Maine Department of Inland Fisheries and Wildlife
OILED WILDLIFE RESPONSE PLAN

Maine Department of Inland Fisheries and Wildlife

Tri-State Bird Rescue& Research, Inc.

January 16, 2020

Table of Contents

1. EXECUTIVE SUMMARY

1.1. Scope & Purpose

This plan describes the roles, objectives, and implementation strategies for the Maine Department of Inland Fisheries and Wildlife (MDIFW) in responding to an oil spill that impacts wildlife resources for which MDIFW is responsible (see below). Other fish and wildlife agencies (e.g., federal, tribal, neighboring states, Canadian provinces) may also have jurisdiction and be involved in a response. This plan is not intended to define their needs/roles or to determine their possible actions (although our goal would be to work collaboratively with them).

This plan uses the best available science and lessons learned from real-world experiences and training exercises to propose specific objectives and implementation strategies. It provides sufficiently detailed guidance to enable a rapid response by MDIFW, but this "best-guess starting point" is not mandatory; specific circumstances may (and probably will) require some flexibility.

This plan is a living document that should be reviewed regularly and updated as needed. Such updates should be logged in the Record of Changes (Section 3).

1.2. Relationship to Other Response Plans

This plan references various Primary Care Center plans and Stabilization Facility plans (as they currently exist) and the *MDIFW Oiled Wildlife Response Trailer Plan*. It is referenced by (or incorporated into) the *Maine Marine Oil Spill Contingency Plan*, the *Maine/New Hampshire Area Contingency Plan*, and the *Joint Marine Pollution Contingency Plan Atlantic Regional Annex* (CANUSLANT).

1.3. Legal Authority

Federal laws (e.g., Water Pollution Control Act of 1974; Comprehensive Environmental Response, Compensation, and Liability Act of 1980; Oil Pollution Act of 1990) and state laws (Title 38 M.R.S.A. §546, 551) authorize and obligate MDIFW to plan for and respond to oil-impacted wildlife. Specifically, MDIFW is responsible for all inland fisheries and wildlife in the state of Maine; the Department of Marine Resources is responsible for sea-run fisheries and marine mammals. MDIFW's responsibilities are further defined by a Memorandum of Understanding with the Maine Department of Environmental Protection (DEP) and by the strategies described in this document and the other response plans listed above.

The state of Maine has a contract with an Oiled Wildlife Response Organization (OWRO) to assist with training and planning for an oiled wildlife response. Permits issued to MDIFW by the U.S. Fish and Wildlife Service and the Canadian Wildlife Service and permits issued by MDIFW to DEP and the OWRO allow responders to legally conduct necessary activities (e.g., capturing, possessing, transporting, hazing, holding, releasing, and/or euthanizing wildlife) during a response.

Delegation of authority as a Natural Resource Trustee proceeds from the Governor to the Commissioner of MDIFW to the MDIFW staff person designated by the

Commissioner to act on his/her behalf. For Natural Resource Damage Assessment and Restoration, this delegation requires a document signed by the Commissioner. Final documents such as those authorizing distribution of settlement funds, still require the Commissioner's signature. For a spill response, there is no signed delegation of authority but it is MDIFW unwritten policy that the MDIFW Oil Spill Response Coordinator acts on behalf of the Commissioner. Although any MDFIW staff person could be said to do the same, in an Incident Command System during a spill response the normal agency hierarchy is necessarily suspended to prevent conflicting priorities. The Wildlife Branch Director in the Operations Section, a role that the MDIFW Oil Spill Response Coordinator would likely fill at times, is supervised by the Operations Section Chief and in turn supervises each of the Groups (Assessment & Recovery, Hazing, Transport, Rehabilitation, etc.) for the wildlife response. Those Groups likely would be staffed by personnel throughout MDIFW and other agencies/organizations, potentially creating a different hierarchical structure of supervision from the agency norm.

1.4. Plan Objectives

The objectives below, excepting the final one, are in approximately chronological order of implementation during a spill response.

- Ensure human health & safety during a response
- Integrate the wildlife response into the Incident Command System (ICS)
- Notify MDIFW staff, other state agencies, the contracted wildlife rehabilitator, local wildlife rehabilitators, and potential volunteers about the incident
- Develop an incident-specific Wildlife Response Plan
- 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
- Maintain response preparedness between incidents

1.5. Relative Size of the Spill and Response

Spill size is based on the volume of product that has been, or could be, released. A "small" spill, however, may impact a large number of wildlife – thus the wildlife

response may be disproportionate relative to the rest of the response. Other characteristics of the response that will affect MDIFW include:

- Incident Command Post (ICP) – a staffed ICP helps responders with logistic and financial needs (e.g., requisitioning response resources, tracking costs, maintaining documentation, and paying bills). In a "small" spill involving only a few responders, however, there may not be a formal ICP and/or it may have very limited staffing. In this situation, MDIFW might need to address any logistic/financial needs for the wildlife response itself.
- Responsible Party (RP) – particularly in "small" spills, a spiller (Responsible Party) may not be identified (a "mystery spill") or the RP may have insufficient financial resources to fund the response. In this situation, MDIFW might have to front the wildlife response costs and later seek reimbursement from the Oil Spill Surface Fund or through a Natural Resource Damage Assessment & Restoration claim against the RP (or the RP's insurance company).
- Federalization – involvement of a federal agency potentially opens the federal Oil Spill Liability Trust Fund as a source of funds for conducting the response when an RP has not been identified or the RP is unable to fund the response. Federal involvement also could assist MDIFW with additional wildlife staff and response resources.

1.6. Roles, Responsibilities, & Implementation Strategies

The objectives of this plan will be implemented by a coordinated effort including MDIFW staff, a contracted Oiled Wildlife Response Organization (OWRO), and (potentially) local wildlife rehabilitators/volunteers. These wildlife responders will work within the Incident Command System (ICS) under the Wildlife Branch of the Operations Section with a liaison to the Environmental Unit of the Planning Section. Staff from MDIFW (40-50 trained people) will be responsible for field operations to assess wildlife impacts, collect live and dead impacted wildlife, and transport them to a Primary Care Center for oiled wildlife. If needed, site(s) for stabilizing wildlife prior to transport will be established closer to the incident location. The contracted OWRO will operate the Primary Care Center. The current contractor (through May 2020) is Tri-State Bird Rescue & Research, Inc. (TSBRR) from Newark, DE. International Bird Rescue from California was the previous contractor. Either or both of these organizations may also be contracted by the Responsible Party during an incident. Local wildlife rehabilitators have limited capacity to handle oiled wildlife but their trained staff and volunteers, if available, could assist at the Primary Care Center. They may also be able to assist with long-term rehabilitation needs for a few animals on a case-by-case basis.

Many components of a wildlife response would be similar regardless of the specifics of a spill incident. The same strategies will be used to accomplish response objectives for spills of a different size, just scaled up/down as needed. For example, all spills will require field surveys to assess wildlife impacts and to recover impacted wildlife. A Primary Care Center, perhaps supplemented by a Stabilization Facility closer to the incident location, will need to be established. This consistency has allowed MDIFW to

pre-plan strategies to meet these objectives. We have developed a detailed set of tactical objectives (Appendix 8.2) with their associated resource request lists that could be quickly implemented.

Preventing wildlife from becoming oiled is the best response – MDIFW has worked extensively with the Maine Department of Environmental Protection to map and describe sensitive wildlife resources and to develop Geographic Response Strategies to protect those areas including a process for prioritizing them.

The wildlife response typically lags other response operations. Wildlife may not encounter oil immediately and wildlife responders must locate the oiled wildlife before they can be recovered. It also will take time for the contracted OWRO to arrive on-scene and staff the Primary Care Center. Thus, the primary wildlife response objectives for the first day of an incident will be to establish an oiled wildlife hotline, conduct initial assessments to locate oiled wildlife, and active the Primary Care Center. Wildlife may continue to encounter oil throughout the incident and some oiled wildlife may take time to capture or only become capturable after clean-up operations have curtailed. Further, rehabilitating an oiled animal may take several weeks. Thus, the wildlife response may still be scaling up while other response activities are scaling down and may continue after other operations are completed. Wildlife response resources may be the last to demobilize.

1.7. Document Locations

This plan is a PDF file (*MDIFW Oiled Wildlife Response Plan.pdf*) saved in *H:\Wildlife\OIL SPILL\Spill Response\Plans\MDIFW\MDIFW Oil Spill Response Plan* on the server *oit-teaqfsemc11.som.w2k.state.me.us*. The most recent entry in the Record of Changes (Section 3) for a printed or digital copy of this document can be used to assess its currency.

2. AUTHORIZATION AND REVIEW

By signing below, we authorize our respective agency/organization to use this document, as best and where applicable, to guide our response to an oiled-wildlife incident in Maine.

Judith Camuso, Commissioner — Date 11/14/20
Maine Department of Inland Fishers and Wildlife

Lisa Smith, Executive Director — Date 15 Jan 2020
Tri-State Bird Rescue & Research, Inc.

The authors listed below used their professional experience, consultation with other experts, knowledge of local and regional resources, and research of the best available methods and equipment to develop this document as guidance for an oiled-wildlife response in Maine.

Donald Katnik, Oil Spill Response Coordinator — Date 1/15/2020
Maine Department of Inland Fishers and Wildlife

Michelle Knapp, Preparedness Manager — Date 1/15/2020
Tri-State Bird Rescue & Research, Inc.

3. RECORD OF CHANGES

DATE	CHANGE	EDITOR

4. SCOPE & PURPOSE

4.1. Scope

Oil spill response is a collaborative effort among many federal and state agencies, regional and local communities, tribes, organizations, industries, contractors, and other stakeholders. Most of these entities have developed their own spill response plans. Broader planning efforts coordinate across these individual plans and often assemble them by incorporation or reference into a collective response plan.

This response plan is for the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the state's contracted Oiled Wildlife Response Organization (OWRO). It is not intended to define the needs/roles or to determine the possible actions of other federal, state, tribal, or provincial fish and wildlife agencies. A separate section of this document details the relationship of this document to other spill response plans.

4.2. Purpose

Lessons learned from previous incidents have shown that thoughtful planning is critical to the success of a response. Defining and prioritizing response objectives, coordinating efforts among responders, and having access to essential equipment all benefit greatly from a deliberative planning effort before an incident occurs. No response plan can be completely applicable to any single incident because all spills are different, but the more scenarios that are considered and addressed through planning, the more likely the response to a given incident will be successful. Further, some elements of an oiled wildlife response will be similar enough across incidents to make detailed pre-planning useful.

This document is intended to be a comprehensive resource for MDIFW and the OWRO describing their roles, objectives, and implementation strategies in responding to an oil spill impacting wildlife resources in the state of Maine. These topics are detailed in this document either explicitly, by providing detail here, or implicitly by referencing the other appropriate documents that contain that detail.

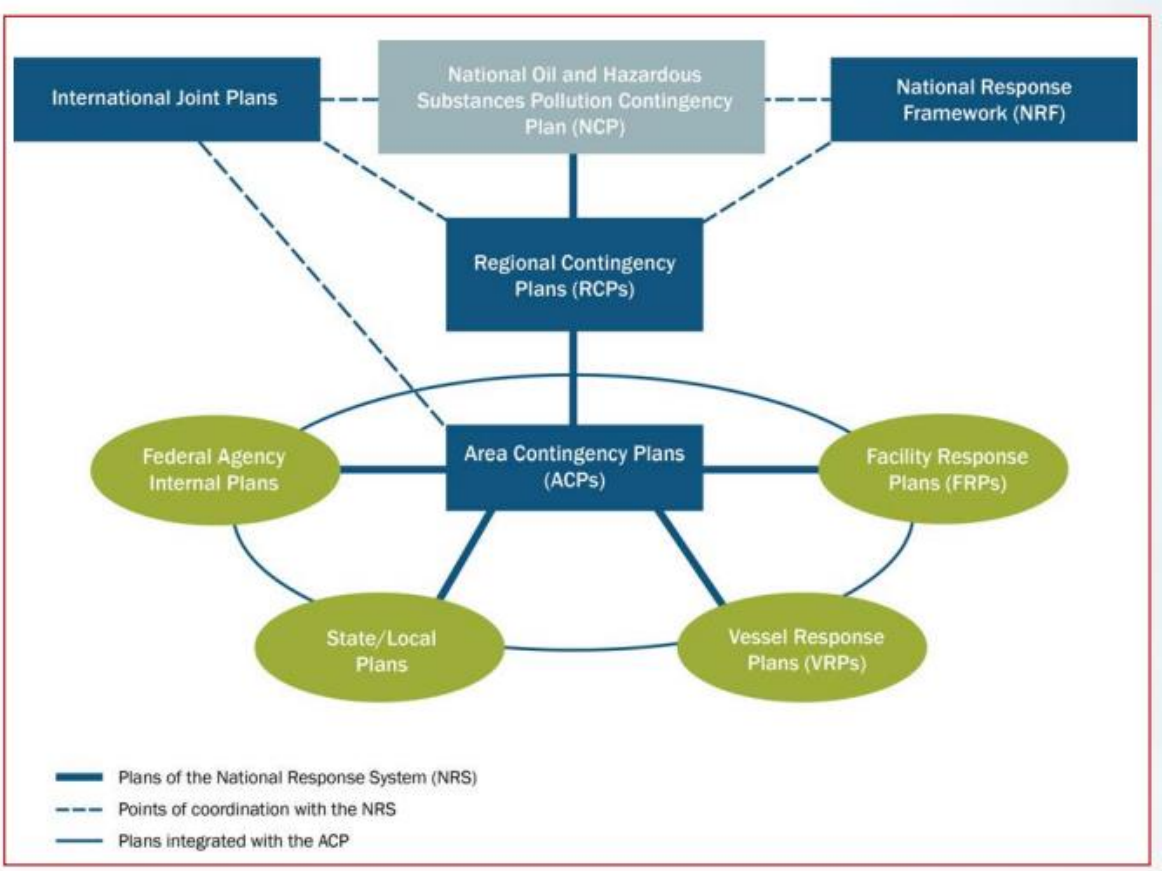
This document provides the context (the why) of oil spill response for MDIFW administrators explaining the legal mandates and agency mission needs that make this spill response planning effort necessary. It also details the components of a spill response (the what). The initial sections of this plan, particularly the Executive Summary, are most appropriate for this target audience.

This document also provides extensive detail (the how) for specific spill response strategies. These sections are intended for MDIFW and OWRO staff that will be involved in a spill response. Most MDIFW staff have experience with oiled wildlife only through training once a year; thus, it is critical to provide a resource of documentation for how to safely and effectively implement the specific tasks MDIFW may be asked to do during an incident response. This plan is a go-to resource for the MDIFW Oil Spill Response Coordinator in maintaining the equipment, training staff, and planning efforts required

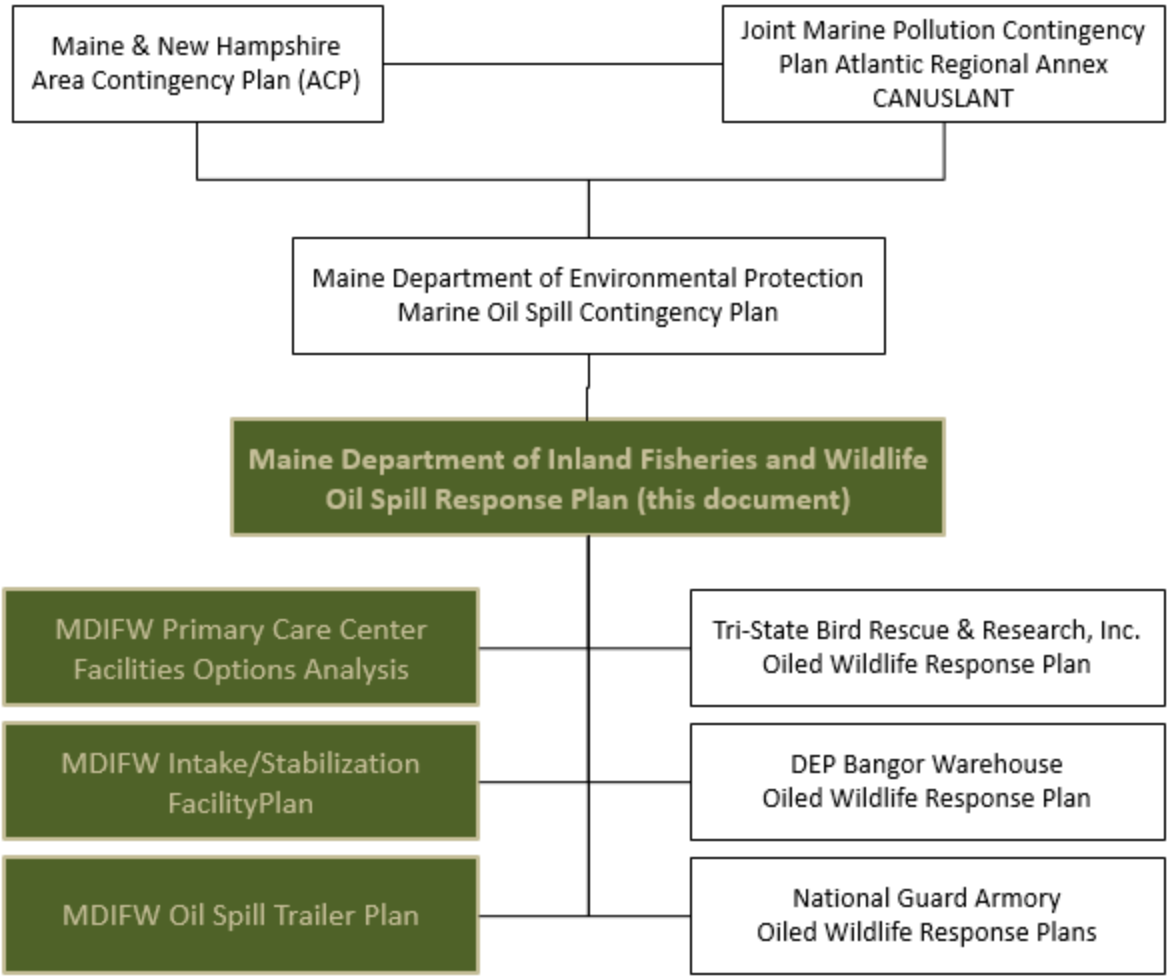
to keep MDIFW prepared for a response. It also ensures continuity through turnover in the Oil Spill Coordinator position.

