of the search area on the BIRD SEARCH EFFORT and BIRDS COLLECTED DATA FORM.
* Complete the white Evidence Seizure Tag with information from all of the blue Evidence Identification Tags associated with each carcass found at this location. One white Evidence Seizure Tag should be used to represent (tag) all carcasses (not to exceed 10 carcasses per seizure tag; use additional tags if necessary) collected within a defined search location (shoreline segment). After the search of a specific location has been completed and carcasses have been appropriately bagged and tagged, the accompanying Evidence Seizure Tag should be filled in to include: the stop date/time; number of carcasses collected; blue Evidence Identification Tag item numbers associated with each carcass; and the name of the person collecting the carcasses.
* One member of the collection team should become responsible for that collection and their name should appear on the Evidence Seizure Tag.

**Turn in the Carcasses**

* At the end of the search day, the carcass collection person whose name appears on the Evidence Seizure Tag should take the carcasses to a pre-established carcass collection facility (should be a secure location) and sign them over to the Evidence Custodian or ship the carcass (es) to the appropriate intake station.
* If circumstances are such that no designated carcass collection facility has been established for the area from which a bird carcass is collected, then the collector should receive guidance and assistance from the Sector Spill Response Coordinator, OLE Case Agent, or NRDA representative regarding appropriate transfer procedures to a designated FWS official.

**Evidence Custodian**

* Please refer to the **Deepwater Horizon (MC 252) Oil Spill U.S. F.W.S. Procedures for Evidence Custodians Stationed at Bird Intake Centers**
* The Evidence Custodian (if different from the person who collected the carcasses), or designated FWS official, will complete the chain-of-custody on the back of the white Evidence Seizure Tag before logging the carcasses into the **Evidence Storage Log (Form 3-2064)**. The Evidence Custodian will log the carcasses into storage on the Evidence Storage Log including the following information: sequential log number; INV (incident-specific) number; date and time; description of the evidence; Evidence Seizure Tag number; and custodian’s signature.
* At the end of each day, the Evidence Custodian should compile the number and species of carcasses collected and logged, and transmit that information to the Service’s Response Representative at the Incident Command Center, the OLE Case Agent, and the NRDA Bird Lead.

**Carcass Photographs**

* Carcass collection photographs taken by Field Teams should be referenced on the original BIRD SEARCH EFFORT and BIRDS COLLECTED DATA FORM that is provided to the Evidence Custodian or to a designated Law Enforcement official and as soon as possible downloaded from the camera (memory card) to an approved data storage device. \*\*\*DO NOT DELETE, OVERWRITE OR OTHERWISE REMOVE OR MANIPULATE DIGITAL DATA (photographs) FROM THE INTERNAL MEMORY OF THE CAMERA OR FROM THE MEMORY CARD. \*\*\*
* For personnel working under authorized NRDA protocols, please refer to your study methods for the disposition of photographic documentation.

