# Command Oil Spill FINAL

Restoration Plan and Environmental Assessment



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Prepared by: United States Fish and Wildlife Service National Oceanic and Atmospheric Administration California Department of Fish and Game California Department of Parks and Recreation California State Lands Commission



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# FINAL RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT FOR THE 1998 COMMAND OIL SPILL

#### 1.0 Introduction, Purpose and Need for Restoration

#### **1.1 Introduction**

This document is being prepared by the Command Oil Spill Natural Resources Trustee Council comprised of representatives of the U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA), the California Department of Fish and Game (CDFG), the California State Lands Commission (CSLC), and the California Department of Parks and Recreation (CDPR). The purpose of this document is to inform the public about the affected environment and the proposed restoration actions to compensate for natural resource injuries and lost recreational uses caused by the 1998 Command oil spill (hereafter Spill or the Command Spill).

#### 1.2. Purpose & Need

This final Restoration Plan (RP) and Environmental Assessment (EA) provides information regarding the affected environment, natural resource and human use injuries resulting from the Command Spill into the waters off of the San Mateo coast. This document also includes the Trustee agencies' plan for restoration, including descriptions of proposed restoration alternatives consistent with the Oil Pollution Act (OPA) and the National Environmental Policy Act (NEPA). The purpose of restoration planning is to identify and evaluate restoration alternatives and to provide the public opportunity for review and comment on the selected restoration alternatives. Restoration planning provides the link between injury and restoration. The goal of proposed restoration actions presented in this document is to address injuries to, or lost use of, natural resources and services resulting from the Spill. This will be accomplished through the restoration, rehabilitation, or acquisition of equivalent natural resources and services, collectively referred to as restoration. The specific goals for this final RP/EA, in compliance with OPA, are to restore the following natural resources affected by the Spill: seabirds, sandy beach and rocky intertidal shoreline habitats, and use of beaches for human recreation.

This document also serves, in part, as the Trustee agencies' compliance with the NEPA and the California Environmental Quality Act (CEQA). Additional environmental compliance may be required prior to actual implementation of the proposed projects described herein.

# 1.3 Overview

On the evening of September 26, 1998, the tanker Command left San Francisco Bay bound for Panama. As it traveled in the southbound traffic lane off San Francisco and San Mateo County coasts, it released an estimated 3,000 gallons of Intermediate Bunker Fuel (IBF) 380, also known as Fuel Oil No. 6. Due to light winds and fair weather, the oil moved little in the first few days, primarily staying in the vicinity of the southbound traffic lane. On September 30, oil began to wash ashore, largely in the form of scattered tarballs, over 15 miles of beaches, mainly in San Mateo County (Figure 1). However, a tarball sample collected as far away as the Salinas River mouth in Monterey County matched the source sample from the tanker.

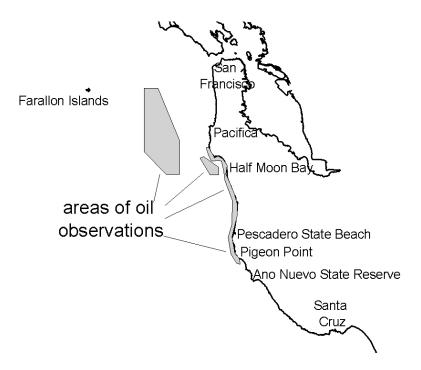


Figure 1: Areas of oil observations during the Command Oil Spill

Response activities included skimming by oil spill response vessels at sea; however, little oil could be collected. In addition, shoreline crews were able to clean up some of the oil that was found onshore in the form of tarballs, and tar patties. No beaches were closed as a result of the Spill but coastal access was interrupted.

#### 1.4 Natural Resource Trustees and Authorities

Both federal and State of California laws establish liability for natural resource damages, requiring responsible parties to make the environment and the public whole for the injury, destruction and loss of natural resources and services resulting from oil spills. Natural resource damages include the reasonable cost of assessing resource injuries and lost services along with the cost of developing and implementing a restoration plan to make the environment and the public whole for the injury of natural resources and to compensate for lost or diminished resource services resulting from oil spills.

The USFWS, NOAA, CDFG, CSLC, and CDPR are the Trustees for the natural resources injured by the spill (Trustees). The USFWS and NOAA are designated Trustees for natural resources pursuant to subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR § 300.600 et seq.) and Executive Order 12580 (3 C.F.R., 1987 Comp. p. 193, 52 Fed. Reg. 2923 (January 23, 1987) as amended by Executive Order 12777 (56 Fed. Reg. 54757 (October 19, 1991). Additionally, the CDFG has State natural resource trustee authority pursuant to Fish and Game Code sections 711.7 and 1802 and the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (Government Code sections 8670.1 et seq.); the CDPR has State natural resource trustee authority pursuant to Public Resources Code section 5003; and the CSLC has State natural resource trustee, each agency is authorized to act on behalf of the public under State and/or federal law to assess and recover natural resource damages and to plan and implement actions to restore, rehabilitate, replace, or acquire the equivalent of the

affected natural resources injured as a result of a discharge of oil. Pursuant to 15 CFR § 990.14(a), the Trustees designated CDFG and USFWS as the Co-Lead Administrative Trustees. The Trustees have jointly developed this final RP/EA to address restoration of the injured resources.

#### 1.5 Settlement of Natural Resource Claims

The United States and the State of California reached a settlement with the parties responsible for the Command Spill. The terms of the settlement were memorialized in a Consent Decree, which was reviewed by a U.S. District Court and was subject to public comment prior to being entered by the Court on March 31, 2000. The Consent Decree required the responsible parties to pay a total of \$5,518,000 to resolve all civil claims (natural resource damages and civil penalties) arising from the Command Spill, of which \$4,007,242 was allocated to natural resources damages. The natural resources damages portion of the settlement, together with interest earned on the entire settlement amount while held in escrow pending final Court approval of the settlement, was deposited into the Natural Resource Damage Assessment and Restoration Fund created pursuant to 43 U.S.C. § 1474b ("NRDAR Fund") and has been maintained in a segregated account within the NRDAR Fund ("the *Command* NRD Account"). Restoration funds are held in an interest bearing account, with a balance of \$4,042,980 as of September 30, 2003. The Council anticipates that this balance will continue to change as interest accrues and planning activities proceed.

The Consent Decree requires the Trustees, when allocating monies for Restoration projects, to take into consideration their preliminary determination of injuries caused by the Spill. According to the Consent Decree, the Trustees determined that seabirds, primarily Common Murres (*Uria aalge*), suffered the greatest injury and as a result the restoration money will primarily be used for projects benefiting seabirds. The Consent Decree also provided for the Trustees to make a more precise allocation of the restoration monies through a Memorandum of Understanding ("MOU").

The MOU subsequently entered into by the Trustees provided some further guidance on allocations of money in the NRD account (approximately \$2,850,000 for seabird projects, particularly benefiting Common Murres, \$400,000 for Marbled Murrelet(*Brachyramphus marmoratus*) projects and \$200,000 for projects benefiting shoreline and human use). These allocations were, however, subject to adjustments based on post-settlement assessment work. Based on the post-settlement injury assessments conducted by the Trustees, these allocations were adjusted to increase the allocation for Marbled Murrelet enhancement projects because the injury to this species was greater than originally estimated, relative to those of other seabirds (see Section 3.0 for more information). The MOU also allows up to \$463,016 of the funds deposited in the Command NRD Account to be used for the Trustees' costs associated with planning, implementation and oversight of restoration.

The Trustees have committed to the expenditure of the NRD money for the design, implementation, permitting (as necessary), monitoring, and oversight of restoration projects, and for the costs of complying with the requirements of the law to conduct a restoration planning and implementation process. The Trustees share joint responsibilities regarding the injured seabirds, habitat, and human use losses.

#### **1.6 Public Participation**

Public review of this final RP/EA was an integral component of the restoration planning process. The Trustees released a Public Scoping Document in May 2002 to assist in identifying potential restoration projects. The Trustees also held a workshop with Marbled Murrelet scientists and resource specialists to refine the Marbled Murrelet projects. All public comments received during the public scoping period are reflected in this final RP/EA. In all, the Trustees evaluated 25 proposed projects, 23 of which were proposed by the public.

There were several public comment periods during the development of the RP. There was a thirty-day public comment period on the Public Scoping Document and an initial public review period of over 45 days on the draft plan. Due to requests by the public for additional review time, the Trustees extended the initial 45+ day comment period for the draft plan an additional thirty days.

The Trustees held several public meetings during the development of the RP/EA. The first meeting was a Public Scoping Meeting held on May 21, 2002 in Half Moon Bay, CA to assist in identifying potential restoration projects and to receive public comments on the scoping document. A second public meeting was held on the draft Restoration Plan in Half Moon Bay, California on January 29, 2004. At this meeting, the Trustees presented a brief overview of the draft RP/EA and accepted public comment.

Through the public review process, the Trustees received public comment on the suite of projects which were being considered to restore injuries from the Spill and suggestions for additional restoration projects. All of the comments and suggestions were seriously considered and evaluated against the criteria stated in this document. Appendix A includes the written and verbal comments received during the public comment period for the draft plan and the Trustee's responses to comments.

Further information on this public meeting and other activities of the Trustees was distributed to those on our mailing list, and was announced on our websites at <a href="http://www.darcnw.noaa.gov/command.htm">http://www.darcnw.noaa.gov/command.htm</a> and <a href="http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/NRDAcommand.htm">http://www.dfg.ca.gov/command.htm</a> and <a href="http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/NRDAcommand.htm">http://www.dfg.ca.gov/command.htm</a> and <a href="http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/NRDAcommand.htm">http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/NRDAcommand.htm</a>, and through press releases.

#### **Administrative Record**

The Trustees have opened an Administrative Record (Record) in compliance with 15 C.F.R. Section 990.45. The Record includes documents relied upon or considered by the Trustees during the assessment and restoration planning performed in connection with the Spill. The Record is on file at The Gulf of the Farallones National Marine Sanctuary, Fort Mason, Building 201, San Francisco, California 94123. Arrangements may be made to review the Record by calling (415) 561-6622. The Record may also be viewed at our website at http://www.darcnw.noaa.gov/command.htm.

#### 2.0 Affected Environment

#### 2.1 Physical and Biological Environment

#### **Physical Environment**

The physical environment within the affected area includes the ocean and coastal environments within the Gulf of the Farallones and Monterey Bay National Marine Sanctuaries (GFNMS and MBNMS). The affected environment encompasses a 6,577 square mile area of Pacific Ocean along with near shore tidal flats, wetlands, rocky intertidal areas, coastal beaches, subtidal reefs, kelp forests, and underwater canyons. In addition, the physical environment encompasses rocks and islands contained within the California Coastal National Monument managed by the Bureau of Land Management (BLM), public beaches that are under the jurisdiction of the CDPR, the Farallon National Wildlife Refuge managed by the USFWS and the Point Reyes National Seashore managed by the National Park Service (NPS). Designated by Presidential Proclamation on January 11, 2000, the California Coastal National Monument runs the entire length of the California coast (840-miles) between Oregon and Mexico, extends 12 nautical miles from the shoreline, and encompasses thousands of BLM administered islands, rocks, exposed reefs, and pinnacles above mean high tide.

The Farallon National Wildlife Refuge is a group of islands located 28 miles west of San Francisco. It sustains the largest seabird breeding colony south of Alaska and contains 30 percent of California's nesting seabirds. Thirteen species, representing up to 250,000 individuals breed here, including the largest colonies of Brandt's Cormorant (*Phalacrocorax penicillatus*) and Western Gull (*Larus occidentalis*) found anywhere.

The dominant oceanic current within the affected environment is the California current, which flows southward from Alaska to Mexico. During the year, several oceanic phenomena affect this general movement, such as the northward flowing Davidson counter current prevailing during the winter, upwelling processes, local gyres and eddies, and tidal exchanges with San Francisco and Monterey Bays. The average annual ocean surface temperature is 55° F.

The three distinct ocean seasons along the central California coast are: the oceanic period (July-October); the Davidson Current period (October- March); and the upwelling period (March/April-August). The oceanic period is the season in which the California Current dominates the circulation pattern. This period is characterized by low temperature, low salinity, high-nutrient, and highly oxygenated sub arctic water (Minerals Management Service 1983). The Davidson Counter Current carries oxygen-poor, nutrient rich waters that are characteristically warmer and more saline than the California Current. Low temperatures, high salinities, and high nutrient levels usually characterize coastal upwelling. The process increases primary productivity of surface waters by supporting large phytoplankton blooms. Rich zooplankton and fisheries production ensues.

#### **Biological Environment**

The affected area has one of the most diverse and abundant assemblages of marine organisms in the world. A rich array of habitats including the open ocean, rugged rocky shores, sandy

beaches, lush kelp forests, and wetlands support large numbers of seals and sea lions, whales, fish stocks, otters, and seabirds. The environment is home to, or a migration corridor for, 26 species of marine mammals, 94 species of seabirds, 400 species of fish, 4 species of sea turtles, 31 phyla of invertebrates, and over 500 species of marine algae. Other important megafauna species in the affected area include the sea otter (*Enhydra lutris*), gray whale (*Eschrichtius robustus*), blue whale (*Balaenoptera musculus*), humpback whale (*Megaptera novaeangliae*), market squid (*Loligo opalescens*), Brown Pelican (*Pelecanus occidentalis*), rockfish (*Sebastes sp.*), commercial sea urchin (Class *Echinoidea*), and giant kelp (*Heterostichus rostratus*). For many migratory species, such as the gray whale, salmon, trout, and Brown Pelicans, the affected area is also an important link to other habitats beyond its boundaries.

#### **Marine Mammals**

#### Pinnipeds

Twenty-six species of marine mammals have been observed in the affected area, including five species of the sub-order pinnipedia (seals and sea lions), one species from the sub-order fissipedia (sea otter), and twenty species of the order cetaceans (whales and dolphins).

Both Año Nuevo and the Farallon Islands are important pinniped breeding sites in the area and the most important pinniped rookeries and resting areas in central and northern California. The five species of pinnipeds considered common within the affected area include California sea lions (*Zalophus californianus*), Steller sea lions (*Eumetopias jubatus*), Northern elephant seals (*Mirounga angustirostris*), Northern fur seals (*Callorhinus ursinus*), and Pacific harbor seals (*Phoca vitulina*). An additional species, the Guadalupe fur seal (*Arctocephalus townsendi*), has been documented on the Farallon Islands.

In any season, California sea lions are the most abundant pinniped in the area (Bonnell *et al.*1983). They breed farther south along the coast in the summer, then migrate northward, reaching their greatest numbers in the sanctuaries in autumn. Sea lions haul out on offshore rocks and islands. Both haul-out sites and foraging grounds are essential to the species' health. Northern elephant seals breed in the winter months and then disperse to feed in pelagic waters throughout the eastern North Pacific. A portion of the population returns to the colony later in the year to undergo an annual molt. Peak abundances occur on land in the spring when juvenile males and females haul out to molt. The largest populations are on Año Nuevo Island and the adjacent mainland point. The spring population on land exceeds 4,000 (M.L. Bonnell *pers. com.*).

Pacific harbor seals are year-round residents in the area. They haul out at dozens of sites along the coast from Point Sur to Año Nuevo. Peak abundance on land is reached in late spring and early summer when they haul out to breed, give birth to pups, and molt. Favorite haul out sites are isolated sandy beaches and rocky reef areas exposed at low tide. Harbor seals also use the estuarine habitats of Elkhorn Slough, Tomales Bay and the Esteros.

Northern fur seals occur in the open waters in winter and spring. They feed offshore after migrating from the Pribilof Islands. The greatest density of individuals is found well offshore over the continental slope in waters from 100 to 1,000 fathoms (200 to 2,000 m) depth. Northern fur seals have a declining population presently estimated at 1.2 million animals. Many causes

have been attributed to this decline, including entanglement in marine debris. This species has been proposed for designation as a depleted species by NOAA. Northern fur seals regularly haul out on the Farallon Islands and have pupped on the island every years since 1996. Fur seals also occasionally haul out on Año Nuevo island.

#### Cetaceans

Seventeen species of whales and dolphins have been sighted within the affected areas. Ten species are seen regularly and of these, the killer whale (*Orcinus orca*), Minke whale (*Balaenoptera acutorostrata*), harbor porpoise (*Phocoena phocoena*), Dall's porpoise (*Phocoenoides dalli*), and Pacific white-sided dolphin (*Lagenorhynchus obliquidens*) are considered year-round "residents". The affected area also lies on the migratory pathway of the gray whale and other large baleen and tooth whales.

#### Fissipeds

The California or southern sea otter (*Enhydra lutris nereis*) is a threatened species that is found throughout the shallow waters in the affected area. Sea otters inhabit a narrow zone of coastal waters, normally staying within one mile of shore. They forage in both rocky and soft-sediment communities as well as in the kelp understory and canopy. They seldom are found in open waters deeper than 30 m, preferring instead the kelp beds which serve as vital resting, foraging, and nursery sites. Otters are an important part of the marine ecosystem. By foraging on kelp-eating macroinvertebrates (especially sea urchins) sea otters can, in many instances, influence the abundance and species composition of kelp assemblages and animals within nearshore communities (Riedman 1987).

The California sea otter population is a remnant of the North Pacific population that was decimated by the commercial fur trade in the 18<sup>th</sup> and 19<sup>th</sup> centuries. In 1914, this population in California occupied a few miles of the rocky Point Sur coast and was estimated to contain about 50 otters. By 1938, when the public became aware of these remnant otters, the total California population was between 100-300 animals. Between 1938 and 1976 the population increased at about 5 percent per year. From 1976 until the early 1980's, the population did not grow at all, mainly due to the number of otters drowning from entanglement in fishing nets. Since state legislation restricted the use of entangling nets, spring population growth rate is still much lower than the growth rates of sea otter populations in the Aleutian Islands. In addition to the entanglement in fishing nets, other possible factors for the low population growth include illegal shooting, shark attacks, pathological disorders, contamination from degraded water quality, starvation, and adverse weather conditions. Approximately 31 percent of this population is currently found in the area from Point Sur north to Año Nuevo/Pigeon Point.

# Seabirds

Marine habitats along the affected coast are among the most productive in the world as measured by the sheer numbers of seabirds supported year-round. These populations forage in nearshore areas within the GFNMS and MBNMS and are highly dependent on the productive waters of the two sanctuaries. The Farallon Islands, a National Wildlife Refuge surrounded by the waters of GFNMS supports the largest concentrations of breeding marine birds in the continental United States (Ainley and Boekelhide 1990). The islands support a diverse nesting community of 12 species including over 50,000 breeding pairs of Common Murres, a species heavily impacted by the Command Spill. The populations of Ashy Storm-Petrels (*Oceanodroma homochroa*) and Western Gulls breeding on the Farallones are the largest for these species worldwide. The Ashy Storm-Petrel reaches the northern limit of its breeding range on the Farallones (Ainley and Boekelheide 1990, Ainley 1995). Rhinocerous Auklets (*Cerorhinca monocerata*) disappeared from the Farallones in the 1860s but recolonized and began breeding in the 1970s (McChesney and Whitworth 1995). In addition the island supports breeding colonies of Cassin's Auklets (*Ptychoramphus aleuticus*), and Tufted Puffins (*Fratercula cirrhata*).

There are also several species found in the area of the Spill that are of special concern because of their small world populations. These species include the endangered California Brown Pelican (*Pelecanus occidentalis californicus*), the federal listed threatened and State listed endangered Marbled Murrelet and several species being considered for listing, such as Black Storm-Petrel (*Oceanodroma melania*), Ashy Storm-petrel and Xantus's Murrelet (*Synthliboramphus hypoleucus*). The world's largest known concentration of Ashy Storm-Petrel can be found in Monterey Bay during the fall (Stallcup 1990). The California Brown Pelican once bred within the affected environment (Baldridge 1973), and with return of the sardine, may do so again.

Many seabird species use the affected area during migrations from their nesting areas. One notable species is the Sooty Shearwater (*Puffinus griseus*), which occur in large numbers off California during their austral winter migration from New Zealand breeding colonies. The Sooty Shearwater is the most abundant seabird off central California during May to September (Briggs *et al.* 1987). They aggregate in large conspicuous flocks to feed on shoaling fishes, squid, and euphausids that concentrate in productive shelf waters influenced by coastal upwelling (Briggs and Chu 1986). Single flocks can extend for many kilometers and number in the 10,000–100,000s. Their aggregated dispersion along the populated coast and near offshore shipping lanes makes shearwaters particularly vulnerable to oil pollution. Numbers off California have declined precipitously during the past decade due to a combination of factors, including oil spills, marine climate change, incidental fisheries take, and pollution (Veit *et al.* 1996, 1997, Lyver *et al.* 1999, Uhlmann and Moller 2000, Oedekoven *et al.* 2001, Uhlmann 2001).

#### Fish

The diversity and abundance of the fish fauna within the affected area is a significant resource. Generally, the area exhibits the very rich cold-water fish fauna of the Oregonian province (Briggs 1979). The same environmental factors that determine the distribution, abundance, and species composition of the other living resources of the area also affect the fish communities.

Approximately 400 species of fish are found within the affected area. The diverse habitats of the area each have their own characteristic assemblage of fishes. Fishes of the nearshore subtidal habitats exhibit the greatest diversity. This habitat includes many commercially important fishes such as the pelagic schooling species [northern anchovy (*Engraulis mordax*), Pacific herring (*Clupea pallis*), jack mackerel (*Thyrsitops sp.*), and California sardine (*Sardinops caeruleus*)], the large predators [king or Chinook salmon (*Oncorhynchus tshawytscha*), sablefish (*Anoplopoma fimbria*), sharks)], and some demersal species [English *Parophrys vetulus*) and petrale sole (*Eopsetta jordani*)]. Many important species of rockfish are found over rocky reefs

and coho (*Oncorhynchus kisutch*) salmon as well as steelhead trout can all be found within the boundaries of the affected waters.

Sandy intertidal areas are used by small pelagic species [California grunion (*Leuresthes tenuis*) and smelt (*Atherinopsis spp.*)] that use the beaches of the inner bay for spawning. Other species that forage near sand flats include the surf perch (Family *Embiotocidae*), striped bass (*Morone lineatus*), jack smelt, sand sole (*Pegusa lascaris*), Pacific sanddab (*Citharichthys sordidus*), and starry flounder (*Platichthys stellatus*). Most of the finfish found in shallow rocky reefs are also common in kelp beds. The kelp canopy, stipes, and holdfasts increase the available habitat for pelagic and demersal species and offer protection to juvenile finfish. Greenling (*Hexagrammos sp.*), lingcod (*Ophiodon elongatus*), and numerous species of rockfish are the dominant fishes.

The rocky intertidal habitat is characterized by a rather small and specialized group of fish adapted for life in tide pools and wash areas. The most representative species are the monkey-face eel (*Cebidichthys violaceous*), rock eel (*Pholis gunnellus*), dwarf surfperch, juvenile cabezon (*Scorpaenichthys marmoratus*), sculpins (*Cottidae sp.*), and blennies (*Blennius sp.*) (California Department of Fish and Game 1979).

Fishes in the submarine canyon of MBNMS are characterized by a variety of little known mesoand bathypelagic species. Because the canyon allows deep-living species to come close to shore, many uncommon deep-sea fishes have been taken in Monterey Bay. Anderson *et al.* (1979) reports fishes belonging to 41 families were captured in Monterey Bay by Moss Landing Marine Laboratories or by fishermen. Several of the species were previously unrecorded in the area, while others were extremely rare or far beyond their normal range.

Few fishes live year-round in sloughs and estuaries although some fish such as the tidewater goby (*Eucyclogobius newberryi*) and the stickleback (*Gasterosteus aculeatus leiurus*) depend upon the more brackish upper reaches of the estuarine habitats. Full time residents such as the staghorn sculpin and the bay pipefish depend upon the mud, eelgrass and other microhabitats to feed, reproduce and hide from predators. Mid-water swimmers such as the Northern anchovies, Pacific herring, topsmelt and jacksmelt also use the area for feeding while simultaneously using the microhabitats for protection from predators (Silberstein and Campbell 1989). Large marine predators such as bat rays (*Myliobatis californica*) and leopard sharks (*Trakis semifasciata*) forage extensively on the benthic fauna of the more saline lower reaches of the estuaries. Sardines were the basis for an extensive fishery in the 1930's. Overfishing caused stocks of the Pacific sardine to decrease until the fishery collapsed.

#### Turtles

Four species of sea turtles are found in the affected area. The Leatherback (*Dermocheysp coriacea*) is the most common followed by the Green (or Black) turtle (*Chelonia mydas agassizi*), the Loggerhead turtle (*Caretta caretta*) and an occasional Olive Ridley (*Lepidochelys olivaceas*). There are no sea turtle nesting areas in the affected area. They are mostly seen during their foraging activities in the summer and early fall. Most appear during the warmest sea temperatures (above 16 degrees C and most common above 18 degrees C). Many of the turtle's distributions seem to be regulated by the 16 degree C isotherm (Scott Eckert NOAA/NOAA Fisheries, *pers. com.*).

# Algae

Large marine algae, or seaweeds, are diverse and abundant within the affected area. The extent of this diversity is shown by the presence of over 500 of the 669 species of algae described for California (Abott and Hollenberg 1976). The area has the largest marine flora of the temperate northern hemisphere, with numerous endemic species and the only population of one large understory kelp (*Eisenia arborea*) between southern California and Canada.

The seaweeds of the Monterey Bay area are composed of three main phyla: red algae (Division *Rhodophycota*), brown algae (Division *Phaeophycophyta*), and green algae (Division *Chlorophycota*). They occur primarily in areas of rocky substrate and only rarely in water deeper than 40 m (Abbott and Hollenberg 1976). The most extensive algal communities are dominated by forests of giant kelp and bull kelp (*Nereocystis leutkeana*). Bull kelp rejuvenates itself annually; giant kelp is generally perennial, growing all year.

Kelp beds are continuous from San Simeon in the south of the affected area to the city of Monterey. Within Monterey Bay from the city of Monterey to south of Santa Cruz there are no kelp beds due to the sandy substrate of the shore. Kelp beds are thick off of Santa Cruz and intermittent up to Año Nuevo. Kelp is rare from Año Nuevo to Half Moon Bay, the northern limit of its dominance. The Santa Cruz County coast between Terrace Point and Point Año Nuevo has changed from almost total dominance of giant kelp in 1911 to an increase in the number of bull kelp stands (Yellin *et al.* 1977). Although sea otters may produce further changes, the primary factors affecting these kelp forests appear to be storms and substrate composition (reviewed in Foster and Schiel 1985).

In addition to the marine and coastal types of algae, the estuary and slough habitats provide sheltered areas for an abundant growth of marine algae as well as specifically adapted vascular plants, such as eelgrass (*Vallisneria gigantean*) and pickleweed *Salicornia* sp.) that in turn provide rich micro-habitats for other organisms.

#### 2.2 Threatened and Endangered Species

The federal Endangered Species Act of 1973 (16 USC 1531 et seq.) and the California Endangered Species Act of 1970 (Ca. Fish and Game Code 2050 et seq.) direct the protection and conservation of listed endangered and threatened fishes, plants, and wildlife. The habitat of endangered, threatened and rare species takes on special importance because of these laws and the protection and conservation of these species requires diligent management of their habitat. Two state and federally listed bird species were impacted by the spill, the Marbled Murrelet and the California Brown Pelican. Several other State or federally listed sensitive species are found in the affected area. These species are not thought to have been affected by the spill because they either were not present in the area due to migration patterns or because of low overall population density or regional scarcity. These species include: the Short-tailed Albatross (Diomedea albatrus), the American Peregrine Falcon (Falco peregrinus anatum), the California Least Tern (Sterna antillarum browni), the Western Snowy Plover (Charadrius alexandrinus nivosus), the Steller sea lion (Eumetopias jubatus), the California or southern sea otter (Enhydra *lutris nereis*), four species of turtles (Leatherback (*Dermocheysp coriacea*), Green (or Black) (Chelonia mydas agassizi), Loggerhead (Caretta caretta) and the Olive Ridley (Lepidochelys olivaceas)), and the humpback whale (Megaptera novaeangliae).

The Marbled Murrelet is a federally listed threatened species and State listed endangered species that was injured in the Spill. Marbled Murrelets, a member of the alcid family, are a robin-sized seabird that feed on small fishes and can fly up to 50 miles inland to nest on the large branches of mature conifers. Marbled Murrelets range along the Pacific coast from Alaska to California with some wintering birds found as far south as northern Baja California, Mexico. The total world population is estimated at 263,000 to 841,000 individuals (Nelson 1997). The size of the Marbled Murrelet population in Washington, Oregon and California was estimated at 18,550-32,000 (Ralph et al. 1995). In 1992, due to the anticipation that "the species is likely to become endangered within the foreseeable future throughout a significant portion of its range" (Stein and Miller 1992), largely because of logging of old-growth forests, the USFWS listed the Marbled Murrelet as threatened in California, Oregon and Washington. Due to logging and habitat modification only 2.5 percent of original old-growth forests remain in California. In addition to removal and degradation of nesting habitat, the following are also known threats: predation, gillnet fishing operations, oil spills, marine pollution, and changes in prey abundances and distribution (USFWS 1997). Marbled Murrelets have a high vulnerability to oiling, and oil spills have had catastrophic effects when they have occurred in the vicinity of Marbled Murrelet concentrations (USFWS 1996). Additionally, predation of eggs and chicks was found to be a major cause of nest failure (Nelson and Hamer 1995). Nelson and Hamer (1995) further predict that even small increases in predation can have deleterious effects to population viability due to low reproductive rates.

Once a species is listed as threatened, the federal Endangered Species Act (ESA) requires the preparation and implementation of a recovery plan. The ESA recovery plan for Marbled Murrelets identifies stabilizing and increasing habitat quality and quantity on land and at sea as the key means to stopping population decline and encouraging future population growth. This approach assumes that the species will respond positively to a long term reversal in the trend of habitat loss. The ESA recovery plan recommends the following short and long-term actions to stabilize and increase the population: (1) maintain as much occupied habitat as possible; (2) maintain and enhance buffer habitat; (3) decrease adult and juvenile mortality; (4) minimize nest disturbances to increase reproductive success; and (5) increase speed of development of new habitat (via silviculture practices).

A relatively isolated population of approximately 500 birds breeds in the Santa Cruz Mountains of San Mateo and Santa Cruz Counties, the area of the Spill. This population of Marbled Murrelets is in decline, probably due to low productivity (Peery *et al.* 2002). Low productivity likely reflects poor breeding success, most likely from predation. This low productivity could also reflect the development of a larger than normal nonbreeding segment of the population (possibly from immigration, loss of habitat, or other factors). This central California population forages off the coast from Half Moon Bay to Santa Cruz. Foraging activity primarily occurs within 0.5 - 2.0 miles of shore. Many of the Marbled Murrelets in the Santa Cruz area winter in Monterey Bay and concentrate in Año Nuevo Bay throughout the breeding season which occurs from May to early September. The Trustees estimate that 87 Marbled Murrelets were at risk during the Spill and that 6 to 12 Marbled Murrelets were killed as a result of the Spill (see section 3.1 of this RP/EA).

The California Brown Pelican is a State and federally listed endangered bird found in the Spill area and is known to have been injured by the Spill. The species is a large bird weighing up to 8 pounds with a wing span of up 10 feet. The pelican breeding population on Anacapa was nearly

extirpated in the late 1960s and early 1970s due to almost total reproductive failure attributed to excessive eggshell thinning associated with very high levels of *p.p* '-DDE, the principal metabolite of DDT (Gress 1994, Risebrough *et al.* 1971). As a result, the California Brown Pelican was accorded endangered species status by the USFWS in 1970 and by the California Fish and Game Commission in 1971. DDT was banned in the U.S. in 1972 and since then Brown Pelicans numbers have increased. Today they are close to, or above, historical population sizes. During the Spill response, the Trustees collected four dead pelicans and 6 live oiled pelicans, two of which died following treatment. In addition, five Brown Pelicans were observed visibly oiled but not captured. Other pelicans were estimated to have been at risk and/or killed as a result of the Spill (see Section 3.1 of this Plan/EA). Pelicans are seasonal migrants to the California coast during the late summer, fall and winter months following their dispersal from breeding colonies on Anacapa and Santa Barbara Islands in Southern California and islands in Mexico. They feed and roost throughout San Francisco Bay and coastal waters.

Communal roost sites are essential habitat for Brown Pelicans at all times of year, throughout their range (Gress and Anderson 1983, Jaques 1994). Brown Pelicans are unlike many seabirds in that they have wettable plumage (Rijke 1970) and will become heavy and hypothermic in cold water if they do not come ashore regularly to dry and restore their plumage. Brown Pelicans spend a large portion of their daily time budget at terrestrial roosts. These birds have many behavioral adaptations, including careful habitat selection, in order to conserve energy, as they are among the heaviest flying birds (Pennycuik 1972). Roost site selection is based on proximity to prey resources, isolation from potential predators and human disturbance, and microclimate features that aid in thermoregulation. Pelicans spread out to a larger number of roosts by day and gather into a smaller number of highest quality roosts at night. Island-type habitat is generally required at night. Major night roosts support hundreds to thousands of pelicans on a given night (Briggs and Chu 1987, Jaques and Anderson 1988, Jaques *et al.* 1996).

#### 2.3 Archeological and Cultural Resources

Humans settled in the vicinity of the affected environment at least 10,000 years ago. At the time of Spanish arrival in the early 1700's, about forty Native American tribes populated coastal areas from San Francisco Bay to Point Sur. The size of coastal middens suggests that Native Americans were a principal control of animal population sizes in the intertidal zone in some areas. The Spanish, the first European settlers, arrived in the late 1700s, and began to exploit sanctuary resources by hunting sea otters and harvesting abalone for trade with northwest coast Native Americans.

Many shipwrecks along this coastline are a result of significant maritime exploration and trade, coupled with a coastline dotted with shallow, rocky headlands that are largely exposed to prevailing winds and storms. More than one hundred wrecks have been documented in this region, and there are undoubtedly more that are unrecorded.

#### 2.4 Sandy and Rocky Intertidal Habitats

Sandy beaches are the dominant intertidal habitat within the affected area. This is a very dynamic habitat with constantly shifting sands caused by wave action and the along shore transport of sand. Most animals capable of tolerating the stresses of the intertidal area are burrowing

organisms. The overall productivity of this habitat is lower than that for rocky intertidal habitats (Nybakken 1982).

Polychaete worms, bivalve mollusks, and crustaceans are the predominant invertebrates on sandy beaches. Sand dollars (*Clypeaster subdepressus*) and gastropod mollusks are also found here (Wilson 1986). The only fishes that are common are those that use sandy beaches for spawning [e.g., the surf smelt (*Hypomesus pretiosus*)]. Benthic diatoms are the only marine algae that may be present and growing within this habitat, although kelp beds may be common in subtidal habitats just offshore from sandy beaches. However, drift algae may accumulate on some sandy beaches, providing refuge and food for amphipods, insects, and shorebirds.

Rocky intertidal habitats are highly productive and diverse environments and located throughout the affected area within the lowest and highest tidal level. Organisms living in this area must be able to withstand periodic desiccation, high temperature and light, low salinities, and strong wave action (Nybakken, 1982). Variation in the degree of exposure to these environmental factors can create marked zonation patterns within this habitat (Foster *et al.* 1988). Marine plants are primarily red, brown, and green algae. The invertebrates include mostly sessile species such as mussels, barnacles (Infraclass *Cirripedia*), and anemones (Order *Actiniaria*). Mobile grazers and predators include crabs (Order *Decapoda*), amphipods (*Stygobromus sp.*), littorine snails (Class *Gastropoda*), limpets (Subclass *Streptoneura*), sea stars (Subclass *Asteroidea*), and sea urchins. Tidepool fishes include the striped surfperch (*Embiotoca lateralis*), tidepool sculpin (*Oligocottus maculosus*), and tidepool snailfish (*Liparis florae*).

Rocky intertidal habitats are probably the most well studied of all habitats in and adjacent to Monterey Bay. These habitats are not uniform within Monterey Bay, but vary in composition within short distances. In addition, Asilomar Beach and Point Sur are well known areas for invertebrates and the Fitzgerald Marine Reserve has one of the largest intertidal reefs in California supporting an extremely diverse and abundant array of invertebrate species.

# **2.5 Recreational Services**

The Central California coast is well known for its scenic rocky coastline, open sandy beaches, and picturesque coves. Because much of the San Mateo County coast is undeveloped, many of these beaches have a remote, wild feeling to them. At the same time, Highway 1 and ample parking lots and pull-outs provide easy public access. These beaches host a wide range of recreational activities, including general beach use, hiking, biking, fishing, surfing, camping, wildlife viewing, horseback riding, and other specialized uses. Among the most well-known beaches in the area are the Fitzgerald Marine Reserve (containing Moss Beach and Seal Cove), Pillar Pt. (including Maverick's, a well-known surfing area), and Montara, Half Moon Bay, San Gregorio, Pomponio, Pescadero, and Bean Hollow State Beaches.

#### 3.0 Injured Resources

The primary impacts from the Spill were: 1) injuries to seabirds; 2) injuries to sandy beach and rocky intertidal shoreline habitats; and 3) lost and diminished use of beaches for human recreation.

#### **3.1 Seabird Resources**

Oil is extremely harmful to birds that come in direct contact with it. First, many of the birds that come into direct contact with oil die of hypothermia as a result of oil coating their feathers. Others die from oil toxicity resulting from oil ingestion, or from oil inhalation which can cause pneumonia or emphysema. Finally, reproductive output may suffer, because reproduction by surviving oiled birds may be impaired for one or more breeding seasons.

During the Spill, 171 live and dead birds were recovered from the beaches. Table 1 (below) lists these by species, enumerating the number that died and the number that were rehabilitated and released. This spill, unlike many that occur along the Pacific coastline, remained at sea for several days before coming ashore. As a result, many bird injuries may not have been observed. After an oil spill only a fraction of the number of birds injured are actually recovered. Birds may be lost at sea, scavenged at sea or on shore, missed by searchers, or live debilitated birds may fly out of the search area. Many birds die at sea and sink; a few crawl into secluded spots on land. The likelihood of retrieving a carcass decreases with the decreasing body size of the bird (Carter *et al.* 2000). For example, deposition of Marbled Murrelet carcasses on Northern California beaches is unlikely because of low onshore transport, currents, at-sea carcass sinking, and scavenging by other wildlife (Ford *et al.* 1996). Many of the animals recovered alive and subsequently cleaned at rescue centers do not survive the process or have a reduced chance of surviving once released to the wild (Sharp 1996, Anderson *et al.* 1996).

In the alcid family, the Marbled Murrelet is one of the most vulnerable seabirds in the world. Due to the small size of the bird, it would be unlikely to be found after it dies. Beach scavenging of birds by mammal and avian scavengers also undoubtedly contributed to low carcass retrieval. Baseline beached bird surveys show an encounter rate of only 0.001 Marbled Murrelet carcasses per km. Only six Marbled Murrelet carcasses have been documented on beaches in the Spill area during non-oil spill surveys from 1993 – 2000 (Roletto *et al.* 2001). In comparison, the Common Murre, a much larger bodied and more abundant bird, is encountered in baseline surveys at a rate of 0.316 birds per km (Roletto *et al.* 2001) and a total of 1,332 Common Murres have been documented on beaches within the Spill area during non-oil spill surveys from 1993 to 2000. In evaluating the impacts of the *M/V Kure* and the *M/V New Carissa* on Marbled Murrelet populations, Ford *et al* (2000, 2002) estimated that on average only about 1 in 18 dead Marbled Murrelets would be recovered. Therefore, although Marbled Murrelets carcasses were not recovered during the Spill response (see Table 1), on-water surveys and oil trajectory patterns indicate it is reasonable to assume that some mortality occurred.

During the Spill response, the Trustees conducted three forms of surveys: 1) aerial surveys for resources at risk at sea; 2) boat surveys for resources at risk and the collection of injured and dead specimens (specific focus on Marbled Murrelets) and 3) shoreline surveys for oiled wildlife, resources at risk, and the collection of injured or dead specimens. The purpose of these surveys was not only to collect oiled wildlife but also to identify resources that were potentially in the path of the oil or wildlife that were oiled but still mobile (for more information on resources impacted by the Spill see the Bird Injury Report available as part of the administrative record ).

| Table 1: Recovered Birds. |                   |                          |                                 |       |
|---------------------------|-------------------|--------------------------|---------------------------------|-------|
| SPECIES                   | COLLECTED<br>DEAD | COLLECTED<br>LIVE – DIED | COLLECTED<br>LIVE –<br>RELEASED | TOTAL |
| Common Loon               | 1                 | 0                        | 0                               | 1     |
| (Gavia immer)             |                   |                          |                                 |       |
| Pacific Loon              | 1                 | 0                        | 0                               | 1     |
| (Gavia pacifica)          |                   |                          |                                 |       |
| Western Grebe             | 1                 | 0                        | 0                               | 1     |
| (Aechmophorus             |                   |                          |                                 |       |
| occidentalis)             |                   |                          |                                 |       |
| Eared Grebe               | 1                 | 0                        | 0                               | 1     |
| (Podiceps nigricollis)    |                   |                          |                                 |       |
| Sooty Shearwater          | 11                | 0                        | 1                               | 12    |
| Shearwater, sp.           | 1                 | 0                        | 0                               | 1     |
| Double-crested Cormorant  | 1                 | 0                        | 0                               | 1     |
| (Phalacrocorax auritus)   |                   |                          |                                 |       |
| Brandt's Cormorant        | 1                 | 0                        | 0                               | 1     |
| Cormorant, sp.            | 1                 | 0                        | 0                               | 1     |
| Brown Pelican             | 4                 | 2                        | 4                               | 10    |
| Surf Scoter               | 1                 | 0                        | 0                               | 1     |
| (Melanitta perspicillata) |                   |                          |                                 |       |
| Common Moorhen            | 1                 | 0                        | 0                               | 1     |
| (Gallinula chloropus)     |                   |                          |                                 |       |
| Wandering Tattler         | 1                 | 0                        | 0                               | 1     |
| (Heteroscelus incanus)    |                   |                          |                                 |       |
| Western Gull              | 3                 | 0                        | 2                               | 5     |
| Glaucous-winged x         | 0                 | 1                        | 0                               | 1     |
| Western Gull (hybrid)     |                   |                          |                                 |       |
| California Gull           | 2                 | 0                        | 0                               | 2     |
| (Larus californicus)      |                   |                          |                                 |       |
| Common Murre              | 64                | 35                       | 30                              | 129   |
| Unknown                   | 1                 | 0                        | 0                               | 1     |
| TOTAL                     | 96                | 38                       | 37                              | 171   |

# **Total Bird Mortality**

The Trustees employed a mathematical model to obtain an estimate of the total bird mortality caused by the Command Spill (Boyce and Hampton 2002). By analyzing the aerial surveys conducted during the Spill and accounting for the amount of coastline inaccessible to searchers and carcass recovery rates documented in other spills, the model estimated that 11,193 Common Murres were at risk during the Spill and that a total of 1,490 murres were killed. By assuming that the proportion of Marbled Murrelets within the affected area that die as a result of oil exposure is the same as the proportion of Common Murres, the model also estimated that 87 Marbled Murrelets were at risk during the Spill and that 6 to 12 Marbled Murrelets were killed. For more information on this model see the Boyce and Hampton 2002 Report entitled Command

Bird Injury Report, which is available as part of the Trustee's administrative record available at <u>http://www.darcnw.noaa.gov/command.htm</u>.

Although not the subject of a specific modeling exercise in the Bird Injury Report, the Trustees believe it is likely that several other species of seabirds were injured in the Spill but not recovered, i.e., Cassin's Auklets, Rhinoceros Auklets, Ashy Storm-Petrels, and Black-vented Shearwaters (*Puffinus opisthomelas*). The Bird Injury Report presents evidence that most of these species were detected in the post-spill surveys. One Cassin's Auklet was observed on a transect of the aerial surveys conducted during the response. Rhinoceros Auklets and Black-vented Shearwaters are frequently observed in the immediate vicinity of the oil spill and several were observed on aerial surveys conducted during the response. In order to maximize the amount of funds available for restoration, the trustees did not conduct modeling exercises for these seabird species (See 15 C.F.R. 990.27(c)). While no individuals of these species were collected during the response, all are pelagic species found in the vicinity of the Spill. Like the Marbled Murrelet, many of these species are small in size. As such, they would be expected to succumb quickly to oiling, be easily overlooked by search crews, and be removed quickly by scavengers. And, as with Marbled Murrelets, beachcast birds of this size are rarely found during oil spills.

#### 3.2 Lost and Diminished Use of Beaches for Human Recreation

The Spill interrupted recreational services to individuals participating in beach related activities from Montara State Beach to Bean Hollow State Beach. The predominant onshore recreational uses within the affected area include coastal hiking, nature observation (whale and bird watching), tidepooling, surfing and windsurfing, clamming and abalone diving, surf fishing, and duck hunting (Industrial Economics Inc.2001). Coastal access was interrupted for five days, from September 30 to October 4, 1998. During this period, service disruptions can be attributed to physical oiling and subsequent clean up activities.

Baseline use of the affected beaches was calculated from historic data. Based on historic data, it was estimated that 18,228 beach trips would have been taken in the absence of the Spill. It was estimated that 10 percent of the potential user population avoided the beaches during the oil spill impact period of September 30 to October 4, 1998. It also was estimated that two percent of the potential user population avoided the beach during the week following the completion of clean up activities conducted during October 5 through October 11, 1998. Based on these assumptions, it was calculated that 1,823 individuals avoided the beaches during the impact period and 510 individuals avoided the beach during the following week. The value of these beach impacts was determined using the benefits transfer method, in which resource valuation estimates from existing studies are used to calculate the approximate value of lost and diminished services associated with affected activities. Using this approach, a value of \$20.19 per person per day of beach recreation was derived. Applying this value to the total of 2,333 lost trips, the value of lost use is \$47,108.

In addition to the lost use as a result of the Spill, the quality of use was also diminished. The number of diminished use trips during the oil spill impact period was estimated to be 16,405. Based on past use, it was estimated that each of these individuals experienced a 20 percent loss in utility due to the Command Spill (including associated clean up activities), which when valued results in a utility loss of approximately \$4.04 per trip or a total diminished use value of \$66,278.

Combining total lost use with total diminished use, the total value of human use impacts resulting from the Command Spill was calculated to be \$113,386. For more information of the valuation of human use losses please see the Estimate of Human Use Impacts from the T/V Command Oil Spill Report (by Industrial Economics Inc.) available as part of the administrative record.

#### 4.0 Restoration Planning

#### 4.1 Restoration Strategy

The goal of restoration under OPA is to make the environment and the public whole for injuries to natural resources and loss of services resulting from an oil spill. OPA and its implementing regulations (15 C.F.R. Part 990, hereafter referred to as the "OPA regulations") require that this goal be achieved by returning injured natural resources to their baseline condition and, if possible, by compensating for any interim losses of natural resources and services during the period of recovery to baseline.

Restoration actions under the OPA regulations are either primary or compensatory. Primary restoration is action(s) taken to return injured natural resources and services to baseline quicker than the natural recovery rate. The OPA regulations require that Trustees consider natural recovery alternatives in their consideration of primary restoration actions. Trustees may select natural recovery under three conditions: 1) if feasible 2) if cost-effective primary restoration is not available or 3) if injured resources will recover quickly to baseline without human intervention. Alternative primary restoration activities can include: natural recovery; actions that prevent interference with natural recovery; and more intensive actions expected to return injured natural recovery.

Compensatory restoration is action(s) taken to compensate for the interim losses of natural resources and/or services pending recovery. The type and scale of compensatory restoration may depend on the nature of the primary restoration action and the level and rate of recovery of the injured natural resources and/or services given the primary restoration action. When identifying the compensatory restoration components of the restoration alternatives, Trustees must first consider compensatory restoration actions that provide services of the same type and quality and of comparable value as those lost. If compensatory actions of the same type and quality and comparable value cannot provide a reasonable range of alternatives, Trustees then consider other quality as those lost.

In considering restoration for injuries resulting from the Command Spill, the Trustees first evaluated possible primary restoration for each injury. Based on that analysis, the Trustees determined that all injured natural resources, except Marbled Murrelets, would best recover to baseline conditions over time through natural recovery. Therefore, the Trustees' preferred restoration alternatives are for primary and compensatory restoration for Marbled Murrelets and compensatory restoration for all other resources. In addition, given that natural recovery for many of the injured species may take many years, the proposed compensatory projects will also contribute, somewhat, to primary restoration by aiding natural recovery.

The Trustees considered twenty-five different restoration ideas and alternatives potentially capable of providing compensatory restoration for injuries from the Command Spill. Some of these ideas and alternatives were developed by the Trustees and presented in the scoping document; others ideas were provided to the Trustees by the public.

# 4.2 Criteria Used To Evaluate Restoration Project Concepts

OPA and other applicable laws require the Trustees to use monies in the Command NRD Account for restoring, replacing, rehabilitating and/or acquiring the equivalent of natural resources injured and services lost as a result of the Spill. These injuries and lost services include injuries to seabirds as well as impairment of habitat and human use along the coast of San Mateo County. The Trustees considered a reasonable range of restoration alternatives before selecting their preferred alternatives. Each restoration alternative was comprised of compensatory restoration components that address one or more specific injuries associated with the Command Spill.

The Trustee Council for the Spill developed two categories of selection criteria, the first being described as "threshold" and the latter described as "additional" criteria. The criteria used were developed from the OPA regulations and supplemental factors developed for this Spill. Restoration alternatives must achieve a minimum level of acceptance on the threshold criteria in order to receive further consideration under the additional criteria. The Trustee Council used the evaluation criteria listed below to consider and prioritize all restoration project alternatives, including alternative projects that were proposed by the public. The criteria are not ranked in order of priority. Preferred alternatives were then scaled to ensure that their size appropriately compensates for the injuries resulting from the Spill.

# 4.2.1 Threshold Criteria

- <u>Nexus to Injured Resources</u> As described above, restoration efforts must be directed at projects that restore, rehabilitate, replace, enhance or acquire the equivalent of the resources and services impacted by the Spill.
- •
- <u>Feasibility</u> Based on past experience or studies, the restoration projects must be technically and procedurally sound.
- <u>Public Health and Safety</u> The possibility that a proposed alternative would create a threat to the health and safety of the public will be part of the evaluation process.
- <u>Legality</u> The projects must comply with all applicable laws

# 4.2.2 Additional Criteria

- <u>No Duplicate or Replacement Funding</u> The Trustees will not fund projects that are already going to be fully funded or accomplished by other means or should be funded by more appropriate sources.
- <u>Likelihood of Success</u> Projects will be evaluated for their potential for success, including the level of expected return of resources and resource services. Performance criteria of projects will have to be clear and measurable.

- <u>Cost Effectiveness</u> The projects will be evaluated by considering the relationship of expected project costs to the expected resource/service benefits from each project alternative.
- <u>Multiple Resource Benefits</u> Benefits can be increased if proposed projects benefit more than one natural resource or resource service.
- <u>Duration of Benefits</u> Long-term benefits are the objective of the restoration projects, and the Trustees will evaluate project alternatives according to their expected duration of benefits.
- <u>Potential for Adverse Impacts</u> Evaluation of projects will include examination of potential adverse impacts on the environment and the associated natural resources.
- <u>Opportunities for Collaboration</u> Cost effectiveness can be enhanced by matching funds, inkind services, or volunteer assistance as well as coordination with on-going or proposed projects.
- <u>Time to provide benefits</u>- The Trustees will consider the time it takes for benefits to be provided to the target ecosystem and/or public. A more rapid response to providing benefits is favorable.
- <u>Total cost and accuracy of estimate</u>-The Trustees will evaluate the estimated total cost of each project alternative and the validity of the estimate. The total cost estimate should include costs to design, implement, monitor, and manage the alternative. The validity of cost estimates are evaluated based on the completeness, accuracy, and the reliability of methods used to estimate costs, as well as the credentials of the person or entity submitting the cost estimate to accurately estimate costs.
- <u>Comprehensive range of projects</u>- The Trustees will evaluate the extent to which a project contributes to a more comprehensive restoration package. Proposed project alternatives are evaluated for the degree to which it benefits any uncompensated spill injuries.

#### 4.3 Evaluation of Environmental Restoration Alternatives

To reduce costs and avoid delays in restoration, the OPA regulations encourage Trustees to conduct the NEPA process concurrently with the development of the Restoration Plan. To comply with the requirements of NEPA, the Trustees analyzed the effects of each proposed alternative on the quality of the human environment. NEPA's implementing regulations direct federal agencies to evaluate the potential significance of proposed actions by considering both the context and the intensity of the action.

For most of the restoration actions considered, the appropriate context and area of potential significance of the action is regional, as opposed to national or worldwide. Several restoration alternatives included in this section are based on conceptual designs rather than detailed engineering refinements or operational plans. These alternatives may require additional refinements or adjustments to reflect site conditions or Project-specific NEPA and CEQA compliance may be needed for some of the proposed restoration projects once detailed implementation plans are developed. In addition, the cost estimates presented for each preferred project are the Trustees' best current estimate, and assume that project implementation will begin prior to 2005.

In accordance with the Consent Decree, the MOU and OPA, expenditures from the Command NRD Account are limited to restoring the injuries to seabirds, and to sandy beach and rocky intertidal shoreline habitats; and the lost and diminished use of beaches for human recreation that resulted from the Command Spill. To accomplish this goal the Trustees ranked restoration alternatives into two categories: preferred and non-preferred.

The restoration planning and public scoping process (see section 1.6 Public Participation) resulted in the identification of 10 preferred (Table 2) and 15 non-preferred (Section 4.7) proposed restoration projects.

#### 4.4 No Action Alternative

NEPA requires the Trustees to consider a "no action" alternative, and the OPA regulations require consideration of the equivalent, "the natural recovery option". Under this alternative, the Trustees would take no direct action to restore injured natural resources or compensate for lost services pending natural recovery. Instead, the Trustees would rely on natural processes for recovery of the injured natural resources.

The principal advantages of this approach are the ease of implementation and the absence of monetary costs because natural processes rather than humans determine the trajectory of recovery. However, while natural recovery would occur over time for most of the injured resources, the interim losses suffered would not be compensated under the no action alternative. OPA clearly establishes Trustee responsibility to seek compensation for interim losses pending recovery of natural resources. Losses were, and continue to be, suffered during the period of recovery from this Spill, and technically feasible, cost-effective alternatives exist to compensate for these losses.

| Project<br>No. | <b>Restoration Category and Project</b>  | Estimated Cost*   |
|----------------|--|-------------------|
|                | Seabirds   |                   |
| 1              | Marbled Murrelet Restoration and Corvid<br>Management Project                  | \$747,200         |
| 2              | Marbled Murrelet Land Acquisition and<br>Enhancement Project                   | \$400,000         |
| 3              | Seabird Colony Protection Project  | \$1,225,035       |
| 4              | Common Murre Nesting Ledge Creation  | \$59,973          |
| 5              | Brown Pelican Roost Site Enhancement and<br>Creation Projects                  | \$34,188          |
| 6              | Seabird Entanglement Reduction and<br>Education Program                        | \$22,000          |
| 7              | Sooty Shearwater Restoration Project Lost Human Use                            | \$390,300         |
| 8              | Seal Cove Beach Access Improvement<br>Project                                  | \$125,000         |
| 9              | Half Moon Bay State Park Beach Access<br>Improvement Project                   | \$20,000          |
| 10             | Mirada Surf Recreational Improvements  | \$50,000          |
|                | Non-Preferred Alternatives   | (see section 4.7) |
| 1              | Seabird Nesting Habitat Restoration and<br>Enhancement on the Farallon Islands |                   |
| 2              | Año Nuevo Island Seabird Habitat<br>Restoration                                |                   |
| 3              | Appanolio Canyon Steelhead Passage Project                                     |                   |
| 4              | Pescadero Marsh Restoration Plan   |                   |
| 5              | San Vicente Creek Restoration  |                   |
| 6              | Moss Landing Project Monitoring  |                   |
| 7              | Gulf of the Farallon Islands Research  |                   |
| 8              | Seabird Protection in Chile  |                   |
| 9              | Education and Planning for Seabird   |                   |
|                | Protection on Natividad Island, Mexico   |                   |
| 10             | Leash Law Enforcement at Pillar Point  |                   |
| 11             | Education Projects   |                   |
| 12             | Donations to Existing Programs to Benefit<br>Water Quality                     |                   |
| 13             | California Coastal Monument Recreation<br>Planning                             |                   |
| 14             | Pacifica State Beach Improvement Plan  |                   |
| 15             | Save Our Shores, Clean Boating Program   |                   |

 Table 2.- Summary of Preferred Projects and Estimated Funding Allocations for the

 Command Oil Spill and Non-Preferred Alternatives.

\* additional contracting and administrative costs may apply to each project

#### **4.5 Preferred Alternatives**

### 4.5.1 Marbled Murrelet Restoration and Corvid Management Project

#### 4.5.1.1 Goals and Nexus to Injury

The goal of this project is to improve the nesting success of the Marbled Murrelet in the Santa Cruz Mountains of central California. The Command Spill is estimated to have killed six to twelve of these birds (Ford 2002).

#### 4.5.1.2 Background

The Marbled Murrelet population of the Santa Cruz Mountains is small, isolated, and declining. At present, their rate of reproduction is insufficient to sustain the population.

The Marbled Murrelet is a small seabird in the alcid family (akin to puffins) found along the Pacific Coast from Alaska to California. At sea, it feeds by diving for small fishes in near-shore waters, typically within 5 km of the coastline. Unlike most alcids, the Marbled Murrelet nests up to 50 km (most within 30 km) inland in old growth coniferous forests (Nelson 1997). In California, it nests primarily in redwoods (*Sequoia sempervirens*) and occasionally in Douglas-fir (*Pseudotsuga menziesii*) greater than 300 years old (Hamer and Nelson 1995).



The total world population of the Marbled Murrelet is estimated at 263,000 to 841,000 individuals (Nelson 1997). In California, the total population is estimated at 6,450 (Ralph and Miller 1995). The vast majority breed in the coastal redwoods of Del Norte and Humboldt Counties (Figure 2). A relatively isolated population of approximately 500 birds breeds in the Santa Cruz Mountains in San Mateo and Santa Cruz Counties of central California (Peery et al. 2002). A small number of birds may also nest at scattered locations in Mendocino County (Hamer, pers. com.).

Figure 2: Marbled Murrelet breeding range in California

In the Santa Cruz Mountains, nesting is largely limited to five adjacent watersheds: Pescadero Creek, Butano Creek, Gazos Creek, Waddell Creek, and Scott Creek. The nesting area thus encompasses approximately 15 miles from north to south and 10 miles from east to west. Within this area, the majority of nesting is thought to occur in five public parks or on adjacent private lands where suitable habitat still exists. The five parks are Big Basin Redwoods State Park, Butano State Park, Portola State Park, Memorial County Park, and Pescadero Creek County Park (Figure 3).

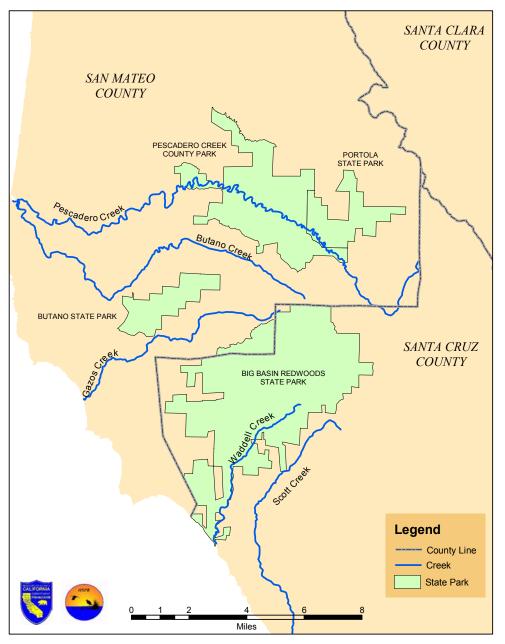


Figure 3: Primary Marbled Murrelet nesting area in Santa Cruz Mountains. Note that Memorial County Park is located in the western portion of Pescadero Creek County Park.

Several studies suggest that the Santa Cruz Mountain population is declining (Figures 4 through 7). The longest available data set (audio/visual detections from Redwood Meadow near Big Basin Redwoods State Park headquarters), suggests a continuous and pronounced decline in the number of nesting birds in that area. Formerly the site of the greatest detections, the current surveys report only a small fraction of the numbers recorded in the early 1990s.

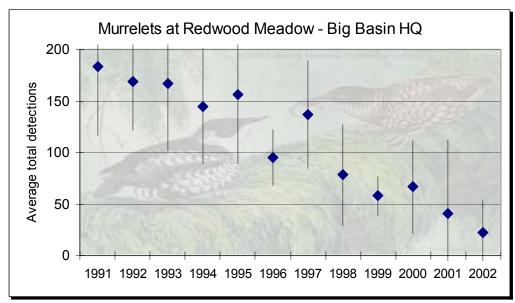


Figure 4: Average number of Marbled Murrelet detections at the Redwood Meadow – Park HQ, Big Basin Redwoods SP (Suddjian 2003a).

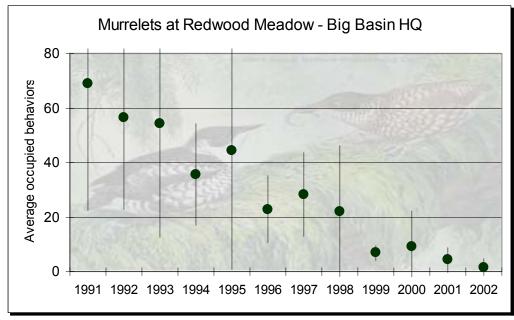
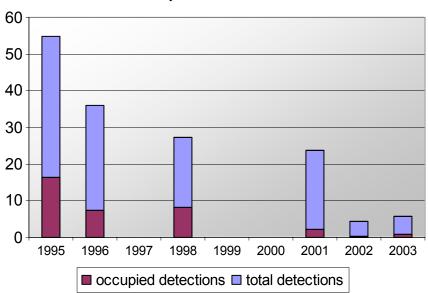


Figure 5: Average number of Marbled Murrelet detections with "nesting behavior" at the Redwood Meadow – Park HQ, Big Basin Redwoods SP (Suddjian 2003a).

Recent surveys partially funded by the Command Trustee Council revealed 16.3 detections at Redwood Meadow in 2003, with an average of 1.3 exhibiting occupied behavior (Suddjian 2003b). Other surveys span shorter time horizons, usually with just a few years of data.

Nevertheless, some of these also show declines. For example, other survey sites within Big Basin Redwoods State Park have shown similar trends.



Murrelet Survey Results: Santa Cruz Mtns.

Sites from other watersheds outside Big Basin have shown similar declines; only slight declines, or relatively stable numbers, though the total number of detections is relatively low when compared to former high counts at Redwood Meadow (Big Basin HQ). At-sea surveys have shown relatively stable population numbers, although with very few juveniles present (Beissinger, *pers. com.*). However, these surveys have only been conducted for three years and thus lack statistical power.

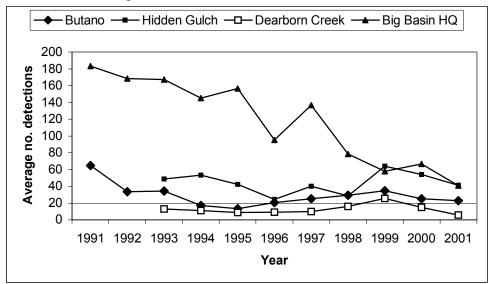


Figure 7: Comparison of Marbled Murrelet activity at four areas in the Santa Cruz Mountains. (Hidden Gulch and Dearborn Creek are located near Loma Mar in the Pescadero Creek watershed.)