5. RELATIONSHIP TO OTHER RESPONSE PLANS

This diagram from the U.S. Environmental Protection Agency's "Area Contingency Planning Handbook" (2013) illustrates relationships among response plans at the federal, regional, area, and state levels.



The diagram below illustrates how this MDIFW response plan relates to the state of Maine's contingency plan, the Maine/New Hampshire Area Committee's plan, and the Joint Canada-U.S. plan, and to other response plans within MDIFW.


Maine & New Hampshire Area Contingency Plan (ACP)
Joint Marine Pollution Contingency Plan Atlantic Regional Annex CANUSLANT
Maine Department of Environmental Protection Marine Oil Spill Contingency Plan
Maine Department of Inland Fisheries and Wildlife Oil Spill Response Plan (this document)
MDIFW Primary Care Center Facilities Options Analysis
MDIFW Intake/Stabilization FacilityPlan
MDIFW Oil Spill Trailer Plan
Tri-State Bird Rescue & Research, Inc. Oiled Wildlife Response Plan
DEP Bangor Warehouse Oiled Wildlife Response Plan
National Guard Armory Oiled Wildlife Response Plans

6. LEGAL AUTHORITY & MANDATES

Federal and state laws both authorize and obligate MDIFW to plan for and conduct a response to oiled wildlife. The Department's responsibilities are further defined by specific Memorandums of Agreement/Understanding with other agencies and by the strategies described in this document and other response plans it references. An oiled wildlife response often involves capturing, possessing, transporting, hazing, holding, releasing, and/or euthanizing wildlife; permits from federal, state (including MDIFW), and provincial agencies with jurisdiction over those species are required and thus part of the response authorization.

6.1. Federal Statutes

6.1.1. Water Pollution Control Act (FWPCA)

The Oil and Hazardous Liability section (§1321) of the FWPCA (33 U.S.C., amended 1974) establishes Area Committees that are responsible for developing regional Area Contingency Plans to be implemented in conjunction with the National Contingency Plan for responding to pollution discharges into water. Federal, state, and local agencies and federally recognized Indian tribes, where applicable, are the identified members of these Area Committees. MDIFW helped develop the Maine/New Hampshire Area Contingency Plan and regularly participates in updated it and in training exercises to test and improve it.

6.1.2. Oil Pollution Act (OPA)

The Oil Pollution Act of 1990, (33 U.S.C. §2701) established new requirements and extensively amended the FWPCA to provide enhanced capabilities for oil spill response and natural resource damage assessment. Title I of OPA 1990 established the Oil Spill Liability Trust Fund, financed by a tax on oil, to clean up spills when the responsible party is incapable or unwilling to do so. Not all oil spills involve federal agencies; a spill must be "federalized" to enable access to the Oil Spill Liability Trust Fund.

The Elements of Liability section (§2702) of OPA establishes that damages to natural resources, including the cost of assessing such damages, are recoverable through the Natural Resource Damage Assessment (NRDA) process by the federal, state, and tribal trustees of those resources. Under §2706(b)(3), the Governor of each state shall designate state and local officials who may act on behalf of the public as trustee for natural resources under OPA 1990. Thus, the Commissioner of MDIFW is the designated state trustee for oil impacted wildlife and wildlife habitat.

6.1.3. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The role of State Trustees in NRDA is further defined by CERCLA (42 U.S.C. §9607, 1980). Specifically, the Natural Resource Trustees have delegated authority to perform NRDA and to recover costs beyond cleanup to restore or replace natural resources to the conditions that would have existed before the spill.

6.1.4. Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act of 1976 (42 U.S.C.) is like CERCLA but applies to facilities currently in use whereas CERCLA applies to abandoned/non-operational sites.

6.1.5. Migratory Bird Treaty Act (MBTA)

The MBTA of 1918 (16 U.S.C. §703-712, 709 omitted) is relevant to oil spill response by regulating the taking, transportation, killing, or possessing of migratory birds. These activities may occur during a spill response and could require a federal permit.

6.1.6. Endangered Species Act (ESA)

Like the MBTA, the Endangered Species Act (16 U.S.C. §1538) regulates the taking, transportation, and possession species that are listed as federally endangered. During a spill response, these activities—and in some cases euthanization—may be required for endangered species impacted by the oil or the spill response. Consultation with the U.S. Fish & Wildlife Service would be necessary before taking any of these actions.

6.2. State Statutes

6.2.1. State Marine Oil Spill Contingency Plan

Title 38 M.R.S.A. §546-A, as amended in 1991, mandates the development of the *Maine Marine Oil Spill Contingency Plan* to include, among other things, the roles of other state agencies in spill response, the state's role under the joint agreement between the U.S. and Canada (CANUSLANT), an inventory of oil spill response equipment and trained responders in Maine, pre-identification of sensitive areas and resources and management strategies to protect them (i.e., Maine's "Environmental Vulnerability Index" (EVI) maps and Geographic Response Strategies), and identification of resources for wildlife rehabilitation.

6.2.2. Sensitive Area Identification and Protection

Title 38 M.R.S.A. §546-B, as amended in 2015, specifies that the Maine Department of Environmental Protection will work with the Departments of Marine Resources; Inland Fisheries and Wildlife; and Agriculture, Conservation and Forestry and the U.S. Fish and Wildlife Service to assess the nature and extent of sensitive areas and resources in the marine environment that may be threatened by oil spills and to develop a system to collect and maintain the necessary data. The original (1991) statute was a critical part in establishing MDIFW's Geographic Information System (GIS) program for mapping wildlife habitat. It states that the Department must use the state GIS and make the mapped information available through it.

6.2.3. Wildlife Rehabilitation Plan

Title 38 M.R.S.A. §546-C (1991) directs MDIFW, in consultation with other appropriate state and federal agencies, to develop a plan for rehabilitating oiled wildlife including policies, guidelines, and priorities; an analysis of the cost-effectiveness of rehabilitation; a mechanism for safely using volunteers; identification of needed resources and facilities; preliminary agreements with facilities; and required training.

6.2.4. Surface Fund

Title 38 M.R.S.A. §551, as amended in 2015, establishes the Maine Ground and Surface Waters Clean-up and Response Fund as a non-lapsing, revolving fund for carrying out oil discharge prevention and pollution control including sensitive area data management and mapping [§551(1-A)]. If a Responsible Party has been identified, they are responsible for reimbursing all costs of the wildlife response including MDIFW staff time and equipment use (even equipment owned by MDIFW). In most cases reimbursement for agency resources is after-the-fact and depends upon accurate documentation of costs. Payment for other resources such as purchased materials, contractors, and food and lodging may come directly from the Responsible Party. If a Responsible Party has not been identified, the Surface Fund may be used to reimburse cost of the wildlife response, in which case that would occur after-the-fact.

6.3. Memorandums

6.3.1. Agency Roles/Responsibilities

The Maine Department of Environmental Protection (DEP) and MDIFW maintain a Memorandum of Understanding (MOU) that describes the relative responsibilities of the two agencies in oil spill response and support for the MDIFW Oil Spill Response Coordinator position and MDIFW's spill response-related equipment and training from the Maine Ground and Surface Waters Clean-up and Response Fund. The MOU is renewed every two years in coordination with agency's biennial agency. Signed copies are retained by both MDIFW and DEP.

6.3.2. Facilities

MDIFW has a Memorandum of Agreement (MOA) through 2020 with the Maine Wildlife Park (MWP) in Gray for its potential use as a Primary Care Center. The MWP is owned by MDIFW, designed and operated for animal husbandry, and relatively secure. The facility within the MWP that would be used for treating/rehabilitating oiled wildlife (the Game Warden pole barn), however, lacks sufficient electrical power and water supply, temperature control, ventilation, and a water storage/containment system. These could be supplemented during an incident and we are working on a facility plan with strategies to do that, but we need alternative sites for a Primary Care Center.

MDIFW has had MOAs with National Guard armories in Belfast, Calais, Portland, and Westbrook, but these have expired. We are working with the National Guard to renew them.

MDIFW also had an MOA with Beal College in Bangor, but that has expired. Since then MDFIW has worked with DEP on potentially using the DEP response warehouse adjacent to the MDIFW office on the Dorothea Dix Psychiatric Center campus in Bangor. The DEP Bangor Warehouse would best serve as a Stabilization Facility; it is not large enough to clean more than a few birds and the more intensive needs for bird cleaning could interfere with DEP operations. MDIFW and TSBRR visited the DEP Bangor Warehouse and conducted training on oiled wildlife stabilization in the facility in June 2017. We are developing an MOA and a facility plan for that location.

Some of MDIFW's regional offices also have structures that could be used as a Primary Care Center/Stabilization Facility. TSBRR assisted MDFIW with evaluating the seaplane hangar and a new building in Greenville for this purpose. An internal MOA might not be necessary for legal authority, but would help the MDIFW manager of that facility understand the intended potential use of it and how that use would or would not impact their daily operations. The MOA would be part of the specific facility plan; MDIFW is working to develop these.

MDIFW and TSBRR visited USFWS facilities at Moosehorn National Wildlife Refuge (NWR) in Calais and at the Maine Coastal Islands NWR in Rockland in 2017. Moosehorn could function as either a Primary Care Center or Stabilization Facility. The Rockland facility would be small for a Primary Care Center. USFWS was supportive of these potential uses. During a federalized spill response with USFWS as a natural resource trustee, a formal MOA probably would not be required to use these facilities but in the event of a smaller spill in which USFWS was not directly involved an MOA with MDIFW for use of these facilities might be beneficial. We initiated that process in fall of 2017; a formal MOA has not been signed yet.

6.4. Contracts

The state maintains a contract with an Oiled Wildlife Response Organization (OWRO) to assist MDIFW with developing and updating its response plans, acquiring and maintaining appropriate equipment and resources, and training staff and local wildlife rehabilitators/volunteers in caring for oiled wildlife. The contract is paid for from the Maine Ground and Surface Waters Clean-up and Response Fund through DEP. MDIFW works with the OWRO and administers the contract and, when necessary, conducts the process to renew it including issuing a formal Request For Proposals, reviewing submissions, and awarding the contract. Previous contracts lasted 5 years; the current contract is on a 2-year cycle (with a possible 2-year renewal) tied to the state's biennial budget cycle.

The contract does not obligate the OWRO to respond to an oil spill in Maine or cover any response costs should the OWRO do so. The contract does, however, build a working relationship between the state and the OWRO that would greatly facilitate such a collaborated response. In practice, there are relatively few OWROs that could provide a significant response in Maine. Only Tri-State Bird Rescue & Research, Inc. in Delaware and International Bird Rescue in California have worked with Maine before. These OWROs have been involved in every recent, major oil spill that impacted wildlife in the U.S. They maintain state, federal, and provincial permits allowing them to work with oiled wildlife wherever needed. One or both almost certainly would participate in a Maine response working for the Responsible Party, a federal agency, or the state of Maine under an incident-specific contract.

6.5. Multi-State/-National Response

Spilled oil and oiled wildlife, or wildlife at risk of becoming oiled, can readily cross geographic boundaries requiring a response involving multiple states and/or countries. This plan addresses an MDIFW response within Maine. A response involving both Maine and New Hampshire would fall under the Maine/New Hampshire Area Committee's response plan. If Connecticut, Massachusetts, Rhode Island, or Vermont were also involved it would invoke the Region I – New England contingency plan. A multi-regional response would follow the National Contingency Plan and if Canada were involved the Joint Marine Pollution Contingency Plan Atlantic Region Annex (CANUSLANT).

These multi-state/-national plans address issues such as:

- Differences in applicable state, federal, national, and provincial laws.
- Moving response resources including staff across jurisdictional boundaries. This is particularly important for state employees needing to travel and work out-of-state or in Canada.
- Transporting oiled wildlife across a political boundary (if there is not an oiled wildlife Primary Care Center in each jurisdiction). Different states and countries have different policies regarding how certain wildlife can/must be handled, particularly regarding euthanasia. Endangered, threatened, special concern, etc. status of each wildlife species can vary among jurisdictions.
- Releasing rehabilitated wildlife that were captured in another jurisdiction.
- Hazing unoiled wildlife from one jurisdiction to another.
- State, federal, and provincial permits required for the wildlife response.

6.6. Permits

6.6.1. From MDIFW

Federal, state, and provincial wildlife laws restrict various activities that may be necessary during an oil spill response. Some wildlife responders, though, may not be from the agency with the applicable statutory authority. It therefore is

necessary for each wildlife agency or organization responding to a spill to have permits allowing them to conduct those activities. These permits are not specific to an incident but instead are blanket authorizations that cover the range of possible activities and are valid for a certain number of years depending on the issuing agency. These are kept on file by both the issuing agency and by the permittee.

MDIFW issued a Wildlife Scientific Collection Permit (2016-28) to DEP in 2016. This permit allows DEP responders to collect wildlife that are contaminated by oil, alive or dead, and including endangered and threatened species. It is valid throughout the state of Maine and has no expiration date but it does list specific DEP responders by name as sub-permittees. It requires an annual report of any activity under the permit. It does not include fish.

MDIFW has also issued a non-expiring Wildlife Scientific Collection Permit to itself. It includes more activities than the permit to DEP including animals that are sick or injured (versus oiled). It specifically includes invertebrates and has no expiration date. It lists by name certain seasonal staff as sub-permittees and also allows MDIFW to designate additional sub-permittees.

MDIFW issued a Wildlife Rehabilitation permit (R-2008-1058) to our Oiled Wildlife Rehabilitation Organization, Tri-State Bird Rescue & Research, Inc. It is valid through Feb 15, 2018.

MDIFW issued a Wildlife Importation Permit to the Canadian Wildlife Service (CWS) in 2008 to allow American Black Ducks, Mallards, and Wood Ducks to be taken from the U.S. into Canada as part of an oil spill exercise. We have not issued a permit to CWS since then.

6.6.2. To MDIFW

MDIFW possesses a Scientific Permit (SO2551) from CWS that allows MDIFW to collect live or dead migratory birds from New Brunswick during a spill response and transport them to a collection site/Primary Care Center. It also permits MDIFW to haze migratory birds away from oiled areas. It is valid through Dec 31, 2021.

MDIFW also has a Special Purpose – State Migratory Bird Master Permit/Import-Export from the U.S. Fish and Wildlife Service. This permit is not specific to oil spill response but covers a broad range of other activities carried out by MDIFW.

6.7. Delegation of Authority

Delegation of authority as a Natural Resource Trustee proceeds from the Governor to the Commissioner of MDIFW to the MDIFW staff person designated by the Commissioner to act on his/her behalf. For Natural Resource Damage Assessment and Restoration, this delegation requires a document signed by the Commissioner. Final documents such as those authorizing distribution of settlement funds, still require the Commissioner's signature. For a spill response, there is no signed delegation of

authority but it is MDIFW unwritten policy that the MDIFW Oil Spill Response Coordinator acts on behalf of the Commissioner. Although any MDFIW staff person could be said to do the same, in an Incident Command System during a spill response the normal agency hierarchy is necessarily suspended to prevent conflicting priorities. The Wildlife Branch Director in the Operations Section, a role that the MDIFW Oil Spill Response Coordinator would likely fill at times, is supervised by the Operations Section Chief and in turn supervises each of the Groups (Assessment & Recovery, Hazing, Transport, Rehabilitation, etc.) for the wildlife response. Those Groups likely would be staffed by personnel throughout MDIFW and other agencies/organizations, potentially creating a different hierarchical structure of supervision from the agency norm.

7. OBJECTIVES & IMPLEMENTATION STRATEGIES

7.1. Human Health & Safety

7.1.1. Job Hazard/Safety Assessments

The following table identifies health and safety risks for the jobs that wildlife staff could perform during a spill response.

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

	ICP	Field Operations									Primary Care Center						
		Assess/ Recover				Hazing											
Risk	WBD[1], 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	
Poisonous plants			X	X	X	X	X	X									

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

	ICP	Field Operations								Primary Care Center						
		Assess/ Recover				Hazing										
Risk	WBD[1], 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.
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							
WORKING WITH WILDLIFE																	
Getting hit, bit, clawed, scratched, etc.			X	X	X				X	X		X	X	X	X		

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

	ICP	Field Operations								Primary Care Center						
		Assess/ Recover				Hazing										
Risk	WBD[1], 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.
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			

[1.] Wildlife Branch Director

7.1.2. Incident-Specific Site Safety Plans

During an incident, MDIFW will need to develop a safety plan for each site where MDIFW staff will have primary responsibility. Site safety plans include a physical description and map of the site and identify hazards, key staff, security procedures, emergency contacts, and required Personal Protective Equipment (PPE). Most MDIFW staff will be assigned to a field location. A safety plan template appropriate to a field site is in this response plan (Appendix 8.7). It has empty fields for all the required information and can be filled out/modified as needed for a specific location.

