



TORCH/PLATFORM IRENE OIL SPILL

Final Restoration Plan and Environmental Assessment

October 24, 2007



Prepared by Torch/Platform Irene Trustee Council:

United States Fish and Wildlife Service

California Department of Fish and Game

United States Department of Air Force, Vandenberg Air Force Base

California State Lands Commission

With Assistance from Santa Barbara County Planning and Development Department

"In every walk with nature, one receives far more than he seeks." John Muir

Through the process of interagency cooperation woven with public participation, we are learning how to repair what we have broken in nature while building lasting relationships with those who value community and our natural heritage.
Anonymous

COVER FACT SHEET	
Final Restoration Plan and Environmental Assessment	
Co-Lead Trustee Agencies:	United States Fish and Wildlife Service California Department of Fish and Game, Office of Spill Prevention and Response
Cooperating Trustee Agencies:	United States Air Force, at Vandenberg Air Force Base California State Lands Commission
Abstract:	<p>On 9/28/97, a discharge of at least 163 barrels of crude oil occurred from a rupture in a 20-inch offshore pipeline emanating from Platform Irene off the Santa Barbara County coast near Vandenberg Air Force Base. The Spill resulted in the fouling of approximately 17 miles of coastline, and caused an impact to a variety of natural resources, including seabirds, sandy and gravel beach habitats, rocky intertidal shoreline habitats, and use of beaches for human recreation.</p> <p>The purpose of this document is to inform the public about the spill, the affected environment, and the selected restoration actions to compensate for natural resource injuries and lost recreational uses caused by the Spill. The selected restoration actions described herein include seabird colony protection program, sandy beach and dune habitat restoration, mussel bed restoration, rocky intertidal habitat protection program, and boardwalk at Ocean Beach Park (Phase 1).</p>
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Copies:	Copies of the Torch/Platform Irene Final Restoration Plan and Environmental Assessment are available on the California Department of Fish and Game website at: http:// www.dfg.ca.gov/ospr/spill/nrda/nrda_irene.html .

EXECUTIVE SUMMARY

On September 28, 1997, a 20" transport pipeline connecting the Torch/Platform Irene (Torch) oil extraction platform to an onshore storage facility located in Santa Barbara County ruptured and the Torch/Platform Irene Oil Spill (hereafter the Spill) occurred. The pipeline was owned or operated by Torch Operating Company, Nuevo Energy Company, and Black Hawk Oil and Gas Company (collectively the Responsible Parties). The Spill released at least 163 barrels (or 6,846 gallons) of crude oil emulsion into the Pacific Ocean. Subsequent movement of the crude oil resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, causing impacts to a variety of natural resources, including seabirds, sandy and gravel beach habitats, rocky intertidal shoreline habitats, and lost use of beaches for human recreation.

Final Restoration Plan and Environmental Assessment

This Final Restoration Plan and Environmental Assessment (RP/EA) describes the effects of the Spill, and provides information regarding the affected environment, injuries to natural resources, and lost and diminished use of beaches and shoreline for human recreation as a result of the Spill. This document identifies the restoration alternatives that were selected to compensate for natural resource losses due to the Spill after consideration of public comments on the draft RP/EA. The intent of the restoration planning process is to make the environment and public whole for injuries to natural resources and related services resulting from the discharge of oil.

This document also serves as the federal Trustees' (the United States Fish and Wildlife Service (Service) and the United States Air Force, at Vandenberg Air Force Base (VAFB)) compliance with the National Environmental Policy Act (NEPA) in analyzing and selecting preferred restoration alternatives in the restoration plan. Subsequent NEPA compliance may be required prior to implementation of the restoration projects described herein pending development of further project-level detail. Additionally, this RP/EA and Finding of No Significant Impact (FONSI) may be relied upon by the California State Trustees (the California Department of Fish and Game (CDFG) and the California State Lands Commission (CSLC)) or other California state or local agencies towards compliance with the California Environmental Quality Act (CEQA). CEQA compliance is required for discretionary projects that are authorized, funded or carried out by California state or local agencies.

Public Participation

The Service, VAFB, the CDFG, and the CSLC (collectively, the Trustees) conducted a public scoping process early in the restoration planning development process to solicit public input in identifying potential concerns and additional restoration alternatives. The Trustees prepared the October 20, 2004 Torch/Platform Irene Oil Spill Scoping

Document for Restoration Planning, which summarized preliminary restoration alternatives for the natural resources impacted by the Spill. The public was given an opportunity to review and comment on preliminary restoration alternatives and submit ideas of their own that they believed were more cost-effective, and that better met the objective of restoring resources injured by the Spill. Following the public scoping process the Trustees prepared a Draft RP/EA dated March 13, 2006. Again, the public was given an opportunity to review and comment on the draft RP/EA and the proposed restoration alternatives and a public workshop was held April 19, 2006. The Trustees have considered the public comments received during the scoping process and draft RP/EA public review process in the development of this final RP/EA. Details of the public participation process are presented in Section 1.5 of this RP/EA.

Injured Resources

Studies and surveys conducted by the Trustees and other experts identified Spill-related injuries to the following natural resources and recreational services:

- Seabirds.
- Sandy and gravel beach habitats.
- Rocky intertidal shoreline habitats.
- Use of beaches for human recreation.

A detailed summary of the Spill injuries is presented in Section 3.0, Injury Assessment.

Restoration Projects

The goal of this restoration planning process is to identify and evaluate restoration projects that will make the environment and the public whole for injuries to natural resources and natural resource services resulting from the discharge of oil. This restoration goal is achieved through the restoration, rehabilitation, replacement, or acquisition of the equivalent of the injured natural resources and services. After evaluating a number of restoration alternatives, and considering the public comments on the Draft RP/EA, the Trustees have selected the following five Most Preferred Restoration Alternatives:

1. *Seabird Colony Enhancement Project*. This project will protect seabirds by reducing human disturbance of roosts and colonies.
2. *Sandy Beach and Dune Habitat Restoration*. This project will eradicate invasive plant species and replant native vegetation more conducive to the propagation and survival of indigenous species.
3. *Mussel Bed Restoration*. This project will accelerate natural restoration along rocky intertidal areas.

4. Rocky Intertidal Habitat Protection Program – Focus on Abalone & Other Rocky Intertidal Species. This project was developed by combining educational elements from other proposed restoration alternatives and will focus on educating the public about the sensitivity of rocky intertidal species, including abalone, to reduce human disturbance on these species.
5. Boardwalk at Ocean Beach Park (Phase 1). This project will include supplementing funding for the Santa Barbara County boardwalk project at Ocean Beach Park.

Based on public comments received on the draft RP/EA the Trustees have, to some extent, modified the above project descriptions as detailed in Section 4.5. The above projects have been ranked by the Trustees as the Most Preferred Restoration Alternatives based on established project selection criteria, detailed in Section 4.0. The reasons and considerations for the selection and relative rankings of projects are based on these criteria, including the threshold criteria of the relative nexus, or connection and relationship between natural resource injuries from the Spill and proposed restoration alternatives. Other restoration alternatives were considered, and are also discussed in Section 4.0.

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1.0 INTRODUCTION

This Final Restoration Plan and Environmental Assessment (RP/EA) was prepared by the Torch/Platform Irene Oil Spill Natural Resources Trustee Council to inform the public about the affected environment and the restoration projects selected to compensate for natural resource injuries and lost recreational uses caused by the Torch/Platform Irene Oil Spill (hereafter Spill or Torch Spill). The Trustee Council is comprised of representatives of the U.S. Fish and Wildlife Service (Service); the United States Air Force, at Vandenberg Air Force Base (VAFB); the California Department of Fish and Game, Office of Spill Prevention and Response (CDFG); and the California State Lands Commission (CSLC), (collectively, the Trustees).

1.1 Background

On September 28, 1997, a discharge of crude oil occurred from a rupture in a 20-inch pipeline owned or operated by Torch Operating Company, Nuevo Energy Company, and Black Hawk Oil & Gas Company (collectively, the Responsible Parties). The pipeline runs from the offshore oil platform, Platform Irene, to a processing facility onshore north of the City of Lompoc, on Harris Grade Road in Santa Barbara County (see Figure 1). This pipeline transports an emulsion of crude oil and water from Platform Irene to the onshore facility.

At the time of the Spill, in addition to oil and production water, the pipeline contained approximately 900 gallons of diesel and 800 gallons of anti-corrosion chemical compounds. The Spill released at least 163 barrels (or 6,846 gallons) of the petroleum product into the Pacific Ocean. Subsequent movement of the petroleum resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, and caused impacts to a variety of natural resources including seabirds and shoreline habitats. The degree of oiling varied along the affected coastline, with the most heavily oiled area being Surf Beach on VAFB.

The Trustees determined that the Spill constituted an "incident" within the meaning of 15 C.F.R. § 990.30 and was not permitted under federal, state or local laws. Since natural resources under their trusteeship were likely to have been injured, the Trustees had jurisdiction to pursue restoration under the Oil Pollution Act of 1990 (OPA), 33 U.S.C. § 2701, *et seq.*, and 15 C.F.R. § 990.41. The Trustees made a determination to proceed with a natural resource damage assessment (NRDA)/restoration planning based on the following: (1) data gathered during the Spill response indicated that injuries to natural resources had resulted from the incident, e.g., seabird mortality; (2) the response actions were not expected to address the injuries resulting from the incident; and (3) feasible primary and/or compensatory restoration actions existed that could address the potential injuries.

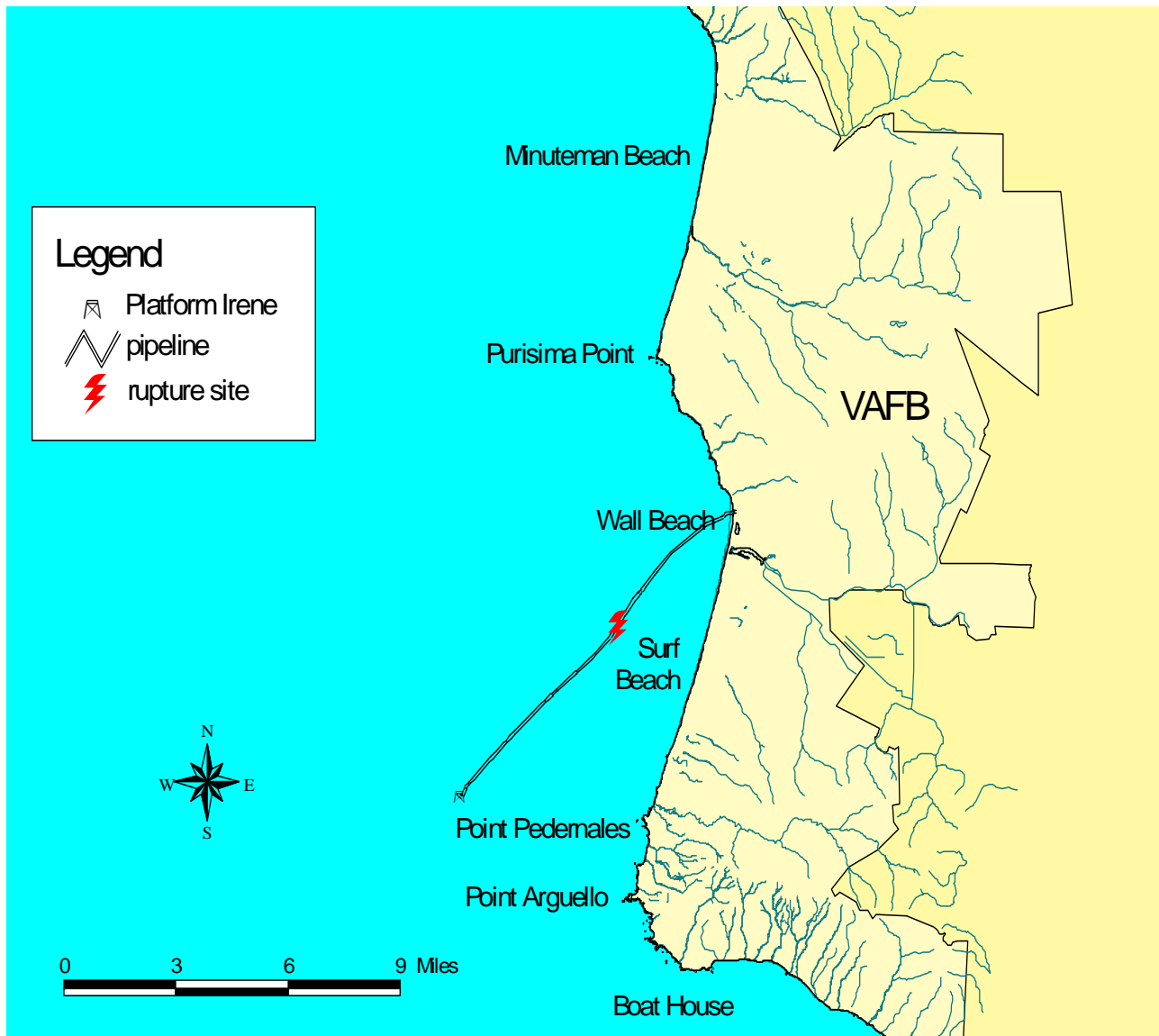


Figure 1. Platform Irene Oil Spill Location

1.2 Purpose of RP/EA

The purpose of this RP/EA is to provide information regarding the affected environment, injured natural resources, and human recreational use impacts resulting from the Spill. This document also includes the Trustee agencies' plan for restoration, including descriptions and analyses of proposed restoration alternatives consistent with OPA and the National Environmental Policy Act (NEPA), 40 U.S.C. § 4321, *et seq.*

During the restoration planning process, the Trustees identify and evaluate various alternatives, and provide the public an opportunity to review and comment on the

selected restoration options. The goal of restoration is to compensate for injuries to, or lost use of, natural resources and services resulting from the Spill, through restoration, rehabilitation, replacement, or acquisition of equivalent natural resources and services. The specific goals for this RP/EA are to restore the following natural resources and services affected by the Spill: seabirds, sandy and gravel beach habitats, rocky intertidal shoreline habitats, and use of beaches for human recreation.

Federal trustees are required to coordinate restoration planning with NEPA. Accordingly, this document is also intended to serve as an Environmental Assessment (EA) under NEPA. An EA is a concise public document that assists federal agencies in determining whether to prepare an Environmental Impact Statement or a Finding of No Significant Impact (FONSI) for a proposed action. This EA discusses the need for the Most Preferred Restoration Alternatives, environmental impacts of the Most Preferred Restoration Alternatives, alternatives to the Most Preferred Restoration Alternatives, and a listing of agencies and persons consulted.

The Service has prepared this EA in conjunction with publication of the Restoration Plan which presents the restoration alternatives. However, subsequent NEPA compliance may be required prior to implementation of selected restoration projects upon further development of project-level detail. Additionally, other federal, state or local environmental laws, regulations or permitting requirements may be triggered in conjunction with specific project implementation. This RP/EA and FONSI may be relied upon by the State Trustee agencies or other state or local agencies towards compliance with the California Environmental Quality Act (CEQA) as required for discretionary projects that are authorized, funded or carried out by California State or local agencies.

1.3 Natural Resources Trustees and Authorities

Both federal and 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 to natural resources and associated services resulting from oil spills.

The Service, VAFB, the CDFG, and the CSLC are the Trustees for the natural resources injured by the Spill. The Service and VAFB are designated Trustees for natural resources pursuant to subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 C.F.R. Part 300), and Executive Order 12580 (52 Fed. Reg. 2923 (January 23, 1987)), as amended by Executive Order 12777 (56 Fed. Reg. 54757 (October 22, 1991)). The CDFG has been designated as a state trustee for natural resources pursuant to Section 1006 (b)(3) of the Oil Pollution Act and subpart G of the

NCP. In addition, the CDFG has state natural resource trustee authority pursuant to the California Fish and Game Code §§ 711.7 and 1802, and the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (California Government Code § 8670.1 et seq.). The CSLC has state natural resource trustee authority pursuant to the California Public Resources Code § 6201 et seq. As designated Trustees, the agencies are authorized to act on behalf of the public under state and 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 C.F.R. § 990.14(a), the Trustees designated the CDFG and the Service as the Co-Lead Administrative Trustees. In addition, the Santa Barbara County Planning and Development Department assisted the Trustees during the assessment and evaluation of restoration alternatives.

The Trustees have jointly developed this RP/EA to address restoration of the injured resources. The Trustees released a Public Scoping Document on October 20, 2004; held a Public Scoping Meeting on November 4, 2004; released a draft RP/EA on March 13, 2006; and held another Public Meeting on April 19, 2006. The Trustees have considered all public comments received in preparing this final RP/EA. In all, the Trustees evaluated 18 proposed projects, 13 of which were proposed by the public. Refer to Administrative Record for public comments and project proposals submitted during scoping phase and Appendix A, public comments on the draft RP/EA and agency responses.

1.4 Settlement of Natural Resource Claims

The United States, (represented by the Service, VAFB, the United States Coast Guard, the National Pollution Funds Center, and the United States Environmental Protection Agency) and the state of California (represented by the CDFG, the CSLC, and the California Coastal Commission) reached a \$3 million dollar settlement with the Responsible Parties for civil claims, including natural resource damages arising from the Spill. The terms of the settlement were memorialized in a Consent Decree, a written agreement, which was reviewed by a U.S. District Court and subject to public comment prior to being approved by the Court on July 25, 2002. The Consent Decree required the Responsible Parties to pay a total of \$2,397,000 for natural resource damages. The money for natural resource damages, together with interest earned on the entire \$3 million while held in escrow, was deposited into the Natural Resources Damage Assessment and Restoration Fund ("NRDAR Fund"), created pursuant to federal law (43 U.S.C. § 1474b). The Trustees have the authority and responsibility to use the funds in the Torch NRDAR account to restore natural resources in accordance with applicable laws and the consent decree.

The Trustees entered into a Memorandum of Understanding (MOU) which created a Trustee Council comprised of agency representatives to ensure the coordination and

cooperation among the Trustees during the restoration planning and implementation process. The Trustees will allocate natural resource damage funds for restoration projects, roughly in proportion to the injured resources being restored. The MOU dictates the division of the \$2,397,000 in damages for restoration projects as follows:

- Approximately \$396,000 will be used for sandy shoreline and dune habitat projects which will also benefit western snowy plovers;
- Approximately \$104,650 will be allocated for a project to benefit mussel beds and other rocky intertidal resources;
- Approximately \$136,500 will be used for abalone projects;
- Approximately \$1,193,833 will be used for projects benefiting seabirds, e.g., murre, cormorants, and pelicans;
- Approximately \$65,520 will be used for human recreational beach use projects;
- An additional \$100,497 may be allocated to some or all of the categories above; and
- Up to \$400,000 may be used for Trustees' costs of complying with requirements of the law to conduct restoration planning and implementation.