Figure 6-: Average number of Marbled Murrelet detections recorded at the five CDFG monitoring stations in Big Basin Redwoods SP (Suddjian 2003b).

The reason for the current decline is thought to be low reproductive success, likely compounded by low reproductive effort during years when foraging conditions are poor. Marbled Murrelets lay a single egg per year, though they may re-nest if they suffer an early nest failure. Recent studies of the Santa Cruz Mountain population suggest that reproductive success has fallen to near zero. Peery *et al.* (in review) estimates annual fecundity at 0.03 to 0.04, implying that only 3-4 young are produced per 100 pairs each year. Given that the species' adult annual survival rate is likely between 84% and 90% (Beissinger and Nur 1997), this fecundity rate implies that the Santa Cruz Mountain population, without immigration from other populations, will be extirpated within 25 years.

There are several factors that may be negatively impacting the Marbled Murrelets of the Santa Cruz Mountains. These include limited nesting habitat, nest predation, and probably reduced prey availability as a function of oceanographic events.

Historic logging of old growth redwoods has severely reduced the available nesting habitat. However, relatively limited logging has occurred in the last forty years and does not account for the recent decline in Marbled Murrelets. Peery et al. (in review) suggests that habitat availability is currently not a limiting factor, although the remaining habitat, because it is fragmented and subject to substantial predator pressure, may be sub-optimal for reproduction. Habitat availability, of course, does constrain future recovery of the population.

Nest predation is thought to be one of the primary causes behind the lack of reproduction of the Santa Cruz Mountains Marbled Murrelets. Nelson (1997), in discussing Marbled Murrelet fecundity in general, notes:

Predators contribute substantially to nest failure in North America (43% of 32 nests, Nelson and Hamer 1995; 71% of 14 nests, I. Manley *pers. com.*). Eggs may be preyed on when nests are neglected for short periods of time or abandoned, or if adult is chased off nest. Adults are vulnerable during incubation and during flights to nests. Chicks may be preyed on anytime during the 27-40 days they are along on nest.

Avian predators (1) of eggs: include Common Ravens (*Corvus corax*) and Steller's Jays (*Cyanocitta stelleri*), (2) of chicks: include Common Ravens, Steller's Jays, and Sharp-shinned Hawks (*Accipiter striatus*), (3) of adults on nest: include Common Ravens and Sharp-shinned Hawks, and (4) of adults flying in forests: include Peregrine Falcon (*Falco peregrinus*); Singer *et al.* 1991, Marks and Naslund 1994, Nelson and Hamer 1995, D. Suddjian *pers. com.*).

Note that corvids (i.e., ravens and jays) are some of the primary nest predators of Marbled Murrelets (see also Brand and George 2000). In the Santa Cruz Mountains, both Steller's Jays and Common Ravens are common. While the former have been present historically, the latter were apparently absent from the region until the mid-1970s. Raven numbers began to increase markedly by the late 1980s, and the raven population exploded in the 1990s, to the point where the species has become very numerous and widespread (Suddjian *pers. com.*). Two Christmas Bird Counts (CBCs) are conducted in the area, Santa Cruz County and Año Nuevo (Figures 8 and 9). These annual surveys seek to count all birds within a 15-mile diameter circle. From 1957 to 1972, no ravens were ever documented on either count. From 1973 to 1979, no more than ten birds were ever counted. In the 1980s, the number of ravens per count increased from 2 to 88 birds. In recent years, over 200 ravens have been documented within each count circle.

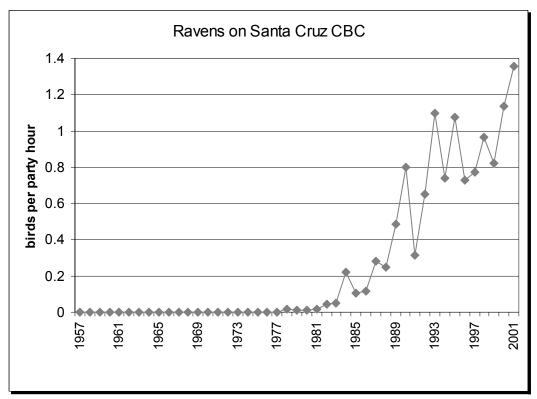


Figure 8: Numbers of Common Ravens on the Santa Cruz County CBC 1957-2001 (standardized by total party hours). Data courtesy of David Suddjian.

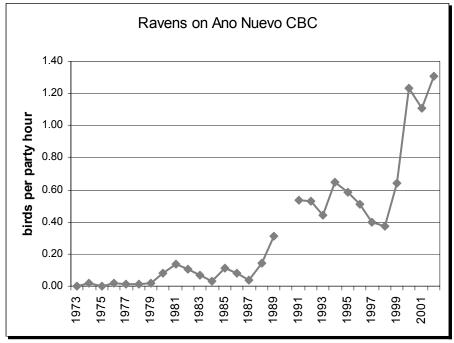


Figure 9: Numbers of Common Ravens on the Año Nuevo CBC 1972-2001 (standardized by total party hours).

It is suspected that the recent increase in ravens, especially around campgrounds within the parks where Marbled Murrelets nest, is a significant reason for the decline in the Marbled Murrelet population. Within the small region where nesting occurs, four public campgrounds (or

complexes of adjacent campgrounds) are located, one within each of the public parks (not including Pescadero Creek County Park) (Figure 10 and Table 3). These campgrounds are also located within stands of old growth trees suitable for Marbled Murrelet nesting. Indeed, the Redwood Meadow survey site at Big Basin is immediately adjacent to a campground. In addition to the campgrounds, there are some private youth and group camps located in the area.

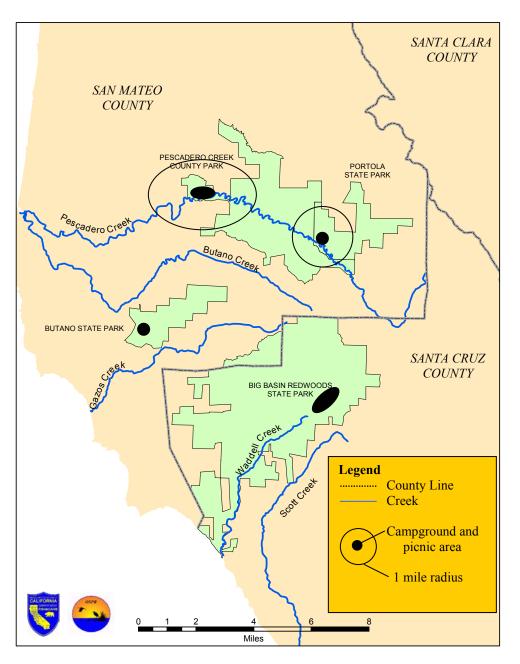


Figure 10: Location of campgrounds with one-mile radii, where corvids may range while foraging

| Table 3: | Santa | Cruz M | ountains | Campgroun | ds by | Park |
|----------|-------|--------|----------|-----------|-------|------|
|----------|-------|--------|----------|-----------|-------|------|

| PARK                 | <b>REGULAR CAMPSITES</b> | <b>GROUP SITES</b> | PICNIC AREAS |
|----------------------|--------------------------|--------------------|--------------|
| Butano State Park    | 38                       | 0                  | 1            |
| Memorial County Park | 153                      | 5                  | 13           |
| Portola State Park   | 67                       | 4                  | 4            |
| Big Basin Redwoods   | 183                      | 2                  | 4            |
| State Park           |                          |                    |              |

Recent surveys have suggested that corvid density is especially elevated in campgrounds (Figure 11). This finding comes as no surprise, as these species readily scavenge human garbage, discarded food, and spilled food around picnic tables and other outdoor locations (Liebezeit and George 2002).

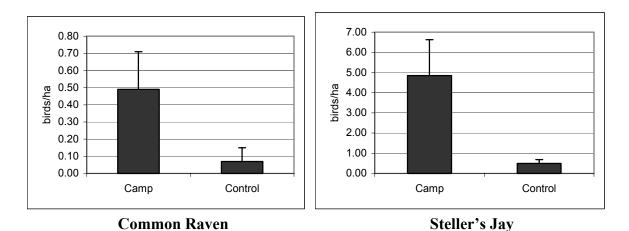


Figure 11: Average relative abundance of corvids in campgrounds and away from campgrounds in Marbled Murrelet habitat at seven areas in the Santa Cruz Mountains. (Data from 2002). (D. Suddjian, *pers. com.*)

When trash receptacles are accessible to raccoons (*Procyon sp.*), squirrels, and foxes, corvids may feed off spilled food, or directly from the trash cans (Figure 12). Ravens, which have been termed "classic subsidized predators" (Boarman 2002), appear to be expanding from food sources on all sides of the Santa Cruz Mountains. To the north and south, they have become common visitors at the Ox Mountain Landfill near Half Moon Bay and at the Santa Cruz City Landfill. As many as 300 birds may be counted at once at a landfill (winter 2002-2003 Half Moon Bay Christmas Bird Count). Other garbage collection areas that may contribute to raven increases are the Ben Lomond Transfer Station, the Buena Vista County Landfill near Watsonville, and landfills in the south San Francisco Bay area. To the west, ravens are prevalent in agricultural fields and along the coast, where they utilize natural food sources deposited on the beaches as well as human food waste.



Figure 12: Open trash can and spilled garbage at Memorial Park Campground, August, 2002

Corvid predation of Marbled Murrelet chicks and eggs around the campgrounds in the Santa Cruz Mountains has been witnessed on several occasions (Singer *et al.* 1991, Suddjian 2003a). Given the difficulty in observing such an event, it is more likely that these few observations are symptomatic of regular occurrences, rather than chance observations of unusual events. Recent research in Redwood National Park has demonstrated that corvid predation of Marbled Murrelet nests is a serious problem (R. Golightly, *pers. com.*).

Because the Marbled Murrelet population is so small, there are probably fewer than 200 nests in the Santa Cruz Mountains each year. As such, Marbled Murrelet eggs and chicks would represent a minor component to the corvid diet. However, the loss of just 50 nests due to corvid predation would represent a major impact on the Marbled Murrelet.

Raven predation of endangered species is not a new problem. It has been widely documented in the Mojave Desert with respect to the Desert Tortoise. In that context, a comprehensive program to address anthropogenic food sources that support ravens is being recommended to supplement lethal control efforts (Boarman 2002). The problem of corvid management has also been addressed in a recent statewide Corvid Management Plan, which reviews many potential management options (Liebezeit and George 2002).

#### 4.5.1.3 Project Description and Methods

Given that corvid predation is known to occur and that it is likely a significant cause in the recent decline of Marbled Murrelet nest success, and given that Marbled Murrelets nest around the four campground complexes where corvid densities are inflated, the Command Trustee Council proposes to increase Marbled Murrelet nest success through a multi-pronged approach to corvid management at the campgrounds. This project has many similar components to a project at Redwood National Park, Prairie Creek Redwoods State Park, Jedediah Smith Redwoods State Park, and Mill Creek State Park that began in May 2003.

This project will consist of three phases:

# Phase 1: Pre-implementation Monitoring

Prior to the implementation of corvid management efforts, monitoring will be conducted at the four campgrounds (Big Basin, Portola, Butano, and Memorial Park). This work was performed in the summer of 2003 for restoration planning purposes. Because direct monitoring of Marbled Murrelet nests is difficult, monitoring methods will include:

- Marbled Murrelet surveys near all four campground areas. In order to build on existing data sets and confirm the presence of nesting murrelets, the surveys will include the following 11 audio/visual survey stations:
  - 1. Five stations at Big Basin Redwoods State Park (all five are pre-existing stations);
  - Two stations each at Butano and Portola State Parks, and at Memorial and/or Pescadero Creek County Park (one station at Portola is pre-existing). All stations will have several surveys per summer.

• Jay and raven surveys at all four campground areas. In order to identify problem areas and monitor the success of the project, there will be a number of survey sites in high human activity areas (at Big Basin, Memorial Park, Butano, and Portola), plus several control sites spread through the parks where feasible. These surveys will be conducted several times per summer, approximately every month, May through August.

#### Phase 2: Corvid Management Efforts and Continued Monitoring

Corvid management efforts will be implemented at all four campground complexes. Because it may take several years for the results to be detected, all Phase 2 components will continue for five years. These efforts will include:

- <u>Development of camper education materials and park staff training.</u> This task requires developing educational materials for campground users, explaining the problems associated with human waste, corvids and other wildlife, and Marbled Murrelets, and offering instructions regarding keeping food and garbage from where animals can get it. These materials will include: (1) a brochure for campers and picnickers; (2) signs to be posted on food picnic tables, storage lockers, trash disposal areas, and in bathrooms; (3) the development of a short video and presentation devices for use in visitor centers. Additionally, this task will include familiarizing park staff with these issues, such that park staff may develop campfire programs on the topic as well as answer questions from the public.
- <u>Improved garbage protection at Memorial County Park.</u> Memorial County Park contains approximately 90 open trash cans with no lids (Figure 12). This makes it quite easy for corvids to access food waste. Additionally, raccoons and other animals may spill trash on the ground that is, in turn, eaten by corvids. This project will fund the acquisition of new garbage cans at Memorial County Park that can be secured with lids.
- <u>Improved garbage protection at Big Basin Redwoods State Park</u>. Big Basin Redwoods State Park contains approximately 40 large dumpsters with plastic lids. Holes are chewed in these lids by animals (primarily squirrels), allowing corvids to enter the dumpsters. This project will fund new aluminum lids. Additionally, dumpsters sometimes overflow between trash pick-up days. This project will fund new dumpsters as needed. Finally, garbage is stored in an open garbage truck for two weeks prior to disposal off-site. Ravens routinely access the truck and feed on the uncovered garbage while it is parked. Efforts to cover the garbage with tarps and use hazing devices to deter the ravens have been unsuccessful. This project will fund the construction of a shed in which to park the vehicle, which is the most cost-effective solution to this problem.
- <u>Augmented seasonal staff.</u> Despite educational materials and improved trash receptacles, campers and picnickers will need reminding about proper food storage and waste disposal. This task envisions the hiring of seasonal campground staff between Memorial Day and Labor Day. These staff will walk the campgrounds and picnic areas daily, monitoring for compliance of camping regulations and educating the public with regard to food storage and wildlife impacts from human actions. The project would fund two full time seasonal staff at Big Basin, two at Memorial Park, and partially fund a position at Portola and Butano.
- <u>Removal of ravens and nests.</u> Based on field observations, it is estimated that approximately one pair of ravens is associated with each campground. It is thought that these ravens, which reside primarily among Marbled Murrelet nesting habitat, are the primary sources of nest predation.

This task involves the removal of ravens (probably through trapping and euthanasia) and is intended to remove only those ravens immediately associated with the campgrounds. Because ravens are long-lived species, this component of the plan is necessary in order to achieve benefits in the short term (see Liebezeit and George 2002). It is hoped that, by combining this action with the other program components that limit human food waste, immigration of "replacement" ravens into the campgrounds will be minimized. Because the Memorial Park and Big Basin campgrounds are actually a complex of several adjacent campgrounds, more than one pair of ravens may be present at these sites. Removal of ravens will likely achieve considerable benefits. In the Mojave Desert, it was determined that nesting ravens spend most of their time foraging within 0.8 km of their nests (Sherman 1993). Likewise, evidence from the Mojave Desert suggested that certain ravens were responsible for taking relatively large numbers of tortoises (Boarman 2002).

• Removal of any nests of raven that immigrate into the campgrounds will also be done to the extent feasible. Removal of nests with eggs is likely to discourage re-nesting or reduce nest success (Boarman 2002). Nest removal will include all areas within an appropriate radius of Marbled Murrelet nesting habitat near the campgrounds.

The Marbled Murrelet and corvid monitoring surveys in Phase 1 will continue annually through each year of Phase 2.

# Phase 3: Adaptive Management; Alterations to Corvid Management Efforts

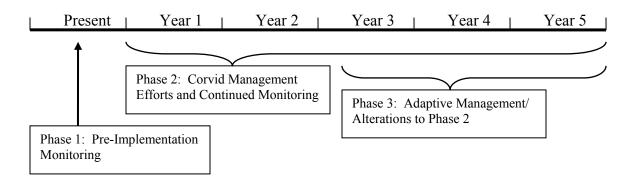
The results of Phase 2 will be analyzed and evaluated between the second and third years of the project. At this time, we will consider alterations and improvements to existing Phase 2 components, as well as augmenting Phase 2 with additional measures. These measures may include:

- I improvements to camper education and food waste control efforts
- Installation of food waste receptacles at water spigots (grates)
- I improved garbage protection at Butano State Park
- additional removal of ravens
- [] efforts to limit corvid use of landfills
- expansion of education and other project components to private camps

The effects of West Nile Virus on the corvid population will also be evaluated throughout the life of the project to determine appropriate levels of corvid management at the campgrounds. This virus is expected to impact California avifauna, particularly corvids, in the near future. It is likely that the need for this program will remain, however, as surviving corvids will be attracted to campground areas. Nevertheless, changes to the project as a result of West Nile Virus may be incorporated during Phase 3.

Figure 13 below provides a timeline of the various phases.

# Figure 13: Project Timeline



The project will also require two project managers to oversee all monitoring efforts and all corvid management tasks, to work with State Parks and county staff, to secure all necessary permits, and to report to the Trustee Council. One project manager will oversee efforts in the State Parks, as well as all project-wide activities (e.g., monitoring surveys), while another project manager will oversee only those activities specific to Memorial County Park.

# 4.5.1.4 Environmental Consequences (Adverse and Beneficial)

### **Beneficial Effects**

The project is intended to improve Marbled Murrelet nest success through a decrease in predation caused by jays and ravens. Any improvement in nest success will help forestall the extirpation of the Marbled Murrelet from the Santa Cruz Mountains. Sustaining the Marbled Murrelet population through the next few decades will enable future Marbled Murrelets to access increasing amounts of protected old growth forest and second growth forest as it matures into suitable nesting habitat.

Because the campgrounds are located near the largest old growth trees, many known nesting stands with the highest Marbled Murrelet activity are near the campgrounds. Figure 12 illustrates the extensive area that the four campground complexes actually impact, assuming a one mile radius of foraging range by corvids. To the extent that the campgrounds serve as source populations for jays and ravens, the project may considerably lower corvid numbers in areas adjacent to the campgrounds as well. Consequently, those Marbled Murrelets beyond the immediate vicinity of the campgrounds may also benefit from the project.

The educational components of the project will teach the public about imbalances in the ecosystem that may be caused as different species respond positively and negatively to human actions. Specifically, the public will learn how seemingly innocuous interactions with wildlife (e.g., feeding jays at a picnic table) or poor housekeeping at a campsite (e.g., leaving a bag of chips on a table) sustains corvid populations at unnaturally high levels, which in turn can have long-term negative consequences for the Marbled Murrelet. The educational message may carry beyond the campgrounds to local residences and other human gathering places in the Santa Cruz

Mountains (e.g., conference centers and private camps), resulting in increased awareness at those locations as well.

The results of the project will have research value that will be of interest in other locations where similar relationships between campgrounds, corvids, and Marbled Murrelets are suspected to occur (e.g., northern California, Oregon, and Washington).

#### **Adverse Impacts**

This project will have direct impacts upon both campers at these four campground areas and upon jays, ravens, and possibly other animals that scavenge food waste at campgrounds.

Campers may experience more rules and restrictions upon their food management and may be under the threat of enforcement action should they fail to comply. While this will likely make camping less convenient, such measures are commonplace in campgrounds where bears pose a threat to campers (e.g., Yosemite National Park, Redwood National Park, Olympic National Park, and many others) (Figures 14 through 17). Because locations with bear problems are popular camping destinations, most campers are accustomed to dealing with the inconveniences associated with food management restrictions. As it is most effective to address the root causes of raven predation pressure rather than to simply remove ravens, efforts to control anthropogenic food sources are critical in the long run (Goodrich and Buskirk 1995).



Figure 14 Sign at Tuolumne Meadows Campground, Yosemite National Park, California.



Figure 16 Brochures regarding human disturbance of Snowy Plovers at California State Beaches.



Figure 15 Sign on picnic table at Hoh Rainforest Campground, Olympic National Park, Washington.



Figure 17 Sign at Redwood National Park, California.

Ravens will experience the most direct impacts. However, the overall raven population in Santa Cruz and San Mateo Counties will be unaffected. Because ravens are protected under the Migratory Bird Treaty Act, appropriate permits will be required for removal. While jays and other animals such as raccoons will not be trapped and removed, they will likely experience a reduction in their available food supply beginning in 2004. For jays, this may lead to decreased fledgling survival and lower reproductive success. It may also cause jays to wander and leave the area, possibly subjecting them to increased predation or low nesting success. These adverse impacts are an inevitable part of the path from artificially elevated population levels to lower, more natural, population levels. Jays, raccoons, and other animals living outside of the campgrounds are not likely to be impacted.

To insure marbled murrelets do not experience increased nest predation when campground food wastes are removed from the project area, waste-control measures would be implemented and maintained diligently throughout the duration of the project, and certain ravens closely associated with the campground would be removed. The presence of jays are expected to continue to decline in the project area with initiation of the *Corvid Management Project*, as decreased availability of food waste results in decreased nesting effort. Given the anticipated project-related decrease in corvid numbers, the existing small number of marbled murrelet nesters in the area, and the expected extent of existing corvid predation, it is unlikely that predation of marbled murrelet nests would increase as a result of any project activities.

### 4.5.1.5 Probability of Success

The success of this project relies on several linkages: the link between project tasks and an actual reduction in food waste; the link between a reduction in food waste and an actual reduction in corvid numbers; and the link between a reduction in corvid numbers and an actual reduction in nest predation.

The first two linkages have been demonstrated at other campgrounds dealing with bear problems. For example, daily camper education, constant enforcement, and improved food waste receptacles at Yosemite National Park severely limits the amount of food available to wildlife. In the Santa Cruz Mountains, corvid density has been correlated with the level of campground occupancy (D. Suddjian, *pers. com.*).

Additionally, the elevated corvid levels already demonstrated in the Santa Cruz Mountains campgrounds suggest that corvids do depend on human food waste, and thus corvid numbers may be reduced by a reduction in food waste. The final link between corvid numbers and actual nest predation is difficult to measure directly, as Marbled Murrelet nests are difficult to find and study. However, experiments with artificial eggs have found that predation pressure declines with decreasing corvid density (Raphael *et al.* 2002). Thus, the project has a reasonable probability of success.

#### 4.5.1.6 Performance Criteria and Monitoring

Because Marbled Murrelet nests are so difficult to find and nest predation so difficult to study directly, the success of the project will be monitored through a variety of indirect measures: annual audio/visual surveys of Marbled Murrelets near the campgrounds to detect the presence of breeding birds; annual surveys of jays and ravens both in the campgrounds and at control sites

to detect changes in corvid numbers as the project is implemented; and annual progress reports on the implementation of the corvid management tasks.

The quantitative results of the surveys and monitoring studies described above will be evaluated. If the ratio of corvid densities within the campgrounds relative to the control sites decreases significantly, the project will be considered to be making progress. Prior to the 2006 camping and breeding season, Phase 3 includes a project-wide evaluation with the anticipation that adjustments to the project may be made.

# 4.5.1.7 Evaluation

While this is a novel project with several uncertainties, the Trustees believe this is the best option available for restoring and enhancing the Marbled Murrelet population impacted by the Spill. We selected this project as a preferred alternatives for three reasons:

- 1) The condition of the Santa Cruz Mountain Marbled Murrelet population is so critical that a lower threshold regarding uncertainty is acceptable. As Boarman (2002) states, "When managing a threatened or endangered species, we must rely on the best available data and, when little or no data is available, it may be best to err on the side of the threatened or endangered species rather than risk greater population declines due to inaction. Most management decisions can be reversed or relaxed as new information is obtained, but a slip to extinction or critical endangerment may be irreversible."
- This project has been identified by nearly every Marbled Murrelet researcher in the state as important and valuable, addressing a known problem (S. Beissinger, *pers. com.*, , Z. Peery, S. Singer, D. Suddjian, H. Carter, R. Golightly, T. Hamer, J. Shulzitski, L. Henkel, E. Burkett).
- 3) No other feasible project that addresses the low rate of reproductive success in the Santa Cruz Mountains has been identified. Note that land acquisition will benefit Marbled Murrelet populations in the future and make greater recovery of the population possible.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors.

# 4.5.1.8 Budget

The following table provides additional detail and budget information regarding each task. Note that these budgets are estimates. Actual amounts will vary depending upon competitive bids from outside contractors.

| r hase 1 and 2 wronntornig 1 asks     |                  |  |
|---------------------------------------|------------------|--|
| Description                           | Cost (all years) |  |
| Audio/visual Marbled Murrelet surveys | \$60,000         |  |
| Jay and raven surveys                 | \$72,000         |  |
| Sub-total:                            | \$132,000        |  |

# Phase 1 and 2 Monitoring Tasks

#### **Phase 2 Implementation Tasks**

| Description  | Cost (all years) |
|--|------------------|
| Development and installation of camper education materials         | \$40,000         |
| (brochures, signs, video)  | . ,              |
| Improved garbage protection at Memorial Park (approximately 90     | \$60,000         |
| wildlife-proof garbage cans-specially designed to be tamper proof) | \$00,000         |
| Improved garbage protection at Big Basin (aluminum lids, new       | \$40,000         |
| dumpsters, and new shed)   | \$+0,000         |
| Removal of ravens  | \$10,000         |
| Augmented seasonal staff (4 full-time positions; 2 part-time       | \$200,000        |
| positions; years 1 through 5)                                      | \$200,000        |
| Project manager (State Parks) (years 1 through 5)                  | \$183,600        |
| Project manager (Memorial Park) (years 1 through 5)                | \$81,600         |
| Sub-total:   | \$615,200        |
| Total cost of the project from for all years:                      | \$747,200        |

### 4.5.2 Marbled Murrelet Land Acquisition and Enhancement Project

### 4.5.2.1 Goals and Nexus to Injury

The goal of this project is to protect and enhance nesting habitat of the Marbled Murrelet in the Santa Cruz Mountains of central California. The Command Spill is estimated to have killed six to twelve of these birds.

### 4.5.2.2 Background

The status of the Marbled Murrelet in the Santa Cruz Mountains is explained in detail under the Corvid Management Project description. In that section, it is noted that historic logging of old growth redwoods has severely reduced available nesting habitat in the Santa Cruz Mountains. This habitat loss has severely restricted the number of Marbled Murrelets that this region can support. Moreover, the habitat loss has caused the remaining Marbled Murrelets to nest in smaller and more marginal parcels, possibly subjecting them to greater nest predation and lower fecundity. While the Corvid Management Project aims to address immediate needs and recent

trends regarding nest productivity, this project focuses on the long-term needs of the species to have suitable nesting habitat.

## 4.5.2.3 Project Description and Methods

Given that habitat loss is likely a major cause of the long-term decline of Marbled Murrelets in the Santa Cruz Mountains, the Command Trustee Council proposes to protect and enhance Marbled Murrelet nesting habitat through the acquisition and management of a parcel of forest land that supports nesting Marbled Murrelets. Surveys indicate that there are no remaining parcels that contain 100% virgin old growth. However, there are some parcels that contain some uncut old growth suitable for Marbled Murrelet nesting and that have been confirmed to host Marbled Murrelets. The Trustee Council used these characteristics as criteria in identifying parcels to protect in the Santa Cruz Mountains.

According to information furnished to the Trustee Council, opportunities to acquire property containing Marbled Murrelet nesting habitat are extremely limited at this time. This lack of availability is due to a number of factors. These include, for example, the highly specialized nature of habitat (e.g., old growth forests), limited suitability of location (e.g., sufficiently near current populations of Marbled Murrelets to serve as breeding habitat) and infrequency with which such properties are made available for acquisition (e.g., willing sellers). Working within these limitations, the Trustee Council has identified a parcel referred to as the "UC Regents Girl Scout Creek" property (Figure 18), located north of Butano State Park within the Butano Creek watershed. This parcel is 80 acres in size and is located in a remote area where access is difficult.

The parcel has been unevenly harvested several times and currently contains a mix of residual old growth clusters, especially in drainages on the southern half of the parcel. Four audio/visual surveys for Marbled Murrelets were conducted at one station in July 2002 by Bryan Mori Biological Consulting Services. "Occupied behavior" of Marbled Murrelets, suggestive of local nesting, was observed on all four visits. At least ten potential nest trees were noted in the immediate vicinity of this survey site as well. The parcel is also located near current Marbled Murrelet breeding pairs. It is located approximately one-quarter mile to the north of Butano State Park, which contains known Marbled Murrelet breeding pairs. This location also makes it susceptible to management by a State land steward, as the CDPR currently has an effective presence in the immediate vicinity of the parcel and a staff already in place. At this time, there is no public access to the parcel.

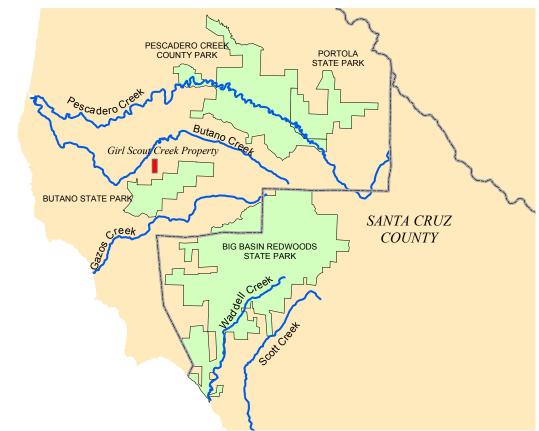


Figure 18: Approximate location of Girl Scout Creek property..

Currently, this parcel is being held by Save-the-Redwoods League, a non-profit conservation organization. The League recently acquired the parcel, reportedly to prevent the parcel from being placed on the open market by its prior owner. Save-the-Redwoods League is willing to sell the parcel to a State or federal land steward that will be able to permanently protect the habitat.

This project consists of providing up to \$400,000 to be used for the following tasks: (1) resource inventory and development of guidelines for managing the parcel to protect and enhance Marbled Murrelet habitat ("habitat management guidelines); (2) acquisition of the parcel by CDPR provided CDPR agrees to manage the parcel as part of the State park system and in accordance with habitat management guidelines to be developed by the Trustee Council and CDPR; and (3) periodic monitoring of the habitat to ensure that all management guidelines are implemented and enforced.

These tasks will provide for protection and enhancement of Marbled Murrelet habitat in the Santa Cruz Mountains in a number of ways. CDPR will be a permanent land steward. It has staff and an on-site presence that will enable CDPR to manage the property day-to-day in a proactive manner. Those attributes combined with the transfer of the property to CDPR on condition that CDPR manage the property in accordance with approved habitat management guidelines should protect the Marbled Murrelet habitat and promote the continued (and perhaps increased future) use of the parcel by nesting Marbled Murrelets.

# 4.5.2.4 Environmental Consequences (Adverse and Beneficial)

#### **Beneficial Impacts**

This project will protect nesting Marbled Murrelet habitat and guarantee that it remains in existence into the future. Because the project focuses on the entire habitat, all other species associated with redwood forests should benefit as well.

#### **Adverse Impacts**

There are no obvious adverse impacts to wildlife or habitat from this project provided that the habitat is managed according to approved habitat management guidelines.

Given that there is no current public access to the property, there will be no adverse impacts to recreation uses.

### 4.5.2.5 Probability of Success

The probability of success is quite high. Such land acquisitions have been done in the past (e.g., by the Apex Houston Oil Spill Trustee Council) and such lands remain protected and still contain nesting Marbled Murrelets. There is no reason to expect Marbled Murrelets to abandon suitable nesting habitat.

### 4.5.2.6 Performance Criteria and Monitoring

Periodic updates by CDPR will be provided to the council regarding the status of the habitat and the implementation of the habitat management guidelines developed by the Council and CDPR.

CDPR will be responsible for periodic monitoring of the habitat to ensure that all management guidelines are implemented and enforced.

### 4.5.2.7 Evaluation

Habitat acquisition is an effective and practical method to achieve the restoration of injured Marbled Murrelets. However, opportunities to acquire property containing Marbled Murrelet nesting habitat are extremely limited and make opportunities for Marbled Murrelet habitat acquisition unique. By providing funding to CDPR to take ownership of this habitat, the Trustee Council believes it is taking advantage of this unique opportunity to protect and promote Marbled Murrelet nesting habitat and to move the Girl Scout Creek property into the hands of a long-term land steward. Furthermore, by instituting land management guidelines, the Council is guaranteeing that no use of the land will jeopardize Marbled Murrelet nesting.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this projects is consistent with these selection factors. The Trustees determined that this type and scale of project would effectively provide appropriate compensation for Marbled Murrelets injured as a result of the Spill and have selected this project as a preferred alternative.

#### 4.5.2.7 Budget

| Description           | Cost (all years) | Comment                            |
|-----------------------|------------------|------------------------------------|
| Acquisition/ Resource | \$400,000        | due to the sensitive nature of the |
| Inventory/ Habitat    |                  | acquisition component of this      |
| Management            |                  | project the budget is presented as |
| Guidelines/Monitoring |                  | a cap                              |

#### 4.5.3 Seabird Colony Protection Program

### 4.5.3.1 Goals and Nexus to Injury

Breeding seabirds, in particular species that nest on cliffs or offshore rocks such as Common Murres, are highly susceptible to negative impacts caused by human disturbance (Manuwal 1978, Anderson and Keith 1980, Carney and Sydeman 1999). When disturbance events occur in seabird colonies, the birds may flee from their nests, leaving their eggs and chicks unprotected from predators and adverse weather conditions. Eggs and chicks can also be accidentally knocked off rocks or moved into another territory where they may be attacked or killed. Human disturbances are frequently caused by low flying aircraft, landings on islands and rocks by boaters or kayakers, or by commercial and recreational fishers anchoring close to colonies.

The Spill is estimated to have impacted approximately 1,490 Common Murres and to have placed another 11,193 birds at risk. Other injured species that will also benefit from the project are a variety of other seabirds including Brown Pelican and cormorants.

The primary goal of this program is to improve survival of California's seabird species (especially surface nesting species such as Common Murres, Brown Pelicans and cormorants) by reducing disturbance at their breeding and roosting colonies. This project will reduce disturbance by implementing an educational program involving signs, buoys and outreach materials designed to educate recreational users of the coast about the presence of nesting and roosting seabirds and ways to avoid disturbing these sensitive seabirds. In addition this project will also include outreach to the Federal Aviation Administration, Coast Guard and other agencies to educate their pilots about the sensitive nature of seabird colonies and their locations along the central California coast with the goal of reducing inadvertent disturbance of colonies during operations.

### 4.5.3.2 Background

Sixteen species of seabirds breed along the central California coast, typically on offshore rocks and islands (Figure 19). California seabird nesting habitat occurs within several ownerships and jurisdictions (NPS, CDPR, BLM, U.S. Army, U.S. Navy, CDFG, USFWS, USFS, CSLC and private ownerships). As a result of this complex ownership arrangement and overlapping jurisdictions, no coordinated management and conservation program for seabirds currently exists in California. A few planning efforts are underway that address some aspects of California seabird conservation needs (USFWS, BLM, Point Reyes Bird Observatory), but no one plan considers all the biological factors, status, regulatory issues, conservation threats, management needs and restoration opportunities in one statewide document. A few of California's listed or

sensitive species have been the focus of intermittent monitoring efforts, (e.g., Brown Pelican, Marbled Murrelet, Xantus's Murrelet, Ashy Storm-petrels). However, except for the Marbled Murrelet and Brown Pelican, no recovery plans have been prepared.

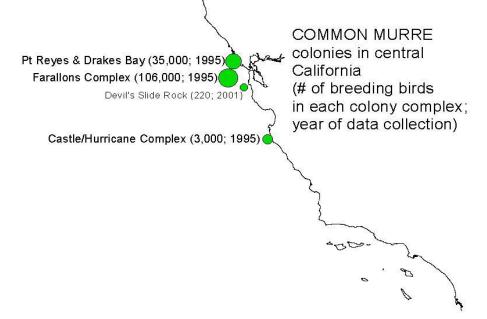


Figure 19- Common Murre colonies along Central California Coast.

# Threats to Seabird Colonies

The primary anthropogenic threats to seabirds in California are (not necessarily in order of severity) catastrophic oil spills, chronic oil pollution, conflicts with commercial fisheries and disturbance to breeding colonies.

An overarching threat to nesting and roosting seabirds in California and one that has not been addressed through coordinated agency action is that posed by human disturbance. Human disturbance takes numerous forms and includes, but is not limited to, disturbance by aircraft, fishing boats, sea kayakers, sport divers, squid light boats, and unauthorized entrance onto colonies. Due in part to insufficient agency funding and complex jurisdictional boundaries, human disturbance threats have not been addressed or resolved through coordinated programs and recently have been documented at a few locations (Restoration of Common Murre Colonies in Central California – Annual Reports). The MBNMS is currently engaged in a Joint Management Plan Review that has created a final document that identifies disturbance threats to nesting seabirds as a serious multi-faceted problem requiring yet-to-be developed, multi-pronged solutions. No specific implementation plan is underway.

The central California Common Murre population is recovering from a dramatic decline due to gill net and oil spill mortality that occurred during the 1980s and 1990s. Today, this population still remains below levels reported in the early 1980s. Disturbances only increase the vulnerability of this population. The slow recovery rate of the central California Murre population puts these birds in a vulnerable condition and warrants definitive actions by trustee agencies to abate disturbance problems. Reduction of anthropogenic disturbance such as aircraft

and boat disturbances is essential if the complete recovery of nearshore seabird colonies in central California is to be accomplished (Parker *et al.* 2001).

#### Seabird Colony Disturbance by Fishing Activities in Central California

Biologists working on the Apex Houston Common Murre Restoration Project have documented repeated disturbances to Common Murre and Brandt's Cormorant colonies caused by fishing boats involved in the nearshore fishery at colonies near San Pedro, Point Reyes and Monterey, California. Seabirds are disturbed by the boat's movement, the boat's engine noise, and human activity on board the boats. Observations of fishing boats deploying and retrieving traps and lines in close proximity to breeding colonies show that these boats can cause seabirds to flush or move about on the breeding rocks. Sport and commercial divers could pose similar threats. These disturbances cause lower reproductive success through the direct loss of eggs and chicks as a result of being dislodged from the nesting site or being trampled by birds responding to the disturbance. Also, opportunistic predation by gulls and ravens occurs when adults are flushed leaving eggs and chicks unprotected. Squid light boats are suspected to have impacted seabirds at some colonies, however, few direct observations have been made (F.Gress, *pers. com.*).

#### Seabird Colony Disturbance by Aircraft in Central California

Documentation of aircraft disturbance to California seabird colonies is not readily available because of the difficulty inherent in documenting such intermittent events. However, one data set compiled by a USGS biologist at Piedras Blancas describes regular disturbances to seabirds by various types of aircraft. Helicopters in particular are known to flush seabirds, causing the types of impacts described above. Civilian and military helicopter pilots generally have little awareness of the vulnerability of seabird colonies to disturbance by their aircraft. Information about the sensitivity of marine wildlife resources is generally lacking on aeronautical charts and enforcement of existing regulations is problematic. The Apex Houston project staff have documented numerous examples of disturbance to murres by helicopters and other aircraft. Given the difficulty in observing such an event, it is more likely that these few observations are symptomatic of regular occurrences, rather than chance observations of unusual events. Rojek and Parker (2000), have reported that a flyover by a helicopter (at the Castle-Hurricane colony) was more likely to cause a disturbance than a plane (82.9% of helicopter flyovers vs. 56.9% of plane flyovers). Helicopter disturbance resulted in flushing versus just 10.3% of plane disturbance.

# Seabird Colony and Seabird Roost Disturbance by Human Recreational Uses in Central California

The number of people involved in recreational activities specifically geared toward viewing wildlife is increasing rapidly. For many years, it was assumed that such activities were harmless to wildlife and could aid in conservation efforts by generating revenue and publicity. However, it has become clear that even visitation by those most interested in conserving wildlife can have detrimental effects.

The species account for the Common Murre (The Birds of North American, No. 666, 2002)

reports that "panic flights from colonies are caused by low-flying aircraft, especially helicopters (<1000 m), by humans on land or in boats, and even kayaks. The total collapse of colonies in S. Norway was caused by the increased approach of pleasure boats". The popularity of sea kayaking, for example, has increased rapidly, resulting in access into coastal areas that were previously inaccessible. Jaques and Strong (2002) reported on the effects of an "explosion" of water-based ecotourism and kayak use in Elkhorn Slough. "Kayaks and boats accounted for 77% of all disturbances in the Moss Landing area in 1999-2000". They further reported that "human disturbance in estuaries appears to have the most severe negative effects...." "Flushing distances were greater, disturbance was more frequent, and the total number of pelicans affected by disturbances was higher in these natural habitats...."

Communal roost sites such as Elkhorn Slough are essential habitat for Brown Pelicans (Gress and Anderson 1983, Jaques 1994.) Disturbance at these roost sites is extremely high and can have serious impacts to individual survival. Brown Pelicans are unlike many other seabirds in that they have wettable plumage (Rijke 1970). Their feather structure is such that they will take on water, become soaked to the skin and hypothermic if they do not come ashore regularly to dry out and restore their plumage. Brown Pelicans are also among the earth's heaviest flying birds (Pennycuik 1972). They have evolved a series of behavioral adaptations to conserve energy in flight, and spend a large portion of their daily time budget resting onshore at terrestrial roosts. Roost site selection is based on proximity to prey resources, isolation from potential predators and human disturbance, and microclimate features that aid in thermoregulation. Pelicans spread out at larger number of roosts by day and gather into a smaller number of traditional night roosts at dark, when they are more vulnerable to mammalian predation. Island-type habitat is generally required at night. Major night roosts support hundreds to thousands of pelicans on a given night (Jaques and Anderson 1988, Jaques et al. 1996). Reducing disturbance at communal roosts will have positive benefits to pelicans by reducing energy costs associated with flushing and relocating due to human disturbance. Reducing energy expenditures should result in improved body condition of individual birds, which will lead to increased juvenile and adult survival and increased reproductive success of pelicans.

Nesting colonial waterbirds are particularly vulnerable to human intrusion. Their high visibility, animated behavior and physical beauty tend to attract human visitors. When approached by humans, nesting colonial waterbirds often flush from nests in an attempt to either intimidate a potential predator or to flee from danger. During such times, nest contents can be spilled, exposed to predation, or perish from exposure to the elements during temporary or permanent abandonment. This sensitivity of nesting waterbirds, in combination with increasing pressures of visitation on areas containing their colonies presents a difficult situation for land and resource managers. Though visitation of nesting areas can generate conservation interest and revenue, disturbance, paradoxically, can cause birds to abandon the site that managers are attempting to preserve.

### 4.5.3.3 Project Description and Methods

The Command Trustee Council proposes to improve Common Murre and other seabird species nesting success through a multi-pronged coordinated approach to reducing human disturbance at seabird nesting colonies and roosts.

In addition, this project will benefit Brown Pelicans and other seabird species by enhancing

critical non-breeding habitat. Specifically, this project will enhance, and protect coastal roosts along the California mainland. Improvements in the existing network of communal roosts along the coast will have a positive influence on the energy budgets of pelicans and other seabirds by reducing energy costs associated with: 1) commuting between foraging areas and roosts, 2) flushing and relocating due to human disturbance, and 3) use of sub-optimal microclimates within roosts. Pelicans migrating along the California mainland will also benefit from increased availability, quality, and capacity of stopover sites. Cumulative energy reductions should result in improved body condition of individual birds. Population-level effects from improving the condition of individual birds should include increased juvenile and adult survival, and increased reproductive success of the Brown Pelican population.

This project will focus on the major seabird breeding colonies and roosting areas found along the Central California Coast (Figure 19).

The project will be divided into three phases: (1) Pre-Implementation Monitoring, (2) Implementation and (3) Adaptive Management and Monitoring (Figure 20). The project is projected to last a minimum of five years.

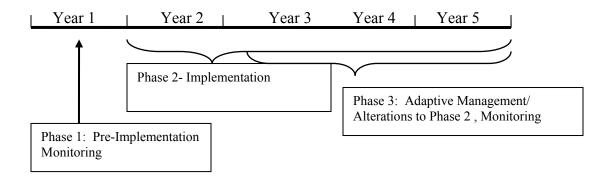


Figure 20: Seabird Colony Protection Project Timeline.

### **Phase I- Pre-implementation monitoring**

Prior to the implementation of human disturbance reduction actions, monitoring will be undertaken at key colony and roost sites for the first two project years to better define the scope of disturbance problems and to provide a basis for comparison in future years. Monitoring methods will build upon those developed by the Apex Houston project staff and will include the following:

- Seabird population size, breeding success, and attendance patterns at colonies and roosts will be monitored before, during and after implementation of the project to evaluate effectiveness. Aerial photography and photo interpretation methods would be utilized.
- The types and degree of human disturbance throughout the restoration area will be documented in order to identify specific colonies and roost sites that require specific protection efforts.

#### **Phase II-Implementation**

- Appropriate protective measures to reduce disturbance at specific colonies will be developed, implemented, and enforced;
- Compliance by the public will be monitored and appropriate modifications will be made if necessary.
- Signs would be erected at coastal launching ramps to educate sport and commercial fishermen, kayakers and others about the sensitivity of nearby seabird colonies. Specially produced pamphlets will be distributed through marine supply stores and sporting goods stores.
- In coordination with Team Ocean (MBNMS), a video will be developed depicting the threats to seabird colonies, highlighting the importance of the regional seabird fauna and its conservation problems, and describing applicable State and federal laws. The video would be produced and distributed through tourist information services, tourist lodging facilities and local school districts. Sea kayak touring, sales and rental companies would be asked to show the video to customers. The video could function as a public service announcement on local television.
- Anchored buoys with warnings will be placed around key colonies seasonally to establish protection zones and signs will be placed on selected offshore rocks and sensitive coastal trails.
- Public outreach to promote awareness of seabird conservation needs will be accomplished through seasonal presentations to community groups and schools.
- Presentations will be developed for U.S. Coast Guard pilots, Highway Patrol and military pilots and general aviation pilots to promote conformance with Department of Fish and Game Code Sections, National Marine Sanctuary regulations and USFWS regulations prohibiting low altitude flights over State Ecological Reserves and Marine Sanctuaries and increase agency awareness. These presentations would be repeated twice annually for all agencies because of staffing turnovers. Measures would be taken to ensure that aeronautical charts contain current information about altitude restrictions over sensitive colony sites. Project staff would monitor annual events involving aircraft, such as the Big Sur Marathon.
- The technical feasibility of video surveillance at key colonies will be explored.
- Wildlife interpretive programs and materials will be developed to promote public awareness and used to provide seabird viewing opportunities at selected coastal vantage points.

- Improved surveillance at key colonies will identify unauthorized actions. Coordination between the project staff and DFG, USFWS, and NFMS agents would promote more effective enforcement of state and federal regulations.
- Restoration project staff will coordinate with the California Coastal Commission, State Parks, Point Reyes National Seashore (PRNS) and the California Coastal Conservancy to work towards accommodating the protection needs of seabird colonies and roost sites in planning activities for public coastal access.
- Sport fishing charter boat crews will be educated to ensure that party boats maintain an appropriate distance from colonies and to advise them on ways to reduce hooking and entanglement conflicts.
- A CD-ROM will be created, depicting all colony and roost sites in GIS layers for state and federal agency land managers and regulatory agencies.
- Project staff will work cooperatively with BLM Coastal Monument staff, CDFG, Marine Sanctuaries, PRNS Staff and USFWS staff to provide for a coordinated approach to seabird conservation in the project area.

In general, the project staff would monitor the health of seabird populations, while identifying types and sources of disturbances. Action plans would be developed and implemented by the project staff to minimize disturbance problems.

# Phase III: Adaptive Management; Refinements of the Human Disturbance Reduction Program and Monitoring

The results of Phase I and II from the first two years of the project will be analyzed and evaluated prior to the third project year. At this time the Council will consider alterations and improvements to existing Phase II components as well as augmenting Phase II with additional measures.

The impact of the program will be monitored through a combination of aerial and ground based surveys.

# 4.5.3.4 Environmental Consequences (Adverse and Beneficial)

# **Beneficial Effects**

The actions implemented by this project will increase public awareness of seabird habitat requirements and educate the public about the potential impacts of seabird human interactions. By educating the public in ways to safely observe seabirds while engaged in recreation, the Trustees can reduce the impacts of disturbance to nesting populations of Common Murres and other seabirds thereby aiding in the recovery of these populations to pre-spill levels. Disturbance caused by planes, helicopters and kayakers are known to have resulted in eggs and chicks being lost from Common Murre colonies in central California. Decreasing or eliminating these disturbances will likely have a direct impact on the reproductive output of these colonies.

#### **Adverse Impacts**

Signs used in any of the above projects need to be carefully designed and placed so as not to detract from the natural aesthetics of any area. Open-air kiosks and signs are subject to vandalism. Therefore, repair or replacement costs for structures should be factored into cost estimates. Placing structures in open, well-traveled areas will reduce the risk of vandalism. The restriction of recreational activities around sensitive areas may be perceived by some to limit the enjoyment and scope of the public's recreational experience. However, given the small number of seabird colonies in the region and the limited nesting season, the actual size and time of any restrictions should be minimal. Moreover, a balance will be sought between minimizing the impacts on the resource and preserving quality opportunities for recreation. If appropriate, additional environmental compliance specifically for this project will be conducted prior to implementation.

### 4.5.3.5 Probability of Success

The likelihood of success for this project is very high. The project is likely to have a tremendous positive impact on breeding seabirds in central California by reducing disturbance to nesting colonies and thereby decreasing the loss of chicks and eggs which will lead to an increase in productivity. Improvements to communal roosts will have positive benefits to pelicans by reducing energy costs associated with commuting between prey and roosts, and with flushing and relocating due to human disturbance. Reducing energy expenditures should result in improved body condition of individual birds, which should lead to increased juvenile and adult survival and increased reproductive success of pelicans and cormorants. This project will greatly aid the Trustees' actions to recover these species to pre-spill levels.

The Trustees expect this project will mirror the success of a program developed in Oregon to protect nesting seabirds at Three Arches National Wildlife Refuge. Monitoring during the breeding season following the implementation of the disturbance reduction program (500 foot area closure during the breeding season) revealed a 39% reduction in disturbance events (Reimer and Brown 1997). Human disturbance to nesting and roosting areas is one of the major threats facing seabird populations in California.

### 4.5.3.6 Performance Criteria and Monitoring

To monitor the success of the restoration efforts, a combination of aerial and ground based surveys will be conducted for the duration of the project. Prior to the implementation of human disturbance reduction actions, monitoring will be undertaken at key colony and roost sites for the first two project years to better define the scope of disturbance problems and to provide a basis for comparison in future years. Monitoring of the colony will be used to evaluate whether there has been a decrease in human caused adverse effects. Indices to document a decrease in human caused effects may include a decrease in observed flushing events by aircrafts and boats and increases in colony productivity and numbers of birds utilizing roosting areas. Public feedback and the amount of reaction will be the primary means of monitoring the success of educational activities.

#### 4.5.3.7 Evaluation

Implementation of this project should result in major positive benefits to Common Murres and other surface nesting seabirds by reducing the impact of human disturbance to their nesting colonies. The primary anthropogenic threats to seabirds in California are (not necessarily in order of severity) catastrophic oil spills, chronic oil pollution, conflicts with commercial fisheries and disturbance to breeding colonies. Human disturbance takes numerous forms and includes, but is not limited to, disturbance by aircraft, fishing boats, sea kayakers, sport divers, squid light boats, and unauthorized entrance onto colonies. Through education and prevention activities this project will strive to minimize the number of disturbance events involving loss of eggs and chicks and thereby increase the population of impacted seabirds.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this projects is consistent with these selection factors. The Trustees determined that this type and scale of project would provide appropriate compensation for many of the surface-nesting seabirds injured as a result of the Spill and have selected this project as a preferred alternative.

#### 4.5.3.8 Budget-

| Description        | Year 1   | Year 2   | Year 3   | Year 4   | Year 5    |
|--------------------|----------|----------|----------|----------|-----------|
| Personnel (Project | \$31,500 | \$53,750 | \$53,750 | \$54,750 | \$38,370  |
| Manager/Field      |          |          |          |          |           |
| Techs)             |          |          |          |          |           |
| Aerial Surveys     | Donated  | Donated  |          |          |           |
|                    | by CDFG  | by CDFG  |          |          |           |
| Equipment          | \$0      | \$15,500 | \$11,000 | \$11,000 | \$8,250   |
| Agency Admin       | \$0      | \$5,000  | \$5,000  | \$5,000  | \$5,000   |
| Support            |          |          |          |          |           |
| Travel/Vehicles    | \$0      | \$11,000 | \$11,000 | \$11,000 | \$11,000  |
|                    |          |          |          |          |           |
| Sub-total          | \$31,500 | \$85,250 | \$80,750 | \$81,750 | \$79,500  |
| USFWS Overhead     | \$3,465  | \$9,378  | \$8,883  | \$8,992  | \$8,745   |
| Costs (11%)        |          |          |          |          |           |
| Total              | \$34,965 | \$94,628 | \$89,633 | \$90,742 | \$88,245  |
| Total (all years)  |          |          |          |          | \$398,213 |

## **Colony Observation/Monitoring Component**

#### Law Enforcement Component

| Description      | Year 1   | Year 2   | Year 3   | Year 4   |
|------------------|----------|----------|----------|----------|
| GS 11-USFWS      | \$18,710 | \$18,710 | \$18,710 | \$18,710 |
| Law Enforcement  |          |          |          |          |
| Agent (1/4 time) |          |          |          |          |
| USFWS Overhead   | \$2,058  | \$2,058  | \$2,058  | \$2,058  |

| (11%)             |  |          |
|-------------------|--|----------|
| Total (all years) |  | \$83,072 |

#### **Outreach/Education Component**

| Description          | Year 1    | Year 2    | Year 3            | Year 4    |
|----------------------|-----------|-----------|-------------------|-----------|
| Personnel (Project   | \$105,000 | \$105,000 | \$105,000         | \$105,000 |
| Manager/Field Techs) |           |           |                   |           |
| Signs, Buoys, Ed.    | \$60,000  | \$65,000  | \$15,000          | \$150,000 |
| Materials, other     |           |           |                   |           |
| equipment, workboat  |           |           |                   |           |
| charter              |           |           |                   |           |
|                      |           |           |                   |           |
| Travel               | \$5,000   | \$5,000   | \$5,000           | \$5,000   |
| Sub-Total            | \$170,000 | \$175,000 | \$125,000         | \$125,000 |
| Overhead (25%)       | \$42,500  | \$43,750  | \$31,250          | \$31,250  |
| Total                | \$212,500 | \$218,750 | \$156,250         | \$156,250 |
|                      |           |           | Total (all years) | \$743,750 |

Total Project Cost- \$1,225,035

# 4.5.4 Common Murre Nesting Ledge Creation

### 4.5.4.1 Goals and Nexus to Injury

The goal of this project is to benefit the Common Murre population injured by the Spill. This project will create nesting habitat capable of supporting 200-400 breeding murres on Southeast Farallon Island (SEFI) at the Farallon National Wildlife Refuge (FNWR).

### 4.5.4.2 Background

The Farallon Islands are home to one of the largest and most important colonies of Common Murres on the west coast of North America, south of Alaska. It is estimated that 400,000 murres once bred on the Farallon Islands. Extensive egg harvesting between 1849 and the late 1800s caused murre populations to plummet. By 1910, only 20,000 murres remained. Between 1911 and the late 1950s, the population remained in a seriously depleted state due to oil spills and human disturbance. By the 1950s, the population gradually increased over the next several decades, peaking at over 102,000 in 1982 (Briggs *et al.* 1983). During the mid to late 1980s, Common Murres again declined mainly due to the combined effects of the El Niño Southerly Oscillation (El Niño) and gill-net caused mortality (Ainley and Boekelheide 1990). The near shore gill-net fishery was halted in late 1987 due to its impact on seabirds (primarily murres) and marine animals. Beginning in the early 1990s the murre population began to recover, but recovery was interrupted by the 1992 and 1998 El Niño events.

Over the last 5 years, favorable oceanic conditions have resulted in rapid growth of the murre population. In 2002, the South Farallon Islands (SFI) colony exceeded 100,000 birds for the first time in over a century, and the total Farallon Islands breeding population currently exceeds over 150,000 individuals. This population increase, combined with reduced mortality from gill netting and oil spills, poises this colony on the brink of a dramatic population increase. The Farallon

Islands is already one of the two largest Common Murre breeding colonies in California, tied with Castle Rock in Humboldt Co.

At some point, lack of available, secure breeding habitat will become a limiting factor. The expansion of Western Gulls into previously unused areas and the establishment of a permanent human presence on the island have reduced the amount of available murre breeding habitat from historic times. The majority of the SFI is not likely to be re-colonized because of the lack of available habitat, loss of habitat to Western Gulls, and the nearby human activities associated with the small field station.

Currently there are few projects that are able to directly enhance habitat for Common Murres, the species most commonly affected by oil spills. The proposed project would restore/enhance Common Murre habitat in two ways: 1) it would create additional ledge nesting habitat, and 2) would put a barrier between the murre colony and the path to North Landing, thereby reducing human disturbance.

# 4.5.4.3 Project Description and Methods

A series of murre nesting ledges would be built to create nesting habitat for Common Murres. Sections of concrete block would be stacked and tied together to create a wall with numerous terraced ledges that will simulate the natural (occupied) cliff habitat found on the islands. The blocks to be used in the construction are part of a retired containment berm for two large diesel tanks, and are already on the island. The US Coast Guard (USCG) removed the tanks and broke up the containment wall in October 2003. Elimination of this unused containment berm will also benefit other seabirds that breed on the island, because it fills with rainwater every winter and has posed a drowning hazard for decades.

The project consists of several steps or phases: 1) Breaking the concrete containment berm into "ledge-sized" blocks; the USCG has agreed to do this as part of their contribution to the project. 2) Moving the blocks from their present location on the southeast side of SEFI to the project site. 3) Stacking the blocks into an engineered design of murre nesting ledges, and 4) Constructing a wooden monitoring blind that will be incorporated into the backside of the ledge structure in a way that will allow biologists to monitor murre colonization without disruption.

### 4.5.4.4 Environmental Consequences (Adverse and Beneficial)

### **Beneficial Effects**

The construction of this blind is expected to create high quality nesting habitat, encouraging expansion and growth of the adjacent Sea Lion Cove Colony. It is estimated that an additional 200-400 breeding murres (100-200 pairs) will eventually use the newly created habitat. In addition, murres and Brandt's Cormorants nesting on natural cliff/ledge habitat in the area may also benefit from reduced human disturbance. The ledge wall will screen these existing colonies from human (pedestrian) traffic.

The unique viewpoint afforded by this structure will allow monitoring of the reproductive success, population growth and feeding ecology of a recently established colony of murres. It will also allow the monitoring of a large and expanding colony of Brandt's Cormorants. Other

bird species that will benefit from the project include Cassin's and Rhinoceros Auklets, Pigeon Guillemots (*Cepphus columba*), Leach's (*Oceanodroma leucorhoa*) and Ashy Storm Petrels, Western Gulls, and migratory landbirds. Additionally, the concrete diesel containment structure is an entrapment and drowning hazard for seabirds and landbirds and its removal will reduce impacts to seabirds. It holds water during the winter/spring rains, and although it is kept covered and periodically pumped out, birds find their way into it and drown. Also, since it is located on the marine terrace and surrounded by Cassin's Auklets nesting burrows, pumping it out runs the risk of flooding nesting burrows.

### **Adverse Impacts**

Demolition of the containment wall and construction of the murre nesting ledges would be completed after most breeding seabirds have left the island, and when wildlife activity on SEFI is at is lowest point. Some post-breeding and non-breeding western gulls and Brandt's Cormorants may be temporarily disturbed (flushed) from the project area during construction.

Five species of pinnipeds either breed or haul-out on the FNWR. The proposed work window will avoid impacts to breeding pinnipeds. Some seals and sea lions will likely be hauled out in Sea Lion Cove during this time period, however. Human activity and noise during construction of the murre nesting ledge may cause some of them to flush into the water. Few Steller's Sea Lions are usually present during the fall in the project area; however, there is a possibility that one or a few could be flushed, which would be considered a "take" under the Endangered Species Act. Therefore, proponents will complete Section 7 consultation with the National Marine Fisheries Service (NOAA Fisheries) prior to project implementation.

## 4.5.4.5 Probability of Success

Probability of success is considered high based on the results of a similar project in the area. In September 2000, a nesting structure was constructed of a similar concrete rubble construction as is proposed for the nesting ledge, in the north landing area. Concrete blocks were stacked upon one another in a design engineered to create habitat for crevice nesting birds and incorporated an observation blind as part of its design. The habitat sculpture was very successful and 9 of the 32 available sites were occupied by Cassin's Auklets in the first year (2001). In 2002 12 Cassin's Auklet pairs and 1 Pigeon Guillemot pair nested in the created habitat, and in 2003, there were 17 auklet pairs and 1 guillemot pair.

This project proposes to use the same design and contractor to construct the murre nesting ledges. The contractor is familiar with the challenging logistics and wildlife sensitivity of the island, and is creative yet practical in their design of habitat restoration projects.

### 4.5.4.6 Performance Criteria and Monitoring

This project will be determined successful when Common Murres and/or Brandt's Cormorants begin occupying the newly created nesting ledges. The observation blind will allow biologists to monitor colonization and reproductive parameters. Thirty-two years of pre-project murre and cormorant breeding population and productivity data collected from SEFI will also allow comparisons of pre-and post-project changes in populations, and how the newly colonized site compares to older, more established colonies. Seabird monitoring will be conducted by biologists

from PRBO through a cooperative agreement with the USFWS, San Francisco Bay National Wildlife Refuge Complex. Post-project monitoring will take place for a minimum of 3 years, and probably longer.

# 4.5.4.7 Evaluation

The Farallon Islands are home to one of the largest colonies of Common Murres on the west coast of North America, south of Alaska. Creation of nesting habitat is expected to result in a long-term measurable increase in the number of Common Murres that can nest on these islands. These positive effects will aid in the population recovery of Common Murres and other seabird species affected by the Spill.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors. The Trustees determined that this type and scale of project would effectively provide appropriate compensation for Common Murres injured as a result of the spill and have selected this project as a preferred alternative.

| Description   | Cost (all<br>years) | Comment            |
|---|---------------------|--------------------|
| Breaking Containment Berm   | \$0                 | USCG Donated       |
| N. Landing trail improvements   | \$ 2,000            | labor/materials    |
| Wheeled, non-motorized vehicle to<br>transport large blocks of concrete over<br>rough terrain | \$ 500              |                    |
| Materials for habitat ledge/blind   | \$10,415            | Materials          |
| Labor: Moving blocks; constructing ledge wall/blind   | \$ 8,715            | 265 hrs @\$35/hr   |
| Transport/per diem for personnel from mainland  | \$ 2,400            | To/From island     |
| Transport of materials/equipment to island  | \$ 4,500            |                    |
| FWS Project Management  | \$ 3,300            | 160 hrs @GS9 level |
| Monitoring success of project (3 years @<br>\$7,400/yr)                                       | \$22,200            |                    |
| Sub-total   | \$54,030            |                    |
| 11% FWS Administrative Overhead   | \$5,943             |                    |
| Total   | \$59,973            |                    |

### 4.5.4.8 Budget

## 4.5.5 Brown Pelican Roost Site Enhancement and Protection

# 4.5.5.1 Goals and Nexus to Injury

The goal of this project is to benefit the Brown Pelican population injured by the Command Spill. This project will restore critical non-breeding pelican habitat by enhancing and protecting coastal roosts along the central California mainland.

