

Protecting our Wildlife from Spills - California Department of Fish and Game Office of Spill Prevention & Response's Wildlife Response Plan for California

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Abstract

Since the California Office of Spill Prevention and Response (OSPR) was created within the Department of Fish and Game by the 1990 Oil Spill Prevention and Response Act, OSPR has been charged with protecting the state's wildlife from pollution events. When spill prevention fails and a spill occurs, OSPR and our partners are ready to respond to protect our wildlife and to provide the best achievable care in the event wildlife become oiled or otherwise injured. An oiled wildlife response has the best probability of success if pre-spill planning is in place that outlines response coordination, capabilities, and procedures. In 1999 OSPR, in coordination with other state and federal agencies and oil industry representatives, prepared the first Wildlife Response Plan for California. This plan was updated in 2005 to expand upon OSPR's wildlife operations objectives, organizational structure, duties, and capabilities during spill response, all of which is summarized in this paper.

Introduction

The impacts of oil spills vary, but economic and environmental effects usually dominate. One of the most visible effects of an oil spill is the impact on wildlife. Wildlife impacts are often what the news media focus on, which elevates public interest and concern. Prior to OSPR's inception, wildlife operations during spill response often lacked organizational structure and resources (including staffing and equipment) for both the field and at the few wildlife rehabilitation facilities that existed, and there was no consistent documentation. Since OSPR's inception in 1990, wildlife operations during spill response have become much more coordinated and systematic, to the benefit of the State's wildlife.

At a spill in California OSPR has primary responsibility for oiled wildlife protection, rescue and rehabilitation because of our legal mandates and our expertise. We hold the Department of Fish and Game's public trustee status to protect wildlife and ensure restoration of oil-damaged natural resources. The

Wildlife Response Plan has been written to address both federal and state requirements. California's Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) requires OSPR to:

- Establish rescue and rehabilitation stations for sea birds, sea otters, and other marine mammals to be able to provide the best achievable treatment;
- Conduct studies and evaluations necessary for improving oil spill response, containment, cleanup and wildlife rehabilitation;
- Assess injuries to natural resources; and
- Require responsible parties to fully mitigate adverse impacts to wildlife, fisheries, wildlife habitat and fisheries habitat following spills.

The OSPRA also required that the funds used to establish and maintain the network of rescue and rehabilitation stations be appropriated to a school of veterinary medicine within California. As such, the Oiled Wildlife Care Network (OWCN) was developed and is a collaborative program with the Wildlife Health Center, School of Veterinary Medicine at the University of California, Davis. OWCN is a statewide cooperative system of specialized wildlife health centers and organizations. OWCN maintains a corps of veterinarians, paid staff, and professionally-trained volunteers. OWCN has enlisted 28 academic and private non-profit rehabilitation organizations to actively participate during oil spill responses. OWCN has 12 permanent wildlife care facilities along the California coast, with the equipment and staff specifically trained in oiled wildlife care.