In addition to the \$2,397,000 for Natural Resource Damage Assessment claims, other components of the settlement included:

- \$60,000 to the California Department of Fish and Game for civil penalties;
- \$119,000 to the California Coastal Commission for California Coastal Act violations;
- \$60,000 to the State Lands Commission for trespass damages;
- \$25,000 to the Service for Endangered Species Act violations;
- \$100,000 to the United States Department of Justice for civil penalties for Outer Continental Shelf Lands Act violations; and
- \$179,300 to the United States Department of Justice for civil penalties for Clean Water Act violations.

The Trustees have committed to the expenditure of the natural resource damages for the design, implementation, permitting (as necessary), monitoring, and oversight of restoration projects. The Trustees have decided to use the \$100,497 (that per the MOU can be allocated to any project category) as a contingency for any of the selected restoration projects. If the contingency is not needed for any project, and/or if any funds remain after projects have been implemented then the remaining funds will be allocated to some or all of the project categories described above.

1.5 Public Participation

The Trustees conducted a public scoping process early on in the restoration planning development process to solicit public input in identifying potential concerns and

additional restoration alternatives. The Trustees prepared the October 20, 2004 "Torch/Platform Irene Oil Spill Scoping Document for Restoration Planning," which summarized restoration alternatives for the natural resources impacted by the Spill. The public was given an opportunity to review and comment on preliminary restoration alternatives and submit project ideas of their own that they believed were more cost-effective, and that better met the objective of restoring resources injured by the Spill. In addition to releasing the Scoping Document for public review and comment, a public workshop was held November 4, 2004. Thirteen project concepts were submitted by the public during the scoping phase. These projects were evaluated and are included in this document. Additional comments received from the public during the scoping phase have also been considered in preparing this RP/EA. For details of comments and project concepts received during the scoping phase refer to the Administrative Record, specifically Appendix A in the draft RP/EA.

Based on public comments received during the public scoping phase, the Trustees prepared the Draft RP/EA dated March 13, 2006, and held another public workshop on April 19, 2006. Public notice was placed in local newspapers and on Trustee Agency web pages, and sent to those on the mailing list in Appendix C. The Trustees incorporated public comments in this final RP/EA. For details of comments and responses to comments received on the draft RP/EA, see Appendix A.

Further information and other activities of the Trustee Council will be distributed to those on our mailing list, and will be announced on our website at www.dfg.ca.gov/ospr/organization/scientific/nrda/NRDAirene.htm. To be placed on the mailing list, please contact Melissa Boggs-Blalack at the address above.

1.6 Administrative Record

The Trustees have opened an Administrative Record (Record) in compliance with 15 C.F.R. § 990.45. The Record includes documents relied upon by the Trustees during the injury assessment and restoration planning process performed in connection with the Spill. The Record is on file at the Service office located at 2493 Portola Road, Suite B, Ventura, CA 93003. Arrangements may be made to review the Record by calling (805) 644-1766. Portions of the Record, including this RP/EA, may also be viewed at the following website: http://www.dfg.ca.gov/ospr/spill/nrda/nrda_irene.html.

2.0 AFFECTED ENVIRONMENT

A general understanding and awareness of the affected environment is important in evaluating the nature and extent of injuries resulting from the Spill relative to baseline conditions. Baseline, defined at 15 C.F.R. § 990.30 as "the condition of the natural resources and services that would have existed had the incident not occurred," is used as a reference point in evaluating the restoration alternatives being considered. This

section provides a brief overview of the physical and biological environment, threatened and endangered species, archeological and cultural resources, and land use including recreational services.

2.1 Physical and Biological Environment

As required by NEPA, this section presents a brief description of the physical and biological environments affected by the Torch Spill, and potentially affected by the selected restoration projects.

Physical Environment

The Spill site area is located along the south-central coast of California, approximately 275 miles south of San Francisco, 140 miles northwest of Los Angeles, 60 miles northwest of Santa Barbara, and 6 miles west of the City of Lompoc. The Spill occurred from a rupture in a 20-inch pipeline running from the offshore oil platform (Platform Irene), on the Outer Continental Shelf, to an onshore processing facility north of the City of Lompoc in Santa Barbara County.

At least 163 barrels (or 6,846 gallons) of petroleum products were released into the Pacific Ocean from the underwater pipeline. The Spill moved through approximately 120 feet of water column to the ocean surface. Subsequent movement of crude oil resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, impacting sandy beaches and rocky intertidal areas from Minuteman Beach to Boathouse Beach along the VAFB coastline (see Figure 1). Crude oil stranded on shorelines to the northeast, east, and southeast of the pipeline break. Estuaries at San Antonio Creek, Honda Creek, and the Santa Ynez River were also impacted.

The sandy beach and dune habitat ecosystems in San Luis Obispo and Santa Barbara Counties are considered to be among the richest in California in terms of species abundance and overall biomass (Dugan, *et al.* 1998). These beaches are typically broad sandy beaches, with dune formations behind them. Rocky intertidal shorelines are regionally limited, and occur primarily along the northern coastal areas of the Spill zone. Rocky intertidal habitats are highly productive and diverse environments within the lowest and highest tidal levels. The Santa Ynez River supports extensive wetland resources and endangered species habitat, and its estuary consists of salt marsh, mud flats, shallow tidal channels, and open water (County of Santa Barbara, 2000).

Biological Environment

Offshore, the region as a whole includes benthic communities (organisms that live on or in the sediment), fisheries, and seabird populations. In addition, at least 1 species of fissiped (the threatened southern sea otter, *Enhydra lutris*), 5 species of pinniped

(generally seals and sea lions) and 22 species of cetacean (generally whales, dolphins, and porpoises) migrate through or use the Point Conception region (County of Santa Barbara, 2000). At least one marine mammal (a dead California sea lion) was found oiled during the spill. Benthic communities are dominated by species of *Ophiuridea* (brittle stars) while epifauna (organisms that live on the surface of a substrate) are dominated by the starfish (*Petalaster foliolata*) and the sea pen (*Stylatula elongata*) at water depths in excess of 150 feet. Predominant groundfish species in the area, include the specklefin midshipman (*Porichthys notatus*) and the Pacific sanddab (*Citharichthys sordidus*). Historic data from the Department of Fish and Game indicate that the Platform Irene area (DFG Fish Block 644) is not a significant commercial fishing area.

Sandy beach and dune habitat within the spill area is characterized as ecologically productive with little degradation prior to the spill, with a healthy invertebrate population and associated vertebrate population. Common sand crabs (*Emerita analoga*), spiny sand crabs (*Blepharipoda occidentalis*), and Pismo clams (*Tivela stultorum*) were found in the intertidal zone, while flies, beach hoppers (*Megalorchestia sp.*), and isopods (*Alloniscus sp.*) frequented the wrack, i.e., seaweed accumulation line (Ricketts et al., 1985; Dugan, pers. comm.). This invertebrate population provides a foraging base for many species of birds (primarily gulls and shorebirds). All sandy beaches at VAFB have been determined by the U.S. Fish and Wildlife Service and the Western Snowy Plover Recovery Team to be essential to the recovery of the threatened coastal population of the western snowy plover. Additionally, endangered California least terns nest in dunes at Purisima Point.

Rocky intertidal habitats support resident black abalone (*Haliotis Cracherodii*), mussels and a wide variety of other organisms. Rocky intertidal habitats on VAFB are particularly rich due to their remoteness and geographic location. Shorebirds, including breeding black oystercatchers (*Haematopus palliatus*), forage in this habitat.

The Santa Ynez River Mouth and VAFB shoreline is mentioned repeatedly in *The Birds of Santa Barbara County, California* (Lehman, 1994) as one of the best places to observe birds, especially listed species such as western snowy plovers (*Charadrius alexandrinus*) and California least terns (*Sterna antillarum*). Estuary habitat supports large concentrations of marine birds that use the lagoons for roosting and foraging. Several marsh dwelling birds depend on its large stands of tule for nesting. The endangered peregrine falcon, California brown pelicans, and California least terns are among the regular visitors to the Santa Ynez estuary. The Belding's savanna sparrow (state-endangered) are permanent residents of the coastal salt marsh at this location. These sparrows resemble the subspecies *alaudinus*, not the state-endangered subspecies *beldingi*, in body type and plumage. The federally endangered tidewater goby also resides in the river estuary, and the endangered southern steelhead trout occurs in the estuary during migration.

2.2 Threatened and Endangered Species

The federal Endangered Species Act of 1973 (16 U.S.C. § 1531, *et seq.*) (ESA) and the California Endangered Species Act of 1970 (California 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. At least five state and/or federally listed bird species (western snowy plover, California least tern, California brown pelican, Belding's savanna sparrow, and American peregrine falcon) and one federally listed mammal species (southern sea otter) are found in the area affected by the Torch Spill.

Many rare plants such as surf thistle, Blochman's leafy daisy, beach layia, and salt marsh bird's beak are also found in the dune habitat in the Spill area. These plants are in danger of extinction because their habitats have been significantly reduced by development, military activities, alteration of natural fire cycles, and the invasion of alien plant species.

2.3 Archeological and Cultural Resources

More than 2,200 archaeological and historic sites have been identified on VAFB, most of which contain cultural artifacts of the Chumash Indians, who once occupied the land (Final Gaviota Coast Feasibility Study and Environmental Assessment, 2004). The area as a whole represents a cultural and scenic landscape and way of life that is becoming increasingly rare. Agricultural and ranching land use patterns dating from the Mission period (1760 - 1820) have not changed as much as other areas on the central and southern California coast. This landscape character can be linked to land use patterns established by the La Purisima Mission, Mission Santa Ynez, and the Santa Barbara Mission.

Historical resources include shipwrecks, wharves/landings, and marine-based land settlements. The receding coastline has submerged pre-historic and historic sites. Historic contact dates back to 1542 and the Spanish exploration by Juan Rodriguez Cabrillo. While many of the historic maritime sites may not be nationally significant, based on their individual attributes, the large concentration of resources connected to historical events along the coast makes it an important cultural area.

The area contains elements of the historic ranching land use pattern established by the Spanish and Mexicans during the Mission and Rancho Periods (1820 - 1845) that continued into the Americanization Period (1880 - 1915). It is considered one of the most outstanding – and last remaining - examples of an historic California coastal ranching landscape. The pastoral landscape of the area has remained largely intact due

to stewardship of ranchers, farmers, and public land managers such as the U.S. Forest Service and VAFB. Many historic adobe buildings and ranch structures remain along the coast, some of which have retained their physical integrity. In addition, there are still remnants of the orchards planted during the Mission period.

2.4 Land Uses

The central and southern California coast is well known for its scenic rocky coastline, open sandy beaches, and picturesque coves. Because much of the northern Santa Barbara County coast is undeveloped, many of these beaches have a remote, wild feeling to them. At the same time, there are several accessible public beaches at Surf Beach, Ocean Beach, and Jalama Beach Park which host a wide range of recreational activities including general beach use, hiking, fishing, surfing, camping, wildlife viewing, and other specialized uses.

Most of VAFB is not accessible to the public because of its military operations. However, under a Memorandum of Understanding (MOU) between the Department of Defense and Santa Barbara County, public access is available to five miles of Surf, Ocean, and Wall Beaches via access points at Surf Station and Ocean Beach County Park. Public access is reduced to a one-half mile area adjacent to Surf Station during the snowy plover nesting season (March 1 through September 30). Under the MOU, approximately one mile of the southernmost section of the VAFB coastline is also available for public access through Jalama Beach County Park.

VAFB operates as a missile test base and aerospace center, supporting west coast launch activities for the Air Force, Department of Defense, National Aeronautics and Space Administration, and commercial contractors. Vandenberg AFB is headquarters for the 30th Space Wing, the Air Force's Space Command unit that operates Vandenberg AFB and the Western Range. The Western Range begins at the coastal boundaries of Vandenberg and extends westward from the California coast to the Western Pacific including sites in Hawaii.

The Air Force does not currently have active missions within the area affected by the Spill except for periodic security clearance operations. However, all beach areas on VAFB are subject to periodic closures during launch operations due to safety and security requirements.

3.0 INJURY ASSESSMENT

The purpose of an injury assessment under OPA involves determining the nature, extent, and severity of injuries to natural resources from a spill. This injury assessment data provides the technical basis for evaluating and scaling restoration actions. Regulations implementing the OPA define injury as "an observable or measurable

adverse change in a natural resource or impairment of a natural resource service." 15 C.F.R. § 990.30. Diminution in the quantity or quality of the recreational use of natural resources also constitutes an injury as defined by the OPA regulations.

For each injured resource category, the Trustees selected appropriate assessment procedures based on (1) range of procedures available under section 990.27(b) of the OPA regulations; (2) time and cost necessary to implement the procedures; (3) potential nature, degree, and spatial and temporal extent of the injury; (4) potential restoration actions for the injury; (5) relevance and adequacy of information generated by the procedures to meet information requirements of planning appropriate restoration actions; and (6) input from consultants with damage assessment experience, scientific experts, and/or technical consultants.

The injury assessment focused on determining both the magnitude of the injury, such as the number of animals killed or area of habitat lost and the time to full recovery. This produces an estimate of direct, plus interim (from the time of injury until full recovery), loss of resources resulting from the oil. Injury estimates in future years were discounted at three percent per year (NOAA 1999).

Detailed descriptions and analyses of the injury assessments relied upon in this RP/EA are contained in the following separate injury reports located in the Administrative Record:

- 1) Final Report: Bird Injury Assessment for the Torch/Platform Irene Pipeline Oil Spill, September 1997. R.G. Ford Consulting Company, July 1998;
- 2) Preliminary Analysis of Injuries Abalone and Rocky Intertidal Habitat, Torch/Platform Irene Pipeline Oil Spill, September 20, 2005;
- 3) Public Beach Use Data Collection, November 18, 1997 and Trustees Estimate of Human Use Losses Resulting from Torch's Platform Irene Pipeline Spill;
- 4) Preliminary Injury Determination for Marine Mammals Torch/Platform Irene Pipeline Oil Spill, September 1997, Santa Barbara County, CA, October 9, 1998; and,
- 5) Monitoring of Rocky Intertidal Resources along the Central and Southern California Mainland, Part II Section 4.0: Torch Oil Spill, Peter T. Raimondi, Ph.D., October 30, 1998.

The primary impacts from the Spill are 1) injuries to seabirds; 2) injuries to sand and gravel beach habitats; 3) injuries to rocky intertidal shoreline habitats; and 4) lost and diminished use of beaches for human recreation. Summaries of each injury category are described below.

3.1 Seabird Resources

Exposure to oil can injure marine birds in three ways: 1) physical effects of oil on plumage, 2) toxic effects, and 3) impacts to bird habitat. A large proportion of the acute mortality caused by spills is due to physical oiling of birds which results in hypothermia and reduced ability to feed. Acute (short-term) mortality, as well as sublethal effects, can also result from toxicity after birds ingest or inhale oil. Chronic (long-term) effects of oiling likely include reduced reproduction and survivability.

The Trustees estimated that between 635 and 815 seabirds and shorebirds died or were otherwise adversely impacted by the Spill. The Spill impacted two listed species: western snowy plovers, which are listed as a threatened species; and California brown pelicans, which are listed as an endangered species. Dead oiled birds were recovered as far south as Honda Cove, just north of Point Pedernales, and as far north as Morro Bay. Live oiled birds were observed as far southeast as Santa Barbara Harbor and as far north as Morro Bay. It is reasonable to assume that some live oiled birds, such as endangered brown pelicans, flew well beyond the area immediately affected by the Spill. Dead birds may also have drifted passively beyond the area since spill-affected seabird carcasses frequently persist longer than detectable quantities of oil (Ford *et al.* 1996).

Shorebird species, such as western snowy plovers, were impacted after the oil reached shore but many of the seabirds were oiled at sea. The majority of species impacted by the Spill do not breed in the area and originated from other geographic areas, and were in the spill zone during migration. The western snowy plovers were impacted when their habitat became oiled and then disturbed during cleanup. The cleanup of oiled beaches required the use of heavy equipment which resulted in extensive physical disturbance of the sandy beach habitat, as well as the removal of marine plants and other matter constituting the "wrack line," an important source of food and cover for numerous shore species. Several seabird species whose populations are declining or flat in southern and central California were impacted by the spill, including Brandt's cormorants and common murre. Spill impacts to these species exacerbate seabird conservation problems in California. Other impacted bird species included western grebe, rhinoceros auklet, pigeon guillemot, elegant tern, long-billed curlew, common loon, shearwaters, gulls, sanderlings, northern phalarope, and American coot.

During the April 19, 2006, public meeting, a question was raised about how many birds die naturally every year and how many are impacted by natural seeps such as the most notable seep in Santa Barbara County, Coal Oil Point, which is approximately 70 miles south of the Spill area. A Santa Barbara County Energy Division paper regarding Natural Oil Seeps and Oil Spills dated March 8, 2002, states:

[L]ittle is known about the effects of natural seeps on bird populations. The Santa Barbara Wildlife Care Network recovers an average of about fifty oiled birds from the beaches of Santa Barbara and Ventura Counties each year. Some are treated and released, but the majority die. No attempt is made to determine the cause of death. Oiling may be the cause in some cases, but is probably only a contributing or incidental factor in others.

Marine biologists have been studying the effects of natural seeps on biological communities for a number of years. However, it remains unclear whether animals living in oil seep areas adapt to the oil. Regarding birds, one possible means of adaptation is through behavioral response. A study of birds off Coal Oil Point funded by the Minerals Management Service (MMS) and summarized in the March 8, 2002, paper found that adult gulls and pelicans were less likely to be oiled than younger birds. Shearwaters (another type of sea bird) on the other hand, completely avoided the seep areas. This "avoidance" behavior may be due to experience; that is, the birds "learned" to avoid the seep areas. One hypothesis for the shearwater's seep avoidance is that their keen sense of smell contributed to their seep avoidance.