MDIFW staff also may be working in a Stabilization Facility or in the Primary Care Center. Where we have pre-identified potential sites for these needs and written a facility response plan for it, a safety plan will be included in that facility response plan. Some required information is incident-specific but as much as possible has already been filled out. If a different site is chosen for these activities, the existing site safety plans will be modified as needed.

7.1.3. Training

The wildlife responders addressed by this plan include OWRO and MDIFW staff, local wildlife rehabilitators, and their volunteers. Most oil spill responders are required to complete OSHA HAZWOPER (HAZardous Waste Operations and Emergency Response) training. The risks faced by wildlife responders, however, are different from those faced by other spill responders. Wildlife responders 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.

Wildlife responders face risks that other responders do not, such as handling live animals and exposure to wildlife diseases. Capturing live animals sometimes requires working at night or in risky environments like shallow, near-shore water.

HAZWOPER training, therefore, is not entirely appropriate for wildlife responders because it does not include some of the additional risks they could face and because it emphasizes many skills, such as contaminant identification, that wildlife responders are unlikely to need in a spill response.

7.1.3.1. OWRO Staff

The Oiled Wildlife Response Organization is responsible for training its own staff. Typically, this includes OSHA HAZWOPER and veterinary training.

7.1.3.2. MDIFW Staff

Considering that OSHA HAZWOPER training is not entirely appropriate for the tasks that MDIFW staff will be assigned during a spill response and that it is a significant time/cost investment (24-40 hours initially followed by 8-hour annual refreshers), MDIFW has opted to develop its own safety training program for oiled wildlife response. The Maine Bureau of Labor Standards oversees safety of Maine state workers but typically applies OSHA standards. OSHA considers a responder to be adequately trained if the risks associated with the job duties for that responder have been assessed and incorporated into an agency-approved training program and the policies of that program (i.e., frequency/amount of specific training) have been followed by that responder.

The training regimen detailed below, which MDIFW has designed to specifically address the job hazard/safety assessments for MDIFW staff participating in an oiled wildlife response, constitutes our formal training policy for MDIFW staff acting as spill responders as described in this plan.

Most MDIFW staff would be deployed on field operations during an oiled wildlife response. Assessing, capturing, and handling wildlife are normal duties for a wildlife biologist. Many staff also have training and experience with hazing wildlife. Except for the Oil Spill Response Coordinator and those who participated in the *Julie N.* incident in 1996, most MDIFW staff have limited experience in oil spill response. Regular training, therefore, is critical to helping MDIFW staff carry out wildlife duties they are familiar with in the unfamiliar context of an oil spill response.

MDIFW conducts an annual, 8-hour minimum training for wildlife staff. Response basics such as Personal Protective Equipment (PPE), ICS, and general safety are always covered but each year focuses on a different aspect of a potential response such as cold-weather operations, inland vs. coastal sites, working from boats, or in a Stabilization Facility/Primary Care Center. MDIFW staff must have completed three of the last four annual trainings to be adequately prepared to participate in a response. This ensures that the training for each person is both recent and comprehensive. Staff who do not meet that requirement (e.g., new employees or those who missed more than one training in the last four years) would either receive additional on-site training or be assigned less hazardous duties appropriate to their current level of training.

MDIFW designs and conducts these annual trainings with the assistance of the state-contracted Oiled Wildlife Response Organization (OWRO). The OWRO provides a higher level of expertise in both wildlife rehabilitation and real-world oil spill response. The MDIFW Oil Spill Response Coordinator maintains

lists of staff participants in each year's training to determine who is qualified to work on a response.

7.1.3.3. Local Wildlife Rehabilitators/Volunteers

Local wildlife rehabilitators and their affiliated volunteers could be critical staff in an oiled wildlife response. However, they often lack adequate safety training relative to hazardous materials, especially petroleum products. The OWRO contracted by the state of Maine provides a two-day training session every two years for local wildlife rehabilitators (Avian Haven, Center for Wildlife, and The Raptor Trust) and their volunteers. The OWRO may also provide on-scene training, in coordination with the Incident Safety Officer staff and/or Responsible Party staff if appropriate.

7.1.4. 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 2. 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 PPE[1].

	Area of Operations / Response Task		
PPE Type	FIELD[2]	TRANSPORT	STABILIZATION OR PRIMARY CARE CENTER[3]
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	

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.

7.1.5. 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 3. Zooneses most likely to be encountered during an oiled wildlife response.

Zoonosis	Description/Symptoms	Transmission
Giardia	Diarrhea	Land-based airborne pathogen (inhalation of spores or contact with an open wound)
Lyme Disease	Rash, fever, arthritis, heart & nervous system abnormalities	Tick bite (deer ticks)
Rocky Mountain Spotted Fever	Rash, fever, arthritis, heart & nervous system abnormalities	Tick bite (deer ticks)
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
Salmonella	Diarrhea, fever, nausea, dehydration	Bacteria transmitted through contact with feces or uncooked foods
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)
Psittacosis	Flu-like symptoms	Contact with bodily fluid/feces
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

Table 3. Zooneses most likely to be encountered during an oiled wildlife response.

Zoonosis	Description/Symptoms	Transmission
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.
Algal Bloom[1]	Respiratory problems/rash	Contact with water contaminated with cyanotoxins
Tetanus[1]	Lockjaw, general muscle stiffness, fever, headache, and/or seizure	Bacteria transmitted through an open, usually puncture wound from a contaminated object

[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

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

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

7.2. Roles & Responsibilities

7.2.1. Size of the Spill and Response

Spill size is based on the volume of product involved and the expected difficulty in containing and cleaning it up. The Incident Command Post (ICP) is scaled to the size of the spill response. For a "small" spill, it may just be one or two individuals working out of a vehicle. The wildlife response, however, often is disproportionate to the rest of the response. A very small amount of oil could impact a significant number of wildlife or a large amount of oil might have little wildlife impact. Thus, the size and capability/staffing of the ICP may not reflect the logistical and financial needs of the wildlife response. In some cases, MDIFW might need to provide much of its own logistic and financial support including requisitioning response resources, tracking costs, paying bills, and maintaining proper documentation.

7.2.2. MDIFW

The roles and responsibilities for MDIFW staff during an oiled wildlife response are listed below. The list order is based on staffing requirements. The bracketed letters refer to the Incident Command System organizational charts (Figure 1, Figure 2).

7.2.2.1. Field Operations [E]

During a spill response, most MDIFW staff—including field contractors and seasonal staff—will be assessing, hazing, recovering, and transporting wildlife. These groups work within the Wildlife Branch of the Operations Section. They may be divided into teams (e.g., Aerial, Boat, Shoreline). Some MDIFW staff will be group or team leaders. Group leaders could deploy with the group or coordinate their activities from a field command post.

7.2.2.2. Primary Care Center [H]

The Rehab Group in the Primary Care Center is the responsibility of the OWRO, but in a large response additional staff will be needed. These may come from local wildlife rehabilitators, volunteers, and/or staff from responding wildlife agencies who are not deployed on field operations. From MDIFW, these may include administrative, clerical, and engineering staff and others.

7.2.2.3. Stabilization Facility [F]

Some MDIFW staff might assist at the Stabilization Facility accepting animals from field teams and preparing them for transport to the Primary Care Center. Usually the OWRO will the supervise the Stabilization Facility and provide veterinary services.

7.2.2.4. Environmental Unit [D]

The Environmental Unit (EU) within the Planning Section at the Incident Command Post develops response objectives for the next operational period. The initial wildlife objectives will be similar for most incidents (Appendix 8.2):

- Assess the incident area for impacts to wildlife
- Activate the OWRO
- Activate the Primary Care Center
- Establish a Stabilization Facility, if needed

As the incident evolves, additional/more specific objectives will be developed. Most responding wildlife agencies will provide wildlife Subject Matter Experts to the EU. MDIFW will need to provide at least one, perhaps several, staff depending on the impacted resources. If just one is needed, the MDIFW Oil Spill Response Coordinator may alternate between acting as the WBD and as a Subject Matter Expert in the EU.

7.2.2.5. Natural Resource Damage Assessment & Restoration [B]

The planning component of Natural Resource Damage Assessment & Restoration (NRDAR) involves designing field studies to assess the damage to natural resources. The Research & Assessment Section (RAS) Supervisor or a RAS Group Leader would be best suited for this, although—depending on the impacted resources—a RAS species specialist also might be appropriate. Typically, all the federal/state Natural Resource Trustees and possibly the Responsible Party will have staff involved.

The operational component of NRDAR is very similar to what MDIFW RAS staff do normally—conducting field studies to inventory resources. Both pre- and post-spill data need to be collected, so this should happen concurrent with other response activities, making it difficult to staff when people are already deployed elsewhere in the response.

NRDAR usually continues long after other field operations have concluded. When the Oil Spill Response Coordinator is no longer occupied with other response roles, he/she will assume NRDAR responsibility for MDIFW.

7.2.2.6. Wildlife Branch Director [C]

The Wildlife Branch Director (WBD) in the Operations Section at the Incident Command Post oversees the wildlife response groups, coordinates with other operational branches (e.g., Air Operations, Emergency Response, and Recovery & Protection), and ensures that wildlife objectives are addressed in the Incident Action Plan. For larger incidents, there may be a Deputy WBD. The responding wildlife agencies (MDIFW; USFWS; other state, provincial, or tribal agencies) will share/alternate in staffing these roles. For MDIFW, this will be the responsibility of the Oil Spill Response Coordinator.

7.2.2.7. Public Outreach [A]

MDIFW should provide an outreach specialist from our Information & Education Division to assist the Public Information Officer (PIO) in the Joint Information Center (JIC). The wildlife operations during a spill response are of great interest to the public. A tactically well-executed response can still be perceived as a failure if the public misunderstands or is unaware of what MDIFW is doing and why. It is critical to ensure that the information being distributed by the JIC is accurate and appropriate. This person should be located at the Primary Care Center, for best access to incoming data on oiled wildlife, but remain in close communication with the PIO. The OWRO also will have experience with public outreach during an oiled wildlife response and will assist with summarizing information and drafting press releases.

7.2.2.8. Evidence Custodian [G]

The Evidence Custodian is responsible for collecting all carcasses and samples and logging them in as evidence at the Primary Care Center. This role usually will be filled by a Maine Game Warden or a USFWS Law Enforcement Officer.

7.2.3. Oiled Wildlife Response Organization (OWRO)

7.2.3.1. Stabilization Facility [F]

OWRO staff will evaluate the condition of captured wildlife, provide immediate veterinary care for acute conditions, ensure they are kept warm (or cool) and hydrated, and otherwise stabilize animals for transport. They will communicate with the Primary Care Center to prepare them for the number, type, and condition of animals to expect. If MDIFW staff or volunteers are employed at a Stabilization Facility, the OWRO will oversee their work.

7.2.3.2. Primary Care Center [H]

Once on-scene, OWRO staff will oversee activation and maintenance of the Primary Care Center. When oiled wildlife begin arriving, the OWRO will oversee all aspects of the wildlife care until they are rehabilitated and released, deceased, or otherwise removed from the facility. Each OWRO will have its own detailed plans and policies for these activities, which will be incorporated as appropriate into the Incident Specific Wildlife Response Plan. They also will be operating under the appropriate facility plan.

Another key role for the OWRO at the Primary Care Center will be providing accurate information to the Joint Information Center and to conduct tours for VIPs and the media. All visits to the Primary Care Center must be pre-planned, approved by the Wildlife Brach Director and Unified Command, and must not impede ongoing animal care. Approved visitors will be required to sign in and out of the facility, receive a safety briefing, and remain with their assigned

guide throughout the tour. Generally, visitors will not able to venture off on their own or enter a contaminated area.

7.2.3.3. Wildlife Branch Director [C]

The OWRO will assist the Wildlife Branch Director (WBD), a role that may be filled by the MDIFW Oil Spill Response Coordinator, with operational tactics, planning, and logistic needs for the Stabilization Facility and Primary Care Center. To facilitate this, Tri-State Bird Rescue & Research, Inc. has used their experience with operating Primary Care Centers during other spill incidents to help MDIFW compile detailed 213RR (Resource Request) forms that itemize expected resource needs.

7.2.3.4. Cost Accounting

The OWRO will track all expenses associated with operating the Primary Care Center and the Stabilization Facility(ies). It will bill for its services in accordance with its established rate structure and the executed response agreement. It is the responsibility of the OWRO to develop a daily estimated cost/burn rate for their activities. This information will be submitted to the Finance Section in the Incident Command Post at the agreed upon time by the WBD or the OWRO.

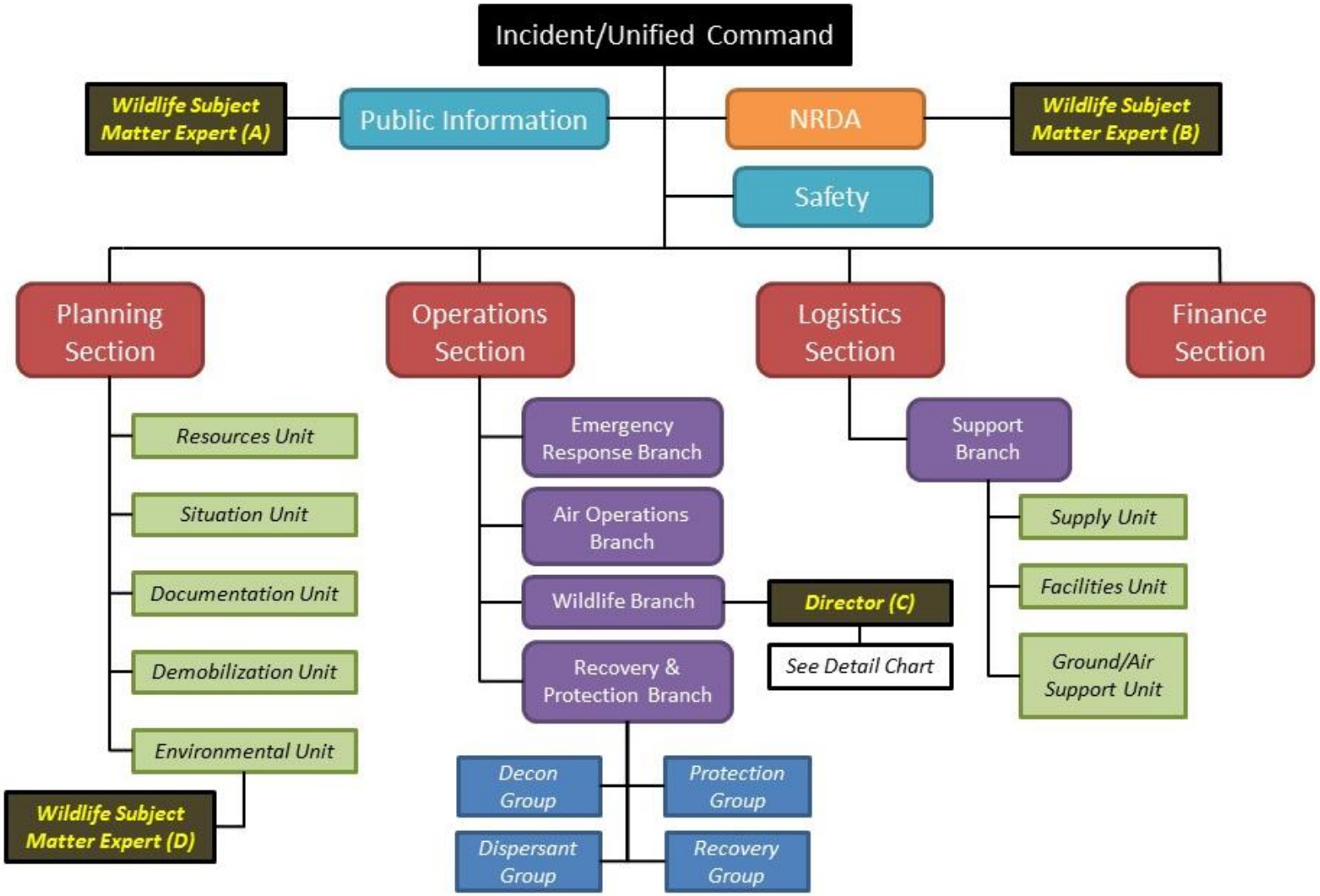


Figure 1. Typical response structure within an Incident Command Post. Only those elements that wildlife responders would interact with the most are shown. The labeled roles (in yellow text) may be filled by MDIFW staff.