# 4.5.5.2 Background

Communal roost sites are essential habitat for Brown Pelicans (Gress and Anderson 1983). The primary roost sites for Brown Pelicans in the western U.S. are offshore rocks and islands on the outer coast, and sand islands within large estuaries (Briggs *et al.* 1987, Jaques 1994). Intense shoreline development, wetland filling, and other habitat alteration has eliminated much of the natural onshore roost habitat. Loss of historic roost habitat from human encroachment has been somewhat offset by the addition of artificial structures, such as jetties, breakwaters and floating structures. Pelicans now rely heavily on these types of structures for roost sites in California (Jaques *et al.* 1996). Few roosts along the mainland fall under the jurisdiction of natural resource agencies, and several major roost sites on privately owned structures have been lost in recent years. The most frequent cause of this disturbance is recreational activities and the most heavily disturbed habitats used by pelicans are estuaries (Jaques and Anderson 1987). Birds that were injured in the Spill use habitat throughout the central California coast.

Improvements to communal roosts will have positive benefits to pelicans by reducing energy costs associated with commuting between prey and roosts, and with flushing and relocating due to human disturbance. Reducing energy expenditures should result in improved body condition of individual birds, which should lead to increased juvenile and adult survival and increased reproductive success of pelicans.

# 4.5.5.3 Project Descriptions and Methods

One project under this category involves improvements to the roost site at Breakwater Island, located in San Francisco Bay adjacent to Alameda. This is the largest roosting area and the only known night roost in the San Francisco Bay area (U.S. Navy 1997). It is used primarily in late summer through fall (from July into November or December), when pelicans move northward in a post-breeding dispersal from breeding areas in southern California and Mexico. On June 28, 2002 the Island had a record number of 2,498 pelicans roosting on it. Breakwater Island was formerly part of the Alameda Naval Air Station (NAS), closed to the public, and protected from human disturbance. Since closure of the Alameda NAS, the roost has been subject to human disturbance from recreational boaters and fishers (USFWS 1998). Methods to protect this roost include buoy placement to keep boaters a safe distance from the island, signing, public outreach/education programs, and enforcement patrols.

Both the U.S Navy and the USFWS are willing partners on this project. Moreover, the parties currently propose to turn Alameda NAS into a National Wildlife Refuge. The U.S. Coast Guard has approved the use of Class 6 buoys with regulatory lettering and anchoring apparatus. Ten buoys will be needed to adequately delineate the restricted area. Eight signs will be deployed with lettering large enough to be read from a distance notifying boaters of the restricted areas. In

addition, an interpretive sign will be placed at the mouth of the Navy Seaplane Lagoon, which is gradually being developed into a marina, from which the majority of the recreational boats originate. The sign would educate boaters on the sensitivity of the roosting pelicans to disturbance and the need to stay out of the restricted area. The costs of the signs and buoys are delineated in the attached budget.

Other potential sites such as the Davenport Pier will be considered for roost site enhancement work, as appropriate, during project design and development.

# 4.5.5.4 Environmental Consequences (Adverse and Beneficial)

# **Beneficial Effects**

Improvements in the existing network of communal roosts along the coast will have a positive influence on the energy budgets of pelicans by reducing energy costs associated with: 1) commuting between prey and roosts; 2) flushing and relocating due to human disturbance; and 3) use of sub-optimal microclimates within roosts. Costs of migration will also be reduced by increased availability, quality and capacity of stopover sites. Cumulative energy reductions should result in improved body condition of individual birds. Expected population-level effects from improving the condition of individual birds are increased juvenile and adult survival, and increased reproductive success of pelicans in California. Juvenile survival and adult reproductive success are the primary life history parameters affecting the Brown Pelican population (Anderson and Gress 1983).

All other bird species that occur in association with roosting pelicans are likely to benefit from the proposed roost projects. Bird groups that will benefit from increased availability of island habitat and reduced human disturbance in coastal environments will include gulls, terns, cormorants, shorebirds, herons (Order *Ciconiiformes*), egrets (Family *Ardeidae*), guillemots, and ducks (Order *Anseriformes*). The suite of species receiving benefits will vary with the type of roost treatment and project site. The restoration projects will also enrich the public through associated interpretation and will help foster an awareness and stewardship ethic that should result in reduced disturbance to roosting Brown Pelicans, and other coastal waterbirds at other locations. Public enjoyment of pelicans will be increased by projects that allow the public to view communal roosting groups without causing disturbance. These positive effects will aid in the recovery of the population to pre-spill conditions.

### **Adverse Impacts**

Environmental consequences of increased pelican use of lagoons and other roosting areas may include impacts on water quality if guano accumulation exceeds the circulation ability of the lagoon. However, on the outer coast, Brown Pelican guano in the vicinity of roosts will provide a desirable source of nutrient enrichment and may enhance local food webs in given areas.

Pelican roost site creation projects will be associated with variable degrees of liability and some projects will require ongoing management oversight. Careful site selection, project design, selection of raw materials, and adequately funded maintenance programs will offset potential liability costs. Signs, posts, or fences may need to be replaced during the projected life of the

project due to fading, corrosion, or vandalism. Vegetation on any earthen islands that are created may need to be periodically controlled or removed.

Negative aspects of pelican use of harbors for roosting include the increased risk of contact with environmental contaminants such as oil, the increased likelihood of injury due to scavenging (e.g., entanglement in fishing line, puncture from fishing hooks, etc.) and the development of nuisance issues. However, most of the proposed projects are not expected to result in major increases in pelican use of harbors. Rather they are expected to improve the quality of resting time allowed within harbors.

Concerns regarding visual impacts of signs and their potential for providing predator perches near Snowy Plover or Least Tern nesting areas will need to be addressed. Signs will be carefully designed and located so as not to detract from the natural beauty of any area or provide predator perches near Snowy Plover or Least Tern nesting areas.

### 4.5.5.5 Probability of Success

Brown Pelicans respond readily to novel roost sites as long as the key habitat elements are provided. Key elements have been described in this document and in Gress and Anderson (1983) and Jaques and Anderson (1987). All projects that involve physical manipulation of habitat are very likely to succeed. The successes of projects that rely on alteration of human behavior include a wider range of unknowns. Projects that provide the most secure island habitat in areas that harbor reliable food resources are expected to receive the highest level of use and will function as communal night roosts as well as daytime use areas.

Only one pelican roost site enhancement project has been attempted on the Pacific west coast. This project, construction of a small island in a remnant salt pond, took place at Moss Landing Wildlife Area. The "island" was not an effective island and the effort was a failure due to poor site selection and poor design. Projects conducted under this final RP/EA will be designed and implemented utilizing the best available expertise and information on Brown Pelican habitat selection, microclimate preference, and behavioral ecology.

Education and awareness programs, including displays, signs and brochures nearly always attract public attention. If done well, experience has demonstrated that such programs instill in the public new knowledge and appreciation of the subject considered. Informational and warning signs to protect seabirds had a high probability of reducing human behaviors that are detrimental to the resource.

# 4.5.5.6 Performance Criteria and Monitoring

Performance Criteria: Performance criteria will be developed for each specific project. Success will be based on increases in roost attendance and increases in population abundance.

Monitoring: To monitor the success of restoration efforts, ground-based observations at roosts will be conducted for the duration of the project.

Ground-based observations at selected roost sites will be designed to monitor the response of pelicans to individual roost treatments. The amount of time spent observing each site will vary

according to the type of roost, type of project, and questions that need to be addressed. For each major project, observations spanning a period of approximately 3 days, 4 times per year are anticipated.

## 4.5.5.7 Evaluation

Breakwater Island, located in San Francisco Bay adjacent to Alameda is the largest roosting area and the only known night roost in the San Francisco Bay Area (U.S. Navy 1997). Improvements to the roosting site are expected to result in a long-term measurable increase in the number of pelicans that roost along the Northern California mainland. These positive effects will aid in the recovery of the Brown Pelican population to pre-spill conditions.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors. The Trustees determined that this type and scale of project would provide appropriate compensation for Brown Pelicans injured as a result of the Spill and have selected this project as a preferred alternative.

### 4.5.5.8 Budget

| Description                        | Cost (all years) | Comment   |
|------------------------------------|------------------|---|
| Regulatory Buoys                   | \$10,000         |   |
| Regulatory Signs                   | \$4,800          |   |
| Interpretive Signs                 | \$6,000          |   |
| Monitoring                         | \$10,000         |   |
| Sub-total                          | \$30,800         |   |
|                                    |                  | Installation costs for signs and<br>buoys will be provided in-kind<br>by the USFWS. |
| 11% FWS Administrative<br>Overhead | \$3,388          |   |
| Total                              | \$34,188         |   |

# 4.5.6 Brown Pelican Entanglement Reduction Education and Outreach Program

#### 4.5.6.1 Goals and Nexus to Injury

The goal of this project is to benefit the Brown Pelican population injured by the Command Spill. Entanglement in fishing line and hooking of pelicans by fishers is a major factor affecting Brown Pelican survival. This project will reduce entanglement of Brown Pelicans and other seabirds in fishing line by educating fishers in ways to minimize negative interactions with seabirds while fishing.

# 4.5.6.2 Background

Most avid recreational anglers have at some point interacted with seabirds while fishing along our coast. Seabirds may eat the same fishes being targeted or may be attracted to bait at the end of fishing lines and, as a result, they can accidentally be hooked or entangled. The entanglement situation is not resolved when the line breaks and the seabird flies away. Both hooks and broken lines injure and kill seabirds. Hooks, which penetrate the bird's hollow bones, can lead to infection. Broken lines can rap around legs, wings, or beaks and result in death due to starvation or inability to fly or swim.

While seabird entanglements can occur during any type of recreational fishing activity, the problem has been more severe at piers where large numbers of bait fishes concentrate. This concentration attracts both fishermen and seabirds, such as Brown Pelicans that feed on bait fishes. In late summer of 2001, seabird and angler interaction was a big problem at the Santa Cruz City Pier. Nearly 200 Brown Pelicans were rescued with hooks or line entanglements, and 59 of those died or had to be euthanized due to the severity of the injuries. Many other injured birds could not be rescued. Due to the severity of the problem, the City of Santa Cruz and the Department of Fish and Game (CDFG) closed fishing on two-thirds of the city's pier for several weeks.

# 4.5.6.3 Project Descriptions and Methods

This project involves expanding the American Trader Trustee Council's (ATTC) Seabird Entanglement Education and Outreach Program to problem fishing piers and wharfs in Northern California. The goal of the program is to provide information in the form of brochures, signs, and wildlife guides that heighten public awareness about the potential hazards to the endangered Brown Pelicans and other seabird species vulnerable to being hooked by fishing tackle or entangled by monofilament line. Additionally, information will be provided about the impacts of human disturbance to seabird breeding colonies (i.e. nest abandonment) and measures that can be taken to avoid such disturbances. A similar program has been developed by the ATTC for sites in southern California. The Command Council will be able to adopt the designs and materials from the ATTC program and modify them slightly to address sites in Northern California. The program will involve producing a minimum of ten signs that will be placed at problem areas educating anglers about ways to reduce hooking birds and what to do if one is hooked.

Specific locations where the signs will be installed will be identified during implementation. One known problem area is the Santa Cruz Pier. The County of Santa Cruz in conjunction with the CDFG has created some products and measures to address the immediate problem. The Command Trustee Council will work with these groups to determine if additional measures are needed at the Santa Cruz pier and to identify other potential trouble areas.

In addition to educational signs, the program will involve the production of a brochure designed to educate fishers in the ways to minimize risk to seabirds from fishing line and measures that can be taken to avoid impacts to seabirds from human disturbance. A version of this type of brochure for Southern California has been produced by the ATTC and the Command Council would only need to modify the design to cover Northern California sites. The development of these products would be closely coordinated with the disturbance reduction program described in section 4.5.1. By using the products developed for the Southern California program, the Trustees are able to save considerable costs in the initial mock-up and design of the signs and brochures (see budget below).

# 4.5.6.4 Environmental Consequences (Adverse and Beneficial)

# **Beneficial Effects**

For very little monetary output for signs and brochures, the conservation benefits of public information at piers and wharfs will be considerable. These activities will help promote public awareness and thus reduce bird injuries and deaths. When successful, these efforts will aid in assuring that the on-going recovery of injured seabird populations is not hampered by conflicts with anglers. Furthermore, to the extent that pelican entanglement decreases, the need for emergency closures to pier fishing will be reduced.

# **Adverse Impacts**

Negative aspects of pelican use of harbors for roosting include the increased risk of contact with environmental contaminants such as oil, the increased likelihood of injury due to scavenging (e.g., entanglement in fishing line, puncture from fishing hooks, etc.) and the development of nuisance issues. However, most of the proposed projects are not expected to result in major increases in pelican use of harbors, rather they are expected to improve the quality of resting time allowed within harbors.

Concerns regarding visual impacts of signs and their potential for providing predator perches near Snowy Plover or Least Tern nesting areas will need to be addressed. Signs will be carefully designed and located so as not to detract from the natural beauty of any area.

### 4.5.6.5 Probability of Success

Education and awareness programs, including display signs and brochures, nearly always attract public attention. If done well, experience has demonstrated that this will instill in the public new knowledge and appreciation of the subject considered. Informational and warning signs to protect seabirds have a high probability of reducing human behaviors that are detrimental to the resource.

## 4.5.6.6 Performance Criteria and Monitoring

Public feedback and reaction will be the primary means of monitoring the success of educational activities. These programs will continually evolve and be updated to keep the information current.

## 4.5.6.7 Evaluation

Entanglement in fishing line and hooking of pelicans by fishers is a major factor affecting Brown Pelican survival. For a relatively little expenditure of funds, a great deal of information concerning seabird conservation issues can be disseminated through educational materials.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors. The Trustees determined that this type and scale of project would provide appropriate compensation for Brown Pelicans injured as a result of the Spill and have selected this project as a preferred alternative.

| Description           | Cost (all years) | Comment |
|-----------------------|------------------|---------|
| Signs                 |                  |         |
| Design Modification   | \$1,400          |         |
| Signs                 | \$3,600          |         |
| Posts and Brackets    | \$8,000          |         |
| Sign Assembly         | \$1,000          |         |
| Sub-total             | \$14,000         |         |
| Brochure              |                  |         |
| Design Modification   | \$1,500          |         |
| Printing              | \$4,000          |         |
| Content writer/editor | \$2,500          |         |
| Sub-total             | \$8,000          |         |
| Total                 | \$22,000         |         |

#### 4.5.6.8 Budget

# 4.5.7 Sooty Shearwater Restoration Project

## 4.5.7.1 Goals and Nexus to Injury

The goal of this project is to protect and enhance nesting habitat of the Sooty Shearwater on its native nesting ground in New Zealand. During the Command oil spill response 12 shearwaters were collected, one of which had been banded on Whenua Hou Island, New Zealand. This recovery along with 11 shearwaters recovered on beach surveys provides a direct nexus between the proposed project and the Command Spill, showing a negative impact on this trans-Pacific migrating seabird. This project will attempt to eradicate rats from their breeding areas at the Big South Cape Islands group (Taukihepa, Pukeweka, and Rerewhakaupoko Islands) and Mokonui Island off Stewart Island (Rakiura), New Zealand.

The three main objectives of the project are:

- 1. Eliminate rodents from four shearwater breeding islands, thereby eliminating egg and chick predation;
- 2. Establish quarantine contingencies to prevent reintroduction of rats to restored island colonies;
- 3. Monitor the restoration progress and project effectiveness.

### 4.5.7.2 Background

The majority of Sooty Shearwaters that occur off California during the austral winter migrate from New Zealand breeding colonies. The Sooty Shearwater is the most abundant seabird off central California during May to September (Briggs *et al.* 1987). They aggregate in large conspicuous flocks to feed on shoaling fishes, squid, and euphausids that concentrate in productive shelf waters influenced by coastal upwelling (Briggs and Chu 1986). Single flocks can extend for many kilometers and number in the 10,000– 100,000s. Their aggregated dispersion along the populated coast and near offshore shipping lanes makes shearwaters particularly vulnerable to oil pollution. Numbers off California have declined precipitously during the past decade due to a combination of factors, including marine climate change, incidental fisheries take, and pollution (Veit *et al.* 1996, 1997, Lyver *et al.* 1999, Uhlmann and Moller 2000, Oedekoven *et al.* 2001, Uhlmann 2001).

The most easily reversed detrimental impact to New Zealand shearwater breeding populations is predation by introduced predators. Rats (*Rattus spp.*), stoats (*Mustela erminea*), feral ferrets (*M. furo*) and feral house cats (*Felis catus*) were introduced 125–200 years ago and now kill both shearwater adults and chicks at mainland colonies (Hamilton and Moller 1995, Lyver 2000, Jones 2000, 2001). The Polynesian or Pacific rat (*R. exulans*), also called the kiore, was introduced to breeding islands by Mäori several centuries ago and the black rat (*R. rattus*) was introduced during the 1960s. Whereas Norway rats (*R. norvegicus*) are destructive predators of shearwater on mainland colonies, and until recently on Campbell Island, the more serious threat to shearwater eggs and chicks is posed by the black rat and the smaller Polynesian rat. Rats

probably kill some eggs but their main population impact is caused by predation of young chicks just after the 'guard stage' when both parents must leave the chick unattended in order to forage for themselves and their chick. Direct action to eliminate predation of shearwaters by introduced rats at breeding colonies will greatly aid the Trustees' efforts to restore the injured shearwater population.

Although there have been no formal studies of the impact of rats on shearwater abundance, accumulating evidence indicates negative effects of rat predation are occurring. Inferences indicating rat impacts include:

- Declines in seabird abundance and total elimination of some seabird breeding colonies have been well documented in New Zealand and other Pacific islands (Atkinson *et al.* 1978, King 1990, Towns *et al.* 1990).
- Predation by introduced mammals has been identified as the most serious threat to New Zealand seabirds (Taylor 2000 a and b). Rats are listed as the main threat, especially to the smaller seabirds. Continued eradication of rats from island breeding colonies is the main recommended conservation strategy. Rats impact Grey Petrel (*Procellaria cinerea*), Black Storm-Petrel (*Oceanodroma melania*), Cook's Petrels (*Pterodroma cookii*), Chatham Island Taiko (*Pterodroma magentae*), New Zealand Sooty Tern (*Sterna fuscata*), and several non-threatened seabird species.
- Norway rats killed virtually every Sooty Shearwater chick on Campbell Island during a 1985/86 study.
- There was no breeding of shearwaters in 1994/95 and 1995/96 at the Taiaroa Head Reserve colony where mustelids and feral house cats were virtually eliminated, but rats were abundant.
- Rats occur at very high densities on the Big South Cape Islands group considered in this proposal for eradication.
- Chick harvest rate (associated with traditional harvesting by the Mäori) declined sharply from 1970 to 1973 on Taukihepa (the main Big South Cape Island proposed for eradication) 6 to 9 years after the accidental introduction of *R. rattus*. The timing of this decline coincides with when the 1964 and 1965 cohorts of eggs and chicks would have re-appeared for breeding if they had not been killed by rats. The shearwater research team is currently seeking additional chick harvest diaries to determine if similar perturbation in harvest rates occurred on Pukeweka and Rerewhakaupoko, compared with nearby rat-free islands.

Sooty Shearwater are a culturally important species for the Rakiura Mäori, New Zealand's southern-most indigenous people. The Ngäi Tahu Settlement Act (1987) established the Rakiura Mäori as environmental stewards for this species and returned to them ownership and management rights of shearwater breeding islands. The Rakiura Mäori harvest Sooty Shearwater for food, oil and feathers. The annual journey to harvest chicks from the islands is an important activity for the Rakiura Mäori. The Rakiura Mäori abide by traditional teaching and bylaws to regulate chick harvest and to protect the adult birds and their island breeding habitat. The Rakiura Mäori community instigated a long-term research project called *Kia Mau Te Titi Mo Ake Tönu Atu* ("Keep the Titi or Shearwater Forever") to work toward ensuring that the shearwater populations remain available for future generations. Because of their concern for the shearwaters and their traditional harvest, the Rakiura Mäori are supportive of this project and will be involved in its implementation.

#### 4.5.7.3 Project Descriptions and Methods

Currently about 47% of the total area of Sooty Shearwater breeding ground in New Zealand is infested with rats. The first priority for eradication is the Big South Cape Island group. The Big South Cape Islands include Taukihepa (939 ha), Pukeweka (3 ha), and Rerewhakaupoko (30 ha) The Big South Cape Island group is sufficiently far from the Rakiura mainland that rats could not re-invade naturally. Eradication of black rat from the Big South Cape Islands would reduce by one half the total breeding area infested by rats, and benefit the shearwater population dramatically.

In addition to eradicating black rats from the Big South Cape Islands, it is also proposed that Polynesian rats (*R. exulans*) be eradicated from Mokonui (86 ha), the next largest island in the area with rats remaining. Successful eradication from both areas would leave only about 14% of the total New Zealand shearwater breeding area infested with rats.

Rats can swim at least 500 m. Therefore, the eradication campaign must occur simultaneously on all three of the Big South Cape islands. The isolated nature of the Mokonui precludes potential natural reinvasion. Combining the eradication work on Mokonui with Big South Cape islands operations allows cost-sharing and would be much more cost-effective than eradicating rats from each island separately. Efficiency gain results from taking full advantage of the assembled helicopter teams and equipment and trained personnel when at the remote southern islands.

The project will use Pestoff<sup>TM</sup> rodenticide (20 ppm Brodifacoum). Cereal baits will be dyed green to minimize uptake of baits by birds as per Department of Conservation requirements. The bait has a field life equivalent to approximately 1-inch of rainfall. Two drops of bait are planned using helicopters, the first at 8 kg/ha to be carried out on the first suitable forecast after an agreed date. The optimum time for the drop will be around 1st of July when rats are unlikely to be breeding and probably have the least natural foods available as alternatives to bait. The breeding shearwaters will be absent from the islands at this time. The second drop will be at 4 kg/ha, which will take place in the next suitable weather window at least 5 days after the first drop. This second drop is to ensure that there are no gaps in the bait coverage and to lengthen the time that rats have access to bait. The first drop will be done in strips with 50 % overlap between passes (*i.e.* 4 kg/ha coming out of the helicopter delivery bucket, sowing the 8 kg/ha on the ground). The second will involve 20% overlap. This strategy maximizes the proven quality standard required for total eradication, and minimizes the amount of toxin introduced to the environment. On each drop, cliff areas will be flown twice to ensure sufficient bait is applied to these areas (*i.e.* 16 kg/ha over steep areas equates roughly to 8 kg/ha planar area).

The rodent eradication project methods proposed have been proven to be effective against rats on islands throughout the world. These methods have been used successfully for other eradication projects in New Zealand including Whenua Hou (1,900 ha), Kapiti Island (2,200 ha) and Raoul Island (1,300 ha). The first two operations were proven successful, and results on the other islands are pending two more years post-drop before success can be established.

The proposed actions will comply with the New Zealand statutory processes for Environmental Impact Assessment and resource approval. The New Zealand Department of Conservation and Rakiura Tïtï Islands Administering Body (RTIAB) will guide the overall project and handle all

statutory requirements. Aerial broadcast of rodenticide requires resource approval from the Southland Regional Council. Similar to the U.S., this approval requires the development of an Environmental Impact Assessment. The project will be publicly announced and individuals and groups have the opportunity to submit formal comments on the proposed eradication. The Council will consider all objections before permitting aerial dispersal of rodenticide. Decisions may be appealed to the New Zealand Environment Court.

The rat eradication operation will require a full health and safety plan, as required by the New Zealand Department of Conservation's (DOC) policy. The safety plan will cover the handling of bait, work around helicopters, boat travel, etc. New Zealand has now successfully completed many such aerial poisoning campaigns to eradicate rodents from islands (Veitch and Bell 1990 and Veitch and Clout 2002). As a further safeguard, the New Zealand Department of Conservation is required to obtain additional internal consents for the use of toxins. The Department is required to notify the local 'Medical Officer of Health' who will manage any human health issues.

To help guide the project both in the development and implementation, an international working group will be established. The project's preliminary working group includes members of the RTIAB, Rakiura Tïtï Islands Committee (RTIC), DOC, the *Kia Mau Te Tïtï Mo Ake Tönu Atu* ("Keep the Tïtï Forever") research team from the University of Otago, the United States-based non-profit research group *Oikonos*, and independent consultants from the United States. The RTIAB, a statutory non-profit body established under the Ngäi Tahu Settlement Act 1997, consists of 10 elected representatives of the Rakiura Mäori community. They will consult with the Rakiura Mäori community in regular meetings to discuss the rat eradication.

# 4.5.7.4 Environmental Consequences (Adverse and Beneficial)

### **Beneficial Effects**

The project will benefit multiple island ecosystems including the terrestrial faunal community, as well as restoring shearwaters. Introduced rats have probably altered regeneration patterns, so restoration of plant processes can also be expected. Re-introduction of several threatened native species [e.g., saddleback *Philesturnus carunculatus*)] or ones similar to those driven extinct by the rat predation will suggest that eradication has been successful. A general increase in invertebrate, lizard, bird and bat populations is expected after initial reductions immediately following poisoning (Towns *et al.* 1990, Towns 1991, Veitch 1994, Towns 1996, Empson and Miskelly 1999, Taylor 2000a, Veitch and Clout 2002).

### **Adverse Impacts**

Potential adverse impacts mainly involve potential poisoning of non-target native species (Colvin *et al.* 1991, Department of Conservation 1996, McClelland 1999). Because there are no land mammals native to New Zealand, the risk of impacted non-target species is minimal. Nevertheless, care is needed to minimize loading and delivery of the bait in order to minimize risks to non-target species (Godfrey 1985, Eason 1992, Eason and Spurr 1995, WHO 1995). Many of the species present on the islands proposed for rat eradication have also been present during previous poisoning operations elsewhere in New Zealand. Monitoring of these species during other operations has shown that while there may be some individual losses at the time of

poisoning, no species is at risk at a population level (Towns 1991, Robertson *et al.* 1993, Ogilvie 1997, Empson & Miskelly 1999). The monitoring has shown that the populations rapidly recover from any losses and will generally reach numbers far in excess of levels when rats were there.

# 4.5.7.5 Probability of Success

World-wide, in the course of more than 100 island rodent eradication attempts, there have been no cases of failure where proven methods were applied with appropriate care and planning (C.R. Veitch in litt. 26 November 2002). Most of these eradications have occurred in New Zealand. The same team that would direct the eradication project described here has just completed the largest and most logistically difficult rodent eradication program yet attempted – to rid the sub Antarctic Campbell Island of Norway rats. Campbell Island is more than ten times the size of the combined islands targeted in this proposal and much more remote. Proof of eradication success at Campbell Island will not be available for two more years, but preliminary signs are encouraging (P. McClelland, *pers. com.*). In California, a similar project on Anacapa Island has been successful and led to a significant increase in the number of successful seabird nests. The Trustees fully expect this project to be successful and for Sooty Shearwater productivity to increase substantially as a result. This will lead directly to more shearwaters off the San Mateo County coast in the fall.

# 4.5.7.6 Performance Criteria and Monitoring

Population monitoring before and after the application of rodenticide will provide data to evaluate the effectiveness of this project and determine the recovery time for these shearwater colonies. The project will include 'before' and 'after' monitoring data (burrow occupancy, hatching success, chick survival, and breeding success) during 3-5 years of intensive monitoring on the Big South Cape islands and Mokonui (impact sites) and islands with and without rats (control sites). The success of the project will be measured by documenting increases in breeding success by shearwaters before and after rat eradication.

Sooty Shearwater population recovery is expected to be slow relative to other birds because shearwaters are long-lived, have low annual productivity, and do not begin breeding until about seven years of age. As a result, documentation of the project's success on a population level will be augmented by using mathematical models. Preliminary mathematical models of shearwater population dynamics have already been developed (Hamilton and Moller 1995, Hunter *et al.* 2000a, Jones *et al* in press) so the simulations of the proposed rat eradication project should be rapid and cost-effective. The RTIAB hopes to continue to monitor population with funds, other than the Command Spill funds, to independently validate model predictions.

Predicted recovery will then be tested by repeated monitoring of fixed plots on impact and control sites 8 and 9 years after eradication (2012 and 2013), by which time the additional fledglings resulting from the elimination of predators will have been recruited to the breeding population.

Long-term benefits of rat eradication are critically dependent on establishing effective quarantine measures amongst the Rakiura Mäori harvesters and other visitors to the Big South Cape Islands.

The project will establish quarantine measures to be maintained by the RTIAB, thus ensuring long-term viability of the eradication. Similar programs have been established on the Pribilof Islands, Alaska by State and Federal agencies in co-operation with the Tribal Government of the Pribilof Islands and the native Tanadgusix Corporation. They work and plan together to protect these important seabird colonies from potential "rat spills". These well-planned programs provide a model framework for similar effective measures to be imposed by the project. The harvesters carry considerable quantities of gear and food supplies to the islands, so effective management and educational outreach is essential to prevent re-introduction by rodent 'stowaways'.

# 4.5.7.7 Evaluation

Approximately 70% of recorded animal extinctions have occurred on islands, and most of these extinctions, including more than half of all seabird extinctions, were caused by invasive species. The most easily reversed detrimental impact to the Sooty Shearwater is to focus restoration on the breeding grounds in New Zealand. The successful implementation of this project would protect a substantial portion of the shearwater breeding area from rats.

The Trustees have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this projects is consistent with these selection factors. The Trustees determined that this type and scale of project would effectively provide appropriate compensation for Sooty Shearwaters injured as a result of the Spill and have selected this project as a preferred alternative.

| Description              | Cost (all years) | Comment |
|--------------------------|------------------|---------|
| Eradication              | \$234,000        |         |
| Quarantine Procedures    | \$39,720         |         |
| Monitoring (pre and post | \$87,000         |         |
| implementation)          |                  |         |
| Education/Outreach       | \$1,980          |         |
| Administration           | \$27,600         |         |
| Total                    | \$390,300        |         |

### 4.5.7.8 Budget

### 4.5.8 Lost Human Use Restoration Projects

### 4.5.8.1 Goals and Nexus to Injury

The lost human use restoration projects will be focused on the recreational areas that were impacted by the Command Spill. To develop potential restoration projects that could be implemented to compensate for human use impacts the Trustees collected restoration concepts from the public and staff of CDPR, San Mateo County, and the Fitzgerald Marine Reserve. Projects developed will be designed to avoid impacts to wildlife.

The Trustees have narrowed the focus of the human use projects to three sites: Half Moon Bay State Beach, Seal Cove Beach at the Fitzgerald Marine Reserve, and improvement and enhancement of the Mirada Surf Property.

Enhancement of the Mirada Surf property will address the loss of human use by providing the public with an additional safe, public access area at the shoreline. The property lies just south of "Surfer's Beach" and is prominently visible from the Highway 1. The open nature of the site combined with its location makes it a natural destination for coastal visitors. Coastal access and the coastal trail on the site are not yet improved.

# 4.5.8.2 Background

The area impacted included over 15 miles of shoreline in San Mateo County. The Command Oil Spill interrupted the flow of existing recreational services to individuals in beach related activities (e.g., walking, jogging, surfing, tidal pool viewing, and picnicking) on the coastline from Montara State Beach to Bean Hollow State Beach. Combining total lost use with total diminished use, the total value of human use impacts resulting from the Command Spill was calculated to be \$113,386 (see discussion in Introduction). Based on this estimate of injury, the MOU allocated approximately \$200,000 for projects benefiting shoreline and human use projects.

# 4.5.8.3 Project Description and Methods

At the Fitzgerald Marine Reserve, the project involves replacement of a heavily worn walkway/staircase to Seal Cove Beach, an intertidal area where guided interpretive walks are conducted. This walkway/staircase, which consists of older decomposing railroad timbers, contains an 80-foot change in elevation. The proposed project would greatly enhance access and safety at this heavily used area.

At Half Moon Bay State Beach the proposed project involves improving beach access and protection of natural resources through construction of a stairway to the beach. The purpose of the project is to improve public access to the coastline at the State Beach and protect natural resources. CDPR will design and construct the stairs and walkway to enhance coastal access. By defining appropriate pathways and beach access points, CDPR can eliminate a network of informal paths that have caused erosion and damage to sensitive resources. For example, trails and access points will be directed away from the nesting area of the Western Snowy Plover.

Mirada Surf is a 49-acre parcel located at the south end of El Granada, a community in the unincorporated mid-coast of San Mateo County. The Mirada Surf Property has been identified for open space and parkland on the local coastal plan maps for over 20 years, but it was privately owned. Its mixed terrain supports numerous habitats, including coastal bluff, a creek with healthy native willows, seasonal wetlands, grasslands and forested hillsides. The Mirada Surf property is the missing link of the Coastal Trail between Pillar Point Harbor and Half Moon Bay.

On August 4, 2003, the County of San Mateo took title to the Mirada Surf Oceanside parcel. The site will remain in permanent public ownership and is dedicated for open space and recreational activities. The council proposes to contribute funds to assist in the implementation of the next phase of the project: the completion of the missing link of the coastal trail and coastal access improvements. The County already has secured a \$100,000 grant to pay for the planning, design and permitting of the trail, access improvements and other amenities. It is anticipated that

the planning, design, and permitting process will take nine to twelve months and that actual improvements will begin in Spring of 2005.

# 4.5.8.4 Environmental Consequences (Adverse and Beneficial)

# **Beneficial Effects**

These projects should result in positive benefits by enhancing the quality and amount of public use at the affected sites which were affected by the spill. Improvements to beach access to Half Moon Bay State Beach and Seal Cove will prevent or minimize future adverse impacts to vegetation which is currently affected by soil erosion caused by use of informal foot trails. This will result in additional project benefits since impacted vegetation will recover and soil erosion will be minimized or prevented.

Implementation of these projects will result in an improved visitor experience to these beaches. The project at Half Moon Bay and Seal Cove will provide visitors with safer and more accessible routes to the beach. The Mirada Surf property is the missing link of the Coastal Trail between Pillar Point Harbor and Half Moon Bay. The purchase of Mirada Surf will close the gap in the Trail and enhance safe public access and recreation, protect sensitive wetlands and arroyo willows, and preserve open space and native habitats.

# **Adverse Impacts**

No significant adverse economic impacts are expected to occur as a result of this project. To minimize potential short-tem impacts to human use that may occur during construction, the projects will be implemented during periods of low use. Potential environmental impacts will be addressed through the permit process. The improvements will likely result in increased visitation which will likely result in an increased need for trash control and safety patrols. These needs can be met with existing resources.

## 4.5.8.5 Probability of Success

Considering the unimproved condition of the sites targeted for improvement, the probability of success for these projects is very high. Similar projects at Half Moon Bay State Beach have resulted in increased use and improved public safety.

## 4.5.8.6 Performance Criteria and Monitoring

Performance criteria for these projects will be the completion of the project elements described above. Monitoring is not practical or cost-effective for this project. Ongoing maintenance of the new facilities will be provided by CDPR and San Mateo County personnel.

## 4.5.8.7 Evaluation

These projects should result in positive benefits by enhancing the quality and amount of public use at Half Moon Bay State Beach, Seal Cove, and Mirada Surf, which were affected by the Spill.

The Trustees have evaluated these projects against all threshold and additional screening criteria developed to select restoration projects and concluded that this projects is consistent with these selection factors. The Trustees determined that this type and scale of projects would effectively provide appropriate compensation for lost or diminished beach user days that occurred as a result of the spill and have selected these projects as preferred alternatives.

#### 4.5.8.8 Budget

| Description                    | Cost (all years) | Comment |
|--------------------------------|------------------|---------|
| Seal Cove Beach Access         | \$125,000        |         |
| Improvement Project            |                  |         |
| Half Moon Bay State Park Beach | \$20,000         |         |
| Access Improvement Project     |                  |         |
| Mirada Surf Recreational       | \$50,000         |         |
| Improvements                   |                  |         |
|                                |                  |         |
| Total                          | \$195,000        |         |

# 4.6 Cumulative Impacts

The Trustees examined a variety of proposed projects to restore resources and/or services lost as a result of the Command Spill. Project-specific environmental consequences for each preferred project are provided in Sections 4.5. This section addresses the potential overall cumulative impacts to be considered in both OPA and NEPA.

The Trustees believe that the projects selected in this restoration program will not cause significant adverse impacts to natural resources or the services they provide. The Trustees further do not believe that the proposed projects will affect the quality of the human environment in ways deemed "significant."

Cumulative environmental impacts are those combined effects on quality of the human environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what Federal or non-Federal agency or person undertakes such other actions (40 CFR 1508.7, 1508.25(a), and 1508.25(c)). Since the projects are designed to achieve recovery of injured natural resources, the cumulative environmental consequences will be largely beneficial. Although this plan directs efforts at restoring injured resources and creating beneficial impacts to injured resources, many other local and regional activities may influence the ability of our project to create a net population or species level benefit for injured seabirds throughout their range. In Central California, serious threats such as oil spills, El Niño impacts, and changes to prey availability may have a negative impact on the recovery of injured seabird populations. Monitoring of projects funded under this final RP/EA will confirm that cumulative impacts will be beneficial rather than adverse. Any unanticipated cumulative adverse effects from a proposed project identified prior to implementation will result in reconsideration of the project by the Trustees.

# 4.7 Non-Preferred Alternatives

|    | Non-Preferred Alternatives                |
|----|---|
| 1  | Seabird Nesting Habitat Restoration and   |
|    | Enhancement on the Farallon Islands       |
| 2  | Año Nuevo Island Seabird Habitat          |
|    | Restoration                               |
| 3  | Appanolio Canyon Steelhead Passage        |
|    | Project                                   |
| 4  | Pescadero Marsh Restoration Plan          |
| 5  | San Vicente Creek Restoration             |
| 6  | Moss Landing Project Monitoring           |
| 7  | Gulf of the Farallon Islands Research     |
| 8  | Seabird Protection in Chile               |
| 9  | Education and Planning for Seabird        |
|    | Protection on Natividad Island, Mexico    |
| 10 | Leash Law Enforcement at Pillar Point     |
| 11 | Education Projects                        |
| 12 | Donations to Existing Programs to Benefit |
|    | Water Quality                             |
| 13 | California Coastal Monument Recreation    |
|    | Planning                                  |
| 14 | Pacifica State Beach Improvement Plan     |
| 15 | Save Our Shores, Clean Boating Program    |

#### **Figure 4- Non-Preferred Alternatives**

The following is a list of projects that the Command Trustee Council considered for funding but has decided not to fund for reasons explained below. These projects were suggested to the Council from members of the public, non-profit organizations, and government agencies during the public comment periods. All of these projects were evaluated using the project selection criteria described above.

Furthermore, they were compared with the preferred projects. Should some of the preferred projects above become infeasible, or should extra funds remain, it is possible that the Council will revisit these projects at a later date.

1. Seabird Nesting Habitat Restoration and Enhancement on the Farallon Islands This project would restore critical seabird nesting habitat on the Farallon Islands for burrow/crevice nesting seabirds such as the Ashy Storm-petrels and the Cassin's Auklet by eradicating the introduced house mouse. The Trustees have rated this project as non-preferred due to financial constraints and a low nexus to the injured resources.

## 2. Año Nuevo Island Seabird Habitat Restoration

This restoration project would revegetate the central marine terrace, the main habitat for burrowing seabirds, with a diversity of native shrub and grass assemblages. The Trustees have rated this project as non-preferred due to financial constraints and a low nexus to the injured resources.

# 3. Appanolio Canyon Steelhead Passage Project

This project would remove a fish barrier and allow passage for steelhead to increase their spawning habitat. As steelheads were not directly impacted by the Spill, the nexus to resources injured by the Spill is low.

## 4. Pescadero Marsh Restoration Plan

Funding was sought to contribute (with matching funds) towards the development of a Pescadero Marsh Restoration Plan. This proposal was less preferred for two reasons: 1) the marsh was not

directly impacted by the Spill, and thus the nexus is low; 2) the project would merely be the development of a plan (much like this one) but with no direct funding for on-the-ground work.

# 5. San Vicente Creek Restoration

This project would focus on storm drain run-off and stream restoration in San Vicente Creek, in order to improve water quality. This would provide benefits not just to the creek, but to the Fitzgerald Marine Reserve at the creek's outfall. This project would provide some direct benefits to the coastal habitat, which was lightly impacted by the Spill, and indirect benefits to seabirds and human recreational beach use. Nevertheless, relative to the other preferred projects, the nexus to the Spill is low and the benefits to impacted resources are relatively small. For this reason, it was not preferred.

# 6. Moss Landing Project Monitoring

This project would augment on-going restoration efforts for Brown Pelican roosting habitat and Snowy Plover nesting habitat near Moss Landing. Specifically, funds were sought to augment the monitoring component of this project, as the project implementation funding needs have already been satisfied. This project was considered and compared to the other projects benefiting Brown Pelicans. Because this project would focus on monitoring only, while the other projects addressed immediate needs at other places along the coast, this project was less preferred compared to them.

# 7. Gulf of the Farallon Islands Research

This project would focus research on the oceanic areas around the Farallon Islands, exploring the possibility of increased preservation and protection of the marine habitat through the creation of a Farallon Archipelago National Marine Park and Preserve. While the implementation of such protection may yield substantial benefits to natural resources, it is difficult and speculative to quantify the direct benefits of this research. Additionally, the criteria imply a strong preference for on-the-ground projects over research. For this reason, this project was not preferred.

# 8. Seabird Protection in Chile

This project would focus on protecting Pink-footed Shearwater (*Puffinus creatopus*) nesting areas in Chile. While this species was present in small numbers during the Spill, none were collected. Furthermore, the option of contributing to the restoration of Sooty Shearwaters in New Zealand offered greater assurance of success and a higher degree of nexus to the Spill. Thus, the Sooty Shearwater project was preferred over this one.

9. Education and Planning for Seabird Protection on Natividad Island, Mexico This multi-pronged project would seek to educate local islanders regarding the effects of introduced predators (e.g., cats, rats, others) on seabirds, to develop a map of the island to assist in enforcement of regulations, to develop and implement a quarantine plan to keep the island free of introduced predators. This project would benefit Black-vented Shearwaters (of which 95% of the world's population nests on this island), as well as Brown Pelicans, Double-crested and Brandt's Cormorants, and Western Gulls. Because goats, sheep, and feral cats have been removed from the island in recent years, and educational outreach with island residents has recently been conducted, this project aims to continue and augment these previous efforts. This project provides only marginal on-the-ground restoration benefits. Thus, the Sooty Shearwater Project was preferred over this one.

#### 10. Leash Law Enforcement at Pillar Point

This project would provide for additional enforcement of leash laws at Pillar Point in order to reduce disturbance of shorebirds. Additionally, it may also provide added benefits for some recreational beach users. Because the disturbance of shorebirds at this location is not likely to impact large numbers of shorebirds, nor any nesting shorebirds, the benefits of this project to shorebirds were thought to be rather small. Additionally, shorebirds were only minimally impacted by the Spill, and thus the nexus to the Spill is low. For these reasons, this project was given lower priority when compared to other projects benefiting impacted bird species.

#### 11. Education Projects

There were several proposals to focus on the education of youth regarding seabird conservation and marine ecology. These included a project to develop curriculum for high school students, the development of a seabird education website, and a proposal to allocate \$1 million for an educational trust fund. As stand-alone projects, these ideas were compared to other seabird projects and were less preferred because they did not provide tangible benefits in the immediate future. However, these projects, specifically the concrete proposals to develop curriculum, would complement the Seabird Colony Protection Program, which focuses education on usergroups most likely to cause disturbance to seabird colonies. Thus, the curriculum development project may be considered as a component of the Seabird Colony Protection Program if funds are available after the implementation of its primary objectives.

#### 12. Donations to Existing Programs to Benefit Water Quality

There were several proposals to donate \$1 million to \$2 million to existing programs such as the Monterey Bay National Marine Sanctuary water quality program, the Agriculture Clean Water Foundation, and the San Mateo County Resource Conservation District. The aim was to allocate funds to improve water quality at various sites. Because this Trustee Council is obligated to use the above criteria to address specific injuries to specific resources from the Command Spill, and because these programs apply a different set of criteria to achieve a different set of objectives, the Trustees cannot make such a donation. However, the Trustees could contribute to specific projects carried out by these programs if they were consistent with the Trustees' goals and criteria.

#### 13. California Coastal Monument Recreation Planning

This project would develop outreach materials and information to increase recreational use of the Bureau of Land Management's rocks off the coast of San Mateo. A comprehensive investigation and planning effort would be undertaken along the San Mateo coast to identify access points for viewing and kayaking along the National Monument rocks, performing an assessment, and identifying partners to increase local tourism tied into rock viewing and use. This project could enhance the quality and amount of public use in areas affected by the Spill. However, this project was less preferred because it does not provide tangible benefits in the immediate future.

#### 14. Pacifica State Beach Improvement Plan

This project would involve the purchase and removal of two houses, restoration of the dunes where the houses are located, the restoration of tidal wetlands associated with San Pedro Creek and the installation of a one mile of pedestrian/multi-purpose trail along the beach and other improvements to recreational facilities. The restoration of the wetlands would improve steelhead trout habitat and coastal shore bird habitat. The dune restoration would enhance foraging habitat for Snowy Plovers. The habitat restoration aspects of this project were less preferred because of a low nexus. Shorebirds were only minimally impacted by the Spill, and there was no documented impact by the spill to steel-head tout populations, thus the nexus is low. For these reasons, this project was given lower priority when compared to other projects benefiting impacted seabird species. The installation of a one mile pedestrian trail and improved recreational facilities was less preferred because the Mirada Surf Property improvement project more effectively fulfills the Trustees' goal of recovering the lost human use injury and is closer to the area of most severe impact.

## 15. Save Our Shores, Clean Boating Program

This project would involve making a contribution to the Save Our Shores oil prevention projects such as the Clean Boating Program. The Clean Boating Program provides tangible oil collection tools to boaters as proactive measures to keep oil out of the water. This project was less preferred because it is more of a prevention project than a restoration project. The Trustees are required under law to use the settlement funds for on-the ground projects that have a goal of restoring, replacing, rehabilitating and/or acquiring the equivalent of natural resources injured and services lost as a result of the Spill.

# 5.0 APPLICABLE LAWS AND REGULATIONS

# 5.1 Overview

The three major laws guiding the restoration of the injured resources and services for the Command Spill are OPA, CEQA and NEPA. These statutes set forth a specific process of impact analysis and public review. In addition, the Trustees must comply with other applicable laws, regulations and policies at the federal, state and local levels.

The potentially relevant laws, regulations and policies are set forth below. In addition to laws and regulations, the Trustees must consider relevant environmental or economic programs or plans that are ongoing or planned in or near the affected environment. The Trustees must ensure that their proposed restoration activities neither impede nor duplicate such programs or plans. By coordinating restoration with other relevant programs and plans, the Trustees can enhance the overall effort to improve the environment affected by the incident.

# 5.2 Key Statutes Regulations and Policies

# **5.2.1 Federal Statutes**

# Oil Pollution Act of 1990, 33 U.S.C. 2701, et seq.; 15 C.F.R. Part 990

The Oil Pollution Act, 33 USC§2706(b), establishes a liability regime for oil spills which injure or are likely to injure natural resources and/or the services that those resources provide to the ecosystem or humans. Federal and state agencies and Indian tribes act as Trustees on behalf of the public to assess the injuries, scale restoration to compensate for those injuries and implement restoration. This final RP/EA has been prepared jointly by NOAA, CDFG, USFWS, CDPR, and CSLC. Each of these agencies is a designated natural resource Trustee under the Oil Pollution Act of 1990 (OPA), 33 USC§2706(b) and/or State law for natural resources injured by the

Command Oil Spill. OPA defines "natural resources" to include land, fish, wildlife, water sources and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States, any State or local government or Indian tribe, or any foreign government. Assessments are intended to provide the basis for restoring, replacing, rehabilitating, and acquiring the equivalent of injured natural resources and services. OPA mandates that the Trustees assess natural resource damages injured under their trusteeship. OPA further mandates that the designated Trustees shall develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent of the natural resources under their trusteeship. The process emphasizes both public involvement and participation by the Responsible Party(ies).

# National Environmental Policy Act, 42 U.S.C. 4321, et seq.; 40 C.F.R. Parts 1500-1508

The National Environmental Policy Act (NEPA) sets forth a specific process of impact analysis and public review. NEPA is the basic national charter for the protection of the environment. Its purpose is to "encourage productive and enjoyable harmony between man and the environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; and to enrich the understanding of the ecological systems and natural resources important to the Nation." The law requires the government to consider the consequences of major federal actions on human and natural aspects of the environment in order to minimize, where possible, adverse impacts. Equally important, NEPA established a process of environmental review and public notification for federal planning and decision making.

Generally, when it is uncertain whether an action will have a significant effect, federal agencies will begin the NEPA planning process by preparing an environmental assessment (EA). The EA may undergo a public review and comment period. Federal agencies may then review the comments and make a determination. Depending on whether the impact is considered significant, an environmental impact statement (EIS) or a finding of no significant impact (FONSI) will be issued.

The Trustees have integrated OPA restoration planning with the NEPA process to comply, in part, with those requirements. This integrated process allows the Trustees to meet the public involvement requirement of OPA and NEPA concurrently.

## The Clean Water Act, 33 U.S.C. 1251, et seq.

The Clean Water Act (CWA or the Act) is the principle statute governing water quality. The Act's goal is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA regulates both the direct and indirect discharge of pollutants into the Nation's waters. Section 301 of the Act prohibits the discharge into navigable waters of any pollutant by any person from a point source unless it is in compliance with a National Pollution Discharge Elimination System (NPDES) permit.

Section 311 of the CWA regulates the discharge of oil and other hazardous substances into navigable waters and waters of the contiguous zone, as well as onto adjoining shorelines, that may be harmful to the public or to natural resources. The Act allows the Federal government to remove the substance and assess the removal costs against the responsible party. The CWA

defines removal costs to include costs for the restoration or replacement of natural resources damaged or destroyed as a result of a discharge of oil or a hazardous substance.

Section 404 of the Act authorizes the U.S. Army Corps of Engineers (the Corps) to issue permits, after notice and opportunity for public hearings, for the disposal of dredged and fill material into navigable waters. Generally, projects which move material in or out of waters or wetlands require section 404 permits. Section 401 of the Act provides that projects that involve discharge or fill to wetlands or navigable waters must obtain certification of compliance with state water quality standards. The Trustees do not anticipate any of the proposed projects will require such permits.

## Coastal Zone Management Act, 16 U.S.C. 1451, et seq.

The goal of the Coastal Zone Management Act (CZMA) is to encourage States to preserve, protect, develop and, where possible, restore and enhance valuable natural coastal resources. Participation by States is voluntary. The State of California has enacted the federally approved California Coastal Act.

Section 1456 of the CZMA requires that any federal action inside or outside of the coastal zone that affects any land or water use or natural resources of the coastal zone shall be consistent, to the maximum extent practicable, with the enforceable policies of approved State management programs. It states that no federal license or permit may be granted without giving the State the opportunity to concur that the project is consistent with the State's coastal policies. The regulations outline the consistency procedures.

The Trustees do not believe that the final RP/EA will adversely affect the State's coastal zone. However, to comply with the CZMA, the Trustees intend to seek the concurrence of the State of California that their preferred alternatives are consistent to the maximum extent practicable with the enforceable policies of the state coastal program.

# Endangered Species Act, 16 U.S.C. 1531, et seq.

The purpose of the Endangered Species Act is to conserve endangered and threatened species and the ecosystems upon which they depend. The Endangered Species Act (ESA) directs all federal agencies to utilize their authorities to further these purposes. All federal agencies are required to ensure that any action that they authorize, fund or carryout is not likely to jeopardize the continued existence of any endangered or threatened species, or result in the destruction or adverse modification of habitat designated as critical for such species, unless the agency is granted an exemption for the action. Under the ESA, the National Marine Fisheries Service (NOAA Fisheries) and the USFWS publish lists of endangered and threatened species. If a federal agency proponent (action agency) of a project determines that a listed species may be in the action area of the project, the agency must consult with the Fish and Wildlife Service and/or NOAA Fisheries to ensure that implementing the project will not jeopardize the listed species. If the action agency concludes that the project will not adversely affect a listed species or its critical habitat, it submits a "not likely to adversely affect determination" to the USFWS and / or NOAA Fisheries for its concurrence. If the project constitutes a major construction activity, then the action agency must prepare a biological assessment with a more in-depth evaluation of the potential effects of the project on the listed species, which may still lead to a not likely to

adversely affect determination. If the project is likely to adversely affect either a listed species or its critical habitat, then more formal consultation procedures are required.

The federally endangered Marbled Murrelet and California Brown Pelican and the federally threatened Western Snowy Plover may utilize and nest on beaches and in forests which may be included in selected areas for implementing restoration projects. Marbled Murrelets nest near and around the corvid control projects sites and nest within the acquisition project sites. Corvid and Marbled Murrelet surveys and corvid removal activities will occur in a manner that will not adversely affect Marbled Murrelets, and are intended to increase nest success of Marbled Murrelets. Several species of birds, including the Brown Pelican and the Western Snowy Plover may utilize beaches near the human use projects and seabird restoration projects. These projects will be implemented outside of the nesting and rearing season and will not be located within zones of the beaches used for nesting.

The Trustees do not believe that any of their projects constitute a major construction activity, or that they will adversely affect listed species, and do not believe that a formal consultation is required to complete the ESA consultation requirements. The Trustees will submit this determination to the USFWS and will seek its concurrence prior to implementing any proposed activities. If the Trustees determine that a restoration project planned in the future will have an adverse effect on a threatened or endangered species, the Trustees will either redesign the project, substitute another project, or conduct a Section 7 consultation with the USFWS and/or NOAA Fisheries, as appropriate.

## Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801, et seq.

The federal Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) as amended and reauthorized by the Sustainable Fisheries Act (Public Law 104-297) establishes a program to promote the protection of essential fish habitat (EFH) in the review of projects conducted under federal permits, licenses, or other authorities that affect or have the potential to affect such habitat. After EFH has been described and identified in fishery management plans by the regional fishery management councils, federal agencies are obligated to consult with the Secretary of Commerce with respect to any action authorized, funded, or undertaken, or proposed to be authorized, funded, or undertaken, by such agency that may adversely affect any EFH.

The Trustees believe that the projects identified in the Final RP/EA will have no adverse effect on EFH and will promote the protection of fish resources and EFH.

## National Historic Preservation Act, 16 USC 470 et seq.

Compliance with the National Historic Preservation Act of 1966 would be necessary for proposed Federal or Federally assisted undertakings (as defined in the Act and implementing regulations) in areas listed, or that or eligible for listing, on the National Register for Historic Places. The diversity and scope of the proposed actions may have the potential to disturb both exposed and buried cultural resources. When specific project activities have been defined, compliance with Section 106 of the National Historic Preservation Act will occur as appropriate at the site-specific project level to avoid adverse effects.

# Fish and Wildlife Coordination Act, 16 U.S.C. 661, et seq.

The federal Fish and Wildlife Coordination Act (FWCA) requires that federal agencies consult with the USFWS, NOAA Fisheries, and state wildlife agencies for activities that affect, control or modify waters of any stream or bodies of water, in order to minimize the adverse impacts of such actions on fish and wildlife resources and habitat. This consultation is generally incorporated into the process of complying with Section 404 of the Clean Water Act, NEPA or other federal permit, license or review requirements.

The Trustees do not expect the Final RP/EA to implicate the FWCA, but may consult with the appropriate agencies.

## Marine Mammal Protection Act, 16 U.S.C. 3371, et seq.

Under the Marine Mammal Protection Act (MMPA), the Secretary of Commerce is responsible for the conservation and management of pinnipeds (other than walruses) and cetaceans. The Secretary of the Interior is responsible for walruses, sea otters, polar bears, manatees, and dugongs. The Secretary of Commerce delegated MMPA authority to NOAA Fisheries. Title II of the Act established an independent Marine Mammal Commission and its Committee of Scientific Advisors to oversee and recommend actions necessary to meet the intents and provisions of the Act. The Act provides that the Secretary shall allow the incidental, but not intentional, taking, by U.S. citizens engaged in activities other than commercial fishing of small numbers of depleted as well as non-depleted marine mammals if, after notice and opportunity for public comment, the Secretary finds that the total of such taking will have a negligible impact on the affected species or stock, and prescribes regulations setting forth permissible methods of taking, and requirements for monitoring and reporting such taking." However, the 1994 Amendments provide that this regulation requirement may be waived provided that the proposed activity results in only harassment, and no serious injury or mortality is anticipated.

The Trustees do not expect the Final RP/EA to "take," "harass," or "injure" any species protected under the MMPA.

## Migratory Bird Treaty Act of 1918, 16 U.S.C. 703, et seq.

The Migratory Bird Treaty Act (MBTA) implements four international treaties involving protection of migratory birds, including all marine birds, and is one of the earliest statutes (amended several times) to provide for avian protection by the Federal Government. Among its other provisions, it broadly prohibits actions to "pursue, hunt, take, capture, kill, attempt to take, kill, possess, offer for sale, sell, offer to purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird...or any part, nest, or egg of such bird." Exceptions to these prohibitions are only allowed under regulations or permits issued by USFWS. Hunting of game birds, including waterfowl and certain shore birds, is annually regulated through a process in which the USFWS sets "framework regulations" based on the best current population data available, and States pass regulations that conform to those Federal regulations. All other prohibited actions are only allowed under specific permits issued by the USFWS. Criminal

violations of this Act are enforced by USFWS, and it is also the primary statute under which USFWS and Interior have responsibility to manage all migratory birds wherever they occur, including marine birds.

The MBTA also is the basis for USFWS oversight and permitting of collection and preservation or rehabilitation of birds oiled during spill response, which usually provides the primary data for determining extent of injury to marine birds and the need for restoration.

Projects identified in the Final RP/EA will be conducted in full compliance with the MBTA.

# National Marine Sanctuaries Act, 16 U.S.C. 1431, et seq.

The National Marine Sanctuaries Act (NMSA) prohibits the destruction, loss of, or injury to any sanctuary resource and any violation of the Act, any regulations, or permits issued pursuant to the NMSA. The Secretary of Commerce (Secretary) is required to conduct such enforcement activities as are necessary and reasonable to carry out the Act. The Secretary may issue special use permits which authorize specific activities in a sanctuary, in order to establish conditions of access to and use of any sanctuary resource, or to promote public use and understanding of a sanctuary resource.

The NMSA also establishes liability for response costs and natural resource damages for injury to sanctuary natural resources. Under the Act, the Secretary may undertake or authorize all necessary actions to prevent or minimize the destruction or loss of, or injury to, sanctuary resources, or to minimize the imminent risk of such destruction, loss, or injury. Furthermore, the Secretary shall assess damages to sanctuary resources. The Act defines natural resource damage to include the cost of replacing, restoring, or acquiring the equivalent of a sanctuary resource; the value of the lost use of the resource pending its restoration the cost of damage assessments; and reasonable monitoring costs. The Secretary is required to use recovered response costs and damages to finance response actions and damage assessments to restore, replace or acquire the equivalent of the injured sanctuary resource, and to manage and improve national marine sanctuaries.

# Park System Resource Protection Act, 16 U.S.C. 19jj

Public Law 101-337, the Park System Resource Protections Act (16 U.S.C. 19jj), requires the Secretary of the Interior (Secretary) to assess and monitor injuries to the National Park Service (NPS) resources. A "park system resource" is defined by the PSRPA as "any living or nonliving resource that is located within or is a living part of a marine regimen or a Great Lakes aquatic regimen...within the boundaries of a unit of the NPS...." The Act specifically allows the Secretary to recover response costs and damages from the Responsible Party causing the destruction, loss of, or injury to park system resources. "Response costs" are defined by the Act to include the costs of actions taken by the Secretary to prevent, abate or minimize the destruction, loss or injury or imminent risk of such destruction, loss, or injury. The Act further provides that "response costs" include monitoring ongoing effects of incidents causing such destruction, loss, or injury.

## Rivers and Harbors Act, 33 U.S.C. 401, et seq.

The federal Rivers and Harbors Act regulates development and use of the Nation's navigable waterways. Section 10 of the Act prohibits unauthorized obstruction or alteration of navigable waters and vests the Army Corps of Engineers with authority to regulate discharges of fill and other materials into such waters. Restoration actions that require Section 404 Clean Water Act permits are likely also to require permits under Section 10 of the Rivers and Harbors Act. However, a single permit usually serves for both. Therefore, the Trustees can ensure compliance with the Rivers and Harbors Act through the same mechanisms.

#### Executive Order (EO) 11988 – Construction in Flood Plains

This 1977 Executive Order directs federal agencies to avoid, to the extent possible, the long-and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct or indirect support of development in flood plains wherever there is a practicable alternative. Each agency is responsible for evaluating the potential effects of any action it may take in a flood plain. Before taking an action, the federal agency should determine whether the proposed action would occur in a flood plain. For any major federal action significantly affecting the quality of the human environment, the evaluation would be included in the agency's NEPA compliance document(s). The agency should consider alternatives to avoid adverse effects and incompatible development in flood plains. If the only practicable alternative requires siting in a flood plain, the agency should: (1) design or modify the action to minimize potential harm, and (2) prepare and circulate a notice containing an explanation of why the action is proposed to be located in the flood plain.

#### **Executive Order 13112 - Invasive Species**

EO 13112 applies to all Federal agencies whose actions may affect the status of invasive species and requires agencies to identify such actions and to the extent practicable and permitted by law (1) take actions specified in the Order to address the problem consistent with their authorities and budgetary resources; and (2) not authorize, fund, or carry out actions that they believe are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, "pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions."

#### Executive Order (EO) 12898 - Environmental Justice

On February 11, 1994, President Clinton issued EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This EO requires each federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority and low income populations. EPA and the CEQ have emphasized the importance of incorporating environmental justice review in the analyses conducted by federal agencies under NEPA and of developing mitigation measures that avoid disproportionate environmental effects on minority and low-income populations. The Trustees have concluded that there are no low income or ethnic minority communities that would be adversely affected by the Final RP/EA. Environmental Justice further requires federal agencies to provide opportunities for community input in the NEPA process. The Trustees will make every effort to involve the affected community by providing notice to members of the public and access to related documents.

# Information Quality Law, Public Law 106-554, Section 515

Information disseminated by federal agencies to the public after October 1, 2002, is subject to information quality guidelines developed by each agency pursuant to Section 515 of Public Law 106-554 that are intended to ensure and maximize the quality of the objectivity, utility and integrity of such information. This Final RP/EA is an information product covered by information quality guidelines established by NOAA and DOI for this purpose. The quality of the information contained herein is consistent with these guidelines, as applicable.

# 5.2.2 State Statutes

# California Environmental Quality Act, Pub. Res. Code 21000-21178.1

The California Environmental Quality Act (CEQA) was adopted in 1970 and applies to most public agency decisions to carry out, authorize or approve projects that may have adverse environmental impacts. CEQA requires that agencies inform themselves about the environmental effects of their proposed actions, consider all relevant information, and provide the public an opportunity to comment on the environmental issues, and avoid or reduce potential environmental harm whenever feasible.

