Command Oil Spill Public Scoping Document for Restoration Planning

Natural Resource Trustees

U.S. 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

May 1, 2002

I. INTRODUCTION

In 1998, the tanker vessel Command released oil into waters outside of San Francisco Bay (Command Spill). The Command Spill spread into ocean waters off the coast south of the Golden Gate and came ashore along the coast of San Mateo County. The spill impacted thousands of seabirds, primarily Common Murres. In addition, a number of California Brown Pelicans and Marbled Murrelets were impacted along with various other seabird 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 to causing seabird injury, the spill impaired habitat and human use along the coast of San Mateo County.

The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration, the California Department of Fish and Game, the California State Lands Commission, and the California Department of Parks and Recreation are the Trustees for the natural resources injured by the spill (Command Trustees). They are authorized by applicable federal and state law to assess the injuries caused by the Command Spill, to recover damages for the injuries, and to use the damages recovered to restore, rehabilitate, replace, or acquire the equivalent of the affected natural resources.

The Command Trustees have begun development of a restoration plan and an environmental assessment (EA) that will address restoration of the injured resources. The Command Trustees have chosen to use scoping at this stage of development to assist in identifying potential restoration projects, potential participants, areas where restoration may be possible, and available resources and constraints. The public is encouraged to review the Trustees' initial concepts for restoration and to provide comments, concerns, and ideas for restoration projects.

Background

On the evening of September 26, 1998, the M/T 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, primarily in San Mateo County (see Figure 1). A tarball sample collected as far away as the Salinas River mouth in Monterey County, however, matched the source sample from the tanker.

The United States (on behalf of NOAA and the Department of the Interior) and the California Department of Fish and Game, the California State Lands Commission, and the California Department of Parks and Recreation reached a settlement with the responsible parties 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 $5,518,000.0 to resolve all civil claims arising from the Command Spill, of which $3,913,015.97 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 (collectively the "NRDA money") was deposited into the Natural Resources Damage Assessment and Restoration Fund created pursuant to 43 U.S.C. § 1474b ("NRDAR Fund") as natural resource damages.

Pursuant to the Consent Decree, the NRDA money deposited into the NRDAR Fund will be maintained in a segregated account within the NRDAR Fund ("the *M/T Command* NRD Account") for the purpose of restoring the injured natural resources. The restoration plan will be developed jointly by the Trustees.

The Trustees have committed to the expenditure of the NRDA 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.