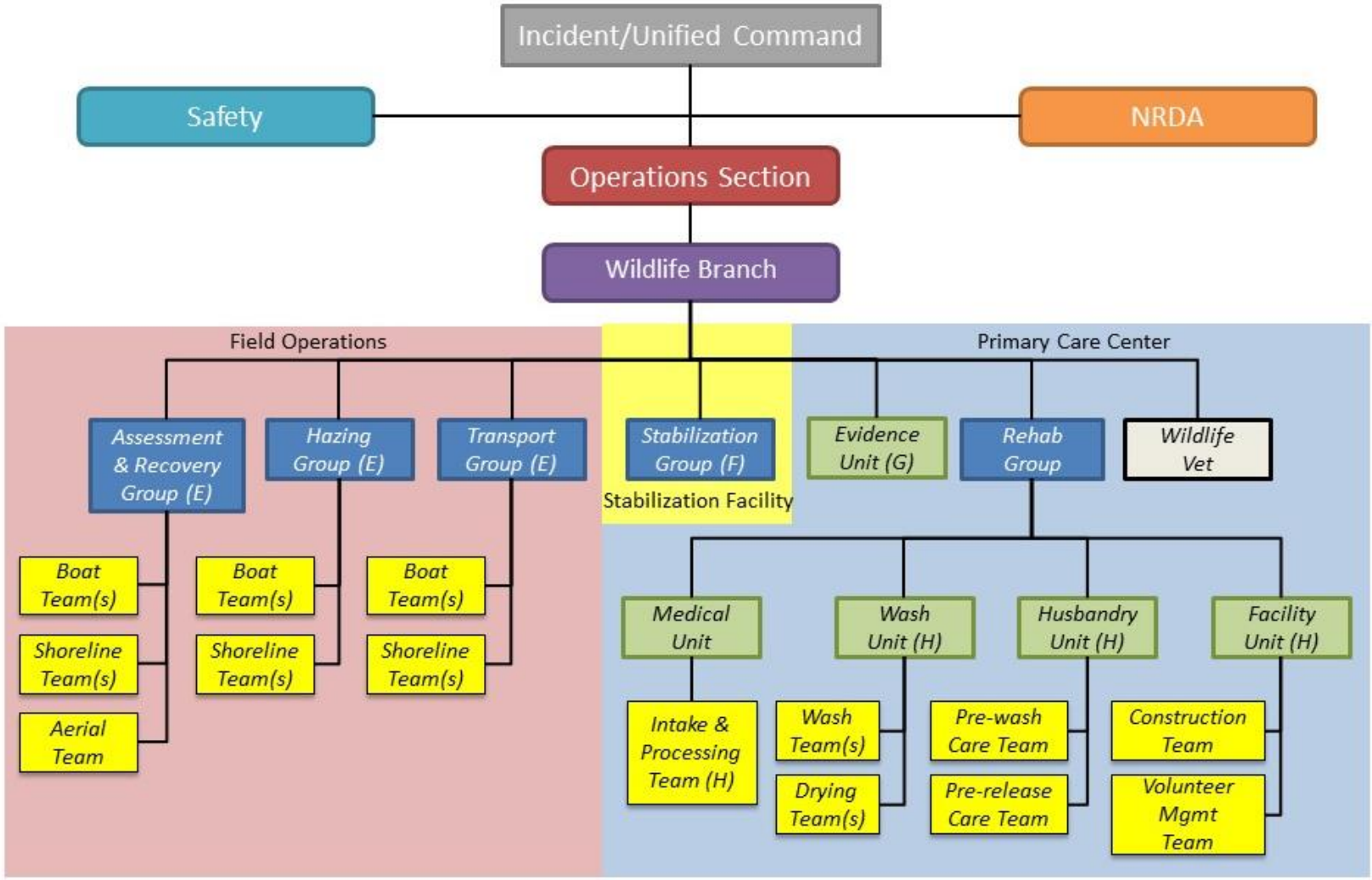


Figure 2. Suggested response structure of the Wildlife Branch within the Operations Section. Not all Groups/Units/Teams may be needed. Additional details on specific Unit/Team structure within the Rehab Group at the Primary Care Center is provided in the facility response plan.

7.3. Notifications

7.3.1. Within MDIFW

The initial contact for MDIFW is the Oil Spill Response Coordinator. Notifications usually come from the Maine DEP or the U.S. Coast Guard. Sometimes they are forwarded from the Maine Department of Marine Resources, an adjacent state/provincial fish and wildlife agency, or an Oiled Wildlife Response Organization contracted by the Responsible Party.

The Oil Spill Response Coordinator will first contact an MDIFW Regional Office to conduct an initial on-site assessment. Depending on the seriousness of the incident and/or the extent of available information, the MDIFW Wildlife Management Section Supervisor, Wildlife and Fisheries Division Directors, Fish and Wildlife Bureau Director, and Information & Education Division will be notified next.

If there are impacted wildlife or if the incident has been publicized, the Oil Spill Response Coordinator will notify the MDIFW Commissioner. Otherwise notification of the Commissioner will be at the discretion of the Bureau Director.

The potential scale of an MDIFW response usually will not be known until Regional staff have completed the initial on-site assessment. If that indicates a large-scale deployment of MDIFW may be necessary, the Oil Spill Response Coordinator will schedule a general staff briefing.

7.3.2. Department of Human Resources (DHS)

MDIFW will work with DHS staff to ensure that MDIFW staff can work legally under their employment contracts while deployed for a spill response. Responders might work irregular schedules exceeding 80 hours per pay-period and/or on holidays. An incident-specific code will be created for tracking staff time on the response. We may need, however, to designate other staff to complete timesheets as deployed individuals might not have access to MDIFW's time-tracking system to enter their hours or to approve timesheets for staff they supervise.

7.3.3. Oiled Wildlife Response Organization (OWRO)

MDIFW will notify the OWRO if the Maine DEP, the U.S. Coast Guard, or the Responsible Party have not already, even if there are no reports yet of oiled wildlife. Early notice enables the OWRO to prepare for possible deployment. The OWRO will need to know:

- The name, affiliation, response position, and contact information of the notifier;
- Type and estimated amount of product released;
- Time/date of release;

- Incident location;
- Responsible Party;
- Wildlife involved (species/numbers, ICS 232 Resources at Risk form if available);
- Agencies already notified;

The OWRO and MDIFW will jointly determine if the OWRO will remain on alert and/or just provide technical assistance remotely or deploy (full deployment could take up to 48 hours).

7.3.4. Other Federal/State Agencies

MDIFW will notify the U.S. Fish & Wildlife Service (USFWS) regional office in Hadley, the Maine Field Office, and any potentially affected refuges in Maine. Even if these offices were already aware of the incident, early coordination with USFWS will be a high priority.

If a Primary Care Center will be established to decontaminate/rehabilitate oiled wildlife and the selected facility is managed by another organization (e.g., Maine National Guard), MDIFW will contact that organization to begin the process of securing permission for use of the facility.

If MDIFW learns about a spill incident before any other federal/state agencies, we will immediately notify DEP and USCG.

7.3.5. Local Wildlife Rehabilitators/Volunteers

A courtesy call to Avian Haven and the Center for Wildlife is appropriate any time a spill might impact wildlife. These local wildlife rehabilitators may get inquiries about or reports of oiled wildlife from other responding organizations, the public, or the media so briefing them on the incident status and the oiled wildlife hotline, if activated, would be helpful. They might also have oiled animals brought to their facilities. They will notify their own staff and volunteers depending on their potential involvement in the spill response.

7.4. Incident-Specific Wildlife Response Plan

As the name implies, an "incident-specific wildlife response plan" is an implementation of this comprehensive plan document relative to a specific spill incident. In many ways, the two versions would be very similar but the incident-specific plan:

- will not include objectives and strategies described in the comprehensive plan that are not necessary/appropriate for the specific incident,
- might contain modified objectives and strategies,
- will contain more detailed information specific to the incident (e.g., deployment locations, number/size of teams),
- will be more actionable (i.e., more details on how to implement a strategy,
- will include the objectives and strategies of other responding wildlife agencies and/or detail for how they will be integrated with those of MDIFW,
- will change over time throughout the incident.

7.5. Primary Care Center

The location for the Primary Care Center (PCC) will be determined during an incident. It will depend on where the spill occurred and the availability of a suitable site near it. If it is a facility that has been pre-identified as a potential site for the Primary Care Center, at least a draft response plan may already exist for it. If not, then a generic Primary Care Center plan will be used and adapted for the existing circumstances.

In 2019, MDIFW and Tri-State Bird Rescue concluded a facility options analysis for Maine. The options analyzed include:

- a purpose-built facility,
- adapting a facility built for another purpose,
- deploying a mobile facility, or
- some combination of the above

The analysis determined that the best option is to adapt an existing facility that was built for some other purpose and potentially supplement it with mobile elements (e.g., a large, all-weather tent) if available (mobile shelters suitable for a PCC may take months to acquire as they are not available off-the-shelf).

Potential facilities that could be adapted for a PCC include sites owned by MDIFW, U.S. Fish and Wildlife Service, and the Maine DEP. Most of these are limited in size, infrastructure, and/or location but depending on the incident circumstances could still be the best choice. National Guard armories, in contrast, have a lot of space and existing infrastructure and are distributed throughout the state—thus a good choice for a PCC if available. The downside is that the National Guard is not an active member of the spill response community.

Additional options are evaluated in the facility options analysis (it assessed all of the various ideas that have been proposed over the years). Most have some potential and might be useful in a specific circumstance, but none are ideal and/or suitable across a broad enough range of incident scenarios to be viable as a primary strategy.

7.6. Assessing & Recovering Oil-Impacted Wildlife

Assessing potential impacts to wildlife and recovering oil-impacted animals will be MDIFW's most significant objective in a spill response and likely where most MDIFW staff will be deployed. Assessment & Recovery Teams may also collect carcasses (see Section 7.9). Rehabilitating oiled wildlife also is a significant objective, but will be carried out by the Oiled Wildlife Response Organization, not MDIFW.

As trained wildlife professionals, MDIFW staff have considerable experience with capturing and handling wildlife. It is not the purpose of this response plan to detail techniques or protocols commonly used by MDIFW but rather to emphasize the unique requirements of an oiled wildlife response.

Recovery of oiled wildlife usually does not begin until after an initial assessment has provided detailed information on the location of these animals and additional MDIFW staff have arrived on-scene. Even after cleanup, wildlife may continue to encounter residual amounts of oil that may still cause injury. Recovery and rehabilitation operations may therefore continue after most other aspects of the response are completed.

The MDIFW Oil Spill Response Trailer, based at the Bangor office, contains Personal Protective Equipment (PPE), nets, pet carriers, and other equipment that would be useful for staff conducting assessment and recovery operations. The trailer will be deployed to a nearby field command post/Stabilization Facility.

MDIFW also will need to manage the data collected from these assessments and from other reports. Staff at the Primary Care Center will need to know how many oiled animals will need to be cared for and what species to expect. The Operations Section in the ICP will need to know where to deploy recovery and hazing/deterrence teams. The Planning Section will need information to develop objectives for the next operational period, and the Public Information Officer will need current and accurate information on wildlife impacts for developing press releases and briefing the media.

The Maine Department of Marine Resources is responsible for marine mammals. They can only be captured by permitted officials (with an appropriate Letter of Authorization). NOAA Fisheries, the federal jurisdictional agency, prohibits capture of animals in the water (they can only be captured when the animal is on land).

7.6.1. Initial Assessment

Before we can recover live, oiled wildlife for rehabilitation, collect dead oiled wildlife as evidence, establish a Stabilization Facility, or try to prevent unoiled wildlife from becoming oiled, we need to determine where these animals are located relative to the spill. Based on past surveys and anecdotal information, MDIFW has considerable knowledge of where species tend to occur, but animal concentrations and movements change seasonally and spill response requires more site-specific information than our general knowledge usually can provide. Reports from other responders and/or the public can provide some information on wildlife

impacts, but an initial assessment by MDIFW staff, usually from a Regional office, is crucial to determining how best to recover oiled animals. Ideally this initial assessment will occur on the first day of the spill. It may be ground-based if aircraft or boats are not available.

7.6.2. Ground Assessment and Recovery

Ground-based assessment and recovery will be conducted by teams of three MDIFW staff each; two people 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.

Ground teams will search their assigned areas for both oiled and unoiled wildlife, capture live oiled animals, and collected dead ones. MDIFW might need to deploy a dozen or more ground teams. Because oil spreads most rapidly on water, most survey areas will be along shorelines, wetland edges, or river/stream banks. MDIFW staff operating within 6 ft of the water are required to wear a Personal Floatation Device (PFD).

Ideally ground teams will be deployed from a Stabilization Facility or Field Command Post near the incident location. The Ground Assessment & Recovery Group Leader likely will be located there to assign teams to survey areas, coordinate reports, and relay information to the Incident Command Post via the oiled wildlife hotline.

MDIFW 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 ground team will plan where to exit the area, where decontamination will occur, and how to dispose of their contaminated PPE.

Rapid communication is critical to a successful wildlife response, particularly when live animals are involved. Ground teams will carry two-way radios or cell phones allowing them to communicate with the Group Leader. If direct communication during a survey is not possible, then ground teams will need report back to the Stabilization Facility/Field Command Post as quickly as possible.

Captured animals will be transported from the field to a Stabilization Facility as quickly as possible. If a transport team is available, the ground team may rendezvous with them to hand over a captured animal before continuing their survey. Otherwise the ground team will stop the survey to transport the animal themselves. In any case, the ground team will be responsible for initiating a Chain-of-Custody form (Appendix 8.6) for each recovered animal, live or dead, and

ensuring this form is properly filled out before transferring the animal to someone else.

Ground teams might be assigned multiple areas to survey. Areas might also need to be re-surveyed daily or even multiple times per day. Level D PPE, however, is difficult to work in and can lead to heat exhaustion. Thus, ground assessment and recovery must be planned and a specific site-safety plan developed to minimize the time staff are wearing PPE and allow sufficient time for breaks.

7.6.3. Aerial Assessment

Aerial assessment is an efficient way to estimate numbers and locations of most species of oiled/unoiled wildlife across the incident area, but access to an aircraft and pilot may be difficult in the first hours of a response. Skilled wildlife observers (typically two per flight, one on each side of the aircraft) can accurately make these estimates from a low-flying (e.g., 500 ft. AGL) small fixed-wing aircraft or helicopter. MDIFW has staff in both the Research & Assessment Section in Bangor and the Management Section Regional offices with aerial survey experience. The frequency of surveys will depend on the extent and nature of the spill and the prevalence of wildlife, but could be daily. These flights will be coordinated with the Air Operations Group.

The Maine Warden Service has several fixed-wing aircraft and pilots that have previously assisted MDIFW biologists with various wildlife surveys. They will be our primary resource for aerial support during a spill response. Search and rescue and/or critical law enforcement operations unrelated to the spill, however, could take precedence.

The Maine Forest Service (MFS) has both fixed-wing aircraft and helicopters. MFS pilots also have assisted MDIFW biologists with wildlife surveys and will be an excellent secondary resource for aerial support. Like the Warden Service, though, MFS has critical operations that could take precedence to assisting MDIFW.

The U.S. Coast Guard (USCG) would be the third potential source of aircraft and pilots for conducting aerial assessments. Their aircraft are considerably more expensive to operate than state aircraft and they would be in extensive demand by the rest of the response operations and therefore unlikely to be available for dedicated wildlife surveys. Most likely MDIFW staff would be allowed to ride along on other USCG air operations to collect as much wildlife information as possible.

Unmanned Aerial Vehicles (UAVs, “drones”) are another possibility for conducting aerial assessments. MDIFW does not own any UAVs but there are private companies that contract for special missions. MDIFW has not used a UAV contractor yet but other Maine state agencies, including the Department of Marine Resources, have. There also are private individuals with drones (“hobbyists”) in Maine who have expressed interest in assisting with a spill response. Besides

lingering legal concerns about use of UAVs by government agencies, particularly those with a law enforcement branch, most commercial UAVs must be operated within sight of the pilot and therefore have somewhat limited ranges. There also is potential for birds to perceive a low, slow-flying UAV as a predatory threat, causing them to either flush or even to attack the UAV. Still, UAVs could be a valuable tool for aerial assessment and should be considered in the response.

7.6.4. On-Water Assessment and Recovery

MDIFW has numerous boats ranging in size from kayaks to the 25-ft Parker moored in Bucksport. The other boats are located in Bangor, at MDIFW Regional Offices, at the Maine Wildlife Park, and with various Game Wardens. MDIFW staff might also be assigned to a DEP or U.S. Coast Guard boat. Canoes and kayaks likely would be used for assessment rather than recovery although they might herd birds on the water to a recovery team. Various boats might also be used to transport captured animals.

On-water recovery teams will have at least four people; two MDIFW 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. All MDIFW staff operating on a boat are required to wear a PFD and to have appropriate boat training including coastal navigation.

If the boat staging area/put-in site is separate from the Stabilization Facility or Field Command Post, a Boat Team Leader should be assigned to coordinate boat activities for the Assessment & Recovery Group. Oiled boats will need to be decontaminated before leaving the incident area; large-equipment decontamination will be coordinated with DEP, USCG, and/or the Responsible Party.

Boat and ground teams may work together. For example, a small boat, canoe, or kayak might be used to herd waterfowl towards shoreline teams. Incident Command should be notified of any nighttime operations to capture oiled wildlife.

7.6.5. Coordinating Information

Impacts to wildlife and the wildlife response overall are of considerable interest to the public. Incident Command and other responders also need information. It is critical that everyone has access to the same data and that it is current and accurate. The numbers, location, and activities of unoiled wildlife are as important as those of oiled wildlife. These data will guide the Environmental Unit in planning objectives, the Operations Section in directing field operations, and the Primary Care Center in preparing to care for oiled birds. To ensure this can happen, MDIFW needs to determine what wildlife data to collect and how to manage and share it. There likely will be a broader plan for information management throughout the response that the wildlife data plan will need to fit within.

7.6.5.1. Documenting Wildlife Sightings

A useful wildlife observation will include a specific location, the numbers and types of wildlife observed, their current activity, whether oil is present at the location and whether the animals are oiled, the date and time, and the name and contact information of the observer. The species involved is important, too, but misidentification can cause unnecessary problems. It is better to record a species as undetermined or to generalize it (e.g., waterfowl) than to misidentify the species. Observers may be wildlife responders, other responders, or the public.