The Trustees do not believe that any of the oiled birds collected following the Spill were oiled by natural seep oil. This belief was based in part on survey results, the oil pathway and proximity of the birds to Platform Irene. The Responsible Parties raised the issue of baseline conditions early on and pointed to natural seeps in the area as a major cause of the bird losses. The Trustees took this into consideration when they compiled data to determine the pathway of the oil. The Trustees checked various local sources and determined that low numbers of birds are collected annually around seeps. The Trustees found no records supporting large die offs of birds associated with or around seeps unless there has been some other catastrophic event, such as an oil spill in the area. The pathway data included analysis of oil samples, video footage, and visual observations by various response personnel and contractors. Taken together, the data demonstrated that oil in the impacted area was from Platform Irene. In addition, analysis of sand crab tissues collected from Spill impacted beaches before and after the Spill revealed that hydrocarbon levels in the crabs were 7 to 11 times higher after the spill.

During the Spill, shoreline and aerial surveys were conducted to locate and collect oiled birds and estimate the number and distribution of seabirds at risk. The Trustees conducted four types of surveys: 1) aerial surveys to determine wildlife at risk at sea; 2) beach surveys for oiled wildlife to collect injured or dead birds, and to determine resources at risk; 3) boat surveys to determine the number of oiled pelicans in the area; and 4) monitoring of snowy plover habitat at VAFB. 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 (Final Report: Preliminary Bird Injury Assessment for the Torch/Platform Irene Oil Spill, Ford, R.G. 1998. September 1997).

It is important to realize that following an oil spill, only a fraction 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, and a few crawl into secluded spots on land. In addition, the likelihood of retrieving a carcass decreases with the decreasing body size (Carter *et al.* 2000). For example, deposition of murrelet carcasses on California beaches is unlikely because of low onshore transport, currents, at-sea carcass sinking, and scavenging (Ford *et al.* 1996). Finally, 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 (Sharpe 1996, Anderson *et al.* 1996).

The Trustees used a Beached Bird Model to estimate the total number of birds injured from the Spill. The Beached Bird Model utilized data from the various beach searches that were conducted, including information regarding beaches searched, methods, and number of birds collected, if any. The model also incorporated estimates regarding the numbers of birds beached along inaccessible segments of the coast and scavenging rates (removal of bird carcasses by predators or scavengers). The Trustees conducted a scavenging study to evaluate the scavenging and removal rate of beachcast carcasses along beaches within the spill zone.

As noted above, between 635 and 815 seabirds and shorebirds are estimated to have been impacted by the Spill. This estimate includes the 90 dead birds that were recovered, 32 birds that died in the rehabilitation center, and 18 birds that were rehabilitated and released. The total of live and dead beached birds collected during the Spill are listed in Table 1 by species.

Table 1 Summary of Spill Related Stranded Birds from Torch/Platform Irene Oil Spill

Species	Collected Dead	Collected Live-died	Collected Live-Released	<i>Total</i>
Red-throated Loon	1	1	0	2
Pacific Loon	1	0	0	1
Common Loon	0	1	0	1
Eared Grebe	0	1	2	3
Western Grebe	6	5	0	11
Brandt's Cormorant	34	1	1	36
Common Murre	28	21	0	49
Rhinoceros Auklet	1	0	0	1
Pigeon Guillemot	1	0	0	1
American Coot	1	0	0	1
Sooty Shearwater	2	0	0	2
Black-vented Shearwater	1	0	0	1
California Brown Pelican	0	0	2	2
Western Gull	3	0	7	10
Heermann's Gull	2	0	2	4
California Gull	1	0	2	3
Ring-billed Gull	1	0	0	1
Elegant Tern	0	1	0	1
Northern Phalarope	1	1	0	2
Sanderling	1	0	2	3
Unknown	5	0	0	5
<i>Total</i>	<i>90</i>	<i>32</i>	<i>18</i>	<i>140</i>

3.2 Sand and Gravel Beach Habitats

The oil came ashore on sandy beaches and on rocky intertidal areas from Minuteman Beach to Boathouse Beach at VAFB impacting at least 17 miles of Santa Barbara County coast shoreline. The estuaries at San Antonio Creek, Honda Creek, and the Santa Ynez River were also impacted.

The sandy beach habitat within the spill area, due to limited public use over broad stretches of coastline, could be characterized as ecologically productive with little degradation prior to the spill, supporting healthy invertebrate (and associated vertebrate) species populations. After the Spill, the invertebrates on the beach, particularly the spiny sand crabs and the Pismo clams, likely suffered significant

mortality due to smothering under blankets of oil and sand compression caused by heavy equipment from cleanup operations. In addition, due to removal of wrack during the course of cleanup, habitat and food sources for invertebrates associated with the wrack line disappeared. A decrease in shorebird numbers, including the threatened western snowy plovers, appeared to be associated with both the injuries to the invertebrate populations and disturbances to its habitat.

Oiling of the sandy beaches consisted of variably sized ribbons of thick oil, as well as very large tar patties, up to three feet in diameter. The regions between the high and low tides were identified as being most heavily impacted. The beaches in this area are typically broad with dune formations behind them. Some stretches of beach had greater than 50% of their surface area visibly covered with oil. The tides moved the oil throughout the intertidal zone and along the coast. Cleanup actions removed some of the oil within the first few days, although the continuing presence of oil at some locations required the cleanup work to continue for almost six weeks.

3.3 Rocky Intertidal Shoreline Habitats

Rocky shores along the VAFB shoreline typically occur as horizontal or gently sloping platforms, and as rocky cliffs. There are extensive tracts of relatively undisturbed, highly productive, and diverse rocky intertidal habitat environments along the VAFB coast. These habitats are characterized by a rich diversity of invertebrate species, including black abalone (*Haliotis cracherodii*), seastars, turf alga (*Endocladia*), rockweeds (*Pelentia*), barnacles, and mussels.

Rocky intertidal habitat was exposed to oil in many places along the shoreline. While levels of injury greater than 10 percent were not documented, it is expected that the oil exposure caused unquantifiable low levels of injury to a variety of rocky intertidal species, including crustacea, mollusks, arthropods, and algae. Black abalone and mussel beds were observed to be coated with oil along or near the shores of VAFB, and at other nearby rocky shorelines. While abalone are monitored by the MMS and Santa Barbara County at three sites within the Spill exposure zone, abalone losses from the Spill could not be evaluated in this separate analysis, as the data was confounded by the declines associated with withering foot syndrome. Since 1992, withering foot syndrome, a disease associated with warmer waters, has caused a marked decline in black abalone densities in the VAFB area. The additional stress associated with the Spill is expected to have exacerbated the decline and reduced chances for recovery.

3.4 Lost and Diminished Use of Beaches for Human Recreation

The Spill interrupted recreational services to individuals participating in beach-related activities along the Santa Barbara County coast. Specifically, the following beaches were impacted: Minuteman Beach, Purisima Point, Seal Beach, Wall Beach, Ocean

Park, and Surf Station. Physical oiling of the beaches and subsequent cleanup activities impacted beach-related recreational services, including walking, jogging, swimming, surfing, wildlife and tidepool viewing, fishing, and picnicking. Ocean Beach was closed to the public from September 29 through October 4. Additionally, many people avoided other impacted beaches due to the presence of tarballs and/or oil spill cleanup activities.

The Trustees conducted surveys at Ocean Park and Surf Station in the weeks after the Spill, when the beach had re-opened. The results suggest that the Spill impacted recreational activities in two ways: 1) it precluded recreational activities altogether, resulting in lost use; and 2) it caused a loss of value to the activity, resulting in diminished use value. Lost use occurred both when the beach was closed, as well as after the beach re-opened, when people still avoided the beach. Diminished use refers to a decrease in the value (or enjoyment) of the activity for those users that went ahead with their activity. Specifically, the Trustees concluded the following:

- September 29 - Oct 4: 100% of beach use was lost.
- October 5 – October 11: 50% of beach use was lost; the other 50% suffered diminished value.
- October 12 – October 30: no beach use was lost, but 100% suffered diminished value.

The basic approach used to quantify damages associated with lost recreational use is to estimate the number of lost user days of a specific activity and multiply that by the value per user day of that activity. The equation below describes this:

$$\# \text{ of lost user days} \times \text{value of a lost user day} = \text{total value of lost user days}$$

Because these activities involve using publicly available resources that exact little cost on the user, there is no observable market price. One cannot see how much the user really values (*i.e.*, is really willing to pay for) the recreational activity. Thus, one cannot determine its true value to the user. Potential marginal costs (e.g., parking) and fixed costs associated with equipment (e.g., surfboards, wetsuits etc.) provide a lower bound on the value of the recreational activity. Because the individual made the decision to pursue the activity, the activity must be worth *at least* these costs. The pertinent inquiry for the economist is not what does it cost to do this recreational activity, but what is the value of this activity to the users and what would they be willing to pay to do it.

A vast body of economic literature has emerged attempting to consider these factors and estimate the value of a recreational activity. For purposes of minimizing assessment costs, the Trustees relied on existing studies.

For quantification purposes, recreation activities were divided into two categories: general beach use and specialized beach use (e.g., surfing, surf fishing). For general beach use, the Trustees relied on previous value estimates for beach use in Orange County, California (used in the *American Trader* oil spill claim for lost recreational use damages), adjusted for inflation to October 1997 dollars. This value is \$18.55/user day.

The Trustees were not able to find any economic analyses specifically regarding the value of surfing or surf fishing. These specialized activities were estimated to be equal to 125% of general beach use (*i.e.*, \$23.19/user day). Relative to estimates for other outdoor activities, this is a conservative figure. For diminished use, the Trustees assumed that the value of the trip was diminished by 20% (*i.e.*, \$3.71/general beach use day and \$4.64/specialized beach use day).

The Trustees concluded that over 2,000 user days were lost as a result of the spill, and that over 7,000 user days suffered diminished value. The total loss in value to the public was estimated to be at least \$65,000.

4.0 RESTORATION PLANNING

4.1 Restoration Strategy

The goal of OPA is to make the environment and the public whole for injuries to natural resources and loss of services resulting from an oil spill. This goal is achieved through the return of the injured natural resources and services to baseline condition, and compensation for interim losses of such natural resources and services from the date of the incident until recovery. 15 C.F.R. § 990.10.

Restoration actions under the OPA regulations (15 C.F.R. Part 990) are either primary or compensatory. Generally, restoration is any action (or alternative), or combination of actions (or alternatives), to restore, rehabilitate, replace, or acquire the equivalent of injured natural resources. Primary restoration is any action, including natural recovery, which returns injured natural resources to baseline. Trustees must consider a natural recovery alternative in which no human intervention would be taken to directly restore injured natural resources and services to baseline. Trustees may select natural recovery under three conditions: 1) if feasible, 2) if cost-effective primary restoration is not available, and 3) if injured resources will recover quickly to baseline without human intervention. The Trustees must also consider an alternative comprised of active primary restoration actions to directly restore the natural resources and services to baseline on an accelerated timeframe. When identifying active primary restoration actions, Trustees may consider actions that prevent interference with restoration actions as well as more intensive actions expected to return injured natural resources and services to baseline faster or with greater certainty than with natural recovery.

Compensatory restoration is an action(s) taken to compensate for the interim loss of natural resources and/or services pending full recovery to baseline conditions. To the extent practicable, when evaluating compensatory restoration actions, the Trustees must first consider compensatory restoration actions that provide services of the same type and quality, and of comparable value, as those injured. If compensatory actions of the same type and quality and comparable value cannot provide a reasonable range of alternatives, the Trustees then consider other compensatory restoration actions that will provide services of at least comparable type and quality as those lost.

In considering restoration for injuries resulting from the Torch Spill, the Trustees first evaluated possible primary restoration for each injury. Based on that analysis, the Trustees determined that most injured natural resources would best recover to baseline conditions over time through natural recovery. Therefore, with the exception of the Mussel Bed Restoration Project which should enhance natural recovery, the Trustees' Most Preferred Restoration Alternatives are compensatory restoration for the natural resources and services injured from the Spill. For example, the Seabird Colony Enhancement Project will reduce human disturbance to seabirds and therefore, over time will compensate for impacts to seabirds from the Spill. In addition, given that natural recovery for many of the injured species may take many years, the selected compensatory projects will contribute to primary restoration by aiding natural recovery for some species.

The Trustees considered 18 different restoration alternatives capable of compensating injuries from the Torch Spill. The Trustees received restoration concepts for lost or diminished human use from staff at the Santa Barbara County Planning and Development Department. Wildlife and habitat alternatives were developed by the Trustees and presented in the scoping document along with the recreation alternatives. Other restoration alternatives considered were provided to the Trustees by the public during or following the public scoping meeting, and/or in response to the draft RP/EA.

4.2 Criteria Used to Evaluate Restoration Alternatives

OPA and other applicable laws require the Trustees to use monies in the Torch Natural Resource Damage (NRD) Account for restoring, replacing, rehabilitating, and/or acquiring the equivalent of natural resources injured and services lost as a result of the Spill. The injuries and lost services from the Spill include injuries to seabirds, sandy beach habitats, rocky intertidal shoreline habitats, and lost and diminished use of beaches for human recreation. The Trustees considered a reasonable range of restoration alternatives before selecting their Most Preferred Restoration Alternatives. Each restoration alternative addressed one or more specific injuries associated with the Torch Spill.

The Trustees developed three categories of selection criteria: "Threshold," "Initial Screening," and "Additional Screening" 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 under the Threshold Criteria in order to receive further consideration under the Initial Screening and Additional Criteria. The Trustee Council used the evaluation criteria listed below to consider and prioritize all restoration alternatives, including alternatives that were proposed by the public. Within each criteria category (*i.e.*, Threshold, Initial Screening, and Additional Screening), the criteria are not prioritized.

4.2.1 Threshold Criteria

A project had to meet the following threshold criteria in order to be further considered and evaluated using the Screening Criteria below. If any project did not meet the Threshold Criteria, it was not given further consideration.

- *Consistency with Trustees' Restoration Goals* - Projects must meet the Trustees' intent to restore, rehabilitate, replace, enhance, or acquire the equivalent of the injured resources and resource services. In addition, projects must comply with applicable settlement documents.
- *Technical Feasibility* - Based on past experience or studies, the restoration projects must be technically and procedurally sound.

4.2.2 Initial Screening Criteria

The following initial screening criteria were used to determine preferred and non-preferred projects.

- *Relationship to Injured Resources and/or Services (nexus)* - Projects that restore rehabilitate, replace, enhance, or acquire the equivalent of the same or similar resources or services injured by the spill are preferred to projects that benefit other comparable resources or services. On-site and in-kind restoration projects are preferred but not required. Consider the types of resources or services injured by the spill, the location, and the connection or nexus of project benefits to those injured resources.
- *Avoidance of Adverse Impacts* - The project should avoid or minimize adverse impacts to the environment and the associated natural resources. Adverse impacts may be caused by collateral injuries when implementing, or as a result of implementing, the project.
- *Likelihood of Success* - Consider the potential for success and the level of expected return of resources and resource services. Consider also the ability to evaluate the success of the project, the ability to correct problems that arise

during the course of the project, and the capability of individuals or organizations expected to implement the project.

- Multiple Resource [and Service] Benefits - Consider the extent to which the project benefits more than one natural resource or resource service. Measure in terms of the quantity and associated quality of the benefits to natural resources or services expected to result from the project.
- Time to Provide Benefits - Consider the time it takes for benefits to be provided to the target ecosystem or public to minimize interim resource loss (sooner = better).
- Duration of Benefits - Consider the expected duration of benefits from the project. Long-term benefits are the objective.

4.2.3 Additional Screening Criteria

The following additional screening criteria were used to further evaluate and prioritize projects for funding and implementation. These additional criteria were not considered to be of lesser importance than the initial screening criteria. However, in practice it was difficult to apply these criteria to project concepts. These criteria are generally more appropriately applied after detailed project plans and scopes of work are developed. If sufficient information was available, these criteria were also used during the initial screening process.

- Compliance with Applicable Federal, State, and Local Laws and Policies - The project must comply with appropriate laws and policies.
- Public Health and Safety - The project must not pose a threat to public health and safety.
- Protection of Project [Maintenance and Oversight] - Consider the opportunities to protect the implemented project and resulting benefits over time through conservation easements, land acquisition, or other types of resource dedication. Long-term protection is preferable.
- Opportunities for Collaboration - Consider the possibility of matching funds, in-kind services, volunteer assistance, and coordination with other ongoing or proposed projects. External funding and support services that reduce costs or extend benefits are preferable. Funds, however, shall not be used to offset the costs of ongoing mitigation projects required pursuant to state or federal law.
- Cost-Effectiveness - Consider the relationship of expected project costs to expected resource and service benefits. Seek the least costly approach to deliver an equivalent or greater amount and type of benefits.

- *Total Cost and Accuracy of Estimate* - The total cost estimate should include costs to design, implement, monitor, and manage the project. Its validity is determined by the completeness, accuracy, and reliability of methods used to estimate costs, as well as the credibility of the person or entity submitting the estimate.
- *Comprehensive Range of Projects* - Consider the extent to which the project contributes to the more comprehensive restoration package. Evaluate the project for the degree to which it benefits any otherwise uncompensated spill injuries.

4.3 Environmental Assessment of the Most Preferred Restoration Alternatives

The OPA regulations require federal Trustees to integrate the NEPA process with the development of Restoration Plans. 15 C.F.R. § 990.23. To comply with the requirements of NEPA, the Trustees analyzed the effects of each of the Most Preferred Restoration Alternatives on the quality of the human environment. NEPA's implementing regulations direct federal agencies to evaluate the potential significance of proposed federal actions by considering both the context and the intensity of the action. 40 C.F.R. § 1508.27.

The appropriate context and area of potential significance for the restoration actions considered in this RP/EA is regional, as opposed to national or international. In the event any of the selected restoration actions require additional refinements or adjustments to reflect site-specific conditions, further project-specific NEPA compliance may be needed once detailed implementation plans are developed. Also, other federal or state permitting requirements may be triggered. In addition, the cost estimates presented herein are the Trustees' best estimate at the time of this report, and may change to some degree upon implementation.

In accordance with the Consent Decree, the MOU, and OPA, expenditures from the Torch NRD Account are limited to restoring the injuries to seabirds, sand and gravel beach, rocky intertidal shoreline habitats, and lost and diminished use of beaches for human recreation.

To accomplish the goal of prioritizing restoration alternatives, the Trustees ranked restoration proposals into four categories based on the screening criteria: Most Preferred, Moderately Preferred, Least Preferred, and Non-Preferred. The restoration planning and public scoping process (see Section 1.5 Public Participation) resulted in the identification of 5 Most Preferred (Table 2), 4 Moderately Preferred, 3 Least Preferred, and 7 Non-Preferred restoration alternatives (Table 3). The Trustees have decided to implement the projects identified as Most Preferred. Some projects have been modified due to public comment.