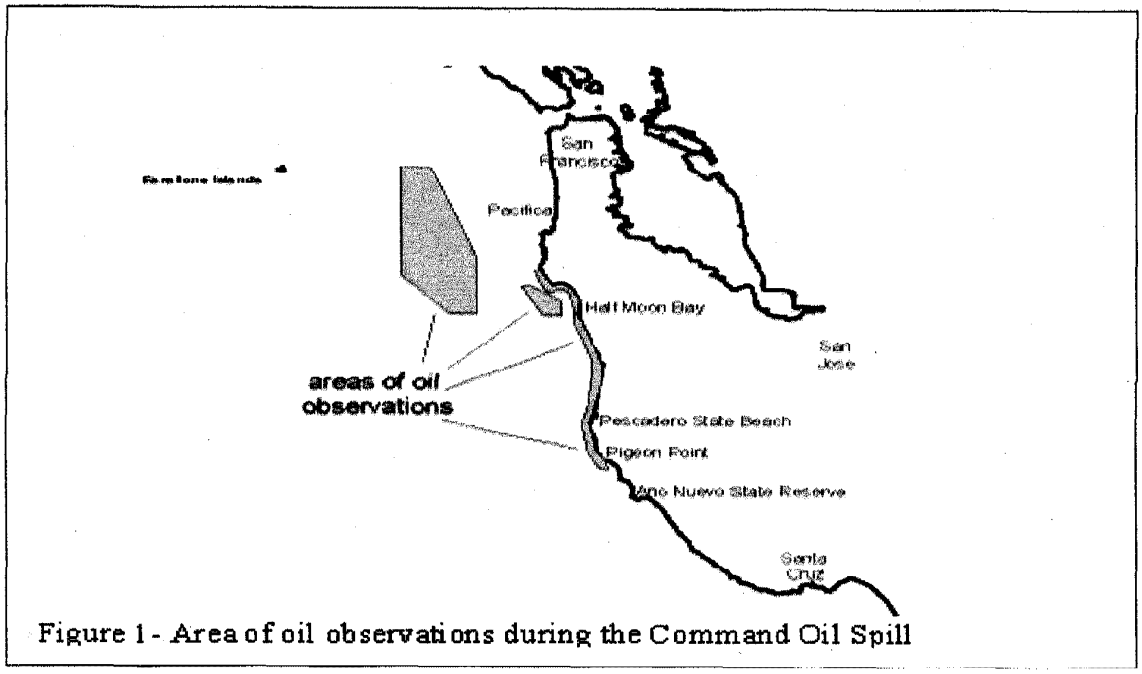

Figure 1 - Area of oil observations during the Command Oil Spill

Injuries to Natural 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.

Injuries to Seabirds

Oil is highly toxic and inflicts two kinds of harm on birds. First, many birds die from direct contact with oil, either by oil coating their feathers resulting in hypothermia, or by ingesting oil resulting in toxicity, or by inhaling oil causing pneumonia or emphysema. Second, reproductive output suffers, both because birds that die are permanently removed from the breeding population and because the reproduction of surviving oiled birds are 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 from the number that were rehabilitated and released. However, after an oil spill only fractions of the 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 murrelet carcasses on Northern

California beaches is unlikely because of low onshore transport, currents, at-sea carcass sinking, and scavenging (Ford et al. 1996). Many of the animals recovered alive and subsequently cleaned at rescue centers do not survive the process or have reduced chance of surviving once released to the wild (Sharp 1996, Anderson et al. 1996).

In the alcid family, the Marbled Murrelet (federally designated as threatened under the Endangered Species Act) 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. High levels of beach scavenging of murrelets also undoubtedly contribute to low carcass retrieval. Baseline beached bird surveys show an encounter rate of only 0.001 Marbled Murrelet carcasses per km. Only a total of six 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, Common Murres, a much larger bodied and more abundant bird, are 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 murrelets would be recovered. Therefore, although no Marbled Murrelets carcasses were recovered during the spill response (see Table 1), 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.

Table 1: Recovered Birds

SPECIES	COLLECTED DEAD	COLLECTED LIVE – DIED	COLLECTED LIVE – RELEASED	TOTAL
Common Loon	1	0	0	1
Pacific Loon	1	0	0	1
Western Grebe	1	0	0	1
Eared Grebe	1	0	0	1
Sooty Shearwater	11	0	1	12
shearwater, sp.	1	0	0	1
Double-cr. Cormorant	1	0	0	1
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
Common Moorhen	1	0	0	1
Wandering Tattler	1	0	0	1
Western Gull	3	0	2	5
Glaucous-winged x Western Gull	0	1	0	1
California Gull	2	0	0	2
Common Murre	64	35	30	129
unknown	1	0	0	1
TOTAL	**96**	**38**	**37**	**171**

Aerial Survey Results

The aerial surveys were conducted on four consecutive days (September 29, September 30, October 1, and October 2). All of the flights covered transects of ocean between Pt. Santa Cruz and Pacifica. The intent was to identify and quantify the numbers of seabirds and other wildlife that were potentially in the path of the oil. These surveys identified over 21 species, including the marbled murrelet, in the vicinity of the spill and at risk as the oil moved through the area.

Boat Survey Results

Two near-shore boat surveys were conducted, primarily to identify at risk Marbled Murrelets and other bird species. The first survey conducted on September 3 began at Princeton Harbor and ended off Greyhound Rock (south of Ano Nuevo Island). A total of 51 Marbled Murrelets were observed during the survey.

The second boat survey was conducted on October 2, during the period when oil was coming ashore. The survey began at Pillar Point Harbor and ended at Soquel Point (in Santa Cruz). A total of 21 Marbled Murrelets were counted during the survey, all in groups of two with one group of three. Oil globs and sheening were observed twice, near Eel and Seal Rocks, not far from four of the Marbled Murrelets.