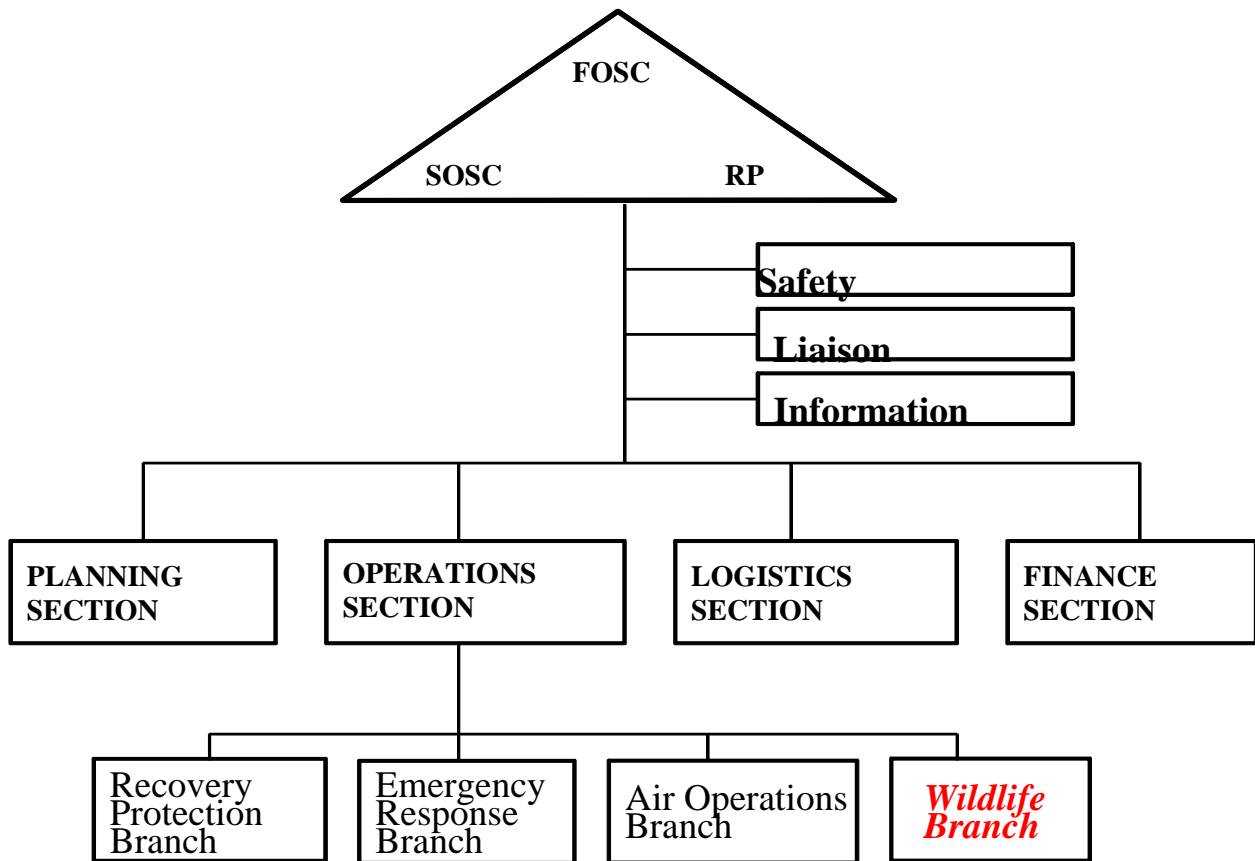
In 2005 OSPR updated and expanded the Wildlife Response Plan for California to ensure the statutory requirements of best achievable protection, treatment, care, and restoration of wildlife are met. When spill prevention fails and a spill occurs, OSPR's principle objectives of wildlife operations during spill response and cleanup are to:

- Protect wildlife and habitats from contamination;
- Minimize injuries to wildlife and habitats from the contamination;
- Minimize injuries to wildlife from the cleanup;
- Provide best achievable care for injured wildlife; and
- Document adverse effects that result from the spill and cleanup.

To ensure these objectives are achieved, the organization of the Wildlife Branch is critical. When oil spills occur in California, the Incident Command System (ICS) is used as the organizational structure to coordinate response actions. The ICS

organizational structure is typically comprised of the Unified Command which includes the Federal On-Scene Coordinator (FOSC), the State On-Scene Coordinator (SOSC) and a representative from the Responsible Party (RP), and Operations, Planning, Logistics and Finance Sections. In California, response actions concerning the protection, rescue, processing and rehabilitation of oiled or threatened wildlife are performed by the Wildlife Branch within the Operations Section of the ICS structure (Figure 1). The Wildlife Branch, like the rest of the response organization, grows and shrinks to fit the level of response necessary for each specific incident.

Figure 1: Wildlife Branch position in the ICS Structure.



Even though the Wildlife Branch is integrated into the ICS structure, it is self-directed and self-contained in many ways with regard to wildlife response resources (both staff and equipment). Wildlife operations gathers much of its own spill information through wildlife reconnaissance, staffs its own branch with pre-

trained experts (e.g. veterinarians, rehabilitation staff, processing staff, capture experts, volunteers), and prepares its own operational plan for the Incident Action Plan.