7.6.5.2. Hotline for Reporting Oiled Wildlife

The first step to managing data successfully is to centralize collection. MDIFW has a phone hotline (1-877-OIL-BIRD) for reporting oiled wildlife. This number should be used by all observers (including MDIFW staff and other responders). One of the highest priorities of MDIFW during the initial response will be to request a dedicated phone line and operators to receive these calls 24/7. These operators may be trained volunteers rather than MDIFW permanent staff. The call center should be located in the Incident Command Post (ICP) or at the Primary Care Center. Normally calls to this number route to the MDIFW Oil Spill Response Coordinator. During a response, MDIFW will have this number forwarded to the call center. As soon as this line is established, MDIFW will request a press release providing this number and information about how to report oiled wildlife. The number of phones/operators may need to be scaled up to handle communications with the Assessment & Recovery Group.

7.6.5.3. Social Media/Email

Observations of oiled wildlife may also be reported through social media and email. Additional staff may be needed to monitor these sources of information and make it available to responders. As with the oiled wildlife hotline, this work may be performed by trained volunteers rather than MDIFW permanent staff.

7.6.5.4. Wildlife Sightings Database

Information collected by the call center will be entered as soon as possible into a database that can be shared throughout the ICP and Primary Care Center. There are many options for building and deploying sharable databases, but experience from training exercises has shown that differences in computers, operating systems, software, drivers, web browsers, etc. across the response often make complex solutions unworkable. MDIFW therefore will use just a simple Microsoft Excel spreadsheet to capture and share this data. This format will allow us to email or text the database, transfer it via an

external/thumb drive, or upload it into something like GoogleDrive. Indeed, the initial data collection (i.e., by the hotline operator while on the phone) should be onto a paper form that can be keyed into the database by the operator as soon as possible or by a computer technician/volunteer dedicated to that task. If the response is prolonged enough to develop a more sophisticated approach, MDIFW will explore that, but the best database solution then would depend on what system the ICP has decided to use.

7.7. Preventing 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.

7.7.1. Protection Strategies

Maine's strategy for protecting unoiled birds and habitats requires knowing where they are located, how response resources will be deployed to implement the strategy, and prioritizing which areas to protect first.

7.7.1.1. Environmental Vulnerability Index (EVI) Maps

MDIFW has considerable knowledge about where wildlife resources occur in the state. We proactively map these locations to meet a variety of agency needs including spill response. The GIS program at MDIFW was initially supported, in part, to develop EVI maps for oil spill response planning. The Maine DEP developed these EVI maps using data from MDIFW and other state agencies. They include tabular data describing the different wildlife species that use specific areas and what times of year they are present and most vulnerable (e.g., during nesting season).

The EVI maps allow protection efforts to be initiated almost immediately. Although MDIFW prefers to be consulted on response strategies, we helped create the EVI maps so that our knowledge on the location of important wildlife areas could be available to the Operations and Planning Sections as soon as a response begins. In general, the EVI maps provide guidance on the initial response before extensive field reconnaissance has been completed. Then, as more responders arrive on-scene and/or as the incident evolves, MDIFW staff can provide additional guidance and more updated, site-specific information.

The maps are updated every 5-10 years. MDIFW incorporates new survey information with each update but usually this does not change the map dramatically—most areas that are important to wildlife remain so. Some mapping has improved with technology and greater availability of high resolution aerial imagery.

Maine's EVI maps are available digitally as PDF files (from DEP's website), hard-copy as a series of map books, and now interactively through an ArcGIS Online web mapping application. Unlike the PDF file and books, the web map draws directly from MDIFW's digital data served by the Maine Office of GIS and therefore will always be the most current.

7.7.1.2. Environmental Sensitivity Index (ESI) Maps

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.

7.7.1.3. Bird Oil Vulnerability Index (BOVI)

Birds differ in their vulnerability to oil and therefore in the priority for protecting them. MDIFW uses a "Bird Oil Vulnerability Index" (BOVI) to compare species for prioritizing protection (Section 7.7.1.5). We adapted this index for Maine's unique species and environments from similar indices published in the scientific literature for other areas. The BOVI assesses characteristics of a species that affect the likelihood of a bird becoming oiled. For example, does the species roost on water? Does it escape from danger by diving, swimming, or flying? Does it flock on water? Is it a colonial nester? A feeding specialist? The BOVI also assess a species' relative tolerance to the effects of oil, to being handled and held in captivity, and to response activities and its potential for recovery. These are individual behaviors. Population characteristics that influence vulnerability to oil include seasonal population size, reproductive potential, seasonal movements and geographic distribution, and the proportion of the regional population that occurs in Maine. The BOVI for a given species can change seasonally. BOVI scores for Maine's coastal bird species are included in the EVI maps and incorporated into MDIFW's protection prioritization.

7.7.1.4. Geographic Response Plans

The Maine DEP has led an effort to develop Geographic Response Plans (GRPs) based on the most sensitive areas identified in the EVI maps. Not all sensitive areas are protectable and there are insufficient response resources to protect all the areas that can be. The GRPs therefore focus on those areas that are protectable and where the cost of that protection, primarily the amount of response resources and time taken to deploy them, will have the most benefit.

Each GRP describes the protection strategy including the amount and type of boom, where it will be anchored, and what will be needed to deploy it. It also identifies staging areas, operational hazards, and local resources. Most protection strategies were developed on paper. The DEP has been field-testing strategies and updating them as much as possible but some remain untested.

The EVI maps and GRPs provide a good starting point for an initial response. MDIFW's input would be most important later through the Environmental Unit in the Planning Section helping to prioritize additional GRPs, identify protection gaps, and evaluate any potential negative effects of deployment operations such as inadvertently hazing wildlife.

7.7.1.5. Prioritization

Every wildlife area cannot can be protected immediately, especially early in the incident when response resources are limited. MDIFW has therefore

developed a prioritized list to enable the Planning Section to set realistic operational goals. Prioritization of wildlife areas occurs at several levels.

The Geographic Response Plans are the first level of prioritization. They provide protection strategies for the areas we have pre-identified as being the most vulnerable to an oil spill.

When a spill impacts multiple GRPs, we may have to choose which to implement first. The second level of prioritization involves ranking the GRPs. MDIFW developed a method based on the vulnerability of the different species and habitats in each GRP and the geographic extent of those resources that each GRP strategy could protect (the cumulative benefit).

After the GRPs in the incident area have been implemented, there may be additional wildlife areas worth protecting. Determining where those are and which to protect next is a third level of prioritization. Building off the process developed to rank the GRPs, MDIFW has developed a statewide prioritization map that accounts for:

- the vulnerability of the species/habitat
- the rarity of a species/habitat
- its ecological importance
- the proportion of the statewide extent that the area provides,
- the potential to successfully rehabilitate/clean the oiled area/animal
- how difficult it would be to replace lost resources.

7.7.2. Hazing/Deterrence

We want to keep unoiled wildlife away from areas that are oiled or are likely to become oiled. The disturbance created to haze/deter unoiled wildlife can be auditory, visual, or both. The animals should be moved to an area where the threat of becoming oiled is less or non-existent, but that can be difficult to control. Hazing/Deterrence should only be used if such lower impact areas exist and the animals are likely to go there. Typically, the disturbance must be repeated or even continuous to prevent animals from returning or new animals from arriving. Animals also can quickly acclimate to a particular disturbance, making it less effective over time so alternating methods may be needed.

MDIFW's equipment for creating disturbances includes two propane-powered cannons and three shotguns for firing cracker shells. These all make loud noises without actually discharging projectiles. The propane cannons fire at regular intervals, making them particularly susceptible to acclimation. This equipment is stored at the MDIFW Bangor office. Simpler techniques include just approaching the animals on foot or from a vehicle/boat. A drone also could be used to simulate an aerial predator. It is critical to coordinate these activities with Incident Command to avoid impacting other response operations. "Scarecrow" objects,

whether human-shaped or just a visual disturbance like a flapping piece of cloth, are other options but may have limited effectiveness. The Hazing/Deterrence team typically consists of one or two MDIFW staff that would operate independent of the Assessment/Recovery teams.

Forcing animals to move repeatedly stresses them and can cause critical harm during sensitive times like nesting or migration. We need to consider the likelihood of animals becoming oiled and our potential to capture and rehabilitate them successfully without using hazing/deterrence against the impacts of disturbing them and the potential for them still to get oiled regardless. We also need to consider whether any endangered/threatened species are involved as hazing/deterrence could constitute illegal harassment under federal or state law. Hazing/deterrence activities can create negative perceptions by the public, particularly when it is relatively ineffective at preventing animals from becoming oiled.

7.7.3. Pre-emptive Capture

Pre-emptive capture of healthy, unoiled wildlife to prevent them from becoming oiled is an aggressive, stressful disturbance that would only be used by MDIFW if hazing/deterrence was not a viable option and the wildlife was unlikely to survive oiling or being rehabilitated. We would need to have an adequate facility to hold the wildlife—most likely the Maine Wildlife Park unless only a few individuals were involved and a local wildlife rehabilitator could house them. Pre-emptive capture, and especially any use of tranquilizing drugs, will need to be approved by Incident Command. Before capturing any animals, we also will need a plan for their release (i.e., to a different, unoiled area or back to the capture area after the oil was removed). This plan must minimize time in captivity. A key question will be the likelihood of successful capture—stressing the animals but failing to capture them would only make the situation worse. Both MDIFW and USFWS have staff with experience in capturing live wildlife and would lead this effort. This strategy will attract media attention; a press-release explaining our actions and reasons for them should be prepared beforehand. There also will likely be strong interest from the media, public, VIPs, and others to watch the captures and/or see the captive animals. Although such publicity could have positive outreach benefits, it would increase stress on the animals. A plan strictly controlling access to the wildlife and when/how any viewing would be allowed must be in place before any animals are captured.

7.8. Minimizing Negative Impacts of Response Operations

Response activities such as deploying boom, cleaning shorelines, and applying dispersants can have both direct and indirect negative impacts on wildlife by increasing stress and/or by inadvertently hazing them. The activities of other responders also can interfere with what the wildlife responders are trying to accomplish. It is important, therefore, to coordinate all response activities through Incident Command and to provide input to planning and implementing operations.

7.8.1. Input to Planning and Operations Sections

The presence of a Wildlife Subject Matter Expert in both the Planning and Operations Sections of the ICS can help to minimize any negative impacts of response operations to wildlife. This role could be filled by any of the responding wildlife agencies but that person must be familiar with current information on where the wildlife of concern are located and what wildlife response operations are being planned or implemented. Filling this role does not have to be a full-time job or preclude this wildlife expert from having other duties in the ICP. The key to providing good input is to quickly establish a relationship with critical staff in the Planning and Operations Sections, make them aware of the importance of minimizing negative impacts on wildlife, and agree on a process for the wildlife expert to provide input when/where most needed.

7.8.2. Representation on Non-wildlife Operations Teams

Embedding a wildlife expert among other response groups/teams will also help minimize negative impacts to wildlife. For example, a wildlife specialist assisting a SCAT (Shoreline Cleanup & Assessment Team) could provide input on proposed cleanup techniques to minimize potential negative impacts to wildlife while also collecting wildlife assessment data to assist the wildlife recovery and hazing teams. Other response operations such as deploying dispersants could benefit from an embedded wildlife expert but these specialized operations may limit who can be on the aircraft/boat.

7.9. Recovering Oiled Carcasses

Oiled wildlife carcasses will be collected and tagged following the USFWS Carcass Collection Protocol, version 7-7-2010 (Appendix 8.6). Carcass collection most likely will be handled by Assessment & Recovery Teams staffed by MDIFW, USFWS, and other responding wildlife agencies.

The Maine Warden Service or USFWS Law Enforcement will act as Evidence Custodians who will maintain the Wildlife Evidence Log for the incident. Ideally the Evidence Custodian will be stationed at the Primary Care Center. Processed carcasses will be stored in a locked freezer in a secured area at the Primary Care Center or at a secured MDIFW or USFWS facility (particularly for long-term storage). This evidence will need to be maintained until all legal proceedings related to the spill are concluded (potentially years after the incident).

7.10. Wildlife Facilities

There will be up to five centers of activity for wildlife responders. Relatively few MDIFW staff will be in the Incident Command Post (ICP) and that facility will be managed by other responders. The other four are detailed below.

7.10.1. Field Command Post

The Assessment & Recovery Group and the Hazing Group will be coordinated from a Field Command Post if the ICP is not located close enough to the spill site to be practical or (more likely) if the ICP is limited for space. This is where daily briefings will be held for wildlife field responders and where they will check in/out for each shift. The Field Command Post may be just for wildlife or may include other field responders. This is where Group Supervisors will be located (if not out with a Team).

Requirements include:

- Ample room for parking including trucks towing boats
- Space to brief at least 10 people and something to hang maps/charts on
- Communications capabilities including phone (preferably a land line) and internet
- At least one restroom

Additional needs:

- Kitchen/space to feed field teams
- Multiple restrooms
- Computer, printer, and/or copy machine
- Place to collect and store contaminated PPE

Regional offices, warehouses, etc. for MDIFW, USFWS, or another wildlife agency make ideal Field Command Posts if located close enough to the impacted area to be practical. Municipal buildings such as town offices, fire/police stations, schools, etc. could also be used or, if nothing else is close enough, a trailer or large tent could suffice. This will depend on how extensive the response area is and the road access around it. Multiple Field Command Posts may be needed.

7.10.2. Stabilization Facility

Live animals collected by Assessment & Recovery Teams will need to be placed in a quiet, dark, well-ventilated, temperature-controlled (~70°F) environment as soon as possible. Animals in critical condition also may need immediate medical care. Considering Maine's extensive coastline, numerous islands, and remote interior areas, in many cases there will be limited options, if any, for locating a

Primary Care Center near enough to the spill site to allow oiled animals to be transported directly there without being stabilized first.

A Stabilization Facility is a place where live animals can be gathered, given immediate medical attention, stabilized, and kept until transport to the Primary Care Center. The facility should be at least 100 ft². Each animal may be at the Stabilization Facility for just a few hours or up to 1-2 days depending on their condition, the proximity of the Primary Care Center, the rate of animals being recovered, and the capabilities of the facility. Carcasses should also come through the Stabilization Facility (i.e., travel the same route as live animals) to minimize confusion and maintain proper chain-of-custody.

Because animals will not be washed at the Stabilization Facility, the options for structures that could provide this capability will be more numerous than for a Primary Care Center, making it much easier to locate close to the spill site. Ideally the Stabilization Facility will be located with the Field Command Post, especially if at an MDIFW or USFWS site, but probably in a separate building. The Maine DEP has a large decontamination tent that could be used for a Stabilization Facility (or at least part of it). It is stored at the DEP Bangor Warehouse.

In 2017, Tri-State Bird Rescue & Research, Inc. and MDIFW visited several potential Stabilization Facility sites around Maine. These included the DEP Bangor Warehouse, the MDIFW Regional Office in Greenville, the USFWS office at Moosehorn National Wildlife Refuge, and the USFWS Coastal Islands Refuge office in Rockland. We are in the process of developing a MOA for each of these facilities. Only the DEP Bangor Warehouse has even a draft facility plan so far, but the goal is to develop one for each facility.

7.10.3. Primary Care Center

Live oiled animals will receive ongoing medical attention and be cleaned at the Primary Care Center (PCC). Upon arrival, the animals will be evaluated and triaged. They may need to be stabilized further before washing. Many animals may need to be washed and dried several times; they will need a temperature controlled, secure, relatively quiet space to rest and recover in between cleanings. They will need to be fed and watered. Cleaned birds will need clean, temperature-controlled space (including pools for water birds) and additional time to recondition their feathers before being released.

Carcasses will be logged in as evidence and stored, at least temporarily, at the PCC. Animals that expire at the PCC also will need to be processed as evidence.

The PCC should be at least 500 ft² but, depending on the number and type of animals involved, could need to be 10,000 ft² or more. It is larger than the Stabilization Facility because it requires separate spaces for oiled versus unoiled animals, cage construction, and indoor/outdoor housing for cages and pools. The indoor space needs to maintain a temperature of 70-80°F and be well-ventilated.

A PCC requires a lot of running water: up to 24,000 gal/day of cold water (for pools and general use) and 450 gal/hour (6,750 gal/day across 15 hours) of water heated to 104°F for washing animals. All wash water and overflow/splash from the pools needs to be captured as contaminated waste. For washing animals, the water pressure needs to be 50-60 psi with a hardness of 2.5-3.5 grains/gal, usually requiring a pressurizer and water softener.

Electrical needs also are significant; a 200 amp 120/240 volt, 3-wire single phase service with at least ten 20-amp circuits in addition to the lighting and HVAC needs; GFCI outlets, and a backup generator. The PCC should have at least 3 pet driers each requiring a 220 V, 60 amp outlet. To minimize the possibility of electrocution, these should be connected directly of GFCI outlets wired to a service panel (i.e., no extension cords).

The entire PCC needs to be secured to prevent animal escapes and unauthorized access. It also needs to provide for human needs including restrooms, office space, and break areas and for storage of waste (solid and liquid, clean and contaminated).

The extensive infrastructure requirements for a PCC make it a difficult facility to locate, particularly during an emergency response when time is short. Although a facility could be established in any large, open space (e.g., a vacant warehouse), pre-identifying a facility location, developing a plan for how all these needs will be met, and pre-staging materials will greatly decrease the amount of time required to have a fully functional Primary Care Center.