Shoreline Survey Results

In addition, during the spill response, several shoreline surveys were conducted to collect oiled dead and injured wildlife and to determine the locations of wildlife that may be at risk from the spill. These surveys included general searches of the beaches for all wildlife and a specific survey for Snowy Plovers.

On September 29, beaches from Linda Mar Beach in Pacifica to Pescadero State Beach were searched. On September 30 and October 1, selected beaches from Pacifica to Gazos Greek were searched. These surveys were responsible for finding many of the birds listed in Table 1, in addition to documenting the presence of several oiled but free flying birds and identifying large numbers of seabirds who were at risk of being impacted. The following free flying oiled wildlife were observed during the surveys: five Brown Pelicans, two Common Murres, one Western Gull and one Heermann's Gull. The surveys also identified 27 bird species present on the beaches in the area of the spill.

Total Bird Mortality

The Trustees employed a model to obtain an estimate of the total bird mortality caused by the Command Spill. 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 a risk during the spill and that a total of 1,490 murres were killed. The model also, 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, estimated that 87 murrelets were at risk during the spill and that 12 murrelets were killed. For more information on this model please see the Ford 2002 Report entitled Estimated Common Murre and Marbled Murrelet Mortality Resulting from the Command Spill, which is available as part of the Trustee's administrative record.

Human Use Impacts

The Command Spill affected shoreline areas extending from Montara State Beach to Bean Hollow State Beach for the period September 30 to October 4, 1998. During this period, physical oiling of the beaches and consequent clean up activities disrupted the flow of recreational services to individuals participating in beach-related activities (e.g. walking, jogging, swimming, surfing, tidal pool viewing, and picnicking). Human use impacts of the Command Spill were estimated using the following methodology.

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 Command 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 2,333 lost trips, the value of lost use is $47,108.

In addition to the use lost as a result of the Command Spill, use also was diminished. The number of diminished use trips during the oil spill impact period was estimated to be 16,405. Based on experience, 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.

II. THE RESTORATION PLANNING PROCESS

The restoration planning process is aimed at developing a strategy for restoring habitats, species, and natural resource services that are lost or impaired as a result of the spill. The restoration plan will identify among other things (1) a range of restoration alternatives, (2) the relative effectiveness of alternative actions in achieving restoration goals using criteria developed for evaluating the alternatives, and (3) the estimated costs of alternatives.

This scoping phase is the first step in the restoration planning process. The purpose of scoping is to involve the public in the identification of significant issues and environmental impacts related to

the proposed actions to be analyzed in the RP/EA, as well as any reasonable alternatives to be addressed. This document describes possible restoration alternatives the Trustees currently plan to evaluate, invites public participation in the scoping process for preparing the RP/EA, and identifies where the public may direct questions.

Project Selection Criteria

The Oil Pollution Act of 1990 (OPA) and other applicable laws require the Trustees to use the NRDA Money for restoring, replacing, rehabilitating and/or acquiring the equivalent of natural resources injured and services lost as a result of the Command 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 will consider a reasonable range of restoration alternatives before selecting their preferred alternatives. Each restoration alternative should be comprised of primary and/or compensatory restoration components that address one or more specific injuries associated with the Command Spill. The Trustees have compiled the following initial set of criteria for analyzing potential restoration projects for this case.

- Nexus to Injured Resources – 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.

- Feasibility - Based on past experience or studies, the restoration projects must be technically and procedurally sound.

- No Duplicate or Replacement Funding - The Trustees will not fund projects that are already going to be funded or accomplished by other means or should be funded by more appropriate sources.

- Legality - The projects must comply with all applicable laws.

- Likelihood of Success – 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.

- Cost Effectiveness – The projects will be evaluated by considering the relationship of expected project costs to the expected resource/service benefits from each project alternative.

- Multiple Resource Benefits – Benefits can be increased if proposed projects benefit more than one natural resource or resource service.

- Duration of Benefits – Long-term benefits are the objective of the restoration projects, and the Trustees will evaluate project alternatives according to their expected duration of benefits.