4.4 No Action Alternative

NEPA requires the Trustees to consider a “no action” alternative, and the OPA regulations require consideration of its equivalent for purposes of primary restoration, “the natural recovery option.” Under the no action 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 entirely on natural processes for recovery of the injured natural resources, and the Trustees would not seek any compensatory restoration.

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 suffered from this Spill, and technically feasible, cost-effective alternatives exist to compensate for these losses.

4.5 Restoration Alternatives: Evaluation and Ranking

The following projects were evaluated and ranked pursuant to the Threshold and Initial Screening Criteria detailed above in Section 4.2 and included in the October 20, 2004, Scoping Document and the March 13, 2006, draft RP/EA (see Record). As the Trustees evaluated projects, the restoration alternatives had to achieve a minimum level of acceptance on the Threshold Criteria to receive further consideration under the Initial Screening Criteria. Projects were not evaluated using the Additional Screening Criteria because more detailed project plans and scopes of work need to be developed. The Trustees first individually ranked the proposed projects and then met as a group to discuss each project and qualitatively evaluate each project based upon the criteria and public comments received during the Scoping Phase. Based on this individual and then group review, by consensus, the Trustees ranked the projects as Preferred, Moderately Preferred, Least Preferred, and Non-Preferred as listed in the draft RP/EA.

Following the April 19, 2006, public meeting, the Trustees considered public comment, both verbal and written, and conducted additional research. Based upon the public comments and the subsequent research, the Trustees re-evaluated and re-ranked the proposed alternatives. Below is a summary of the final project rankings. The Trustees have decided to implement the Most Preferred Restoration Alternatives.

4.5.1 Most Preferred Restoration Alternatives

The Most Preferred Restoration Alternatives are the projects the Trustees have selected for funding (*i.e.*, the proposed action) and are listed below in Table 2. Details of each project follow and include an evaluation of the project goals and nexus to the injury, project background, project description and methods, environmental consequences of the project, probability of success, performance criteria and monitoring, project evaluation, and budget. Some of the selected projects were modified based upon additional research by the Trustees and consideration of comments by the public. Additional project refinements (including more detailed budgets), and detailed scopes of work will likely be needed prior to project implementation.

Table 2 – Most Preferred Restoration Alternatives

Project Title
Seabird Colony Enhancement Project
Sandy Beach & Dune Habitat Restoration
Mussel Bed Restoration
Rocky Intertidal Habitat Protection Program – Focus on Abalone & Other Rocky Intertidal Species
Boardwalk at Ocean Beach Park (Phase 1)

4.5.1.1 Seabird Colony Enhancement Project

Goals and Nexus to Injury

The goal of this project is to restore injured seabird resources to pre-spill or baseline conditions, and to compensate for interim ecological losses pending full recovery. More specifically, the primary goal of the Seabird Colony Enhancement Project is to improve the nesting success of seabird species such as cormorants and common murre by reducing human disturbances at their breeding colony sites along the central California coast. Additionally, the project is intended to improve the survivability and condition of roosting seabirds such as California brown pelicans by reducing human disturbances at roosting sites. There is a strong nexus to the injury since the vast majority of the 635 to 815 birds estimated to have been adversely impacted by the Torch Spill were seabirds.

Breeding seabird species, particularly those species that nest on cliffs or offshore rocks, are highly susceptible to human disturbances. A variety of human activities have the potential to harm or disturb breeding seabirds. These activities include, but are not

limited to, recreational boating, flying planes and helicopters, fisheries operations, and water-based ecotourism such as diving and kayaking.

This Seabird Colony Enhancement Project will reduce disturbance to seabirds by implementing an educational program along the central California coast. The program involves signs, buoys and outreach materials designed to educate users of the coast about the presence of nesting and roosting seabirds and ways to avoid disturbing these sensitive seabirds.

Background

It is estimated that between 635 and 815 seabirds and shorebirds were adversely impacted from the Torch Spill. While most shorebird species, such as western snowy plovers, were impacted after the oil reached shore, many of the seabirds were oiled at sea. The majority of seabird species impacted by the Spill do not breed in the impacted area; instead, they originated from other geographic areas, and were migrating through the spill zone at the time of the Spill. A listing of impacted birds is presented in Table 1. Spill impacts to these species exacerbate seabird conservation problems in California.

Sixteen species of seabirds breed along the central California coast, typically on offshore rocks and islands. California seabird nesting habitat occurs in areas characterized by complex ownerships and overlapping governmental jurisdictions. As a result of these ownership and jurisdictional relationships, no coordinated management and conservation program for seabirds currently exists in California. A few planning efforts are underway that address certain aspects of California seabird conservation needs. However, there is no single statewide document that considers all the biological factors, regulatory issues, conservation threats, and management needs affecting species status, along with restoration opportunities.

The Gulf of the Farallones National Marine Sanctuary (GFNMS) is implementing a Seabird Colony Protection Program in the area of Point Reyes south to Castle Rock/Hurricane Complex near Point Sur in Monterey County. This Torch seabird project will entail collaborating with the GFNMS program to extend the project area south into Santa Barbara County and the Channel Islands. Additional partners include, but are not necessarily limited to, the Monterey Bay National Marine Sanctuary (MBNMS), the Channel Islands National Marine Sanctuary, Channel Island National Park, the Service, the California Department of Parks and Recreation, the California Coastal Conservancy, CDFG, and the Bureau of Land Management (BLM) as managing agency of the California Coastal National Monument (CCNM). BLM recently released the Resource Management Plan and Final Environmental Impact Statement for the California Coastal National Monument which identifies seabird conservation as a top priority.

The primary anthropogenic (man-made) threats to seabirds in California are the following (not necessarily in order of severity):

- Catastrophic oil spills,
- Chronic oil pollution,
- Conflicts with commercial fisheries, and
- Disturbance to breeding colonies.

Seabirds are disturbed by boats from the boat's movement, lights, engine noise, and human activity on board the boats including deploying and retrieving traps. Sport and commercial divers could pose similar threats. Aircraft disturbance to seabirds is also a problem. Helicopters in particular are known to flush seabirds. Recreational activities can also impact seabirds; for example, kayaking has resulted in people accessing coastal areas that were previously inaccessible.

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 occurs when adults are flushed, leaving eggs and chicks unprotected. Disturbances also affect roosting sites.



Photo 1 – Kayakers recreating near a roosting bird colony.

Increased public awareness, coupled with coordinated management and strategic partnership, is necessary to effectively address the source of seabird disturbance. The GFNMS developed "A proposal to implement the Seabird Colony Protection Program" dated May 2005, which was submitted to the Command Trustee Council for funding (the Command project). The Command Trustee Council was formed following a

settlement of natural resource damage claims associated with an oil spill that occurred in 1998 in waters off the San Mateo coast and affected large numbers of seabirds. The Command project is mirrored after a similar successful project in Oregon that protects nesting seabirds at the Three Arches National Wildlife Refuge (Reimer and Brown 1997). The potential exists for the Sanctuaries, BLM, and the Trustee Councils to improve efficiencies and effectiveness by combining efforts, sharing experiences, and joining resources, to enhance the scope of seabird colony protection programs along the California coast.

Project Description and Methods

This project will entail collaborating with the GFNMS program to extend the project area south into Santa Barbara County and the Channel Islands. Project objectives include the following:

1. Developing and enforcing appropriate seabird colony protective measures;
2. Educating the public and specific user groups about protective measures; and
3. Monitoring and evaluating program effectiveness to ensure integration into long-term statewide seabird management programs.

This project will be implemented by the GFNMS or the MBNMS, or another partnering agency such as the BLM, which manages the California Coastal National Monument along the coast of California.

Managing human impacts on wildlife can be accomplished through a variety of activities. In order to do this effectively, a comprehensive program needs to be implemented, with planned strategies including monitoring, enforcement, education and outreach.

The project will include surveying to better define the scope of disturbance problems and to provide a basis for comparison in future years. The project will also assess current education and outreach strategies, which will include identifying gaps and potential collaborators such as Point Reyes Bird Observatory. Additionally the California Current Marine Bird Conservation Plan, if applicable, will be used as a tool to further develop this project.

As the project is further refined during project implementation, an analysis will be made to determine areas along VAFB and beyond, such as along the Channel Islands, where human disturbance to nesting and/or roosting seabirds is problematic. Additionally, the Seabird Colony Enhancement Project will include coordinating, to the greatest extent possible, with VAFB on military activities that impact or could impact nesting and/or roosting sea birds.

This project will address four primary types of disturbances: motorized vessels, non-motorized vessels, low flying aircraft and shoreside users. In addition, the project will include conducting general public education on seabird disturbance issues. The education and outreach strategies will target identified audiences for each type of disturbance. Developing partnerships with the target audience will be key to successful implementation of the project.

An educational program will be implemented involving habitat protection and disturbance reduction measures addressing excessive noise from aerial overflights, intrusive landings on islands and rocks, close approach of sensitive coastal areas by unauthorized boats and other watercraft, and close approach on foot, or by vehicle on land. The plan will incorporate outreach materials, presentations, signs and displays to educate shoreline visitors and recreational and commercial boat users about the presence of nesting and roosting seabirds and ways to avoid disturbing them. Outreach materials will be developed and presentations will be given to pilot associations and government agency pilots.

Specific measures may include, but are not necessarily limited to, positioning buoys around breeding rocks, posting signs, and developing educational programs targeting recreational users of the coast about the presence of nesting and roosting seabirds and ways to avoid disturbing these sensitive species. Outreach efforts to the Coast Guard, regulatory agencies, pilots, kayakers, and sport fishermen will also be conducted, and will include providing information about the sensitive nature of seabird colonies and the importance of maintaining a specified distance from colonies during the breeding season.

Additionally, based on public comment, the Trustee Council has decided to allocate a portion of these funds to local organizations such as Cabrillo High School Aquarium, to educate visitors regarding the sensitive nature of seabird colonies by funding, for instance, a seabird specimen collection and/or interpretive panels. Additionally, a portion of these funds will be allocated for spotting scopes and interpretive panels for the Boardwalk Project at Ocean Beach Park.

The following is an overview of the target audience and tasks from the GFNMS Proposal. The GFMS project tasks below will be modified to address resource needs in the expanded project area south into Santa Barbara County:

Motorized Vessel Disturbance

Commercial and Recreational Fishing, Ecotourism, Motorized Boating

- Designate seabird protection zones around key colonies.
- Educate targeted audiences about protection zones.
- Design written graphics and/or outreach messages on anchor buoys.

- Develop and install signs at selected offshore rocks, sensitive coastal trails, and launch ramps.
- Educate sport fishing and ecotourism crews to ensure that boats maintain an appropriate distance from colonies.
- Advise fishermen about ways to reduce seabird disturbances associated with lights and hooking and entanglement conflicts.

Non-Motorized Vessel Disturbance

Personal Watercraft (kayaks, canoes, vessels under 20ft)

- Design and install signs or kiosks at coastal landing ramps to educate sport or commercial fishermen, kayakers and others about the sensitivity of nearby seabird colonies.
- Design and distribute brochures to marine supply and sporting goods stores.
- Develop and distribute posters, flyers and maps to individuals, marinas, recreational equipment stores, and recreational sport user clubs.
- Link wildlife disturbance reduction information to marinas, recreational equipment stores, and recreational sport user club web sites.
- Develop an exhibit and staff a table at recreational/sports shows.
- Develop a PowerPoint presentation for use at stores, club meetings, and schools.
- Develop on-the-water interpretive programs such as MBNMS's Team OCEAN.

Low Flying Aircraft Disturbance

Ultralight, Hang gliding, Small Plane Pilots, Military, Coast Guard

- Design and implement at least one workshop for the Federal Aviation Administration, the California Highway Patrol, U.S. Military and Coast Guard pilots, and other enforcement agencies to promote conformance with overflight restrictions prohibiting low altitude flights over protected marine areas. PowerPoint presentations and handouts will be developed.
- Ensure that aeronautical charts contain current information about altitude restrictions over sensitive colony sites.
- Develop and staff an exhibit and literature to be used at air shows.
- Educate organizers of annual events involving aircraft.
- Present information and distribute materials to ultralight, hang glider, and wind surfing clubs.

Shoreside Disturbance

Surfers, Divers, Beach Users

- Develop and conduct presentations about seabird conservation to community groups.
- Develop and implement programs and materials to promote public awareness.
- Develop a plan for signage at key locations.
- Provide seabird viewing opportunities at selected coastal vantage points.

General Education and Public Outreach

- Develop curricula for students.
- Develop informational materials for visitor's center.

The geographic area of this project extends beyond the immediate area impacted by the Spill because this project requires a regional approach in order to be successful. For example, pilots and boat captains from several airports and ports should be reached by the program. Additionally, the extent of the seabird injury cannot be addressed by a VAFB-specific or Lompoc-specific project alone. Although many of the seabirds that were impacted by the Torch Spill originated from colonies to the north, these species have not been targeted for restoration within this project. For example, common murrelets, the bird species with the largest number impacted by the Spill, while experiencing serious problems in central California, are the focus of other programs currently underway. It is difficult to design a single project that benefits all seabird species affected by the Spill, particularly when many do not breed in the region. This project will likely benefit the following birds, which were impacted by the Spill: California brown pelicans, Brandt's cormorants, double-crested cormorants, pigeon guillemot and gulls.

Environmental Consequences (Beneficial and Adverse)

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 seabirds, thereby aiding in the recovery of these populations. Decreasing or eliminating these disturbances will likely have a direct beneficial impact on the reproductive output of these colonies.

Project benefits will include the following:

1. Increased public awareness of seabird habitat requirements.
2. Increased awareness of potential impacts of adverse human-seabird interactions.
3. Increased awareness of safe methods of observing seabirds while engaged in recreational activities.
4. Facilitating reduction of airplane and helicopter activity over sensitive seabird colonies.
5. Facilitating reduction of human disturbances that decrease reproductive output of nesting seabird populations.
6. Increased awareness of decision makers (such as federal, state and local agencies and management bodies) of the threat human disturbance poses to breeding seabird colonies and methods to reduce and eliminate human disturbance.
7. Protecting seabird habitat also provides collateral benefits to marine mammals such as harbor seals and California sea lions.

Potential Adverse Effects and Measures to Minimize or Avoid Adverse Impacts

Implementation of the Seabird Colony Enhancement Project is not expected to result in any significant adverse effects to the environment.

The Trustees will coordinate with implementing entities to ensure that any kiosks or signs, if installed, are carefully designed and placed so as not to detract from the natural aesthetics of the area. Additionally, structures will be placed in open well-traveled areas to maximize sign efficacy and to reduce the risk of vandalism.

While 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, this restriction is expected to be minimal and will not significantly affect recreational opportunities. Moreover, the Trustee Council will carefully coordinate with implementing agencies to balance the goal of minimizing the impacts to seabird colony resources with preserving quality opportunities for recreation. Similarly, any restrictions that may impact fishermen are expected to be minimal given the small number of seabird colonies in the region and the limited nesting season. The selected action emphasizes education and collaboration.

The Trustee Council does not expect that the low-flying aircraft disturbance measures will significantly adversely affect the operations of the State Highway Patrol, U.S. Military, or other enforcement agencies. While law enforcement and military organizations may be exempt from overflight restrictions, the goal of this selected activity is to foster interagency coordination, to inform and educate state and federal law enforcement or military agencies regarding flight restrictions designed to protect sensitive resources, and to facilitate conformance to the extent practicable.

Probability of Success

The likelihood of success for this project is high. The project is likely to have a positive impact on breeding seabirds 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.

As stated above, this project will be similar to existing programs developed in Oregon and California for protecting seabird colonies. The existing GFNMS Seabird Colony Protection Program will be used as a model and thus the foundation for the project has already been outlined. In Oregon, 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.

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 to better define the scope of disturbance problems and to provide a basis for comparison in future years. Monitoring of the colonies 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 reaction will be the primary means of monitoring the success of educational activities.

In addition to monitoring the colonies, the following are performance goals and measures from the GFNMS Seabird Colony Protection Program:

1. Increase seabird disturbance information exchange to key events/venues. Measure number of public venues attended/signs posted and number of individuals receiving information.

2. Increase awareness of organized users who impact nesting and breeding seabird colonies, including fishing association events, air shows, boat shows, and dive venues. Measure number of organizations contacted.
3. Increase central coast seabird protection coordination between agencies, non-governmental organizations, and interested public. Measure number of requests for information and number of places information is posted.
4. Increase the number of agencies, non-governmental organizations, and interested public reporting incidents of seabird disturbance. Measure number of recorded incidents.

Evaluation

The Trustees determined that this type and scale of project would provide appropriate compensation for many of the seabirds injured as a result of the Spill and have selected this project as a most preferred alternative. The treatment of cormorants and pelicans as both injured resources and as surrogate species for other injured birds for scaling purposes required a comparison of the Spill injuries to expected project benefits. This was largely a qualitative assessment. This project has been designed and selected as a technically feasible and cost-effective restoration alternative based upon techniques and approaches that have proven successful in similar applications.

Implementation of the Seabird Colony Enhancement Project is not expected to result in any significant effects to the environment when viewed in the context of the pertinent factors in NEPA, 40 C.F.R. § 1508.27. This project would have a beneficial impact on the environment through education and limitation of certain activities. This restoration alternative does not affect public health and safety. Although part of the project will occur in ecologically sensitive areas, this project consists of educating the public and decision makers, which has no adverse effect on these areas, and restricting use in order to protect the seabird colonies, which has a beneficial effect on the environment. Because this project consists of educating the public about protecting seabirds, the action will not adversely affect endangered or threatened species, or its critical habitat; instead, this project will have only beneficial effects on listed species.

Budget

Per the Memorandum of Understanding between the Trustee Agencies, approximately \$1.2 million has been allocated to projects benefiting seabirds. This project includes partnering with GFNMS Seabird Colony Protection Program and these funds may be used to supplement the one-time costs to establish the GFNMS Program and to expand the project south, plus annual costs to implement and monitor the disturbance reduction efforts for five years.

Following the budget outlined for the GFNMS Seabird Colony Protection Program, below is a budget estimate for this project. A detailed budget and scope of work will be developed at a later date.