In February 2019, Tri-State and MDIFW completed a PCC facilities options analysis to assess all the various site options that have been proposed for a potential PCC and any other options worth considering. The analysis concluded that the best strategy was to temporarily adapt an existing facility built for another purpose (versus constructing a purpose-built facility or developing an entirely mobile capability). MDIFW, USFWS, and DEP all have facilities that could be adapted for a PCC, but they are limited in size, infrastructure, and/or location so, depending on the specifics of a spill incident, may or may not work well. National Guard armories, in contrast, have more space, better infrastructure, and are distributed throughout the state.

7.10.4. Rehabilitation Facilities

Cleaned birds that have special housing needs (e.g., seabirds, diving birds, long-legged waders) or animals recovering from additional injuries will require intensive rehabilitation. This could occur at the Primary Care Center but, depending on the number of animals involved, at least some might be moved to a local wildlife rehabilitator such as Avian Haven or the Center for Wildlife.

7.11. Wildlife Transport

Live, oiled animals and oiled carcasses will need to be transported from where they are captured/recovered to the Primary Care Center. Usually they will first be gathered at a Stabilization Facility or Field Command Post. This initial transport may be by truck, boat, ATV, snowmobile, etc. Transport from the Stabilization Facility/Field Command Post to the Primary Care Center will be by truck. The Transport Team will have a driver and second person to navigate and monitor the condition of the live animals. With proper training and education, these may be volunteers or local rehabilitators.

Live, oiled animals will be in ventilated containers such as pet carriers. Fumes from the oil on these animals pose an inhalation risk to humans. Even oiled carcasses that are properly packaged may be hazardous. The transport vehicle, therefore, must have a well-ventilated space for the Transport Team separate from the contaminated animals. The space containing the live animals also must be temperature controlled or at least not exposed to the elements, particularly wind/drafts. A pickup truck with a cap over the bed is a reasonable transport vehicle if the outside temperature is not too extreme (otherwise the animal space will need to be heated/cooled as appropriate). The MDIFW Oil Spill Truck, which is based in Bangor, has a covered bed. If it is unavailable, unsuitable to the environmental conditions, or just does not have enough capacity we will need to procure additional vehicle(s) from other agencies, Maine Central Fleet motor pool, or from a rental company (many rental companies may not allow their vehicles to be contaminated with petroleum fumes).

An example of proper transport of live, oiled animals in a covered truck bed.

7.12. Volunteers

Oil spill incidents attract considerable public attention, particularly when wildlife are impacted. Many people will volunteer to help. Finding suitable and safe work for those volunteers and managing them properly is important to a successful oiled wildlife response and to the public's perception of it.

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.

Working directly with wildlife requires skills that the average person will not possess and is unlikely to obtain through incident-specific training. The goal of the wildlife response, therefore, is to seek out individuals with sufficient, applicable training to assist with the wildlife work while finding meaningful work related to the wildlife response for less-trained individuals.

7.12.1. Affiliated Volunteers

Volunteers who have an established working relationship with a wildlife organization such as a local wildlife rehabilitator, Maine Audubon, The Nature Conservancy, etc. are considered "affiliated" with those organizations. These volunteers already have some wildlife training and potentially even oil spill training.

The OWRO may also bring affiliated volunteers. These individuals will have even more specialized training and might function as additional OWRO staff. Managing them will be the responsibility of the OWRO.

By definition, a volunteer is not compensated. An affiliated volunteer with sufficient skills to be hired as contract staff for the wildlife response is considered a contractor, not a volunteer.

Other potential sources for wildlife-trained volunteers include other OWROs, veterinary/wildlife students from local universities and colleges, staff from zoos and aquaria, veterinary clinics, or state/county Animal Response Teams.

Affiliated volunteers may work in the Primary Care Center, the Stabilization Facility, or on a Transport Team under the supervision of the OWRO or MDIFW. Example tasks include:

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

Affiliated volunteers will not be used in field operations to assess, recovery, or haze wildlife.

7.12.2. Event-based Volunteers

Members of the general public who volunteer during an oiled wildlife response are "event-based" or "unaffiliated." Most will not have specialized oil spill/wildlife training, but may have other useful skills:

- Clerical - managing/filing paperwork, photocopying, general phone/email, ordering supplies/services
- Computer/Data Entry
- Monitoring the Oiled Wildlife Hotline
- Construction - carpentry, electrical, plumbing, etc. at the Primary Care Center
- Cage building
- Food preparation (for both people and wildlife)
- Cage cleaning
- General errands such as getting/delivering supplies, shuttling people, etc.
- Laundry

7.13. Rehabilitating Impacted Wildlife

Local wildlife rehabilitators have very limited capacity for cleaning oiled birds (less than 5, depending on the species). In that case, the Wildlife Rehabilitation "Rehab" Group will be just the local wildlife rehabilitator and their staff (with remote support from the OWRO). Most spill scenarios will exceed this capacity; we do not consider this our primary strategy.

Most likely, the OWRO will be deployed to Maine and a separate Primary Care Center established where the Rehab Group will include OWRO staff, local wildlife rehabilitators and their affiliated 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. MDIFW staff that assist with rehabilitation will work under the guidance of the OWRO and/or local wildlife rehabilitator; hence MDIFW has not developed its own rehabilitation protocols to include here.

An average wildlife rehabilitation effort takes 2-3 weeks but can last for months and may continue after many other response resources have been demobilized. Staffing needs vary throughout different components/phases of the wildlife rehabilitation, which include:

- Intake/triage – each animal is processed into the Primary Care Center, including Chain-of-Custody documentation; evaluated; and prioritized for care depending on its medical status. Triage also may consider whether it is an endangered species. Part of this process involves ensuring the Primary Care Center is equipped for the special needs of the species such as caging requirements, access to a pool, etc.
- Stabilization – the animal is given medical treatment and basic husbandry (food, water) and time to rest in a quiet, dark, temperature-controlled space to prepare it for the decontamination process. These animals are still oiled and must be kept separate from clean animals.
- Decontamination (wash/dry) – LOTS of warm water and mild detergent are used to remove oil from the animal, then it is dried. An animal may repeat the wash/dry cycle multiple times—with stabilization rests in between—until it is fully clean. Even a little oil remaining on an animal will quickly spread and compromise its health.
- Conditioning – once clean, the 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 and blood work to ensure the animal is as healthy as possible and completely free from contamination, an assessment of behavior in an outdoor setting, and an assessment of waterproofing. This phase includes determining where and how each animal will be released. The release area must have natural and uncontaminated food available.

The Stabilization phase listed here, which prepares oiled animals for the strenuous and stressful decontamination phase, is separate from what happens at a Stabilization Facility where animals are prepared for transport to the Primary Care Center. The initial stabilization should occur within 2 hours of capture and helps to ensure the animal will survive transport.

7.14. Releasing Rehabilitated Wildlife

Release planning begins as soon as animals are taken into captivity. By the time animals are in the conditioning phase of rehabilitation, the release plan should be nearly complete and include consideration of migratory timing for the species, a proposed release date (and alternates), the proposed release site, how animals will be transported to the site, and how released animals will be monitored to determine their success. MDIFW, the OWRO, and any other wildlife agencies with jurisdiction will develop the release plan together.

Once the pre-release evaluation has documented that an animal is fully waterproofed, has no visible signs of disease or significant injury, has average body weight with normal feces, behaviors normally, and has blood values within acceptable ranges it can be released. Releases often attract significant media attention; it is a good opportunity to share a response success with the public if that doesn't compromise the safety of the animals.

Some animals may not be releasable after rehabilitation because of permanent injury, lack of a suitable release site, timing relative to migration, or federal/state/tribal/provincial law prohibits it. MDIFW, USFWS, the OWRO, and other responding wildlife agencies will jointly determine whether some of those animals can be placed elsewhere or need to be euthanized.

7.15. Managing Evidence of Wildlife Impacts

Animals that are captured or collected during the oiled wildlife response are evidence of natural resource damage for which the Responsible Party (RP) can be held accountable if it is shown that this damage was caused by the RP. This includes live, oiled animals that are rehabilitated; oiled animals that died after capture; oiled carcasses that were collected; and unoiled animals that were preemptively captured and relocated to prevent oiling.

7.15.1. Protocol

MDIFW will follow the U.S. Fish & Wildlife Service's (USFWS) protocol for handling wildlife evidence (Appendix 8.6) unless agency's jurisdiction supersedes that (i.e., most the spill impact is in an adjacent state or Canadian province). Besides the animal, the evidence also includes paperwork related to that animal (the Chain-of-Custody record, medical exam/treatment documents, and response reports), digital information such as the database used to track impacted animals, specimens taken from the animal, and photographs/digital images taken of it.

The Chain-of-Custody record is one of the most critical pieces of evidence. Appendix 8.6 provides an example form and the USFWS protocol for using it.

7.15.2. Evidence Custodian

A Maine Game Warden or USFWS Law Enforcement officer would be best qualified to act as the Evidence Custodian. The Custodian will be based at the Primary Care Center. If large numbers of carcasses are being collected, a second Evidence Custodian might be stationed at a Stabilization Facility.

7.15.3. Samples

Evidence samples must be collected from every animal, live or dead, that enters the Primary Care Center. Samples should be taken from an area of the animal that is obviously oiled but without harming or impeding the animal in any way.

- Birds – pluck a feather from the breast or belly (never from a wing or the tail). Feathers should never be cut. Swab the affected skin of an oiled area with sterile cotton or a gauze pad.
- Reptiles/Amphibians – swab the affected skin of an oiled area with sterile cotton or a gauze pad.
- Fur-bearing Mammals – collect a small patch of fur or swab the affected area with sterile cotton or a gauze pad.

Wrap each sample in aluminum foil (never plastic) and label it with:

- Date/time of collection
- Sample type
- Incident name

- Species
- Case Number
- Collector's name

Samples will be secured in a locked freezer and follow Chain-of-Custody procedures (Appendix 8.6).

7.15.4. Photos

MDIFW will use a digital camera to photograph impacted wildlife. One camera is kept in the MDIFW Oil Spill Response Trailer. Additional cameras may be purchased during the incident.

At least two (2) photos will be taken of each animal:

- View of the entire length of the animal
- View showing the oiling as best as possible
- Additional photos may be taken as needed

The blue Evidence Identification Tag (Form 3-2052, Appendix 8.6) for the animal must be clearly visible beside the animal in each photo.

The data card from the camera must be kept in a secured location when not in use or given to the Evidence Custodian after use. Data from the card should never be shared or downloaded to another device except as part of the evidence archive process.

7.16. Demobilization

As the spill is contained and contaminated areas are cleaned, the potential for additional wildlife to be impacted will decline and the Assessment & Recovery, Hazing/Deterrence, Stabilization, and Transport operations can be scaled back and eventually ended. Rehabilitation operations will continue after that until all impacted birds have been rehabilitated and released or transferred/placed, if circumstances allow and are necessary. It is not unusual for wildlife operations to demobilize after other Operations Section responders.

7.16.1. MDIFW Resources

Most MDIFW resources will be deployed in the field until no longer needed there. At that time, those staff and equipment may be released from the response or reassigned to the Primary Care Center. Contaminated equipment will need to be decontaminated before being released.

Assessment & Recovery operations will require the most staff and equipment (primarily vehicles, boats, etc.) that may gradually be scaled back as containment and cleanup progress. The other operations (Hazing/Deterrence, Stabilization, Transportation) will involve fewer people. Hazing/Deterrence may be ended whenever no longer needed or effective, but Stabilization and Transportation Teams will continue operate with Assessment & Recovery.

Release versus reassignment of MDIFW staff will depend on the individuals involved:

- Wildlife Management Section – staff from the region where the incident occurred likely will remain involved throughout the response. Staff from other regions will be released as operations scale back.
- Wildlife Research & Assessment Section – specialists for the impacted species will remain involved, at least part-time to provide expertise. Specialists for other species will be released sooner.
- Augusta staff, if deployed, will be released or reassigned depending on their other work priorities. An MDIFW outreach specialist, however, should remain involved throughout but not on a full-time basis.
- The Oil Spill Response Coordinator will be dedicated full-time throughout the incident.

The orderly release of MDIFW staff and equipment resources from the spill response will require a demobilization plan and subsequent documentation. The demobilization plan should identify when specific operations will be scaled back or ended. It should prioritize staff for release from the incident based on individual timing limitations including conflicts with other job duties and family obligations. Unlike most other responders in a spill incident, only Warden Service staff from MDIFW have an emergency/first responder expectation as part of their

job description that provides for a prolonged, 24/7 deployment away from home. Other MDIFW staff certainly would do whatever they could to help, but this type of intensive deployment, especially for an unexpected event, is not a normal part of their job duties.

Equipment is less likely to be as time-limited as staff resources but conflicting needs should be addressed in the demobilization plan. For example, equipment resources used for search and rescue operations or critical field work should be prioritized for release. The plan needs to allow time for decontamination of equipment.

Accurate documentation of the release or reassignment of resources is critical to a successful demobilization. Besides minimizing the chance of equipment becoming lost or misplaced, it is part of the record that eventually will be used to obtain reimbursement from the Responsible Party. During the response, most MDIFW staff will not be supervised by their normal MDIFW supervisors. Documenting the release of a person from the incident response terminates the ICS supervisory hierarchy for that person and returns him/her to their normal supervisor. Like equipment, even people can become "lost" (or at least whereabouts unknown) during the chaos of an incident. A released person should not rejoin the response effort without being reassigned to a specific task and checking in.

7.16.2. OWRO Resources

The OWRO, MDIFW, USFWS, and other responding wildlife agencies will jointly develop a demobilization plan for the Primary Care Center, which will either be returned to its 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
- Ensuring remaining supplies and equipment are returned, redistributed, or warehoused as appropriate
- Coordinate with the Wildlife Branch Director on transferring documentation and evidence from the Primary Care Center.

7.17. Documentation & Reporting

MDIFW will need to track what resources were used and what was accomplished for each response objective. We will document and report this information for each operational period then summarize an overall report at the end of the incident. There may be additional documentation and reporting requirements established by Incident Command. These periodic reports will be used by the Planning and Operations Sections in Incident Command to develop objectives and strategies for the next operational period and by the Public Information Officer to develop outreach messages. The final report will be used to account for reimbursable costs from the Responsible Party and for Natural Resource Damage Assessment and Restoration.

Chain-of-Command forms (Appendix 8.6) are one of the most important pieces of documentation to maintain for the wildlife response. They are carried through all of the tasks below from the initial recovery and transport to the animal's final disposition at the Primary Care Center or release.

7.17.1. Assessment & Recovery

At the end of each operational period, the Assessment & Recovery Group Leader will need to document the following:

- Operational objective(s) for that period
- Number of teams deployed
- The location(s) each team was deployed to
- Lists of staff assigned to each team
- How long each team worked for
- Accomplishments for each team (i.e., summary of wildlife observed, oiling, etc.)
- Any objectives that were not accomplished and why
- Any safety issues (e.g., injuries, unexpected hazards, improper equipment)
- Recommendations for the next operational period

Most likely a paper form will be provided to solicit this information for each operational period (it is possible that a web-based digital form would be used instead; that capability might be developed during the response if the incident is prolonged). The Assessment & Recovery Group Leader may just have each team complete a report at the end of the period, then assemble the team reports and submit them through the MDIFW Oil Spill Response Coordinator to Incident Command.

The final Assessment & Recovery report will be prepared by the MDIFW Oil Spill Response Coordinator with assistance from the Assessment & Recovery Group Leader.

7.17.2. Hazing/Deterrence

Documentation and reporting will be similar to that for Assessment & Recovery operations with the exception that in most cases there will be only one team deployed thus simplifying the process. It will be important to document the hazing/deterrence measure that were employed, where and how often, and their effectiveness. Any observed negative effects and/or unintended consequences will also need to be reported.

7.17.3. Transport

Besides operational period and after-action summary reports as described for the Assessment & Recovery Group and the Hazing/Deterrence Group above, the Transport Group will be documenting information about the animals they are transporting, their route, and ETA to the Primary Care Center for each transport trip.

7.17.4. Wildlife Care

The OWRO will be responsible for all documentation and reporting from the Primary Care Center. They may have their own digital/web-based data/reporting system like *Wildlife Rehabilitation MD*. That system may or may not be sharable with responders outside the Primary Care Center (e.g., operators on the Oiled Wildlife Hotline). The OWRO will retain documentation copies for their own post-incident, permit-reporting requirements.

7.18. Natural Resource Damage Assessment & Restoration (NRDAR)

7.18.1. Definition

Natural Resource Damage Assessment & Restoration (NRDAR, formerly just NRDA) is a process used to determine injuries and the appropriate amount and type of restoration needed to "make the public whole" (quotes used to reference specific language in federal statute) following the release of a hazardous substance such as oil. Federal and state "Trustees" (MDIFW, DMR) act on behalf of the public by developing and/or implementing a restoration plan to use funds to return natural resources, including those for public use and enjoyment, to their pre-release "baseline" condition and to compensate for interim lost resources and services. These resources do not have to be owned by the government (e.g., migratory birds) to qualify for NRDAR. The success of NRDAR is measured by the amount of appropriate restoration achieved. Natural resource damages are entirely compensatory; there is no punitive element.

