

6. RESPONSE AND PROTECTION STRATEGIES

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6.1 INTRODUCTION

GRPs are an annex to the NWACP and a key element of both facility and vessel contingency plans. The GRPs provide a description of sensitive biological, cultural, and economic resources that must be addressed in the event of a spill. Any spill response activities must be consistent with the applicable GRP, unless otherwise directed by the Environmental Unit.

GRPs contain detailed information useful for guiding the first 12 to 24 hours of an oil spill response. GRPs are designed to eliminate the confusion surrounding initial response, and to identify and prioritize sensitive resource areas requiring protection.

6.2 STRATEGY

Since all areas within the state are considered environmentally sensitive, the following environmental protection priorities apply:

1. The first priority will be, of course, to prevent any spills from occurring.
2. If a spill does occur, the next priority will be to contain and conduct on-water recovery of the spilled product before it reaches, or spreads, to any beach or shoreline area, particularly those with the greatest sensitivities as determined by the applicable GRPs.
3. If this fails, it will be the responsibility of the spiller to restore, as much as feasible, all oiled areas to their original or natural state. The guidelines for determining "How Clean is Clean" are included at the end of this chapter (Table 6-1). These guidelines have been used in previous oil spills on the West Coast of the United States. They were drafted by the NOAA Scientific Support Coordinator (SSC) as part of the Regional IX Response Team (RRT).

4. In general, shoreline cleanup will be conducted pursuant to strategies described in the Shoreline Countermeasures Manual and Matrices in Section 9420 of the NWACP. Clean up actions will be approved by the ICS / Unified Command.

6.3 LOCAL AREA KNOWLEDGE

Local area knowledge can be an invaluable tool in the decision making process, and must be considered with other available resources. In addition to local residents and employees, many representatives on the RRT have extensive local area knowledge. Local boat operators, fisherman, and tribal or coastal resource managers may be consulted for specific area sensitivities and priorities at the time of a response.

6.4 PUBLICATIONS, CHARTS AND MAPS

A wide variety of published information is available regarding environmentally vulnerable or sensitive areas in the states of Washington. Because of the complexity and number of publications, charts and maps, they are hereby incorporated into this plan by reference only. The most significant publications, charts and maps include, but are not limited to:

Geographic Response Plans (GRPs)

GRPs clearly identify response strategies needed to protect sensitive public resources in an area, and present unified priorities for strategy implementation. GRPs also describe the natural and other public resources found in a region, as well as logistical information such as spill reporting contacts and equipment lists.

GRPs fulfill a number of the ACP content requirements under the Oil Pollution Act of 1990, and are considered annexes to the NWACP. GRPs for the State of Washington are incorporated into the NRC Contingency Plan by reference.

The following link leads to the GRPs online:

<http://www.ecy.wa.gov/programs/spills/preparedness/GRP/Introduction/introduction.htm>

Washington State Coastal Atlas <https://fortress.wa.gov/ecy/coastalatlus/> “The purpose of the Washington Coastal Atlas is to make relevant information easily available for use in coastal and shoreline resource planning and management. Since inception in 1995, what is now known as the Washington Coastal Atlas has undergone many changes and upgrades to become what it is today. The Atlas is now used by many people and organizations including: local, state, and Tribal government agencies; private contractors; advocacy groups; educators; outdoor recreationalists; and interested citizens. The Washington Coastal Atlas is managed and maintained by the [Washington Department of Ecology](#) with funding from the National Oceanic and Atmospheric Administration (NOAA) [Office of Ocean and Coastal and Resource Management \(OCRM\)](#).”

Prepared by the Department of Landscape Architecture, University of Washington, for the Washington State Department of Ecology (March 9, 1992), this set of seven booklets covers:

- Coastal Bay
- San Juan Islands
- Outer Coast
- Upper Puget Sound
- Cape Flattery
- Lower Puget Sound
- Strait of Juan de Fuca

While the booklets provide information critical to protecting environmental resources, they were not designed to be comprehensive. Ecology's Oil Spill Compensation Schedule adds a more detailed level of information, such as the significance and abundance of particular species, seasonal variations, and migratory patterns. Used in conjunction, the two sources can serve as a reliable resource for spill contingency planning.