The CEQA process begins with a preliminary review as to whether CEQA applies to the project in question. Generally, a project is subject to CEQA if it involves discretionary action by an agency that may cause an effect on the environment. Once the agency determines that the "project" is subject to CEQA, the lead agency must then determine whether the action is exempt under either a statutory or categorical exemption.

If the lead agency determines that the project is not exempt then an initial study must be prepared to determine whether the project may have a potentially significant effect on the environment. Based on the initial study, the lead agency determines the type of CEQA documentation that will be prepared. The test for determining whether an environmental impact report (EIR) or negative declaration must be prepared is whether a fair argument can be made based on substantial evidence that the project may have a significant effect on the environment.

After reviewing the proposed Final Restoration Plan and Environmental Assessment, the State Trustee (CDFG) determined that the proposed actions will not result in substantial, or potentially substantial, adverse changes in any of the physical conditions within the areas affected by the projects and a Negative Declaration was prepared. Additionally, the State Trustee considers many of these actions to be categorically exempt pursuant to: (1) "Minor alterations to land, water, or vegetation"; (2) "Actions by regulatory agencies for protection of natural resources", and (3) "Actions by regulatory agencies for the protection of the environment." None-the-less, additional Project-specific CEQA compliance may be needed for some of the proposed restoration projects once detailed implementation plans are developed.

The Trustees have integrated both NEPA and CEQA requirements into this Final RP/EA.

# California Lempert-Keene-Seastrand Oil Spill Prevention and Response Act, Government Code Section 9574.1, et seq.

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act, commencing with Section 8574.1, became effective on September 24, 1990. This legislation is the key state compensatory mechanism for subsequent marine oil spills. It establishes a comprehensive liability scheme for damages resulting from marine oil spills. Recoverable damages include injury to natural resources, the cost of rehabilitating wildlife, habitat, and other resources, and loss of use and enjoyment of natural resources, public beaches, and other public resources. Responsible parties are required to fully mitigate adverse impacts to wildlife, fisheries, and wildlife and fisheries habitat by successfully carrying out environmental restoration projects or funding the activities of CDFG to carry out environmental restoration projects.

## California Coastal Act, California Public Resources Code sections 30000, et seq.

The California Coastal Act was enacted by the State Legislature in 1976 to provide long-term protection of California's 1,100-mile coastline for the benefit of current and future generations. The Coastal Act created a partnership between the State (acting through the California Coastal Commission) and local government (15 coastal counties and 58 cities) to manage the conservation and development of coastal resources through a comprehensive planning and regulatory program.

The Commission's authority (called federal consistency review) comes from the Federal Coastal Zone Management Act (CZMA). After California's Coastal Management Program (CCMP) was approved by the NOAA pursuant to the CZMA in 1977, all federal activities affecting coastal zone resources became subject to the Commission's regulatory jurisdiction.

The Trustees do not believe that the RP/EA will adversely affect California's coastal zone resources. However, the Trustees intend to seek the California Coastal Commission's concurrence that their preferred alternative is consistent with California's federally approved Coastal Management Program.

## California Endangered Species Act, Fish and Game Code 2050 et seq.

It is the policy of the State of California that state agencies should not approve projects as proposed which would jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species if there are reasonable and prudent alternatives available. If reasonable alternatives are infeasible, individual projects may be approved if appropriate mitigation and enhancement measures are provided. Under this act, the Fish and Game Commission established a list of threatened and endangered species based on criteria recommended by the Department of Fish and Game.

# California Harbor and Navigation Code section 294

Harbors and Navigation Code Section 294 creates absolute liability for damages from the discharge or leaking of gas, oil, or drilling waste onto marine waters. Damages include cost of wildlife rehabilitation and injury to natural resources or wildlife, and "loss of use and enjoyment of public beaches and other public resources or facilities."

# Public Resources Code, Division 6, Sections 6001, et seq.

The Public Resources Code, Division 6, gives the California State Lands Commission trustee ownership over State sovereign tide and submerged lands. Permits or leases may be required from the State Lands Commission if a restoration project is located on such lands.

# Executive Order 13186 – Protection of Migratory Birds

Executive Order (EO) 13186, *The Responsibilities of Federal Agencies to Protect Migratory Birds,* requires Federal agencies to avoid or minimize the effects of their actions on migratory birds, and, in some cases, to evaluate the effects of actions and plans on migratory birds during environmental analyses. The EO further directs Federal agencies taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service that shall promote the conservation of migratory bird populations.

# 5.2.3 Other Potentially Applicable Statutes and Regulations

Additional statues may be applicable to NRDA restoration planning activities. The statutes listed below, or their implementing regulations, may require permits from federal or state permitting authorities.

- National Park Act of August 19, 1916 (Organic Act), 16 USC 1, et seq.
- Archaeological Resources Protection Act, 16 U.S.C. 460, *et seq.*
- National Historic Preservation Act of 1966 as amended (16 U.S.C. 470-470t, 110)
- Clean Air Act, 42 U.S.C. 7401, et seq.
- Executive Order 11514 Protection and Enhancement of Environmental Quality
- Executive Order 11990 Protection of Wetlands
- Executive Order 11991 Relating to the Protection and Enhancement of Environmental Quality
- Porter-Cologne Water Quality Control Act (Porter-Cologne)
- Marine Life Protection Act (MLPA)

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#### APPENDICES

Appendix A Public Involvement

- Part 1. Synopsis of Written and Public Comments with Trustee Response
- Part 2. Summary of Oral Comments Provided at the Public Meeting
- Part 3. Written Comments Received During the Public Review Process
- Appendix B. Proposals Submitted During Draft Plan Review Process
- Appendix C. Mailing List
- Appendix D. Finding of No Significant Impact NOAA
  - Finding of No Significant Impact-U.S.F.W.S
- Appendix E. State of California Negative Declaration

# **APPENDIX A:** Public Involvement **Part 1:**

## Synopsis of Written and Oral Public Comments with Trustee Responses

The Command Trustee Council received many thoughtful and relevant comments during the public review process. In reviewing and evaluating public comments and proposals, the Trustees have applied the Criteria Used to Evaluate Restoration Project Concepts (Section 4.2, pg. 19). Although after review, some of the comments were not incorporated into the final plan, others have enhanced our final plan. The comments received were grouped into similar headings and the Trustee Council's responses are presented below each comment.

# 1. Requests for extension of comment period due to the size of the plan and to review the administrative record

Some commenters requested an extension of the public comment period in order to have more time to review the draft plan and administrative record. To accommodate these requests the Trustee Council extended the comment period for an additional thirty days. The Trustees considered public involvement to be such an important element of the planning process that the original comment period for the draft plan was over 45 days long, longer than is required under the regulations for an Restoration Plan/Environmental Assessment. In addition the Trustees initiated a public scoping period to solicit ideas and published a Scoping Document prior to the release of the draft plan and held an additional thirty day comment period on that document. The Trustees were not required to produce a scoping document prior to the release of the draft plan. All together the Trustees provided over 120 days for receiving public input into the restoration process.

# 2. Questions related to how the public was notified of the release of the scoping document and draft restoration plan and how the Trustees engaged the public in the restoration planning process

Several commenters raised questions related to the process the Trustee Council used to notify the public of the release of the scoping document and draft restoration plan and how the Trustees engaged the public in the restoration planning process. Appendix C contains a copy of the mailing list which was used to notify the public of the availability of the scoping document and draft restoration plan and of the opportunity to comment on both documents. The Trustee Council also posted news releases in newspapers and on email newsgroups and list servers. In addition, the Trustee Council held two public meetings during which the public was afforded the opportunity to provide oral or written comments on the documents, the restoration planning process and proposed restoration projects. The process of allocating the restoration dollars from the Command Oil Spill is not a formal grant process; therefore, the Trustees are not required to request federal forms such as 424 or other applications for federal assistance when developing restoration alternatives.

As a designated Trustee, each agency on the Trustee Council is authorized to act on behalf of the public under State and/or Federal law to assess and recover natural resource damages and to plan and implement actions to restore, rehabilitate, replace or acquire the equivalent of the affected

natural resources injured as a result of a discharge of oil. The purpose of restoration planning is to identify and evaluate restoration alternatives and to provide the public opportunity for review and comment on the restoration alternatives. The Trustees accomplished this goal by drafting and presenting in the draft RP/EA restoration alternatives developed from their own expertise, discussions with other experts in the field and concepts suggested by the public through the public comment periods. These alternatives were then evaluated against the Criteria Used to Evaluate Restoration Project Concepts (Section 4.2, pg. 19). The Trustees considered a wide range of restoration alternatives before selecting their preferred alternatives. The restoration planning and public scoping process resulted in the identification of 10 preferred and 15 non-preferred proposed restoration projects.

#### 3. Some of the preferred projects have a poor nexus

The Trustee Council received several comments questioning the nexus of some of the preferred projects. Each of the project descriptions includes a "Goals and Nexus to Injury" section. For the seabird projects, the nexus focuses on mortality to certain species, whereby the species impacted by the spill are the same as those that will benefit from the project. For the recreational use projects, the nexus refers to the documented impacts to recreational beach use that occurred as a result of the spill. The beach use projects are intended to improve access to some of the same beaches that were impacted.

There were several comments requesting that funds be spent only in San Mateo County. For recreational use projects, this makes sense, as that is where the beach impacts were located. However, projects designed to restore bird species are best focused on the ecological bottlenecks of the population, which may be on the breeding grounds, at migration stop-over points, or on the wintering grounds. Trustees around the nation have routinely adopted this approach, which has been strongly supported by biologists. In several cases involving migratory birds, this desire to achieve the most ecologically efficient restoration has led to out-of-state and out-of-country projects. For example, in the *North Cape* oil spill off Rhode Island, restoration for injured loons was targeted on protecting breeding areas in Maine. In the Chalk Point oil spill in Maryland, restoration for injured ruddy ducks was focused on breeding areas in the Great Plains. In California, restoration actions for impacts from the *American Trader* oil spill off the southern California. While far from the original spill location, these projects are intended to restore the same populations that occur at the locations where the injuries occurred.

To this end, the Trustee Council has proposed projects that are located at pelican roosting sites from Monterey to the Bay Area, at murre colonies located from Monterey County to Pt. Reyes and the Farallon Islands, and at shearwater colonies in New Zealand. While murres and shearwaters were the two most prevalent species collected during the spill response, there are no shearwater nesting colonies and only a small murre nesting colony in San Mateo County (which will be included in the Colony Protection Project). As noted in the plan, one of the shearwaters collected during the spill response had been banded as a chick in New Zealand and most of California's Sooty Shearwaters use islands off New Zealand as their breeding area. The Trustees expect that the murre and shearwater projects will result in increased numbers of those species visible offshore of San Mateo County. Pelicans are likewise a wide-ranging species, easily foraging over tens or even hundreds of miles in one day. Conservation problems (and project benefits) experienced by pelicans adjacent to San Mateo County will likely affect the same pelicans that transit and forage within the county.

# 4. Allocation of funds to the San Mateo County Resource Conservation District (RCD)

During the public scoping phase in 2002, the RCD suggested the following projects: The Marine Coastal and Education Trust (an endowment), Eliminating Environmental Impacts to Fitzgerald Marine Reserve (San Vicente Creek), Restoration of Pescadero Marsh, Appanolio Canyon Steelhead Passage Project, and Marine and Watershed Resource Planning. None of these projects were listed as "preferred" in the Draft Restoration Plan of December 2003. During the most recent public comment period, the RCD requested funds for some of the same projects, as well as the California Coastal National Monument Education and Use Project.

The Trustee Council received several letters supporting all RCD projects. The Council also received one letter specifically recommending against funding the RCD projects, on the basis of poor project nexus to the spill and poor project management practices by the RCD.

The Council is not in a position to evaluate the RCD's management practices. Instead, we have focused on the proposed projects in light of our project selection criteria (and independent of the implementing agency).

Regarding the projects proposed during the scoping period, the Trustee Council has re-evaluated them and continue to consider them less-preferred. The Command oil spill impacted primarily seabirds, with limited oiling of beaches and some impacts to human recreational uses. The Consent Decree decreed that "seabirds, primarily Common Murres, suffered the greatest injury as a result of the Ocean Spill and that, as a result, the restoration money will primarily be used for projects benefiting seabirds." Common Murres and most of the other seabirds impacted are highly pelagic, occurring well off-shore. Some of the projects proposed by the RCD provide direct benefits to certain resources (e.g. coastal wetlands, steelhead, watersheds) but only indirect benefits to seabirds or public recreation (through the reduction of polluted run-off into the ocean). Others constitute planning and information gathering (e.g. catalog of problems facing resources) or the education of youth. While important, the Council preferred other projects that have a greater likelihood of providing more direct and immediate benefits to seabird populations. The Council found it difficult and somewhat speculative to quantify the benefits of a marginal improvement in ocean water quality to these highly pelagic seabirds.

Regarding the new proposal to "develop materials and information to increase recreational use of the BLM rocks off the coast of San Mateo", the Trustees have been in discussion with the BLM regarding such a project. There are very few offshore rocks in San Mateo County. Access to these rocks would require specialized skills, such as sea kayaking and rock climbing in locations with dangerous exposure. Given the limited number of rocks in the area and the relatively small segment of the population that could use them for recreational purposes, the Trustees have decided to stay with the current suite of recreational use projects that improve beach access in San Mateo County for the general public (Half Moon Bay stairway, Seal Cove stairway, and Mirada Surf enhancements). The Trustee Council has received considerable support for these preferred projects, as well.

# 5. Financial accounting of the settlement dollars

Several comments requested a complete accounting of the settlement dollars. Here is a summary that accounts for all the recovered funds. This table is drawn directly from the Consent Decree, which is available on-line at <a href="http://www.darcnw.noaa.gov/command.htm">http://www.darcnw.noaa.gov/command.htm</a>. The amount for natural resource damages has been increased slightly to account for interest earned. Note that, due to interest, the amount held is always changing. Project costs are based on the estimated budgets. These are estimates only.

| Natural Resource Damages (plus interest)                   | \$4,123,646 |
|--|-------------|
| Proposed Projects  |             |
| Marbled Murrelet Restoration and Corvid Management Project | \$747,200   |
| Marbled Murrelet Land Acquisition and Enhancement Project  | \$400,000   |
| Seabird Colony Protection Project                          | \$1,225,035 |
| Common Murre Nesting Ledge Creation                        | \$59,973    |
| Brown Pelican Roost Site Enhancement and Creation Projects | \$34,188    |
| Seabird Entanglement Reduction and Education Program       | \$22,000    |
| Sooty Shearwater Restoration                               | \$390,300   |
| Seal Cove Beach Access Improvement Project                 | \$125,000   |
| Half Moon Bay State Park Beach Access Improvement Project  | \$20,000    |
| Mirada Surf Recreational Improvements                      | \$50,000    |
| Contingency Fund   | \$589,950   |
| Administration   | \$460,000   |
| Other Penalties and Settlement Amounts                     | \$1,510,758 |
| Civil Penalty under National Marine Safety Act             | \$196,200   |
| Response Costs – California DFG                            | \$242,092   |
| Damage Assessment Costs – California DFG                   | \$36,767    |
| Civil Penalties to California DFG                          | \$324,708   |
| Payment to Oil Spill Prevention and Administration Fund    | \$300,000   |
| Damage Assessment Costs – State Lands Commission           | \$5,991     |
| Trespass Damages – State Lands Commission                  | \$90,000    |
| Civil Penalties to State Water Resources Control Board     | \$5,000     |
| Supplemental Environmental Project—ballast treatment       | \$70,000    |
| Supplemental Environmental Project—wildlife response       | \$150,000   |
| Payment to San Mateo County Health Services Agency         | \$60,000    |
| Payment to San Mateo County District Attorney              | \$30,000    |
| TOTAL  | \$5,634,404 |

Note that this document concerns itself only with the natural resource damages.

## 6. Concerns related to the Sooty Shearwater Restoration Project

Comments were received related to the Sooty Shearwater Restoration Project. These comments related to whether there will be an environmental review of the project in New Zealand, the

concern that rats will return to the islands following the eradication and the potential impacts of the subsistence harvest by the native peoples of New Zealand.

With regard to the question of environmental compliance actions similar to those required in the United States, the proposed actions will comply with the New Zealand statutory processes for Environmental Impact Assessment and resource approval (as outlined in the draft restoration plan on page 67). The New Zealand Department of Conservation has successfully completed many such aerial poisoning campaigns to eradicate rodents from islands. The New Zealand Department of Conservation and Rakiura Titi Islands Administering Body (RTIAB) will guide the overall project and handle all statutory requirements. Aerial broadcast of rodenticide requires resource approval from the Southland Regional Council. Similar to the U.S., this approval requires the development of an Environmental Impact Assessment. The project will be publicly announced and individuals and groups have the opportunity to submit formal comments on the proposed eradication. The Council will consider all objections when deciding whether to permit aerial dispersal of rodenticide.

To help guide the project both in the development and implementation, an international working group will be established. The project's preliminary working group includes members of the RTIAB, Rakiura Tïtï Islands Committee (RTIC), DOC, the *Kia Mau Te Tïtï Mo Ake Tönu Atu* ("Keep the Tïtï Forever") research team from the University of Otago, the United States-based non-profit research group *Oikonos*, and independent consultants from the United States. The RTIAB, a statutory non-profit body established under the Ngäi Tahu Settlement Act 1997, consists of 10 elected representatives of the Rakiura Mäori community. They will consult with the Rakiura Mäori community in regular meetings to discuss the rat eradication.

Another issue raised was the concern that the rats will return to the islands following the completion of the project or if the project isn't successful in removing all the rats. As outlined on page 69 of the RP, long-term benefits of rat eradication are critically dependent on establishing effective quarantine measures amongst the Rakiura Mäori harvesters and other visitors to the Big South Cape Islands. The project will establish quarantine measures to be maintained by the RTIAB, thus ensuring long-term viability of the eradication. Similar programs have been successfully established on the Pribilof Islands, Alaska by State and Federal agencies in co-operation with the Tribal Government of the Pribilof Islands and the native Tanadgusix Corporation. They work and plan together to protect these important seabird colonies from potential "rat spills". These well-planned programs provide a model framework for similar effective measures to be imposed by the project.

The Trustee Council fully expect this project to be completely effective in eradicating rats from the islands. World-wide, in the course of more than 100 island eradication attempts, there have been no cases of failure where proven methods, such as outlined for this project, were applied with appropriate care and planning. A similar project was recently completed in the U.S on Anacapa Island, off the coast of Santa Barbara. Rats were eradicated from the island by broadcasting the bait, brodifacoum, from a helicopter throughout rat habitat in the fall of 2001 and 2002. To date there have been no signs of any rats surviving on the island following the dispersal of the bait and the breeding seabirds have shown significant signs of recovery. The draft plan noted that, even if the project failed, rats would be suppressed to near zero for at least three years, which would still yield considerable benefits. This created some confusion. To clarify, this project has a very high likelihood of success and we do not expect it to fail.

Finally several commenters raised concerns related to impacts to shearwaters from subsistence harvest by the native peoples of New Zealand and the potential effects on the success of the project. The Maori interest in conserving Shearwaters stems from their historical use of these birds in a cultural harvest practice known as "mutton birding". Evidence of mutton birding dates as far back as the 13<sup>th</sup> century, however large-scale mutton birding likely did not occur until the late 1700s. Current research is looking at the possible effects of harvest; however, it is not thought that the current harvest rates are responsible for the declines in Shearwater numbers. It is also argued that because adult birds continue to reproduce up to ages of 35-40 years old, and adults are not taken, harvest has minimal effect on adult populations.

It is thought that invasive mammals are perhaps the greatest threat to shearwater populations. Because shearwaters nest in burrows and lay only one egg per pair, mammals such as rats and mustelids can have a tremendous influence on breeding success. Approximately 47% of the total Sooty Shearwater breeding ground in New Zealand is populated with rats.

# 7. Concerns related to Seabird Colony Protection Project

Some commenters felt that the funds allocated for the Colony Protection Project could be used more effectively on other projects or the goals achieved more affectively by existing agencies. The Trustee Council have evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors. The Trustee Council determined that this type and scale of project would provide appropriate compensation for many of the surface-nesting seabirds injured as a result of the Spill and have selected this project as a preferred alternative.

The Trustees believe that implementation of this project should result in major positive benefits to Common Murres and other surface nesting seabirds by reducing the impact of human disturbance to their nesting colonies. The primary anthropogenic threats to seabirds in California are (not necessarily in order of severity) catastrophic oil spills, chronic oil pollution, conflicts with commercial fisheries and disturbance to breeding colonies. Human disturbance takes numerous forms and includes, but is not limited to, disturbance by aircraft, fishing boats, sea kayakers, sport divers, squid light boats, and unauthorized entrance onto colonies. Through education and prevention activities, this project will strive to minimize the number of disturbance events involving loss of eggs and chicks and thereby increase the population of impacted seabirds. The Trustees expect this project will mirror the success of a program developed in Oregon to protect nesting seabirds at Three Arches National Wildlife Refuge. Monitoring during the breeding season following the implementation of the disturbance reduction program (500 foot area closure during the breeding season) revealed a 39% reduction in disturbance events.

The Trustees disagree with the comments about cost-effectiveness and project design. This project was designed in cooperation with biologists associated with successful seabird restoration and monitoring projects. The budget reflects other recent project costs for specific equipment, labor and materials. To develop the restoration alternatives presented in the draft plan the Trustees consulted experts in seabird conservation. Through these consultations, the Trustees developed a list of threats to seabird populations in central California. The major threats identified included human disturbance to nesting and roosting areas.

Another commenter suggested that the aims of this project can be met by simply asking the FAA, Coast Guard (CG), and DFG to handle it. In fact, part of this project is precisely to coordinate among the various agencies. Protecting seabirds is not a primary mission of the FAA or CG. Furthermore, the CG and other government agencies are one of the user groups that have inadvertently disturbed the seabird colonies. Because CG personnel rotate through the area every two years, constant training regarding local concerns is necessary. Preliminary contacts by trustee agencies have found the CG willing to cooperate. Thus, part of this project involves education and outreach to the FAA, CG, and other agencies on a regular basis. This emulates the similar and successful cooperative project in Oregon.

Finally, one commenter suggested expanding the scope of the project to include sensitive roosting and breeding habitat in Mexico. The Trustees recognize that the populations of pelicans and cormorants that will benefit from this project extend into Mexico and that many of the proposed actions, if carried out in Mexico, would greatly benefit these same populations. The Trustees will examine the possibility of expanding the project into Mexico following the successful implementation of actions in central California if funds remain. Another commenter raised the issue that the project should include important rocks for roosting such as Greyhound Rock, Año Nuevo Island and others. Disturbance reduction actions will be focused on Brown Pelican and cormorant roosting habitat in addition to nesting habitat for Common Murres. An additional commenter suggested that an educational video be made about seabird species affected by the spill and made available at State Park centers. As outlined in the project description, public outreach and education will be a large component of the project and the main method for educating the public in ways to minimize disturbance. Producing an educational video is one of the specific tasks discussed.

# 8. Comments on Brown Pelican Entanglement Reduction and Education Program

One commenter noted that this project should include areas without piers, but with high use by recreational beach anglers. The Trustee Council appreciate this helpful comment. Prior to implementing actions, the Council will be surveying areas where recreational fishing occurs to determine which sites are experiencing problems with entanglement. These surveys will include beach angling areas.

# 9. Comments on the Common Murre Nesting Ledge Creation Project

One commenter raised concerns regarding the Common Murre Nesting Ledge Creation Project. Concerns were related to cost-effectiveness, probability of success and the overall benefits of the project to Common Murres and other seabird species on the island. The goal of this project is to benefit the Common Murre population injured by the Spill. This project will create nesting habitat capable of supporting 200-400 breeding murres on Southeast Farallon Island (SEFI) at the Farallon National Wildlife Refuge (FNWR).

Currently there are few projects available to the Trustees that are able to directly enhance habitat for Common Murres, the species most severely affected by the spill. The proposed project would restore/enhance Common Murre habitat in two ways: 1) it would create additional ledge nesting habitat, and 2) would put a barrier between the murre colony and the path to North Landing, thereby reducing human disturbance. The construction of this blind is expected to create high

quality nesting habitat, encouraging expansion and growth of the adjacent Sea Lion Cove Colony. It is estimated that an additional 200-400 breeding murres (100-200 pairs) will eventually use the newly created habitat. At some point, lack of available secure breeding habitat will become a limiting factor. The expansion of Western Gulls into previously unused areas and the establishment of a permanent human presence on the island have reduced the amount of available murre breeding habitat from historic times. The majority of SEFI is not likely to be recolonized because of the lack of available habitat, loss of habitat to Western Gulls, and the nearby human activities associated with the small field station.

In addition, murres and Brandt's Cormorants nesting on natural cliff/ledge habitat in the area may also benefit from reduced human disturbance. The ledge wall will screen these existing colonies from human (pedestrian) traffic. The Coast Guard is an active cost-sharing partner in this project. They have already broken up the concrete to be used to build the artificial ledges with no cost to the Trustees.

The Trustee Council consider the probability of success for this project to be high based on the results of a similar project in the area. In September 2000, a nesting structure was constructed of a similar concrete rubble material as is proposed for the nesting ledge, in the north landing area. Concrete blocks were stacked upon one another in a design engineered to create habitat for crevice nesting birds and incorporated an observation blind as part of its design. The habitat sculpture was very successful and 9 of the 32 available sites were occupied by Cassin's Auklets in the first year (2001). In 2002, 12 Cassin's Auklet pairs and 1 Pigeon Guillemot pair nested in the created habitat, and in 2003, there were 17 auklet pairs and 1 guillemot pair. The Trustee Council has evaluated this project against all threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with these selection factors. The Trustees Council believe that this project is a cost effective project that will enhance the Common Murre population breeding on the Farallon Islands and aid in their recovery to pre-spill levels.

## 10. Concerns regarding the Marbled Murrelet Restoration and Corvid Management Project

There were several comments raising a variety of concerns regarding the project to address murrelet nest success in the Santa Cruz Mountains. One concern noted that the Santa Cruz Mountain population of Marbled Murrelets is now such a small percentage of the worldwide population that it is insignificant. In fact, Marbled Murrelets are facing declines throughout much of their range. Given that global extinction can and does result from many isolated local extinctions, it is a priority of the Trustees to prevent local extinctions whenever possible. Moreover, the murrelets in the Santa Cruz Mountains represent the southernmost sub-population of this species.

Another comment questioned the relationship between ravens and the decline of the murrelet, given that murrelet populations have been heavily impacted by habitat loss over the past century or more. Prior to selecting this project, the Trustee Council assembled a meeting of regional Marbled Murrelet experts and researchers to evaluate the conservation needs of the species. The impetus for this project came from that meeting where many suggested that recent murrelet declines in the Santa Cruz area have been the result of poor nest productivity. Reducing nest predation is one of the few methods available to increase nest productivity.

Another concern questioned the efficacy of changing human behavior regarding garbage disposal at campgrounds. The Trustee Council evaluated this question prior to selecting the project and was impressed with successes at other campgrounds around the nation. Some examples are provided in the project description. One comment proposed introducing murrelets in areas away from campgrounds. Unfortunately, murrelets are a wide-ranging species, foraging at sea and flying inland many miles to scout for nesting sites. When released, birds fly out to sea and may return to previously utilized nesting areas. Thus, introduction to a specific site is not technically feasible.

Another concern was the perceived "punishment" of ravens, especially given their intelligence. The aim of the project is not to punish any one species, but to restore ecological balance and improve nesting success. The present imbalance threatens the viability of the Marbled Murrelet population.

A final concern was the project's potential to backfire and result in increased predation of murrelet nests. The Trustees examined this potential with agency staff and biologists, specifically with regard to its biological plausibility and whether additional regulatory requirements were warranted. The conclusion of the experts was that this possibility was extremely remote, in part because the nest predation rate is already extremely high. To avoid this remote possibility the project will not be fully implemented until late in the murrelet nesting season this year, when young are no longer in the egg stage and are almost full size. This will reduce the possibility that corvids, who may have switched foraging habits at campgrounds, will predate murrelet nests. Additionally, in all future years of the project, raven removal and corvid control activities will be initiated prior to the beginning of the murrelet nesting season. This will reduce the possibility that corvids who search for alternative food sources will predate murrelets. A similar concern was raised regarding the necessary permits for certain components of the project. State Parks and San Mateo County Parks, who will be implementing the project intend to comply with all applicable laws.

There was one comment to expand the project. The project incorporates an adaptive management phase that will examine possible expansions of the project after several years of implementation. While the Trustee Council will be in a position to evaluate such proposals at that time, the funds would likely have to come from other sources.

Given the discussion above and the available funds, the Trustee Council has elected to retain this project as preferred, and to maintain the same budget allocation for the project.

## 11. Concerns regarding the Marbled Murrelet Land Acquisition and Enhancement Project

Several comments stated that we were not sure if murrelets nested at the proposed acquisition parcel (Girl Scout Creek). To clarify, the "occupied behavior" described in the plan means "nesting behavior". While actual murrelet nests are extremely difficult to locate, nesting behavior is routinely used to evaluate whether or not a stand of timber contains nesting murrelets. In this case, murrelet surveys, designed to detect such behavior, were conducted during the 2002 breeding season. Murrelets exhibiting breeding behavior were detected during all four surveys, indicating that murrelets do nest there presently. Indeed, given that this site

contains suitable nesting habitat away from campgrounds and other human uses, it is an important site for this species.

Another concern raised was that this site is not in need of further protection. Although the property is held by a non-profit organization, transfer to the California State Park system will enhance protection of the Marbled Murrelet habitat in several ways, as outlined in the Restoration Plan. CDPR staff and on-site presence will enable this property to be managed day-to-day and ultimately will be more protective of the resource. It is the position of the Trustees that benefits to murrelets in the far-distant future are most guaranteed when the land is under public ownership and has a management plan that will protect and enhance the habitat. To this end, the Trustee Council has decided to retain this as a preferred project.

# 12. Comments on Lost human use projects

Many commenters have expressed general support of the preferred lost human use restoration projects identified in the draft plan, and specific support of the Mirada Surf and Seal Cove Beach projects. Two commenters expressed concerns that the section of coastal trail that is proposed on the Mirada Surf property should not be paved, nor be allowed to impact the wetlands, vernal pools, or naturally eroding cliffs. The Trustee Council has met with the San Mateo County Parks and Recreation Foundation on the Mirada Surf property and reviewed the preliminary improvement plans. We are satisfied that they will have minimal impact to the sensitive environmental resources on the property.

# **13.** Comments expressing support of preferred alternatives

Several commenters have expressed support of the Trustee Council's approach to look beyond geographic borders and jurisdictional lines for restoration projects, and instead adopting a "whole species" approach. Many commenters have also expressed support of specific preferred projects identified in the draft restoration plan, including:

- The Sooty Shearwater restoration project
- The Common Murre nesting ledge creation
- The Brown Pelican roost site enhancement and protection project
- The acquisition of the Girl Scout Creek property for Marbled Murrlet habitat
- The corvid management project intended to improve the nesting success of Marbled Murrlets
- The seabird colony protection program
- The contribution of funds to assist coastal access improvements on the Mirada Surf Property
- The replacement of the walkway and staircase at Seal Cove Beach.

# 14. Comments in support of Non-Preferred Restoration Alternatives

The Trustees received many comments supportive of using any remaining funds to support the non-preferred projects. The Trustees recognize that these are worthwhile projects with significant natural resource benefits but they were rated as non-preferred because the preferred alternatives provided a stronger nexus to the injured resources and higher overall ecosystem benefits. If there are funds available following the implementation of the preferred alternatives

or some of the preferred projects become infeasible, the Trustee Council will evaluate the possibility of funding some of the non-preferred projects outlined in the RP.

#### **APPENDIX A:** Public Involvement

Part 2: Summary of Oral Comments Provided at the Public Meeting

#### Dave Moore, San Mateo County Parks:

Expressed support for the contribution of funds to assist coastal access improvements on the Mirada Surf Property, the replacement of the walkway and staircase at Seal Cove Beach, and the corvid management project intended to improve the nesting success of Marbled Murrlets.

Keith Mangold, Save Our Shores:

Expressed general support for the preferred projects. Also expressed support for one of the nonpreferred projects, Pillar Point leash law enforcement, because of the project's potential to benefit Snowy Plover and other seabirds that use the beach and dunes.

#### Michelle Hester, Oikonos:

Expressed support of the Trustee Council's approach of looking beyond borders and jurisdictional lines for restoration projects, and instead adopting a "whole species" approach and looking at where the species would receive the most benefit. Also expressed support for one of the non-preferred projects, Año Nuevo Island seabird habitat restoration, because while no oiled Rhinoceros Auklets were recovered during surveys responding to the spill, the database of daily observations at the Farrallon Islands showed that an oiled Rhinoceros Auklet was recovered there during the time of the spill.

Julia Bott, San Mateo County Parks and Recreation Foundation: Expressed support for the contribution of funds to assist coastal access improvements on the Mirada Surf Property.

Lennie Roberts, Committee for Green Foothills:

Expressed general support for the preferred projects, in particular the human use restoration projects. Also praised the criteria used to evaluate each project's nexus to damaged resources.

Deborah Herst, Supervisor Gordon's office, San Mateo County:

Expressed support for the contribution of funds to assist coastal access improvements on the Mirada Surf Property and other projects in San Mateo County, and thanks for the Trustee Council's interest in input from San Mateo County.

### **APPENDIX A:** Public Involvement

Part 3: Written Comments Received During the Public Review Process

19 March 2004

Josh Adams PO Box 1103 Aptos, CA 95001

Trustees of the Command Oil Spill U.S. Fish and Wildlife Service 2800 Cottage Way, Suite 2605 Sacramento, CA 95825

Dear Trustees of the Command Oil Spill,

I would like to provide comment on the proposed Draft Marbled Murrelet Restoration and Corvid Management Project [\$747,200] designed to restore/replace Marbled Murrelets damaged during the T/V Command spill. I agree that the sub-population in the Santa Cruz mountains has suffered loss of habitat, certain historic fishing practices, pollution of nearshore marine waters, and anthropogenic habitat disturbances that likely have led to increased predation rates.

Given the precarious status and high vulnerability of this small, southernmost, isolated population, I support the proposed restoration plan to control potential corvid predators in areas (especially campgrounds) located near and within murrelet nesting areas. The authors of this project, however, have touched on issues, that in my opinion require further clarification.

"The longest available data set [1991 – 2002] (audio/visual detections from Redwood Meadow near Big Basin Redwoods State Park headquarters), suggests a continuous and pronounced decline in the number of nesting birds in that area."

The scientific community, resource managers, and public still lack information regarding the interpretation of forest-based surveys implemented to help understand the population ecology of this vulnerable species. As the authors point out, direct monitoring of Marbled Murrelet nests is extremely difficult.

To assess restoration success, the murrelet plan has suggested and implemented under Phase 1, *Pre-implementation Monitoring* at four campgrounds (Big Basin, Portola, Butano, and Memorial Park). The proposed plan relies on fixed site, audio/visual survey stations near four campground areas "to build on existing data sets ... and augment our ability to detect long-term trends".

The Marbled Murrelet Restoration and Corvid Management Project would more likely establish the required, quantified performance criteria and effective monitoring if they included additional at-sea survey efforts. According to the draft EA/RP, performance criteria of projects should be "clear and measurable". Whereas the forest surveys present highly suggestive data indicative of declines, (1) there is limited biological context for the interpretation of audio/visual detections of murrelets in forests, and (2) it is not clear from the data presented, what the magnitude of decline is given the variability (SD or SE?) presented in Figs. 4, 5. Furthermore, Figures 6 and 7 are presented without measures of variation. The authors infer these data "suggest[s] a continuous and pronounced decline in the number of nesting birds in that area". I hesitate to agree with this conjecture, because there is an urgent need to conceptualize these trends in "average number of calls detected" and to examine relationships with other independent biological measures. The authors point out "at-sea surveys have shown relatively stable population numbers, although with very few juveniles present (Beissinger, pers. com.). However, these surveys have only been conducted for three years and thus lack statistical power." I disagree with the implication that the forest based surveys are statistically better than at sea surveys for detecting trends in the Marbled Murrelet population related to restoration success.

Continued forest surveys are an important component for continued monitoring. I strongly suggest, however, that the Command Trustees implement and support continued at-sea monitoring of this population for the following reasons:

1. There is no quantitative evidence presented to suggest that declining numbers of inland detections measure population trends, and thus serve as a required measure of restoration success. Furthermore, the sampling is non-random and has extremely limited inference capacity.

2. The authors (unlike marine-based studies, i.e. Becker et al. 1997) present no indication of how they would conduct statistical or quantitative analyses required to detect population trends (e.g. density, abundance with appropriate power analyses).

3. The restoration plan cites several studies that used at-sea methods to directly address murrelet population biology and demography (Beissinger and Nur 1997, Peery et al. 2002, Peery et al. in review). These studies and others have created sound, biologically based quantitative reference for continued population studies.

Recent studies of this population indicated significant aggregations (greatest numbers and density) of Marbled Murrelets occur during the post-breeding through pre-breeding period in restricted areas near the coast. This time period in the murrelet's annual cycle has not been well studied, yet at-sea surveys during this period offers an ideal opportunity to monitor population trends, and potential recovery of murrelets breeding in the Santa Cruz Mountains. Well-designed at-sea surveys from July through September would provide the opportunity to enumerate first year juvenile murrelets, thereby providing resource managers with annual quantification of reproductive output (Kulitz and Piatt 1999) and restoration success. Furthermore, from December through April, researches have obtained some of the lowest variances associated with estimating at-sea densities when compared with other surveys conducted during the breeding season, when an unknown proportion of the population is attending inland nest sites. Lastly, inclusion of at-sea monitoring would be more consistent with the Threshold and Additional Criteria outlined by the Trustees, specifically the following:

#### 4.2.1 Threshold Criteria

• Nexus to Injured Resources ~Restoration efforts must be directed at projects that restore, rehabilitate, replace, enhance or acquire the equivalent of the resources and services impacted by the Spill Nexus to damaged murrelets was established via at-sea survey efforts.

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| I apo<br>your | ologia<br>very   | ze for se           | ending this me   | essage b                        | y email, b                              | ut I wante                 | d to thank the                                 | entire Truste                    | e Council team again | 0   |  |

I apologize for sending this message by email, but I wanted to thank the entire Trustee Council team again for your very fine presentation at the January 29, 2004 public meeting in Half Moon Bay regarding the Command

On behalf of the over 1300 family members of the Committee for Green Foothills, I would like to especially compliment the Trustees on the diligence and thought that has gone into your consideration of the most

Printed for Lennie Roberts <lennie@darwin.ptvy.ca.us>

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I have reviewed many proposals for restoration projects on the San Mateo County Coastside in my role as Legislative Advocate for Committee for Green Foothills. Additionally, I have served for several years as a member of the Advisory Commission for Golden Gate National Recreation Area and Point Reyes National Seashore, and as a Project Review Committee member for the Yosemite Fund. All three of these National Parks have been conducting extensive restoration of diverse habitats, from the ocean to the back country of Yosemite, and therefore I believe I have more experience in reviewing proposals than some of the well-meaning but misguided people who have questioned the use of the Command funds.

It is evident that some commenters have viewed the Command funds as an easy source of money for general operations of a local agency or for projects that may be meritorious but have little or no nexus to the damaged resources, or would not have tangible benefits. Some commenters would prefer that you ignore the legal requirements to use the settlement monics for "replacing, rehabilitating or acquiring the equivalent of natural resources injured and services lost" as a result of the Spill. This of course you cannot do in your duty as

I have been impressed by the science and the thought underlying the proposals that have been selected as preferred in the Draft Plan, and by the care with which you have evaluated their compliance with the Threshold Criteria of Nexus to Injured Resources, Feasibility, Public Health and Safety, and Legality.

Thank you all for your hard work on behalf of the public trust resources of the State of California and of the Nation.

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Please let me know as to your final decisions in this matter.

Best Wishes,

Lennie Roberts, Legislative Advocate Committee for Green Foothills 339 La Cuesta Portola Valley, CA 94028

phone: 650-854-0449 fax: 650-854-8134 email: lennie@greenfoothills.org, or lennie@darwin.ptvy.ca.us

Printed for Lennie Roberts <lennie@darwin.ptvy.ca.us>

March 17, 2004

Ms. Charlene Hall USFWS 2800 Cottage Way, Suite 2605 Sacramento, CA 95825 RECEIVED

SACRAMENTO FISH & WILDLIFE OFFICE

RE: Comments on Command Oil Spill Draft Restoration Plan and Environmental Assessment

Dear Ms. Hall

I have enclosed a petition with over 40 signatures concerning the Command Oil Spill draft plan requesting that the Trustees and/or our elected officials reconsider projects proposed and re-open the process for public participation for use of these fine dollars in projects that benefit the community. The majority of signatures are from farmers in San Mateo and Santa Cruz counties who are working together in partnership with state and federal agencies to improve water quality in the Monterey Bay National Marine Sanctuary. The Sanctuary is where the oil spilled. Improving water quality will improve the sanctuary habitat for the benefit of all species, including all the bird species that use the sanctuary as a source of food. All funds should be spent in San Mateo County where the oil washed ashore. I request that the process be re-opened and that all locally elected governing bodies (cities, special districts and advisory councils) be invited to participate in developing projects that benefit their communities.

Sincerely,

Donie figone

Louie Figone 428 Fifth Avenue Half Moon Bay, CA 94019

CC: Tom Lantos Anna Eshoo

Arnold Schwarzenegger Jackie Speier Gene Mullin

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#### Petition for Extension of Time for Public Participation and Comment, Reconsideration of Major Projects Selected by Trustees, and Re-allocation of Funds to Benefit the County of San Mateo

Re: Command Oil Spill Draft Restoration Plan ("Draft") and Environmental Assessment dated December 2003 – Deadline for public comment March 19, 2004 – Proposal to Spend \$4 Million Dollars of restoration funds

To:

Command Trustee Council Pescadero Municipal Advisory Council Midcoast Community Council Half Moon Bay City Council Pacifica City Council Daly City City Council San Mateo County Board of Supervisors State and Federal Legislators And other interested government agencies

The undersigned citizens, taxpayers, farmers, nurserymen, and voters of San Mateo County, urge the above agencies to obtain an extend time for public participation and input, and reconsider the major projects selected by the Trustees, and reallocate expenditure of funds for the benefit of San Mateo County.

1. The lengthy Draft was submitted to the public in December 2003 and there has not been sufficient time for citizens and agencies of San Mateo County to study and comment on the Draft.

2. The major projects selected by the Trustees are flawed and do not reflect the best use of the restoration funds. Other projects should be considered, such as preventing further pollution to the Monterey Bay Sanctuary, the body of water that was injured by the spill.

3. Only 33% of the restoration funds are being spent in San Mateo County, which is where the spill occurred. We are in dire financial straits due to the State budget crisis and the money should be spent in our County to clean up the local environment while stimulating our local economy.

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2. The major projects selected by the Trustees are flawed and do not reflect the best use of the restoration funds. Other projects should be considered, such as preventing further pollution to the Monterey Bay Sanctuary, the body of water that was injured by the spill.

3. Only 33% of the restoration funds are being spent in San Mateo County, which is where the spill occurred. We are in dire financial straits due to the State budget crisis and the money should be spent in our County to clean up the local environment while stimulating our local economy.

Saula Croz Calf 95000 Streeowel Rd Eduald Davenpos G. 9507 P.O. Bor 357 Harr Mach Bag 94019 Watsonvelle 95076 330 Mayellan, HMB3 15 Nelewood Con- Utto watsonilly 85077 P.O. Bx 1420 Watsorville 95076 125 Noney CT. WATSONVILLE 95076 HOWATTING RD. PR dilicco Watsonville Ga. 95077 P.O. BOX 2716 Watzonvelle Ca 25016 650 Laberian Rd With Dowell Unerly Watsonuille CA95076 642 Bridge St. John brasse Belmonth CA 94002 Eclust 48 Heritage ct WATSowell CA 95076 Wichicel 240 Progeen Jui Nos HMR, CA PLONG Chu Yolotos Charles El Gramade Cot 9498 Box 1583

State and rederat Legislators And other interested government agencies

The undersigned citizens, taxpayers, farmers, nurserymen, and voters of San Mateo County, urge the above agencies to obtain an extend time for public participation and input, and reconsider the major projects selected by the Trustees, and reallocate expenditure of funds for the benefit of San Mateo County.

1. The lengthy Draft was submitted to the public in December 2003 and there has not been sufficient time for citizens and agencies of San Mateo County to study and comment on the Draft.

2. The major projects selected by the Trustees are flawed and do not reflect the best use of the restoration funds. Other projects should be considered, such as preventing further pollution to the Monterey Bay Sanctuary, the body of water that was injured by the spill.

3. Only 33% of the restoration funds are being spent in San Mateo County, which is where the spill occurred. We are in dire financial straits due to the State budget crisis and the money should be spent in our County to clean up the local environment while stimulating our local economy.

Watsmville Ca 95076 PO BAX Jeena Andrews 5 Lakeriew Rd. Watsonville CA 95076 278 California Ave Moss Beace CA 94038 780x 427 Rescalardo CA 94660 Ryan Qualla MOSS BEACH, CA 94038 BOX 24 ALLEN



March 19, 2004

Charlene Hall Field Supervisor, U.S. Fish and Wildlife Service 2800 Cottage Way, Room 2605 Sacramento CA 94123 VIA FACSIMILE 916-414-6713

Dear Ms. Hall,

On March 11, the Pescadero Municipal Advisory Council voted unanimously to request that the Command Oil Spill funds be utilized for restoration projects that are to be carried out within San Matco County.

Additionally the Council suggests that no projects be considered which require killing another native species for hypothetical benefit to an endangered species.

Sincerely yours.

ShERNED Catherine M. Peery

Chair

#### Robert Zatkin

140 Springdale Way • Redwood City, CA 94062 Tel./fax (650) 369-6462 • <u>rszatkin@sbcglobal.net</u>

## VIA FACSIMILE

March 19, 2004

Charlene Hull Command Trustee Council 2800 Cottage Way Suite 2605 Sacramento, CA 95825

Ms. Hull:

I am writing to the Command Trustee Council (Council) to recommend that any proposed project submitted by the San Mateo County Resource Conservation District (RCD) to the Council be denied funding. This recommendation follows from the years between 1998 and 2001 during which I followed the machinations of the RCD concerning natural resource issues, proposed projects, and fund management for restoration efforts in the RCD service area. Based on my experiences I believe it is imprudent to grant any funds to the RCD from the Command oil spill settlement. My belief is founded in part on the following issues.

Lack of continuity in employing senior staff.
 The RCD has been something of a "revolving door" for senior-most staff. In the last five years five individuals have been employed by the RCD under various titles—all vested with essentially the same responsibility of being the lead employee of the RCD.

 Staff of the RCD is not competent to properly manage projects. The RCD has a history of hiring staff that does not have the appropriate academic background and professional experience to adequately manage projects resulting in a discernable net benefit to the environment and public trust resources.

• The RCD has a history of spending relatively large amounts of money with little to show for the expenditure.

A case in point is the Pilarcitos Creek watershed Restoration Fund (Fund). The Pilarcitos Creek watershed is an ocean draining system that supports salmonid fish. In the early 1990s a sediment release from two illegal sediment retention ponds at the Ox Mountain Landfill owned by Browning Ferris Industries of San Mateo (BFI) resulted in significant adverse affects to the lower Pilarcitos Creek watershed. In settlement and restitution BFI sent a payment in the amount of \$1 million dollars to the State of California. In turn the State established a fund eventually managed by the RCD in the amount of approximately \$1.25 million dollars—the additional money came from fines associated with an offshore oil barge release. The fund was to focus on restoring portions of the watershed, however fund monies were spent on "projects" irrelevant to the goal of the fund. For example, a demonstration green house irrigation project was funded to purportedly gain trust of farmers but the project had no benefit whatsoever to the purpose of the fund—restoration of habitat. In another situation an individual with land bordering the main stem Pilarcitos Creek was given funds to build a stream armament structure adjacent to reaches that the landowner had been devegetating for years with

consequent loss of channel bank. The fund was nearly exhausted before important projects were completed including an unfinished salmonid fish barrier removal project that was funded in the 2002-2003 grant cycle at \$250,000 by the California Department of Fish and Game, Fisheries Restoration Grant Program.

- Proposals submitted by the RCD likely do not meet requirements of the federal Oil Pollution Act and the criteria established by the Trustee Council.
   As stated in the Command Oil Spill Draft Restoration Plan and Environmental Assessment, 4.2.1 Threshold Criteria (page 25) the "restoration efforts must be directed at projects that restore, rehabilitate, replace, enhance or acquire the equivalent of the resources and services impacted by the Spill." It is my understanding that the locations of the proposed projects submitted by the RCD are not located in the marine or marine/shore environment—rather, the locations are inland from the environments and resources affected by the Command oil spill. As such, it is inappropriate to grant any funds from the settlement to the RCD as the focus of the RCD is on terrestrial ecosystems.
- The RCD has a history of excluding the interested public in formulating projects and project proposals submitted to government agencies for funding.
   See the attached letter for additional information concerning the exclusion of the public by the RCD.

In summary it is imprudent and inappropriate—based on the criteria for project funding by the Trustee Council and the history of RCD performance in managing publicly funded projects—to grant monies to the RCD from the Command oil spill settlement.

Thank you for your time and attention to my concerns.

Sincerely,

Robert Zatkin

Robert Zatkin Watershed Scientist

# Robert Zatkin

140 Springdale Way • Redwood City, CA 94062 telephone: (650) 369-6462 • rzatkin@att.net

January 9, 2000

Susan Marr U.S. Environmental Protection Agency Wetlands Grant USEPA (WTR-3) 75 Hawthorne Street San Francisco, Ca 94105-3919

#### re: San Gregorio Watershed Protection Partnership Project

Dear Ms. Marr:

I am writing in the matter of a grant proposal submitted to your office during December 1999 by the San Mateo County Resource Conservation District (RCD) for assistance under the U.S. EPA State Tribal Local Wetlands Program Development Grants. The proposed project is titled the San Gregorio Watershed Protection Partnership Project.

Chris Fischer, Watershed Coordinator for the RCD, formulated the subject proposal (proposal) without informing, or soliciting input from, myriad individuals and organizations that have established vested interests in the San Gregorio Creek watershed and other watersheds of the San Mateo County coast. Such stakeholders include individuals living in the watershed; scientists and non-scientists involved in local watershed assessment and restoration efforts; and conservation organizations within and beyond the San Gregorio Creek watershed that are focused on coastal San Mateo County watershed issues. The omission of such input stands in contradistinction to the assertion in the subject proposal that the main project goal is the development of a watershed restoration plan which will provide a framework for cooperative restoration efforts... and that the project will provide a mechanism for community involvement in consensus-based watershed planning... . The exclusion of the aforementioned types of stakeholders from the beginning of proposal formulation makes highly suspect the stated intent of the RCD and Chris Fischer that a cooperative restoration effort will emerge from the proposed project.

The RCD has a history of formulating and submitting grant proposals covertly without the knowledge or input from members of the interested public. These proposals all contain the same thread of a meliorative tone that intimates if money is granted some grand picture will manifest in which all interested parties work cooperatively to attain improved watershed function and increased conserver-based use of natural resources. This thread stands in stark contrast to the mechanics by which the RCD, and Chris Fischer in particular, execute their responsibilities as a publicly funded entity. The true nature of the RCD, and Chris Fischer as its grant seeker, is to obtain large dollar amount grants to fund the RCD staff salary and expenditures. As such, it is in the best interest of the RCD, and Chris Fischer, to deflect public input in proposal formulation and withhold information generated from public funds in an attempt to drive the effort with minimal public oversight. I have been party to the following situations, which validate the nature of the RCD.

 In late 1998 a proposal for funding under the 319(h) grant program was submitted by the RCD to the State Water Resources Control Board (SWRCB). No public input was solicited by the RCD in formulating the proposal and submittal was not advertised to the .

public. After funding was granted by the SWRCB a letter was sent to the RCD by myself and other interested members of the public as a follow up to a meeting to discuss the grant. The letter included details of significant inadequacies in the proposal including omission of costing by RCD staff of major components of the proposal. I have attached a copy of my letter of critique for this proposal.

 In December of 1998 I submitted to Chris Fischer a written request for accounting of expenditures from the Pilarcitos Creek Restoration Fund (Fund). The Fund is currently managed by the RCD, and was previously managed by the State of California, Regional Water Quality Control Board San Francisco Bay Region (RWQCB). During management of the Fund by the RWQCB I requested, and was sent, complete accountings of expenditures from the Fund. In contradistinction to the RWQCB ready willingness to provide the public with information on Fund expenditures, the RCD did not send me a complete accounting of expenditures. Over the course of several months I submitted iterative written requests for a complete accounting of expenditures. Resolution of my request was finally obtained after I sent a letter of complaint to Bill Lockeyer, Attorney General, State of California, and registered a complaint with the office of my State Senator, Byron Sher. I have attached a copy of my letter of request for information to the RCD, and my letter to Attorney General Lockeyer.

These acts of intentional omission of public participation and the withholding of public information indicate that the RCD does not want the public to provide input and review of any endeavors involving grant monies from public agencies. The intent of obfuscating public participation and disclosure is to maintain and preserve the historic focus of the RCD supporting and enhancing the interests of the agriculture community and its advocacy public relations organization, the San Mateo County Farm Bureau.

The notion of a consensus-based watershed planning as enunciated in the proposal is all the more unlikely given the historic conflict over water rights and use that has occurred in the San Gregorio Creek watershed. The conflict, which resulted in adjudication of the basin in 1993, extends to the present. Those granted water rights by the court have yet to provide the requisite collective funds to establish a stream discharge gage in the watershed as mandated in the decree. Further, the court appointed water master is currently not monitoring or enforcing the decree. As such it is likely that out of permit/license diversions, or diversions without permit, are occurring. The State Water Resources Control Board, Division of Water Rights has issued a draft water availability analysis<sup>1</sup> coincident with attempts to resolve pending water rights applications in the San Gregorio Creek watershed. The results of analysis indicate some water may be available for appropriation, constrained to portions of average or above average rainfall years. Seven water rights applications, of which six are proposed for irrigation, are pending processing. However, given the absence of a stream discharge gage, compliance with the decree can not be obtained nor can the pending applications be processed. As of October 13, 1999 the Division has deferred processing of the applications until a gage is installed. Furthermore, the Division has issued a dictum that the applicants must submit by April 15, 2000 Ainformation that describes the specific steps that are being taken to provide for the reinstallation and annual monitoring of the gage. The Division has indicated that if the information is not submitted by the due date, the Division may cancel the pending applications.

<sup>&</sup>lt;sup>1</sup> Draft San Gregorio Water Availability Analysis Description of Pending Applications San Gregorio Creek Adjudication: Decree No. 255792 State Water Resources Control Board, Division of Water Rights no date

I believe the true intent of the subject proposal is an opaque design by agriculturists through the vehicle of the RCD and the San Mateo County Farm Bureau, an advocacy public relations organization that is a partner to the proposed project, to obtain federal grant monies under the auspice of a watershed protection project which will be leveraged to forestall action by the Division of Water Rights. The prospect of this action is not unlikely as the Division has a recent history of decisive enforcement action in watersheds such as San Gregorio Creek in which diversions, legal and illegal, have compromised riparian resources including salmonid fisheries. A principal example of such action by the Division is that in the Russian River watershed<sup>2</sup>.

More relevant to the San Gregorio Creek watershed, during the past year the Division performed analysis to determine if illegal water impoundments exist in the San Gregorio Creek watershed and adjacent Pescadero Creek watershed. The Division determined that approximately 25 such impoundments exist; the inference being that such illegal impoundments were filled, and storage maintained, by non permitted and therefore illegal diversions from the streams in the subject watersheds. As such, the prospect of the Division of Water Rights following through aggressively with field-based inspections and enforcement in the San Gregorio Creek watershed is essentially a threat to all diverters, including agriculturists. Such a prospect is not viewed positively by landowners in a watershed with a history of contentious issues concerning out of permit/license diversions, diversions without permit, an unwillingness to obtain compliance with an adjudication decree.

In addition to the issues of the adjudication decree, the State of California, Department of Fish and Game, has targeted the San Gregorio Creek watershed as one of nine southernmost habitat range watersheds for recovery of the Coho Salmon (*Oncorhynchus kisutch (Walbaum)*). Recovery will require assessment of watershed function in the context of Coho salmon habitat conditions and venues for preserving and improving the quality, and possibly quantity, of such habitat. Such assessment may further constrain low flow bypass requirements, present fundamental conflict with the adjudication decree, and add additional and unforeseeable complexities to efforts to improve watershed function. The result will be presently unforeseeable implications to the content and execution of any assessment of the watershed.

Assessment of the San Gregorio Creek watershed is premature and will likely produce invalid data sets and results until such time as the mandates imposed by the adjudication decree are met, and the mechanics of executing the Coho Recovery Plan for the watershed are established. In particular the mandates of the decree must be obtained before assessment as a multi-year baseline data record of low flow stream conditions, and attendant permitted/licensed diversions, must be established to determine low flow conditions in average and low rainfall years.

Finally, and perhaps of greatest significance, the RCD is not the proper entity for any watershed assessment in the San Mateo County coast. This follows from the RCD having no power of authority to enable ordinance designed to check errant land use practices that have compromised and degraded watershed function. The need for such ordinance is a possibility given the historic and current divisive nature of water use amongst landowners in the

<sup>2</sup> State Water Resources Control Board Division of Water Rights Staff Report X Russian River Watershed Proposed Action s to be taken by the Division of Water Rights on Pending Water Right Applications within the Russian River Watershed August 15, 1997 watershed, and State level mandates imposed on resources of, the San Gregorio Creek watershed. The notion being promulgated by the RCD of cooperative restoration efforts in the watershed is not the real world as it vests landowners solely with cooperativism for a situation characterized by competition. This approach is certainly a setup for failure. The proper course of action is an attempt to effect cooperation backed by monitoring and tempered by the dictum that if cooperation fails coercion will be used by power of law. The only governing authority for the San Gregorio Creek watershed that has the right to establish law is the San Mateo County government as the entire watershed is unincorporated and reliant on the County for all basic infrastructure services. As such, if a watershed assessment is executed for the San Gregorio Creek watershed the proper venue for orchestrating such an assessment is San Mateo County government.

In closing I recommend that the U.S. Environmental Protection Agency not fund the subject proposal submitted by the RCD. This recommendation is based on the following actions of the San Mateo County Resource Conservation District:

- o Not involving the interested public in formulation of proposals for funding.
- Resisting requests to provide information to the public that was obtained through public funds.
- Not obtaining consensus across the spectrum of interested parties that the proposed project is valid.
- o Obfuscating the real intent and nature of the proposal.
- Ignoring unresolved complexities of State of California regulatory oversight in the San Gregorio Creek watershed.
- Promoting the false notion that cooperation will work in a situation that requires the potential for legal mandate.
- Inability to promulgate ordinance that mandates changes in land use practices in the San Gregorio Creek watershed.

The public monies funding the State Tribal Local Wetlands Program Development Grants should be put to optimal use through funding proposals for work in watersheds devoid of the above listed items.

Thank you for consideration of my recommendation.

Sincerely,

Robert Zatkin Watershed Scientist December 2, 1998

Mike Napolitano California Regional Water Quality Control Board San Francisco Bay Region 2101 Webster Street, Suite 500 Oakland, CA 94612

Chris Fischer San Mateo County Resource Conservation District 785 Main Street, Suite C Half Moon Bay, CA 94019

Mike and Chris,

Thank you for meeting with us to discuss the grant titled Characterization, Monitoring and Best Management Practices Implementation in Pescadero Watershed San Mateo County. We appreciate your time in considering our perspectives of the need to assess processes in the Pescadero Creek watershed.

After careful review we have determined that (1) the grant scope of work is too expansive for the amount of money granted, and (2) the scope fails to adequately address the principal technical issue in the watershed – sources and disposition of sediment in transit. We firmly believe the scope should be significantly narrowed and focused on the principle issue. Following are our comments concerning narrowing and focusing the proposed project funded by grant.

#### Change in Focus to the Principle Issue

The proposed project should be reconfigured to focus effort that addresses the principle technical issue for the watershed – execution of an adequately detailed, watershed-wide sediment budget analysis performed by a qualified technical consulting organization. In the absence of an adequate analysis, future studies and plans for improving watershed functions, in particular salmonid habitat, will prove difficult to effectively formulate and execute.

Following are specific comments about a reconfigured proposed project.

X Pesticide, Nutrient and Pathogen Sampling and Analysis X Sampling and analysis for pesticides, nutrients and pathogens should be removed from the project. This follows from the relatively large percentage of certain funds that would be consumed by sampling and analysis for these constituents of concern. Sampling and analysis may have merit during the first and second flushing flow events of the first year of project execution. In the event a constituent, or constituents, exceeds the applicable State or Federal maximum contaminant level concentration, a separate source of funding should be sought to support a dedicated pesticide, nutrient and pathogen sampling and analysis program.

• Sediment Budget Analysis X The major impediment to action designed to preserve and enhance salmonid habitat in the Pescadero Creek watershed is a lack of field-based knowledge of the sources and disposition of sediment in transit through the watershed. This lack of knowledge is acknowledged in the grant proposal in several statements, including the following.

AThe upper watershed was extensively logged in the 1950s, and this fact, combined with the steep slopes, highly erodible soils, and seismic instability of the area has led to severe sediment aggradation in the lower drainage. These impacts have reduced instream habitat quality and diversity and substantially increased the frequency and severity of flooding. $\cong$ 

AThere is a clear need for an enhance description of the processes of sediment movement in the watershed, and how that impacts water quality, habitat quality and cultural problems such as flood risk. $\cong$ 

There is consensus that sediment transport is the principal issue, that very little fieldbased data exists concerning sediment transport and transience, and that salmonid habitat preservation and enhancement is the key issue of watershed process and management.

The focus of a reconfigured project proposal should be execution of a sediment budget analysis consisting of the following sequential steps (Reid and Dunne, 1998<sup>1</sup>).

- 1. Definition of the problem in the Pescadero Creek watershed in terms of the objectives of the project and the type of sediment budget required to meet the objectives. A component of problem definition is review of information held by the California Department of Fish and Game, which will demonstrate the types, and locations of problems.
- Acquire existing information concerning geomorphic processes and conditions in the watershed generated by state and federal agencies, and academic and professional consulting organizations. The acquired information should be compiled as a hard copy archive and an electronic database.

<sup>&</sup>lt;sup>1</sup> Rapid Evaluation of Sediment Budgets Leslie M. Reid and Thomas Dunne GeoEcology paperback Catena Verlag, 1996

- 3. Subdivision of the watershed into analytical units based on characteristics likely to control erosion and sediment transport, including but not limited to, land use, soil and geologic substrate, topographic relief, rainfall regime, slope angle and aspect and vegetation type.
- 4. Interpretation of available aerial photographs, or photographs procured specifically for the sediment budget analysis.
- Execution of fieldwork based on information gathered and reviewed in steps 1.through 4. The fieldwork must be focused on the specific problems defined in step 1.
- 6. Compilation and evaluation of data, including the reconciliation of differences of scale between all sources of data, refinement of calculations of preliminary rates and calculation of long-term rates. Comparison and validation of calculated rates with published rates for similar processes in other watersheds. Rates are checked for accuracy, differences evaluated, and additional work performed as required to reconcile rates.
- 7. Results of the analysis checked against published data for other watersheds. The published data may include reservoir sedimentation, basin sediment yield rates, and sediment sampling and stream discharge rates.
- 8. Production of a report that includes documentation, analysis and interpretation of data from the sediment budget. The report should include, but not be limited to, all data, descriptions of methods, parsing of sediment production by watershed analysis unit, and various graphical representations of sediment flux through the watershed.