Not every spill results in a NRDAR. It usually is a long, involved process that consumes significant time for agency staff. That time may eventually be reimbursable (if there is a settlement), but it can conflict with other agency missions. There are additional costs for assessments including contracting specialists and processing samples that must be paid for upfront by the Trustees unless the Responsible Party agrees to do so. The Trustees therefore must weigh their potential investment, the extent of the perceived injury, and their ability to prove that it was caused by the spill and that meaningful restoration is possible. Federal and state Trustees typically act together but either can pursue or not pursue a NRDAR without the other (Maine state law provides a similar framework for NRDAR compared to federal law). In Maine, DEP takes the lead in NRDAR so MDIFW is constrained by their interest in participating.

7.18.2. Integration With ICS

Although NRDAR is related to the overall spill response, it usually is not fully integrated into the ICS but instead is a somewhat separate process with different staff. The primary goal of most MDIFW responders will be to recover live, oiled wildlife so they can be rehabilitated. Although those oiled wildlife are part of the NRDAR injury and efforts to rehabilitate them are part of the restoration cost, NRDAR teams also have the goal of documenting pre-spill (baseline) conditions of natural resources.

Actions undertaken to remediate the spill affect NRDAR. By removing oil from the environment, these actions lessen the potential for additional injury. The time it takes to complete the cleanup determines the length of interim loss and can prolong the period of injury. Usually it is not possible to completely recover all spilled oil; some residual amount remains and may cause ongoing injury. Cleanup actions themselves also can cause injuries that may become part of the NRDAR.

Because of this, it is helpful for MDIFW staff to provide input to cleanup operations.

7.18.3. Baseline Data

For NRDAR, existing maps of wildlife habitats and population surveys are considered historic data that may or may not represent the actual amount and condition of natural resources immediately before the injury. Ideally baseline data is collected in an unaffected area just before it becomes oiled. This often is not practical. Alternatively, unaffected areas that are close enough to the spill site to represent the pre-spill condition of the impacted areas can be assessed. Besides basic survey data (numbers and locations of wildlife species), NRDAR sampling may need to document changes in the health of individual animals (e.g., longevity and reproductive success), populations (demography, sustainability), and food resources. Because baseline data will be used to determine the extent of injury and therefore the cost of restoration, they may be subject to intense scrutiny and challenge by the Responsible Party. A detailed and transparent assessment plan is essential to documenting the validity of the data. Thus, MDIFW staff will be needed to develop this plan and to implement or oversee the data collection. It is unlikely that these MDIFW staff would have time to assist with other response operations.

7.18.4. Injury Assessment

The NRDAR team also will need to assess the injuries to natural resources from the spill. This includes live oiled wildlife that were recovered for rehabilitation and carcasses of dead oiled wildlife. As described for baseline data collection, it also may require documenting changes to the health of individual, populations, and food resources and relating those changes to contamination from the spill. NRDAR work typically continues long after other spill response operations, including wildlife rehabilitation, have ended. Detailed assessment of impacts can require ongoing monitoring and intensive sampling that may last for months or years. It is not unusual for this work to be conducted by contract staff overseen by the Trustees rather than by state agency staff (although the MDIFW Oil Spill Response Coordinator would continue to be involved as a state Trustee designate). Ideally the Trustees and the Responsible Party will collaborate on this to reduce potential disagreement over assessment results and facilitate an eventual settlement, but – if not – the Trustees will need to front the costs for this work. Those costs would be reimbursed if/when a settlement is reached. Under Maine law, state agencies also could seek a court order compelling the Responsible Party to fund NRDAR work beforehand.

7.18.5. Settlement

The Trustees and the Responsible Party must reach agreement on the extent of the injuries and the cost of restoration. This typically is a negotiation that may be directly between the Trustees and the Responsible Party or through a mediator. If the Trustees and the Responsible Party did not work collaboratively on the assessment, each will have their own experts, data, and estimates. Even if they did work collaboratively, data always is open to interpretation. The Trustees have the right to litigate to reach settlement. This settlement process can take months or years.

7.18.6. Restoration

Following settlement, the Trustees must develop and implement, or oversee the implementation of, a restoration plan funded by the settlement. Restoration actions typically occur in or near the spill site but may instead enhance other wildlife populations or habitats similar to those that were lost. Restoration projects may be undertaken by the Trustee agencies, the Responsible Party, or a third party. The Trustees may solicit project proposals and award settlement funds to one or several of them. The Trustees may be directly involved in these projects or just oversee them. Following restoration, the Trustees will prepare a final report summarizing what was accomplished with the settlement funds and how the impacted natural resources were “made whole.”

7.19. Maintain Response Readiness Between Incidents

Spills impacting wildlife are infrequent, but when they occur can be catastrophic to both the resource and to public perception of the responsible agency. Keeping MDIFW prepared for such an incident is the responsibility of the MDIFW Oil Spill Response Coordinator. There are different levels of preparedness, though, ranging from simple awareness of the possibility to an everything-in-hand, ready-to-go 24/7 posture. Neither extreme is practical for MDIFW. Our goal is to be prepared by planning in detail for the most likely spill scenarios (but also at least considering less likely ones), having enough equipment and supplies to at initiate a full-scale response, and annually providing a day of training for staff who might be asked to participate.

7.19.1. Planning

Planning for an oiled wildlife response is the first and most essential step of being prepared.

Scale is integral to response planning. The amount of oil released and the size of the response usually are closely related. A “large” spill results in a large response from multiple agencies/organizations and a fully-staffed Incident Command Post (ICP). This is the scenario that most planning and training focuses on. A “small” spill might involve just a few DEP responders. The ICP might be the cab of someone’s truck. “Small” spills are much more frequent than large ones but we prepare less for them because fewer people are involved and there is less chance for negative impacts—except to wildlife. A small amount of oil spilled in the wrong place at the wrong time can significantly impact wildlife, resulting in a full-scale wildlife response when the rest of the Incident Command System is negligible. MDIFW therefore must consider two very different types of wildlife responses: one integrated into a large, complex response structure and another with MDIFW largely on its own except for a few DEP responders who could assist with site safety and an Oiled Wildlife Response Organization (OWRO) that would staff a Primary Care Center.

Funding also is integral to response planning. An incident with a large release and fully staffed ICP, particularly if federalized, is more likely to have emergency funds available for on-demand purchase of response resources. The nature of the Responsible Party (RP) can also affect the availability of response funds, especially initially. The RP can range from a global corporation with its own response teams and contracted OWRO to a small family business that might rely on insurance to cover such expenses. MDIFW should not rely on an immediate, extensive flow of funds from the RP, the federal Oil Spill Trust fund, or the state Surface Fund. Particularly for a “small” spill, response costs might not be reimbursed until after the incident and then perhaps only through litigation.

7.19.1.1. MDIFW Wildlife Response Plan

This document is MDIFW's plan for an oiled wildlife response of any size or location. It addresses a range of possible scenarios, but focuses on those that are most likely. It outlines a set of tactical objectives, not all of which might apply to a given incident, and provides detailed strategies to address them.

Most of this document will not need to be updated unless there is a fundamental change in MDIFW's response objectives or strategies. A quick review every few years will be sufficient. The list of important contacts (Appendix 8.8), however, should be updated annually.

7.19.1.2. Primary Care Center

Developing a Primary Care Center (PCC) plan will minimize the time needed to activate a fully functional facility. Once a bird has been oiled, its chance for survival and eventual rehabilitation and release depends, in part, on how long that time is.

A Primary Care Center has extensive needs for infrastructure (water, electricity, heating/cooling, ventilation) and equipment (water pumps, softeners, and pressurizers; washing stations, dryers). It must have an efficient layout separating contaminated and uncontaminated areas with space for decontamination, animal intake, veterinary exams and treatment, washing, drying, caging and pools, a kitchen for preparing food, and evidence storage.

Pre-identifying potential locations for a Primary Care Center and signing a Memorandum of Understanding with the owner/manager of each facility is a critical first step in being prepared for an oiled wildlife response. Most such locations, however, are already in use (e.g., as a warehouse or armory) and would have to be converted. A vacant structure might be easier, but it is difficult to predict where they will be ahead of an incident.

The next step is to develop a realistic, detailed plan for how to quickly set up the Primary Care Center. Besides the infrastructure, equipment, and layout needs listed above, the plan should consider the current use of the facility and what existing contents will need to be moved and where to. It will identify nearby sources for a variety of supplies, contractors, and other services. It will contain a site safety plan. It will include steps for deactivating the facility and returning it to its pre-spill condition. These plans (one for each proposed location) are more difficult to create than the overall MDIFW wildlife response plan because of the great level of detail and research needed to make them specific, but that time is more easily spent before an incident than during the chaos of an ongoing one.

7.19.1.3. Stabilization Facility

Stabilization Facilities have fewer needs than the Primary Care Center so they are easier to locate. Even so, MDIFW has identified several potential sites including the DEP Bangor Warehouse, USFWS facilities in Rockland and Calais, and at MDIFW regional offices. Additional sites across the state should be explored. A plan should be developed for each potential site, but it can be much simpler than the Primary Care Center plan. Besides facilitating the activation of a site during an incident, developing a plan will help the facility manager better understand how it would be used. These plans need to be reviewed every few years, primarily to ensure that they are still available for potential use.

7.19.1.4. MDIFW Oil Spill Response Trailer

The trailer plan is mostly an equipment inventory but also addresses the intended use of the trailer and a maintenance schedule. The equipment inventory should be updated annually.

7.19.1.5. Response Plans Outside of MDIFW

Outside MDIFW there are response plans for other Maine agencies (primarily DEP), the Maine/New Hampshire Area Committee, and the joint Canada-US Atlantic Regional Annex. The OSRC attends 5-10 meetings annually to participate in the development and updating of these plans. This investment ensures that MDIFW's response plan will remain compatible and maintains good working relationships with staff from across the spill response community.

The OSRC also ensures that Memorandums of Agreement/Understanding, the OWRO contract, and various permits are kept current. These will provide some of the legal framework that MDIFW will need to engage in an oiled response.

7.19.2. Procuring and Maintaining Equipment

An oiled wildlife response requires a wide range of equipment and supplies. MDIFW staff will need Personal Protective Equipment (PPE), capture equipment, and containers for holding oiled wildlife. Many of these items, even nitrile gloves and *Tyvek©* suits, have a limited shelf-life – especially if stored outside a temperature-controlled environment. Fortunately, we can now order almost anything online and have it delivered within days. It is more important to have detailed lists of what specifically is needed than to stockpile it. Indeed, the function of the Logistics section in the ICS is to procure equipment and supplies. To this end, MDIFW and Tri-State have developed detailed 213 Resource Request lists to submit to Logistics on the first day of an incident.

The MDIFW Oil Spill Response Trailer, once envisioned as a mobile bird-washing unit, is being converted to simply store just enough equipment to support an initial deployment of MDIFW field staff on Assessment & Recovery and Hazing/Deterrence operations. Keeping this equipment organized and inventoried is key to making this resource useful.

It is no longer practical or worthwhile to attempt to stockpile technology like computers, printers, and phones. These are evolving so rapidly—and they are so readily available—that it will be better to acquire them on-demand.

Many of the supplies needed for the Primary Care Center are similarly easily obtained and sometimes perishable. The most specialized items such as sophisticated spray nozzles for washing oiled birds will be brought by the OWRO. For the rest, we can store just enough to get started with a few animals and prepare detailed 213 Resource Requests to order more as needed.

7.19.3. Exercising/Training

We need to ensure that MDIFW staff are prepared for the tasks they will be asked to carry out during an oiled wildlife response and to test that our response plans are realistic and effective. Both can be accomplished by incorporating facilities and equipment into staff training. As much as possible, we should regularly attempt to activate various Stabilization Facilities or even a Primary Care Center. If planned properly, these deployment exercises can attract media attention that will educate the public on MDIFW's oiled wildlife response program.

8. APPENDICES

8.1. 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.

8.2. Suggested Tactical Wildlife Objectives for the First Operational Period

8.2.1. No Confirmed Oiled Wildlife

- Send an MDIFW Regional Biologist to the incident site to evaluate potential impacts to wildlife.
- Deploy the MDIFW Oil Spill Response Coordinator to the Incident Command Post.
- Notify the Oiled Wildlife Response Organization (OWRO), local wildlife rehabilitators, MDFIW senior staff, and the Maine Wildlife Park.
- Set up the Oiled Wildlife Hotline.
- Work with the Joint Information Center on a press release advising the public on how to report oiled wildlife.
- If needed, request an aerial survey to search for oiled wildlife and unoiled wildlife at risk of becoming oiled.

8.2.2. Confirmed Oiled Wildlife

- All of the objectives listed under "No Confirmed Oiled Wildlife" above.
- Consult with the Oiled Wildlife Response Organization to determine if they need to deploy; if yes, request OWRO deployment.
- Brief MDIFW general staff.
- Determine if the Primary Care Center will be at Maine Wildlife Park. If yes:
    - Notify the Maine Wildlife Park, MDIFW senior staff, and the MDIFW Engineering Division.
    - Deploy MDIFW staff to the Maine Wildlife Park to assist with activating the Primary Care Center.
    - Begin activation of the facility as detailed in the *Maine Wildlife Park – Oiled Wildlife Response* plan.
- If the Primary Care Center will NOT be located at the Maine Wildlife Park:
    - Determine where it will be located.
    - Develop a plan to prepare that facility to be the Primary Care Center.
- Request a Maine Game Warden/USFWS Law Enforcement officer to act as Evidence Custodian at the Primary Care Center.
- Determine if a Stabilization Facility will be established and, if so, where.
- If a Stabilization Facility will be established, request that the DEP Decontamination Tent stored at the DEP Bangor Warehouse be deployed to the Stabilization Facility location.

- Request that the MDIFW Oil Spill Response trailed in Bangor be deployed to the MDIFW field command post or the Stabilization Facility.
- Assess shorelines and open water in the incident area for impacted wildlife; capture live, oiled wildlife; and collected oiled carcasses.
- Request personnel and vehicle(s) to transport captured/collected wildlife from Assessment & Recovery Teams to the Stabilization Facility (if established) and/or to the Primary Care Center.
- Determine if baseline data will be needed for a Natural Resource Damage Assessment. If yes, designate MDIFW staff to participate.
- Work with Incident Command to develop a plan for managing

8.3. Chronology of a Wildlife Response

- Initial Response – Day 0
    - Maine DEP and/or U.S. Coast Guard are notified of the spill
    - Maine DEP and/or U.S. Coast Guard deploy first responders to the scene
        - Address immediate threats to human safety, conduct search & rescue operations, etc.
        - Initiate actions to stop the discharge
        - Initiate actions to contain the spill
        - If wildlife are observed in the area (oiled or not), DEP/USCG notifies the MDIFW Oil Spill Response Coordinator (OSRC). *Several hours may have passed since the spill began.*
    - MDIFW OSRC alerts the Oiled Wildlife Response Organization (OWRO) to a potential need for consultation and/or possible deployment.
    - MDIFW OSRC notifies local wildlife rehabilitators to prepare for questions about the spill, possibly receiving oiled wildlife (most likely from the public), and/or potentially assisting at the PCC.
    - MDIFW OSRC notifies Regional Biologist. *If the spill occurs on a weekend or after regular business hours, regional staff may not receive messages until the morning of the next business day. Even during a work day, regional staff are not always immediately reachable.*
    - MDIFW OSRC notifies Section/Division/Bureau Directors as appropriate depending on the potential for MDIFW staff involvement and/or the likelihood of media contacts with the Department about the spill.
    - If an Incident Command Post (ICP) will be established, a location is identified and responders are notified to begin deploying there. *For small incidents, an ICP may not be established (instead, the incident will be managed at the incident site). If an ICP is established, most staff will not arrive there until the morning after the incident began.*
    - MDIFW Regional staff report back to the OSRC with more information on impacts to wildlife. *Typically, this happens within a few hours of regional staff being notified of the incident.*
    - The MDIFW OSRC consults with the OWRO to determine:
        - The estimated extent of the wildlife response
        - Whether the OWRO will deploy to the scene
        - Whether and where a Primary Care Center (PCC) should be established
        - Whether and where a Stabilization Facility should be established

- The MDIFW OSRC conducts an initial briefing for MDIFW staff and notifies individuals to prepare to deploy for field operations, to help activate the PCC, or to set up a Stabilization Facility. *Unless the wildlife impacts are immediately obvious and significant, this briefing will not occur until Regional staff have visited the incident scene and reported back to the OSRC. Ideally this would all occur on the same day as the spill, but depending on the timing it may not be until the following (working) day.*
- If the OWRO will deploy to the scene, they will make arrangements for 1-2 staff to fly to Maine the following day. More staff will begin preparing to drive to Maine with their equipment (likely leaving the morning of the following day).
- The MDIFW OSRC works with the Public Information Officer and Incident Command on a press release informing the public about what to do if they see oiled wildlife and providing a hotline number for making a report.
- The MDIFW OSRC submits an ICS 213 Resource Request for a hotline phone and staff to work it.

- Initial Response – Day 1
  - The MDIFW OSRC travels to the ICP for the Incident Briefing (usually first thing in the morning).
  - MDIFW Regional staff return to the incident scene to begin assessment & recovery operations and/or to establish a Stabilization Facility
  - Other MDIFW staff begin traveling to their assigned locations
  - The MDIFW OSRC submits ICS 213 Resource Request forms for all resources that will be needed for the initial wildlife response including:
    - MDIFW staff and equipment to conduct ground/boat/aerial assessment, recovery, hazing, deterrence, and transportation operations
    - Activation and deployment of the OWRO
    - Establishment of a PCC and (if needed) a Stabilization Facility
  - The MDIFW OSRC contacts the owner of the designated PCC facility to secure permission to use it and begins preparing to activate it. *Depending on the owner and the complexity of the required agreement/contract, this could take hours or days.*
  - The MDIFW OSRC works with the Operations Section to develop wildlife objectives and tactics for Day 1.
  - OWRO staff flying to Maine arrive by mid-day and deploy to either the PCC (if permission for use has been obtained) to begin activating it or to the ICP.
  - MDIFW staff begin assessment & recovery operations.