- Bird colony observation and monitoring component for 5 years which includes personnel, aerial surveys, equipment, agency administrative support and overhead, and travel – estimated cost is \$400,000.
- Law enforcement component for 5 years based on a Service GS 11 Law Enforcement Agent salary (1/4 time) – estimated cost is \$105,000.
- Outreach and education component for 5 years which includes project management, signs, buoys, educational materials, other equipment, workboat charter, travel, administration and overhead – estimated cost is \$695,000.
- Total budget is \$1,200,000.

4.5.1.2 Sandy Beach and Dune Habitat Restoration

Goals and Nexus to Injury

This project has two major elements:

1. Eradication of non-native European beach grass, iceplant, and other invasives such as acacia through the selective use of herbicides, hand treatment, mechanical treatment, and burning; and
2. Re-establishment of native vegetation (e.g., sand verbena, *Abronia spp.*), focusing on areas currently in non-native vegetation monoculture where native vegetation is not likely to re-establish naturally.

The objective of this project is to compensate for injuries to sandy shoreline habitat and to the federally threatened western snowy plover through removal of non-native vegetation in dune habitats, and replacement of native vegetation adjacent to affected beaches.

Background

The nature of sandy beaches makes direct restoration of this habitat difficult. Instead, the Trustees propose to restore natural resource services lost to the Spill through restoration of dune habitat immediately adjacent to impacted sandy beaches. Iceplant (*Carpobrotus spp.*) and European beach grass (*Aimophila arenaria*) invasion and expansion plus other non-native plants have rendered large areas of dune habitat on

VAFB and surrounding property unsuitable for nesting by snowy plovers. Selected beach/dune habitat improvement projects include eradication of non-native vegetation that presently degrades natural habitat quality, and re-establishment of native vegetation, which will increase the capacity of the habitat to support nesting of the western snowy plover.

There is an existing plan to eradicate non-native vegetation along VAFB in a number of dune habitat areas. The plan is titled "Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base," prepared by SRS Technologies and dated April 2005. The Torch restoration project proposes to fund the invasive plant removal from one of the areas outlined in the VAFB plan, specifically Area D which extends from the Santa Ynez River estuary south to Surf Station.



Photo 2 – Invasive species removal in the dunes.

Project Description and Methods

The project area is located on Surf/Ocean Beach on VAFB. This beach extends approximately 3.5 miles south of the Santa Ynez River mouth. The area targeted for treatment is located on the northern end of the beach between the Santa Ynez River and the public beach access area adjacent to Surf Station. Dunes between the beach and the railroad tracks are the areas targeted for restoration (see Photo 3).

This project will be implemented by VAFB, the landowner with jurisdiction over the project area. This project will seek to eradicate invasive plant species and replant native vegetation more conducive to the propagation and survival of indigenous species. The selected restoration project seeks to remove key non-native plant species in the areas with the greatest potential for habitat improvements, thereby increasing suitable snowy plover nesting areas. The invasion and expansion of non-native vegetation, specifically

iceplant (*Carpobrotus spp.*), European beachgrass (*Ammophila arenaria*), and other invasive non-natives such as acacia (*Acacia spp.*), across much of the beach and dune habitat, has rendered large expanses of habitat unsuitable for nesting by snowy plovers. The non-native vegetation has also reduced the available habitat for native plant species.



Photo 3 – Sandy Beach and Dune Habitat Restoration Area

The methods used to treat iceplant and European beach grass, and other invasive non-native plants, restructure dunes, and revegetate dune habitat will be based on the *Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base* (SRS Technologies 2005), and any updates to the plan, hereinafter referred to as the Snowy Plover Habitat Restoration Plan. This plan was developed by VAFB, and approved by the Service, as a component of an overall Snowy Plover/Beach Management Plan. The Service analyzed the potential impacts, both beneficial and adverse, in the Biological Opinion for Beach Management for the Western Snowy Plover on Vandenberg Air Force Base (Service 2005). The goal of the habitat restoration plan is to increase the amount of quality breeding habitat on VAFB for snowy plovers, and to minimize impacts to the species. Manual, chemical, mechanical, burning or a combination of the four treatments will be conducted between 1 October and 28 February to avoid disturbance of plovers during the breeding season.

Treatments consider alteration of topography and area of disturbance at different levels. Manual removal is recommended for small areas (less than 200 m² or 0.05 acres) where there is no need to alter dune structure mechanically, and where native plant species cover is equal to or greater than 40 percent of the total vegetative cover. Manual treatment uses equipment such as trenching shovels, pitchforks, hand trowels and other tools. If dune structure needs alteration due to site-specific requirements, hand tools such as shovels and rakes would be used.

Chemical treatment would be used only on large areas with less than 40 percent of native plant cover. Glyphosate Roundup PRO Concentrate would be applied by a backpack sprayer or truck mounted hose sprayer using recommended concentrations of 4% for beachgrass and 1.2 to 1.6% for iceplant. Strict application protocols will be followed depending on site and weather conditions during active plant growth periods outside the plover nesting season. Additionally, glyphosphate Roundup PRO Concentrate will not be used near aquatic habitats.

Mechanical removal would be used in medium to large areas (between 0.05 acres to greater than 0.25 acres [200 m² to greater than 1000 m²]), where substantial alteration of dune structure is necessary to restore the area to natural conditions. Heavy equipment would be used to excavate invasive plants and sand buildup that is not characteristic of plover breeding habitat. The excavated material will be sifted, screened, and disposed of as specified in VAFB's Snowy Plover Habitat Restoration Plan. A rubber-tired mower may be used to prepare the site for burn treatments and to reduce fuels.

Burning will be used in areas of sensitive cultural resources or where appropriate for large areas. Burn treatments will be selected and coordinated with the Vandenberg Hot Shot crew and Santa Barbara Air Pollution Control District. Most of the residual burn material will be left in place to provide a mulch for plantings.

Any combination of the four treatments may be used. The most effective treatments will be determined from site-specific characteristics. A combination of treatments may be used during initial and follow-up treatments or follow-up treatments may differ from the initial treatment (SRS Technologies 2005).

Revegetation of treated areas will be with common and rare native plant species known to occur in the area. Plants used for revegetation include, but are not limited to, beach sand verbena (*Abronia maritima*), beach-bur (*Ambrosia chamissonis*), beach evening primrose (*Camissonia cheiranthifolia*), California and beach saltbush (*Atriplex californica* and *A. leucophylla*), and dandelion (*Malacothrix incana*). Seeds from native plant species, including rare or special status plants, would be collected onsite during the summer prior to restoration activities and propagated for planting during the winter after the first rains. Seeds from onsite vegetation are preferred over nursery stock to

ensure the genetic integrity of the local plant community. Seed collection would be conducted outside snowy plover nesting areas, and close coordination with VAFB's snowy plover monitors would further ensure that nesting snowy plovers and their chicks would not be disturbed. Seed collection is the only component of this restoration project that would be conducted during nesting season, and this is driven by the necessity of collecting seed at the correct time when seeds are mature but have not yet dispersed.

Straw may also be used to immediately stabilize the dunes where necessary (SRS Technologies 2005). In some areas, re-seeding may be a less expensive option than propagation and outplanting of seedlings to expedite natural recolonization by native plant species.

Environmental Consequences (Beneficial and Adverse)

Beneficial Effects

This project will benefit the beach/dune ecosystem by eradicating non-native vegetation that presently degrades habitat quality, and will increase the capacity of the habitat to support the nesting of the federally-threatened western snowy plover. Iceplant and European beach grass invasion and expansion have rendered large areas of dune habitat in the area unsuitable for nesting by snowy plovers. This non-native vegetation also reduces available habitat for sensitive plant species such as surf thistle and the federally-endangered beach layia. Although this vegetation is not present on the lower beach areas that were oiled, non-native vegetation eradication and re-establishment of native vegetation have the potential to benefit the overall beach/dune ecosystem as well as the western snowy plover.

Potential Adverse Effects and Measures to Minimize or Avoid Adverse Impacts

The project area, specifically Area D on VAFB, is covered by the *Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base* (SRS Technologies 2005), approved by the Service. The Torch Trustee Council will not commit funds or begin implementation of the Sandy Beach and Dune Habitat Restoration project until VAFB has completed a separate NEPA EA analysis for that project and the federal Trustee agencies make a final NEPA determination based upon that analysis.

Non-native vegetation eradication projects use varying types and concentrations of herbicides, burning, and physical removal to eradicate invasive species. This selected project involves the use of a glyphosphate herbicide and physical removal, when practicable, to remove invasive species and restore dune contours to a condition more closely resembling natural conditions.

Although invasive species eradication will be conducted outside the plover nesting season, minor short-term impacts to snowy plovers are likely to occur. Plovers may be displaced and physically disturbed in response to equipment and work crew activities. However, no long-term adverse impacts would occur because of the large area of roosting and foraging habitat available to wintering snowy plovers on Surf and Wall Beach. Additionally, short-term disturbance would be minimized by monitoring conducted by a qualified snowy plover biologist.

While glyphosate is not expected to adversely affect wildlife, the Roundup PRO formulation can be toxic to aquatic species. However, application of the herbicide is not expected to adversely affect aquatic wildlife or aquatic habitats because chemical application near aquatic areas and areas with flowing water will be avoided. Further, wintering birds, including snowy plovers, would not likely be exposed to the herbicide because shorebirds and seabirds in winter typically roost and forage on open beach areas rather than in vegetated dunes where herbicide applications would occur.

Minor short-term impacts may occur with unintentional native vegetation mortality of individuals closely associated with targeted, non-native vegetation eradication. Precautions will be taken to avoid disturbance to native vegetation during initial and follow-up treatments. Long-term adverse effects are not expected to native vegetation. Monitoring will determine the effects of eradication and revegetation techniques and the habitat quality for snowy plovers (See Performance Criteria and Monitoring Section).

One subsurface historical archeological site is within the project area on Surf Beach. Removal methods within site boundaries and within 60 feet of site boundaries will be limited to burning, chemical treatment, and mowing. Mechanical removal and dune restructuring will be prohibited in that area. Archaeological monitoring will be conducted at the known site to ensure no adverse impacts occur. If previously unrecorded archaeological remains are observed during project construction, work in that area will cease and Vandenberg AFB cultural resources group will be contacted.

The human health risk is expected to be minimal. Routes of exposure to herbicide containing glyphosate include skin contact, eye contact, and inhalation. Temporary eye irritation may occur, but no significant adverse effects are expected with skin contact or inhalation when label instructions are followed. If ingestion occurs, water intake is recommended. Activities with manual and mechanical equipment may cause injury. Long-term or adverse effects are not anticipated with proper and careful use of maintained equipment. All restoration areas where ground disturbance would occur would be surveyed in advance by VAFB's Explosive Ordnance Disposal personnel.

Public access to Surf-Ocean Beach from both the Surf Station and Ocean Park access points would continue during restoration activities. No beach closures due to restoration activities are anticipated. Active work areas, including chemical application

sites, would be fenced and signed, and only small areas of exclusion at any one time would be necessary. Revegetation sites will also be fenced and signed to minimize disturbance and enhance the probability of success.

Probability of Success

To evaluate success, an ongoing monitoring and maintenance program will ensure achievement of the 95% eradication goal and use of the project area by snowy plovers. The project monitoring will be conducted in conjunction with an existing snowy plover monitoring program at VAFB. Based on other invasive species removal projects in similar dune habitats, the probability of success is high. The probability of success is further enhanced by the site's proximity to existing high-quality nesting habitat near the Santa Ynez River.

Performance Criteria and Monitoring

A program to eradicate both beach grass and iceplant, and other select non-native plants from the dunes, combined with native plant restoration would, if successful, result in the creation of significant areas suitable for native community populations. Monitoring throughout the life of the project will evaluate project success in terms of use of the areas by western snowy plovers, and the degree to which the project area will not be re-colonized by non-native vegetation.

The goal of eradication is to achieve 95 percent eradication of iceplant, beach grass, and other non-native plants over the project area, and successfully establish self-sustaining native vegetation cover over 15 percent of the same area (considered to be representative of natural conditions in healthy foredune habitat). Criteria for success must ultimately include annual goals as well as final standards that the program must meet.

Evaluation

Because of the difficulty in predicting subsequent use of the area by birds, no targets are identified for numbers of snowy plovers or other shorebirds using this habitat. However, based upon the large percentage of otherwise suitable habitat covered in beach grass, and the fact that snowy plovers presently nest on these beaches in significant numbers, use of restored habitat by western snowy plovers is anticipated. Ongoing project evaluation would be conducted in conjunction with an existing snowy plover monitoring program already underway at VAFB.

This project would have a beneficial impact on the environment by enhancing the dune habitat adjacent to the affected sandy beaches. Non-native vegetation would be removed and native vegetation would be planted, increasing the capacity of this habitat

to support nesting of the western snowy plover. This restoration alternative does not affect public health and safety. Fencing will surround active work areas. Although this project will occur in and near ecologically important and sensitive areas, this project will enhance the dune habitat adjacent to the impacted beaches to provide better habitat for nesting western snowy plovers, which has a beneficial effect on these areas. No archeological sites are known to occur in the area; if extensive mechanical removal and dune restructuring is conducted, archeological and cultural resource monitoring will be conducted as needed to ensure no adverse effects occur. Planting native vegetation would occur to stabilize the site as needed.

Because this project consists of enhancing western snowy plover dune habitat, the action will have primarily beneficial effects on endangered or threatened species, and its critical habitat. Any effects on western snowy plovers due to equipment and work crew activities will be short-term because of other roosting and foraging habitat at Surf and Wall Beach. Additionally, all activities will be monitored by a qualified snowy plover biologist. Adverse impacts to the western snowy plover will be temporary and are expected to be minor, and are outweighed by the beneficial effect of enhancing their habitat.

Budget

Per the Memorandum of Understanding between the Trustee Agencies, approximately \$396,000 has been allocated to Sandy Beach and Dune Habitat Restoration. The funds will be spent on non-native plant eradication and native vegetation restoration. A general approximation for how these funds would be distributed among the different project elements is provided below. A detailed budget and project scope of work will be developed at a later date.

Beachgrass and iceplant eradication: initial treatment and follow-up treatment for four additional years: estimated cost is \$280,000.

Native seed collection, seedling propagation and outplanting: estimated cost is \$42,000.

Materials and Equipment: estimated cost is \$15,000.

Snowy Plover monitoring: estimated cost is \$48,000.

Archaeological monitoring during ground-disturbing activities: estimated cost is \$11,000.

Total Budget is \$396,000.

4.5.1.3 Mussel Bed Restoration

Goals and Nexus to Injury

Mussel beds are extremely important to the ecological health of rocky intertidal habitats. The goal of this project is to speed up the natural restoration process for injured mussel beds by seeding barren areas with adult mussels. One commenter questioned whether this project is necessary because recruitment in this area does not seem to be declining. Based on personal communications with Mary Elaine Helix with MMS, the mussel populations between Point Conception and just south of Point Sal do have lower abundances and as such, populations in this area could be enhanced by this project.

Oil covered rocky intertidal habitats, including mussel beds, were observed along the shoreline during the Spill at a location south of Point Arguello. While levels of injury greater than 10 percent were not documented, it is expected that the oil exposure caused unquantifiable, low levels of injury to a variety of rocky intertidal species including crustacea, mollusks, arthropods, and algae. In addition, at the time of the Torch Spill, there was a huge El Niño event which ripped the mussels off the rocks within a couple of weeks of the Spill. Other potential causes for reduced abundances include burial from sand; other physical disturbances from logs, rocks, and humans (trampling and/or collecting); or impacts from other pollution sources (e.g., non-point source pollution).

Seastars, in particular, and other rocky intertidal plants and animals found in mussel beds were injured by the Spill. Oiled seastars were documented in photos taken at Point Arguello near the CDFG's abalone plots. As seastars are long-lived animals, and a keystone species, the loss of even a small percentage of adults will be felt in the population for many years. Since mussels are the primary food of seastars, maintaining a stable source of mussel provides direct benefits to seastars. Mussel beds also provide an important habitat for many other important intertidal species including barnacles, limpets, worms, snails, and varieties of algae. Restoring mussel beds to a healthy condition also provides collateral benefits to marine mammals such as sea otters and shorebirds which feed on mussels.

Background

Mussel beds in northern Santa Barbara County and elsewhere in southern California have been declining for the past several years. The value of mussel beds in the coastal region is well documented. Mussel beds are one of the most diverse habitats in the world, and are relied upon by many marine animals as an important food source. When damaged, they may take as long as 15 - 20 years to recover fully. Many organisms depend on this stable habitat for their livelihood, including the diverse assemblage

found within the mussel bed itself. Other animals such as birds, seastars, and sea otters also rely on mussels as an important food source. As the Spill impacted rocky intertidal habitats, including mussel beds, this project will seek to speed up the natural restoration process of these impacted mussel beds by seeding barren areas with adult mussels.

Project Description and Methods

The MMS will likely implement this project due to its experience in studying mussel beds in northern and central California for a number of years. Indications from MMS studies are that once a threshold of cover is reached in a plot, recovery rates increase. The goal of this restoration would be to accelerate the normal recovery time by starting with a 30% cover of mussels of the species *Mytilus californianus*, thereby shortening the recovery time. Three separate sites on VAFB that have mussel beds known to be receding, including areas impacted by the Spill, will be identified for the project. Locations for study plots will also be established. Possible areas where rocky intertidal habitat is accessible are located south of Surf Beach on the southern side of Point Arguello, north of Wall Beach, and at Purisima Point. Within the 3 sites, a total of 12 fixed, one-meter square plots will be established along the perimeters of the mussel beds.

The mussel beds will be "seeded" by laying small patches of adult mussels on the substrate. Burlap cloth will be affixed to the substrate to facilitate mussel adherence. Additionally, three one-meter square control plots will be established in healthy portions of the mussel beds, ideally in the same location, or as close to the injured beds as possible. It is projected that 3 patches of adult mussels (about a 4 - 5" square each) would be adequate to provide the requisite 30% cover. The burlap should disintegrate in about three weeks, at which time the mussels would have been able to put out sufficient byssal threads to stay secured to the substrate. Instead of taking mussels from otherwise healthy beds, adult mussels will be collected from an offshore platform.

Within fixed plot areas, two different techniques will be used in order to enhance the success of the effort. Previous fieldwork indicated that the presence of some plants and animals are beneficial to mussel recruitment. However, it is not clear whether their presence accelerates the recovery in a plot where adult mussels are being added, or whether the presence of these other plants and animals increases competition for space. Therefore, two techniques will be used.