Aerial photographs of the watershed are crucial to producing a high-quality sediment budget analysis. For example, Pacific Aerial of Oakland, California has indicated complete aerial photography coverage of the Pescadero Creek Watershed in colored stereo-pair at a scale of 1:6,000 will cost about \$15,000.

# Certain Funding and Uncertain Funding

The grant application lists funding from the State Water Resources Control Board (SWRCB) as \$229,340, and \$178,000 in match contributions for a three year period. The application does not state the source or type (work-in-kind or money) of the match contributions. Qualified technical professionals must perform a sediment budget analysis, therefore work-in-kind contributions are of limited value. Furthermore, given that match contributions are not certain, such contributions should not be considered in finalizing the scope of work. To assume otherwise will compromise the thoroughness, and quality, of the proposed project in the event the match funds do not materialize.

#### Pesticide, Nutrient and Pathogen Sampling and Analysis

Costs for sampling and analysis for pesticide, nutrient and pathogen loading in surface waters will consume an unacceptably large portion of the certain funds for the proposed project. Volunteers can not execute sampling, and analysis can not be executed in the field. This follows from the necessity to produce data that is valid and defensible. Such data can only be produced with a qualified consulting organization employing the appropriate State of California certified professionals executing sampling, and a State of California certified analytical laboratory performing analysis. Given these constraints, the costs for sampling and analysis of these constituents will be considerable. Based on current standard costs, sampling and analysis for organophosphate pesticides for the projected three year period of the study is approximately \$25,000. It is important to note that the cost for pesticide sampling and analysis will increase if additional classes of pesticide are likely to occur in the watershed. The current approximate costs of analysis for nutrients as nitrate and ammonia is \$7,600, and for pathogens as total coliform bacteria \$4,000. In addition, the cost for sampling for a three years by a qualified technical professional organization is \$10,800.

The sum total for the pesticide, nutrient and pathogen sampling and analysis for the minimum three year duration of the proposed project is about \$47,600. This represents about 42% of the certain funds dedicated to Professional Monitoring and Characterization. The calculation of these costs is presented in the following table.

| ltem  | Cost per Unit  | Units per<br>Sample Event | Total Number of<br>Units per Year | Total Cost for<br>Three Years |  |  |  |
|---|----------------|---------------------------|-----------------------------------|-------------------------------|--|--|--|
| Organophosphorous pesticides<br>(EPA Method 8140) | \$175 sample   | 12                        | 48                                | \$25,200                      |  |  |  |
| Ammonia (SM 417E & 417G)                          | \$28 sample    | 12                        | 48                                | \$4,032                       |  |  |  |
| nitrate (SM 429)                                  | \$25 sample    | 12                        | 48                                | \$3,600                       |  |  |  |
| Coliform bacteria (total)                         | \$27.50 sample | 12                        | 48                                | \$3,960                       |  |  |  |
| Technical professional sampling                   | \$75 hour      | 12                        | 48                                | \$10,800                      |  |  |  |
| TOTAL COST  |                |                           |                                   | \$47,592                      |  |  |  |

Pesticide, Nutrient and Pathogen Sampling and Analysis

Furthermore, a sampling and analysis plan, protocols and procedures, and other technical documentation must be prepared to meet Federal Environmental Protection Agency grant requirements for Quality Assurance/Quality Control. For example, documentation for a similar sampling and analysis plan for the lower Salinas River system cost \$12,000. In addition it is not clear who will develop, and who will review, the Page 4

requisite documentation.

#### **Implementing Best Management Practices**

Given the lack of knowledge of sediment transport processes in the watershed, it is premature to implement Best Management Practices (BMP). Credible establishment of BMPs must be executed after completion of a sediment budget analysis from which differentials of erosion and sediment transport, and correlative land use practices, throughout the watershed will be established. Given this sequential constraint of watershed analysis, and the requirement that a 319(h) grant proposal contain a demonstration project, we believe the grant requirement for a demonstration should follow only from the results of a sediment budget analysis. The results will allow designation of priority concerns from which a demonstration project may be targeted.

Our fundamental belief is that properly formulated and executed a sediment budget analysis will produce a solid foundation for future projects oriented to improve our understanding of processes and problems in the Pescadero Creek watershed. As such it is imperative that the proposed project be reconfigured to focus on the principle analysis required to understand the Pescadero Creek watershed – a sediment budget analysis. Reconfiguring the proposal is best accomplished by a Technical Advisory Committee (TAC) composed of the proper types of technical professionals including, but not limited to, a process geomorphologist, hydrologist/hydrogeologist, and fisheries biologist.

We are willing to meet a second time to discuss our concerns and ideas. Please contact Lennie to set a time and location.

Sincerely,

Robert Zatkin Lennie Roberts Toni Danzig

# Robert Zatkin

140 Springdale Way Redwood City, CA 94062 telephone: (650) 369-6462 rszatkin@pacbell.net

March 13, 1999

Bill Lockyer Attorney General State of California 1300 I Street Sacramento, CA 94814

Attorney General Lockyer:

I have written to request your assistnace under authority of the California Public Records Act (California Governmet code, Section 6250-6270) in obtaining infomration I have requested from the San Mateo County Resource Conservation district  $(RCD)^1$ , a public agnecy. The request concerns expenditures from two funds of money established to restore a damaged watershed within the District's boundary.

My request for this information begain in early December 1998. To date the RCD has not provided me with the informatin I requested in a form that fully disclouses the information I am seeking.

The damaged watershed is the Pilarcitos Creek watershed, located east of the City of Half Moon Bay on the San Matco County coast. A tributary of Pilarcitos Creek, Cornido los Trancos, was the site of a large volume release in the early 1990s of sediment from illegal sediment retention ponds located on property owned by Browning Ferris Industries of San Mateo (BFI). The released sediment flowed into Pilarcitos Creek and caused a significant amount of damage to biota and habitat. As a consequence of the event, BFI agreed to place \$1 million in a fund dedicated ostensibly to restore and improve watershed function. In addition about \$200,000 was added to the fund from a separate fine action by the State of California. I believe the latter fine orginated from an illegal ocean discharf from a petroleum transport barge. The fund was originally admininstered from the office of the California Department of Justice with the Regional Water Quality Control Board—San Francisco Bay Region (RWQCB), and the California Department of Fish and Game responsible for management of the fund. In December 1997 the RWQCB signed a Memorandum of Agreement which vested all decisions regarding management and expenditures of the fund with the RCD.

785 Main Street, Suite C

Half Moon Bay, CA 94019

Telephone: (650) 726-4660

<sup>1</sup> San Mateo County Resource Conservation District

I have attached copies of the unfulfilled requests to the RCD. The requests are simple and straightforward—copies of spreadsheets in which all information contained in all colums is indicated.

Note there are two requests: one for the Pilarcitos Restoration Fund, and one for the Pilarcitos Petty Cash Fun. For reasons that are not clear to me, a petty cash fund was established as a derivative fund from the Pilarcitos Restoration Fund.

Than you for your attention to my request.

Sincerely,

-signed-

Robert Zatkin

625 Miramontes St., Ste. 103 Half Moon Bay, CA 94019-1942 (650) 712-7765 \* Fax 726-0494

# **RESOLUTION NO. 2004-03**

### Request of the San Mateo County Resource Conservation District to the Command Oil Spill Trustees and Elected Representatives for Reconsideration of Major Projects Selected by the Trustees, Extension of Time to Allow Greater Public Participation in Selecting Projects, and Re-allocation of Funds to Benefit San Mateo County

Whereas, the San Mateo County Resource Conservation District, a Special District organized under Division 9 of the California Public Resources Code with an original petition granted on July 1, 1939, and

Whereas, the San Mateo County Resource Conservation District encompasses 157,119 acres of coastal San Mateo County representing more than 46,300 registered voters, and

Whereas, the San Mateo County Resource Conservation District has found that the public outreach and public participation by local elected bodies, organizations, and constituents in the coastside with regards to the Command Oil Spill funds was limited, and that the restoration planning process conducted by the Trustees and projects ultimately developed for recommendation would have benefited by having direct participation by these elected bodies, organizations and constituents, and

Whereas, the San Mateo County Resource Conservation District believes that the Command Oil Spill funds should be spent in San Mateo County where the spill occurred, primarily for water quality improvement projects that benefit the Monterey Bay National Marine Sanctuary, the body of water and natural resource habitat injured by the oil spill.

**NOW THEREFORE BE IT RESOLVED,** that the San Mateo County Resource Conservation District Board of Directors hereby requests our elected representatives and the Command Oil Spill Trustees to reconsider the major projects selected in the draft restoration plan by the Trustees; re-open the process of project development and selection to allow greater local public input and participation; and require a re-allocation of the highest percentage of funds to benefit San Mateo County.

ADOPTED, at a regular meeting of the Board of Directors of San Mateo County Resource Conservation District on March 17, 2004.

Rich Allen, President

WARCH 17, 2004

Partnering to Implement Conservation Practices and Promote Environmental Stewardship on Public and Private Lands Since 1939

www.sanmateorcd.org

info@sanmateorcd.org

March 18, 2004



To: Command Trustee Council Field Supervisor, U.S. Fish and Wildlife Service, 2800 Cottage Way, Rm. 2605, Sacramento, CA 95825 (facsimile 916/414-6713), or via email to <u>Charlenehall@fws.gov</u>.

# Re: Command Oil Spill Draft Restoration Plan and Environmental Assessment dated December 2003

I have reviewed the Draft and find that the approved projects are not technically and procedurally sound. My comments and concerns are as follows. I also listened to the presentation by Fish and Game during the MCC meeting last week, clearly no decision has been made and other projects can still be reviewed and chosen.

1. **Insufficient Public Comment and Application Process:** I do not believe that there has been sufficient time since December 2003, when the Draft was presented for public comment, for citizens and local government agencies in San Mateo County to study the lengthy Draft and provide informed comment on the proposals set forth by the Trustees. It also appears that the Trustees did not do sufficient public outreach since many local organizations, local councils, including sanitary districts, did not receive applications for projects on the San Mateo County Coastline. The process by which the Trustees requested applications failed to give appropriate guidelines that would qualify a project for funding. The mailing list for notification was less than 100 agencies during this project.

**2. Selection of major projects:** The Trustees state that the major projects selected for funding comply with guidelines provided by state and federal law and regulations. However, I believe that projects with <u>long-term benefits</u> serving the area damaged in the Oil Spill (San Mateo County) could easily meet such criteria. However, the Trustees' preferred projects appear to violate their own criteria and are not efficiently using public funds while projects determined to have <u>long term benefits</u>, would better serve the community.

I would suggest that criteria similar to what the **Environmental Protection Agency**, California Dept of Fish and Game's Mission Statement or your own Draft criteria:

- Focus the program more effectively on achievement of environmental results, rather than fulfillment of unnecessary steps in a bureaucratic process
- Foster maximum use of program flexibility and practical approaches to achieve program goals
- Enhance public access to cleanup information and improve opportunity for public involvement in the cleanup process

#### California Department of Fish & Game Mission Statement:

The Department of Fish and Game maintains native fish, wildlife, plant species and natural communities for their intrinsic and ecological value and their benefits to people. This includes habitat protection and maintenance in a sufficient amount and quality to <u>ensure the survival of all species and natural</u> <u>communities</u>. The department is also responsible for the diversified use of fish and wildlife including recreational, commercial, scientific and educational uses.

#### **National Marine Fisheries Service**

The National Marine Fisheries Service (NOAA Fisheries) dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems.

As a steward, NOAA Fisheries conserves, protects, and manages living marine resources in a way that <u>ensures their continuation as functioning components of marine ecosystems, affords economic</u> <u>opportunities, and enhances the quality of life for the American public.</u>

#### Command Oil Spill Draft 4.2.1

- Restoration efforts must be directed at project that restore, rehabilitate, replace, enhance or acquire the equivalent of the resources and services impacted by the spill.
- Technically and procedurally sound

#### Command Oil Spill Draft 4.2.2

- Potential for success
- Projects benefit more than one natural resource or resource service
- Long tem benefits
- Examination of potential adverse impact on the environments and associated natural resources.

**3. Allocation of Funds:** It is estimated that only 33% of the \$3,045,408 allocated for the 10 "Preferred Projects" in Table 2, p. 22 of the Draft is earmarked for projects in <u>San Mateo County where the damage was done</u>. The Draft fails to identify who is receiving the funds. One project in particular, poisoning rats in New Zealand, may be unlawful since it is contrary to the intent of the Consent Decree which provides that the restoration funds be spent in the United States and/or the State of California. I and many others believe that 100% of the restoration funds should be spent in San Mateo County where the damage occurred restoring not only birds but the habitat that is essential for there food source, nesting etc.

**4. Proposals for Alternate Projects:** The first order of business should be to eliminate projects selected by the Trustees that have been determined within the draft proposal to have no long-term impact. Then there should be further time granted for study and public input so that the community most effected could come up with projects with long term results in mind. The following is a preview of what some in our community have

been considering that involves preventing further pollution to the Monterey Bay Sanctuary, which is the habitat that was damaged by the oil spill:

- Improve ground water run-off polluted by residential development, providing cleaner water for the Sanctuary and Aviary habitats along the San Mateo Coastline.
- Funding to assist the 3 major sewage treatment plants (Pacifica, Montara & Half Moon Bay).
- Funds placed in a permanent endowment so that the income can be used for environmental cleanup operations in perpetuity, in which case the principal will never be depleted.
- Provide funding to all San Mateo County coastline communities to aid in bringing ground water quality up to the current standards.
- Provide funding to local parks and schools to educate our youth on protection of all coastal resources
- Model a restoration program similar to the one done in Pacifica over the past several years. Their success has been outstanding in reviving the Avery habits along the coast line.
- Purchase garbage facilities for the girl scout park and educational material
- Continued work for restoration of the Common Murre Back to Devil's
- Further research into the June 4, 2002 letter by Ron Sturgeon to the Trustee Council

Such projects would benefit all living species that are served by the Monterey Bay Sanctuary by preventing further pollution to that body of water over the long term. I endorse these and other common sense ideas for use of the restoration funds instead of the short-term ineffective and inefficient projects proposed by the Trustees such as poisoning rats in New Zealand to temporarily protect the Sooty Shearwater bird from this predator at a time when the native peoples of New Zealand kill and eat upwards of half a million of these birds each year, killing a few Ravens in the Santa Cruz Mountains protected by the Migratory Bird Act *Title 50 of the Code of Federal Regulations, Section 10.13.*, discouraging infrequent contacts by humans from cliffs and offshore rocks where birds nest is more than ridiculous, and buying a tiny parcel of already protected land in the Santa Cruz mountains in hopes that the Marbeled Murrelets might nest there. (maybe you should include funding to put up signs so the Murrelets know where it's safe to hang out)

I request that the Trustees (1) grant our community more time to study this matter and submit alternative proposals for spending the restoration funds, (2) ensure that all funds are spent in San Mateo County where the spill occurred, and (3) take care that our requests are not lost in the bureaucratic process (4) a full accounting of funds not accounted for in the Draft Report. Given the current state of the economy and the limited resource projects planed for San Mateo County, I suggest that a positive and communicative outreach program occurs with a primary focus on living marine resources in a way that ensures their continuation as functioning components of marine ecosystems, affords economic opportunities, and enhances the quality of life for residents of San Mateo County.

Sincerely,

Karen Wilson Post Office Box 371273 Montara, CA 94037 650-728-3292

CC:

Governor Schwarzenegger-governor@governor.ca.gov Tom Lantos http://www.house.gov/lantos/contact.html SAN MATEO OFFICE 400 S. El Camino Real Suite 410 San Mateo, CA 94402

Anna Eshoo <u>http://www.house.gov/eshoo/communicate.html</u> **California Office** 698 Emerson Street Palo Alto. California 94301 Telephone (650) 323-2984 or (408) 245-2339 or (831) 335-2020

State Senator Jackie SpeierSenator Speier @sen.ca.govState Senator Byron SherSenator Sher @sen.ca.govGene MullinAssemblymember.Mullin@asm.ca.gov

# Midcoast Community Council

An elected Municipal Advisory Council to the San Mateo County Board of Supervisors Serving 12,000 coastal residents Post Office Box 64, Moss Beach, CA 94038-0064 Office Fax: (650) 728-2129

March 18, 2004

#### VIA EMAIL, FAX AND FIRST CLASS MAIL: 5 PAGES

To: San Mateo County Board of Supervisors The Honorable Mark Church, Jerry Hill, Richard S. Gordon, Rose Jacobs Gibson, and Michael D. Nevin County Government Center, Hall of Justice and Records 400 County Center Redwood City, CA 94063

Phone: 650 363 4653 Fax: 650 599 1027

cc: Command Oil Spill Trustee Council ATTN: Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way, Room 2605 Sacramento CA 95825

<u>Charlene\_Hall@fws.gov</u> Phone: 916 414 6600 Fax: 916 414 6713

RECEIVED MAR 192004

Re: Command Oil Spill Draft Restoration Plan and Environmental Assessment for public comment and review dated December 2003 ("Draft")

The Midcoast Community Council ("MCC") is comprised of 6 elected members (currently with 1 vacancy) from the San Mateo County, California Coastside whose purpose is in part:

- 1) To provide the Community with a more effective means to express its views to the County of San Mateo and other governmental agencies on matters of concern to the Community;
- 2) To contribute to the Community's awareness of issues of public import by providing a forum for discussions, and sponsoring meetings, discussions, and other events which will contribute to the general welfare, knowledge and awareness of the Community regarding such issues;
- 3) To seek to preserve the rural-small town character of the Area by protecting the existence of agricultural lands, commercial fishing activities and the natural marine environment; supporting the retention of a greenbelt around urban areas of the County of San Mateo; maintaining the coastal protections afforded by the County Local Coastal Plan and Measure A, and seeking to manage growth in a manner which is consistent with the present character of the Area;

Midcoast Community Council Response to Command Oil Spill Draft Plan 3/18/04 Page 1 -

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4) To assist the Community in developing and expressing a long range vision of the Community which meets the goals of its residents for an improved quality of life, protection of the environment, and sound economic planning." (MCC Bylaws)

This letter is in response to a request for public comment to the Command Oil Spill Draft Restoration Plan and Environmental Assessment and review dated December 2003 ("Draft"). The Draft sets forth the Trustee Council's proposals to spend \$4,007,242 recovered in a civil settlement to restore natural resources damaged by the September 26, 1998 oil spill caused by the tanker Command. The Command released 3,000 gallons of Fuel Oil No. 6 contaminating water and beaches along 15 miles of San Mateo County coastline, including the Monterey Bay Sanctuary. (Draft, p. 2)

The MCC held two public meetings on February 25 and March 10, 2004, and took public comment. Steve Hampton, a Trustee representative from the California Department of Fish and Game, Office of Spill Prevention and Response, Sacramento, CA (OSPR), came to answer questions concerning the proposed projects in the Draft.

The MCC understands that the funds made available from the Command Oil Spill are constrained by law in the ways that they can be applied. Within this set of legal constraints there are three points we would like to make at this time: 1) We would like the project selection criteria delineated in your plan to be observed. Specifically in the likelihood of success section the requirement that results be clearly measurable was listed. This was contradicted later in the document by observing one of the projects impacts could not be effectively measured. 2) We would strongly encourage that alternative projects which are more San Mateo County centric be considered as opposed to the majority of the funding being applied in communities that were not directly impacted by the spill. Finally 3) It would reasonable to consider projects that are not exclusively limited to strictly improving the condition of marine birds. Beaches and marine mammals have also been affected. Several examples of such projects are enclosed in the form of a letter written by a community member in 2002.

Respectfully submitted,

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Kainen Stetn Carter

Kathryn Slater-Carter Chair, Midcoast Community Council

Encl: Copy of 2 page letter from Ron Stugeon to Trustee Council dated June 4, 2002

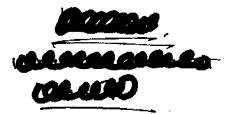
Cc: Command Oil Spill Trustee Council

Midcoast Community Council Response to Command Oil Spill Draft Plan 3/18/04 Page 2 -

# Rob Sturgeon, P.O. Box 36, San Gregorio, CA 94074

June 4, 2002

Charlene Hall and Trustee Council U.S. Fish & Wildlife Service 2800 Cottage Way, Suite 2605 Sacremento, CA 95825



Re: Draft environmental assessment and "Restoration Plan" relating to the 1998 tanker vessel *Command* oil release off shore of San Mateo County.

Dear Ms. Hall and Council:

I have been associated for close to 30 years with a coastal ranch property which also provides the privately operated access to approximately 1.3 miles of beach north of San Gregorio State Beach. I have seen multiple "oil spills" over the years; the *Command* incident was by far the worst, seemingly by a hundred fold. The nightmarish memory of watching the slick slowly move onshore and the globs of ensuing oil/tar and oil/tar encased birds dead and alive washing in is however always coupled with the memory of an elected official who really cares about the environment and the Coast Guard showing up within minutes of it touching shore. I will never forget how my own sense of disaster and desperation was assuaged by the Coast Guard Commander's resolve; referring to the culprits, he said: "We will find them and they will pay."

The environmental assessment of the impact of this oil slick found within the Scoping Document is disturbingly narrow. This assessment appropriately notes the impact to various bird species and recreational opportunities, i.e. visible impacts; but fails to note that the oil from the Command was dumped in the Monterey Bay National Marine Sanctuary (if not directly into the Sanctuary the drift was such that its impacts were concentrated therein). Although the impacts of oil on birds has an immediacy that is heart wrenching, the base resource that was impacted was not the birds but their habitat. The primary natural resource that was impacted was not birds but the ocean/water itself and by extension the very waters of the Monterey Bay National Marine Sanctuary which serves as "home" not just to birds but "to the greatest biodiversity in temperate regions of the world".

I recommend and urge that the monetary punitive and indemnificatory damages resulting from this gross act of pollution (to refer to it as a "spill" is misleading in that it was a deliberate "release") of this Sanctuary be allocated to non enforcement driven, i.e., the voluntary efforts directed at the elimination of point and non point pollution of its waters. Although the Sanctuary Area was so designated as a consequence of its relative cleanness its long term biotic integrity hinges on the success of the implementation of the Sanctuary's multiple action plans to this end. I therefore urge: 1) that a portion of these restoration funds (one million dollars) be allocated directly to Monterey Bay National Marine Sanctuary to be explicitly used to implement under-funded aspects of its "Water Quality Protection Program Action Plans" as they relate to San Mateo County's agricultural, rural lands, marinas and boating activities; 2) that a portion (one million dollars) be allocated to the Agricultural Clean Water Initiative Foundation (established by the California Farm Bureau) for its use in San Mateo County toward the Sanctuary's objectives incorporated in the "Action Plan IV: Agriculture and Rural Lands" - to fund lower priority and non or under funded tasks such as the development of practical and scientifically acceptable monitoring protocols and test kits for use by farmers and ranchers in conducting self monitoring of various management practices; 3) the remaining portion I urge be allocated to the San Mateo County Resource  $\checkmark$ Conservation District which ought to be the Sanctuary's most active resource enhancement/conservation partner on the San Mateo County Coast.

This Resource Conservation District (RCD) is a public agency that at this time receives virtually no direct public support - it is a public resource conservation agency that is

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essentially dependent on charity. It is noteworthy that San Vicente Creek which runs through the Fitzgerald Marine Reserve (which the Scoping Document indicates as a potential site for recreational access improvements - a site with its number one problem being too much recreational access already!) is polluted and has been for years. The RCD is the logical conservation entity to tackle this and similar problems that are impacting habitat and recreational values along the San Mateo Coast. The lagoon at San Gregorio State Beach 🗸 likewise is posted every year now as hazardous to recreational activities due to pollutants. The RCD if adequately and appropriately funded (perhaps through an endowment fund created by the Trustee Council for this purpose) is the logical non regulatory agency to identify the source of these perennial "slicks" and create and effect the conservation/restoration of these intertwined natural and recreational resources. The RCD's proper leadership role and function as an educational and full service ("one stop shopping") resource conservation entity lies dormant for lack of requisite funding. A whole lot of money buys only a few old growth redwoods; but investment in a RCD endowment fund would buy a whole lot of enhancement/conservation of the Sanctuary's resources. Conceivably a two million dollar endowment could leverage through matching funds a net million dollars annually toward resource conservation along the San Mateo County Coast. (A word of caution here regarding the Marbled Murrelet: Rarely does a species go extinct because of one factor alone and the insuring of nesting habitat is not necessarily sufficient to insure survival of the Marble Murrelet Species. The individuals of this species that may have been impacted by the oil discharged from the Command certainly did not succumb as a consequence of the loss of preferred nesting habitat.)

In regards to the impact to recreational opportunities related to the Command incident: I do not believe that an overriding concern for loss of opportunities for fun times was the motivation of the legislators which authorized the Coast Guard Commander (or explains his personal resolve) to track down the Command's irresponsibles and make them pay. The impacted recreational resources were promptly restored to ante-incident levels. I urge that expenditure of the compensatory restoration funds be focused on the enhancement of the primary resource impacted (the Sanctuary) and that all enhancement of recreational values be derivative. I further urge the Council to reject "improving beach access and protection of natural resources through construction of access trails and boardwalks in sensitive areas" (emphasis added, page 13, Scoping Document).

I apologize for getting these comments to you near the last moment; I've just recently become aware that this "restoration planning" was in development. I appreciate the Trustees' solicitation of public input and review of its processes.

Sincerely,

lon Staron

Ron Sturgeon

cc: NOAA California Dept. Parks and Rec. California Dept. Fish and Game Representative Anna Eshoo

Sturgeon - San Cregorio - June 4, 2002

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FROM TOM LANTOS

0161141C\* OFFICE 400 S. EL CAMINO REAL SUITE 410 SAN MATEO CA 54402 (850) 342:0300 IN San Francisco (415) 366:5257



Congress of the United States House of Representatives Washington, D.C. 20513 INTERNATIONAL RELATIONS COMMITTEE Ranking Opmocratic Member

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GOVERNMENT REFORM COMMITTEE

Subcommittee on Energy Policy Natural Resources and Regulatory Attalts

Suboptimines on National Security, Veterans: Affeirs and International Relations

> Cochair, Permenent United States Congressional Leagetion to the European Parliament

Mamber, United Sivera Congressional Dalagation to the NATO Parliamontary Assembly Coonstruct, Congressional Human Rights Caucia Member, United Statan Aningsuss Memorial Council

March 18, 2004

Ms. Charlene Hall Fund Administrator Command Remediation Fund U.S. Fish and Wildlife Service 2800 Cottage Way Suite W-2605 Sacramento, CA 95825-1846

Dear Ms. Hall:

As you complete the comment period for the Command Remediation Fund I would appreciate your consideration of the request of the City of Pacifica in San Mateo County California.

Beaches and wildlife in Pacifica were impacted significantly by the 1998 Command oil spill along the San Mateo coast. The City of Pacifica proposes restoration of Pacifica State Beach, including restoration of 4 acres of tidally influenced wetlands, 4 acres of dune restoration and the expansion of the beach by 4 acres. It includes pedestrian trails, additional parking, new restrooms and changing rooms. I believe that this proposal provides excellent examples of environmental restoration and enhances visitor recreation. It is my understanding that the City of Pacifica has requested \$600,000 to adequately fund this program.

While I recognize that there are many needs to be met with limited funding under the constraints of the settlement agreement, I would appreciate your consideration of the meritorious proposal submitted by Pacifica.

Cordially,

Im Lantos

TOM LANTOS Member of Congress

March 18, 2004

Charlene Hull and Command Trustee Council U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

#### Rc: Command Oil Spill Fund Restoration Projects

Dear Ms. Hull and Trustees,

I attended the March 10, 2004 Midcoast Community Council meeting to hear the presentation on the Command Oil Spill restoration projects.

I want to especially thank Steve Hampton for taking the time to come down from Sacramento and attend this meeting. His comprehensive presentation on the "Command Preferred Project Allocation" was very clear and easy to understand. It showed the extensive public outreach and notification over a very long time regarding projects that could be funded with these monies. Steve clearly explained the requirement to adhere to the threshold criteria, specifically, the "Nexus to Injured Resources, Feasibility, Legality, and Likelihood of Success", and that the projects will have to be clear and measurable.

In attending this meeting and reviewing the video tape as well, it is clear that some of the people attending and on the Midcoast Community Council wanted to disregard the guidelines your Trustee Council must follow and instead they want a good portion of the money spent in San Mateo County regardless of the threshold criteria. It also seemed that the San Mateo County RCD through its representative, Mike Ednoff, is pushing for money from the Fund for general support of the RCD.

As I stated at the meeting, "The decision is best left to the Trustee Council members, who will decide which projects meet the established threshold criteria." The Command Trustee Council's decisions will not please everybody. The selection process must be a careful one, and most importantly <u>must have a nexus to the injured or damaged resources.</u> I don't think the mandate for the Trustee Council should be to solve the budget crisis for the State of California or any local agency, as one member of the Midcoast Council stated.

It was extremely clear that those people pushing the Trustee Council for a piece of the pie simply want "free money" without regard to the damaged species. Keep up your fine work, and just do the right thing.

Thank you

P.O. Box 222 Pescadero, CA 94060



03/15/2004 10:35 AM

Dear Ms Hall--

I am a resident of Moss Beach since 1998. In September 1998 I rescued 2 common murre and one surf scoter (might have been in Oct)..It was very sad, emotional, and i still have tar balls on the rocks on my beachfront.

I strongly feel that any monies spent from this spill SHOULD be spent in the impacted areas. I have strongly stated that position to the MCC and the PMAC publicly elected officials that represent the interests of the affected area...

Why New Zealand? Why kill corvid (ravens)? Why is the impacted area only receiving a third of the monies?

To a resident of the affected area, proposals that you have received from SMC RCD and from Ron Sturgeon would benefit the water quality and watershed issues in the affected area far better that killing ravens, buying girl scout lands, or killing rats in NZ...

best

Terry Gossett Moss Beach 650-563-9508

What is the real agenda here?

A.,



# CITY HALL • 170 Santa Maria Avenue • Pacifica, California 94044-2506

Telephone (650) 738-7300 • Fax (650) 359-6038 www.ci.pacifica.ca.us

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RECEIVED

Charlene Hall Fund Administrator for Command Remediation Fund US Fish and Wildlife Service Cottage Way Sacramento, CA MAR 1 5 2004 SACHAMENTO FISH & WILDLIFE OFFICE

March 12, 2004

# Subject: Response comments on the draft restoration plan for the Command Oil Spill

Dear Charlene:

We are still very interested in being included in the restoration funding for the State Beach Improvement Project. We have received support from Senator Feintein and Congressman Lantos. You will be receiving support letters from their offices this week. I have attached 6 a clearer version of the project description that may be of some use to your evaluation board. Thank you again for your support.

Sincerely,

Scott Holmes Director of Public Works City of Pacifica



"H & P Hamor" <hph@neteze.com> 03/12/2004 10:19 AM

To: <charlene\_hall@fws.gov>

Subject: Draft environmental assessment and "Restoration Plan" relating to the 1998 tanker oil spill on the San Mateo Coast.

Dear Ms. Hall and Trustee Council,

I am an elected member of the Pescadero Municipal Advisory Council to the San Mateo County Board of Supervisors and a long time resident of the San Mateo Coast.

CC:

Last night, March 11, 2004 at our monthly meeting of the PMAC Mike Ednoff, Executive Director of the Half Moon Bay RCD presented the council with an overview of your Draft.

As a resident of the San Mateo coast I am asking you to re-open the process on how the mandated funds should be used to fortify the coast and its' wildlife for the next incident. It will happen! The coast is being exposed to more people each year either by air, water or land.

In the name of " Open Space ", recreation is being promoted for the greater population of San Mateo County and beyond.

My opinion is that if you want to help protect the " San Mateo County's Wildlife Resources " you need to spend the money where the incident took place so the next impact will be subdued.

Sincere thanks, Herb Hamor PO Box 733 Pescadero, CA 94060 650 879 9506



#### ENVIRONMENTAL SERVICES AGENCY

Agricultural Commissioner/ Sealer of Weights & Measures

Animal Control

Cooperative Extension

Fire Protection

.

LAFCo

Library

Parks & Recreation

Planning & Building

February 25, 2004

Charlene Hall Command Oil Spill Trustee Council C/O Fish and Wildlife Service 2800 Cottage Way, Suite 2605 Sacramento CA 95825

RE: Seal Cove, Fitzgerald Marine Reserve

Dear Ms. Hall:

The San Mateo County Parks and Recreation Division strongly supports the Council's recommendation of \$125,000 to fully fund the access improvements at Seal Cove, Fitzgerald Marine Reserve. This project is identified as a priority in the Reserve's master plan. The improvements will reduce erosion into the Reserve, improve public safety and provide safe access to the tidal reef for school groups.

The County of San Mateo is facing a severe budget crisis and no general funds are available for capital improvements such as this access. Moreover, no grant funding has been identified for this project. We respectfully request that the amount allocated to this project remain at \$125,000 as any reduction would impact successful completion of the project.

Thank you for your attention to this matter. Please contact me at 650-363-1906 or DMoore@co.sanmateo.ca.us if you require additional information.

Sincerely,

David Moore Superintendent, San Mateo County Parks February 24, 2004

Charlene Hall

Command Oil Spill Trustee Council

C/O Fish and Wildlife Service

2800 Cottage Way, Suite 2605

Sacramento CA 95825

#### RE: Mirada Surf Acquisition

Dear Ms. Hall:

The San Mateo County Parks and Recreation Foundation strongly supports the Council's recommendation of \$50,000 towards on-site improvements at Mirada Surf. We believe this to be a project supported by the community, as evidenced by over \$100,000 in contributions from the community towards the acquisition of this parcel.

We have already secured a grant to pay for the planning, design and permitting of the Coastal Trail and other amenities. The planning, design and permitting process will begin in spring 2004 and is expected to take nine to twelve months. Actual improvements will begin in spring of 2005.

During the planning process, the San Mateo County Parks and Recreation Foundation will be seeking additional funds for the improvements. This project scores very well with the numerous grant sources identified for this project. All of these grants require a certain percentage of matching funds. The \$50,000 proposed as part of the TV Command Restoration Plan is identified as the match for these grants. There are no other sources identified for the required matching funds.

Please let me know if the Trustees need additional information.

Sincerely,

Julia Bott Executive Director San Mateo County Parks and Recreation Foundation 215 Bay Road Menlo Park, CA 94025 650-321-5812 voice 650-321-5813 fax Julia@SupportParks.org www.SupportParks.org



Joe Loomis <joetech49@tmail.co m>

To: Charlene\_Hall@fws.gov

cc: Mike Ednoff <Mike.Ednoff@sanmateorcd.org>, lou sian <dotseapinks@yahoo.com>, Karen Wilson <montara100@comcast.net>

02/21/2004 05:51 AM Please respond to Joe Loomis

Subject: Re: Extension of Comment Period for Command Restoration Plan

Since it was the marine sanctuary that was damaged, it appears that an appropriate use of the restoration funds would be to prevent further pollution of this body of water by run off from the adjacent land. This would not only clean up the water but also benefit species that use Joe loomis 570 marine blvd Moss beach ca 94038 650 728 5277 On Wed, 18 Feb 2004 6:14pm, Charlene Hall@fws.gov wrote: > Announcing 30 Day Extension of Comment Period for the > Dear Interested Party: Command Draft Restoration Plan February 18, 2004 > > State and Federal agencies are proposing restoration projects to > natural resources injured in the 1998 Command Oil Spill. The tanker > Command spilled oil into waters outside of San Francisco Bay. > ashore along the San Mateo County coast and impacted thousands of > and miles of seashore, and impaired human use activities. The oil > The U.S. Fish and Wildlife Service, the National Oceanic and > Administration, the California Department of Fish and Game, the > State Lands Commission, and the California Department of Parks and > State bands commission, and the carrient of partment of facts and > Recreation are authorized to assess the injuries caused by the spill, > recover damages, and to restore, rehabilitate, replace, or acquire the > equivalent of the affected natural resources. A settlement of > \$5,518,000 > was obtained, of which \$3,913,016 plus accrued interest was allocated > restore natural resource damages. > A Draft Restoration Plan and Environmental Assessment (Plan) has been > developed and a public comment period on the Plan was initiated in > December > 2003. That comment period closed February 11, 2004. However, to > accommodate several requests for additional time, the Trustees have > extended the public comment period for an additional 30 days, through · . . . ....

State Capitol Room 2032 Sacramento, CA 95814-4900 TEL (916) 445-0503 FAX (916) 327-2186

District Offices

400 South El Camino Real, Suite 630 San Mareo, CA 94402 TEL (650) 340-8840 FAX (650) 340-1661

Hiram W. Johnson State Office Building 455 Golden Gate Avenue, Suite 14200 San Francisco, Ca 94102 TEL (415) 557-7857 FAX (415) 557-7864

SENATOR.SPEIER@SEN.CA.GOV

WWW.SEN.CA.GOV/SPEIER

January 21, 2004

Ms. Charlene Hall, Administrative Leader U.S. Fish and Wildlife Service 2800 Cottage Way Sacramento, CA 95825

RECEIVED

FEB 17 2004

SACRAMENTO FISH & WILDLIFE OFFICE

Dear Ms. Hall:

I am writing to express my support of funding for projects proposed by the San Mateo County Resource Conservation District in regards to the Command Oil Spill funds.

The oil spill occurred solely in San Mateo County and this is where these funds should be directed. The people of San Mateo County embrace an integrated resource and watershed approach, encompassing the full spectrum of our natural resources, running from the crest of the mountains, down through the creeks and valleys, and onto the beaches and out into the marine sanctuary. They are all part of an interconnected ecosystem. The involvement of the RCD in the use and implementation of these funds is essential to the thriving of that ecosystem.

The legislative intent for the RCD to work cooperatively with both the state resource agencies and federal agencies to implement locally led natural resource conservation programs is notable. However, it is important that local expertise and knowledge be included in projects funded by these monies. The RCD is best to implement these projects, largely because of their ability to facilitate cooperation among landowners, organizations, and agencies. For more than 60 years, the RCD has been educating landowners on controlling erosion, reducing sediments flowing into the marine sanctuary waters, and, more recently, showing horse ranches how to control their non-point source pollution and prevent them from reaching a marine reserve. The RCD's focus is to work with all resources and is the agency that can integrate programs and processes on the local level to achieve the greatest environmental benefit.



California State Senate

SENATOR JACKIE SPEIER

REPRESENTING SAN FRANCISCO AND SAN MATEO COUNTIES

COMMITTEES CHAIR Insurance Select Committee on Covernment Oversight MEMBER Appropriations Emergy, Utilitics and Communications Transportation Joint Committee on Legislative Audit Select Committee on Bay Area Transportation I would like you to reconsider the projects submitted to the Trustees by the RCD. Please include their projects in the final funding recommendations for using Command Oil Spill funds. If you have any questions, please do not hesitate to contact me.

All the Best, **JACKIE SPEIER** 

State Senator 8<sup>th</sup> District

KJS:wm

Cc: Carolyn A. Lown, Office of the Solicitor, Department of the Interior Tom Suchanek, Natural Resources Damage Assessment and Restoration Branch, U.S. Fish and Wildlife Service Kathy Verue-Slater, Office of Spill Prevention and Response, CA Department of Fish and Game Steve Hampton, Office of Spill Prevention and Response, California Department of Fish and Game

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#### **IUCN/SSC Invasive Species Specialist Group**

Centre for Invasive Species Research School of Geography and Environmental Sciences University of Auckland, Tamaki Campus Private Bag 92019, Auckland, New Zealand Tel: + 64 9 3737 599 x 85210 Fax: + 64 9 3737 042 Email: *issg@auckland.ac.nz* 

11<sup>th</sup> February 2004

Charlene Hall, Field Supervisor NRDAR Branch Environmental Contaminants Division US Fish & Wildlife Service 2800 Cottage Way, W-2605 Sacramento, CA 95825 USA

#### LETTER OF SUPPORT FOR THE SOOTY SHEARWATER RESTORATION PROJECT

#### Dear Madam

As Chair of the SSC/IUCN Invasive Species Specialist Group (ISSG), I wish to register my support for the Sooty Shearwater Restoration Project, which is under consideration for inclusion in the Command Oil Spill Restoration Plan. The ISSG is a voluntary international network of over 170 experts from more than 40 countries, concerned with the impacts of invasive species on native biodiversity and the mitigation of these impacts.

The eradication of invasive rats from breeding areas of the Sooty Shearwater at the Big South Cape Islands and Mokonui Island, off Stewart Island, New Zealand would undoubtedly reduce mortality rates of Sooty Shearwater eggs and young chicks. It would also benefit other native wildlife species that are currently subject to rat predation and would allow restoration of their populations as well. The removal of rats is arguably the single most important action that could be taken to restore the natural ecosystems on these islands, of which Sooty Shearwaters are a key component.

Recent experience with rodent eradication is documented in the IUCN volume entitled 'Turning the Tide: the eradication of invasive species' (Veitch & Clout 2002). This publication reports on a series of successful rodent eradication projects, using the same techniques that are proposed for the Big South Cape islands and Mokonui. I have no doubt that the proposed use of aerial poisoning methodology will successfully eradicate the rats, with no lasting environmental damage. Modern safeguards and quarantine procedures should prevent any reinvasion.

The fact that Sooty Shearwaters from southern New Zealand travel in the southern winter to the waters off California emphasises the global connectedness of marine ecosystems. Damage caused by pollution in one part of the world has consequences for the health of breeding populations far away. I therefore congratulate the Command Trustees for having the vision to consider the ecological restoration of remote islands in southern New Zealand as part of the Restoration Plan.

I strongly recommend that the Sooty Shearwater Restoration Project be supported as part of the Command Oil Spill Restoration Plan. It will leave a lasting legacy in the form of rat-free islands and restored native biodiversity.

.

Yours Sincerely

And Can

Dr Mick Clout Chair, IUCN Invasive Species Specialist Group

cc: Henrik Moller



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Scenic Pacifica

February 11, 2004

Charlene Hall Fund Administrator for Command Remediation Fund US Fish and Wildlife Service 2800 Cottage Way Suite W-2605 Sacramento, CA 95825-1846

RECEIVED

FEB 1 7 2004 SACRAMENTO FISH & WILDLIFE OFFICE

# Subject: Response comments on the draft restoration plan for the Command Oil Spill

Dear Charlene:

I am writing this letter so to provide comments in response to the draft restoration plan for the Command Oil Spill. The City of Pacifica was directly affected by the oil spill; we had tar balls and dead oil soaked bird's wash up on the beach. The spill had a negative effect on both the beach habitat and recreational uses of the beach.

The City is currently in the construction phase of the Pacifica State Beach Improvement Plan. The project includes the purchase, removal and demolition of two houses located on the beach; the restoration of the tidally influenced wetlands associated with San Pedro Creek and the installation of one mile of pedestrian/multi-purpose trail along the beach. The plan also includes the installation of four ADA accessible ramps to the beach, new beach changing rooms, new ADA accessible restrooms (eight total), a new parking lot, design construction and implementation of the clean beaches wetlands treatment system for parking lot runoff and the restoration of two acres of sand dune habitat. A total of 4 acres of beach will be added for recreational use.

Attached is a copy of the bcach master plan that will provide a more complete description of the project. The project is the ideal mix of recreational improvements and habitat restoration. As with all projects, it is currently under-funded. We are short approximately \$400,000 for land acquisition and approximately \$200,000 for the native landscaping. We are also short \$100,000 for restroom construction and an additional \$100,000 for the paving of the parking lots. Any available funding will be much appreciated.

The restoration component of the project includes the restoration of a four acre tidally influenced wetlands at the San Pedro Creek mouth. This is one of the first restored tidally influenced wetlands on the San Mateo Coast. The focus of the wetlands is to improve steelhead trout habitat and coastal shore bird habitat. To restore the wetlands, the City purchased two acres of private land for \$2.2 million and through legislation, has purchased an additional two acres of excess right of way from

Caltrans. The removal of the houses also increases the recreational usable beach area by two acres. The restoration is now 80% complete. However, the City is still short of the purchase amount by approximately \$400,000. We would like to include this plan as part of the mitigation that is required. Any restoration funds available will significantly improve this restoration effort.

The second restoration component of the project includes the restoration of three acres of the dune field on the Pacifica State Beach. The dune fields were bladed down for home and railroad construction. Both the homes and railroad have been removed but the dune field has not recovered. The field was most likely breeding habitat for snowy plovers prior to development. It is currently foraging habitat for snowy plovers. The dune restoration effort involves the reshaping of three acres of dune field to be followed by the planting 15,000 native plants.

To date we have done the majority of the reshaping and planted approximately 2000 plants. We are short by approximately 10,000 yards of sand that has been lost from the dune system. An additional \$200,000 would allow us to complete this project in a manner to maximize its habitat value.

We can provide detailed plans and permits for these projects and feel that they are relevant to the improvement of recreational uses and the restoration of native and endangered shorebirds habitat.

On behalf of the city of Pacifica I would like to ask for your sincere consideration for this restoration funding. With these added funds Pacifica's native animal and plant species as well as its citizens would benefit greatly. We sincerely appreciate your time and your understanding of the goals we are working towards achieving.

Sincerely,

Scott Holmes Director of Public Works City of Pacifica

SH/ec

Enclosure: The Pacifica State Beach Master Plan for Public Improvements

Charlene Hall, USFWS representative Command Oil Spill Trustee Council 2800 Cottage Way, Suite 2605 Sacramento, CA 95825

Dear Charlene,

We submitted the proposed Sooty Shearwater Restoration Project, identified as a preferred project in the Draft Command Oil Spill Restoration Plan & Environmental Assessment (p.64, December 2003). While we understand the public review period has just ended and the RP/EA is yet to be finalized, we would like to provide some additional information and request initial funding for planning activities. Provided this project receives council approval, we can begin to initiate restoration activities without delay.

Here we provide a revised budget (Shearwater\_Budget\_21203.xls) and a document describing the concept schedule, provisional milestones, and milestone reporting timeline (Shearwater Restoration Milestones.doc). The revised budget contains the following worksheets; 1) timeline, 2) total budget, 3) Command and matching funds summarized by phase, and 4) summarized budget by each of the four project objectives. The budget has been updated to reflect the proposed schedule change for fund allocation presented in four phases: I Pre-implementation planning and monitoring, II Implementation – Rat eradication, III – Post-eradication monitoring and quarantine, and IV Adaptive monitoring and quarantine. Secondly, administrative costs which were not included in the Draft RP/EA have been added to reflect the US-based project facilitation and reporting (Oikonos). This budget does not include travel funds for trustees to visit the restoration sites; however, we strongly suggest these funds be allocated if the project receives final approval. This would provide trustees with on-site experience and serve to enhance international relations. We hope this joint US-NZ project will become a model for future international restoration efforts for migratory seabirds.

Finally, the timeline has been changed to reflect a 2004 start date. As mentioned in our original proposal, the cumulative impacts of the spill are on-going, compounding with each breeding season, as the adults that are missing fail to produce young. The eradication effort needs to occur during the non-breeding season (austral winter, July) when the birds are away from the island. Therefore the sooner this restoration plan is developed and implemented; the sooner benefits of this restoration project can begin reversing the losses due to this spill.

Should our proposal be approved, we request that trustees consider allocating funds immediately for Phase I (\$54,880). We also request that Phase II (\$227,180) be made available within 3 months thereafter. Bait costs are the major component of the Phase II budget, and these need to be purchased in advance.

On behalf of the many people involved in developing the Shearwater Restoration Project, I sincerely thank the trustees for considering our request for funding this important restoration project. Please contact me for more details or specifics for this project.

Sincerely,

Hannah Nevins Oikonos Ecosystem Knowledge 831-684-9317, hannah@oikonos.org

ite Statistics **Project Total** \$132,380 \$124,660 \$401,680 Matching \$77,500 \$174,500 \$71,500 Subtotal Oikonos \$21,000 \$14,000 \$9,500 \$12,000 \$57,500 \$52,500 \$52,500 \$15,000 RTIAB Matching Funds<sup>3</sup> \$101,000 \$7,000 2 0 0 ß ç Univ. Otago \$8,500 ŝ ŝ ŝ Funding Sought<sup>2</sup> Command \$54,880 \$227,180 \$55,080 \$53,160 Adaptive Monitoring & Quarantine Planning and Pre-implementation Implementation – Rat Eradication Post-eradication Monitoring & A. Budget Summary by Phase Quarantine (year 3-5) Phase<sup>1</sup> Monitoring (year 1) (years 6-10) (year 2) ≡ ≥ =

<sup>1</sup> See "Phased Budget Summary" and "Budget Obj 1-4" worksheets for detailed budget items. <sup>2</sup> See Table B. (below) for proposed Command funding summary. <sup>3</sup> See Table C. (below) for Matching Funds summary.

\$740,800

\$350,500

\$56,500

\$177,500

\$108,000

\$8,500

\$390,300

\$82,080

\$27,000

Sooty Shearwater Restoration Project B. Project Costs - proposed for Command funding

|               |   |                 |           |                 |                   | ſ       |                      |                  |         |            |            |          |                 |
|---------------|---|-----------------|-----------|-----------------|-------------------|---------|----------------------|------------------|---------|------------|------------|----------|-----------------|
|               | Phase   | -               | =         |                 | Ħ                 |         |                      |                  |         | 2          |            |          |                 |
|               |   |                 |           |                 |                   |         |                      | -<br>-<br>-<br>- |         |            |            |          |                 |
| ltem          | Year  | 1               | ٢         | 2               | 3                 | 4       | 5                    | 9                | 7       | 8          | 6          | \$       | subtotal        |
| -             | Planning: Preparation of management plan,<br>environmental consent application, reporting<br>putcomes (Univ. Otago research team) | \$15,000        | \$5,000   | \$5,000         | \$5,000           | 8       | 8                    | 8                | 8       | <b>Ş</b>   | <b>\$</b>  | 8        | \$30,000        |
| 2             | Planning: Eradication operation, negotiation,<br>reporting (RTIAB)  | \$8,000         | \$8,000   | <b>\$</b> 8,000 | <b>3</b>          | 8       | 8                    | <b>3</b>         | 8       | ß          | <b>0\$</b> | \$4,000  | \$28,000        |
| ŝ             | Eradication: Rodenticide, transport and deployment costs (Univ. Otago/RTIAB)  | 8               | \$180,000 | 8               | Ş                 | 8       | 8                    | 3                | 8       | 8          | 8          | 8        | \$180,000       |
| 4             | Monitoring: Establish of monitoring piots on<br>Mokonui, Rerewhakauopoko and northem<br>Taukihepa (Univ. Ctago)                   | <b>\$</b> 4,000 | \$4,000   | \$0             | <b>\$</b>         | 8       | 03                   | 8                | 80      | 8          | \$0        | 8        | \$8,000         |
| ŝ             | Monitoring scientist and quarantine officer,<br>expenses and quarantine supplies (RTIAB)  | \$20,000        | \$20,000  | \$20,000        | 23 <sup>000</sup> | \$3,000 | 000 <sup>'</sup> 8\$ | \$2,000          | \$2,000 | \$2,000    | \$17,000   | \$17,000 | \$109,000       |
| 9             | Quarantine: outreach materials - posters,<br>brochures, signage, articles (Univ. Otago)   | \$880           | \$2,200   | \$880           | \$0               | \$880   | <b>0</b> 5           | \$               | \$680   | , <b>S</b> | ŝ          | 8        | <b>\$</b> 5,720 |
| 2             | Educational package for USA and NZ audience<br>(Oikonos)  | <b>0</b> \$     | \$1,980   | 0\$             | Q\$               | 8       | <b>9</b>             | 8                | 8       | 8          | 8          | Ş        | \$1,980         |
| æ             | Administrative Costs: contracting, reporting,<br>negoritlating with Trustees and NZ partners<br>(Oikonos)                         | \$7,000         | \$6,000   | \$5,000         | \$1,200           | \$1,200 | \$1,200              | \$1,200          | \$1,200 | \$1,200    | \$1,200    | \$1,200  | \$27,600        |
| Annual totals |   | \$54,880        | \$227,180 | \$38,880        | \$9,200           | \$5,080 | \$4,200              | \$3,200          | \$4,080 | \$3,200    | \$18,200   | \$22,200 | \$390,300       |
|               | Projected year  | 2004            | 2004      | 2005            | 2006              | 2007    | 2008                 | 2009             | 2010    | 2011       | 2012       | 2013     | All years       |

Sooty Shearwater Restoration Project C. Matching Project Costs - In-kind contributions from other sources

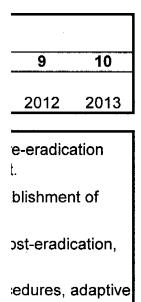
|               | Phase   | -               | Ħ          |            |           |         |           |          |                 | Z        |             |         |           |
|---------------|---|-----------------|------------|------------|-----------|---------|-----------|----------|-----------------|----------|-------------|---------|-----------|
|               |   |                 |            |            |           |         |           | :        |                 | :        |             |         |           |
| ltem          | Year  | -               | 1          | 2          | 3         | 4       | 5         | 9        | 7               | 8        | 6           | 10      | subtotal  |
| -             | Planning: Preparation of management plan,<br>environmental consent application, reporting<br>outcomes (Univ. Otago) | \$8,500         | Ş          | \$0        | <b>\$</b> | \$      | <b>9</b>  | <b>3</b> | <b>0\$</b>      | 0\$      | 8           | 0\$     | \$8,500   |
| 2             | Planning: Eradication operation & quaratine<br>oversight, negotiation, reporting (RTIAB)                            | \$2,500         | \$2,500    | \$2,500    | \$2,500   | \$2,500 | \$2,500   | \$2,500  | <b>\$</b> 2,500 | \$2,500  | \$2,500     | \$2,500 | \$27,500  |
| ÷             | Eradication: Rodenticide, transport and deployment costs (NZ Dept. of Conservation)                                 | \$7,000         | \$101,000  | <b>°\$</b> | 20        | 8       | <b>\$</b> | <b>9</b> | 8               | <b>.</b> | \$          | \$      | \$108,000 |
| 4             | Monitoring: Establish of monitoring plots on non-<br>treatment sites (FRST contract to RTIAB)                       | \$50,000        | \$50,000   | \$50,000   | Ş         | S\$     | \$        | \$0      | \$0             | \$0      | <b>\$</b>   | \$      | \$150,000 |
| ŝ             | Monitoring scientist and quarantine officer,<br>expenses and quarantine supplies (RTIAB)                            | 8               | <b>0\$</b> | \$0        | \$        | \$      | 8         | \$       | ŝ               | \$0      | <b>\$</b> 0 | 8       | <b>05</b> |
| 9             | Quarantine: outreach materials - posters,<br>brochures, signage, articles (Univ. Otago)                             | 8               | \$0        | 80         | Ş         | Ş       | Ş         | ŝ        | 8               | \$0      | <b>2</b> 0  | ş       | 9         |
| 7             | Educational package for USA and NZ audience<br>(Oikonos)  | <b>\$</b> 2,500 | \$15,000   | \$5,000    | \$800     | \$800   | \$600     | 008\$    | \$800           | \$800    | \$800       | \$800   | \$28,900  |
| ŧ             | Administrative Costs: contracting, reporting,<br>negoritating with Trustees and NZ partners<br>(Oikonos)            | 000'2\$         | \$6,000    | \$5,000    | \$1,200   | \$1,200 | \$1,200   | \$1,200  | \$1,200         | \$1,200  | \$1,200     | \$1,200 | \$27,600  |
| Annual totals | tals  | \$77,500        | \$174,500  | \$62,500   | \$4,500   | \$4,500 | \$4,500   | \$4,500  | \$4,500         | \$4,500  | \$4,500     | \$4,500 | \$350,500 |
|               | Projected year  | 2004            | 2004       | 2005       | 2006      | 2007    | 2008      | 2009     | 2010            | 2011     | 2012        | 2013    | All years |

# Timeline for Shearwater Restoration Project<sup>1</sup>

| Phase    | I    | 11   |      | 111  |      |      |      | ŗ    | V    |
|----------|------|------|------|------|------|------|------|------|------|
| Year     | 1    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| Date     |      |      |      |      |      |      |      |      |      |
| Expected | 2004 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |

| 1   | Planning and Pre-implementation Monitoring (year 1): Establishment of promonitoring plots, environmental permitting, contracting, and plan development |
|-----|--|
|     | Implementation – Rat Eradication (year 1): Deployment of rodenticide, esta<br>quarantine procedures and prevention outreach materials.                 |
| 111 | <b>Post-eradication Monitoring &amp; Quarantine (year 2-4)</b> : Monitoring of plots pomaintenance of quarantine protocols, reporting of findings.     |
| ١٧  | Adaptive Monitoring & Quarantine (years 5-10): Continued quarantine proc monitoring, end-point monitoring data, and final reporting.                   |

<sup>1</sup> See Document "Shearwater Restoration Milestones" for more detailed products, etc.



Sooty Shearwater Restoration Project Command funding

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|   | Phase I   | Phase II  | Phase III  | Phase IV  | Totals  |
|---|---|---|--|---|---|
| Objective   | Pre-planning  | Eradication   | Monitoring & Quarantine                                  | Adaptive M & Q                                    |   |
| Eradication   | \$ 23,000   | \$ 193,000  | \$ 18,000  | <b>]s</b>   | \$234,000   |
| Quarantine  | \$ 5,880  | \$ 7,200  | \$ 12,760  | \$ 13,880   | \$ 39,720   |
| Monitoring  | \$ 19,000   | \$ 19,000   | \$ 15,000  | \$ 34,000   | \$ 87,000   |
| Education   | \$ -  | \$ 1,980  | S -  | <b>S</b> -  | \$ 1,980  |
| Administration  | \$ 7,000  | \$ 6,000  | \$ 7,400   | \$ 7,200  | \$ 27,600   |
| Subtotal  | \$ 54,880   | \$ 227,180  | \$ 53,160  | \$ 55,080   | \$ 390,300  |
| Command funding sought  | \$ 54,880 41.8%   | \$ 227,180 56.6%                                    | \$ 53,180 42.6%  | \$ 55,080 67.1%                                   | \$ 390,300 \$2.7%                                 |
|   |   |   |  |   |   |
| Other help in kind*   | Phase I   | Phase II  | Phase III  | Phase IV  |   |
| Objective   |   |   | Phase III  | Phase IV  |   |
| Objective<br>Eradication  | Phase I<br>\$ 18,000                                      | Phase II<br>\$ 103,500                              | \$ -   | \$ -  | \$ 121,500  |
| Objective<br>Eradication<br>Quarantine  | \$ 18,000<br>\$ -   | \$ 103,500<br>\$ -                                  | <b>\$</b> -<br><b>\$</b> 7,500                           | Phase IV<br>\$ -<br>\$ 15,000                     | \$ 22,500   |
| Objective<br>Eradication<br>Quarantine<br>Monitoring                                | \$ 18,000<br>\$ -<br>\$ 50,000                            | \$ 103,500<br>\$<br>\$ 50,000                       | \$ -<br>\$ 7,500<br>\$ 50,000                            | \$ -<br>\$ 15,000<br>\$ -                         | \$ 22,500<br>\$ 150,000                           |
| Objective<br>Eradication<br>Quarantine<br>Monitoring<br>Education                   | \$ 18,000<br>\$ -<br>\$ 50,000<br>\$ 2,500 ***            | \$ 103,500<br>\$ -<br>\$ 50,000<br>\$ 15,000 **     | <b>\$</b> -<br><b>\$</b> 7,500                           | \$ -<br>\$ 15,000<br>\$ -<br>\$ 4,800 **          | \$ 22,500<br>\$ 150,000<br>\$ 28,900              |
| Objective<br>Eradication<br>Quarantine<br>Monitoring<br>Education<br>Administration | \$ 18,000<br>\$ -<br>\$ 50,000<br>\$ 2,500 **<br>\$ 7,000 | \$ 103,500<br>\$ 50,000<br>\$ 15,000 **<br>\$ 6,000 | \$ -<br>\$ 7,500<br>\$ 50,000<br>\$ 6,600 **<br>\$ 7,400 | \$ -<br>\$ 15,000<br>\$ -<br>\$ 4,800<br>\$ 7,200 | \$ 22,500<br>\$ 150,000<br>\$ 28,900<br>\$ 27,600 |
| Objective<br>Eradication<br>Quarantine<br>Monitoring<br>Education                   | \$ 18,000<br>\$ -<br>\$ 50,000<br>\$ 2,500 ***            | \$ 103,500<br>\$ -<br>\$ 50,000<br>\$ 15,000 **     | \$ -<br>\$ 7,500<br>\$ 50,000<br>\$ 6,600 **             | \$ -<br>\$ 15,000<br>\$ -<br>\$ 4,800 **          | \$ 22,500<br>\$ 150,000<br>\$ 28,900              |

\*This table shows the amounts of contributions from other sources

\*\*Funding will be sought (not secured) to develop a documentary on the Titi Islands & to develop educational materials for US school groups (K-12), and public outreach.