Development of the Wildlife Response Plan, the Planning Process

A significant component of the development of the Wildlife Response Plan included stakeholder involvement. Our planning partners included other state and federal agencies, the OWCN and all of the U.S. Coast Guard Area Committees – which include agency and oil industry representatives. The revised Wildlife Response Plan has since become an appendix to the Federal Region 9 Regional (Oil Spill) Contingency Plan (RCP). The RCP was prepared by the U.S. Coast Guard and U.S. Environmental Protection Agency, in cooperation with other federal and state agencies that are represented on the Regional Response Team. The RCP and the Area Contingency Plans (ACPs) are used by emergency response personnel as tools for obtaining resources to respond to an oil spill or hazardous materials incident. Because the Wildlife Response Plan is now incorporated into the RCP, this helps to ensure that wildlife response resources, both staff and equipment, will be available and are pre-authorized to respond when needed. This latter point is important because rapid wildlife response is critical to ensure that oiled wildlife can be quickly captured, stabilized, and rehabilitated.

Wildlife Response Plan Content

The Wildlife Response Plan describes the responsibilities and capabilities of the Wildlife Branch within the ICS structure during a spill. The Plan details the Wildlife Branch purposes, goals, objectives, responsibilities, and structure. The Wildlife Response Plan includes specific criteria for activating wildlife operations under different scenarios, such as those in which no oil spill has been reported, but oiled wildlife have been found. This is an important element because, as experience has shown, oiled birds can be an indicator that there is a pollution event even before a spill has been discovered. The Plan explains the duties of key positions in the Wildlife Branch, which are summarized below. The Plan also describes the procedures to be used, along with personnel and equipment needed, to ensure we provide the best achievable protection and treatment of wildlife. While the Wildlife Response Plan has been designed principally to cover oil spills in marine waters, it is applicable to inland oil and non-oil spills as well.

Wildlife Operations in California

Efficient wildlife response requires a systematic approach to wildlife reconnaissance, search and collection, hazing (if needed), and care and processing. When the Wildlife Response Plan is followed, trained and dedicated wildlife responders can act quickly and efficiently, according to the pre-defined approach detailed in the Plan.

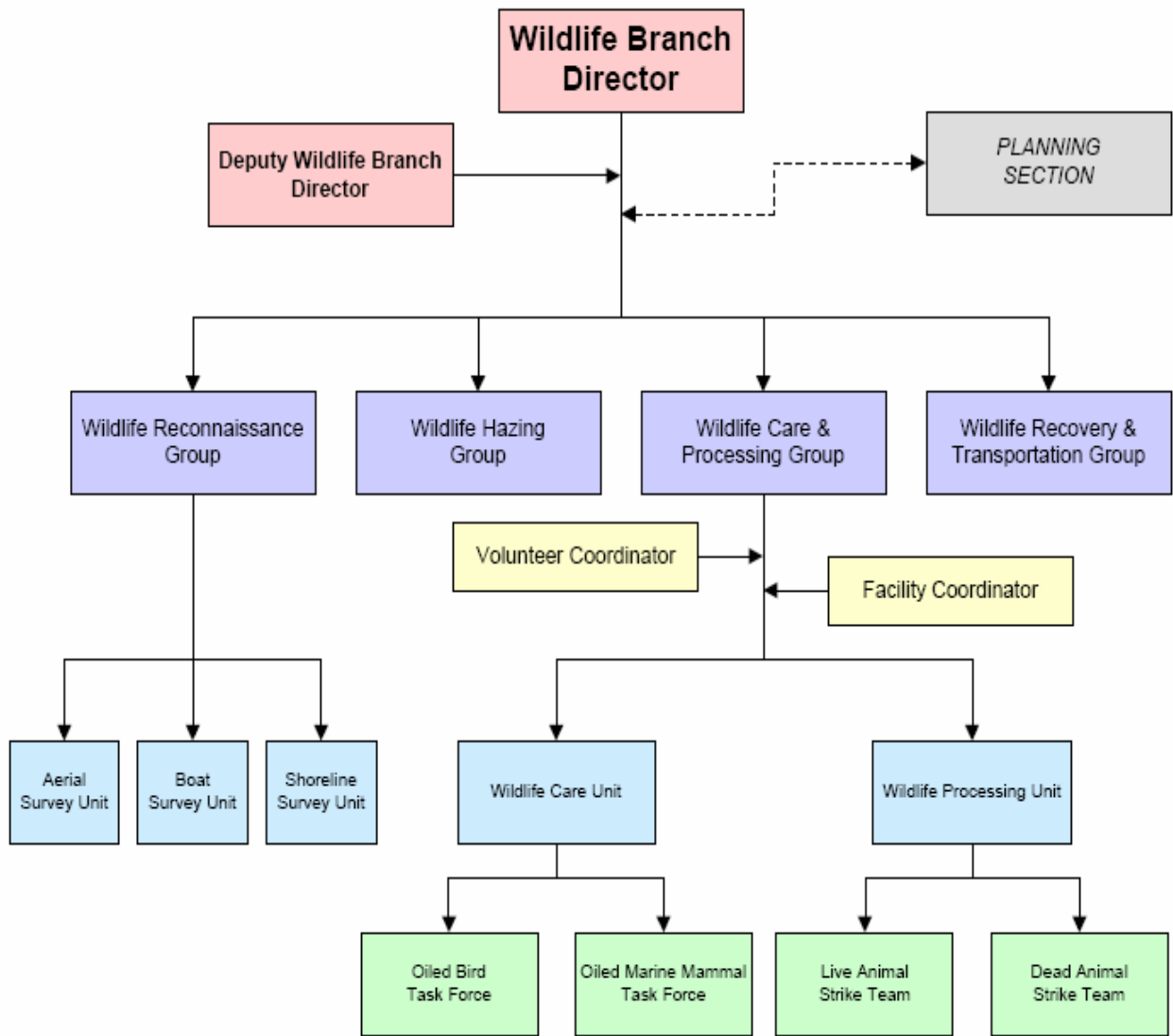
When a spill first occurs, the response – including wildlife operations – is guided by the ACP and RCP. As the response gets organized wildlife operations is integrated into the ICS structure as it is formed. As soon as feasible, a Wildlife Branch Director is assigned. S/he will direct the development of the Wildlife Branch, and will begin drafting the wildlife operations element of the Incident Action Plan, for approval by the Unified Command.