One technique involves removing undesirable plants (such as fleshy algae-like fucus) and animals to provide a clean substrate for the mussels to attach, and then transplanting the adult mussels. For this treatment, six one-meter plots would be cleared as described and transplanted with mussels to reach a 30% cover. Desirable

plants such as coralline algae would be left in place as it is believed they encourage mussel recruitment.

The other technique involves removing undesirable plants/animals as in the first treatment. However, in this treatment, artificial substrate such as netting or air conditioner filters (thought to mimic properties of coralline algae) would be added to cleared surfaces to enhance recruitment. As in the first treatment, six one-meter plots would be treated, and then transplanted with adult mussels sufficient to reach a 30% cover in the plot.

Set up and transplanting of the plots would take place in mid- to late summer so that the mussels have time to acclimate to the local wave stresses before the winter storm season.

The transplanting will be phased; for example, one site will be started a year earlier than the others so that the information gathered from the setup and scraping procedures can be taken into account in setting up the remaining sites.

Weekly monitoring of the transplanted mussels would be required over the first month, replacing transplants as needed. Monthly monitoring would be needed over the next five months, with continued monitoring on a biannual basis for the next two years. Monitoring on an annual basis would be required for two additional years, unless the transplanted plots recover to healthy levels before that time.

Environmental Consequences (Beneficial and Adverse)

Beneficial Effects

Restoring mussel beds will provide wide-ranging benefits to a variety of individual species including barnacles, limpets, worms, snails, and varieties of algae. More importantly, the project will directly benefit a very important ecosystem. Since mussels are the primary food of seastars, maintaining a stable source of mussels provides direct benefits to seastars. Restoring mussel beds to a healthy condition also provides collateral benefits to marine mammals such as sea otters. Additionally, valuable data will be collected with the study design, using two different techniques, to determine if the presence of some plants and animals are beneficial to mussel recruitment or if their presence increases competition for space. This information will be helpful for other restoration efforts and will also help advance our understanding of how to promote recovery in future cases where mussel beds are directly damaged as a result of a spill.

Potential Adverse Effects and Measures to Minimize or Avoid Adverse Impacts

Implementation of the mussel bed restoration project is not expected to result in any significant adverse effects to the environment. Collecting the mussels from the source locations could impact those source mussel beds. However, to ensure that the source locations are not significantly impacted, a minimum of 30% cover of mussels will be left at each source location. Additionally, instead of taking mussels from other healthy mussel beds along the coast, mussels will be collected from an offshore platform (a potential offshore platform source is Torch's Platform Irene).

Probability of Success

Based on previous studies, the probability of success of this project is high. As noted above, two different methods of transplanting mussels will be used to enhance the probability for success. One method will involve removing undesirable plants and animals to provide a clean substrate for the mussels to attach, and the other technique will involve removing undesirable plants/animals as in the first treatment but then adding and attaching a material such as a burlap cloth to cleared surfaces to enhance recruitment.

Additionally, by conducting the plot restorations in stages, several plots at a time, the information learned from the setup and scraping procedures could be taken into account in setting up the remaining sites.

Performance Criteria and Monitoring

Transplanted mussels will be monitored weekly for the first month, replacing transplants as needed. After the first month of weekly monitoring, monthly monitoring will occur for five months, with continued monitoring on a biannual basis for two years. Monitoring on an annual basis would be required for two additional years, unless the transplanted plots recover to healthy levels before that time.

Evaluation

The Trustees determined that this type and scale of project would provide appropriate compensation for the impacts to the intertidal areas and specifically, to the mussel beds injured as a result of the Spill.

Furthermore, implementation of the Mussel Bed Restoration project is not expected to result in any significant effects to the environment when viewed in the context of the pertinent factors in NEPA, 40 C.F.R. § 1508.27. This project would have a beneficial impact on the environment by restoring impacted intertidal habitats by seeding barren mussel beds with adult mussels. Because this project consists of restoring intertidal

habitats which would benefit mussels, seastars and sea otters, the action will not adversely affect endangered or threatened species, or its critical habitat; instead, it would have only beneficial effects. To reduce impact to source beds, adult mussels would be taken from an offshore platform rather than from mussel beds along the coast, and at least 30% of the mussel cover will be left at the source mussel bed. Any adverse effects from this project would be minimized and are outweighed by the beneficial impact of restoring impacted intertidal habitat.

Budget

Per the Memorandum of Understanding between the Trustee Agencies, approximately \$100,000 has been allocated for the project benefiting mussels. This budget takes into account costs for project administration, necessary supplies and equipment, and the cost of obtaining the mussels. Labor costs associated with setup, transplants, and monitoring, data reduction, analysis, and reporting, along with related travel and per diem costs, are also included in this budget. A detailed project budget and scope of work will be developed at a later date.

4.5.1.4 Rocky Intertidal Habitat Protection Program - Focus on Abalone and Other Rocky Intertidal Species (formerly called the Public Educational Program)

Goals and Nexus to Injury

The goal of this project is to provide local community outreach and education regarding the sensitivities of rocky intertidal habitats and to reduce the impacts from human disturbance on tidepools.

The rocky intertidal habitat along the VAFB coast is characterized by a rich diversity of invertebrate species, including black abalone (*Haliotis cracherodii*), sea stars, turf alga (*Endocladia*), rockweeds (*Pelvetia*), barnacles, and mussels. The VAFB coastline contains some extensive tracts of relatively undisturbed rocky intertidal habitat, as well as some of the largest black abalone (*Haliotis cracherodii*) concentrations in Santa Barbara County. The nexus between the spill and this project is that approximately 85 acres of rocky intertidal habitat was exposed to oil as a result of the Spill.

Background

Approximately 85 acres of rocky intertidal habitat were in the spill exposure zone during the Torch Spill. Based upon observations of black abalone covered with oil at Point Arguello, the pathway of oil on surface waters, the mixing of oil in the surf zone, as well as the projected slow recovery time for abalone, the Trustees estimate that black

abalone resources suffered a 10-15% loss in the Spill area. Other rocky intertidal organisms likely suffered similar injuries due to exposure to oil from the Torch Spill.

During the Scoping Phase of this restoration planning process, the Trustees solicited comments on proposed projects and solicited new project ideas. Four comments included new proposed projects related to educating the public about abalone and rocky intertidal species. One project idea from the public included reducing legal take (reducing catch limits), limiting access to particular areas, increasing enforcement, and education. A second project idea from the public included constructing a boardwalk for beach access to Ocean and Surf Beach, and included erection of interpretive signs. A third project idea from the public was to construct an interpretive center at Ocean Park. The fourth project included funding for the Cabrillo High School Aquarium. Further details on these four proposed projects are included in the Moderately, Least, and Non-Preferred Project summaries below. Educational elements of these four projects were incorporated by the Trustees into this preferred alternative, the Rocky Intertidal Habitat Protection Program.

Tidepools and other components of rocky intertidal shores represent a species-rich habitat which attracts a wide array of visitors and collectors. Human disturbance of tidepool areas is of concern and includes trampling of the resources, turnover of rocks, displacement of both living and nonliving resources, and collecting of intertidal species or shells that can provide habitat. In addition to direct losses from trampling and collecting, secondary changes may result from changes in distribution, prey availability and competition. Under heavy use, patches of habitat become more frequently disturbed, allowing less time for recovery.

According to the MBNMS management plan, trampling in tidepools is defined as when animals are crushed or dislodged, or algae are damaged. Disturbance may also occur if animals or substrates are not returned to the same location. Collecting is defined as picking animals out of the intertidal area. Another source of visitor impacts to tidepools is the discarding of trash, which can remain for extended periods of time and become wedged in the substrate.

During the Spill, black abalone, *Haliotis cracherodii*, were observed to be coated with oil in at least one area of rocky intertidal habitat. Once the largest and arguably most important herbivore in intertidal systems along much of the west coast of the United States, the intertidal black abalone has experienced mass mortalities along the coast of California since the mid-1980s. As a declining species, the additional stress associated with the Spill likely exacerbated the decline and reduced the chances for recovery.

Black abalone species in central and southern California experienced stock collapse due to both natural and human-related causes, resulting in the 1997 closure of all abalone fishing in the area. The only abalone fishery currently open in the state is the northern

California red abalone sport fishery. Mortality is due to infection by a pathogen that leads to a fatal wasting disease called "withering foot syndrome" where the foot of the abalone shrinks until it can no longer adhere to the substratum. Scientists first noted massive die-offs due to withering foot syndrome on the Channel Islands in 1986, and by 1992, it was observed near Point Conception on the mainland. The general pattern of mortality, once die-offs start, is that within a few months to a year the population will decrease by more than 90 percent, but a few remnant individuals will remain healthy and persist. Since the early 1990s, the disease has migrated sequentially northwards along the California coast; this migration poses a potential threat to healthy populations of black abalone currently residing within the MBNMS. Black abalone are not a preferred species for commercial trade; hence restoration efforts to maintain their stocks and research efforts to combat withering foot syndrome have received little attention.

The prognosis for rapid natural recovery of black abalone populations along the southern and central coasts of California is not good. Black abalone along the central and into the northern coast of California already show signs of withering foot syndrome, therefore mass mortalities throughout the Sanctuary are likely. In 1999, the National Marine Fisheries Service (NMFS) listed *Haliotis cracherodii* as a candidate species for protection under the ESA.

Restoring populations of slow-growing, long-lived abalone to levels that can sustain productive fisheries will take decades and will require active intervention. Closing the Orange County shoreline to abalone harvest in 1977 and waiting 15 years for populations to recover spontaneously was ineffective (Tegner 1992). Abalone are not unusual in this respect. Recent analysis of 128 marine fish stocks revealed that only three species might be able to recover spontaneously from severe harvest-induced reductions (Meyers *et al.* 1995). Active brood-stock husbandry now seems to offer the only promising abalone restoration approach (Tegner 1992, 1993). However, black abalone have not yet been successfully cultured. Culture programs for black abalone are important to develop a source of stock for out-planting, and to answer questions about withering foot syndrome.

Without human intervention, and possibly even with it, this species may never recover. The recovery portion of the California Department of Fish and Game's Abalone Recovery and Management Plan (ARMP), is directed at preventing further population declines and helping rebuild populations (CDFG, 2002). Formal comprehensive plans have not yet been made to restore the productivity of California abalone populations. Limited research on recruitment dynamics, larval and juvenile stocking feasibility, and brood-stock husbandry are under way (Davis and Haaker 1995). For the recovery portion of the ARMP, the interim goals are to reverse declines in populations by stabilizing stocks (prevent extinction in California waters), and establish self-sustaining populations range-wide. The long-term goal is to attain resource levels that can sustain a fishery.

Project Description and Methods

Project components include 1) educational outreach to minimize human impacts on tide pools, 2) collaboration, and 3) monitoring. A detailed project budget and scope of work will be developed at a later date.

This project will likely be implemented by an organization that focuses on educating the community on environmental issues. The goal of this project is to enhance public awareness of the sensitivities of tidepools and the species that inhabit the intertidal community, including black abalone, to reduce the human impacts on this sensitive habitat type. The target audience will be the Santa Barbara County community and visitors to the area's beaches. This project will also include a monitoring component to evaluate visitor use patterns and resource impacts at select high use rocky intertidal locations in Santa Barbara County such as Jalama Beach.

Components of a good public awareness/educational outreach program may include, but are not necessarily limited to:

- Posting interpretive signs regarding the importance of protecting intertidal species, including black abalone, by providing information about tidepool etiquette;
- Identifying and coordinating regulatory agencies, stakeholders, and partners (e.g., the Cabrillo High School Aquarium whose students can assist with interpretive panel/educational material design);
- Posting signs with information on how to report crimes and resource injuries, (e.g., the CalTip program has been very helpful with enforcement efforts related to abalone);
- Developing and disseminating readily understandable information about regulations;
- Developing publications and other outreach materials;
- Fostering interagency coordination;
- Educating constituents about regulations that protect recovering and managed black abalone stocks;
- Conducting public awareness campaigns about the vulnerability of our intertidal and subtidal marine resources;
- Providing the public with descriptions of anthropogenic threats to black abalone and intertidal species, such as describing the adverse impacts of picking up live abalone and other intertidal organisms ("look don't touch");
- Preventing pollution, dumping, runoff, and other factors negatively impacting marine resources;
- Educating students at schools, and creating educational videos and internet website interactive games and activities;
- Exploring the potential for hands-on exhibits or live display tables;

- Developing multicultural educational elements;
- Enlisting the participation of community groups, fishermen, and coast watch groups that maintain some form of stewardship to closely observe local fishing activities to discourage poaching;
- Emphasizing the importance of good stewardship; and
- Developing and distributing ecological fact sheets.

The project will include collaborating with other organizations and agencies, and researching similar efforts that are taking place in other areas, such as the MBNMS, to use as a guide. Potential collaborators include, but are not necessarily limited to, the CDFG, the California Department of Parks and Recreation, the MMS, the U.C. Santa Barbara, the Hancock Community College, the Discovery Center in Santa Maria, the Santa Barbara Museum of Natural History, the Cabrillo High School Aquarium, and the Sea Center on the Santa Barbara pier.

The project will also involve evaluation of visitor use patterns by monitoring locations, amounts of visits, and types of visitor uses as well as resource impacts. The monitoring may also include field monitoring of intertidal organisms to evaluate species abundance, distribution patterns, and other factors at sites in an attempt to distinguish visitor impacts from other factors that may influence tidepools.

Environmental Consequences (Beneficial and Adverse)

Beneficial Effects

The actions implemented by this project will increase public awareness of the issues associated with a declining black abalone population, and the importance of ecosystem integrity of intertidal species. Seaside postings, educational materials, and kiosk information will likely impact and raise the awareness level of not only the beach visitors, but is likely to extend to local residents and community organizations and agencies.

Potential Adverse Effects and Measures to Minimize or Avoid Adverse Impacts

Implementation of this Rocky Intertidal Habitat Protection Program is not expected to result in any significant adverse effects to the environment.

Trustees will coordinate with implementing entities to ensure that any kiosks or signs (if used) will be carefully designed and placed so as not to detract from the natural aesthetics of the area and to ensure that structures will be placed in open well-traveled areas to maximize sign efficacy and to reduce the risk of vandalism.

The program will not result in any significant restriction on recreational opportunities. The purpose of the project is to educate, not to restrict access. In implementing this educational program, a balance will be sought between minimizing the impacts on the resource, and preserving quality opportunities for recreation.

Probability of Success

The probability of success is high. Similar efforts have been undertaken successfully at other areas such as the MBNMS.

Performance Criteria and Monitoring

Public feedback will be one way to monitor the success of the educational activities. Additionally, specific performance criteria will be developed as part of project implementation, and will measure things such as types of visitor uses, locations visited, and visitor use patterns will be evaluated, including evaluating level of awareness of tidepool etiquette. Effects on the biological resources will also be evaluated, such as evaluating species abundance and distribution at sites that differ in their levels of visitor use.

Evaluation

The Trustees have evaluated this project against all threshold and initial screening criteria developed to select restoration projects and concluded that this project is consistent with the selection factors. The Trustees have determined that this type and scale of project would provide appropriate compensation for injuries to black abalone in the area.

Implementation of this project should result in positive benefits to the beach-goers experience. As noted above, public feedback and the amount of reaction expressed by beach visitors will be one way to evaluate the effectiveness of this outreach program.

Furthermore, implementation of the Rocky Intertidal Habitat Protection Program – Focus on Abalone and Other Rocky Intertidal Species is not expected to result in any significant effects to the environment when viewed in the context of the pertinent factors in NEPA, 40 C.F.R. § 1508.27. This project would have a beneficial impact on the environment through public education about the sensitivities of tidepools and the species that inhabit these intertidal communities, such as the black abalone. Additionally, the action will not adversely affect endangered or threatened species, or its critical habitat.

Budget

Per the Memorandum of Understanding between the Trustee Agencies, approximately \$136,500 was allocated for a project to benefit abalone. This project will benefit abalone as well as other rocky intertidal species and the funds will be used for designing and distributing educational interpretive materials, collaborating with other agencies and organizations, and monitoring.

4.5.1.5 Boardwalk at Ocean Beach Park (Phase 1)

Goals and Nexus to Injury

Based upon the restoration project selection criteria, the Most Preferred Restoration Alternative in the category of "Lost and Diminished Use of Beaches for Human Recreation" is the Boardwalk at the Ocean Beach Park (Phase 1). Phase 1 is a boardwalk around the parking lot with an interpretive kiosk. This restoration alternative will include an educational and interpretive kiosk and provide an alternative high quality, ADA-accessible recreational experience to park visitors. This project has a strong nexus to the spill since Ocean Beach was one of the primary recreational beach areas most heavily impacted by the Torch Spill. Phase 1 is estimated to start in winter of 2008.

Because of public comment and because of concerns regarding a boardwalk to and along the beach at Ocean Beach Park and stairs or a boardwalk at Surf Beach (see Appendix A, response to comment BALL-1 for details), the Trustees decided that the Boardwalk at Ocean Beach Park, Phase 1 around the parking lot, is the most preferred alternative recreation project. Phase 2 of the project (to be funded from other sources) includes construction of a boardwalk into the Santa Ynez River estuary, including a platform for wildlife/habitat viewing, and will connect with the Phase 1 boardwalk at the parking lot.

Background

Ocean Beach Park is a 40-acre park owned and operated by Santa Barbara County. The park provides coastal access to the public, particularly the 65,000 residents of the Lompoc Valley. Facilities at the park include picnic tables, ADA-accessible bathrooms, a small marine-themed playground, and a safe ADA-accessible ramp under the railroad tracks to the beach. Since 2000, access to the beach has been prohibited from March 1 through September 30 to protect nesting western snowy plovers.

Ocean Beach Park was closed for four days due to the Spill. The beach was oiled and heavy equipment and cleanup activities disrupted public recreational activities at the park. In addition, negative publicity about the spill and beach conditions, and

uncertainty about whether the beach had re-opened reduced usage of the beach for several weeks beyond the time period of the actual beach closure.

Project Description and Methods

The Phase 1 boardwalk project will involve constructing a boardwalk along the northern and eastern perimeter of the existing parking lot (see Photo 4). Phase 1 also includes the construction of an interpretive/educational kiosk to provide information relating to environmental concerns, seabird identification, and natural habitats. All of the Phase 1 boardwalk, including construction access and the interpretive kiosk, will be located entirely within the existing parking lot at Ocean Beach Park.

The boardwalk will provide educational and interpretive services to park visitors. When the beach is closed, the boardwalk will provide an alternative high quality, ADA-accessible recreational experience. The interpretive panels will contain information regarding the wetland habitat, environmental concerns (e.g., effects of trash on wildlife and habitat), and the local sensitive species such as listed plants, savannah sparrows, tidewater gobies, seabirds, and steelhead trout.