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SUMMARY BY OBJECTIVE - Command Trustees

**Objective 1 Eradication** 

| ļ                    |   |                         |                   |                         |                        |                    |                    |                    |                    |             |                    |                    |                        |
|----------------------|---|-------------------------|-------------------|-------------------------|------------------------|--------------------|--------------------|--------------------|--------------------|-------------|--------------------|--------------------|------------------------|
|                      | Phase   | -                       | =                 |                         | ≡                      |                    |                    |                    | S                  |             |                    |                    |                        |
| ltern                | Year  | £                       | -                 | 2                       | e                      | 4                  | 5                  | 9                  | 7                  | 8           | 6                  | 10                 | Total                  |
| -                    | Planning: Preparation of management plan,<br>environmental consent application, reporting<br>outcomes (Univ. Otago research team) | \$15,000                | \$5,000           | \$5,000                 | \$5,000                |                    |                    |                    |                    |             |                    |                    |                        |
| 2                    | Planning: Eradication operation, negotiation, reporting (RTIAB)   | \$8,000                 | \$8,000           | \$8,000                 |                        |                    |                    |                    |                    |             |                    |                    |                        |
| e                    | Eradication: Rodenticide, transport and deployment costs (Univ. Otago/RTIAB)  |                         | \$180,000         |                         |                        |                    |                    |                    |                    |             |                    |                    |                        |
| 4                    | Monitoring: Establish of monitoring plots on<br>Mokonui, Rerewhakauopoko and northem<br>Taukihepa (Univ. Otago)                   |                         |                   |                         |                        |                    |                    |                    |                    |             |                    |                    |                        |
| S                    | Monitoring scientist and quarantine officer,<br>expenses and quarantine supplies (RTIAB)  |                         |                   |                         |                        |                    |                    |                    |                    |             |                    | _                  |                        |
| g                    | Quarantine: outreach materials - posters,<br>brochures, signage, articles (Univ. Otago)   |                         |                   |                         |                        |                    |                    |                    |                    |             |                    |                    |                        |
| 7                    | Educational package for USA and NZ audience<br>(Oikonos)  |                         |                   |                         |                        |                    |                    |                    |                    |             |                    |                    |                        |
| œ                    | Administrative Costs: contracting, reporting,<br>negoitiating with Trustees and NZ partners<br>(Oikonos)                          | \$7,000                 | \$6,000           | \$5,000                 | \$1,200                | \$1,200            | \$1,200            | \$1,200            | \$1,200            | \$1,200     | \$1,200            | \$1,200            | \$27,600               |
| Annual totais<br>Pro | <b>stais</b><br>Projected year  | <b>\$23,000</b><br>2004 | \$193,000<br>2004 | <b>\$13,000</b><br>2005 | <b>\$5,000</b><br>2006 | <b>\$0</b><br>2007 | <b>\$0</b><br>2008 | <b>\$0</b><br>2009 | <b>\$0</b><br>2010 | \$0<br>2011 | <b>\$0</b><br>2012 | <b>\$0</b><br>2013 | \$234,000<br>All years |

SUMMARY BY OBJECTIVE - Command Trustees

| International internationalinternatinternational international international international | Ohioctino | 2 Oursenfine  |         |         |         |         |         |         |         |         |         |         |          |           |
|--|-----------|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|
| Phase         Phase         N           Year         Year         Year         N           1         Phanming: Fragmagnement plan,<br>untromerated consertin of management plan,<br>untromerated consertin of management plan,<br>untromerated conserting of management plan,<br>untromerated conserting of management plan,<br>untromerated conserting of management plan,<br>reporting (RTMB)         1         1         2         3         4         5         6         7         8         9           2         Planning: Eradication operation, reporting<br>untromeration constration, reporting<br>(RTMB)         1         1         2         3         4         5         6         7         8         9           3         Eradication operation, regoliation,<br>cosis (Univ. Olago)         Eradication operation, regoliation,<br>cosis (Univ. Olago)         1         1         2         3         6         7         8         9         9           4         Molecutic<br>Molecutic         Reservaluaceopeko and northerm         1         1         2         3         5         5         000         5         000         5         000         2         000         2         000         2         000         2         000         2         000         2         000         2         000         2         000 <td< th=""><th>Cujecure</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></td<>   | Cujecure  |   |         |         |         |         |         |         |         |         |         |         |          |           |
| Year         Year <th< th=""><th></th><th>Phase</th><th>-</th><th>=</th><th></th><th>Ŧ</th><th></th><th></th><th></th><th></th><th>_</th><th></th><th></th><th></th></th<>   |           | Phase   | -       | =       |         | Ŧ       |         |         |         |         | _       |         |          |           |
| Pianing: Freparation of management plan,<br>environmental consent in explication.         Pianing: Frequential consent in explication spotation,<br>environmental conservence.           Planing: Fradication operation, reporting<br>environmental conservence.         Pianing: Fradication operation, reporting<br>environmental conservence.           Planing: Fradication operation, reporting<br>environmental conservence.         Pianing: Fradication operation, reporting<br>environmental conservence.           Planing: Fradication operation, regolation,<br>reporting (FTJAB)         Fradication operation, regolation,<br>environmental conservence.           Monitoring: Establish of monitoring plots on<br>Montoring: Establish of monitoring plots on<br>and quarantine supples (TIAB)         Si,000         Si,000 <th>Item</th> <th>Year</th> <th>-</th> <th>-</th> <th>2</th> <th>e</th> <th>4</th> <th>L.</th> <th>9</th> <th>7</th> <th>8</th> <th>6</th> <th><b>t</b></th> <th>Total</th>   | Item      | Year  | -       | -       | 2       | e       | 4       | L.      | 9       | 7       | 8       | 6       | <b>t</b> | Total     |
| Planning: Eradication operation, negotiation,<br>reporting (RTAB)         Eradication: Rodenicide, transport and deployment<br>costs (Univ. Otago)         Monitoring: Establish of monitoring plots on<br>Monitoring: Establish of monitoring plots on<br>Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)         Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)         Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)         Ubarantine supplies (RTIAB)         S5,000       \$5,000       \$5,000       \$5,000       \$2,000       \$2,000       \$2,000         Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)       \$5,000       \$5,000       \$3,000       \$3,000       \$2,000       \$2,000       \$2,000         Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)       \$5,000       \$5,000       \$3,000       \$3,000       \$3,000       \$2,000       \$2,000       \$2,000         Monitoring scientist and quarantine officer, expenses       \$5,000       \$5,000       \$5,000       \$3,000       \$3,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000       \$2,000   | -         | Planning: Preparation of management plan,<br>environmental consent application, reporting<br>outcomes (Univ. Otago research team) |         |         |         |         |         |         |         |         |         |         |          |           |
| Eradication: Rodenticide, transport and deployment<br>costs (Univ. Ctago/RTIAB).         Monitoring: Establish of monitoring plots on<br>Mokonui, Reewhakauopoko and northern<br>Taukihepa (Univ. Ctago)         Monitoring: Establish of monitoring plots on<br>Mokonui, Reewhakauopoko and northern<br>Taukihepa (Univ. Ctago)         Monitoring scientist and quarantine officer, expenses<br>and quarantine supplies (RTIAB)         Monitoring scientist and quarantine supplies (RTIAB)         Guarantine: outreach materials - posters, brochures,<br>iginage, articles (Univ. Otago)         Stage       \$2,000       \$3,000       \$3,000       \$2,000       \$2,000       \$2,000         Quarantine: outreach materials - posters, brochures,<br>iginage, articles (Univ. Otago)       \$2,000       \$3,000       \$3,000       \$2,000   | 7         | Planning: Eradication operation, negotiation,<br>reporting (RTIAB)  |         |         |         |         |         |         |         |         |         |         |          |           |
| Monitoring: Establish of monitoring plots on<br>Taukihepa (Univ. Otago)         Monitoring: Establish of monitoring plots on<br>Mokonui, Rerewhakauopoko and northern         Monitoring: Establish of monitoring plots on<br>Mokonui, Rerewhakauopoko and northern         Monitoring: Establish of monitoring         Moni   | £         | Eradication: Rodenticide, transport and deployment costs (Univ. Otago/RTiAB)  |         |         |         |         |         |         |         |         |         |         |          |           |
| Monitoring scientist and quarantine officer, expenses         sc, 000         \$5,000         \$5,000         \$5,000         \$3,000         \$2,000<   | 4         | Monitoring: Establish of monitoring plots on<br>Mokonui, Rerewhakauopoko and northern<br>Taukihepa (Univ. Otago)                  |         |         |         |         |         |         |         |         |         |         |          |           |
| Quarantine: outreach materials - posters, brochures,<br>signage, articles (Univ. Otago)       \$880       \$2,200       \$880       \$880       \$880         Educational package for USA and NZ audience       \$880       \$2,200       \$880       \$880       \$880         Iconomic (Oikonos)       \$5,880       \$7,200       \$5,880       \$3,000       \$2,080       \$2,000   | 2         | Monitoring scientist and quarantine officer, expenses and quarantine suppties (RTIAB)   | \$5,000 | \$5,000 | \$5,000 | \$3,000 | \$3,000 | \$3,000 | \$2,000 | \$2,000 | \$2,000 | \$2,000 | \$2,000  |           |
| \$5,880         \$7,200         \$3,000         \$3,000         \$2,000         \$2,000           2004         2005         2006         2007         2008         2010         2012   | 9         | Quarantine: outreach materials - posters, brochures,<br>signage, articles (Univ. Otago)   | \$880   | \$2,200 | \$880   |         | \$880   |         |         | \$880   |         |         |          |           |
| \$5,880 \$7,200 \$5,880 \$3,000 \$3,880 \$3,000 \$2,000 \$2,880 \$2,000 \$2,000<br>2004 2004 2005 2006 2007 2008 2009 2010 2011 2012   | 7         | Educational package for USA and NZ audience<br>(Oikonos)  |         |         |         |         |         |         | :       |         |         |         |          |           |
| 2004 2004 2005 2006 2007 2008 2009 2010 2011   |           |   | \$5,880 | \$7,200 | \$5,880 | \$3,000 | \$3,880 | \$3,000 | \$2,000 | \$2,880 | \$2,000 | \$2,000 | \$2,000  | \$39,720  |
|  |           | Projected year  | 2004    | 2004    | 2005    | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013     | All years |

SUMMARY BY OBJECTIVE - Command Trustees

| Objective | Objective 3 Monitoring  |          |                   |          |      |      |      |      |      |      |          |          |           |
|-----------|---|----------|-------------------|----------|------|------|------|------|------|------|----------|----------|-----------|
|           | Phase   | I        | II                |          | Ш    |      |      |      | Ĩ    | VI   |          |          |           |
| ltem      | Year  | -        | -                 | 2        | ę    | 4    | 'n   | 9    | 7    | 80   | 6        | 10       | Total     |
| *         | Planning: Preparation of management plan,<br>environmental consent application, reporting<br>outcomes (Univ. Otago research team) |          |                   |          |      |      |      |      |      |      |          |          |           |
| 2         | Ptanning: Eradication operation, negotiation, reporting (RTIAB)   |          |                   |          |      |      |      |      |      |      |          | \$4,000  | ·         |
| £         | Eradication: Rodenticide, transport and<br>deployment costs (Univ. Otago/RTIAB)   |          |                   |          |      |      |      |      |      |      |          |          |           |
| 4         | Monitoring: Establish of monitoring plots on<br>Mokonui, Rerewhakauopoko and northern<br>Taukihepa (Univ. Otago)                  | \$4,000  | \$4,000           |          |      |      |      |      |      |      |          |          |           |
| 5         | Monitoring scientist and quarantine officer,<br>expenses and quarantine supplies (RTIAB)  | \$15,000 | \$15,000          | \$15,000 |      |      |      |      |      |      | \$15,000 | \$15,000 |           |
| y         | Quarantine: outreach materials - posters,<br>brochures, signage, articles (Univ. Otago)   |          |                   |          |      |      |      |      |      |      |          |          |           |
| 7         | Educational package for USA and NZ audience<br>(Oikonos)  |          |                   |          |      |      |      |      |      |      |          |          |           |
|           |   | \$19,000 | \$19,000 \$15,000 | \$15,000 | 0\$  | \$0  | 0\$  | 0\$  | 0\$  | \$0  | \$15,000 | \$19,000 | \$87,000  |
|           | Projected Year  | 2004     | 2004              | 2005     | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012     | 2013     | All years |

\$1,980 All years Total 2013 9 **\$** 2012 ß ō, 2011 8 œ  $\mathbf{N}$ 2010 ŝ ~ 2009 Ş φ 2008 8 ŵ 2007 8 4 2006 Ш 8 ŝ 2005 8 2 \$1,980 \$1,980 2004 Π Ŧ 2004 8 T Educational package for USA and NZ audience (Oikonos) Planning: Preparation of management plan, environmental consent application, reporting Planning: Eradication operation, negotiation, reporting (RTIAB) Monitoring scientist and quarantine officer, expenses and quarantine supplies (RTIAB) Monitoring: Establish of monitoring plots on Mokonui, Rerewhakauopoko and northern Taukihepa (Univ. Otago) Quarantine: outreach materials - posters, brochures, signage, articles (Univ. Otago) SUMMARY BY OBJECTIVE - Command Trustees Eradication: Rodenticide, transport and outcomes (Univ. Otago research team) deployment costs (Univ. Otago/RTIAB) Projected Year Objective 4 Education Phase Year 2 • ŵ φ 4 ►-Ŧ item

Sooty Shearwater Restoration Project

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## Sooty Shearwater Restoration Project Schedule & Task Timeline

#### A. Concept Schedule:

|              | Phase<br>I | Phase<br>II | P | hase II | I |   | ] | Phase <b>F</b> | V |      |
|--------------|------------|-------------|---|---------|---|---|---|----------------|---|------|
| Year         | 1          | 1           | 2 | 3       | 4 | 5 | 6 | 7              | 8 | 9-10 |
| Task         |            |             |   |         |   |   |   |                |   |      |
| Planning     | X          | Х           |   |         |   |   |   |                |   |      |
| Eradication  |            | X           | x |         |   |   |   |                |   |      |
| Quarantine   | х          | X           | X | X       | X | x | x | x              | x | х    |
| Monitoring   | Х          | Х           | X | Х       | X | x | x | x              | x | x    |
| Education    |            | X           |   |         |   |   |   |                |   |      |
| X = High eff | fort on ta | sk          |   |         |   |   |   |                |   |      |
| x = Reduced  | effort or  | n task      |   |         |   |   |   |                |   |      |

#### **B.** Provisional Plan and Milestones

# Phase I (year 1): Pre-implementation Planning and Monitoring

Tasks:

NZ Environmental court review US/NZ Legal review Management Plan development Site specific pre-eradication rat predation study<sup>1</sup> Establish baseline monitoring plots on "control" and "targeted" islands Survey and map breeding area extent (manu) Milestones: Environmental court approval (NZ) US legal & environmental compliance **USFWS MOU** Management plan Monitoring report -Rat predation results -Occupancy rate of burrows in plots -Map of breeding area Expense report

#### Phase II (year 1): Implementation – Rat Eradication

Tasks:

Bait deployment Establishment of quarantine officer

<sup>&</sup>lt;sup>1</sup> Funding for this task provided in-kind contribution (Univ. of Otago – Research team)

Establish stations for emergency "rat spill" response Print and distribute signage for quarantine precautions *Milestones*:

Quarantine report

-Bait deployment results

-Map and photos of rat spill prevention stations

-Summary of quarantine precautions, protocols

Expense report

#### Phase III (year 2-4): Post-eradication Monitoring & Quarantine

Re-visit monitoring plots

Maintain quarantine and rat spill response

Milestones:

Monitoring report

-Post-eradication rat predation results<sup>2</sup>

-Occupancy rate of burrows in plots

-Comparisons with pre-eradication

Quarantine report

-Update on status of prevention measures

-List of recommendations for quarantine protocols

Expense report

# Phase IV (years 5-10): Adaptive Monitoring & Quarantine

Tasks:

Re-visit monitoring plots Re-Survey breeding area (*manu*) Maintain quarantine and rat spill response Adapt monitoring and quarantine plan as necessary

#### Milestones:

Final Monitoring report

-Occupancy rate of burrows in plots

- Map of breeding area - comparisons with pre-eradication

Final Quarantine report

-Update on prevention measures and adaptations to original protocols

-List of recommendations for long-term quarantine protocols

Final Expense report

<sup>&</sup>lt;sup>2</sup> Results provided by Univ. of Otago research team.

|            | Phase<br>I | Phase<br>II | P  | 'hase II | I  |    | 1  | Phase I | V  |      |
|------------|------------|-------------|----|----------|----|----|----|---------|----|------|
| Year       | 1          | 1           | 2  | 3        | 4  | 5  | 6  | 7       | 8  | 9-10 |
| Milestone  |            |             |    |          |    |    |    |         |    |      |
| NZ-EIR     | Х          |             |    |          |    |    |    |         |    | -    |
| Permit     |            |             |    |          |    |    |    |         |    |      |
| US legal   | X          |             |    |          |    |    |    |         |    |      |
| compliance |            |             |    |          |    |    |    |         |    |      |
| USFWS      | Х          |             |    |          |    |    |    |         |    |      |
| MOU        |            |             |    |          |    |    |    |         |    |      |
| Management | Х          |             |    |          |    |    |    |         |    |      |
| Plan       |            |             |    |          |    |    |    |         |    |      |
| Biennial   | XX         | XX          | XX | XX       | XX | XX | XX | XX      | XX | XX   |
| Report     |            |             |    |          |    |    |    |         |    |      |
| Breeding   | Х          |             | Х  |          | Х  |    | X  |         | X  |      |
| Monitoring |            |             |    |          |    |    |    |         |    |      |
| Rat        | X          | Х           | Х  |          |    | x  |    | x       |    |      |
| Predation  |            |             |    |          |    |    |    |         |    |      |
| Results    |            |             |    |          |    |    |    |         |    |      |
| Quarantine | X          | Х           | Х  | Х        | Х  | X  | X  | X       | X  | X    |
| Report     |            |             |    |          |    |    |    |         |    |      |
| Expense    | XX         | XX          | XX | XX       | XX | XX | XX | XX      | XX | XX   |
| Report     |            |             |    |          |    |    |    |         |    |      |

# C. Concept Schedule with Milestone Reporting Timeline



United States Department of the Interior

FISH AND WILDLIFE SERVICE Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846



MAR 1 0 2004

In reply refer to: FWS/ECD-04-034

Ms. Hannah Nevins Oikonos Ecosystem Knowledge P.O. Box 1103 Aptos, California 95001-1103

Subject: Proposed Command Restoration Projects

Dear Ms. Nevins:

We are in receipt of your February 13, 2004, e-mail letter requesting the Command Council increase funding, to cover administrative and travel costs, on the proposed New Zealand Project. We thank you for your input, have incorporated your letter and information into the Administrative Record, and will consider your request. We will note all changes to proposed projects, if any, in the Final Command Restoration Plan.

Thank you for input on the proposed New Zealand Project and if you have any further questions or comments please call Charlene Hall at (916) 414-6739.

Sincerely,

David L. Harlow Acting Field Supervisor

cc: Command Trustee Council

TAKE PRIC **INAMERIC** 

#### February 9, 2004

Charlene Hull and Command Trustee Council U.S. Fish and Wildlife Service 2800 Cottage Way, Room W-2605 Sacramento, CA 95825

#### **Re: Command Oil Spill Fund Restoration Projects**

Dear Ms. Hull and Trustees,

I served on the Board of Directors of the San Matco County Resource Conservation District (RCD) for four years. When my term was up in 2002, I did not apply for reappointment by the Board of Supervisors. During the four years I was on the RCD Board, I attempted to ensure greater accountability by the RCD to its taxpayers and other public agencies regarding expenditures of its funds. My efforts were met with great resistance, and I have to say that I was extremely frustrated by the lack of fiscal accountability that I believe persists today.

One example of arrogant mismanagement of funds and projects resulted in two lawsuits brought against the RCD by a contractor, which resulted in a costly negotiated settlement. The settlement money were taken from a fund (BFI fine monies) that had been established for the restoration of Pilarcitos Creek. I do not believe using these fine monies for settlement of litigation was consistent with the purpose of expenditures of the Pilarcitos Fund, under the MOU with the Regional Water Quality Control Board and the California Department of Fish and Game. Furthermore this litigation against the RCD was completely avoidable. The two lawsuits were the result of a lack of diligence on the part of the RCD staff to determine the appropriate time frame for implementing a stream restoration project on Mills Creek, a tributary to Pilarcitos Creek. When the error was discovered, the contractor had already mobilized his equipment to the site and was ready to begin the project. He had to delay the project until later in the summer to a generally well known date that had been established by the agencies to avoid harm to the California red-legged frog, a threatened species.

I understand that the RCD has now asked the Command Oil Spill Trustees to fund various projects that would include funding for the current RCD staff or new positions, such as Watershed Coordinator. I would strongly object to such funding, as I do not believe the RCD has demonstrated the ability to efficiently and effectively manage projects. For example, the Pescadero-Butano Watershed Assessment project was originally scheduled to be done through the auspices of the RCD. Due to bitter and intense opposition by a few landowners, the scope of the Assessment was greatly reduced, removing any assessment of upland sources of sediment. Since most of the excessive sediment in a watershed comes from slopes, not from the stream itself or its riparian areas, this reduction in scope has completely compromised the integrity of the study. The contract (originally with the RCD) was transferred to the Monterey Bay National Marine Sanctuary, further delaying the start of the project. As a result, the only in-field data collection has been done during the summer and fall season of 2003. A study of sediment that doesn't include one or preferably two winter seasons (when sediment is mobilized in the system), the resulting Assessment will be completely inadequate, as there will be no reliable and documented in-field baseline information.

I have received a copy of the letter dated January 27, 2004 from Wayne White to Congresswoman Anna Eshoo outlining the Threshold Criteria and Additional Criteria that the Trustee Council must follow. I particularly support the requirement that there be a direct nexus to the injured resources. Based on this requirement alone, it is clear that none of the projects proposed by the RCD could be approved. The vague, self-serving expanded proposals the RCD staff would offer the Trustees for consideration have no nexus to the injured resources, nor would they meet numerous other criteria such as feasibility, likelihood of success, cost effectiveness, duration of benefits, timely and effective benefits, and accurate estimate of costs. The RCD, in submitting these proposals, is apparently attempting to change whatever rules are in place to suit their needs for having a "golden goose" to fund their operations.

The purpose of this letter is to point out that the RCD has a poor track record in managing projects, fiscal responsibility, resources, and gaining consensus among all the stakeholders regarding watershed restoration.

Thank you for consideration of these comments.

Sincerely,

Aim Rourke P.O. Box 222 Pescadero, CA 94019

February 11, 2004

Charlene Hall Fund Administrator for Command Remediation Fund US Fish and Wildlife Service 2800 Cottage Way Suite W-2605 Sacramento, CA 95825-1846

## Subject: Response comments on the draft restoration plan for the Command Oil Spill

Dear Charlene:

I am writing this letter so to provide comments in response to the draft restoration plan for the Command Oil Spill. The City of Pacifica was directly affected by the oil spill; we had tar balls and dead oil soaked bird's wash up on the beach. The spill had a negative effect on both the beach habitat and recreational uses of the beach.

The City is currently in the construction phase of the Pacifica State Beach Improvement Plan. The project includes the purchase, removal and demolition of two houses located on the beach; the restoration of the tidally influenced wetlands associated with San Pedro Creek and the installation of one mile of pedestrian/multi-purpose trail along the beach. The plan also includes the installation of four ADA accessible ramps to the beach, new beach changing rooms, new ADA accessible restrooms (eight total), a new parking lot, design construction and implementation of two acres of sand dune habitat. A total of 4 acres of beach will be added for recreational use.

Attached is a copy of the beach master plan that will provide a more complete description of the project. The project is the ideal mix of recreational improvements and habitat restoration. As with all projects, it is currently under-funded. We are short approximately \$400,000 for land acquisition and approximately \$200,000 for the native landscaping. We are also short \$100,000 for restroom construction and an additional \$100,000 for the paving of the parking lots. Any available funding will be much appreciated.

The restoration component of the project includes the restoration of a four acre tidally influenced wetlands at the San Pedro Creek mouth. This is one of the first restored tidally influenced wetlands on the San Mateo Coast. The focus of the wetlands is to improve steelhead trout habitat and coastal shore bird habitat. To restore the wetlands, the City purchased two acres of private land for \$2.2 million and through legislation, has purchased an additional two acres of excess right of way from Caltrans. The removal of the houses also increases the recreational usable beach area by two acres. The restoration is now 80% complete. However, the City is still short of the purchase amount by approximately \$400,000. We would like to include this plan as part of the mitigation that is required. Any restoration funds available will significantly improve this restoration effort.

The second restoration component of the project includes the restoration of three acres of the dune field on the Pacifica State Beach. The dune fields were bladed down for home and railroad construction. Both the homes and railroad have been removed but the dune field has not recovered. The field was most likely breeding habitat for snowy plovers prior to development. It is currently foraging habitat for snowy plovers. The dune restoration effort involves the reshaping of three acres of dune field to be followed by the planting 15,000 native plants.

To date we have done the majority of the reshaping and planted approximately 2000 plants. We are short by approximately 10,000 yards of sand that has been lost from the dune system. An additional \$200,000 would allow us to complete this project in a manner to maximize its habitat value.

We can provide detailed plans and permits for these projects and feel that they are relevant to the improvement of recreational uses and the restoration of native and endangered shorebirds habitat.

On behalf of the city of Pacifica I would like to ask for your sincere consideration for this restoration funding. With these added funds Pacifica's native animal and plant species as well as its citizens would benefit greatly. We sincerely appreciate your time and your understanding of the goals we are working towards achieving.

Sincerely,

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Scott Holmes Director of Public Works City of Pacifica

SH/ec

Enclosure: The Pacifica State Beach Master Plan for Public Improvements



"Michelle Hester" <michelle@oikonos.or To: <Charlene\_Hall@fws.gov>

Subject: Command Restoration Plan Public Comment - Hester/Thayer

02/11/2004 04:44 PM Please respond to michelle

February 11, 2004

g>

Re: Public comment on Command Oil Spill Draft Restoration Plan & Environmental Assessment

CC:

Dear Command Spill Trustees,

Thank you for the opportunity to provide comments on the draft Command Oil Spill Restoration Plan. As stated in the draft Plan, the project "Año Nuevo Island Seabird Habitat Restoration" was rated as non-preferred due to financial constraints and a low nexus to the injured resources. We have additional information not provided in previous comments regarding a Rhinoceros Auklet observed oiled during this spill. With the intention to provide as much information as possible to evaluate injury, we summarized the known and potential impacts to Rhinoceros Auklets and presented a budget revised to reflect known costs from the initial restoration efforts that began in November 2003.

Please see the attached file Command\_plancomments\_RHAU.doc for our complete comment. We will follow up with a printed hardcopy in the mail.

Please contact Julie or Michelle if you need any further information or with questions. Thank you again for working so hard on this Plan and giving the public an opportunity to contribute.

Sincerely,

Michelle Hester Oikonos Ecosystem Knowledge

Julie Thayer PRBO, Conservation Science

Command plancomments\_RHAU.

Michelle Hester Oikonos P.O. Box 979 Bolinas, CA 94924 Julie Thayer PRBO, Conservation Science 4990 Shoreline Hwy Stinson Beach, CA 94970

February 11, 2004

Charlene Hall Command Spill Trustees U.S. Fish and Wildlife Service 2800 Cottage Way, Suite 2605 Sacramento, CA 95825

Re: Public comment on Command Oil Spill Draft Restoration Plan and Environmental Assessment

Dear Command Trustees,

Thank you for the opportunity to provide comments on the draft Command Oil Spill Restoration Plan. As stated in the draft Plan, the project "Año Nuevo Island Seabird Habitat Restoration" was rated as non-preferred due to financial constraints and a low nexus to the injured resources. We have additional information not provided in previous comments regarding a Rhinoceros Auklet observed oiled during this spill. With the intention to provide as much information as possible to evaluate injury, we summarized the known and potential impacts to Rhinoceros Auklets and presented a budget revised to reflect known costs from the initial restoration efforts that began in November 2003.

Numerous species are not well documented by current survey methods during spill events. We support the prioritization of efforts that benefit species of highest known injury and/or threatened status, if such beneficial projects are identified and feasible. However, given our inability to quantify injury for pelagic (offshore) species, we suggest these species be prioritized using different criteria. Rhinoceros Auklets are a California State listed Species of Special Concern. Population estimates indicate there are fewer breeding Rhinoceros Auklets in San Mateo County or California than Marbled Murrelets (San Mateo =  $\sim 270$  breeding RHAU,  $\sim 500$  MAMU; CA =  $\sim 1,900$  individual RHAU,  $\sim 6450$  MAMU). To our knowledge, no oil spill restoration funds have been spent on restoring injury to this species (most notably Apex Houston where 1,566 adult Rhinoceros Auklets were estimated to have been killed). Due to the rapid change in nesting habitat due to loss of soil at Año Nuevo Island, efforts to restore a native plant community and reduce erosion are of immediate concern. November 2003, we initiated a largescale re-vegetation project with funding from the State Coastal Conservancy. This revegetation is proposed to continue in 2004/05 and 2005/06 to complete the stabilization of nesting habitat for these and other burrow nesting species (Cassin's Auklets, Pigeon Guillemots). Future efforts (2006 - 2010) will focus on documenting the response of auklets and other wildlife to the habitat changes. If additional monies become available within Command, we request that the council consider contributing support towards this important seabird restoration project.

## I. Rhinoceros Auklet injury from Command spill

Summary of Information:

1) Biologists on South East Farallon Island record observations of oiled birds seen at sea or on the colony daily. In the days following the spill, one oiled Rhinoceros Auklet was seen (we assume at sea) from shore on September 30, 1998. It is likely that this bird died due to the coverage of oil (35% of visible body) and likely that the oil was from the Command Spill (Table 1).

2) Birds were present in the vicinity of oil during OSPR aerial surveys (Table 1).

3) Mortality conservatively estimated between 7 and 74 birds killed (based on model used for murrelets - see below).

4) Hatch-year birds were potentially in the contaminated area. In 1998, the last monitored Rhinoceros Auklet chicks fledged from burrows between 14 and 21 September.

5) Similar to Marbled Murrelets, the low breeding population numbers in the region make it difficult to document the extent of injury to Rhinoceros Auklets using beached bird data.

6) The Command oil spill overlaps with this species range (Figure 1).

7) Spill area was within the foraging range for breeding Rhinoceros Auklets from both Año Nuevo and SE Farallon Islands.

| Date                           | Birds   | Observation                  | Location                | Source               |
|--------------------------------|---|------------------------------|-------------------------|----------------------|
| Sept. 30<br>1998               | 1 oiled                                       | 35% oiled                    | near SE Farallon Island | PRBO Database        |
| Sept. 29 -<br>Oct. 2<br>1998   | Present at sea<br>(abundance not<br>reported) | 4 Aerial<br>Surveys          | Spill Vicinity          | Boyce & Hampton 2001 |
| Sept. 14 -<br>Sept. 21<br>1998 | Present at colony                             | Chicks at<br>monitored sites | Año Nuevo Island        | PRBO                 |

Table 1. Rhinoceros Auklet Observations during Command Spill

## Estimated number of Rhinoceros Auklets killed:

We estimated Rhinoceros Auklet mortality using methods similar to those used in the bird injury report for Marbled Murrelets (Boyce and Hampton 2002), by comparing the reported ratio of the number killed to number at risk for Common Murre to the Rhinoceros Auklet, solving for the number killed.

The total affected spill area of 658  $\text{km}^2$  (Moller et al 2003) was used in the equation. Given the species general distribution further offshore than murres or murrelets, we conservatively restrict the density measurements to the offshore spill area, identified in the Plan as Area A (560  $\text{km}^2$ ). This is 85% of the total spill area used to calculate murre and murrelet mortality.

Rhinoceros Auklet average at-sea densities were derived from published aerial and boat survey data during the Oceanic Period (Aug. to Nov.) from the 1980 to 2001 (NOAA 2003). We selected a conservative low range from 0.1 birds/km<sup>2</sup> to 1.0 birds/ km<sup>2</sup>. Note that Rhinoceros Auklet densities

often average as high as 5-10 km<sup>2</sup> (Figure 1). These densities are also comparable with central California at-sea data from Briggs et. al. 1987. Higher densities reflect the post-breeding movement of birds from northern breeding colonies to the productive central California region.

Using the equation described for murres and murrelets, the number at-risk ( $R_{RA}$ ) ranges from 56 birds to 560 birds.

Following this, we solved for Total Mortality ( $M_{RA}$ ), giving: 1,490/11,193 =  $M_{RA}$  /56 to 560 = 7 to 74 Rhinoceros Auklets killed. This is slightly below the injury estimated for Marbled Murrelets (87 at risk, 12 killed).

#### II. Budget

Phase I, II, and II include direct habitat restoration efforts and response studies. Habitat stabilization will be complete after 3 years of effort, therefore costs for Phase IV are reduced and will include the continuation of response studies. Presently, Phase I is funded by the State Coastal Conservancy, with matching funds from Año Nuevo State Reserve, PRBO, Oikonos, University of California, and private donors. The budget below does not include matching contributions needed for the project. Matching mainly includes donated labor, use of shared facilities, donated equipment and supplies, education, and general operating costs not requested.

We are encouraged by the results of our efforts thus far. Erosion control efforts in the most windward section of the island withstood winter conditions better than expected and selected native species are surviving well. In addition, Rhinoceros Auklet have returned to the colony to begin digging burrows and we observed open burrows in the restoration area in early February 2004 (Figure 2).

#### Ano Nuevo Island Seabird Habitat Restoration

ver. 2/9/2004

| Salary  | Phase 1*<br>2003 - 2004 | Phase II<br>2004 - 2005 | Phase III<br>2005 - 2006 | Phase IV<br>2006 - 2010 |
|---|-------------------------|-------------------------|--------------------------|-------------------------|
| Project Planning, Study Design, & Coordination (Aug-Dec)        | 12,000                  | 12,000                  | 12,000                   | 9.000                   |
| Revegetation (Nov, Dec)   | 12,000                  | 12,000                  | 12,000                   | 0                       |
| Habitat Enhancement and Studies (Jan-July)                      | 12,000                  | 12,000                  | 12,000                   | 20,000                  |
| Education (Aug-July)  | 2,000                   | 2,000                   | 2,000                    | 2,000                   |
| Results and Reporting (Aug-July)                                | 4,000                   | 4,000                   | 4,000                    | 6,000                   |
| Total Annual Salary, Benefits, Overhead<br>Expenses & Equipment | 42,000                  | 42,000                  | 42,000                   | 37,000                  |
| Ground Cover  | 6,000                   | 6,000                   | 4,000                    | 0                       |
| Water Catchment and Irrigation                                  | 7,000                   | 500                     | 300                      | removed                 |
| Boat Transport Supplies   | 3,110                   | 1,000                   | 1,000                    | 1,000                   |
| Travel  | 6,800                   | 6,800                   | 6,800                    | 5,400                   |
| SubTotal Expenses<br>Indirect Costs (15%)                       | 22,910<br>3,437         | 14,300<br>2,145         | 12,100<br>1,815          | 6,400<br>960            |
| Other Expenses (no indirect cost applied)                       |                         |                         |                          |                         |
| Native Plants   | 15,000                  | 15,000                  | 15.000                   | 0                       |
| Aerial Photos - Orthocorrected                                  | 4,500                   | 4,500                   | 4,500                    | 4,500                   |
| Total Expenses  | 45,847                  | 35,945                  | 33.415                   | 11,860                  |
| Total Annual Cost   | 87,847                  | 77,945                  | 75,415                   | 48,860                  |

\* Phase I in progress. Restoration costs reflect actual expenses for 03/04.

<sup>7</sup> year - 2003 to 2010

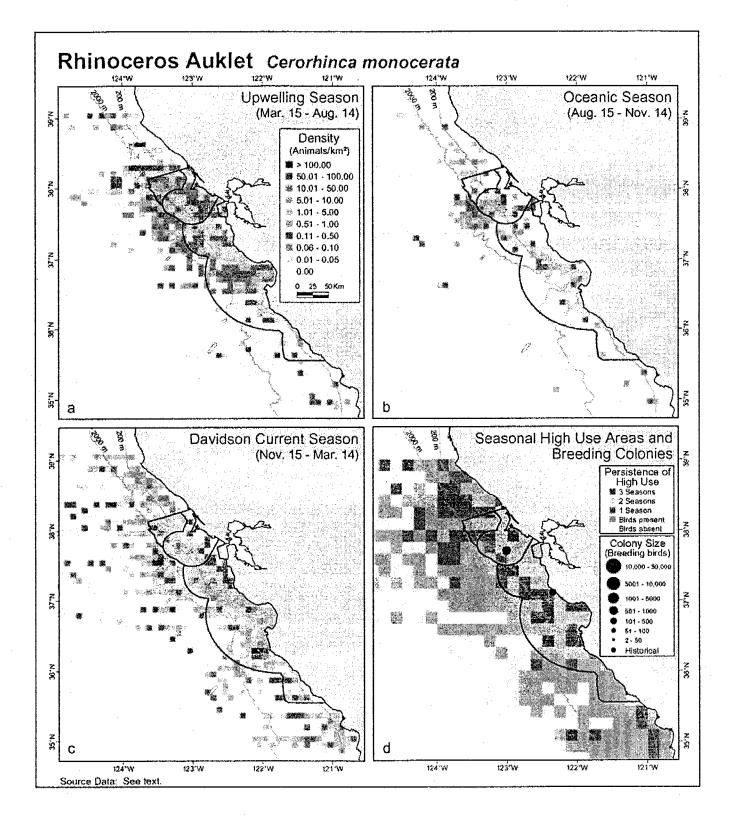


Figure 1. Rhinoceros Auklet distribution and density offshore of central California. Colors represent density of birds per square kilometer averaged for that 5' latitude by 5' longitude grid cells. Map from NOAA 2003.

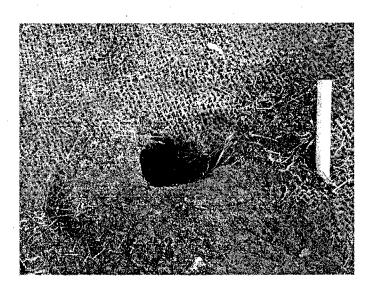


Figure 2. Burrow entrance dug by a Rhinoceros Auklet in February 2004 in the restoration area. Coconut fiber matting overlays mature salt grass plants and native seed from November 2003 efforts.

### References

Boyce, J. and S. Hampton. 2002. Command Bird Injury Report. Final Report to the Command Trustee Council.

Briggs, K. T., Breck Tyler, W., Lewis, D. B., and Carlson, D. R. 1987. Bird communities at sea off California: 1975 to 1983. Studies in Avian Biology No. 11. 74 pp.

Moller, H., H. Nevins, and J. Adams. 2003. The Rakiura Titi Restoration Project Proposal. Unpublished report/request to the Command Trustee Council.

NOAA National Centers for Coastal Ocean Science (NCCOS) 2003. A Biogeographic Assessment off North/Central California: To Support the Joint Management Plan Review for Cordell Bank, Gulf of the Farallones, and Monterey Bay National Marine Sanctuaries: Phase I - Marine Fishes, Birds and Mammals. Prepared by NCCOS's Biogeography Team in cooperation with the National Marine Sanctuary Program. Silver Spring, MD 145 pp.

Page, Gary W, Harry R. Carter and R. Glenn Ford. 1990. Numbers of seabirds killed or debilitated in the 1986 Apex Houston oil spill in central California. Studies in Avian Biology, No. 14. p. 164-174.

February 10, 2004

RECEIVED FEB 1 1 200 SARRAGES SARA

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way, Suite 2605 Sacramento, CA 95825

Re: "Command Oil Spil Draft Restoration Plan and Environmental Assessment"

Dear Ms. Hall:

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I am herein objecting to the lack of transparency surrounding the determination of the natural resources impacted by this spill and the selection of the preferred remedial actions. On February 2, 2004 I made an appointment to review the "Administrative Record" - I was presented a truncated compilation of copies of certain materials included in the file up to a cutoff date of 7/29/2002. I'm requesting of the Trustee Council (and I'll be requesting of Judge Patel and/or the Chief U.S. District Judge) that this matter be kept open until the complete Administrative Record is made available for public review. This record should include all minutes of Command Trustees Council; and not only notation of the recipients of allocations from the "Command NRD Account" but the purpose/use of the particular disbursement. I'm particularly desirous of reviewing all surveys/studies initiated and/or funded by the Command Trustee Council such as (Suddjian 2003).

Given that the large cohort of the staff assembled at the "public meeting" on 1/29/04 were "not taking any questions" time must be extended to the public to answer its own questions.

My preliminary conclusion is that the Trustees have approached the impacted environment as if it were a **Zoo** with the consequences of the "oil spill" reducible to the depletion of certain exhibits in the aviary. Further, the rationale for the "preferred projects" often do not provided the "scientific" support touted; I urge you to recompare Figures 4&5, p.25, with Figure 8, p.28, of the **Draft** – they do not demonstrate the purported correlation between the recent rise in numbers of Common Ravens and the steady decline of Marbled Murrelets – which has not just started occurring in the last 10 years but has been occurring "steadily" over the last 100–150 years due to habitat loss.

### Ron Sturgeon, P.O. Box 36, San Gregorio, CA 94074

I will make every endeavor to forward a full account of my objections to the proposed "Environmental Assessment and Restoration Plan" within the next 10 days it will hinge of course on my access to the actual and complete Administrative Record.

I would like to point out to the Council that if a project such as the proposed "Corvid Management Project" has the potential to backfire thence resulting in an increased predation on Marbled Murrelet nests (eggs, hatchlings or fledglings) an EIR is required in order to entertain alternatives to the proposed project that avoid or mitigate the foreseeable/foreseen adverse impacts [CEQA Guidelines § 15065 (a)].

Sincerely,

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Ron Sturgeon 415 515-みもをす

cc: Judge Marilyn Hall Patel Elected Representatives Dear Ms. Hall,

Residents of the Mid-Coast and Half Moon Bay appreciate that there are mitigation plans for our coastal areas. Please consider the great importance of protecting and preserving our Coastal Area AS IT IS is. For, Coastside residents and Coastside visitors alike revere the many one of a kind natural viewsheds such as the beautiful, environmentally sensitive Mirada Surf Greenbelt/Open Space field, creek, seasonal wetlands, grasses, tree grove and forested hillside areas noted in yourr report material.

Measures must be taken to ensure the preservation of the remarkably scenic and fragile Resorce Management/Coastal Zone (RM/CZ) Zoned - Rural Designated Greenbelt/Open Space Areas of Mirada Surf, Burnham Buffer Strip, land near the Radar Station and other such lands shown on Map at: http://gsd.sanmateo.org/ordinances/ordinance149-map.pdf. because, these Rural, Park, Open Space/Community Open Space Designated Lands are in place as a part of the General Plan to meet requirements of Section 65910 of Gov't. Code of the State of California requiring formulation of an OPEN SPACE ORDINANCE aka OPEN SPACE ELEMENT and, to ensure consistency between the General Plan and the Zoning Ordinance (Section 6906 of the County's Zoning Regulations) that are in place in LCP Pol. 1.5 (a) & (b) and LCP Pol. 1.3 (b) as reflected in Table 1.2.

With regard to connecting the Coastal Trail across the Mirada Surf Bluff Area from Surfer's Beach to Miramar, please be sure that this is done in an environmental manner as there are wetlands and a vernal pool there with a whole host of living creatures to take into consideration. This trail should be just wide enough to accomodate those who stroll the shore line and far enough back so as to not impact the fragile and eroding cliffs there and should be of granite compost or similar material so that it is not impervious. Great care should be taken to preserve this fragile and beautiful area.

I am including the comments of Carl May who is a long-time Moss Beach resident and naturalist. Carl has been working with people on the Coastal Trail for a long period of time and his concerns are also my concerns. Carl can be reached at caveatcen@pacbell.net.

Thank-you,

Barbara K. Mauz P.O. Box 1284 El Granada, CA 94018

These are Carl May's Comments:

Paving the Coastal Trail is a horrible idea. This means a trail of a width that will do environmental damage in some sections. You don't build a trail with heavy equipment. Pavement, itself, will create runoff/erosion problems in some places. Pavement is much harder on the joints of hikers and runners than earth, meaning these kinds of trail users are sacrificed. The trail cannot fulfill its intended purpose of providing lateral access to the coast in some places if it is wide and paved because it cannot be located as close to the shoreline or on a beach the way a true California Coastal Trail should be. Finally, the coast is unique for its basic natural features, and a coastal should access those features and not eradicate them or become the main feature itself. Roads called trails can go someplace besides precious remaining places with natural features. The California Coastal Trail should be paved only through developed areas, and it can even use already existing pavement in many places.

There is no mandate to make the California Coastal Trail multi-use. In fact, SB 908 (Chesbro) which authorizes the trail as an official state project avoids such language. What is happening in many places where the trail route is now being planned is a "braided" trail design with a primary trail, an alternate trail for use when the primary trail may not be passable, a separate bicycle route (turns out the Bicentennial route of 1976 is useful in many places), and interim routes until rights of way and other problems

can be worked out for some links.

Around here, many have long assumed the trail should be of a gross industrial tourism design. Typical of city people and bureaucrats who wish to spend the maximum amount of money on every project but not at all appropriate for the actual features of many of the more open and natural stretches of our coastline.

Carl May

Get some great ideas here for your sweetheart on Valentine's Day - and beyond. http://special.msn.com/network/celebrateromance.armx

#### February 11, 2004

Charlene Hall Command Spill Trustees 2800 Cottage Way, suite 2605 Sacramento, CA 95825 Re: Public comment on Command Oil Spill Draft Restoration Plan & Environmental Assessment

Dear Charlene Hall and Command Spill Trustees,

Thank you for the opportunity to provide comments on the Command Spill

Draft Restoration Plan. I think the council has done an excellent job reviewing and selecting projects that will maximize restoration potential for the resources injured in the spill event. I hope the council will find the following comments constructive.

#### 4.5.3 Seabird Colony Protection Plan

This project addresses an important conservation issue for seabirds in the California Current, especially those species that are highly susceptible to disturbance such as pelicans and cormorants. While the proposed actions will have positive impacts to these species, I also urge the council to consider expanding the scope of this project. The populations of pelicans and cormorants that are likely to be benefited by the proposed actions extend into NW Mexico. Many of the proposed actions, carried out in Mexico, would greatly benefit these same populations at a significantly reduced While pelican and cormorant populations are slowly recovering on cost. islands in NW Mexico (primarily Los Coronados, Todos Santos, San Martin, and San Jeronimo islands) they are still significantly reduced from historical numbers. These islands provide both breeding and roosting habitat for pelicans and cormorants. In some cases the roosting numbers can be very high- in August 2002 we estimated 10,000 Brown Pelicans roosting on San Martin Island. The main threat to these roosting and breeding populations is human disturbance. In many instances this disturbance is caused repeatedly by a relatively small group of people (fisherman, Navy personnel, light house keeper). In other instances, tourists visiting the islands from private yachts cause the disturbances.

I suggest the council consider expanding the current proposed project to include the islands in Mexico. Potential projects that would be most effective are: 1) placement of signs at island colony and roost sites, 2) distribution of education materials to island users, 3) education programs and outreach for island users, and 4) distribution of educational materials to yacht owners utilizing popular magazines which are almost ubiquitous on yachts sailing in the region. All of these are extremely low cost but effective projects. A more thorough effort could also include colony/roost monitoring to obtain a better understanding of the current threats. This would enable targeting specific issues for conservation action and result in long term benefits to the pelicans and cormorants in the region.

This project would also help meet the goals of section 4.5.5 Brown Pelican Roost Site and Protection.

Sincerely,

Brad Keitt

\*\*\*\*\*

Bradford S. Keitt Island Conservation and Ecology Group Center for Ocean Health, LML 100 Shaffer Road University of California Santa Cruz, CA 95060 Ms. Charlene Hall US Fish & Wildlife Service 2800 Cottage Way Suite 2605 Sacramento, CA 95825

Dear Trustees:

Save Our Shores appreciates the opportunity provide public input regarding the expenditure of \$5,518,000 settlement from the M/T Command oil tanker spill on September 26, 1998.

We applaud the Trustee's due diligence to pursue compensatory damages and to further design the Damage Assessment and Restoration Program (December 2003) that directly addresses the damages of mortality to nexus species outlined on page 22 Table -2 Summary of Preferred Projects estimated to total \$4,007,242. We understand the difference is to be held in a contingency fund of \$632,970, earmarked to respond to any uncertainties and potential overruns associated with the proposed projects. We also learned from the trustees' representatives at the January 29, 2004 community hearing in Half Moon Bay, this fund could also be applied to other projects.

Should contingency funds become available, Save Our Shores respectfully requests the Trustee's consideration of our oil prevention projects related to improve water quality and healthy marine ecosystems along our coastal waters.

Save Our Shores has a long history in preventing oil from entering our coastal waters dating back to 1978 related to offshore development. Over the last six years, our leadership role has been implemented "on the docks" through the Clean Boating Program (CBP). Over that time, the CBP has incorporated targeted public education and provided tangible oil collection tools to boaters as proactive measures in keeping oil out of our water. Working in partnership with other agencies, SOS has been instrumental in the installation of oily bilge water pump out stations at all four harbors along the central California coast, including Pillar Point Harbor in San Mateo county. To date, the bilge pump stations have aimed to restore water quality by mitigating point source pollution from commercial and recreational vessels. In addition, the CBP directly supports the Marinas and Boating Plan of Monterey Bay National Marine Sanctuary's Water Quality Protection Program.

We anticipate the need to provide continuity in oil prevention measures in the future (year 2005). As such, we are in the initial conceptual stages for developing programs that aim to further reduce the cumulative affects of dil in our water, encourage the reuse of non-renewable resources, and provide continued direct and targeted public education. We believe these projects will meet the Restoration Program's threshold criteria of nexus to injured resources, feasibility, public health and safety, and legality aspects. In addition, we believe our Clean Boating Program has already accomplished many of the additional criteria: demonstrated its success and cost effectiveness through collaboration, matching funds and use of volunteer resources; and provided long term benefits to more than one natural resource, to name a few.

Furthermore, Save Our Shores is uniquely qualified to help facilitate the restoration of coastal marine resources. It is vital that local knowledge and expertise be brought to these community projects. Our San Mateo location provides an opportunity to implement projects as an agency well-established in the county, and our work is directly related to restoring water quality for healthy marine ecosystems and habitats along our coastal waters.

We would like to remain informed on the progress of the Restoration Program, and request our contact information be added to the mailing list. Our mailing address is:

Save Our Shores PO Box 1163 El Granada, CA 94018 Email: hmbshore@saveourshores.org

Please feel free to contact us at (650) 560-9533, and thank you again for the opportunity to comment on the Program.

Sincerely,

Susan Danielson Northern Program Director Alan Romero Clean Water Director

##

Susan Danielson Northern Program Director, Save Our Shores 650) 560-9533 Fx (650) 560-9433 www.saveourshores.org -Dedicated to protecting and promoting the ecological integrity of the Monterey Bay National Marine Sanctuary through policy research, education and citizen action since 1978. ><(((((>`.`..><((((>`..`.)))



"Hannah Nevins" <hrnevins@hotmail.c om> To: Charlene\_Hall@fws.gov cc: SHAMPTON@OSPR.DFG.CA.GOV Subject: Comment for Command RP-EA

02/11/2004 02:50 PM

February 11, 2004

Charlene Hall Command Spill Trustees 2800 Cottage Way, suite 2605 Sacramento, CA 95825 Re: Public comment on Command Oil Spill Draft Restoration Plan & Environmental Assessment

Dear Charlene & Command Spill Trustees;

After a thorough review of the Draft Restoration Plan & Environmental Assessment, we submit to you comments for each of the 10 priority projects identified in the draft and several of the non-preferred projects. We appreciate the opportunity to review the draft and hope that you find our comments constructive.

Please see attached file Command draftRP-EA Nevins.doc

We thank the trustees for opening up public comment on the Draft Plan and hope you find our comments useful. Please contact us if you have further questions regarding the statements we have made in the attached document. We look forward to seeing valuable restoration activities result to the benefit of seabird populations.

Sincerely,

Hannah Nevins Oikonos Ecosystem Knowledge P.O. Box 1103 Aptos, CA 95001-1103 USA 831-684-9317, hrnevins@hotmail.com

Michelle Hester Oikonos Ecosystem Knowledge P.O. Box 979 Bolinas, CA 94924 USA 415-868-1399, michelle@oikonos.org

Josh Adams Seabird Biologist P.O. Box 1103 Aptos, CA 95001-1103 USA 831-684-9317

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Charlene Hall Command Spill Trustees 2800 Cottage Way, suite 2605 Sacramento, CA 95825 Re: Public comment on Command Oil Spill Draft Restoration Plan & Environmental Assessment

Dear Charlene & Command Spill Trustees;

After a thorough review of the Draft Restoration Plan & Environmental Assessment, we submit to you comments for each of the 10 priority projects identified in the draft and several of the non-preferred projects. We appreciate the opportunity to review the draft and hope that you find our comments constructive.

#### 4.5.1 Marbled Murrelet Restoration and Corvid Management

While no murrelets were recovered in this spill, there was a valid argument presented for inclusion of projects for this threatened species. This appears to be a valuable project for seabird restoration. Some aspects of this project, however, do not appear cost-effective. Specifically, the portion of the budget allocated to monitoring (132k) seems excessive for documenting a known problem, while the proportion allocated to actual restoration activities (e.g. corvid control) appears to be under-bid (10k). It is not clear how much of this work is already being conducted and whether there are other matching funds available for this project.

The scope of the project seems limited (two parks). This project would benefit from including a wider geographic area to incorporate other state, county and city parks in the region, which may serve as "sources" for ravens and jays. We would also suggest that nearby coastal parks where Snowy Plovers nest (federally listed species) also are included. This would increase the value of such mitigation to include multiple resource benefits. Perhaps some funds could be used to host a workshop to educate park managers throughout the Marbled Murrelet range in California about the problems associated with wildlife feeding and waste management.

### 4.5.2 Marbled Murrelet Land Acquisition

As mentioned above, there is a valid argument presented for inclusion of this threatened species. This is a valuable seabird restoration project that will benefit this species. More funds should be allocated to directly acquiring high quality habitat when possible.

### 4.5.3 Seabird Colony Protection

This appears to be a valuable project for mitigation for the Command spill injuries, and will benefit many species. While the authors of this proposed project mention all seabirds at roost and breeding islets, only the Common Murre breeding rocks are indicated in figure 19. This map should reflect all breeding islands, most notably Año Nuevo Island, which is the main seabird breeding and roosting site in the impacted area off San Mateo

County. The program should be expanded to include important rocks for roosting such as Greyhound Rock and the islet off Pescadero Point, which are heavily impacted by visitors during low tide.

An updated seabird catalog will be an important resource for future seabird restoration activities, especially digitalized maps. This project should include measures to identify and address new threats to seabirds as they arise (e.g. new fishing practices) and adapt the management plan accordingly.

To increase multiple resource benefits, the proposed video should be expanded to include information about all the seabird species affected by the Command spill. The video should be made available to State Park visitor centers.

### 4.5.4 Common Murre Ledge creation

Not enough information is provided to determine if the project is cost-effective as the size/scale of new habitat to be created is not defined. Given that the building materials are already on the island, it seems that this project could be accomplished for significantly less money. There is no evidence that nesting habitat is limiting for Common Murres at the Farallones or elsewhere in central California. There is no information that artificial nest sites are of comparable quality to natural sites. Since the proposal indicates that researcher disturbance is an issue at this site, and researchers will be using the new blind to conduct other non-restoration activities, then perhaps it would be more appropriate if research funding were contributed to match funding from the Command spill for this project.

## 4.5.5 Brown Pelican Roost Site Enhancement

This appears to be a valuable project for protecting roost sites.

### 4.5.6 Brown Pelican Outreach

Outreach program should be expanded to include areas without piers, but with high use by recreational beach anglers (e.g. Marina State Beach, Salinas River State Beach).

#### 4.5.7 Sooty Shearwater Restoration Project

This project will provide valuable restoration for the damages to this migratory species. It will have multiple resource benefits, is cost-effective, and will have long-term benefits. Substantial matching contributions and in-kind support make this project a significant international collaborative effort to restore a shared migratory seabird. If funds are available after implementation of the main objectives, we suggest the council consider increasing the funding for the educational component of this project.

#### 4.5.8 Lost Human Use Restoration Projects

Human use projects whenever possible should include wildlife outreach interpretive efforts (e.g., signage). This would increase the enjoyment and enhance education and appreciation of seabird species affected by the spill while restoring loss of human use.

#### 4.7 Non-preferred projects

### Año Nuevo Island Seabird Habitat Restoration

Notably absent in both the bird injury report and draft restoration plan, is the mention of Año Nuevo Island, an important seabird breeding colony, Brown Pelican and Brandt's Cormorant roost site which lies 20 miles down-current of the spill area. This project offers an opportunity to restore nesting habitat which has been altered by past human activities. Like Marbled Murrelets, Rhinoceros Auklets are unlikely to be well documented during oil spill recovery efforts, but are likely to have been affected during the Command spill. This project would provide tangible on-the ground restoration for this affected species. We suggest the trustees revisit their ranking of this project. Regardless of the level of funding provided, this would be a valuable seabird restoration project. In addition, this project can provide matching funds for significant restoration enhancement.

#### Education for Seabirds on Natividad, Mexico

Education and public outreach materials focusing on quarantine measures to prevent reintroductions to islands are important but are often overlooked as an essential component of seabird restoration projects. Additionally, when migratory species (such as shearwaters) are affected, addressing conservation issues such as introduced predators at colony sites are the most effective means to restoring damages. This project would be a cost-effective and valuable restoration project.

#### Education Projects

If funds are available after implementation of primary objectives for each proposed project, the trustees should consider funding education aspects to <u>all</u> projects. Web-based educational materials developed for all Command-funded projects would illustrate ideals of seabird conservation, ecology and biology, while being cost-effective.

#### Seabird Protection in Chile

This project brings up the point that migratory species that nest in other countries, offer opportunities for tangible restoration efforts. The Pink-footed Shearwater is recognized as globally "vulnerable" (ICUN) due to threats of introduced predators at nesting colonies. Future damage assessments for threatened and endangered species should be developed for all of such species which are affected by oil spills such as was done for Marbled Murrelets in the Command spill.

We thank the trustees for opening up public comment on the Draft Plan and hope you find our comments useful. Please contact us if you have further questions regarding the statements we have made here. We look forward to seeing valuable restoration activities result to the benefit of many seabird populations.

Sincerely,

Hannah Nevins Oikonos Ecosystem Knowledge P.O. Box 1103 Aptos, CA 95001-1103 USA

# 831-684-9317, hrnevins@hotmail.com

Michelle Hester Oikonos Ecosystem Knowledge P.O. Box 979 Bolinas, CA 94924 USA 415-868-1399, michelle@oikonos.org

Josh Adams Seabird Biologist P.O. Box 1103 Aptos, CA 95001-1103 USA 831-684-9317 February 9, 2004

Ms. Charlene Hall USFWS 2800 Cottage Way, Suite 2605 Sacramento, CA 95825

RE: Comments on Command Oil Spill Draft Restoration Plan and Environmental Assessment

Dear Ms. Hall

Thank you for the opportunity to provide comments on the above draft report. I have broken my comments into general plan comments and specific comments on proposed projects.

General comments on restoration plan and environmental assessment:

- I would like the previous San Mateo County Resource Conservation District (RCD) letters and funding requests of June, 2002, and January, 2003, (attached) included in the comment record. The RCD continues to recommend: (a) All of the Command Oil spill fine dollars be spent on the coastside of San Mateo county where the oil spilled occurred and resources were impacted; and (b) The definition of "resource" include the entire western side of San Mateo county from the crest of the mountains to the ocean, as this entire area drains into and impacts the Monterey Bay National Marine Sanctuary where the oil was spilled. Spending fine money outside of San Mateo county should not be an option. The Consent Decree defines "natural resource" on page 4, and this definition is similar to those in California state law that govern conservation districts. There are numerous natural resource projects along the San Mateo coastside deserving of Command Oil fine dollars.
- 2. The public comment period should be extended by a minimum of 90 days during which time the Trustees should undertake a intensive outreach effort to elected bodies and advisory committees representing the coastside of San Mateo county. At the public scoping meeting in May, 2002, I suggested that the Trustees contact all the elected bodies in the coastside (three cities and two elected advisory committees) for input. In my letter of June 2, 2002, I expanded on this recommendation by suggesting the Trustees get placed on agendas of a number of advisory groups representing the coastside and even consider having two local coastside residents added to the Trustees to help choose projects. The current draft report is silent as to how the Trustees sought input from elected councils and advisory bodies. In fact the draft report can easily give the impression that the Trustees had predetermined outcomes for projects and simply wanted to divide the money up among themselves.
- 3. The draft report primarily focuses on projects dealing with seabirds. The Command fine dollars should encompass a greater variety of projects and resources in the San Mateo

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coastside that work more closely with local organizations and their priorities. Data on seabirds was collected both within the coastal area where oil spilled and outside the area where no oil washed ashore. For example, Ano Nuevo seemed to be a site where a good deal of data on birds was collected, but where the oil never washed ashore. Some of the criteria the Trustees used to select projects, such as *no duplicate or replacement funding* or *duration of benefits*, simply do not support the recommended projects. There are certainly many sources of funding for purchasing public land and funding parks and the draft plan does not specify how the recommended projects will be continued once Command funding runs out.

- 4. The draft report fails to give sufficient information about exactly where and to whom the fine dollars are being recommended for award. Each project should clearly have the name of the applicant, agency or organization, address, and contact person like any other grant process. The Trustees also need to provide a more detailed accounting of the fine dollars including those already spent. The latter should include the amount of money and Trustee time spent in developing each of the recommended projects as opposed to those that were not recommended.
- 5. The process for applying to the Trustees for Command Oil spill fine dollars was unclear. There was no application package nor instructions. To my knowledge, their was no requirements to fill out federal forms such as 424, application for federal assistance, a mandatory requirement for obtaining funds from the federal government. The RCD simply made unsolicited project suggestions, that were mostly ignored. The Trustees did request more information on one of the unsolicited projects submitted by the RCD, but there was no attempt by the Trustees to work directly with the RCD on developing this project. The draft report gives an impression that the Trustees did work directly with the recommended projects. The report seems to imply that the Trustees spent over \$450,000 developing projects. A better accounting of this money and how the Trustees choose who to work with and who not to work with in developing projects is needed. The RCD falls under the umbrella of the California Resources Agency as do some of the Trustees. The RCD received one letter from the Trustees, no returned phone calls, and in fact, did not receive a notice for the January 29, 2004, public meeting. This lack of communication among agencies is symptomatic of the bigger problems California currently faces.

Comments on specific projects.

<u>Project 1, Marbled Murrelet Restoration</u>. This is an interesting idea, but one that has numerous problems and a low probability of success. The project is mostly outside San Mateo county. A prime reason for parks is the enjoyment of mother nature by humans. Modification of human behavior at campgrounds will be difficult, if not impossible. If you have ever been camping with young children, then you know that it is much easier to clean up after a birthday party at home than to clean up at a campground. Yet the experience of the children in a park camping is as they say "priceless". As long as there are campgrounds, there will always be some food spillage, and as a result, animal scavengers. The Command money will run out and the scavengers will return. Therefore, criteria such as *likelihood of success, cost effectiveness*, and *duration of benefits* are questionable. The cost of the garbage cans (\$660 apiece) seems very high.

The killing one species of bird in the hopes of protecting another species of bird also raises questions as to exactly what we are trying to accomplish. The birds scavenging around campsites are simply being opportunistic due to human causes. The draft plan does not fully address the small Murrelet population remaining in this area and whether or not this species will really be able to survive over the long term. Central California is at the end of the Murrelet's southern range, most of what seems to be its prime habitat was lost (logged) long ago, and increasing temperatures, especially those found in Big Basin or Memorial Park during summer, may already be an overwhelming factor in this species ability to recover. The data provided (figures 4, 5, 8 and others) are also troubling. Could it be that while the ravens numbers were stable and not increasing, that the Murrelet's numbers were already decreasing? Furthermore, if the ravens food is taken away and an insufficient number are not killed (the plan implies only 4 pairs would be killed), would the ravens be more likely to seek Murrelet's as food?

The FWS has been very cautious about issuing depredation (kill) permits legally allowed under the Migratory Bird Act Treaty, as would be required in this proposal, in California to those persons and organizations seeking kill permits for other reasons (agricultural crops). The draft plan needs to address the issuance of kill permits by FWS for this project and its impact on issuing other depredation permits to requests made by individuals and organizations under the Migratory Bird Act Treaty for nuisance birds.

I would like to propose two alternatives to this project. The first would be to try and establish Murrelet populations (nest sites) in areas away from campgrounds and in cooler areas through introductions of breeding pairs, if necessary. Murrelets only require one redwood tree of a minimum of 34 inches in diameter per acre. A number of such small groves exist along the San Mateo coast that are either privately or publicly owned. In addition, being closer to the coast these stands have cooler temperatures year round than do Memorial Park and Big Basin. There is also, little if any, human activity at these sites.

The second suggestion would be to simply give the San Mateo County Parks \$1 million or more in Command fine dollars to spend appropriately, perhaps with some leveraging with other funds and according to their needs. County Parks do a great job and this concept should have widespread local support. Projects 8 and 10 could be included in this recommendation.

<u>Project 2, Murrelet Land Acquisition</u>. This project is 100% in San Mateo county, however, it does not comply with the Trustees criteria of *Duplicate or Replacement funding* (the RCD is in favor of getting rid of this criteria) since there are numerous funding sources to purchase land in San Mateo County. This land has already been purchased for preservation with money that was, most likely, donated and therefore did not go into the public treasury in the form of taxes. The Trustees should therefore not be obligated to pay the same price paid for this land as the present owners since it raises a question on taxpayers buying the land more than once. In addition, other sources of funds could be leveraged for purchasing this parcel. The draft report does not know if any Murrelets currently inhabit this site. The plan should address how Murrelets will be lured or introduced to the site. The temperature issue should also be addressed. This is a fairly reasonable project, if we could be sure that the Murrelets would nest on the property.