- Recovered birds are transported to the Stabilization Facility (if it exists), to the PCC (if activated already), or to a temporary holding facility.
- At the end of the day, the MDIFW OSRC and the OWRO use information collected during initial assessment & recovery operations and the status of the PCC/Stabilization Facility to write an incident-specific wildlife response plan.
- The MDIFW OSRC uses the incident-specific wildlife response plan to work with the Environmental Unit in the Planning Section to develop objectives for the following day.

- Initial Operations – Day 2
  - The MDFIW OSRC and the OWRO attend the morning Incident Briefing
  - The MDIFW OSRC works with the Operations Section to develop tactical objectives for the wildlife response for the day.
  - The OWRO works at the PCC to continue activation and handling any wildlife recovered so far.
  - Any MDIFW staff that were unable to deploy on Day 1 arrive and assist with assessment & recovery, hazing/deterrence, and or/transportation operations.
  - The MDIFW OSRC and the OWRO being implementing the plan for using volunteers as part of the wildlife response.
  - At the end of the day, the MDIFW OSRC and the OWRO use information collected during initial assessment & recovery operations and the status of the PCC/Stabilization Facility to update the incident-specific wildlife response plan.
  - The MDIFW OSRC uses the updated incident-specific wildlife response plan to work with the Environmental Unit in the Planning Section to develop objectives for the following day.
  - If a Natural Resource Damage Assessment (NRDA) will be initiated, some MDIFW staff may begin to work on this. Usually NRDA operations compete (and lose) to response operations for staffing/resources, so early on the NRDA is more of a planning exercise than a field one.

  These activities continue on a daily basis until the PCC is fully activated and operational, the wildlife response is fully staffed, and the incident has "stabilized" (i.e., is not expanding or evolving significantly), after which the response shifts to "ongoing operations." The Initial Operations phase usually lasts from a few days to a few weeks depending on the complexity of the spill.

- Ongoing Operations

- The Operational Period for the Incident Action Plan usually is lengthened from the Initial Operations phase (e.g., 24 hours) to the Ongoing Operations phase (e.g., a week).
- The response is fully staffed and operational.
- Assessment & recovery, hazing/deterrence, transportation, decontamination, and rehabilitation activities continue to occur at the same level.
- MDIFW staff rotate shifts.
- NRDA collects data to document wildlife impacts as staff are available for these activities (alternatively, contractors/consultants may be used).

Ongoing operations for the wildlife response continue until the potential for additional impacts to wildlife decline enough to warrant scaling back the response. This usually does not occur until the spill has been fully contained and cleanup operations are complete. Ongoing operations may last for days, weeks, or months.

- Demobilization
  - Assessment & Recovery, Hazing/Deterrence, and Transportation teams are deactivated as the wildlife response scales down. MDIFW staff from those teams are returned to normal duty.
  - If a Stabilization Facility was established, it is deactivated and, where necessary, decontaminated.
  - Oiled equipment is decontaminated and returned to its original owner or disposed of if not reusable.
  - As the rate of recovery for oiled wildlife declines, the PCC shifts from decontamination activities to rehabilitation activities, allowing some down-sizing of PCC staff. A cleaned animal may need several weeks to be rehabilitated enough for release.

  Because it takes time to locate and capture oiled wildlife and wildlife may continue to encounter residual oil even after cleanup operations have ended, and because cleaned wildlife need several weeks to rehabilitate, the wildlife response usually continues in ongoing operations for several weeks after the rest of the response has downsized and demobilized.
- Deactivation
  - All animals remaining at the PCC are released or transferred to another facility for long-term rehabilitation.
  - All carcasses stored at the PCC are transferred to another location for permanent storage.

- All equipment from the wildlife response is removed from the PCC, decontaminated, and returned to its owner or disposed of.
- The PCC facility is decontaminated and returned to its pre-spill condition.
- The MDIFW OSRC and OWRO ensure that all paperwork/documentation (including final reports) are completed and submitted as appropriate.
- The OWRO fully demobilizes.

If there is a possibility that more wildlife may encounter residual oil, the Incident Command may opt to "moth-ball" the PCC instead of fully deactivating it such that it could be quickly reactivated if needed.

- NRDA
  - The MDIFW OSRC will continue to represent the Department as the State Natural Resource Trustee throughout the NRDA process, which may last for months or (more likely) years after the spill.

8.4. Incident-Specific Wildlife Response Plan Template

8.5. Protocol for Handling and Transporting Oiled Wildlife

8.6. 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

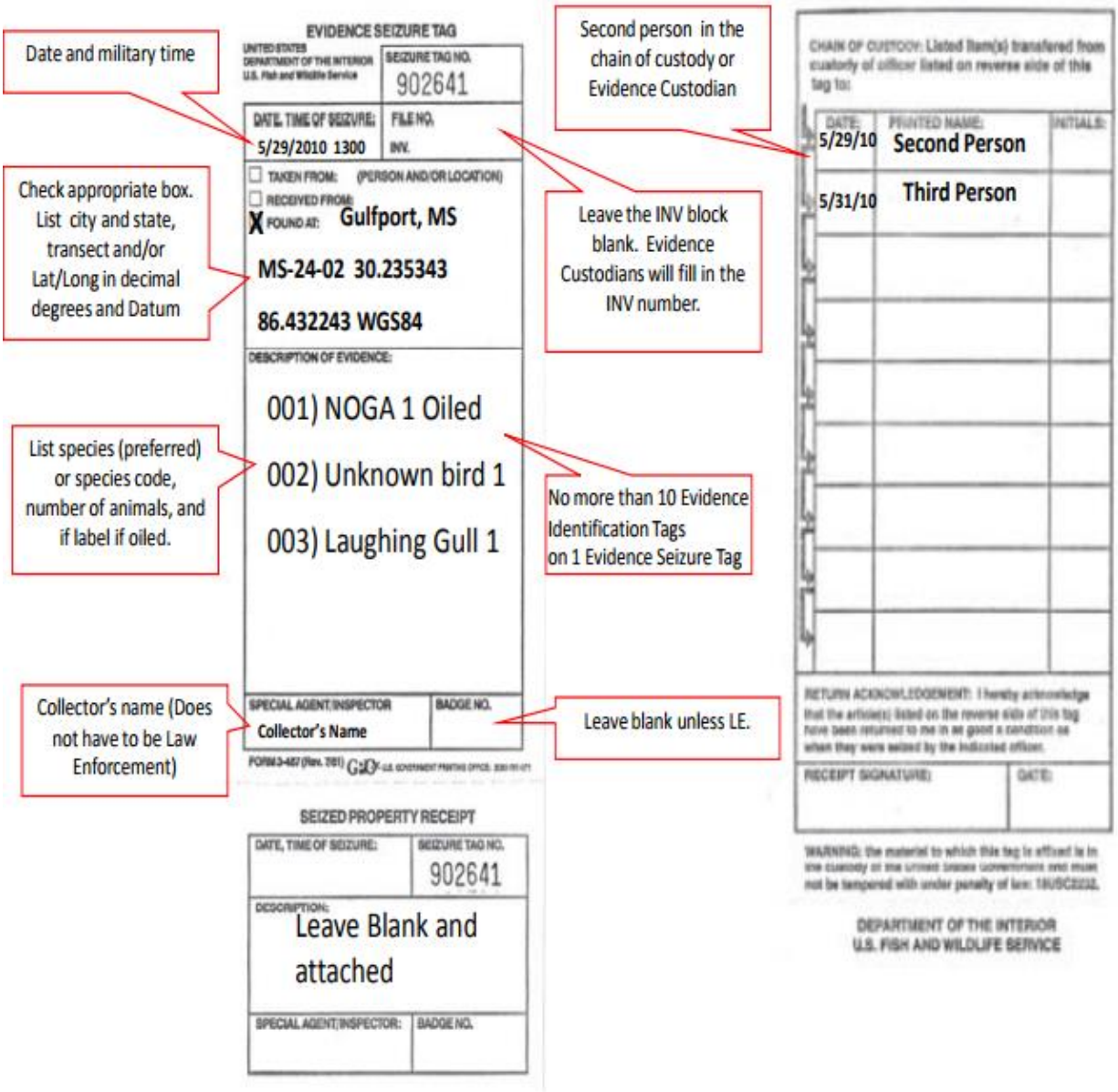
same time. The information from the Evidence Seizure Tag(s) should be listed in the appropriate section on the chain-of-custody form, including all associated Evidence Identification Tag item numbers. Information and signatures of both the transferee and the receiver must be included on the form. The 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.

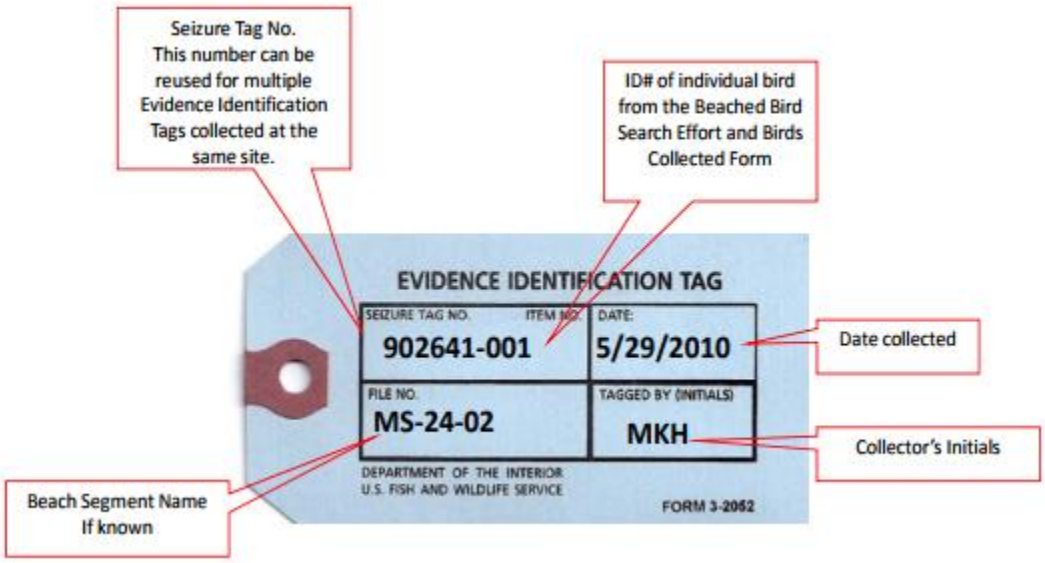
Carcass Collection Kit

- 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



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:		

8.7. Field Site Safety Plan Template

The template on the following pages is for a site-specific safety plan to be filled out as appropriate during an incident response. It is designed for a field location where MDIFW staff are assessing, hazing, and/or recovering wildlife from an aircraft, boat, or on the ground. A separate safety plan must be created for each site. Not all information requested in the template will apply to every site; if it does not it should be marked "N/A" instead of being deleted to ensure the form is complete.

INCIDENT:	
SITE:	**DATE:**

Do not edit this form to delete areas that do not apply to the site - write "N/A" instead.

GENERAL SITE INFORMATION			
***Location*:**			
***Site Description*:**			
Transport Mode for Wildlife Responders: *(check all that apply)*	☐ Fixed-wing aircraft ☐ Motorized boat ☐ Snowmobile ☐ Truck/car ☐ Other:		☐ Helicopter ☐ Non-motorized boat ☐ ATV ☐ Foot
Activities: *(check all that apply)* ***Notes:***	☐ Assessment ☐ Collection ☐ Other:	☐ Hazing ☐ Staging	☐ Recovery ☐ Command
Security Measures to Restrict Access: *(check all that apply)*	☐ Private property ☐ Signage/tape ☐ Sign in/out sheet ☐ Other:		☐ Permanent physical barrier(s) ☐ Temporary physical barrier(s) ☐ Security guard(s)

SITE STAFF *(enter "None" for unfilled positions)*	
Supervisor:	
Team/Unit Leader:	
Pilot/Captain:	
Team/Unit Members:	
Logistics:	
Safety:	
Medical:	
Law Enforcement:	
Public Information:	
Decontamination:	
Other:	

INCIDENT:	
SITE:	**DATE:**

SITE MAP

INCIDENT:	
SITE:	**DATE:**

IN CASE OF EMERGENCY	
NOTIFICATION PROCEDURE:	
EVACUATION PROCEDURE:	
PLACES OF REFUGE / GATHERING LOCATIONS (indicate on site map)	
A.	
B.	
C.	
D.	
CONTACTS	
FIRE	
AMUBLANCE/EMT	
HOSPITAL	
POLICE	
WARDEN SERVICE	
MARINE PATROL	

INCIDENT:	
SITE:	**DATE:**

HAZARDS *(check all that apply; add others as needed)*

- ☐ Air quality
- ☐ Cold water
- ☐ Confined space
- ☐ Currents
- ☐ Debris
- ☐ Drowning
- ☐ Electrical
- ☐ Engine failure
- ☐ Explosives
- ☐ Fumes/smoke
- ☐ Holes/crevices
- ☐ Humidity
- ☐ Hyperthermia
- ☐ Hypothermia
- ☐ Ice/snow
- ☐ Insects
- ☐ Lightning
- ☐ Low-altitude flight
- ☐ Mud
- ☐ Navigation
- ☐ Noise (excessive)
- ☐ Petroleum
- ☐ Precipitation
- ☐ Poisonous plants
- ☐ PPE use
- ☐ Rocks
- ☐ Slippery footing
- ☐ Steep slopes
- ☐ Thick vegetation
- ☐ Thorny vegetation
- ☐ Tides
- ☐ Waves
- ☐ Wildlife
- ☐ Wind
- ☐
- ☐
- ☐
- ☐
- ☐

REQUIRED PERSONAL PROTECTIVE EQUIPMENT (PPE)
(check all that apply; add others as needed)

- ☐ Boots, leather
- ☐ Boots, waterproof
- ☐ Boots, steel-toe
- ☐ Face shield
- ☐ Glasses, safety
- ☐ Gloves, leather
- ☐ Gloves, nitrile
- ☐ Hard hat
- ☐ Hearing protection
- ☐ Nomex flight suit
- ☐ PFD
- ☐ Tyvek suit
- ☐ Waders, chest
- ☐ Waders, hip
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐
- ☐

MAXIMUM TIME IN PPE:
OTHER PPE LIMITATIONS:
PPE REMOVAL SITE:
REMOVAL PROCEDURE:

INCIDENT:	
SITE:	**DATE:**

DECONTAMINATION
PERSONAL - SITE:
PERSONAL - PROCEDURE:
EQUIPMENT - SITE:
EQUIPMENT - PROCEDURE:

INCIDENT:	
SITE:	**DATE:**

SITE SAFETY PLAN BRIEFING ACKNOWLEDGMENT FORM			
Type of Briefing:	☐ Safety Plan	☐ Shift start	☐ Shift end
	☐ Pre-entry	☐ Other:	
Presenter Name:			
Presenter Signature:			
Date:	**Time:**	**Location:**	
By signing this document, I am stating that I have read and fully understand the site safety plan, procedures, and information that has been briefed to me.			

Worker's Name (print)	**Signature**

8.8. Contacts

	Email	Phone
Maine Department of Inland Fisheries and Wildlife https://www.maine.gov/ifw/about/contact/department-directory.html		
Commissioner - *Judy Camuso*	Judy.camuso@maine.gov	(207) 287-5250 (work) (207) 592-3398 (cell)
Commissioner's Secretary - *Becky Orff*	Becky.orff@maine.gov	(207) 287-5202 (work)
Bureau of Resource Management Director - *Jim Connolly*	James.connolly@maine.gov	(207) 287-5259 (work) (207) 592-7856 (cell)
Information & Education Division Director – *Emily Maccabe*	Emily.maccabe@maine.gov	(207) 462-1017 (work)
Game Warden Colonel – Dan Scott	Dan.scott@maine.gov	
Wildlife Division Director - *Nate Webb*	Nathan.webb@maine.gov	(207) 287-5293 (work) (207) 592-4534 (cell)
Fish & Wildlife Support Section Supervisor - *Bob Stratton*	Robert.d.stratton@maine.gov	(207) 287-5659 (work) (207) 592-5446 (cell)
Management Section Supervisor - *Ryan Robicheau*	Ryan.robicheau@maine.gov	(207) 287-5253 (work) (207) 557-0986 (cell)
Wildlife Research & Assessment Section Section Supervisor - *Craig McLaughlin*	Craig.mclaughlin@maine.gov	(207) 941-4467 (work)
Oil Spill Response Coordinator - *Don Katnik*	Donald.katnik@maine.gov	(207) 941-4450 (work) (207) 852-0167 (cell)
Maine Department of Environmental Protection https://www.maine.gov/dep/contact/		
Division of Response Services Director – Jeff Squires	Jeff.squires@maine.gov	(207) 287-7190 (work) (207) 446-9892 (cell)
Response Support Specialist – Ginger McMullin	Ginger.c.mcmullin@maine.gov	(207) 822-6352 (work) (207) 446-7032 (cell)