Northwest Area Contingency Plan (Sector Puget Sound and Sector Columbia River)

USGS District 13
15 Second Ave
Seattle, WA 98174
Telephone: (206) 220-7090
Fax: (206) 220-7225

USEPA Region 10
1200 6th Ave
Seattle, WA 98101
Telephone: (206) 553-1200
Fax: (206) 553-01

Copies of the NWACP are widely distributed, and are readily available to all interested parties at the following webpage:

<http://www.rrt10nwac.com/NWACP/Default.aspx>

NOAA Environmental Sensitivity Index (ESI) Maps

Prepared for NOAA's Office and Response and Restoration by Research Planning, Inc., Columbia, SC.

- Outer Coast of Oregon & Washington
- Puget Sound and Straits of Juan de Fuca

The ESI maps are available electronically in pdf format and may be obtained from NOAA on CD or by downloading. Information about how to obtain electronic ESI maps is available at:

<http://response.restoration.noaa.gov/esi>

If needed for an oil spill response, these detailed ESI maps will be utilized and interpreted by the NOAA Scientific Support Coordinator (SSC), as part of the RRT.

Salmon, Marine Fish and Shellfish Resources

Salmon, Marine Fish and Shellfish Resources and Associated Fisheries in Washington's Coastal and Inland Marine Waters. Technical Report No. 79 (April 1992, revised), published by

the Washington State Department of Fisheries. This report contains extensive information that has been compiled for fisheries.

Tide Tables

Tide Tables (*available annually*), West Coast of North and South America
U.S. Department of Commerce, NOAA, Washington, DC

Tidal Current Tables

Tidal Current Tables (*available annually*), Pacific Coast of North America & Asia North
U.S. Department of Commerce, NOAA, Washington, DC

6.5 OTHER INFORMATIONAL RESOURCES

For other informational resources and services, see listings in Appendix D and refer to the NWACP.

6.6 WILDLIFE PROTECTION

A critical part of oil spill response includes the rescue and rehabilitation of birds, marine mammals, and other wildlife contaminated or otherwise affected by an oil spill. The NRC Plan SMT includes a Wildlife Branch within the Operations Section that addresses this function, in compliance with (and incorporated by reference into this plan): the Northwest Wildlife Response Plan and Policy as found in Chapters 3000 and 9000 of the NWACP. Recovery of impacted wildlife typically would begin as soon as possible to reduce the potential for wildlife casualties. Within the first 24 hours of a spill, NRC will have arrangements made for trained and permitted personnel (boats, land transportation, aerial observation, Wildlife MRU Equipment and development of a plan to determine types and number of birds impacted.

NRC recognizes that it is the policy of the Northwest Area Committee, as stated in the NWACP, representatives of the USFWS will assume the position of Director and Deputy Director of the Wildlife Branch. WSWF representatives would assume these positions if a USFWS representative is not available, or when designated by a USFWS representative. This designation may be made on a case-by-case basis, or through a pre-existing agreement. Appointment of other parties to one or both of these positions may be made by a USFWS representative or their designee at any time during an incident, and for such periods as may be deemed appropriate.

6.6.1 Notification

Report any observation of oiled wildlife to the WEMD (800-258-5990) if an ICS has not been established. The WEMD will forward any reports of oiled wildlife to the WDFW.

After the ICS is established, oiled wildlife observations will be reported to the Wildlife Branch Director (or their designee) within the Operations Section and the Environmental Unit Leader with the Planning Section.