This project has been part of the County's approved Master Plan for Ocean Beach Park since 1988 and, as such, is consistent with the County's applicable land use designations and regulations. The boardwalk will be constructed and managed under the direction of Santa Barbara County's Parks Department.



Photo 4: Ocean Beach County Park, Phase 1, Interpretive Boardwalk location

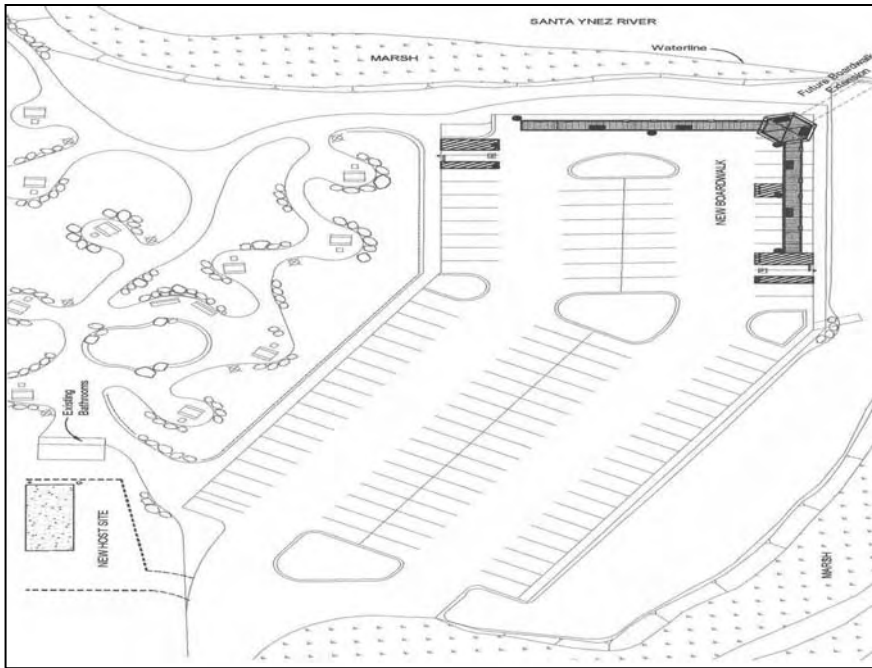


Figure 2: Phase 1 Interpretive Boardwalk, Plot Plan

Care will be taken to assure that construction design and materials will focus on minimizing any adverse impacts to the wetland habitat. Implementation of Phase 1 will likely not require permits from the U.S. Army Corps of Engineers, or the Regional Water Quality Control Board, and is expected to be exempt from CEQA review because construction will occur within the existing parking lot only. All required environmental review/permitting will be completed, including obtaining a permit from the California Coastal Commission by Santa Barbara County prior to construction.

Project Setting

The project is located within Santa Barbara County Ocean Beach Park, at the mouth of the Santa Ynez River. The site is highly scenic and of high biological value. The park property is approximately 40 acres in size. Visitor use at the park is estimated at 18,000 vehicle trips per year (actual traffic counts) resulting in approximately 45,000 visitors per year (average 2.5 visitors / vehicle). The Phase 1 boardwalk will be located within the existing parking lot.

Environmental Consequences (Beneficial and Adverse)

Beneficial Effects

The benefits of the Phase 1 boardwalk will be to provide access and opportunity for viewing estuarine wildlife and habitat, to allow the public to learn first hand about the importance of maintaining this invaluable natural resource and important habitat in a pristine condition. The boardwalk would be available to approximately 45,000 park visitors per year. The project should increase visitor appreciation and awareness of their natural resources and stress the importance of environmental stewardship. During times when access to Ocean Beach is restricted, the boardwalk would provide an alternative, ADA-accessible high quality recreational experience to park visitors.

The boardwalk project should serve to direct visitors to stay within the parking lot area and on the boardwalk. Currently, walking out into the estuary is not allowed but does occur so this project should benefit the habitat by discouraging access into the estuary. Public access will not be increased with the boardwalk project because the number of visitors is limited to what the parking lot can accommodate and the capacity of the parking lot will not be increased.

Potential Adverse Effects and Measures to Minimize or Avoid Adverse Impacts

The project design for Phase 1 includes the following specific measures to avoid or minimize adverse impacts to the environment:

All of the Phase 1 boardwalk, including construction access, will be located within the existing parking lot at Ocean Beach Park and will not permanently affect wildlife or habitat. Some wildlife may temporarily avoid the area due to noise during construction, but should return upon completion of Phase 1 construction activities. Care will be taken in constructing the Phase 1 boardwalk so that disturbances to wildlife caused by the construction will be minimized and human presence will not be unduly intrusive.

For Phase 1, the following measures are proposed to be incorporated into the project to minimize impacts to biological resources:

1. Standard procedures shall be used to ensure that all equipment is maintained properly and free of leaks during operation and any necessary refueling or repairs are carried out with proper spill containment.
2. All human generated trash at the project site shall be contained and removed from the work site and disposed of properly at the end of each workday. All construction debris and trash shall be removed from the work area upon completion of the project.

3. All permit conditions, minimization measures, and Best Management Practices (BMPs) shall be implemented to minimize potential adverse impacts to water and wildlife resources.
4. After its construction, Santa Barbara County Parks Department shall monitor the boardwalk to insure that proper security is maintained, to avoid any impacts to sensitive resources from vandalism, littering, and other careless or unlawful activity.
5. Prior to construction, temporary exclusion fencing shall be placed along the work limits to prevent entry by the public, workers, or equipment into adjacent habitat areas.

The project setting is remote and generally characterized by low noise levels. Intermittently, the project area is subjected to high noise levels from trains on the railroad track immediately adjacent to the park, as well as from large aircraft noise from VAFB. Noise impacts during construction could adversely affect both park visitors and wildlife in the immediate area.

Probability of Success

The probability of success for Phase 1 is very high. Similar boardwalks and viewing platforms have been successfully constructed in other areas, such as Oso Flaco Lake in San Luis Obispo County. This site provides an excellent example of beach and estuary habitat for wildlife viewing and is readily accessible.

Performance Criteria and Monitoring

Performance criteria for this Phase 1 project will be the completion of the project elements described above. Ongoing maintenance of the new facilities will be provided by Santa Barbara County.

Evaluation

This project should result in positive benefits by enhancing the quality and amount of public use at Ocean Beach, which was heavily impacted by the Spill. The Trustees evaluated this project against all threshold and initial screening criteria developed to select restoration projects, and concluded that this project meets these criteria. The Trustees determined that this type and scale of project would provide appropriate compensation for lost or diminished beach user days as result of the spill.

Furthermore, implementation of the Ocean Beach Park Boardwalk project (Phase 1) is not expected to result in any significant effects to the environment when viewed in the context of the pertinent factors in NEPA, 40 C.F.R. § 1508.27. This project will be

constructed within the boundaries of the existing parking lot at Ocean Beach Park, and would have a beneficial impact on the environment by educating the public about the natural resources in the area and the importance of environmental stewardship. It also would provide an alternative ADA-accessible, high quality, recreational experience to park visitors, and may limit uncontrolled pedestrian traffic in these sensitive habitats.

Budget

Pursuant to the Memorandum of Understanding between the Trustee agencies, approximately \$65,520 has been allocated for restoration projects benefiting human recreational beach use. A preliminary cost estimate for constructing the Boardwalk at Ocean Beach Park (Phase 1) is approximately \$93,140, so other sources of funds for Phase 1 would be needed. Potential sources of additional funding include Santa Barbara County's Coastal Resource Enhancement Fund and money collected by the County in settlement of *County of Santa Barbara v. Torch Operating Company*, 2001.

4.6 Cumulative Impacts

The Trustees examined a variety of restoration alternatives to restore resources and/or services lost as a result of the Torch Spill. Project-specific environmental consequences for each of the Most Preferred Restoration Alternatives are provided in Section 4.5. This section addresses the potential cumulative impacts to be considered in accordance with OPA and NEPA.

The Trustees do not believe that the Most Preferred Restoration Alternatives will cause significant adverse impacts to human environment. The Most Preferred Restoration Alternatives are expected to primarily have beneficial impacts on the environment through the restoration and protection of biological resources and expansion of human recreational and educational services.

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 C.F.R. §§ 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.

Boardwalk at Ocean Beach Park (Phase 1) Cumulative Impacts

One project, the Boardwalk at Ocean Beach Park (Phase 1), has cumulative impacts as defined by the NEPA regulations. The Torch Trustee Council proposes to provide funding for Phase 1 only, which includes construction of a boardwalk within the existing

parking lot. However, the County plans to independently implement Phase 2, which involves construction of a boardwalk into the estuary at Ocean Beach Park. Like the Phase 1 boardwalk, Phase 2 has also been part of the County's approved Master Plan for Ocean Beach Park since 1988. The Phase 2 boardwalk will be constructed and managed under the direction of Santa Barbara County's Parks Department. Phase 2 may require permits from the Army Corps, Coastal Commission, California Department of Fish and Game, and potentially the Regional Water Quality Control Board. CEQA review also will be needed prior to Phase 2 implementation. The timing of Phase 2 implementation is uncertain at this time, and depends in large part on the availability of funding. The following discussion evaluates the impacts and specifies measures to avoid or minimize adverse impacts to the environment when implementing Phase 2.

While Phase 1 is entirely within the existing parking lot at Ocean Beach Park, Phase 2 would be located in the marsh at the mouth of the Santa Ynez River. The Santa Ynez River ends in a large shallow estuary, which is typically open to tidal influence in late winter and early spring, and occasionally stays open into the summer months until a sand bar forms at the river mouth. The sand bar typically blocks tidal influence until storm surge and increased flows in the river during winter months cause it to breach naturally. The southern end of this lagoon is bounded by the Union Pacific Rail Road train trestle and Ocean Beach Park, while the northern boundary is VAFB. The lagoon ends to the west in a large sand bar, normally preventing any tidal influence. To the east, freshwater marshes and dense willow woodlands continue for about a mile upstream to where the agricultural areas of the Lompoc Valley begin. Because of the seasonal variation in tidal influence, lagoon salinities vary from being close to fresh water to being close to sea water (Swift et al 1997).

This salt marsh vegetation habitat is considered "rare and worthy of consideration" by the California Natural Diversity Database. Some of the salt marsh areas have a rather simple plant composition, which is primarily pickleweed (*Salicornia virginica*), while other areas of the marsh are more diverse containing alkali heath (*Frankenia grandifolia*), jaumea (*Jaumea carnosa*) and saltgrass (*Distichlis spicata*). The channels within the marsh contain a variety of emergent vegetation, including California bulrush (*Scirpus californicus*), prairie bulrush (*Scirpus maritimus*) and cattails (*Typha spp*). Other areas of the marsh contain both salt and freshwater marsh plants, such as jaumea and pickleweed, as well as coastal isocoma (*Haploppapus venetus*), salt marsh baccharis (*Baccharis douglasii*), alkali wild rye (*Elymus triticoides*), silverweed (*Potentilla edegii*), and western ragweed (*Ambrosia psilostachya*). Upstream, large freshwater marshes containing large stands of California bulrush and cattails are found. The upland areas contain dense stands of arroyo willow (*Salix lasiolepis*) and open scrub of coyote bush (*Baccharis pilularis*). The estuary is unique to the region because large mudflats are exposed when the estuary is under tidal influence. This creates a large feeding area for a wide variety of shore birds.

Several species of concern are known to occur, or may occur, in the area. Sensitive animal species include tidewater gobies, savannah sparrows, and steelhead trout. Tidewater gobies (*Eucylogobius newberryi*) could occur in the tidal channel over which the boardwalk would be placed. The tidewater goby is a fish that occurs in estuaries and lagoons throughout coastal California. This species is restricted to waters with low salinity in California's coastal wetland habitats. Tidewater gobies are bottom dwellers and prefer water that is not deeper than three feet. They burrow four to eight inches in coarse sandy soils to spawn. All life stages of tidewater gobies are typically found at the upper end of lagoons in areas of low salinity (commonly less than 10 parts per thousand). Since 1900, the tidewater goby has disappeared from nearly 50 percent of the coastal lagoons within its historic range, including 74 percent of the lagoons south of Morro Bay in central California (Service website <http://ecos.fws.gov/speciesProfile/SpeciesReport.do?spcode=E071>).

The savannah sparrows (*Passerculus sandwichensis*) in the Santa Ynez River estuary are more similar in body type and plumage to the subspecies *alaudinus* found in Morro Bay, and are thought not to be the endangered subspecies *beldingi* (Paul Collins, personal communication, 2005). Although not the endangered subspecies, savannah sparrows are very common in the marsh adjacent to the Ocean Beach Park parking lot.

Steelhead trout (*Oncorhynchus mykiss*) may also occur in the area. Historically, the Santa Ynez river system supported the largest steelhead run in southern California and was famous for its sport fishery. In August 1997, the NMFS designated the anadromous steelhead, which occur in the lower Santa Ynez River below Bradbury Dam, as an endangered species under the ESA.

The estuary is the largest and most important habitat area for water-associated birds in northern Santa Barbara County (Madhart *et al.*, 1976, as cited in the Ocean Beach Park Master Plan, 1988). The federally-threatened western snowy plover nest along the coastal foredunes of the sandy beaches west of the estuary. Migrating shorebirds, such as willets and long-billed curlews, use the mudflat areas. Gulls, sandpipers, and the endangered California least tern use the open areas near and around the sandbar. The open water and tidal channels are used by a variety of waterfowl, including mallards, canvas back, teals, and ruddy ducks. Wading birds that inhabit the area include great egrets, snowy egrets, and great blue heron. Finally, the marsh areas contain habitat for Virginia rails, sora, and common yellow-throat.

The estuary's large freshwater marsh upstream of the project site supports a number of amphibians and reptiles. These may include several salamanders and toads, especially the California tree frog, western toad and the listed California red-legged frog. The southwestern pond turtle occurs in freshwater ponds in the upper marsh and western fence lizards and garter snakes can be viewed in upland areas. These freshwater

species are not expected to be present in the immediate project area, which is more saline.

A variety of small mammals utilize the marsh, including the Audubon cottontail, California ground squirrel, and a number of species of mice. The western harvest mouse (*Reithrodontomys megalotis* sub. *longicaudus*) is present in high densities in the upper margins of the marsh (Collins, 2005). Predators, such as the striped skunk, long-tailed weasel, and coyote, utilize these small mammals for a food source. In addition, the marsh is heavily utilized by deer, which use the willow thickets for cover and forage in the marsh.

Four special status plant species occur in the general project area. These include *Cirsium loncholepis*, *Cirsium rothophilum*, *Dithyrea maritima*, and *Lasthenia glabrata* ssp. *coulteri*. The first three of these species occur in freshwater wetlands and/or dune habitats, and would not occur within the area of construction. The fourth species, *Lasthenia glabrata* ssp. *coulteri*, is found within salt marsh habitat.

The project setting is remote and generally characterized by low noise levels. Intermittently, the project area is subjected to high noise levels from trains on the railroad track immediately adjacent to the park, as well as from large aircraft noise from VAFB. Noise impacts during construction could adversely affect both park visitors and wildlife in the immediate area. During Phase 2, a pile driver could generate noise levels of 95-105 dB (EPA 1971). An auger could generate noise levels of 85 dB. Total construction may be upwards of two to three months. Pile driving would occur intermittently as deck sections are constructed, and would not exceed an estimated total of ten days. In order to keep impacts to vegetation and water quality to a minimum, the Phase 2 boardwalk will be constructed one section at a time, working with a pile driver or auger from the deck of the previously constructed section. The construction period would be restricted to a low flow, low tide period to minimize impacts to the water column. The duration of the construction period is estimated at 8 - 12 weeks. Due to the remote location of the project, and the limited duration of high noise generating activities, noise effects of the project will be less than significant. Also, visual effects of the Phase 2 boardwalk would be minimized by selecting material which would blend with the natural environment, similar to the weathered wood and light gray/blue decking used at Oso Flaco Lake Boardwalk in San Luis Obispo County.

Care will be taken in constructing the Phase 2 boardwalk so that disturbances to wildlife and habitat caused by the construction will be minimized and human presence will not be unduly intrusive. To preclude any impacts to the sensitive plant species *Lasthenia glabrata* ssp. *coulteri*, which occurs within salt marsh habitat, pre-construction surveys will be conducted. If necessary, a program of salvage, restoration, and enhancement of this species will be conducted.

Savannah sparrows nest in the *Salicornia* vegetation in the project vicinity. These birds could be adversely affected by construction activities. In order to avoid impacts to this species, construction of the Phase 2 boardwalk will be limited to August 1 through March 1. This timeframe is outside of the species' nesting period (Collins, 2005). This timeframe will also avoid peak tidewater goby spawning and the nesting season of the western snowy plover.

Construction work during Phase 2 would expose soils to erosion and possible sedimentation of the estuary downstream of the work site. The amount of erosion and sedimentation is expected to be minimal due to the implementation of standard BMPs in accordance with the state and county-required Storm Water Pollution Prevention Plan (SWPPP) for construction projects. The SWPPP would protect the gobies from significant sedimentation or turbidity impacts during construction.

The short-term construction-related impacts from Phase 2 to the tidewater goby are considered minor. It should be noted that the same types of environmental protection measures have been successfully utilized by Santa Barbara County for a previous bridge repair project and State Parks for several recent projects affecting the tidewater goby.

Endangered California least terns forage in the lagoon during the summer months, but would not be significantly affected by the project due to the short duration of construction and the incorporation of appropriate mitigation measures. Likewise, western snowy plovers would not be directly affected as the construction area is located well east of that species' nesting, roosting, and prime foraging habitat.

The project location was surveyed in 1989 for archaeological resources. No indications of archaeological resources were found in the immediate project vicinity. No significant historic resources are known to exist in the construction area.

For Phase 2, the following measures are proposed to be incorporated into the project to minimize impacts to biological resources:

1. Disturbance of the wetland shall be restricted to the minimum area necessary to accomplish project objectives. Removal of native vegetation shall be restricted.
2. Any excess materials excavated shall be transported to a designated waste or fill site.
3. Standard procedures shall be used to ensure that all equipment is maintained properly and free of leaks during operation and any necessary refueling or repairs are carried out with proper spill containment.