- Public Health and Safety – Possibility that a proposed alternative would create a threat to the health and safety of the public will be part of the evaluation process.

- Likelihood of Adverse Impacts – Evaluation of projects will include examination of potential adverse impacts on the environment and the associated natural resources.

- Opportunities for Collaboration – Cost effectiveness can be enhanced by matching funds, in-kind services, or volunteer assistance as well as coordination with on-going or proposed projects

Administrative Record

The Trustees have opened an Administrative Record (Record) in compliance with 15 C.F.R. Section 990.45. The Record will include documents relied upon by the Trustees during the assessment and restoration planning performed in connection with the Incident. 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.*

III. PROPOSED RESTORATION PROJECTS (TO DATE)

Natural Resource Projects

To develop the restoration projects presented in this document, 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 and the lack of Marbled Murrelet nesting habitat. The Trustees propose to focus restoration actions for the Command Spill on these threats. Specific information on the proposed actions is presented below.

Disturbance Reduction

Due to the breeding characteristics of seabirds, they 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. Aircraft and boating disturbance events of central California Common Murre and cormorant colonies have been well documented by the Apex Houston Common Murre Restoration Program, which has been monitoring seabird colonies in central

California since 1996 (Parker et al. 2000, 2001; Rojek and Parker 2000). This project has documented that the small vessels used in the nearshore live trap fishery are disturbing nesting Common Murres and Brandt's Cormorants at the Hurricane/Castle Rock, Monterey County, and the Point Reyes, Marin County, colonies (Parker et al. 2000, 2001; Rojek and Parker 2000). These data have shown that continued and increasing boat disturbance, within 100 m of colonies, often results in the loss of chicks and eggs. One observed boat disturbance at a monitored Common Murre sub-colony in 1999 resulted in the loss of Common Murre chicks and eggs and a twelve percent reduction in that year's breeding success (USFWS, unpublished data).

The project has also documented aircraft violating Gulf of the Farallones and Monterey Bay National Marine Sanctuary flight elevation (1000 foot) regulations. These low flights, particularly by helicopters, causes seabirds to flush from colonies. While this documentation is limited to a few colonies that are being actively monitored, there is no reason to believe that similar disturbance patterns do not exist at other colonies as well. For example, disturbances at brown pelican and double-crested cormorant colonies are known to cause nest abandonment and increased egg predation (Ellison and Cleary 1978, Anderson 1988). 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).

The purpose of this proposed restoration project is to reduce human disturbance of seabird colonies during the nesting season. By reducing disturbance, the Trustees will be able to increase productivity of nesting seabirds and therefore assist the injured populations in returning to pre-spill levels. The proposed program would emulate a program developed in Oregon to protect nesting seabirds at the 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 at colonies and roost sites would be reduced through the development of a regional seabird protection program. The program would entail development and implementation of appropriate protective measures, educating the public and user groups about theses measures and a monitoring and evaluation program to ensure effectiveness.

Protective measures may include positioning buoys around breeding rocks, signs and educational programs targeting mainland visitors, informing kayakers, commercial and sport fishers to maintain a specified distance from colonies during the breeding season, and developing educational outreach materials and presentations for U.S. Coast Guard pilots, military pilots and general aviation pilots to educate them on flight elevation restrictions and locations of sensitive seabird colonies.

Brown Pelican Roost Site Enhancement and Protection Projects

Communal roost sites are essential habitat for California Brown Pelicans, a federal and state

endangered species, 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).

The primary roost sites for California 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, Strong and Jacques 2001). 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. Human disturbance at many existing roost sites in California is high relative to other portions of the range. 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, Strong and Jacques 2001)

Restoration projects proposed under this category would benefit Brown Pelicans that were injured in the Command spill. Improvements to communal roosts will have positive benefits to pelicans by reducing energy costs associated with commuting between prey and roosts and flushing and relocating due to human disturbance. Reducing energy expenditures will result in improved body condition of individual birds, which will lead to increased juvenile and adult survival and increased reproductive success of pelicans.