Contact the USFWS Response Coordinator to initiate the process of obtaining spill-specific authorizations related to oiled wildlife (see Migratory Bird Treaty Act below) prior to initiating any oiled wildlife activities other than reconnaissance. The 24/7 contact number for the USFWS Response Coordinator in Lacey, WA is 360-753-9440.

Contact private oiled wildlife care contractors according to the number and type of species affected. These contractors have varying abilities to provide service and personnel during response activities and will be engaged as needed by the Wildlife Branch. See Appendix D.8 for contact information.

6.6.2 Wildlife Care Resources

The NWACP identifies four levels of wildlife response that are based on the number of birds being rehabilitated (birds in captivity). These are:

- Level 1 1-15 oiled birds,
- Level 2 16-100 oiled birds
- Level 3 101-500 oiled birds, and
- Level 4 500+ oiled birds.

Equipment and Supplies

The resources to comprise an oiled-wildlife mobile rehabilitation unit (MRU), capable of providing the equipment and infrastructure necessary to support a Level 3 response has been jointly developed by NRC and Focus Wildlife. The MRU resources identified consist of trailers, portable buildings, portable pools and the necessary support equipment and supplies. The requisite MRU equipment and supplies to support a Level 3 response have been acquired and are maintained by NRC. NRC will provide the MRU in the event of a spill response. When needed, the MRU will be deployed by NRC within 24 hours of spill awareness to a location approved by the Wildlife Branch Director.

The MRU described above is equipped with sufficient supplies and equipment to support the initial few days of an oiled wildlife response. Replacement supplies and equipment will be obtained as needed using the established channels within the ICS. Additional mobile wildlife equipment may be also available at the time of a spill incident from the WDFW Oil Spill Team

Personnel

The personnel requirements described in the NWACP will be met primarily through Focus Wildlife. Depending on the number and types of wildlife affected additional specialized services in support of wildlife rescue and rehabilitation may be contracted through the organizations listed in Appendix D, Section D.8 Wildlife Rescue and Rehabilitation.

6.6.3 Permits and Authorizations

During the initial stages of the response, the USFWS Response Coordinator in Lacey, WA will be contacted to initiate spill specific authorizations for oiled wildlife recovery, care, and rehabilitation.

All wildlife collection and rehabilitation activities carried out during a spill response will be done in accordance with established NWACP procedures and all applicable federal and state laws. This section identifies the state and federal permits that are required and generally describes their purpose.

Migratory Bird Treaty Act (Federal)

The Migratory Bird Treaty Act makes it illegal for anyone to “take” or possess any migratory bird except under the terms of a valid Migratory Bird Permit. The USFWS is responsible for issuing Federal Migratory Bird Rehabilitation permits to qualified applicants for the recovery, temporary possession, transportation, and rehabilitation of migratory birds.

In addition to the Federal Migratory Bird Rehabilitation permit, a rehabilitator must also secure a separate spill-specific authorization from the USFWS at the time of the spill for the recovery of both live and dead oiled birds. In Washington State, this authorization must be requested from the USFWS Response Coordinator in Lacey.

Endangered Species Act (Federal)

Listed species that become oiled are subject to Endangered Species Act requirements. For migratory birds, the Migratory Bird Rehabilitation Permit and the spill-specific authorization (see above) authorizes the recovery, temporary possession, transport, and rehabilitation of threatened and endangered species of migratory birds that have become oiled with no additional ESA permits required. For marine mammals, all response actions will be coordinated by the Wildlife Branch Director and appropriate federal agencies.

Marine Mammal Protection Act (Federal)

Federal, state and local government officials, or designees of the relevant Secretaries of the Departments of the Interior and Commerce, may “take” marine mammals during the course of official response duties under certain conditions, including if such taking is for the protection or welfare of the mammal, the protection of the public health and welfare, or the non-lethal removal of nuisance animals. Contractors may also receive authorization to take marine mammals under special circumstances (see NWACP 9312.3). All marine mammal response actions will be coordinated by the Wildlife Branch Director and appropriate federal agencies.