The OWCN responds hand-in-hand with OSPR for wildlife operations, and activation can be virtually simultaneous. Through the OWCN, dedicated wildlife operations equipment and specially-trained response personnel can be deployed immediately in combinations dictated by spill-specific circumstances. OWCN responders retrieve oiled animals, evaluate each animal's needs, provide necessary veterinary care, and remove the toxic material from the animals. They then rehabilitate the cleaned animals, locate suitable release sites, release the animals, and monitor post-release survival. The OWCN also oversees documentation and collection of evidence samples from all collected wildlife (live and dead) to assist investigators, responders, and subsequent assessment phases.

An efficient wildlife response operation requires close cooperation within the Wildlife Branch and requires careful execution of pre-defined roles. In its expanded form, which is flexible following the ICS, the Wildlife Branch contains four Groups under the direction of a Wildlife Branch Director (Figure 2):

- Wildlife Reconnaissance Group (aerial, ground, and on-water reconnaissance of wildlife in the spill area);
- Wildlife Hazing Group (to keep wildlife away from oil);
- Wildlife Recovery and Transportation Group (search and collection); and
- Wildlife Care and Processing Group (intake documentation and rehabilitation).

Figure 2: Organization chart for an expanded Wildlife Branch, per the California Wildlife Response Plan



In California, the Wildlife Branch Director’s duties include but are not limited to:

- Staffing and supervising the Groups within the Wildlife Branch;
- Coordinating with the Planning Section;
- Coordinating with the various land managers and/or trustee agencies;
- Identifying methods to minimize collateral damage to wildlife and habitat from recovery, transportation, and reconnaissance operations;
- Coordinating the OWCN and overseeing activities of any other private

wildlife care groups involved, including those employed by the Responsible Party;

- Providing input at the Tactics and Planning meetings;
- Updating the Unified Command, Operations Section Chief, Planning Section Chief, Information Officer, and Liaison Officer of wildlife at risk and spill related wildlife statistics (e.g. numbers of dead/live oiled birds); and
- Updating the news media, as requested by the Unified Command.

Depending on the size and type of spill and habitats involved, the Wildlife Reconnaissance Group may collect real-time data using aircraft, boat, and/or ground surveys. If warranted, the Wildlife Reconnaissance Group may be divided into Aerial, Boat, and Shoreline Survey Units. The Wildlife Response Plan includes standardized aerial and boat survey protocols which to implement, require skilled, trained wildlife observers. The main objective of wildlife reconnaissance surveys is to evaluate the numbers, species, and locations of animals that could be or are affected by the spill. These are identified as wildlife resources-at-risk. The Wildlife Branch Director will use those data to help guide the Planning Section's development of response strategies that minimize adverse effects on wildlife, and take into account wildlife issues, such as the presence of listed species.