Potential projects under this category include improvements to the roost site within the Moss Landing Wildlife Management Area. This site was once the largest night roost location for Brown Pelicans along the west coast particularly from July to December, but natural and management alternations of the salt ponds have degraded its suitability as a roost site (Jaques and Anderson 1988, Strong and Jacques 2001). After this site started to degrade, pelican roosting numbers in Santa Cruz, such as at the city wharf, and other central California locations were noted (Deborah Jaques, pers. com.). In late summer 2001, a large number of pelicans roosted on the Santa Cruz wharf and the surrounding areas and were entangled by recreational fishing lines. Animal rescue groups rescue 199 entangled pelicans from the wharf; 59 of these birds died or were euthanized. Restoration of the Moss Landing roost site area would reduce human impacts on site and prevent some pelicans from moving to other areas where they could be subject to even more disturbance. The Moss Landing Salt Ponds Habitat Enhancement Plan (California Department of Fish and Game) outlines restoration that would benefit Snowy Plovers, Brown Pelicans and general waterbirds. The National Fish and Wildlife Foundation will provide some of

the funding. However, matching funds are needed to complete this important project that will benefit not only Brown Pelicans, but also several other species of waterbirds.

Another potential project involves the Brown Pelican roost 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. 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 Almeda NAS, the roost has been subject to human disturbance from recreational boaters and fishers (USFWS 1998). Projects to protect this roost include buoy placement to keep boaters a safe distance from the island, signing, public outreach/education programs, and enforcement patrols.

In addition, the Trustees propose to augment and expand a brown pelican roost site atlas that the American Trader Oil Spill Trustee Council is producing for southern California to include northern California. The goal of the atlas is to provide information on roost sites in a format which will facilitate sound management geared to protecting essential brown pelican non-breeding habitat and identify future restoration project sites, if needed. The Brown Pelican roost site atlas would be prepared with data derived from historical and ongoing standard aerial surveys and ground-based observations. The area included will encompass the northern California mainland and the offshore islands or rocks. Data will include detailed maps and information on pelican use of traditional sites (seasonal abundance, diurnal patterns, and changes in use over time), site ownership and jurisdiction, documented levels and sources of disturbance, natural factors that limit use, management concerns and recommendations. The catalog will be prepared in a user-friendly GIS format so that data that can be readily updated, distributed electronically and queried. The initial catalog would be available in both hard copy and Arcview GIS format. Additional roost site enhancement projects will be researched and presented in the draft Restoration Plan.

Marbled Murrelet Habitat Acquisition

Marbled Murrelets are a federally threatened and state endangered seabird species. In California, loss of old-growth forest nesting habitat is considered the primary cause of the marbled murrelet population decline (Stein and Miller, 1992). According to the Recovery Plan for the Marbled Murrelet (USFWS 1997), the major factors contributing to their threatened status include loss of nesting habitat and poor reproductive success in that habitat that remains. Marbled Murrelets nest on moss-covered branches of large tress in old-growth forests. As Marbled Murrelets were one of the species injured in the Command Oil Spill the Trustees will be exploring the possibility of purchasing old-growth habitat along the central California coast to protect critical murrelet nesting habitat. The goal of this project would be to permanently protect murrelet nesting habitat and or forest stands next to murrelet nesting habitat. This permanent protection would occur at

locations not presently protected under other regulations and at risk of being logged or where permanent protection will significantly enhance the future habitat availability for murrelets.

Lost Human Use and Shoreline Habitat Projects

The lost human use restoration projects will be focused on the recreational areas that were impacted by the Command Oil Spill. 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. To develop potential restoration projects that could be implemented to compensate for human use impacts the Trustees collected restoration concepts from staff at the California Department of Parks and Recreation and the Fitzgerald Marine Reserve. Projects developed will be designed to ensure that they do not impact wildlife.

At the Fitzgerald Marine Reserve, restoration projects may focus on access improvements at specific locations. The first is the main entrance to the reserve located near the town of Moss Beach. This entrance, about the width of a road and about ten yards long, is repaired annually. The suggested project would pave the entrance so individuals could access the reserve more easily and safely. A second potential project involves replacement of a heavily worn walkway to Seal Cove Beach, an intertidal area where guided interpretive walks are conducted. This walkway, which consists of older decomposing railroad timbers, contains an 800-foot change in elevation. The proposed project would greatly enhance access and safety at this heavily used area. A third potential project involves adding interpretive signage throughout the reserve to further enhance the visitation experience.