Government contractors conducting oiled wildlife spill response actions may be authorized to take marine mammals if the Wildlife Branch is activated, they are under the direct supervision of the Wildlife Branch Director, and the Wildlife branch Director is authorized to direct this taking.

If the Wildlife Branch is not activated, or if wildlife responders are contract personnel of non-government agencies, the authorization to take marine mammals must be obtained directly from the appropriate Federal trustee, either USFWS or NOAA.

Washington State Rehabilitation Permit (State)

Washington State law makes it illegal for any person to possess wildlife for the purpose of rehabilitation unless they have a valid wildlife rehabilitation permit or they are working under the supervision of a person who has a valid wildlife rehabilitation permit. This rule (WAC 232-12-275) also requires that any facilities used for oiled bird rehabilitation must meet certain infrastructure requirements.

The organizations listed below have the permits needed to conduct oiled bird rehabilitation operations in Washington State. Note that the USFWS Spill specific authorizations will also be required:

- Focus Wildlife
- The International Bird Rescue Research Center (IBRRC)
- The Progressive Animal Welfare Society (PAWS)

6.6.4 Oiled Wildlife Care Procedures

Federal (USFWS) policy requires that rehabilitation activities involving oiled-birds comply with the care standards as described in “Best Practices for Migratory Bird Care during Oil Spill Response” (US Fish and Wildlife Service. 2002). This document is incorporated by reference as a part of the NWACP. Additional animal care and husbandry information may also be obtained in the Oiled Wildlife Care Network manual “Protocols for the Care of Oil-Affected Birds” (UC Davis. 2000).

Wastewater generated by the wildlife cleaning and rehabilitation operations contains contaminants that may include surfactants, oil, and biological waste and must be appropriately treated prior to discharge. All wastewater produced by oiled wildlife operations will be stored using temporary storage tanks delivered to the site. Based upon the results of sampling and analysis, the wastewater will be treated and disposed of on-site or transported to an off-site facility. This determination will be made by the Disposal Group Supervisor and approved by the Washington Department of Ecology.

6.7 SHORELINE ASSESSMENT

When spilled oil threatens or reaches shoreline habitats, responders must survey the area to determine priorities and appropriate response. Typically this is accomplished through SCAT field personnel representing counterparts in the Unified Command (Federal, State, Local/Tribal, and RP). Although general approvals or decision tools for using shoreline cleanup methods can be developed during planning stages, responders' specific cleanup recommendations must integrate field data on shoreline habitats, type and degree of shoreline contamination, and spill specific physical processes.

Cleanup endpoints must be established early so that appropriate cleanup methods can be selected to meet the cleanup objectives. Shoreline surveys must be conducted systematically because they are crucial components of effective decisions. Also, repeated surveys are needed to monitor the effectiveness and effects of ongoing treatment methods (changes in shoreline oiling conditions, as well as natural recovery), so that the need for changes in methodology, additional treatment, or constraints can be evaluated.

The NOAA Shoreline Assessment Manual outlines methods for conducting shoreline assessments and incorporating the results into the decision-making process for shoreline cleanup at oil spills. Incorporated here by reference the full manual can be found at:

<http://response.restoration.noaa.gov/oil-and-chemical-spills/oil-spills/response-tools/selection-guide-oil-spill-response-countermeasures>

6.8 SHORELINE CLEANUP

An oil slick that is not contained will be carried by winds and currents into the open sea or onto a sensitive shoreline. Oil carried ashore should be removed quickly and thoroughly to minimize damage to property and sensitive ecosystems. However, this is a complex ecological, technological and political issue. No decision making process shall be undertaken without first consulting with experts in the field. Typically SCAT leaders will identify priorities for cleanup operations and make recommendations for appropriate cleanup techniques. Shoreline cleanup operations should be defined on a segment by segment basis and must be reviewed and approved by Unified Command.