<u>Project 3, Seabird Colony Protection</u>. It is unclear who is doing this project and how much, if any, of it will be undertaken in San Mateo County. It appears to be an updated version of the

disturbance reduction project originally proposed in the Trustees scoping document. It has a low likelihood of success since it is difficult to alter human behavior, there are competing uses and users of our resources, and once the Command dollars are spent there are not likely to be any state or federal funds available for a permanent program due to state and federal deficits. I recommend against funding for this project. This project more than any other leads one to believe that the Trustees are giving the fine dollars to their own agencies.

Project 4, Common Murre Nesting Creation. Although not exactly in San Mateo county, this is a very reasonable project that will likely help Murre's and be successful. I especially like the concept of creating artificial habitat with the existing and available concrete blocks.

Project 5, Pelican Roosts. This project is not in San Mateo county, however, this project seems to have a big bang for the buck. I would prefer to see the pelicans in San Mateo county helped.

Project 6, Seabird Entanglement. Again, it is not clear if any funds would be spent in San Mateo county and San Mateo county should receive benefit of these funds before Santa Cruz county.

Project 7, Sooty Shearwater Restoration. This is a bad project idea and should not be funded. California is going through its worst budget problems ever and the Trustees, three of whom represent state agencies, are recommending giving \$350,000 to a foreign country. Dropping rat poison from helicopters would never be allowed in or offshore (bay or ocean) in San Mateo County and I seriously doubt anywhere else in California. The draft plan does not detail any public hearings to be held in New Zealand, nor how a process similar to our CEQA would be carried out. There is also the problem of how many Sooty Shearwater's were impacted and the hundreds of thousands of this species eaten each year by indigenous peoples of New Zealand. The report also did not address collateral damage. This is a bad project. Funds could certainly be spent much better here in San Mateo county.

Projects 8, 9 and 10. See comments under project 1. No further comments.

The RCD would still like to receive funds from the Command Oil Spill fine dollars and would be happy to meet with Trustee staff. Thank you for the opportunity to comment.

Sincerely,

Mila Educti

Mike Ednoff **Executive Director** 

625 Miramontes St., Ste. 206 Half Moon Bay, CA 94019 Phone(650) 712-7765 + Fax 726-0494

June 3, 2002

Field Supervisor Fish and Wildlife Service Sacramento Fish and Wildlife Office 2800 Cottage Way, Rm. 2605 Sacramento, CA 95825 VIA FACSIMILE 916-414-6713 and U.S.P.S.

RE: Comments Scoping Process, Command Oil Spill, May 1, 2002, Document

Dear Natural Resource Trustees,

Thank you for the opportunity to provide comments on the Scoping Document for Restoration Planning as well as suggest some topics and projects for funding consideration. I have divided my response into some general comments, some specific comments and concluded with some brief ideas for use of the funds and full proposal consideration.

## General Comments

- 1. As I suggested at the public scoping meeting in Half Moon Bay, the Trustees should actively seek advice from local groups and organizations along the Coastside in San Mateo County. I would encourage Trustees to even attend regularly scheduled meetings of these groups and ask to be placed on their agendas. At a minimum, I suggest the Pescadero Municipal Advisory Council, the Midcoast Municipal Advisory Council, the Coastside Water District, the Pilarcitos Creek Advisory Council and the Agricultural Advisory Council, among others. I find that these groups give careful attention and thought to issues with the best interests of the Coastside and its residents in mind.
- 2. In the scoping process, injuries identified were largely limited to seabirds, intertidal areas, beaches and humans losing recreation time at the beach. I believe this to be a very limited viewpoint, ignoring the potential impacts the spill may have had on the resource as a whole. The resource addressed by the scoping document is in reality much larger and very interconnected. The Trustees should re-define the "resource" as the western half of San Mateo County encompassing about 150,000 acres and a dozen watersheds draining into the Monterrey Bay National Marine Sanctuary. A whole ecosystem ("resource") is the sum of its parts and there are many parts the scoping document may have overlooked from single celled marine phytoplankton to anadromous migratory fish to upland activities that can interact with the marine environment impacting habitat, water quality and food supply. Use of the word "nexus" might be argued to include a more holistic approach since we know that this ecosystem is highly interconnected. Therefore, the scope should be broadened to include any resource component or components of the entire ecosystem impacting the Sanctuary off San Mateo County.

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- 3. The Command Oil Spill occurred off the coast of San Mateo County and not anywhere else. Therefore, I recommend that the settlement funds be spent entirely and exclusively in San Mateo County by targeting projects in the Coastside community of San Mateo County. Keeping and spending the settlement monies in San Mateo County is important to both our environment and economy. San Mateo County is largely an urban county with a population exceeding 717,000, yet the Coastside remains largely rural contributing significantly to the rich quality of life enjoyed by all residents in the county. Maintaining the rural character of the Coastside has come with a cost, that has resulted in an economic shift towards recreation and tourism. Spending the Command settlement funds locally on resource and environmental improvement and recovery would assist the local economy in its search for a new identity. Again, think globally, but spend locally.
- 4. The project selection criteria should be broadened significantly to include the expanded "resource" area included in comments under item #2. above. The criteria for No Duplicate or Replacement Funding is somewhat hypocritical since existing funding sources are available for all projects proposed to date in the May 1, 2002, document. For example, I am all for improved access to the beach and at state parks, however, how did these parks come into being if there was no funding source? Trustees need to be cautious so as not to appear in having predetermined outcomes only addressing seabirds and parks. I propose two solutions. The first is that at least two local Coastside residents be added to the Trustees process for choosing projects to fund. Coastside residents know the coast and its needs better than any agency since they live and mostly work in the target area. The second recommendation is for the Trustees to place a high priority on funding projects that have already been identified in the Coastside for having a high resource enhancement value or contribution. Furthermore, those same identified projects that also have partial funding or a significant identified match, should receive an even higher priority for Command Fund contributions. The San Mateo County Resource Conservation District (SMC RCD) has a number of publications and documents that address such projects available in our Half Moon Bay office . Overall, the scoping process should be about improving the entire resource as identified under item #2 above.

#### Specific Comments on Proposed Projects to Date

- 1. Disturbance reduction is a difficult process as there will always be somebody or something impacted. It can also have a potential perpetual high cost in maintenance and enforcement. Continued funds to operate such a program after Command dollars are expended would need to be identified if this option were chosen as a viable project. It would seem that a better focus would be on bird habitat improvements, especially in coastal areas that presently have the least amount of human use and would thereby satisfy the long term non-disturbance requirement. Any area, if selected, should be in San Mateo County and should include an educational outreach program to inform people why they should be staying out of the designated bird area. Habitat improvement should be the main focus. Good habitat produces a good food supply that in turn attracts the birds. The birds, along with the bees, will do the rest.
- 2. The Brown Pelican project is interesting, but it is not in San Mateo County and therefore, should not be further considered nor funded.

- 3. Marbled Murrelet Habitat acquisition is a good idea, however, only a site or sites in San Mateo County should be chosen for purchase or lease. There must be a reason that the Murrelets were in San Mateo County when the spill occurred. We need to find that place and those reasons and use them in establishing a potential protected Murrelet habitat. Long term support for the habitat would need to be addressed after Command dollars are expended. If the site is privately owned, then perhaps a Marbled Murrelet easement or other such incentive could be obtained from the landowner thereby allowing the property to remain on the tax rolls and continue to contribute to the local economy. This proposed project is a good example of why the No Duplicate or Replacement Funding criteria would need to be revoked or modified.
- 4. I am highly in favor of projects at the Fitzgerald Marine Reserve, but somewhat less in favor of all the potential projects at state and county parks. The parks certainly need the money, however, park projects could eat up the entire settlement budget at the expense of other projects that may do more for the resource over the long term. The key criteria here should include how the project enhances the resource, compliments an existing identified need, or helps educate the public over the long term, as opposed to allows me better access to the beach. I have included a concept for projects at Fitzgerald Marine Reserve in the recommendations below.

Ideas for Projects for the Command Oil Spill Funds. Full proposals are available on request.

The Marine and Coastal Resource Education Trust. A portion of the Command Oil Spill fund, perhaps a million dollars or more, could be set aside to establish a permanent educational endowment. Income earned from endowment investments could be used to fund marine and coastal resource education programs annually, and community education in general, in Educational programs should focus on students in the Coastside, but also be perpetuity. available to students throughout San Mateo County. The SMC RCD has experience administering such funds and in participating in educational programs such as water quality monitoring in watersheds with the local high school (funding expired) and Range Camp, an annual event. Additional programs and curriculum might be developed that address marine habitat, intertidal organisms, seabirds, interactions of the coastal ecosystem, a Sea Camp, and other appropriate topics such as integrating marine science with resource conservation. Concepts could be incorporated into existing school programs to help meet learning standards and educational standards or assisting teachers in meeting their educational requirements. The program could help change how students learn by what they learn. Eventually, our children would grow up with an understanding of the whole ecosystem, from the top of the mountain down through the watershed into the estuary and tide pools and into the ocean. Potential partners include the Cabrillo and LaHonda/Pescadero Unified School Districts, Fitzgerald Marine Reserve, Elkus Ranch (UCCE), state and county parks, Monterrey Bay Sanctuary, National Resource Conservation Service, and other local groups. The trust might even be named the Marine Urban and Rural Resource Environmental Learning Educational Trust or MURRELET, thereby creating a permanent remembrance of the environmental tragedy resulting from the Command Oil Spill.

Eliminating Environmental Impacts to Fitzgerald Marine Reserve. San Vicente Creek is a 5.5 square mile watershed originating on Montara Mountain and entering the Monterey Bay National Marine Sanctuary at Fitzgerald Marine Reserve in San Mateo County. A sign a the mouth of the creek warns visitors to the tide pools to keep out of the water as it is polluted. Environmental issues that have been identified include a damaged culvert at the mouth of the stream that is both unsightly and prevents anadromous migratory fish from entering the creek and polluted water entering the Fitzgerald Marine Reserve that contains high coliform counts from non-point sources such as horse stables, septic tanks and urban stormwater. Improving water quality entering the Reserve would enhance intertidal marine habitat and species. Potential projects include demonstrations to eliminate manure impacts through proper storage, handling and recycling into new uses, and surveying septic tanks to determine loads and then craft solutions to reduce impacts. The latter would require a strong educational component with residents in the watershed. Replacing the culvert and restoring the stream to grade would additionally create a potential benefit for threatened steelhead salmon to enter the stream and spawn. The Command Oil Spill Fund could contribute funding to help provide matching funds to other funding sources. such as San Mateo County, EPA, RWOCB, DFG, NOAA/NMFS, and others.

<u>Restoration of the Pescadero Marsh.</u> The Pescadero-Butano watershed is the largest watershed in San Mateo County encompassing 84 square miles, draining the crest of the Santa Cruz Mountains to the Pacific Ocean at the Pescadero marsh. The marsh, the largest in San Mateo County, has been seriously compromised from upstream impacts and past uses including farming and diking. A large sediment load has inhibited historical tidal exchange changing the marsh into more of a fresh water system supporting some non-native species such as beavers. The marsh is now owned by the park system who's priorities are justifiably spent on operating the park primarily for those enjoying the beach. Command Oil Fund dollars could be matched with other funding sources to develop and implement a marsh restoration plan, thereby returning this resource to a more functional estuary benefiting marine organisms and seabirds. The effort should be part of a larger effort to restore and maintain the entire watershed as the sediment impacting the marsh originates in the upper reaches of the creeks. That is, if one is rehabilitating an entire house, the first part that might be fixed is the roof. This is a good example of a project that encompasses the entire resource, from the top of the mountain down to the sea.

Appanolio Canyon Steelhead Passage Project. Apanolio Creek is a tributary to Pilarcitos Creek, the second largest watershed in San Mateo County. The Apanolio Canyon Steelhead Passage Project has already been approved, designed, engineered and partially funded. Permitting for the project will be initiated in July, 2002, with construction scheduled for late summer, 2003. The project will remove three barriers from Apanolio Creek and replace them with step pools allowing steelhead passage. Riparian habitat will also be restored. The project will create more than 4 miles of unimpeded stream flow for steelhead migration and habitat for spawning. Removal of each of the three barriers and restoration of the stream have a total estimated cost of approximately \$780,000. However, by requesting a proposal for removal of all three barriers at the same time, considerable economy of scale savings are projected. Presently, the project has \$370,000 committed from the RQWCB and CalTrans. A contribution from the Command Oil Spill Fund ranging from \$50,000 to \$200,000 would ensure completion of this project as any final funding needed would be much easier to obtain due to the large existing match. Expenditure of Command dollars on this project would go directly for project implementation, thereby creating a big and immediate return on investment.

<u>Marine and Watershed Resource Planning</u>. A general program is proposed for outreach, education, and coordination in identifying problems impacting marine resources and marine organisms originating from San Mateo County coastal watersheds, urban areas, agricultural activities and other human uses and activities along the coast. A twelve month project could be designed to produce a catalog of problems impacting the coastal and marine environment by land use, watershed, and other activities. Problems identified that could be listed in the catalog include debris, nonpoint source pollution, poor land use practices requiring better management, erosion, gullies, water quality problems, dumping, municipal and rural road maintenance, riparian corridor encroachment, sedimentation, storm water runoff problem areas, instream cattle grazing, and water diversion structures. The project could also address water issues including allocation, storage and distribution as well looking at a coordinated and streamlined permitting process for resource improvements. Project partners would include all existing local groups working in these areas as well as the Sanctuary, NMFS, NRCS, RWQCB, DFG, and others.

The San Mateo County Resource Conservation District is grateful for this opportunity to comment on the scooping document and present concepts for the use of restoration funds. The mission of the SMC RCD is to promote the conservation of natural resources while maintaining the economic vitality of our region through the development of land stewardship ethics that result in long term sustainability of the state's rich and diverse natural resource heritage. The mission is achieved by working in partnership with land owners and managers, project funders, technical advisory sources, area jurisdictions, government agencies, and other groups and individuals.

The SMC RCD is a special district organized under California law and authorized by the state to "save basic resources- soil, water, and air - from unreasonable and economically preventable waste and destruction". The RCD encompasses the western portion of San Mateo County from Skyline Boulevard on the east to the Pacific Ocean on the west, and from the Santa Cruz County line on the south through parts of South San Francisco, San Bruno, Pacifica and Daly City to the north. The RCD is a public resource agency and has no enforcement or regulatory functions or authority. Landowners, be they public or private, partner with the RCD on a voluntary basis. The RCD is managed by five non-salaried directors, appointed for staggered terms by the San Mateo County Board of Supervisors. Operating funds are derived from a modest local tax base on land, contracts and grants, and fundraising activities. The RCD may receive tax deductible donations under Internal Revenue Service Code Section 170 (b) and (c) (1).

If the SMC RCD can be of any further assistance to the Command Trustees or submit full proposals for any of the project concepts listed above, please let me know. Thanks again for the opportunity to comment. The SMC RCD looks forward to working with you.

Sincerely, Mike Eduat

Mike Ednoff Executive Director

## SAN RESOURCE MATEO CONSERVATION COUNTY DISTRICT www.sanmateorcd.org

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January 14, 2003

David Harlow, Field Supervisor Fish and Wildlife Service Sacramento Fish and Wildlife Office 2800 Cottage Way, Rm. 2605 Sacramento, CA 95825

RE: Command Oil Spill Fund Restoration Projects

Dear Mr. Harlow,

Thank you for the opportunity to provide additional information on restoration projects for the Command Oil Spill Fund. I have enclosed a document describing projects for Command Oil Spill funding. It responds to your request for project information in the San Vicente Creek watershed that impacts Fitzgerald Marine Reserve. It also outlines two additional projects. The first concerns completing the stewardship process resulting in a coordinated restoration plan for the Pescadero-Butano watershed and Pescadero Marsh, the largest watershed and marsh in San Mateo County having the single greatest impact on our marine and coastal resources. The second project proposes to develop recreational opportunities and educational materials for the portion of the California Coastal National Monument located in our area. The previous projects proposed to the Trustees also remain viable and important to our resources.

I have enclosed lists of some of the organizations that you requested to include in your outreach efforts and a partial list of resources and publications contained in the SMC RCD office. The latter is also available on our web site www.sanmateorcd.org and is in the process of being updated so that the list is electronically available (Mircosoft Access). In general, the SMC RCD maintains copies of reports and studies undertaken in the district as well as more general studies and recovery plans concerning species, habitat and restoration. The majority of these reports have yet to be added to our electronic list, but are available to the public.

Finally, the San Mateo County Resource Conservation District would like to reiterate two comments from our initial response last June:

- 1. All Command Oil Spill funds should be spent in coastal San Mateo County as this is where the spill occurred and the resource was impacted; and
- 2. The Trustees should expand their definition of "resource" to include the entire western side of San Mateo County from the crest of the mountains to the ocean as this entire area drains into and impacts the Monterey Bay National Marine Sanctuary where the oil was spilled.

Once again, thank you for the opportunity to help shape restoration plans benefiting the people and resources in coastal San Mateo County. Please contact me if we can be of further assistance.

Sincerely, Mile Edut P

Mike Ednoff Executive Director

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# Potential Command Oil Spill Projects Proposed by the San Mateo County Resource Conservation District

# Project 1: San Vicente Creek Watershed Restoration Plan

Status of the Watershed: San Vicente Creek watershed encompasses an approximate area of 5 square miles, originating on Montara Mountain and entering the Monterey Bay National Marine Sanctuary (Pacific Ocean) at the San Mateo County Fitzgerald Marine Reserve. Uses for the watershed include a large rural area, known as Corral de Tierra, designated for open space, equestrian trails and stables, agriculture and recreation; other private lands including farm and ranch; the Moss Beach urban area; and the Fitzgerald Marine Reserve, an important and unique marine resource. There are approximately 200 property owners within the watershed, most of which are located within the Moss Beach urban area.

Approximately 4,200 acres of the upper watershed is in the process of being transferred from private to public trust ownership with a long term likelihood of becoming part of the Golden Gate National Recreation Area. The two largest owners of the upper watershed are supportive of a stewardship and watershed restoration process. An informal group of local citizens and interested organizations and businesses operating in the watershed exists and would logically become part of a more formal watershed group. Local organizations and agencies including Save Our Shores, Surfriders, Peninsula Open Space Trust, San Mateo County Parks (Fitzgerald Reserve) and Environmental Health (Clean Beaches Initiative), and the San Mateo County Resource Conservation District have expressed an interest in working with or directly participating in the proposed project. Information and publications that currently exist on the watershed include: Fitzgerald Marine Reserve Master Plan; San Vicente Creek, A Watershed With New Friends (university student project), Montara-Moss Beach EIR, and various investigations on water and aquifers in and adjacent to the watershed. In addition, the County Environmental Health has been monitoring water quality (primarily coliforms) in the watershed and the RCD has been actively demonstrating management practices for horses along with manure composting. The latter is part of a larger project that produced the publication entitled Horse Keeping: A Guide to Land Management for Clean Water.

Major concerns and preliminary problems identified in the watershed presently include nonpoint source water quality problems from sedimentation, microbial sources, and urban uses; invasive species especially those impacting the riparian zone of the creek; erosion including repair of gullies and rural dirt roads; loss of freshwater in the system; and barriers to fish passage, especially state and federally threatened anadromous steelhead trout.

The Fitzgerald Marine Reserve has its own Master Plan and implementation process that must be respected. This proposal will coordinate, compliment and integrate all processes and activities that lead to restoration and improvement of the health of the watershed, that includes the marine reserve, with the Fitzgerald Master Plan. Improving the health of the watershed will improve the health of the marine reserve. All components of this proposal will be coordinated closely with San Mateo County Parks to ensure an integrated process.

**Project Overview:** The overall goal of this proposal is to develop a coordinated and integrated watershed management process to address problems in the watershed that result in improving the overall water quality and health of this resource for its many diverse users, land owners, and community members. A framework that helps control nonpoint source pollution through monitoring, rehabilitation, and best management practices will be encouraged and facilitated. The process will accommodate diverse interests and participation. The framework will also address land management, species and habitat enhancement, and long term watershed improvement. One major focus will be on obtaining results from restoration activities implemented that improve habitat and water quality for species living in the marine reserve at the mouth of the watershed. The latter will also benefit those who enjoy visiting the marine reserve. Another focus will be on improving the resource and management practices that accommodate expanded recreational uses, especially equestrian, in the upper portion of the watershed. In addition, preservation of prime agricultural lands along with the management of adjacent watersheds will be addressed in the stewardship plan. The proposal will span a two year period, at which time, full implementation of restoration projects will be underway.

# Specific Project Components:

1. Watershed Advisory Committee. People support what they help create. This component will focus on outreach and communication with all landowners and residents located in the watershed as well as be inclusive of other interested organizations and agencies outside the watershed in order to establish a watershed advisory committee. Established practices and approaches will be used to build a consensus based stewardship group and process. Once established, the advisory committee will oversee the entire process, evaluate and make recommendations concerning any studies, restoration projects, program alterations, and activities related to the watershed and stewardship process. Estimated costs for this component are \$96,000 over two years covering staff time and expenses.

2. Watershed Plan and Restoration Project Development. One or more consultants will be subcontracted to develop a watershed plan that identifies restoration projects and includes an implementation schedule. The plan will minimally incorporate:

- a. Sedimentation study and inventory of sediment restoration projects including stream flow monitoring, management of gullies and repair of upper watershed roads (estimated \$70,000);
- b. Invasive species management and restoration of the creek riparian zone (est. \$30,000);
- c. Design options followed by engineering and design specifications for restoration of the creek to allow fish passage especially for migration of ESA listed steelhead (est. \$80,000);
- d. Extensive sampling and analysis of coliform using genomic techniques to determine origin and source of coliforms and recommended corrective actions (est. \$90,000);
- e. Identification of best management practices for land uses, expanded recreation, and maintenance of existing uses including continued equestrian use of open space and integration with the Fitzgerald Master Plan (est. \$100,000).
- 3. Plan Implementation. Restoration projects identified in the watershed plan will be packaged and actual costs determined through an RFP or bid solicitation process. The resulting

projects with costs will then either be implemented directly or additional funds sought (state bond, state and federal grants, etc) for project implementation. Permitting will be a part of this component (est. \$300,000 or more, if available).

- 4. Education. An comprehensive education component will be developed that complements educational programs of the Fitzgerald Marine Reserve to be inclusive of the entire resource from the crest of the mountain down through the valley crossing many habitats, uses, and users, all the way into the marine reserve. The resulting curriculum and educational materials will be integrated into the Fitzgerald programs providing greater use for marine reserve facilities (est. \$160,000).
- 5. Project Administration and Fiscal Management. \$130,000 over 24 months includes all fiscal and programmatic management, coordination and RCD Board administration. Roughly 14% of total project costs. Includes all reporting.

# TOTAL ESTIMATED PROJECT BUDGET: \$ 1,056,000

Additional Information that addresses Scoping Document:

<u>Nexus</u>: The Fitzgerald Marine Reserve is one of the most important marine resources on the San Mateo coast. It was right in the path of the Command Oil Spill. The health of estuarine and rocky intertidal habitats are closely dependent upon the health of the watershed emptying into such an important resource. The two are intricately tied functioning as one integrated marvel of mother nature.

<u>Feasibility</u>: Most of the components proposed in this request have been successfully carried out in nearby watersheds, such as the Pilarcitos Creek Watershed, a much larger watershed with more users and uses and sources of pollution impacting the coastal area. The challenges in this proposal are in the integration of restoration outcomes with the Fitzgerald Master Plan and the expanded recreational uses in the upper watershed. All proposed components are technically and procedurally sound.

<u>Duplicate/Replacement Funding</u>: This project and watershed are unique in that they focus on a marine reserve at the mouth of the watershed and restoration geared towards increased recreational use in the upper watershed. However, the small size of the watershed would typically not qualify for significant federal watershed funders due to cost, and although Californians have generously voted to issue bonds for watershed restoration, these funds are geared toward in-the-ground projects and not so much for planning and coordination. Due to concern over the health of the marine reserve, the existing urban area impacts, and the opportunity for increased recreation and open space held in perpetuity, there is a critical need for a coordinated planning process, a stewardship group, and ultimately a restoration plan based on sound science and information. In addition, once the planning is in place, any additional funding to implement individual restoration projects will be easier to obtain.

<u>Legality</u>: There have not been any legal problems identified. All permits will be obtained as cognizant agencies will be involved from the beginning and throughout the process. In addition,

the SMC RCD is a California special district organized and governed under Division 9 of the Public Resource Code, and as such, must be compliant with all state and federal laws.

<u>Likelihood of Success</u>. A Watershed Advisory Group created through an inclusive process that achieves consensus to develop and complete a restoration plan is always successful. People support what they help create.

<u>Cost Effectiveness</u>. Watershed restoration is a costly process and San Mateo County, where the Command Oil Spill came ashore, has a high cost of living. If the watershed is restored, water quality improved, and marine organisms in the reserve sustained, then the cost will be effective.

<u>Multiple Benefits</u>. This proposal will incorporate a diverse group of people, organizations and agencies into the process. Anticipated outcomes include a healthy marine resource, improved habitat throughout the watershed and especially along the riparian corridor of the stream, and expanded recreational opportunities in the upper portion of the watershed. The proposal will also include and benefit those already living and operating businesses in the watershed.

<u>Duration of Benefits</u>. Restoration "fixes", once fully implemented, are anticipated to last for 20 years or more. The stewardship process will be continuous and as such, will continually evolve, reflect and improve.

<u>Heath and Safety</u>. The microbial component of this proposal directly addresses health issues especially those that have resulted in beach closings and human health warnings. The overall plan, especially the recreational component, must address safety and safe use of the resource.

<u>Adverse Impacts</u>. There is nothing proposed in this request that will adversely impact the resource. All components should result in balance, improved management practices, and overall improved health of the resource, especially the marine reserve.

<u>Collaboration</u>. This project request has extensive interest in collaboration that will only be expanded. A primary duty of RCDs is coordination and collaboration for the benefit of the resource and all those who live within the district.

# Project 2: Pescadero-Butano Watershed and Pescadero Marsh Restoration

The Pescadero-Butano watershed is the largest watershed in San Mateo County, encompassing 84 square miles, draining the crest of the Santa Cruz mountains down through redwood forests, open space, agricultural lands, the community of Pescadero, into the Pescadero Marsh and then emptying into the Monterey Bay National Marine Sanctuary (Pacific Ocean). The Pescadero Marsh is the largest and most important marsh in San Mateo County. The entire system is intricately linked to the marine ecosystem.

A number of projects in the watershed are currently underway or nearing completion including two studies in the marsh (State Parks), an oral history project (RCD and EPA), a water study and

a second sediment study (County Parks), and a sediment and fishery study (Sanctuary and State Water Board). However, there is no overall watershed plan and process in place. These separate projects need to be linked together into an overall watershed plan that addresses upstream resource management issues of the entire watershed that impact the marsh and result in the habitual flooding of Pescadero.

\$400,000 is requested from the Trustees to hire a full time, independent staff person or watershed coordinator for two years to work with: All the people living and owning land within the watershed, local, state and federal agencies, and other private organizations and individuals to complete the stewardship process, link all ongoing and recently completed studies into a coordinated and integrated watershed process, undertake and collect any additional data, science and studies needed, and complete an overall watershed plan. An outside facilitator or process, such as the BLM stewardship course, would be incorporated to help engage a stewardship group and get the process back underway. The resulting group would drive the overall process and restoration effort. All regulatory agencies would also be involved in the process form the beginning and updated routinely to ensure that data and information is sufficient to obtain permits for all restoration work identified in the overall plan.

Support for this concept is high. Potential partners and participants include: San Mateo County (Parks, Public Works, and Board of Supervisors), State Parks, Monterey Bay Sanctuary, Committee for Green Foothills, Pescadero Municipal Advisory Council, Coastal Conservancy, California Department of Forestry (Fire Dept), State and Regional Water Quality Control Board, Agricultural Water Quality Alliance, Farm Bureau, RCD and others.

This project request easily meets or exceeds all selection criteria listed in the scoping document as the Pescadero Marsh is the county's largest marsh and a very important marine resource. Additional details can be provided upon request.

# Project 3: California Coastal National Monument Education and Use Project

\$100,000 is requested from the Trustees to develop outreach materials and information to increase recreational use of the BLM rocks off the coast of San Mateo. This is a joint proposal from the SMC RCD and Recreational and Educational Access (Robert Burco), a BLM consultant and volunteer. A comprehensive investigation would be undertaken along the San Mateo coast to identify access points for viewing and kayaking along the National Monument rocks, performing an assessment and identifying partners who might benefit through the incorporation of promotion materials to increase local tourism tied into rock viewing and use, and developing educational materials that would inform visitors of the rocks, develop protocols for use such as kayaking around the rocks, safety, and preparing for a waterborne excursion. A report, promotional materials, educational brochures, and individuals and businesses interested in this concept would be produced: Currently there is no funding to develop the recreational use of this resource. The Command Oil Spill passed through the rocks on its way to the beach. Additional Information (Project 3 only): Robert Burco, 213-509-8844 or rburco@aol.com.

Additional Contact information for the above projects may be obtained from:

Mike Ednoff San Mateo County RCD 650-712-7765 650-726-0494 Mike.Ednoff@sanmateorcd.org www.sanmateorcd.org

The SMC RCD Board of Directors will maintain full administrative and fiscal oversight of this project. The RCD Board is currently appointed by the County Board of Supervisors, however, California law encourages election and once appointed RCD Board members serve as if elected with a single purpose of resource conservation using a non-regulatory approach. The SMC RCD currently covers all of coastal San Mateo County (157,000 acres) representing approximately 46,380 registered voters.



"John Early" <jearly@akmuseum.or g.nz> 02/10/2004 12:49 PM

To: <charlene\_hall@fws.gov> cc: Subject: support letter

Dear Ms Hall

The attached is a support letter for the Sooty shearwater project component of the Command Oil Spill Restoration Plan.

Yours sincerely

John Early



President: John W. Early Curator of Entomology Auckland Museum Private Bag 92081 Auckland, NEW ZEALAND telephone +64 9 3067042 fax +64 9 306 7091 email jearly@aucklandmuseum.com

10 February 2004

Charlene Hall Fish & Wildlife Biologist NRDAR Branch Environmental Contaminants Division US Fish & Wildlife Service 2800 Cottage Way, W-2605 Sacramento, Ca 95825 fax 916.414.6713

Dear Ms Hall

### Command Oil Spill- Restoration Plan and Environmental Assessment Section 4.5.7 Sooty Shearwater Restoration Project

I am writing in support of this part of the restoration plan. I represent a society of professional and amateur biologists whose prime interest is in the science of entomology and the place of terrestrial invertebrates in New Zealand ecosystems.

It is clear that the proposed eradication of rats on the Big South Cape Islands of New Zealand will hugely benefit these ground nesting seabirds but it will also have major advantages to whole ecosystems and will

allow for ecological restoration of the islands. Rodents are well documented predators of invertebrates particularly large flightless species which form a significant proportion of the fauna on southern islands in the New Zealand archipelago. Local examples are the ground beetle *Mecodema trailli*, the large stag beetle *Geodorcus helmsi*, various spiders and the land snail *Rhytida australis* which live on those islands. At least one large flightless beetle, the stilbocarpa weevil *Hadramphus stilbocarpae*, became locally extinct in the early 1960s on one of the Big South Cape islands within 5 years of the accidental introduction of rats. Removal of rats would allow re-establishment of this endangered species from adjacent islets.

Rats also eat fruit and seeds as well as tender young seedlings and so interfere with natural regeneration of the vegetation. The vegetation in turn provides leaf litter for the soil in which the shearwaters burrow and breed. Many examples could be adduced to emphasize the wider benefits of this proposed project.

It is encouraging to see that projects geographically far removed from the U.S.A. are being considered. From these migratory birds' perspective political boundaries mean nothing, or perhaps you might say that at least they hold dual citizenship of both our countries. They forcefully remind us that indeed all things are connected.

I strongly support this proposal and sincerely hope that you will give it favourable consideration.

Yours sincerely

#### John Early

President, Entomological Society of New Zealand

The material in this email is confidential to the named recipient(s). It may be protected by legal privilege. If you are not the intended recipient please do not copy, use or disclose this communication, notify us immediately and delete the email.

# TE AO MARAMA INC

# (NGAI TAHU (MURIHIKU) RESOURCE MANAGEMENT CONSULTANTS)

P O Box 990 190 Forth Street INVERCARGILL (Waihopai)

Telephone: (03) 214 1573 Facsimile: (03) 214 1505 Email: teaomarama.southland@clear.net.nz

28 January 2004

Field Supervisor NRDAR Branch Environmental Contaminants Division US Fish & Wildlife Service 2800 Cottage Way, W-2605 Sacramento, Ca 95825

ana an Ang taong Ang taong taong

ATTENTION: Charlene Hall >-

Tena koe e Charlene

REFERENCE: Command Oil Spill Funding Application by Rakiura Mäori

Te Ao Marama Inc.is an Incorporated Society set up by the four runanga (Mäori Councils) in Murihiku (Southland) to provide Tangata Whenua (local Indigenous People) input into the processes required by the Resource Management Act 1991. I am writing on behalf of the Management Committee of Te Ao Marama Incorporated in support of the funding application for Rat Eradication, Quarantine Program and Scientific Research on the Titi Islands.

The islands involved are Taukihepa (Big South Cape), Rerewhakaupoko (Solomons), Pukeweka and Mokinui. These islands lie adjacent to Rakiura (Stewart Island), New Zealand.

When rats invaded Taukihepa and the adjacent islands in the 1960s, it was publicised around the world as an international disaster. Taukihepa was the only place in the world that the Tieke (South Island Saddleback) could be found and the island had also been a refuge for several other threatened species of bird life. Some of the species, including Tieke, were captured and transferred to other islands and have been saved and in fact when numbers built up have been on-transferred to other islands that are considered safe from rats. Vegetation was also greatly affected, however, on islands such as Putauhinu that have had successful rat eradication programs, the vegetation has recovered tremendously.

More than a thousand species of flora and fauna are threatened with extinction in New Zealand and that highlights the importance of projects such as this. After the eradication of rats on these islands, they can, with a good quarantine program put in place once again become a safe haven for many of these species including the Titi which was affected by the oil spill. As you are no doubt aware Rakiura Mäori have a long association with the Titi, some eight hundred years in fact. The Titi and the islands they are taonga (treasures) to them. These taonga are an essential element of the traditional, cultural and spiritual wellbeing of Rakiura Mäori.

Rats are the only predators on these islands.

We strongly urge you to look favourably on the application.

Noho ora mai

. - -

MR Skonet JP

Michael R Skerrett Kaupapa Taiao Manager



02/08/2004 07:54 PM

# Planning & Zoning Committee of the MidCoast Community Council PO Box 64, Moss Beach CA 94038

Serving 12,000 residents

February 8, 2004

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825

Charlene Hall@fws.gov

# **Request for Extension of Time for Public Comment:**

Dear Ms. Hall:

In 1998 the tanker vessel M/V Command spilled 3,000 gallons of oil off the San Mateo County coast. The case was settled by a District Court Consent Decree dated March 31, 2000 ("Court Decree") (U.S. District Court for the Northern District of California) and \$5,518,000 was paid by the guilty parties.

The MidCoast Community Council, Planning and Zoning Sub-Committee, a group of 7 elected representatives for the mid-coast section of the San Mateo County coastline located between Pacifica and Half Moon Bay, voted 6-0 (one absent) on Wednesday, February 4, 2004 to present a formal request for extension of time to review the Draft. We believe it is essential to have more time for our community to examine the Draft and provide input.

The District Court provided that "the final Restoration plan will be prepared and implemented by the Trustees, after providing public notice, opportunity for public input, and consideration of public comment." (p. 7 of Court Decree). The Trustees have prepared a document entitled "Command Oil Spill Draft Restoration Plan and Environmental Assessment for public review and comment dated December 2003" ("Draft"). In the Draft, the Trustees propose to spend the restoration funds on 10 projects. The Trustees have provided until Wednesday, February 11, 2004 as the deadline for public comment on the Draft.

The document is 94 pages long and contains extensive references. It is believed that a period of just a little over 30 days is not sufficient to broadcast the contents of the Draft to our community and give the citizens and all community agencies sufficient time hold public hearings and to digest and comment on the contents of the Draft.

In accordance with the spirit and letter of the Court Decree, which mandates meaningful opportunity for public input, it would appear appropriate to request a reasonable extension of time for the public comment period in light of the magnitude of the monies to be spent and the impact on our community.

Due to public notification laws and time to schedule this agenda item for formal review, we are requesting an extension of a minimum 45 to 90 day extension. Our goal it to assist the trustee's in using the monies in a fashion that best serves San Mateo County, the area most affected by the Command Oil Spill.

Sincerely,

Karenwilson

Karen Wilson

Vice Chair, Planning & Zoning Committee of the MidCoast Community Council

cc:Congressman Tom Lantos California Assembly Member Gene Mullin State Senator Byron Sher California State Senator Jackie Speier Congresswoman Anna Eshoo

San Mateo County Supervisor Richard Gordon Command Oil Responce\_Final.



"Joe Loomis" <lawyer49@pacbell.ne

Subject: 1998 Command Oil Spill - Funds cannot be spent in New Zealand

02/06/2004 11:43 PM Please respond to "Joe Loomis"

To:

Charlene Hall<?XML:NAMESPACE PREFIX = O /> <?XML:NAMESPACE PREFIX = ST1 />U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 <u>Charlene\_Hall@fws.gov</u>

Tentative Project #7 "Sooty Shearwater Restoration Project" in the Command Oil Spill Draft Restoration Plan and Environmental

Assessment proposes that \$365,400 (12%) of the restoration funds be spent in New Zealand to kill rats.

The U.S. District Court Consent Decree states on p. 7: "In addition to causing seabird mortality and other injuries, the involved federal and state agencies believe that the Ocean Spill has impaired habitat and human use along the coast of San Mateo County."

On p. 2 of the Decree the Court further states in defining the target for restoration funding: "... Natural Resources mean[s] land, fish, wildlife, boita, air, water, ground water, drinking water supplies, and other such resources belonging to ... the United States (including resources of the Gulf of the Farallones National Marine Sanctuary and the Monterey Bay National Marine Sanctuary) and/or the State of California ..."

There is no mention of New Zealand. I do not believe it was the intent of the Consent Decree or the letter of the law that restoration funds be spent in New Zealand.

It is requested that these funds be spent in San Mateo County where the oil spill occurred.

Joe Loomis 570 Marine Blvd Moss Beach CA 94038 650-728-5277

CC:

Tom Lantos: http://www.house.gov/lantos/contact.html <?xml:namespace prefix = 0 ns = "urn:schemas-microsoft-com:office:office" /> Anna Eshoo:

http://www.house.gov/eshoo/communicate.html

State Senator Jackie Speier <u>Senator.Speier@sen.ca.gov</u>

State Senator Byron Sher <u>Senator.Sher@sen.ca.gov</u>

Gene Mullin <u>Assemblymember.Mullin@asm.ca.gov</u>



"Joe Loomis" <lawyer49@pacbell.ne

02/06/2004 11:19 PM Please respond to "Joe Loomis" To: "Charlene Hall" <Charlene\_Hall@fws.gov> cc: ect: Subject: 1998 Command Oil Spill - Critique of Proposed Pro

Subject: Subject: 1998 Command Oil Spill - Critique of Proposed Project #1 -Killing Ravens

To:

Charlene Hall <?xml:namespace prefix = st1 ns = "urn:schemas-microsoft-com:office:smarttags" />U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 <u>Charlene\_Hall@fws.gov</u>

Subject: 1998 Command Oil Spill – Critique of Proposed Project #3 – Killing Ravens <?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" /> In 1998 the oil tanker Command spilled about 3,000 gallons of oil off the Coast of San Mateo County. A total of \$5,518,000 was recovered in a settlement with the guilty parties to resolve all civil claims (natural resource damages and civil penalties), of which \$4,007,242 was allocated to restoration of natural resources.

The trustees of this fund are in the process of determining how best to spend these funds to repair natural resources damaged by the spill. The public has been invited to comment on their proposals and the comment period ends Wednesday, February 11, 2004.

Although there is no direct evidence that the Marbled Murrelet bird was injured at all by the oil spill (see Draft, p. 15-16), [note however that the trustees believe it is likely that 6 to 12 Marbled Murrelets were killed by the spill based on mathematical models, Draft p. 17] the trustees propose to spend 25% of the settlement monies (\$747,200) proposed in the restoration plan to kill and discourage approximately 8 Ravens (approximately one pair of Ravens for each of 4 identified campgrounds, Draft p. 34) who might prey on the nests of a very small population of these birds in the Santa Cruz Mountains of San Mateo and Santa Cruz Counties. (It is estimated that the Marbled Murrelet birds number about 500 in the entire Central California Coast, which is a tiny fraction of the estimated 263,000 to 841,000 world population.)

The reason given for the presence of the Ravens is that campers are careless with their garbage which is a source of food for the Ravens.

I do not understand why the Ravens should be punished for the misconduct of the campers. Moreover, the Raven is protected under the Migratory Bird Treaty Act. In addition, there are other predators that are not being addressed: Stellar Jays, Hawk, and Peregrine Falcons. Shall we kill one animal species to protect another when the root cause is the campers? If some Ravens had been killed in the oil spill, we would be thinking about protecting the Ravens. The Ravens should not be treated with any less respect than the Murrelets simply because they may not have been harmed by the oil spill. The Ravens are simply taking advantage of an opportunity (source of food) created by humans (adults and children spilling food at campgrounds). The Ravens are being punished due to our desire for recreation (camping). The Raven has long been recognized, especially in Europe, as one of the most intelligent birds. In fact, some scientists consider these black-feathered scavengers' position on the intelligence spectrum to be on par with canids such as wolves, coyotes, and dogs, and have conducted experiments to try to quantify the raven's brain power.

The project will also involve things like educating campers, purchasing lids for the garbage cans, and hiring "garbage police" for the campgrounds. I think all of this can be done under routine campground management and that the \$747,200 could be better spent elsewhere. Moreover, after the three quarters of a million dollars is spent on this project and the Ravens come back, what have we accomplished?

The trustees state on p. 27 of the Draft that another likely cause for the decrease in the Marbled Murrelet population is reduced prey availability as a result of oceanographic events. I am not sure what they are referring to but I would suggest focusing on reducing water pollution in the Monterey Bay Sanctuary off the Coast of San Mateo County as a more efficient way to utilize the restoration funds and as a way to permanently benefit all species from the pollution caused by humans.

I would suggest that the trustees actively solicit government agencies and community groups along the San Mateo County coastline, such as the City of Pacifica, Daly City, the City of Half Moon Bay, the Midcoast Community Council, and the San Mateo County Resource Conservation District (SMC RCD) for ideas on how to better spend the restoration funds. The SMC RCD has already suggested a permanent endowment for the \$4,000,000 fund, the income from which could be used in perpetuity for restoration projects and public education. This way the principal would never be depleted.

Several are listed below:

Tom Lantos: http://www.house.gov/lantos/contact.html

Anna Eshoo: http://www.house.gov/eshoo/communicate.html

State Senator Jackie Speier <u>Senator.Speier@sen.ca.gov</u>

State Senator Byron Sher <u>Senator.Sher@sen.ca.gov</u>

Gene Mullin Assemblymember.Mullin@asm.ca.gov

I object to many of the projects the trustees are proposing. I am certain there are better ways to utilize these valuable restoration funds. According to the U.S. District Court Consent Decree whereby the oil spill civil claims were settled: "In addition to causing seabird mortality and other injuries, the involved federal and state agencies believe that the Ocean Spill has impaired habitat and human use along the coast of San Mateo County". (Decree p. 2) I am certain our citizens can provide more creative ideas for the disposition of these funds.



"Joe Loomis" <lawyer49@pacbell.ne

02/06/2004 11:43 PM Please respond to "Joe Loomis"

To:

Charlene Hall<?XML:NAMESPACE PREFIX = O /> <?XML:NAMESPACE PREFIX = ST1 />U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 <u>Charlene\_Hall@fws.gov</u>

Tentative Project #7 "Sooty Shearwater Restoration Project" in the Command Oil Spill Draft Restoration Plan and Environmental Assessment proposes that \$365,400 (12%) of the restoration funds be spent in New Zealand to kill rats.

The U.S. District Court Consent Decree states on p. 7: "In addition to causing seabird mortality and other injuries, the involved federal and state agencies believe that the Ocean Spill has impaired habitat and human use along the coast of San Mateo County."

On p. 2 of the Decree the Court further states in defining the target for restoration funding: "... Natural Resources mean[s] land, fish, wildlife, boita, air, water, ground water, drinking water supplies, and other such resources belonging to ... the United States (including resources of the Gulf of the Farallones National Marine Sanctuary and the Monterey Bay National Marine Sanctuary) and/or the State of California ..."

There is no mention of New Zealand. I do not believe it was the intent of the Consent Decree or the letter of the law that restoration funds be spent in New Zealand.

It is requested that these funds be spent in San Mateo County where the oil spill occurred.

Joe Loomis 570 Marine Blvd Moss Beach CA 94038 650-728-5277

cc:

Tom Lantos: http://www.house.gov/lantos/contact.html <?xml:namespace prefix = 0 ns = "urn:schemas-microsoft-com:office:office" />



"Joe Loomis" <lawyer49@pacbell.ne t> To: "Charlene Hall" <Charlene\_Hall@fws.gov> cc: Subject: 1998 Command Oil Spill Draft Restoration Plan

02/05/2004 01:18 PM Please respond to "Joe Loomis"

To:

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 Charlene Hall@fws.gov The birds and the bees and all other living things:

During the oil spill response, the Trustees of the settlement funds collected only 171 birds that were affected by the spill. (Table 1: Recovered Birds, p. 16 Command Oil Spill Draft Restoration Plan and Environmental Assessment ["Draft"] dated December 2003).

On p. 7 of the Consent Decree, whereby the parties agreed to settle the claims arising out of the oil spill, it is stated that "The Trustees have determined that seabirds, primarily common murres, suffered the greatest injury as a result of the Oil Spill and that, as a result, the restoration money will primarily be used for projects benefiting seabirds." However, on p. 2 of the Consent Decree it states: "In addition to causing seabird mortality and other injuries, the involved federal and state agencies believe that the Ocean Spill has impaired habitat and human use along the coast of San Mateo County."

The responsible parties paid \$5,518,000 to resolve all civil claims (natural resource damages and civil penalties) arising from the Command Spill, of which \$4,007,242 was allocated to natural resource damages. (Draft, p. 3).

It seems to me that, in addition to impacting seabirds, the oil spill directly impacted the waters off our coast as well as everything that uses or lives on, in, above, or adjacent to the waters. Accordingly the restoration funds could just as easily be applied to efforts to prevent further pollution of these waters thus benefiting all living creatures.

The Trustees have established a deadline of Wednesday, February 11, 2004 for public input into their Dec 2003 Draft. I do not think this is sufficient time for the public to be made aware of, digest, and respond to the proposals set forth in the 94 page Draft, which also includes extensive reference material.

I have read portions of the Draft and already I am already troubled by the plans the Trustees have for spending the restoration monies. For example, \$365,000 (12% of the restoration funds) has been allocated to drop rat poison on rats in New Zealand that eat Sooty Shearwater bird eggs. Only 12 Sooty Shearwater birds were collected during the oil spill response. (Draft, p. 16). Moreover, the indigenous people in the area eat an estimated 500,000 Sooty Shearwater chicks annually. Another report indicates that they eat hundreds of thousands of these chicks. So the rats are not the Shearwater's only headache. And after the poisoning, the rats will be back in 3 years. (Draft, p. 68) But the money will be gone. So what have we accomplished? Moreover, p. 4 of the Consent Decree defines the natural resources to be restored as "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources" belonging to the United States and/or the State of California. New Zealand is not mentioned.

I think it is important for the citizens in our County (San Mateo County, California) where the oil spill

occurred to be given a meaningful opportunity to participate in decisions on how the restoration funds will be spent. I think there are far better ways to utilize these funds than are being proposed by the Trustees.

Accordinly, it is requested that the Feb 11, 2004 deadline be extended for a reasonable period, at a minimum another 60 days.

Joe Loomis 570 Marine Blvd Moss Beach CA 94038 650-728-5277



"Joe Loomis" <lawyer49@pacbell.ne

02/03/2004 09:35 AM Please respond to "Joe Loomis" To: "Charlene Hall" <Charlene\_Hall@fws.gov> cc: "MidCoast List" <Midcoast-L@lists.sanmateo.org> Subject: Command Oil Spill Draft Restoration Plan and Environmental Assessment - Public Comment on Preferred Project #3

To:

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 <u>Charlene\_Hall@fws.gov</u>

Command Oil Spill Draft Restoration Plan and Environmental Assessment – Public Comment on Preferred Project #3

<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />
The trustees of the \$5,518,000 oil spill settlement funds have asked for public comment by
<?xml:namespace prefix = st1 ns = "urn:schemas-microsoft-com:office:smarttags" />February
11, 2004 on their proposals for spending this money to restore damage done by the 3,000 gallon
oil spill off the San Mateo County coast in 1998. This is my comment on proposed project #3.

My description for this project is spending \$1,225,025 or 39% of the restoration funds to "shoo away" humans from cliffs or offshore rocks where birds congregate.

While I believe that it is admirable to prevent humans from disturbing nesting areas, I have to believe this goal can be accomplished without splurging 39% of our oil spill restoration funds. And I believe these funds can be put to far better use.

I have a better and cheaper idea for keeping people away from birds.

The trustees state in their proposed draft that "human disturbances are frequently caused by low flying aircraft, landings on islands or rocks by boaters or kayakers, or by commercial and recreational fishers anchoring close to colonies."

I would think it would be easy and cheap to get the word out to the general aviation community by, for example, including a short notice with the pilot's license, posting notices at the airports, etc. This could be done as part of the Federal Aviation Administration's normal notification channels.

Again, the Department of Fish and Game could easily include notices about staying away from birds in their regulations as part of their public outreach activities.

The Coast Guard could include notices about staying away from birds in their educational leaflets and programs.

What the trustees have in mind is a minimum five year plan. For the first two project years monitoring will be undertaken at key colony and roost sites to better define the scope of disturbance problems and to provide a basis for comparison for future years. After that there would be public outreach, promotion of more effective enforcement of already existing regulations, and continued monitoring. At the end of the project, all the money would be gone.

I would think that what the trustees have in mind is duplicative of what is already being done, or within the jurisdiction of, various law enforcement agencies.

The San Mateo County Resource Conservation District (SMC RCD), a public agency which coordinates the efforts of people and agencies in San Mateo County to promote improvement of the land and ocean environment for plants and living things has a number of proposed projects that need funding. One of its ideas is to establish a \$1,000,000 permanent endowment, the income from which would be used to engage in public outreach and education. The beauty of this plan is that the principal would never be exhausted, as with the trustee's proposed project #3, but would be available in perpetuity to generate income forever for education and outreach.

I support directing at least some measure of the oil spill restoration funds to the SMC RCD for one or more of their proposed projects.

Joe Loomis 570 Marine Boulevard Moss Beach CA 94038 650-728-5277



"Joe Loomis" <lawyer49@pacbell.ne

02/02/2004 09:54 AM Please respond to "Joe Loomis" To: "Charlene Hall" <Charlene\_Hall@fws.gov> cc: "MidCoast List" <Midcoast-L@lists.sanmateo.org> Subject: Command Oil Spill Draft Restoration Plan and Environmental Assessment - Public Comment on Preferred Project #2 (Marbled Murrelet Land Acquisition and Enhancement Project)

To:

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 <u>Charlene Hall@fws.gov</u>

Re: Command Oil Spill Draft Restoration Plan and Environmental Assessment – Public Comment on Preferred Project #2 (Marbled <?xml:namespace prefix = st1 ns = "urn:schemas-microsoft-com:office:smarttags" />Murrelet Land Acquisition and Enhancement Project)

<?xml:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" /> The comments below, except for my opinions, are taken from the Draft Plan.

The Command Oil Spill was estimated to have killed 6 to 12 Marbled Murrelet birds. The total world population of these birds is estimated at 263,000 to 841,000 birds. A relatively isolated population of approximately 500 birds breeds in the Santa Cruz Mountains of San Mateo and Santa Cruz Counties, near Pescadero Creek, Butano Creek, Gazos Creek, Waddell Creek, and Scott Creek with probably fewer than 200 nests. The nesting area is estimated to be spread over an area of 150 square miles. This is equivalent to 96,000 acres. Within this area the majority of nesting is thought to occur in 5 public parks or on adjacent private lands where suitable habitat still exists. The 5 parks are Big Basin, Butano, Portola, Memorial, and Pescadero. This averages about 100 birds per park or adjacent area.

There are several factors that may be negatively impacting the Marbled Murrelets of the Santa Cruz Mountains. These include limited nesting habitat, nest predation, and probably reduced prey availability as a function of oceanographic events.

Nest predation is caused by birds like Ravens, Jays, Hawks, and Falcons. Ravens are drawn to campground areas to eat garbage left behind by campers. It is suspected that the increase in Ravens due to the garbage is a significant reason for the decline in the Marbled Murrelet population.

The trustees propose to utilize \$400,000 (13%) of the oil spill restoration funds to purchase and manage an 80 acre parcel of land called the Girl Scout Creek property just north of Butano State Park. There is no public access to this parcel and it is located in a remote area where access is difficult. It is currently owned by the Save-the-Redwoods League which purchased the parcel to prevent it from being put on the open market by the prior owner.

It appears to me that this parcel is already sufficiently isolated from humankind to enable it to be a potential protected habitat for the birds if they want to use it without further expenditure of funds or intervention from the trustees. Moreover, this 80 acre parcel is minuscule in size compared to the overall existing habitat. It is not known whether any Marbled Murrelets even live there. If they do it is presumed that it would be a tiny minority of the estimated 500 birds nesting in the 150 square mile habitat. Finally, it appears that the Save-the-Redwoods League is doing a fine job in protecting it already.

I believe that we can make better use of the \$400,000 on a broader scope. Given that the trustees indicate that it is probable that reduced prey availability as a function of oceanographic events may be negatively impacting Murrelets, it may be a better use of the money to concentrate on reducing pollution of the ocean adjacent to San Mateo County. This would have a beneficial effect on all species that live on, under and near the sea as well as species which use the ocean as a source of food. One of the beneficial impacts cited by the trustees with respect to their proposed Girl Scout Creek Property purchase is that management of this parcel would benefit other species which live therein. So too, management of pollution that runs off into the ocean would benefit a vast array of species.

Instead of spending 13% of the restoration funds on this rather isolated 80 acre property, I would recommend giving the funds to the San Mateo County Resource Conservation District (SMC RCC) which engages in environmental management of 157,000 acres along the San Mateo County coastline, including reduction of pollution running into the Monterey Bay Sanctuary.

The SMC RCD, a local government agency, is one of the oldest environmental organizations in San Mateo County. The district presently covers over 157,000 acres of mostly rural, agricultural and open space lands in the western half of San Mateo County. The district runs nearly the entire coastline of San Mateo County and includes all watersheds draining into the Monterey Bay National Marine Sanctuary.

The SMC RCD is engaged in conservation of soil, water, species and other natural resources in a proactive manner. The California Legislature expanded the role of the RCD to include resource conservation on public lands, open space, watersheds, riparian corridors, with fish and wildlife, and in providing conservation education to the public.

The SMC RCD has made application for funding in order to work proactively with people to do beneficial things for the land, water and other natural resources in coastal San Mateo County.

I would support the funding of the projects of the RCD, which is sorely under funded, as a way to get more mileage out of the precious limited oil spill funds, instead of buying and managing a small 80 parcel of land, the outcome of which I think is rather speculative.

Joe Loomis 570 Marine Blvd Moss Beach CA 94038 650-728-5277 cc: Mike Ednoff Executive Director San Mateo County Resource Conservation District 625 Miramontes Street, Suite 103 Half Moon Bay, CA 94019-1942 650-712-7765 650-726-0494 fax <u>Mike.Ednoff@sanmateorcd.org</u> <u>http://www.sanmateorcd.org/</u>

cc: Karen Wilson Midcoast Community Council San Mateo County



"Joe Loomis" <lawyer49@pacbell.ne

02/01/2004 09:54 PM Please respond to "Joe Loomis" To: "Charlene Hall" <Charlene\_Hall@fws.gov>

cc: "Mike Ednoff" <Mike.Ednoff@sanmateorcd.org>, "Karen Wilson" <montara100@comcast.net>

Subject: Command Oil Spill Draft Restoration Plan and Environmental Assessment

To:

Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 Charlene Hall@fws.gov

This is in response to a request for public input about the Draft Plan dated Dec 2003.

The following information, except for my opinions, came from the draft plan.

The project to poison rats in New Zealand seems the rather dubious to me.

During the Command oil spill 12 shearwater birds were collected, one of which was banded in New Zealand.

This provided, according to the trustees, a direct nexus for the trustees to consider poisoning rats in New Zealand. I think this is a rather tenuous nexus.

The trustees are concerned that the rats eat shearwater eggs. Yet the shearwaters come to the San Mateo County coast and eat shoaling fishes, squid, and euphausids. Its dog eat dog out there.

Shearwaters are not only affected by rats in New Zealand. "Their numbers off California have declined precipitously during the past decade due to a combination of factors, including marine climate change, incidental fisheries take, and pollution." (see p. 65 of the draft plan).

Well, pollution includes oil pollution and other pollution running off into the Monterey Bay Sanctuary. And the San Mateo County Resource Conservation District (SMC RCD) is charged with minimizing this pollution. There is a nexus for you. The logic of the trustees goes something like this: The shearwater was impacted by the oil spill off our coast. So we should do what we can to insulate it from environmental hazards, like rats in New Zealand.

I have a better line of logic: The shearwater was impacted by the oil spill off our coast. So we should do what we can to insulate it from environmental hazards, like pollution off our coast. And who better to do that than the SMC RCD which is charged with protecting the Sanctuary waters.

And it is far better in my mind to prevent pollution than to drop poison on an island.

And the rats will come back eventually but we can prevent pollution indefinitely.

Another thing, the natives in New Zealand are also predators of the shearwaters. They are harvested for food, oil and feathers. So the rats are not their only headache.

And the poison will kill animal life other than just rats. On the other hand, pollution control off the San Mateo County coastline, where the oil spill occurred, will help everyone and everything and will do not harm whatsoever. Far better to spend the \$365,400 on reduction of ocean pollution.

I say rats to proposed project #7 on p. 22 of the draft and support the RCD's request for funding so they can carry out their anti-pollution projects.

Joe Loomis 570 Marine Blvd Moss Beach CA 94038 650-728-5277

cc: Mike Ednoff Executive Director San Mateo County Resource Conservation District 625 Miramontes Street, Suite 103 Half Moon Bay, CA 94019-1942 650-712-7765 650-726-0494 fax <u>Mike.Ednoff@sanmateorcd.org</u> http://www.sanmateorcd.org/

cc: Karen Wilson Midcoast Community Council San Mateo County



"Joe Loomis" <lawyer49@pacbell.ne To: "Charlene Hall" <Charlene\_Hall@fws.gov> cc: "MidCoast List" <Midcoast-L@lists.sanmateo.org>

01/31/2004 03:44 PM Please respond to "Joe Loomis" Subject: Command Oil Spill - Draft Restoration and Environmental Assessment -Dec 2003

To: Charlene Hall U.S. Fish and Wildlife Service 2800 Cottage Way Suite 2605 Sacramento CA 95825 Charlene Hall@fws.gov

This is in response to a request for public input with respect to expenditure of the remaining \$4,042,980 in settlement funds (remaining from the initial \$5,518,000 settlement) pursuant to the Dec 2003 Command Oil Spill Draft Restoration Plan and Environmental Assessment document.

The County of San Mateo is in dire financial straits due to the recent State of California budget crisis.

I am in favor of spending the settlement funds in San Mateo County rather than, for example, in New Zealand to kill rats.

In addition, we have a local agency in our community which is charged with protection of the Monterey Bay National Marine Sanctuary: The San Mateo County Resource Conservation District. They are in need of funding to do their projects to protect the marine environment, the very environment that was damaged by the spill.

I would request that the funds for restoration be spent here in San Mateo County where the oil spilled occurred.

You may contact the Resource Conservation District as follows:

Mike Ednoff Executive Director San Mateo County Resource Conservation District 625 Miramontes Street, Suite 103 Half Moon Bay, CA 94019-1942 650-712-7765 650-726-0494 fax Mike.Ednoff@sanmateorcd.org http://www.sanmateorcd.org/

Please put me on your mailing list.

Thank you,

Joe Loomis 570 Marine Boulevard TOM LANTOS

WASHINGTON OFFICE: 2217 RAYBURN BUILDING WASHINGTON, D.C. 20515 (202) 225-3531

DISTRICT OFFICE: ₹ 400 S. EL CAMINO REAL SUITE 410 SAN MATEO, CA 94402 (650) 342-0300 IN SAN FRANCISCO: (415) 566-5257



Congress of the United States House of Representatives Washington, D.C. 20515 INTERNATIONAL RELATIONS COMMITTEE Ranking Democratic Member

GOVERNMENT REFORM COMMITTEE Subcommittee on Energy Policy. Natural Resources and Regulatory Affairs Subcommittee on National Service

Subcommittee on National Security, Veterans' Affairs and International Relations

> Cochair, Permanent United States Congressional Delegation to the European Parliament

Member, United States Congressional Delegation to the NATO Parliamentary Assembly Cochair, Congressional Human Rights Caucus

Member, United States Holocaust Memorial Council

JAN 2 0 2004

January 27, 2004

<sup>\*</sup>Ms. Charlene Hall, Administrative Leader U.S. Fish and Wildlife Service 2800 Cottage Way Sacramento, CA 95825

Dear Ms. Charlene Hall,

I am writing you in support of the San Mateo County Resource Conservation District (SMC RCD) application for funds through the Command Oil Spill.

According to the draft plan, no organizations headquartered on the San Mateo County Coast will be receiving funds for cleanup and restoration efforts. I think it is vital that local knowledge and expertise be brought to these projects, and the SMC RCD is uniquely qualified to help facilitate the restoration of the coastal land.

The history of the SMC RCD speaks for itself. They have educated farmers on how to use drip irrigation to save water. They facilitated the restoration of the Pilarcitos Creek near Half Moon Bay, and they have worked to educate the surrounding communities on how to maintain it. They also work with Half Moon Bay and the local University of California Extension Program to educate community members about how to conserve the limited water resources in the area. The Resource Conservation District is a most valuable resource to implement the Command Oil Spill Restoration Projects. Furthermore, SMC RCD is qualified to orchestrate many of these projects because it has the ability to work throughout all the diverse terrains and ecosystems on the coast of San Mateo County. Many government and nonprofit entities specialized in specific environments, such as beaches, rivers, oceans or agricultural lands, but because SMC RCD's mission is to work with all resources, SMC RCD can work across all ecosystems and see the overall effect of these projects on the environment.

I urge you to give your most careful consideration to the SMC RCD's application for funds and I look forward to hearing from you.

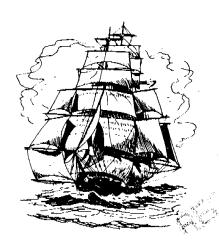
Sincerely,

10m Lantos

Tom Lantos Member of Congress



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January 24, 2004

Ms. Charlene Hall, Administrative Leader Natural Resources Damage Assessment and Restoration Branch Environmental Contaminants Division U.S. Fish and Wildlife Service 2800 Cottage Way Sacramento, CA 95825

Dear Ms. Hall:

Could you please give me an explanation of how <u>each</u> of the preferred projects met the criteria for Nexus to Injury?