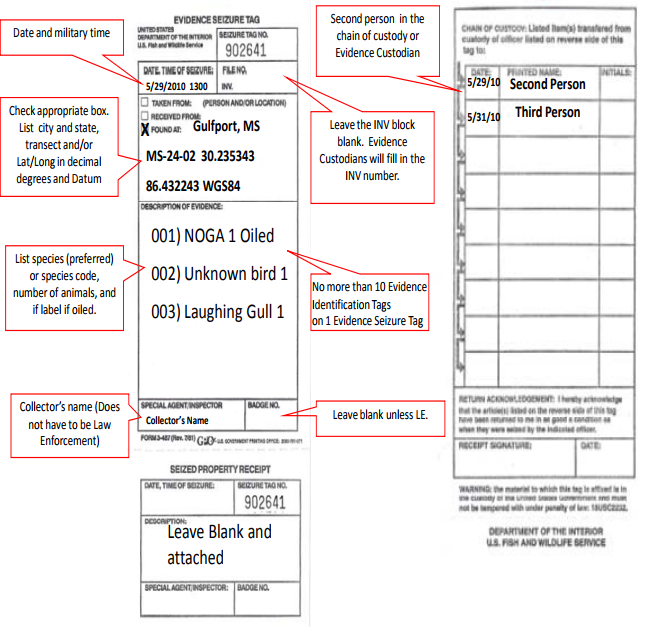
**Chain-of-Custody**

* Anytime carcasses are transferred from one person to another, a **Chain-of-Custody** must be maintained. The chain-of-custody may be maintained by using the back of the white Evidence Seizure Tag or by using a **Chain-of-Custody Form (Form 3-2063)**. A chain-of-custody form would be filled out for each white Evidence Seizure Tag (i.e. batch of carcasses with blue tags associated with that Evidence Seizure Tag). When there are only small numbers of carcasses, more than one Evidence Seizure Tag may be included on a single chain-of-custody form, so long as all of the listed items are transferred at the same time. The information from the Evidence Seizure Tag(s) should be listed in the appropriate section on the chain-of-custody form, including all associated Evidence Identification Tag item numbers. Information and signatures of both the transferee and the receiver must be included on the form. The chain-of-custody form must remain with the carcasses and transferred to a designated Law Enforcement official, as appropriate.
* If evidence is not transferred in person (i.e. via helicopter, plane or mail), the Evidence Custodian should describe how it was delivered on the Evidence Storage Log and/or Chain of Custody Form. The Evidence Custodian will also maintain a file of receipts (i.e.; Fed-Ex air bill) referencing the Evidence Seizure Tag number(s) that were shipped. All shipments must be sealed (preferably, using evidence tape) and signed to ensure that the shipment has not been tampered with during transfer.

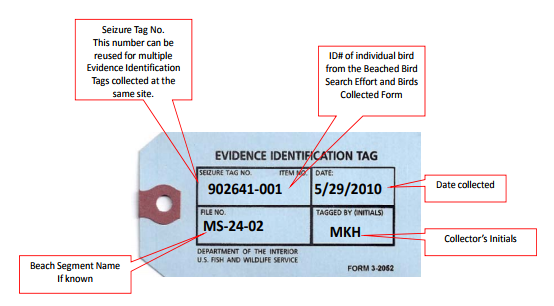
**Carcass Collection Kit**

* Incident-specific carcass collection instructions (if different from these)
* Paper bags
* Plastic bags (large and small)
* Rubber bands or twist-ties
* Pencil and/or permanent black pen
* BIRD SEARCH EFFORT and BIRDS COLLECTED data forms
* Chain-of-Custody forms
* Tape
* Nitrile gloves
* Flagging

**Evidence Seizure Tag**



**Blue Evidence Tag**



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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| DEPARTMENT OF THE INTERIOR  U.S. FISH AND WILDLIFE SERVICE  DIVISION OF LAW ENFORCEMENT | | **CHAIN OF CUSTODY RECORD** | | | | | FILE NO.  INV. | |
| DATE AND TIME OF SIEZURE: | | | REGION: | | EVIDENCE/PROPERTY SEIZED BY: | | | |
| SOURCE OF EVIDENCE/PROPERTY (person and/or location):  🞎TAKEN FROM:  🞎RECEIVED FROM:  🞎FOUND AT: | | | | | CASE TITLE AND REMARKS: | | | |
| ITEM NO. | DESCRIPTION OF EVIDENCE/PROPERTY (include Seizure Tag Numbers and any serial numbers): | | | | | | | |
| ITEM NO. | FROM: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | | RELEASE DATE | | DELIVERED VIA:  🞎US MAIL  🞎IN PERSON  🞎OTHER: |
| TO: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | |  | |
| ITEM NO. | FROM: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | | RELEASE DATE | | DELIVERED VIA:  🞎US MAIL  🞎IN PERSON  🞎OTHER: |
| TO: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | |  | |
| ITEM NO. | FROM: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | | RELEASE DATE | | DELIVERED VIA:  🞎US MAIL  🞎IN PERSON  🞎OTHER: |
| TO: (PRINT NAME, AGENCY) | | | RELEASE SIGNATURE: | |  | |

## Contacts

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| Response Role / Name | Email | Phone |
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