The extent and type of cleanup to be conducted on an oil shoreline will be determined on a case by case basis. The following factors will be considered in making decisions about whether to proceed with shoreline cleanup, and if so, to what extent.

1. Will cleanup activities do more damage to sensitive shorelines than leaving the oil to biodegrade naturally?
2. Some shoreline areas are not readily accessible to appropriate recovery equipment.
3. Before cleanup of any shoreline takes place, the company legal / claims coordinator must procure authorization from the appropriate land management agency, or private land owner. Certain land classifications such as national and state parks, tribal lands, game refuges, archaeological sites and private land may preclude cleanup operations, even when those activities are in the best interest of the particular shoreline.
4. Biological and physical characteristics of a contaminated shoreline need to be evaluated. Sheltered shorelines not exposed to wave / flushing action may likely be given the highest priority for protection and cleanup.

NRC has a staff of 128 full-time trained personnel and 211 stand-by personnel in Puget Sound and Columbia River areas to undertake shoreline cleanup operations. NRC also has access to additional local shoreline clean up personnel through subcontracts with Global Diving & Salvage and Ballard Diving & Salvage. In addition, NRC can mobilize additional responders from its California offices, as well through its nationwide ICN with operating locations throughout the U.S. As appropriate, additional personnel may be contracted from local sources. These personnel would be provided appropriate HAZWOPER training as needed prior to field deployment. Alternatively, local contracted personnel may provide operational and logistical support functions that do not entail contact with oiled materials.

Equipment for shoreline cleanup also is maintained by NRC in dedicated trailers located in Seattle and Portland. Minimum equipment levels in each shoreline trailer are included in the NRC PRC Application. SCAT teams usually will recommend cleanup levels and end-points by shoreline types (Table 6-1). Following cleanup operations, SCAT teams will survey the segment and determine if agreed end-points have been met. If affirmative, operational cleanup on the segment is deemed complete. Otherwise, additional follow-up actions may be required as defined by the SCAT team(s) and approved by Unified Command.

Table 6-1 Guidelines for Determining How Clean is Clean

GUIDELINES FOR DETERMINING HOW CLEAN IS CLEAN

The following guidelines will be used to determine when individual shoreline segments will be considered for sign-off. The cleanup criteria listed below are provided for general guidance. Exact clean up end points will be determined on a case by case basis. Once a segment has met the cleanup criteria, a team of three people will visit the site for inspection and potential sign-off. This Shoreline Cleanup Assessment Team will consist of one representative from the responsible party (spiller), the state, and the federal government. The three entities being represented should choose two people to be team members to allow for multiple teams and /or allow for flexibility in scheduling site visits. Team members should be designated in advance and every effort should be made to keep these representatives consistent throughout the sign-off procedure. All representatives must have the signature authority from their respective organization/agency in order to participate in this process.

Clean up endpoints may take into consideration the following:

1. There may be no free oil remaining either on the water or in the sediment.
2. There may be no oiled debris remaining on the shore or trapped amongst the shoreline vegetation.
3. Only a dry oil stain may be left behind. No wet oil may be left on shoreline or shoreline vegetation. Wet oil may be removed from the shoreline and any impacted vegetation must be similarly removed.
4. Impacted marshes and mud flats may be considered clean when it is determined that mechanical and manual cleanup efforts have reached their maximum effectiveness. At that point the Unified Command may determine if further mitigation is necessary (e.g. vegetation cutting, bioremediation).
5. Trenches should be dug to ensure that there is no buried oil in the sediment. (If buried oil is discovered, then the responsible party should submit an action plan detailing the removal and /or remediation).

When the responsible party believes a segment meets the cleanup endpoint criteria set for a particular spill, then a walk-through by the Shoreline Cleanup Assessment Team can be scheduled. The decision by the team that the segment is clean must be unanimous. Otherwise, the team will issue specific, additional cleanup recommendations for those areas that do not meet these criteria.