I have some serious concerns that some of the projects do not meet with that definition.

I do not expect volumes of information. I know you must have a busy schedule but please if your staff could clear up this question for me, it would be very much appreciated.

Thank you,

Chuck Gust

• 100 Rockaway Beach Avenue • Pacifica, California 94044 •

<sup>•</sup> On the Sbores of the Beautiful Pacific at Rockaway Beach •



Congress of the United States House of Representatives Washington, D. C. 20515

JAN 1 4 2004 SACRAMENTO FISH WILDLIFE OFFICE

Anna G. Eshoo Tourteenth District Califernia January 13, 2004

Ms. Charlene Hall, Administrative Leader Natural Resources Damage Assessment and Restoration Branch Environmental Contaminants Division U.S. Fish and Wildlife Service 2800 Cottage Way Sacramento, California-95825

Dear Ms. Hall,

I'm writing in support of the San Mateo County Resource Conservation District (SMC RCD) application for funds through the Command Oil Spill.

According to the draft plan, <u>no organizations headquartered on the San Mateo County Coast</u> will be receiving funds for cleanup and restoration efforts. I think it's vital that local knowledge and expertise be brought to these projects, and the SMC RCD is uniquely qualified to help facilitate the restoration of the coastal land.

The history of the SMC RCD speaks for itself. They have educated farmers on how to use drip irrigation to save water. They facilitated the restoration of Pilarcitos Creek near Half Moon Bay, and they've worked to educate the surrounding communities on how to maintain it. They also work with Half Moon Bay and the local University of California Extension Program to educate community members about how to conserve the limited water resources in the area. The Resource Conservation District is a most valuable resource to implement the Command Oil Spill Restoration Projects.

Furthermore, SMC RCD is qualified to orchestrate many of these projects because it has the ability to work throughout all the diverse terrains and ecosystems on the coast of San Mateo County. Many government and nonprofit entities specialize in specific environments, such as beaches, rivers, oceans or agricultural lands, but because SMC RCD's mission is to work with <u>all</u> resources, SMC RCD can work across all ecosystems and see the overall effect of these projects on the environment.

I urge you to give your most careful consideration to the SMC RCD's application for funds and I look forward to hearing from you.

Sincerely,

Anna G. Eshoo Member of Congress

cc:

The Honorable Jackie Speier The Honorable Gene Mullin The Honorable Richard Gordon Mr. Mike Ednoff, Executive Director, San Mateo County Resource Conservation District Mr. Chuck Gust, Director, San Mateo County Resource Conservation District

#### **APPENDIX B: Proposals Submitted During Draft Plan Review Process**

The Trustees received several specific proposals on how to spend the Command Oil Spill restoration funds during comment period on the Draft Restoration Plan in addition to the proposals received during the scoping phase. These proposals were evaluated to determine if they were generally consistent with our screening criteria and the Restoration Plan was modified to include a general project description and evaluation.

• Pacifica State Beach Improvement Plan: See Section 4.7

In summary, this project was not considered further because the natural resource restoration components of the project did not meet the criteria for nexus and the public access components were not feasible due to financial constraints and other human use projects were available closer to the impacted area.

• Save Our Shores-Clean Boating Program: See Section 4.7

In summary, this project was not considered further because it not meet the TC criteria for nexus and the project is a prevention and response project rather than a restoration project.

# Appendix C:Mailing List

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|  | Div  | ket Maulupp                        | for D                 | roft      | Pla    |
|--|--|------------------------------------|-----------------------|-----------|--------|
|  | Organization   | Address                            | City                  | State Zig | ,<br>, |
| Agricultural Advisory                      |  |                                    |                       |           |        |
| Committee                                  | County of San Mateo  | 455 County Center                  | Redwood City          | CA        | 94063  |
| Alex Barnum                                | San Francisco Chronicle  | 901 Mission Street                 | San Francisco         | CA        | 94103  |
| Amanda Piper                               | KCBA Channel 35  | PO Box 3560                        | Salinas               | CA        | 93912  |
| Amy McCombs                                | KRON - TV 4  | 1001 Van Ness Avenue               | San Francisco         | CA        | 94109  |
|  |  |                                    |                       |           |        |
| Andy Nystrom                               | Los Altos Town Crier   | 138 Main Street                    | Los Altos             | CA        | 94022  |
| Angela Howard                              | Town of Portola Valley   | 765 Portola Road                   | Portola Valley        | CA        | 94028  |
| Anita Katz                                 | SF Independent   | 1201 Evans Ave                     | San Francisco         | CA        | 94124  |
| Anna Lucas                                 | KQED - TV 9<br>USFWS Common Murre  | 2601 Mariposa Street               | San Francisco         | ĊA        | 94111  |
| April Robinson                             | Project  | 379 Coronado                       | El Granada            | CA        | 94018  |
| Arthur "Chip" McIntosh                     | Planning Commission  | 765 Portola Road                   | Portola Valley        | CA        | 94028  |
|  |  |                                    |                       |           | 94018  |
| Bern Smith                                 | Landsmith<br>Island Conservation Center for  | Box 1583                           | El Granada            | ĊA        |        |
| Bernie Tershy                              | Ocean Health   | 100 Shaffer Road                   | Santa Cruz            | CA        | 95060  |
| BOARD OF SUPERVISORS                       | MONTEREY COUNTY  | 240 CHURCH STREET                  | SALINAS               | CA        | 93901  |
| BOARD OF SUPERVISORS                       | SAN MATEO COUNTY   | 401 MARSHALL STREET                | REDWOOD CITY          | ÇA        | 94063  |
| BOARD OF SUPERVISORS                       | SANTA CRUZ COUNTY  | 701 OCEAN STREET                   | SANTA CRUZ            | CA        | 95060  |
| Bob Breen                                  | San Mateo County Parks   | P.O. Box 451                       | Moss Beach            | CA        | 94038  |
|  |  | Calfiornia and North Lake          |                       |           |        |
| Bob Breen                                  | Fitzgerald Marine Reserve  | Streets                            | Moss Beach            | CA        | 94038  |
| Brad Peyton                                | Town of Portola Valley<br>Island Conservation and  | 765 Portola Road                   | Portola Valley        | CA        | 94028  |
|  | Ecology Group University of<br>California  | 100 Shaffer Road                   | Santa Cruz            | CA        | 95060  |
|  | Science and Environmental<br>Rep.KRON TV Channel 4<br>Golden Gate national<br>Recomption 4 and | 1001 Van Ness Avenue<br>Fort mason | San Francisco         | CA<br>CA  | 94109  |
| Carol Bach                                 | Recreation Area<br>Ferry Building<br>Pescadero Municipal Advisory                              | Ste 3100                           | Port of San Francisco |           | 94123  |
| Carol Simon                                | Council  | P.O. Box 833                       | Pescadero             | CA        | 94060  |
|  |  |                                    |                       |           |        |
| Carole Fertick                             | KOFY WB 20<br>Pescadero Municipal Advisory   | 2500 Matin Street                  | San Francisco         | CA 94     | 124-   |
| Catherine Peery                            | Council  | P.O. Box 28                        | Pescadero             | CA        | 94060  |
| Chris Hunter                               | Pacifica Tribune   | PO Box 1189                        | Pacifica              | CA        | 94044  |
| City Manager                               | Half Moon Bay  | 501 Main Street                    | Half Moon Bay         | CA        | 94019  |
|  |  |                                    |                       |           | 94044  |
| City Manager's Office                      | CITY OF PACIFICA   | 170 Santa Maria Avenue             | Pacifica              | CA        |        |
| City of Half Moon Bay                      |  | 537 Kelly Ave                      | Half Moon Bay         | ĊA        | 94109  |
| City of Pacifica<br>Coastside County Water |  | 170 Santa maria Avenue             | Pacifica              | CA        | 94044  |
| District                                   | Parks Beaches & Recreation   | 766 Main Street                    | Half Moon Bay         | CA        | 94019  |
| Мауо                                       | Commission CITY OF<br>PACIFICA<br>Parks Beaches & Recreation<br>Commission CITY OF             | 170 Santa Maria Avenue             | Pacifica              | CA        | 94044  |
| Commissioner B.J. Nathanson                | PACIFICA<br>Parks Beaches & Recreation<br>Commission CITY OF                                   | 170 Santa Maria Avenue             | Pacifica              | CA        | 94044  |
|  | PACIFICA<br>Parks Beaches & Recreation<br>Commission CITY OF                                   | 170 Santa Maria Avenue             | Pacifica              | CA        | 94044  |
| Commissioner Bruce Hotchkiss               |  | 170 Santa Maria Avenue             | Pacifica              | CA        | 94044  |
| Commissioner Christopher<br>Rankin         | Planning CommissionCITY<br>OF PACIFICA   | City Hall170 Santa Maria<br>Avenue | Pacifica              | CA        | 94044  |
| Commissioner Harold Cicerone               | Planning CommissionCITY<br>OF PACIFICACity Hall  | 170 Santa Maria Avenue             | Pacifica              | CA        | 94044  |
|  |  |                                    |                       |           |        |

| Name  | Organization  | Address                            | City                   | State    | Zip            |
|---|---|------------------------------------|------------------------|----------|----------------|
| Cooperative Extension Service                       | -   | 625 Miramontes Street suite<br>205 | Half Moon Bay          | CA       | 94109          |
| 0   | OTTO DE DU OTTO LO'UNU  |                                    | B 10                   | ~        | 0.0044         |
| Council member Cal Hinton<br>Dan Taylor             | CITY OF PACIFICACity Hall<br>Audubon                                    | 555 Audubon Place                  | Pacifica<br>Sacramento | CA<br>CA | 94044<br>95825 |
| Dun Taylor  | SAN MATEO COUNTY  | 555 Audubon Flace                  | Sacramento             | CA       | 95025          |
| DAN TEMKO   | HARBOR DIST.#1  | JOHNSON PIER                       | HALF MOON BAY          | CA       | 94019          |
| David Dayton  | San Francisco Examiner  | 110 Fifth St                       | San Francisco          | CA       | 94103          |
| ,   |   |                                    |                        |          |                |
| Diana Hall  | penninsula Open Space Trust   | 3393 Cloverdale Road               | Pescadero              | CA       | 94060          |
| Editor  | KGO Baywatch  | 909 Front Street                   | San Francisco          | CA       | 94123          |
| Gary Page   | PRBÓ  | 4990 Shoreline Highway             | Stinson Beach          | CA       | 94970          |
| Geoff Allen   | Pescadero Municipal Advisory<br>Council                                 | D.O. Por 240                       | Pescadero              | CA       | 94060          |
| Geoff Allen   | Council MemberTown of   | P.O. Box 249                       | Pescadero              | CA       | 94000          |
| George E. Comstock                                  | Portola Valley  | 765 Portola Road                   | Portola Valley         | CA       | 94028          |
| George E. Comstock                                  | Tonola valley   | 2530 San Pablo Avenue Suite        | Tonom valley           | -        | 14020          |
| Golden Gate Audubon Society                         |   | G                                  | Berkeley               | CA       | 94702          |
| •   | Conservation Committee Co-  |                                    |                        |          |                |
| Gordon Bennett                                      | Chair   | 105 Sunset Way                     | Muir Beach             | CA       | 94965          |
| Half Moon Bay Library                               |   | 620 Correas Avenue                 | Half Moon Bay          | CA       | 94019          |
|   |   |                                    |                        |          |                |
| Hanna Nevins  | Moss Landing Marine Labs  | 8272 Moss Landing Road             | Moss Landing           | CA       | 95039          |
| Harry Fuller  | KGO Radio   | 900 Front Street                   | San Francisco          | CA       | 94111          |
| Herb Hamer  | Pescadero Municipal Advisory<br>Council                                 | P.O. Box 733                       | Pescadero              | CA       | 94060          |
| Hero Hamer  | Pescadero Municipal Advisory  | P.O. Box 755                       | rescadero              | CA       | 94000          |
| Irma Mitton   | Council   | P.O. Box 864                       | Pescadero              | CA       | 94060          |
| Jim Taylor  | KCBS  | 865 Battery St.                    | San Francisco          | CA       | 94111          |
| Jim Topping   | KGO TV  | 7900 Front Street                  | San Francisco          | CA       | 94111          |
|   | Pescadero Municipal Advisory  |                                    |                        |          |                |
| John Dixon  | Council   | P.O. Box 537                       | Pescadero              | CA       | 94060          |
|   | Pescadero Municipal Advisory  |                                    |                        |          |                |
| John Donovan  | Council   | 55 Wurr Road                       | Loma Mar               | CA       | 94021          |
| Josh Adams  | Moss Landing Marine Labs  | 8272 Moss Landing Road             | Moss Landing           | CA       | 95039          |
|   | San Mateo County Parks and  |                                    |                        |          |                |
| Julia Bott  | Recreation Foundation   | 215 Bay Road                       | Menlo Park             | CA       | 94025          |
| Julie Thayer  | PRBO  | 4990 Shoreline Highway             | Stinson Beach          | CA       | 94970          |
|   |   |                                    |                        |          |                |
| Lennie Roberts                                      | Committee for Green Foothills<br>Pescadero Municipal Advisory           | 339 La Cuesta                      | Portola Valley         | CA       | 94028          |
| Leslie Fiering                                      | Council   | 515 Bean Hollow Road               | Pescadero              | CA       | 94060          |
| Lorin Hofman  | KWAV FM 97  | PO Box 1391                        | Montercy               | CA       | 93942          |
| MARC BEYELER  | COASTAL CONSERVANCY<br>San Mateo Parks and                              | 1330 BROADWAY #1100                | OAKLAND                | CA       | 94612          |
| Marcia Raines                                       | Recreation Divisoin   | 455 County Center 4th Floor        | Redwood City           | CA       | 94063          |
| Mark Des Jardins                                    | Half Moon Bay Review  | PO Box 68                          | Half Moon Bay          | CA       | 94019          |
|   |   | 102000                             |                        |          |                |
| Mary Burns  | Parks and Recreation Divison  | 455 County Center 4th Floor        | Redwood City           | CA       | 94063          |
| Mauricio Acosta                                     | KSMS Channel 67   | 67 Garden Court                    | Monterey               | CA       | 93940          |
| Mayor Ed Davis                                      | Town of Portola Valley  | 765 Portola Road                   | Portola Valley         | CA       | 94028          |
| Mayor Barbara Carr<br>Mayorof the City of Half Moon | CITY OF PACIFICACity Hall   | 170 Santa Maria Avenue             | Pacifica               | СА       | 94044          |
| Bay   |   | 501 Main Street                    | Half Moon Bay          | CA       | 94019          |
| Meg Delano  | Pescadero Municipal Advisory<br>Council<br>Pescadero Municipal Advisory | 4441 Wurr Road                     | Loma Mar               | CA       | 94021          |
| Meredith Reynolds                                   | Council   | P.O. Box 156                       | Pescadero              | CA       | 94060          |
| Michelle Hester                                     | Oikonos   | P.O. Box 792                       | Bolinas                | CA       | 94000          |
|   |   |                                    | 10-0111003             | C/A      | 74724          |
| Midcoast Community Council                          |   | P.O. Box 64                        | Moss Beach             | CA       | 94038          |
|   |   |                                    |                        |          |                |

| Name   | Organization                             | Address                      | City          | State | Zip     |
|--|--|------------------------------|---------------|-------|---------|
| Mideoast Community Coursel                               |  | PO Box 64                    | Moss Beach    | CA    | 94038   |
| Midcoast Community Council<br>Mike Ednoff                | San Mateo County RCD                     | 625 Miramontes St. #06       | Half Moon Bay | CA    | 94038   |
| Monterey Peninsula Audubon                               | San Mateo County RCD                     | 623 Milfamontes St. #06      | Hall Moon Bay | CA    | 94019   |
|  |  | P.O. Box 5656                | Carmel        | CA    | 93921   |
| Society  | LICENIC Comments                         | P.O. Box 3656                | Çarmei        | CA    | 93921   |
|  | USFWS Common Murre                       |                              |               | ~     | 94018   |
| Nate Jones   | Project                                  | 379 Coronado                 | El Granada    | CA    | 94018   |
| Pacifica Chamber of                                      |  |                              |               | ~ .   |         |
| Commerce   |  | 225 Rockaway Beach #1        | Pacifica      | CA    | 94044   |
| Pacifica Library   |  | 104 Hilton Way               | Pacifica      | CA    | 94044   |
| Pescadero Conservation                                   |  |                              |               |       | 0.000   |
| Alliance   |  | 4100 Cabrillo Highway        | Pescadero     | CA    | 94060   |
| Pescadero Municipal Advisory                             |  |                              |               | ~ .   |         |
| Council  |  | P.O. Box 249                 | Pescadero     | CA    | 94060   |
|  | California Coastal                       |                              | 0 B           | ~     |         |
| Peter Emhoff   | Commission                               | 45 Fremont Street Suite 2000 | San Francisco | CA    | 94105   |
|  |  |                              |               |       |         |
| Planning & Conservation                                  |  |                              |               |       |         |
| League and PCL Foundation                                |  | 926 J Street Suite 612       | Sacramento    | CA    | 95814   |
| PMAC   |  | P.O. Box 249                 | Pescadero     | CA    | 94060   |
|  |  |                              |               | ~ .   | 0.4070  |
| PRBO Conservation Science                                |  | 4990 Shoreline Highway       | Stinson Beach | CA    | 94970   |
| Richard Gordon   | Board of Supervisors                     | 400 County Center            | Redwood City  | CA    | 94063   |
| Ron Sturgeon   |  | P.O. Box 36                  | San Gregorio  | CA    | 94074   |
|  | Pescadero Municipal Advisory             |                              |               | ~     | 0.000   |
| Sam Osullivan  | Council                                  | 454 Dearborn Peak Road       | Pescadero     | CA    | 94060   |
| San Mateo County Farm                                    |  |                              |               | ~     | 0.1100  |
| Bureau   |  | 765 Main Street              | Half Moon Bay | CA    | 94109   |
| B. M. BOD  | Attn Pilarcitos Creek Adv                |                              |               | ~     | 0.4010  |
| San Mateo RCD  | Committee                                | 788 Main Street              | Half Moon Bay | CA    | 94019   |
| San Mateo Resource                                       | Attn: Pilarcitos Creek                   |                              |               | ~     | 0.10(2) |
| Conservation District                                    | Advisory Committee                       | 788 Main Street              | Half Moon Bay | CA    | 94063   |
| Save our Shores  |  | P.O. Box 1163                | El Granada    | CA    | 94018   |
| Constant Parla and Large                                 |  | 114 Sansome Street Room      | Con Francisco | ~     | 04104   |
| Save the Redwoods League                                 |  | 1200                         | San Francisco | CA    | 94104   |
| Sanatas Jacki Sasars Office                              | Attn: Susan Brissenden-Smith             | 455 Golden Gate Avenue       | San Francisco | CA    | 94102   |
| Senator Jacki Spears Office<br>Sierra Club Legal Defense | Aun. Susan Brissengen-Smith              | 433 Golden Gate Avenue       | San Prancisco | CA    | 94102   |
| Fund Inc.  |  | 2044 Fillmore ST             | San Francisco | CA    | 94115   |
| runa nic.  | Pescadero Municipal Advisory             | 2044 Fillmore ST             | San Francisco | CA    | 94113   |
| Steve Simms  | Council                                  | P.O. Box 9                   | Pescadero     | CA    | 94060   |
| Steve Simms<br>Sue Abbott                                | PRBO                                     | 4990 Shoreline Highway       | Point Reyes   | CA    | 94060   |
| Suc A0000  | San Mateo County Board of                | 4990 Shoreline rughway       | Fount Reyes   | CA    | 94970   |
| Superviser Dishard C Corden                              | San Mateo County Board of<br>Supervisors | 401 Marshall Street          | Pedurood City | CA    | 94063   |
| Supervisor Richard S. Gordon                             | Supervisors                              | 401 Marshall Street          | Redwood City  | CA    | 74003   |
| THE FUND FOR ANIMALS                                     |  | FORT MASON CENTER            | SAN FRANCISCO | CA    | 94123   |
| THE FUND FOR ANIMALS                                     | Pescadero Municipal Advisory             | FORT MASON CENTER            | SAN FRANCISCU | CA    | 54123   |
| Tim Hudson   | Council                                  | 640 Cabrillo Hwy             | Pescadero     | CA    | 94060   |
| Tim Flucson  | SANTA CRUZ FISH &                        | 640 Cabrino Hwy              | rescauero     | ÇA    | 94000   |
| WALT SMITH   | GAME                                     | 701 OCEAN STREET             | SANTA CRUZ    | CA    | 95060   |
| Wendy Poinsot  | Grints                                   | 143 Staples Avenue           | San Francisco | CA    | 94112   |
| William Sydeman  | PRBO                                     | 4990 Shoreline Highway       | Stinson Beach | CA    | 94970   |
| ti man syuchan   |  | arro onorenne rugnway        | Stabon Deach  | CA.   | 14110   |
|  |  |                              |               |       |         |
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Appendix D: FINDING OF NO SIGNIFICANT IMPACT (FONSI) Part 1: National Oceanic and Atmospheric Administration

#### FINDING OF NO SIGNIFICANT IMPACT (FONSI)

#### **Command Oil Spill Final Restoration Plan and Environmental Assessment**

The National Oceanic and Atmospheric Administration (NOAA) is a cooperating agency for the National Environmental Policy Act (NEPA) compliance for the final Restoration Plan and Environmental Assessment for the 1998 Command Oil Spill. NOAA, the Department of the Interior (DOI) through the U.S. Fish and Wildlife Service (FWS) (Federal Trustees), and the California Department of Fish and Game's (CDFG) Office of Spill Prevention and Response (OSPR), the California Department of Parks and Recreation (CDPR), and the California State Lands Commission (CSLC) (State Trustees), propose to implement restoration to benefit natural resources injured by the Command Oil Spill. The Federal and State Trustees participate in damage assessment and restoration planning activities to address injury and lost services to natural trustee resources as a result of the oil spill under all appropriate environmental laws and regulations.

On September 26, 1998, the T/V Command released an estimated 3,000 gallons of Intermediate Bunker Fuel (IBF) 380, also known as Fuel Oil No. 6. On September 30, oil began to wash ashore, largely in the form of scattered tarballs, over 15 miles of beaches, primarily in San Mateo County. A tarball sample collected as far away as the Salinas River mouth in Monterey County, however, matched the source sample from the tanker.

The primary impacts from the spill were injuries to large numbers of seabirds, primarily common murres. In addition, a number of California brown pelicans and marbled murrelets were impacted along with various other sea birds species. California brown pelicans and marbled murrelets are listed as threatened and/or endangered species under the Endangered Species Act (ESA)(16 U.S.C. 1533(c)) and the California Endangered Species Act (Fish & Game Code 2050, *et seq.*). In addition, injuries occurred to sandy beach and rocky intertidal shoreline habitats and lost and diminished use of beaches for human recreation. No beaches were closed as a result of the Command Oil Spill; however, coastal access was interrupted.

Both federal and California statutes establish liability for natural resource damages to compensate the public for injury, destruction, and loss of such resources and their services resulting from oil spills. Natural resource trustees are authorized to act on behalf of the public under state and federal statutes to assess and recover natural resources damages and to plan and implement actions to restore natural resources and resource services injured or lost as a result of a discharge of oil. The terms of the settlement that was reached between the responsible parties and the Trustees were memorialized in a Consent Decree that was entered by the Court on March 31, 2000. Pursuant to the Consent Decree, the responsible parties placed a total of \$5,518,000 into an interest bearing account. Of the total settlement, approximately \$3,913,000 will be used to restore natural resources injured by the oil spill.

The Restoration Plan and Environmental Assessment (RP/EA) examines and evaluates the effects of the proposed restoration actions on the environment and concludes that the action does not constitute a major Federal action that would significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement has not been prepared. The EA considered in detail the "No-action Alternative" and 25 individual projects to address the injured resources in a public process. The Trustees developed fourteen criteria to evaluate and prioritize the entire suite of projects that were under consideration. The criteria include restoring those resources directly impacted by the oil spill, relevant federal and state law provisions governing use of recoveries for natural resources, and the potential for restoration benefits to be realized. The final RP/EA contains ten projects that met the screening criteria and are selected restoration projects for specific locations throughout the California coast.

The Trustees evaluated several categories of restoration alternatives that would benefit resources injured by the spill, including injuries to seabirds, sandy and rocky intertidal habitats, and impairment of habitat and human use along the California coast. The "No action Alternative was not selected because it would not meet the requirement under the Oil Pollution Act and the goal of restoring lost and diminished human-use restoration alternatives. The "No action Alternative would be contrary to the mandate of the parties under the NRDA settlement agreement, the injured environment would not be restored, additional adverse ecological effects would occur, and potential for negative threats to the health and safety of the public would continue.

Based upon the information contained in the Restoration Plan and Environmental Assessment, we have determined that the RP/EA would not significantly affect the quality of the human environment. The proposed restoration actions are: [Marbled Murrelet Restoration and Corvid Management Project, Marbled Murrelet Land Acquisition and Enhancement Project, Seabird Colony Protection Project, Common Murre Nesting Ledge Creation Project, Brown Pelican Roost Site Enhancement and Creation Projects, Seabird Entanglement Reduction and Education Program, Sooty Shearwater Restoration Project, Seal Cove Beach Access Improvement Project, Half Moon Bay State Park Beach Access Project, and Mirada Surf Recreational Improvements]. Mitigation measures have been designed to minimize any potential for adverse environmental impacts.

The public has been afforded three opportunities to review and provide input on the alternatives, including the preferred alternatives. Initially, a public scoping meeting was held on May 21, 2002 in Half Moon Bay, California. A second public meeting was held on January 29th to present the draft Restoration Plan/Environmental Assessment to the public. Additionally the Draft RP/EA was made available to the public for a 75-day comment period beginning December 29th and closing March 19th. The Draft Restoration Plan/Environmental Assessment was available in both hardcopy form and posting on federal and state agency website pages.

Section 1508.27 of the NEPA regulations describes the minimum criteria that federal agencies should consider in evaluating the potential significance of proposed actions. The regulations explain that significance embodies considerations of both context and intensity. In the case of site-specific actions such as those proposed in this Draft EA/RP, the appropriate context for considering significance of action is local, as opposed to national or worldwide.

With respect to intensity of the impacts of the proposed restoration action, the NEPA regulations suggest consideration of ten factors:

- (1) likely impacts of the proposed project,
- (2) likely effects of the project on public health and safety,
- (3) unique characteristics of the geographic area in which the project is to be implemented,
- (4) controversial aspects of the project or its likely effects,
- (5) degree to which possible effects of implementing the project are highly uncertain or involve unknown risks,
- (6) precedential effect of the project on future actions that may significantly affect the human environment,
- (7) possible significance of cumulative impacts from implementing this and other similar projects,
- (8) effects of the project on National Historic Places, or likely impacts to significant cultural, scientific or historic resources,
- (9) degree to which the project may adversely affect endangered or threatened species or their critical habitat, and
- (10) likely violations of environmental protection laws.

40 C.F.R. § 1508.27. These factors, along with the federal Trustees' preliminary conclusions concerning the likely significance of impacts of the proposed restoration action, are discussed in detail below.

#### (1) NATURE OF LIKELY IMPACTS

The proposed restoration action for injuries from the Spill are to primarily benefit seabirds, sandy beach and rocky intertidal shoreline habitats, and lost and diminished use of beaches for human recreation. The Trustees believe that the projects selected in this restoration program will not cause significant adverse impacts to natural resources or the services they provide. The Trustees further do not believe that the proposed projects will affect the quality of the human environment in ways deemed "significant."

### (2) Effects on public health and safety

The Trustees do not expect to have any impacts on public health and safety. The implementation of the proposed restoration projects would not present any unique physical hazards to humans.

#### (3) Unique characteristics of the geographic area

The affected environment encompasses a 6,577 square mile area of Pacific Ocean along with near shore tidal flats, wetlands, rocky intertidal areas, coastal beaches, subtidal reefs, kelp forests, and underwater canyons. In addition, the physical environment encompasses rocks and islands contained within the California Coastal Monument managed by the Bureau of Land Management (BLM), public beaches that are under the jurisdiction of the CDPR, the Farallon National Wildlife Refuge managed by the USFWS and the Point Reyes National Seashore managed by the National Park Service (NPS). No unique or rare habitat would be destroyed due to restoration of wetlands to those areas that previously supported wetlands.

### (4) Controversial aspects of the project or its effects

The Trustees do not expect any controversy to arise in connection with the proposed restoration projects. The Trustees anticipate that the citizens of California would support the proposed restoration projects.

#### (5) Uncertain effects or unknown risks

The Trustees do not believe there are uncertain effects or unknown risks to the environment associated with implementing the proposed restoration actions. The Trustees would conduct appropriate site surveys to address any significant uncertainties before implementing the proposed restoration actions.

### (6) Precedential effects of implementing the project

The Trustees do not believe that the proposed restoration actions set any precedents for future actions of a type that would significantly affect the quality of the human environment.

### (7) Possible, significant cumulative impacts

Since the proposed restoration projects are designed to achieve recovery of injured natural resources, the cumulative environmental consequences will be largely beneficial. Although this plan directs efforts at restoring injured resources and creating beneficial impacts to injured resources, many other local and regional activities may influence the

ability of our project to create a net population or species level benefit for injured seabirds throughout their range.

# (8) Effects on National Historic Sites or nationally significant cultural, scientific or historic resources

The Trustees are aware of no previously recorded archeological sites located in the area of the proposed projects. The Trustees believe the proposed restoration actions will not affect any designated National Historic Site or any nationally significant cultural, scientific, or historic resources.

#### (9) Effects on endangered or threatened species

The Trustees know of no direct or indirect impacts of the proposed restoration actions on threatened or endangered species, or their designated critical habitats. The general locale where the restoration actions would be sited is not critical habitat for any listed species.

#### (10) Violation of environmental protection laws

The proposed restoration actions do not require nor do the Trustees anticipate any violation of federal, state or local laws, designed to protect the environment incident to or as a consequence of the implementation of either of the proposed actions. The restoration actions proposed can be implemented in compliance with all applicable environmental laws.

#### DETERMINATION

Based upon an environmental review and evaluation of the Final Restoration Plan and Environmental Assessment for the 1998 Command Oil Spill, I have determined that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969, as amended. Accordingly, an Environmental Impact Statement is not required for the Restoration Plan and Environmental Assessment.

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for William T. Hogarth, Ph.D. Assistant Administrator for Fisheries National Marine Fisheries Service National Oceanic and Atmospheric Administration U.S. Department of Commerce

Date 5/17/04

Appendix D: FINDING OF NO SIGNIFICANT IMPACT (FONSI) Part 2: U.S. Fish and Wildlife Service-

# U.S. Fish and Wildlife Service for the Department of Interior FINDING OF NO SIGNIFICANT IMPACT

For the 1998 Command Oil Spill Restoration Plan

The Command Trustee Council has completed its final Restoration Plan and Environmental Assessment (RP/EA) to select restoration projects that compensate for natural resource injuries and lost recreational use caused by the September 26, 1998, Command Oil Spill ("Spill"). The oil spill occurred when the tanker vessel Command released an estimated 3,000 gallons of fuel off the San Francisco coast. Tides and winds dispersed oil onto beaches from Salinas River to just north of Half Moon Bay where it impacted shorelines, birds, and their habitats and disrupted recreational activities.

The RP/EA was prepared jointly by the United States Department of the Interior (DOI), represented by the U.S. Fish and Wildlife Service (USFWS); the Department of Commerce (DOC), through the National Oceanic and Atmospheric Administration (NOAA); and the State of California, through the California Department of Fish and Game's Office of Spill Prevention and Response (CDFG), the California Department of Parks and Recreation (CDPR) and the California State Lands Commission (CSLC) (collectively called "Trustees") and is hereby "incorporated by reference" per 40 CFR 1502.21. These agencies formed a Trustee Council to cooperatively evaluate alternatives for potential restoration actions to address natural resource injuries and damages related to the Spill.

Both Federal and California statutes establish liability for natural resource damages to compensate the public for injury, destruction, and loss of such resources and their services resulting from oil spills. The Trustees are authorized to act on behalf of the public to recover natural resource damages and to plan and implement actions to restore natural resources and resource services injured or lost as a result of a discharge of oil. A settlement of all civil claims arising from the Spill was reached by the Federal and State governments and the parties responsible for the Spill. The terms of that settlement were memorialized in a Consent Decree, which was reviewed by a U.S. District Court and was subject to public comment prior to being entered by the Court on March 31, 2000. The Consent Decree required the responsible parties to pay \$5,518,000 to resolve all civil claims, of which \$3,913,016 was allocated to natural resource damages and restoration. Interest has been earned on that damage amount since its recovery and is also available for use for restoration activities.

The RP/EA evaluated several categories of restoration alternatives, including assessment of a "no action" alternative, and developed criteria to evaluate and prioritize the entire suite of projects under consideration. The no action alternative was not selected, because it would not restore resources lost from the Spill, as required under the Oil Pollution Act. The No Action Alternative would be contrary to the mandate of the parties under the Consent Decree, the injured environment would not be restored. additional adverse ecological effects would occur, and a potential for negative threats to the health and safety of the public would continue. The proposed restoration actions are: Seabird Colony Protection Project, Marbled Murrelet Restoration and Corvid Management Project, Marbled Murrelet Land Acquisition and Enhancement Project, Brown Pelican Roost Site Enhancement and Protection Projects, Sooty Shearwater Restoration Project, Half Moon Bay State Park Beach Access Improvement Project, Seal Cove Access Improvement Project, Mirada Surf Recreation Improvements, and Common Murre Nesting Ledge Creation.

This Finding Of No Significant Impact (FONSI) and decisions pertain to those restoration actions selected for implementation by the Trustees as identified in the RP/EA and summarized here (see Attachment 1).

#### **Public Scoping**

The public had several opportunities to comment on, and propose projects for, the RP/EA. Early in the planning process, the Trustees: i) released a Public Scoping Document in May 2002 to solicit proposed project ideas, ii) initiated a 30 day public comment period, and iii) held a Public Scoping Meeting on May 21, 2002, in Half Moon Bay, California. The Trustees also held a workshop with Marbled Murrelet scientists and resource specialists. Through this early scoping process, the Trustees received and evaluated 23 proposed projects, 21 of which were proposed by the public, and comments received during the scoping process were used to prepare the Draft RP/EA.

The draft RP/EA was made available to the public for an 82-day, extended comment period and a public meeting was held on January 29, 2004, in Half Moon Bay, California. The public was invited to submit oral and written comments on the RP/EA and to propose additional projects. Responses to these comments are summarized in Appendix A of the RP/EA.

#### **Alternatives Considered**

The PR/EA evaluated two action alternatives, consisting of combinations of restoration projects, and an alternative of taking no action, as required by the National Environmental Policy Act, 1969 (NEPA):

(A) Proposed and Preferred Action Alternative 1:

Marbled Murrelet Restoration and Corvid Management Project Marbled Murrelet Land Acquisition and Enhancement Project Seabird Colony Protection Project Common Murre Nesting Ledge Creation Brown Pelican Roost Site Enhancement and Creation Projects Seabird Entanglement Reduction and Education Program Sooty Shearwater Restoration Project Seal Cove Beach Access Improvement Project Half Moon Bay State Park Beach Access Improvement Project Mirada Surf Recreational Improvements A summary of each of these projects is provided in Attachment 1.

(B) Projects Evaluated from Alternative 2, but not currently selected for implementation: Seabird Nesting Habitat Restoration and Enhancement on the Farallon Islands Año Nuevo Island Seabird Habitat Restoration Appanolio Canyon Steelhead Passage Project Pescadero Marsh Restoration Plan San Vicente Creek Restoration Moss Landing Project Monitoring Gulf of the Farallon Islands Research Seabird Protection in Chile Education and Planning for Seabird Protection on Natividad Island, Mexico Leash Law Enforcement at Pillar Point Education Projects Donations to Existing Programs to Benefit Water Quality California Coastal Monument Recreation Planning A summary of each of these projects is provided in Attachment 2.

(C) No Action-Alternative 3:

No Action would be taken to implement any of the proposed restoration activities.

# **Environmental Consequences**

To comply with NEPA, the California Environmental Quality Act (CEQA), and other related state and Federal requirements, the Trustee Council analyzed the effects of each restoration project on the quality of the human environment. The analysis indicates that mitigation measures are key to the success of the overall RP/EA, and are therefore incorporated into each project as appropriate. Each Trustee agency is responsible for ensuring that each project for which it has "lead" responsibility under the memorandum of understanding (MOU), including mitigation, will be implemented as prescribed in the RP/EA and in accordance with the MOU. Attachment 1 contains a summary of the proposed action, environmental consequences and any mitigation proposed at this time.

The RP/EA is intended to satisfy the requirements of NEPA and CEQA by: (1) Summarizing the current environmental setting, (2) describing the purpose and need for restoration action, (3) identifying alternative actions, (4) assessing the environmental consequences of the proposed actions, and (5) summarizing opportunities for public participation in the decision process. However, project-specific NEPA and CEQA compliance may be needed for some of the proposed restoration projects once detailed implementation plans are developed. Other projects may fall within an existing Environmental Impact Statement or Environmental Impact Report.

As documented in the RP/EA, the Trustee Council has determined that the proposed actions can be implemented without significant adverse effects to soils, air quality, water resources, floodplain, wetlands, vegetation, fisheries, wildlife, visual quality, aesthetics/recreation, wilderness, subsistence, cultural resources, park management, and the local economy. Additionally, the Service has determined the proposed actions would not adversely affect any federally listed species under its jurisdiction. Future restoration projects will be submitted appropriately for consultation under the Endangered Species Act with the Service and NOAA Fisheries. If it is determined that a restoration project planned in the future will have an adverse effect on a threatened or endangered species, the Trustees will either redesign the project, substitute another project, or conduct formal Section 7 consultation with the Service and/or NOAA Fisheries, as appropriate. The proposed actions are designed to make the environment and the public whole for injuries to, or lost use of, natural resources and services resulting from the Command Oil Spill.

### **Environmentally Preferred Alternative**

The environmentally preferred alternative is the alternative that will promote NEPA, as expressed in Section 101 of NEPA. The identification of the environmentally preferred alternative is that which best meets the following requirements:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing surrounding.
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based upon the analyses of the proposed action when compared to the alternative projects (non-preferred) and the no action alternative, the proposed actions meet the criteria above and are therefore also the agencies' environmentally preferred alternative.

#### **Basis for Decision**

Implementation of the Proposed and Preferred Alternative 1 would have minimal short-term impacts on natural, cultural, and social resources. Attachment 1 contains a summary of the proposed action, environmental consequences and any mitigation proposed at this time. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative negative effects, or elements of precedence have been identified, and implementing the proposed and preferred Alternative 1 will not violate any Federal, State, or Local environmental protection law.

#### Conclusion

Based upon an environmental review and evaluation of the Final RP/EA for the September 26, 1998, Command Oil Spill, as summarized above, the nature of comments from agencies and the public, and the incorporation of mitigation measures to avoid or reduce potential direct, indirect and cumulative impacts, the USFWS has determined that the implementation of the restoration plan does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required. A RP/EA has been prepared in support of this finding and is available upon request from the U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Suite 2605, Sacramento, CA 95825.

Manager, California/Nevada Operations Office

Date

# **Project & Description**

## i) Marbled Murrelet Restoration and Corvid Management Project

This project will improve the nesting success of Marbled Murrelets, a federally threatened and California State endangered species. Trustee analysis of injuries to wildlife indicates that the Command Spill killed 6 to 12 Marbled Murrelets. This project is intended to improve Marbled Murrelet nest success by reducing the level of nest predation by jays and ravens that congregate around human food sources at campgrounds. The project would seek to reduce human produced food sources for jays and ravens through educational outreach, improved garbage protection, and, when necessary, may include removal of ravens and raven nests associated with campgrounds. Raven removal activities will be timed to avoid the seasonal presence of Marbled Murrelets and food restrictions will be implemented prior to marbled murrelet nesting in the area. Controlling the levels of ravens and jays in and around campgrounds would have minimal impacts on campers and would also impact individual ravens and jays and other animals that scavenge food waste at campgrounds. However, raven population levels in the general area will not be affected. As mitigated, this project has minimal adverse environmental impacts. Over the long term, the public will benefit from enhanced camping experiences and from enhanced biological integrity of ecosystems and restored seabird populations.

# ii) Marbled Murrelet Land Acquisition and Enhancement Project

This project will protect and enhance Marbled Murrelet nesting habitat through the acquisition and management of forest land in the Santa Cruz Mountains of Central California. Trustee analysis of injuries to wildlife indicates that the Command Spill killed six to twelve Marbled Murrelets. This project consists of: (1) Resource inventory and development of habitat management guidelines; (2) acquisition of a parcel of habitat by CDPR who agrees to manage the parcel as part of the State park system and in accordance with habitat management guidelines to be developed by the Trustee Council and CDPR; and (3) periodic monitoring of the habitat to ensure that all management guidelines are implemented and enforced. CDPR will be the permanent land steward and will have an on-site presence that will enable CDPR to actively manage the property in a proactive manner. Over the long term, these attributes should protect the Marbled Murrelet habitat and promote the continued (and perhaps increased future) use of the parcel by nesting Marbled Murrelets. The project would have no adverse environmental impacts.

### iii) Seabird Colony Protection Program\*

This project will improve nesting success of California's resident breeding seabirds by reducing disturbance at seabird breeding colonies. In addition, the project will improve the quality of roosting habitat of cormorants and pelicans by reducing disturbance. Trustee analysis of injuries to wildlife indicates that the Command Spill impacted approximately 1,490 Common Murres. This project includes: i) monitoring colonies to identify the types and degree of human disturbance in the area and to determine specific sites that require protection efforts, and ii) developing protective measures to reduce human related disturbances at colonies. Protective measures could include: a) posting signs, b) developing educational outreach materials for groups which regularly approach sensitive areas, c) actively managing and minimizing recreation activities in sensitive areas, and d) monitoring. The project is projected to last a minimum of 5 years. Restriction of recreational activities around sensitive seabird colonies may reduce

<sup>\* =</sup> Projects which the Department of Interior will implement.

the public's recreational experience. However, only a small area would likely be restricted for a short and limited time period (typically during breeding periods) and a balance will be sought between minimizing resource impacts and preserving quality opportunities for recreation. Permit requirements will address site-specific requirements and minimal adverse impacts are anticipated. Over the long term, the public will benefit through increased wildlife viewing opportunities.

#### iv) Common Murre Nesting Ledge Creation\*

This project will create and protect Common Murre nesting habitat at the Farallon National Wildlife Refuge (FNWR). Trustee analysis of injuries to wildlife indicates that the Command Spill impacted approximately 1,490 Common Murres. This project entails building a series of nesting ledges to simulate the natural (occupied) cliff habitat found on the islands. Wooden monitoring blinds will be incorporated into the backside of the ledge structure to allow biologists to monitor murre colonization without disrupting the birds. In addition, murres and Brandt's Cormorants nesting on natural cliff/ledge habitat in the area will benefit from reduced human disturbance. Some construction activities would have shortterm impacts on seabirds and marine mammals via flushing and noise disturbance. However, most of the construction will be completed after breeding animals have left the area and when wildlife activity is low. Additionally, proponents will complete section 7 consultation with the National Marine Fisheries Service (NOAA Fisheries) prior to project implementation and minimal adverse impacts are anticipated. Over the long term, the public will benefit from increased wildlife viewing opportunities and restored seabird populations.

#### v) Brown Pelican Roost Site Enhancement and Protection\*

This project will enhance and protect Brown Pelican roost sites along Central California. Trustee analysis of injuries to wildlife indicates that the Command Spill impacted approximately ten Federal and California State endangered Brown Pelicans. Methods to protect roost sites include placing buoys to keep boaters a safe distance from roost sites, posting signs, conducting public outreach/education programs, and conducting enforcement patrols. Improving communal roosts will positively influence the energy budgets of pelicans, improve their body condition and increase their survival and reproductive success. Permit requirements will address site-specific requirements for mitigation and any signs will be carefully designed and located so as not to detract from the natural beauty of any area or provide predator perches near sensitive bird populations. Minimal impacts are anticipated. Over the long term, the public will benefit from increased wildlife viewing opportunities and restored seabird populations.

### vi) Brown Pelican Entanglement Reduction Education and Outreach Program

This project will reduce entanglement of Brown Pelicans and other seabirds in fishing line by educating fishers in ways to minimize negative interactions with seabirds while fishing. Trustee analysis of injuries to wildlife indicates that the Command Spill impacted approximately 10 Federal and California State endangered Brown Pelicans. This project involves expanding other successful Seabird Entanglement Education and Outreach Programs to problem fishing piers and wharfs in Northern California. The goal of the program is to provide informational brochures, signs, and wildlife guides that heighten public awareness about the potential hazards to the endangered Brown Pelicans and other seabird species vulnerable to being hooked by fishing tackle or entangled by monofilament line. Additionally, information will be provided about the impacts of human disturbance to seabird breeding colonies (i.e. nest abandonment) and measures that can be taken to avoid such disturbances. The Command Council will be able to adopt the designs and materials from existing programs and modify them slightly to address sites in Northern California. The development of these products will be closely coordinated with the disturbance reduction project. These activities will help promote public awareness and thus reduce

bird injuries and deaths. Minimal adverse impacts are anticipated. Over the long term, the public will benefit from increased wildlife viewing opportunities and restored seabird populations.

## vii) Sooty Shearwater Restoration Project\*

This project will protect and enhance nesting habitat of Sooty Shearwaters on their native nesting grounds in New Zealand. During the Command oil spill response, shearwaters were the second-most collected bird species behind Common Murres. In addition, one of the collected individuals had been banded on Whenua Hou Island, New Zealand. This recovery along with the other shearwaters collected on beach surveys provides a direct nexus between the proposed project and this trans-pacific migrating seabird. The project will attempt to eradicate rats from their breeding areas at the Big South Cape Islands and Mokonui Island off New Zealand. The main objectives of the project are: 1) Eliminate rodents from four shearwater breeding islands, thereby eliminating egg and chick predation; 2) Establish quarantine contingencies to prevent reintroduction of rats to restored island colonies; and 3) Monitor the restoration progress and project effectiveness. The project will benefit multiple island ecosystems including the terrestrial faunal community, as well as compensation for the impacts of the spill to shearwaters. Eradication of rats from native seabird colony breeding sites would have short-term impacts on non-target native species, via incidental poisoning. However, monitoring from other successful rat eradication projects has shown that the populations rapidly recover from any losses and generally reach numbers far in excess of levels when rats were present. A general increase in invertebrate, lizard, bird, and bat populations is expected after rat eradication. The proposed actions will comply with all environmental regulations and resource approval and permit requirements will address site-specific requirements and minimal adverse impacts are anticipated. Over the long term, the public will benefit from enhanced biological integrity of ecosystems and restored seabird populations.

## viii) Improve Beach Access at Fitzgerald Marine Reserve

This project will replace a heavily worn walkway and staircase to Seal Cove Beach, an intertidal area where guided interpretive walks are conducted. Trustee analysis of injuries to recreation and human use resources indicates that the Command Oil Spill interrupted recreational services to individuals in beach related activities (e.g., walking, jogging, surfing, tidal pool viewing, and picnicking) on the coastline from Montara State Beach to Bean Hollow State Beach. This project would repair an old decomposing pathway with an 80-foot elevation change. This project will enhance the quality and amount of public use at a site which was affected by the spill, will improve safety at the site, and will prevent or minimize future adverse impacts to vegetation which is currently affected by soil erosion from existing informal foot trails. This will result in additional project benefits since impacted vegetation will recover and soil erosion will be minimized or prevented. No adverse impacts are anticipated.

### ix) Improve Beach Access at Half Moon Bay State Beach

This project will improve beach access to the coastline and protect natural resources through construction of a stairway to the beach. Trustee analysis of injuries to recreation and human use resources indicates that the Command Oil Spill interrupted recreational services to individuals in beach related activities (e.g., walking, jogging, surfing, tidal pool viewing, and picnicking) on the coastline from Montara State Beach to Bean Hollow State Beach. This project will entail designing and constructing stairs and a walkway to enhance coastal access. By defining appropriate pathways and beach access points, this project will eliminate a network of existing informal paths that have caused erosion and damage to sensitive resources. This project will enhance the quality and amount of public use at a site which was affected by the spill, will improve safety at the site, and will prevent or minimize future adverse impacts to vegetation which is currently affected by soil erosion due to existing informal foot trails. This will result in additional project benefits since impacted vegetation will recover and soil erosion will be minimized or prevented. Permit requirements, if necessary, will address site-specific requirements and minimal adverse impacts are anticipated.

### x) Mirada Surf Recreational Improvements

This project will contribute funds to assist in the completion of a regional coastal trail and create new and improved existing coastal access to beaches in the area affected by the Spill. Trustee analysis of injuries to recreation and human use resources indicates that the Command Oil Spill interrupted recreational services to individuals in beach related activities (e.g., walking, jogging, surfing, tidal pool viewing, and picnicking) on the coastline from Montara State Beach to Bean Hollow State Beach. Enhancement of the trail at Mirada Surf will address the loss of human use by providing the public with an additional safe, public access area at the shoreline. Permit requirements, if necessary, will address site-specific requirements and minimal adverse impacts are anticipated.

#### Attachment 2. Alternative Restoration Projects Evaluated (Non-Preferred Projects)

The following is a list of projects that the Command Trustee Council considered for funding but has decided not to fund for reasons explained below. These projects were suggested to the Council from members of the public, non-profit organizations, and government agencies during the public comment periods. All of these projects were evaluated using the project selection criteria described in the RP/EA. Furthermore, they were compared with the preferred projects. Should some of the preferred projects above become infeasible, or should extra funds remain, it is possible that the Council will revisit these projects at a later date.

#### 1. Seabird Nesting Habitat Restoration and Enhancement on the Farallon Islands

This project would restore critical seabird nesting habitat on the Farallon Islands for burrow/crevice nesting seabirds such as the Ashy Storm-petrel and the Cassin's Auklet, by eradicating the introduced house mouse. The Trustees have rated this project as non-preferred due to financial constraints and a low nexus to the injured resources.

#### 2. Año Nuevo Island Seabird Habitat Restoration

This restoration project would revegetate the central marine terrace on Año Nuevo Island, the main habitat for burrowing seabirds, with a diversity of native shrub and grass assemblages. The Trustees have rated this project as non-preferred due to financial constraints and a low nexus to the injured resources.

### 3. Appanolio Canyon Steelhead Passage Project

This project would remove a fish barrier and allow passage for Steelhead Trout to increase their spawning habitat. As steelheads were not directly impacted by the Spill, the nexus to resources injured by the Spill is low.

#### 4. Pescadero Marsh Restoration Plan

Funding was sought to contribute (with matching funds) towards the development of a Pescadero Marsh Restoration Plan. This proposal was less preferred for two reasons: 1) The marsh was not directly impacted by the Spill, and thus the nexus is low; 2) the project would merely be the development of a plan (much like this one) but with no direct funding for on-the-ground work.

#### 5. San Vicente Creek Restoration

This project would focus on storm drain run-off and stream restoration in San Vicente Creek, in order to improve water quality. This would provide benefits not just to the creek, but to the Fitzgerald Marine Reserve at the creek's outfall. This project would provide some direct benefits to the coastal habitat, which was lightly impacted by the Spill, and indirect benefits to seabirds and human recreational beach use. Nevertheless, relative to the other preferred projects, the nexus to the Spill is low and the benefits to impacted resources are relatively small. For this reason, it was not preferred.

### 6. Moss Landing Project Monitoring

This project would augment on-going restoration efforts for Brown Pelican roosting habitat and Snowy Plover nesting habitat near Moss Landing. Specifically, funds were sought to augment the monitoring

component of this project, as the project implementation funding needs have already been satisfied. This project was considered and compared to the other projects benefiting Brown Pelicans. Because this project would focus on monitoring only, while the other projects addressed immediate needs at other places along the coast, this project was less preferred compared to them.

# 7. Gulf of the Farallon Islands Research

This project would focus research on the oceanic areas around the Farallon Islands, exploring the possibility of increased preservation and protection of the marine habitat through the creation of a Farallon Archipelago National Marine Park and Preserve. While the implementation of such protection may yield substantial benefits to natural resources, it is difficult and speculative to quantify the direct benefits of this research. Additionally, the criteria imply a strong preference for on-the-ground projects over research. For this reason, this project was not preferred.

# 8. Seabird Protection in Chile

This project would focus on protecting Pink-footed Shearwater nesting areas in Chile. While this species was present in small numbers during the Spill, none were collected. Furthermore, the option of contributing to the restoration of Sooty Shearwaters in New Zealand offered greater assurance of success and a higher degree of nexus to the Spill. Thus, the Sooty Shearwater project was preferred over this one.

# 9. Education and Planning for Seabird Protection on Natividad Island, Mexico

This multi-pronged project would seek to educate local islanders regarding the effects of introduced predators (e.g., cats, rats, others) on seabirds, to develop a map of the island to assist in enforcement of regulations, and to develop and implement a quarantine plan to keep the island free of introduced predators. This project would benefit Black-vented Shearwaters (of which 95 percent of the world's population nests on this island), as well as Brown Pelicans, Double-crested and Brandt's Cormorants, and Western Gulls. Because goats, sheep, and feral cats have been removed from the island in recent years, and educational outreach with island residents has recently been conducted, this project aims to continue and augment these previous efforts. This project was preferred over this one.

### 10. Leash Law Enforcement at Pillar Point

This project would provide for additional enforcement of leash laws at Pillar Point in order to reduce disturbance of shorebirds. Additionally, it may also provide added benefits for some recreational beach users. Because the disturbance of shorebirds at this location is not likely to impact large numbers of shorebirds, nor any nesting shorebirds, the benefits of this project to shorebirds were thought to be rather small. Additionally, shorebirds were only minimally impacted by the Spill, and thus the nexus to the Spill is low. For these reasons, this project was given lower priority when compared to other projects benefiting impacted bird species.

### 11. Education Projects

There were several proposals to focus on the education of youth regarding seabird conservation and marine ecology. These included a project to develop curriculum for high school students, the development of a seabird education website, and a proposal to allocate \$1 million for an educational trust fund. As stand-alone projects, these ideas were compared to other seabird projects and were less preferred because they did not provide tangible benefits in the immediate future. However, these projects,

specifically the concrete proposals to develop curriculum, would complement the Seabird Colony Protection Program, which focuses education on usergroups most likely to cause disturbance to seabird colonies. Thus, the curriculum development project may be considered as a component of the Seabird Colony Protection Program if funds are available after the implementation of its primary objectives.

#### 12. Donations to Existing Programs to Benefit Water Quality

There were several proposals to donate \$1 million to \$2 million to existing programs such as the Monterey Bay National Marine Sanctuary water quality program, the Agriculture Clean Water Foundation, and the San Mateo County Resource Conservation District. The aim was to allocate funds to improve water quality at various sites. Because this Trustee Council is obligated to use the criteria listed in the RP/EA to address specific injuries to specific resources from the Command Spill, and because these programs apply a different set of criteria to achieve a different set of objectives, the Trustees cannot make such a donation. However, the Trustees could contribute to specific projects carried out by these programs if they were consistent with the Trustees' goals and criteria.

### 13. California Coastal Monument Recreation Planning

This project would develop outreach materials and information to increase recreational use of the Bureau of Land Management's rocks off the coast of San Mateo. A comprehensive investigation and planning effort would be undertaken along the San Mateo coast to identify access points for viewing and kayaking along the National Monument rocks, performing an assessment, and identifying partners to increase local tourism linked to rock viewing and use. This project could enhance the quality and amount of public use in areas affected by the Spill. However, this project was less preferred because it does not provide tangible benefits in the immediate future.

#### 14. Pacifica State Beach Improvement Plan

This project would involve the purchase and removal of two houses, restoration of the dunes where the houses are located, the restoration of tidal wetlands associated with San Pedro Creek and the installation of a mile of pedestrian/multi-purpose trail along the beach and other improvements to recreational facilities. The restoration of the wetlands would improve Steelhead Trout habitat and coastal shorebird habitat. The dune restoration would enhance foraging habitat for Snowy Plovers. The habitat restoration aspects of this project were less preferred because of a low nexus. Shorebirds were only minimally impacted by the Spill, and there was no documented impact by the spill to Steelhead Trout populations, thus the nexus is low. For these reasons, this project was given lower priority when compared to other projects benefiting impacted seabird species. The installation of a 1 mile pedestrian trail and improved recreational facilities was less preferred because the Mirada Surf Property improvement project more effectively fulfills the Trustees' goal of compensation for the lost human use and is closer to the area of most severe impact.

### 15. Save Our Shores, Clean Boating Program

This project would involve making a contribution to the Save Our Shores oil prevention projects such as the Clean Boating Program. The Clean Boating Program provides tangible oil collection tools to boaters as proactive measures to keep oil out of the water. This project was less preferred because it is more of a prevention project than a restoration project. The Trustees are required under law to use the settlement funds for on-the ground projects that have a goal of restoring, replacing, rehabilitating and/or acquiring the equivalent of natural resources injured and services lost as a result of the Spill.

Appendix E: State of California Negative Declaration



Arnold Schwarzenegger Governor STATE OF CALIFORNIA Governor's Office of Planning and Research State Clearinghouse and Planning Unit



Jan Boel Acting Deputy Director

March 25, 2004

Steve Hampton/Katherine Vurrue-Slater Department of Fish and Game 1700 K Street Suite 250 Sacramento, CA 95814

Subject: Restoration Plan and Environmental Assessment (RP/EA) for the September 26, 1998, T/V Command Oil Spill, San Mateo County, California SCH#: 2004022098

Dear Steve Hampton/Katherine Vurrue-Slater:

The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on March 23, 2004, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Jerry Roberts

Terry Roberts Director, State Clearinghouse

Enclosures cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044 (916)445-0613 FAX(916)323-3018 www.opr.ca.gov

#### Negative Declaration Determination under the California Environmental Quality Act (CEQA) that the T/V Command Oil Spill – Restoration Plan and Environmental Assessment Will Not Have a Significant Effect on the Environment

The California Department of Fish and Game's (CDFG) Office of Spill Prevention and Response (CDFG/OSPR), the California Department of Parks and Recreation (CDPR), and the California State Lands Commission (CSLC) (the "State Trustees"), and the National Oceanic and Atmospheric Administration (NOAA), the Department of the Interior (DOI) through the USFWS (the "Federal Trustees") (collectively, the "Trustees), propose to implement restoration to benefit natural resources injured by the T/V Command Oil Spill of September 26, 1998. The proposed restoration actions are described as the "preferred projects" in the Draft Restoration Plan and Environmental Assessment for the 1998 Command Oil Spill (Draft RP/EA). The Federal and State Trustees participated in damage assessment and restoration planning activities to address injury and lost services to natural resources as a result of the oil spill under all appropriate environmental laws and regulations. In accordance with the Oil Pollution Act of 1990, the Draft RP/EA will be finalized after the Trustees consider all public comments.

On September 26, 1998, the T/V Command released an estimated 3,000 gallons of Intermediate Bunker Fuel (IBF) 380, also known as Fuel Oil No. 6. On September 30, oil began to wash ashore, largely in the form of scattered tarballs, over fifteen (15) miles of beaches, primarily in San Mateo County. A tarball sample collected as far away as the Salinas River mouth in Monterey County, however, matched the source sample from the tanker.

The primary impacts from the Spill were injuries to large numbers of seabirds, primarily Common Murres. In addition, a number of Brown Pelicans and Marbled Murrelets were impacted along with various other sea bird species. Brown Pelicans and Marbled Murrelets are listed as threatened and/or endangered species under the Endangered Species Act (16 U.S.C. 1533(c)) and the California Endangered Species Act (Fish & G. Code sections 2050, *et seq.*). In addition, injuries occurred to sandy beach and rocky inter-tidal shoreline habitats and lost and diminished use of beaches for human recreation. No beaches were closed as a result of the Command Spill; however, coastal access was interrupted.

Both Federal and State statutes establish liability for natural resource damages to compensate the public for injury, destruction, and loss of such resources and their services resulting from oil spills. Natural resource trustees are authorized to act on behalf of the public under state and federal statutes to assess natural resources damages and to plan and implement actions to restore natural resources and resource services injured or lost as a result of a discharge of oil. The terms of the settlement that was reached between the responsible parties and the Trustees were memorialized in a Consent Decree that was entered by the United States District Court for the Northern District of California/San Francisco Division on March 31, 2000 (Case #: 3:99-CV-04359). Pursuant to the Consent Decree, the responsible parties placed a total of \$5,518,000 into an interest bearing account. Of the total settlement, approximately \$3,968,000 will be used to restore natural resources injured by the oil spill.

The Draft RP/EA examines and evaluates the effects of the preferred restoration projects on the environment as well as cumulative impacts. The CDFG/OSPR has elected to use the RP/EA, which was prepared pursuant to the National Environmental Policy Act, to meet the requirement of Section 15063 of the State CEQA Guidelines (Initial Study). The EA considered in detail the "No-action Alternative" and twenty-one (21) individual projects to address the injured resources in a public process. The Trustees developed fourteen (14) criteria to evaluate and prioritize the entire suite of projects that were under consideration. The criteria include restoring those resources directly

impacted by the oil spill, relevant federal and state law provisions governing use of recoveries for natural resources, and the potential for restoration benefits to be realized. The Draft RP/EA contains ten (10) projects that met the screening criteria and were selected as preferred restoration projects.

The Trustees evaluated several categories of restoration alternatives that would benefit resources injured by the Spill, including injuries to seabirds, sandy and rocky inter-tidal habitats and recreational use along the California coast. The "No action Alternative" was not selected because it would not meet the requirement under the Oil Pollution Act and the goal of restoring lost and diminished human-use restoration alternatives. The "No action Alternative" would be contrary to the mandate of the parties under the NRDA settlement agreement, the injured environment would not be restored, additional adverse ecological effects would occur, and potential for negative threats to the health and safety of the public would continue.

The proposed restoration actions are: Marbled Murrelet Restoration and Corvid Management Project, Marbled Murrelet Land Acquisition and Enhancement Project, Seabird Colony Protection Project, Common Murre Nesting Ledge Creation, Brown Pelican Roost Site Enhancement and Protection Projects, Brown Pelican Entanglement Reduction Education and Outreach, Sooty Shearwater Restoration Project, Half Moon Bay State Beach Access Improvement Project, Seal Cove Beach Access Improvement, Mirada Surf Recreational Improvements. Mitigation measures have been designed to minimize any potential for adverse environmental impacts. Details regarding the project descriptions, locations, and likely beneficial and adverse impacts are provided in the Draft RP/EA. A checklist of potential impacts is provided. The projects have been evaluated with respect to all of these potential impacts and been found to have no impact.

#### **Determination:**

Based upon the information contained in the Draft Restoration Plan and Environmental Assessment, the CDFG/OSPR has determined that the proposed actions will not result in substantial, or potentially substantial, adverse changes in any of the physical conditions with the areas affected by the projects. Therefore, an Environmental Impact Report is not required.

Under CEQA, this negative declaration is concurred with and approval by:

CALIFORNIA DEPARTMENT OF FISH AND GAME OFFICE OF SPILL PREVENTION AND RESPONSE

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Dated: February 20, 2004

By:

By:

Dated: February 20, 2004

Interim Administrator als

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Katherine Verrue-Slater Staff Counșel III

Carlton D. Moore

Dated: February 20, 2004

By:

Steve Hampton, Ph.D.