The Trustees have also developed potential human use improvement projects for Bean Hollow, Half Moon Bay, and Pescadero Marsh Natural Preserve and the Ano Nuevo State Reserve. At Bean Hollow State Beach potential projects include improving public access through construction of an accessible boardwalk, picnic tables and interpretive exhibits. At Half Moon Bay State Beach potential projects include improving beach access and protection of natural resources through construction of assess trails and boardwalks in sensitive areas. The Trustees will also consider a potential project removing non-native vegetation and restoring native species to enhance dune vegetation. At Pescadero State Beach and Pescadero Marsh Natural Preserve the Trustees propose to improve public access to the beach and the marsh by repairing existing trails. Additional projects may include purchasing sea kayaks to allow guided tours of the marsh. The feasibility of replacing bridges in the areas will also be explored, in addition to the removal of non-native plants to restore native species to enhance dune vegetation.

IV. PUBLIC PARTICIPATION ACTIVITIES

The Trustees recognize that public participation in the restoration planning process is both desirable and necessary, and that regular communication with the public is an important part of preparing and implementing the restoration plan. The goals of this public scoping process are to:

- Involve the public in the development of the restoration plan,
- Identify issues of concern to the public related to the restoration plan,
- Solicit the public's involvement in identifying projects that best restore the resources injured by the spill, and
- Keep the public informed of restoration developments and progress.

The Trustees will hold a public meeting at the Ted Adcock Community Center Sun Room *in Half Moon Bay CA on May 21, 2002 from 6:00-9:00pm.* *The Community Center is located* at 535 Kelly Avenue. Directions can be obtained by calling 650-726-8297. At this meeting the Trustees will present a brief overview of the Scoping Document and accept public comment.

Further information on this public meeting and other activities of the Trustees will be distributed to those on our mailing list, and will be announced on our websites at http://www.darcnw.noaa.gov/command.htm and www.dfg.ca.gov/Ospr/restorations.html and through press releases.

Types of Public Participation Opportunities

Responsibility for conducting public participation activities lies with the Trustee Council, and will be conducted by the Trustees. Public meetings under the formal notice and comment process will be sponsored by the Trustees.

(1) Commenting and Related Activities

Notice of Intent to Conduct Restoration Planning –
A Notice of Intent will be published in the Federal Register, inviting public involvement in the restoration planning process through public review of, and comment on, this and other documents contained in the Record.

Draft Restoration Plan – Once the Trustees prepare the draft Restoration Plan, a notice will be published in the Federal Register inviting the public to comment on the draft Restoration Plan and any significant modifications proposed to be included in the final Restoration Plan. Written or oral comments on the draft Restoration Plan to the Trustees are provided for at least 30 calendar days.

- A public meeting will be held early in the comment period to explain the draft Restoration Plan.

(2) Public Outreach

The Trustee Council places a high priority on public outreach. The Trustees' methods for informing and involving the public may include, but are not limited to, the following activities:

- **Public scoping document** - Distribution of this public scoping document to inform the public of the restoration planning process and to seek input.
- **Press releases** - Periodic news releases and briefings for reporters on Trustee activities.
- **Meetings** - Periodic meetings to inform the public of restoration progress and to solicit community input.
- **Cooperative efforts** - with individuals and governments to inform and involve the public and to further overall restoration goals.
- **Web site** – Up-to-date information of restoration progress will be posted regularly on the NOAA Command Oil Spill web site at www.darcnw.noaa.gov/command.htm.

Public Comments

We encourage you to share your thoughts through written comments. Please note that any responses we receive will be considered a matter of public record and releasable under the Freedom of Information Act. The public scoping period ends on June 6, 2002. Comments must be received by that date to be considered in the draft RP/EA. Please send comments to:

Charlene Hall at Charlene_Hall@fws.gov or to the U.S. Fish & Wildlife Service, 2800 Cottage Way, ste 2605, Sacramento, CA 95825.

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