The Wildlife Hazing Group is responsible for implementing wildlife hazing operations. These are actions intended to minimize injuries to wildlife by attempting to keep animals away from the oil and cleanup operations. Hazing usually includes deployment of acoustic or visual hazing devices, such as Zon guns or Mylar tape strips.

The Wildlife Recovery and Transportation Group collects dead or captures live animals and transports them to processing centers. Recovery and transportation personnel are drawn from OWCN, OSPR, other state and federal trustee agencies, and approved contractors. As with other wildlife operations activities, Recovery and Transportation Group personnel include a high proportion of professional wildlife biologists. In addition, trained, qualified volunteers obtained through OWCN and/or OSPR Volunteer Coordinators or both, can be used, as long as training requirements are met and safety standards are adhered to. If marine mammals are involved in a spill, the National Marine Fisheries Service or OWCN can provide assistance with mammal capture.

The Wildlife Care and Processing Group can have two Units in its expanded form. The Wildlife Care Unit ensures that animals exposed to petroleum products receive the best achievable care by providing access to veterinary services and

rehabilitation centers. The Wildlife Processing Unit uses a detailed and systematic collection, recording, and scientific examination process for all birds (alive and dead) that are collected. These data are then used to help with the wildlife operations planning, evaluating of possible impacts at the population level, and for the Natural Resource Damage Assessment which documents wildlife injuries. Detailed information is also needed to substantiate reimbursable expenditures for wildlife triage, stabilization, treatment, rehabilitation, and release.

Specific protocols for wildlife care and rehabilitation will not be addressed here because they are highly specialized. Contact OWCN for the most current information on wildlife care and rehabilitation protocols.

Birds are the most abundant wildlife taken to wildlife care centers during oil spills. Birds are often treated and released within three weeks of capture, once they meet pre-established physiological and behavioral milestones specified by the detailed rehabilitation protocols. However, any animal's time in care depends on the spill location, type of oil, how that oil affects the species, pre-existing injuries or illness, seasonal conditions, and other logistical factors.

To staff the four operational groups within the Wildlife Branch, trained staff and maintained equipment are needed so that they can be mobilized at any time, without delay. OSPR maintains some equipment which is specialized for wildlife operations and dedicated to that purpose, including air boats, all-terrain vehicles, hazing equipment, capture equipment, a mobile vet lab, and a wildlife care trailer.

Another critical wildlife operations resource used in California is a cadre of volunteers who are especially needed when large numbers of animals are being collected. Volunteers are often essential to a successful oil spill response. Wildlife transport, husbandry and rehabilitation operations can be substantially benefited by volunteer resources. In order to provide workers' compensation benefits in case of injury, volunteers are temporarily deemed employees of the State which means that they must be 18 years or older. Volunteers can include "pre-trained" volunteers (who have previously worked with us on spills), or "convergent" volunteers (those from the general public who spontaneously appear to assist). Convergent volunteers' previous training can range from none to advanced levels. Most volunteers are provided and managed by OWCN which maintains a database of volunteers through each of its participating network member organizations.

Conclusions

In all aspects of spill response, with every spill we learn ways to do things better, and wildlife operations is no exception to that rule. The Wildlife Response Plan for California is a living document that will be periodically updated to reflect lessons learned from spill responses, and to encourage the exchange of information between stakeholders. An oiled wildlife response has the best probability of success if pre-spill planning is in place that describes response coordination, capabilities, and procedures. All of that is included in the Wildlife Response Plan for California. Any response plan is only as good as the readiness of the staff to implement the plan. As with other aspects of spill response, wildlife operations needs to be drilled and practiced. The Wildlife Response Plan for California is a valuable resource that details OSPR's wildlife operations objectives, organizational structure, duties, and capabilities during a spill. The Wildlife Response Plan can be viewed at www.dfg.ca.gov/ospr/misc/wildlife.htm.

Reference

DFG-OSPR. 2005. Wildlife Response Plan for California.