4. In order to avoid impacts to nesting savannah sparrows, construction shall be restricted to between August 1 and March 1. This timeframe will also avoid times of peak tidewater goby spawning and the nesting season of the western snowy plover.
5. Santa Barbara County shall hire a qualified biological monitor to conduct a pre-construction survey and to monitor construction activities throughout the project to minimize impacts to all biological resources, including special-status plant and wildlife species. The biological monitor shall be responsible for flagging areas where special-status species are located or concentrated, relocating any special-status species in jeopardy of being killed or injured by construction activities, and inspecting equipment and equipment staging areas for gas and oil leaks.
6. A silt fence shall be installed and maintained to surround the construction area as determined by the biological monitor for the duration of construction activities. A fine (less than one centimeter) mesh shall be used to avoid entrapment of amphibians or fish in the silt fence. The silt fence shall be monitored by a qualified biologist periodically during construction to evaluate its effectiveness. The fencing shall be maintained throughout the construction period and removed on project completion.
7. During the pre-construction conference with the contractor, the biological monitor shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the tidewater goby and southern steelhead, their habitats at the site, the specific measures that are being implemented to protect these species during construction, project limits and lines of communications concerning any issues with these species.
8. The biological monitor shall train all project personnel prior to participating in project implementation activities. At a minimum, the training will include a description of any state or federally listed species occurring in the area, the general provisions of the state and ESA and the necessity of adhering to the provisions of the Acts, the penalties associated with violations of the Acts, the general measures being implemented to conserve these species in the project area, and the specific measures and restrictions regarding project implementation.
9. All human generated trash at the project site shall be contained and removed from the work site and disposed of properly at the end of each workday. All construction debris and trash shall be removed from the work area upon completion of the project.
10. The construction contractor will provide the biological monitors with a schedule of planned construction activities 48 hours in advance.

11. All permit conditions, minimization measures, and BMPs shall be implemented to minimize potential adverse impacts to water resources.
12. An SWPPP will be developed and implemented by the contractor. Santa Barbara County shall approve and monitor implementation of the SWPPP. Santa Barbara County requires the SWPPP be submitted 15 days prior to start of work.
13. The biological monitor shall have the authority to require the contractor to stop work if a listed species is located in the work area, until such time that the species is relocated and the origin of the problem has been identified and corrected.
14. Santa Barbara County Flood Control shall review the project plans to insure that the boardwalk would not create or expose visitors to significant flood hazards.
15. After its construction, Santa Barbara County Parks Department shall monitor the boardwalk to insure that proper security is maintained, to avoid any impacts to sensitive resources from vandalism, littering, and other careless or unlawful activity.
16. Prior to construction, temporary exclusion fencing shall be placed along the work limits to prevent entry by the public, workers, or equipment into adjacent habitat areas.
17. Before beginning construction activities, exclusion nets and/or a drift fence shall be installed to exclude tidewater gobies, southern steelhead, and other special-status aquatic species from the project area. Prior to the initiation of construction, the monitor shall inspect the stretch of estuary channel to be crossed by the boardwalk. If water and tidewater gobies are present, the monitor shall sweep a net to relocate any gobies downstream.

Phase 2, like Phase 1, will have beneficial effects by providing access and opportunity for viewing estuarine wildlife and habitat. This boardwalk will allow the public to learn first hand about the importance of maintaining this invaluable natural resource and important habitat in a pristine condition. The Phase 2 boardwalk, in particular, may also help prevent uncontrolled pedestrian traffic into the estuary that can disturb sensitive habitats and wildlife. The boardwalks are not expected to bring additional visitors because the number of visitors will continue to be limited by the availability of parking spaces; the Phase 1 boardwalk will actually reduce the number of parking spaces.

In addition to the above cumulative impacts associated with the Boardwalk at Ocean Beach Park (Phase 1), many other local and regional activities may influence the ability

of our projects to create net population or species level benefits. Existing threats such as oil spills, El Niño impacts, and changes to prey availability may have negative impacts on the recovery of injured species populations. However, it is expected that the selected restoration actions described herein would at least work to offset potential adverse impacts of such occurrences. Any unanticipated adverse cumulative adverse effects from a proposed project identified prior to implementation will result in reconsideration of the project by the Trustees.

4.7 Moderately Preferred, Least Preferred, and Non-Preferred Restoration Alternatives

The following is a list of restoration alternatives that the Trustees considered for funding but have decided not to fund for reasons explained below. These projects were suggested to the Trustees by members of the public, non-profit organizations, and government agencies.

All of these projects were evaluated using the project selection criteria described above in Section 4.2, and were compared with the Most Preferred Restoration Alternatives. The Trustees will reevaluate these projects for possible implementation if 1) any of the Most Preferred projects described in this RP/EA prove infeasible, impractical, or otherwise not in the public interest; or 2) any funds remain after the successful implementation of the Most Preferred Alternatives described in this RP/EA. Additional environmental review will be conducted at the project level as necessary should the Trustees decide to reevaluate these alternative projects for implementation.

Table 3 – Moderately Preferred, Least Preferred, and Non-Preferred Restoration Alternatives (table continued on next page)

Ranking	Project Title
Moderately Preferred	
	Interpretive Center near Ocean Park
	Boardwalk or Stairs: Surf Station to Beach
	Black Abalone Restoration
	Cabrillo High School Aquarium
Least Preferred	
	Reduce Take of Intertidal Species: Enforcement and Education
	Dune Boardwalk from Ocean Beach Park to Surf Station
	Coastal Access Boardwalk from Ocean Beach Park to the Beach
Non-Preferred	
	Exotic Species Removal at Guadalupe-Nipomo Dunes
	Aquaculture Proposal
	Oil Spill Response Equipment Staging

Non-Preferred continued	
	Marine Mammal/Bird Rehabilitation Center
	Point Sal Improvements
	Point Sal Land Acquisition
	Ocean Beach Host Site and Interpretive Signage

Due to public comments received on the draft RP/EA, the Trustees changed some of the project rankings below from what was listed in the draft RP/EA.

4.7.1 Interpretive Center near Ocean Park

The Interpretive Center near Ocean Park (proposed by Surf-Ocean Beach Commission), would include a 2,500 square foot building to host interactive displays with self-guided tours. This proposal was categorized as Moderately Preferred due to the limit on the available funds for this type of project (only one recreational project can be implemented). Additionally, some of the educational elements of this project may be combined into the Rocky Intertidal Habitat Protection Program (see Section 4.5.1.4).

4.7.2 Boardwalk or Stairs: Surf Station to Beach

The Boardwalk or Stairs: Surf Station to Beach (proposed by Surf-Ocean Beach Commission), was categorized as Moderately Preferred. Due to the limit on the available funds for this type of project, only one recreational project can be implemented. Additionally, a boardwalk or stairs from Surf Station to the Beach proposal is in the area of the existing railroad and access to the boardwalk/stairs would overlap with a section of the Union Pacific Railroad (RR) property. The Trustees were informed that the RR would not provide access to its property for a boardwalk or stairs so the Trustees are unable to implement this project.

For safety reasons, a boardwalk or stairs in this area would likely require switchbacks to provide for a safe gradient, and thus would impact a large area of western snowy plover nesting habitat. Maintenance of safe conditions for a boardwalk/stairs in an area of actively blowing sand could also be problematic.

4.7.3 Black Abalone Restoration

The Trustees re-categorized the black abalone restoration project from a Most Preferred Project to a Moderately Preferred Project, after receiving a letter from the original project proponent suggesting that although black abalone were directly impacted by the Spill, before outplanting can be considered, a successful laboratory spawning effort and extensive genetics work on the current population is needed to determine whether such

efforts would help or further hinder the existing population's recovery. In addition, black abalone experts were consulted and although black abalone have been spawned in a laboratory, it is very difficult to do and much more research is needed. The original black abalone restoration proposal has been changed to a public education program with a focus on black abalone and other rocky intertidal species (see Section 4.5.1.4 Rocky Intertidal Habitat Protection Program).

4.7.4 Cabrillo High School Aquarium

A proposal to provide funds to the Cabrillo High School Aquarium (proposed by Surf-Ocean Beach Commission), has been ranked as Moderately Preferred due to the limited funds for projects in this restoration category. Some funds from the Rocky Intertidal Habitat Protection Program (see Section 4.5.1.4) and from the Seabird Colony Enhancement Project (see Section 4.5.1.1) will likely be provided to the Cabrillo High School Aquarium.

4.7.5 Reduce Take of Intertidal Species: Enforcement and Education

This proposal (submitted by MMS), was placed in the Least Preferred category because the CDFG is already responsible for protecting intertidal habitats, including enforcing applicable laws and regulations. Educational elements from this proposed project will be re-directed to the Rocky Intertidal Habitat Protection Program (see Section 4.5.1.4).

4.7.6 Dune Boardwalk from Ocean Beach Park to Surf Station

4.7.7 Coastal Access Boardwalk from Ocean Beach Park to the Beach

These two boardwalk projects are ranked as Least Preferred. The Dune Boardwalk from Ocean Beach Park to Surf Station project, if designed to maximize views from the back dunes between Ocean Beach Park and Surf Station, would likely impact nesting areas used by the western snowy plover, which would be inconsistent with restoration goals. If the boardwalk were designed to be out of the line of sight from sensitive nesting areas, the boardwalk would not provide the high quality coastal recreational experience that would be attractive to beachgoers. A Coastal Access Boardwalk from Ocean Beach Park to the beach was ranked as Least Preferred as it too would likely impact western snowy plovers and is therefore inconsistent with restoration goals. Additionally, the County of Santa Barbara expressed concerns regarding liability issues, VAFB issues, dynamics of the dune system, flooding of river/estuary, meandering of river mouth, limited public access due to beach closure during western snowy plover nesting season, and probable high maintenance costs due to these issues.

4.7.8 Exotic Species Removal at Guadalupe – Nipomo Dunes

This proposed project (submitted by the Land Conservancy of San Luis Obispo), proposes that funds be contributed to ongoing efforts to eradicate invasive species of iceplant and European beach grass in the Guadalupe-Nipomo Dunes Complex, a program that has been underway since 1999. The Trustees placed this proposal in the Non-Preferred Project category because an eradication and restoration project involving iceplant and European beach grass has already been proposed at VAFB, located at the beach that was directly and heavily impacted by the spill and is thus preferable due to a close nexus to the Spill. Additionally the funds available for dune restoration are limited (see Section 4.5.1.2 Sandy Beach and Dune Habitat Restoration).

4.7.9 Aquaculture Proposal

This project (submitted by Kimberly Casazza), proposes to establish a small scale restorative aquaculture center to enhance a locally important fish species that is under heavy fishing pressure and whose population is in decline. Because injuries to fish were not claimed, the Trustees have classified this proposal in the Non-Preferred category due to the low nexus and lack of funds for such a program.

4.7.10 Oil Spill Response Equipment Staging

This proposal (submitted by Jon Picciuolo), suggests the construction of an emergency response and oil spill equipment staging area in Lompoc Valley in readiness for a future spill. This proposal is characterized as Non-Preferred because oil spill response equipment is already nearby, e.g., Clean Seas in Carpinteria is an Oil Spill Response Organization (OSRO) with response equipment. Most oil companies have contracts with OSROs for spill response.

4.7.11 Marine Mammal/Bird Rehabilitation Center

This proposal (submitted by Jon Picciuolo), is to provide a staging center with a large quantity of wildlife rehabilitation materials and supplies for marine mammal and bird rescue operations that may be needed for any future oil spills. The Trustees categorized this proposal as Non-Preferred because there are already plans for two rehabilitation facilities near Santa Barbara and one is under construction in Morro Bay (as of July 2005). All three of these facilities will be participants in the Oiled Wildlife Care Network which has wildlife rehabilitation facilities up and down the California coast.

4.7.12 Point Sal Improvements

This proposal involves the development of minimal, rustic visitor serving facilities at Point Sal State Beach. The concept includes re-grading and graveling the parking lot; constructing a pit toilet and water system; and installing picnic tables, interpretive signs, and a stairway to the beach. The Trustees categorized this proposal as Non-Preferred because this project can only be considered if the Point Sal access road is repaired and re-opened (technical feasibility is questionable). Additionally, there are only limited funds available for recreational projects and this proposed project location is north of the area impacted by the Spill.

4.7.13 Point Sal Land Acquisition

The acquisition of, and/or improvement to, the Point Sal property has been categorized as a Non-Preferred project because of a relatively low nexus geographically to Spill injuries, and the existence of other recreational project proposals closer to the Spill area with lower costs. A large contribution of matching funds would be required and currently, there are no willing sellers of this property. Additionally, a number of comments were received from the public during the Scoping Phase requesting the Point Sal area not be improved to keep public access at a minimum to reduce impacts to the habitat.

4.7.14 Ocean Beach Host Site and Interpretive Signage

This project would involve constructing a host site at Ocean Beach. A trailer pad for a mobile dwelling unit would be built, along with appropriate lighting and electrical hookup equipment. Interpretative or education signage would be added throughout the park that provides information relating to environmental concerns, wildlife identification, and natural habitats surrounding Ocean Beach. Because the Trustees have already selected projects such as the Rocky Intertidal Habitat Protection Program (see Section 4.5.1.4) and the Boardwalk at Ocean Beach Park (Phase 1) (see Section 4.5.1.5), which will include some elements of this proposal, such as educational signage, and due to other concerns regarding long-term maintenance and vandalism at this remote location, this project has been categorized as Non-Preferred.

5.0 APPLICABLE LAWS AND REGULATIONS

5.1 Overview

The major laws guiding the natural resource damage assessment process and the development of this RP/EA are OPA and NEPA. These statutes and the regulations implementing them set forth specific processes for resource injury assessment, restoration planning, impact analysis, and public review. In addition, implementation of

selected restoration actions may trigger compliance with other applicable laws, regulations and policies at the federal, state and local levels. A brief description of relevant and potentially relevant federal and state laws, regulations or 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 the selected 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, Regulations and Executive Orders

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

OPA 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 RP/EA has been prepared jointly by CDFG, Service, VAFB, and CSLC. Each of these agencies is a designated natural resource Trustee in accordance with the OPA and/or State law for natural resources injured by the Torch 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). Opportunities for public participation are described above in Section 1.5. The NRDA regulations under OPA encourage the Trustees to invite responsible parties to participate in the NRDA and enter into agreements with them to promote cost-effectiveness and cooperation. 15 C.F.R. § 990.14(c). The Trustees extended such an invitation to the responsible parties and entered into a Cooperative Natural Resource Damage Assessment Agreement with the Responsible Parties. The Agreement

established a process by which representatives of the Trustees coordinated studies and other technical activities in the injury determination and quantification stages of the assessment with representatives of the Responsible Parties.

Regulations implementing OPA further mandate that federal trustees integrate the proposal of restoration action with NEPA compliance. 15 C.F.R. § 990.23.

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

The NEPA is the basic national charter for the protection of the environment. Its purposes are 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.” 42 U.S.C. § 4321. NEPA provides a mandate and a framework for federal agencies to consider all reasonably foreseeable environmental effects of their proposed actions and to involve and inform the public in the decision-making process. NEPA also established the Council on Environmental Quality in the Executive Office of the President to formulate and recommend national policies which ensure that the programs of the federal government promote improvement of the quality of the environment.

NEPA requires federal agencies to undertake an environmental analysis for “every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the human environment.” 42 U.S.C. § 4332(C). Significance under the NEPA regulations at 40 C.F.R. § 1508.27 requires consideration of both context and intensity. Context requires the action be analyzed in the appropriate setting. Both short- and long-term effects are relevant. And intensity refers to the severity of the impact.

Generally, when it is uncertain whether an action will have a significant effect, federal agencies will begin the NEPA planning process by preparing an EA. The EA may undergo a public review and comment period. Federal lead agencies may then review the comments and make a determination. Depending on whether the effects of a proposed project are considered significant, an Environmental Impact Statement or a FONSI will be issued.

Through development of the RP/EA, the Trustees have integrated OPA restoration planning with the NEPA process as required by OPA implementing regulations. 15 C.F.R. § 990.23. This integrated process allows the Trustees to meet the public involvement requirement of OPA and NEPA concurrently. Subsequent NEPA compliance may be required prior to implementation of the selected restoration actions described herein pending development of further project-level detail.

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

The Federal Water Pollution Control Act (commonly referred to as the Clean Water Act or the CWA) is the principle federal statute governing water quality. The CWA's objective is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA governs both the direct (point source) and indirect (non-point source) discharge of pollutants into the nation's waters.

Section 402 of the Act established the National Pollution Discharge Elimination System (NPDES) program. The Act allows EPA to authorize state governments to implement the NPDES program. 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 NPDES permit. Section 319 of the Act directs states to identify best management practices and measures to reduce non-point source pollution.

Section 311 of the CWA regulates, *inter alia*, the discharge of oil and other hazardous substances into navigable waters, adjoining shorelines, and waters of the contiguous zone. 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 to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into the waters of the United States. Section 401 of the Act provides that any applicant for a federal permit or license to conduct any activity which may result in any discharge into navigable waters must obtain certification of compliance with state water quality standards.

Rivers and Harbors Appropriation Act of 1899, 33 U.S.C. § 401, et seq.

The 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 U.S. Army Corps of Engineers with authority to regulate discharges of fill and other materials into such waters

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

The goal of the Coastal Zone Management Act of 1972 (CZMA) is to encourage and assist states to preserve, protect, develop and, where possible, restore and enhance valuable natural coastal resources. Participation by states is voluntary. The state of California implements the federally-approved California Coastal Management Program

(CCMP). The enforceable policies of the CCMP are found in Chapter 3 of the California Coastal Act of 1976.

For the California coast, except San Francisco Bay, the California Coastal Commission implements the CZMA (in the San Francisco Bay area, the implementing agency is the San Francisco Bay Conservation and Development Commission). The Commission is responsible for reviewing proposed federal and federally-authorized activities to assess their consistency with the CCMP. A federal agency must conduct its activities (including federal development projects, permits and licenses, and assistance to state and local governments) in a manner consistent with the CCMP. The process established to implement this requirement is called a consistency determination for federal activities and development projects, and a consistency certification for federal permits and licenses, and federal support to state and local agencies. The Trustees believe that all of the selected projects can be implemented in a manner that is consistent to the maximum extent practicable with the CZMA and the CCMP.

On June 1, 2007, the California Coastal Commission concurred with the Services' negative determination for the restoration actions selected in this RP/EA (Appendix B). However, this negative determination did not cover the Sandy Beach and Dune Restoration Project as this project is pending further NEPA review and final action by the project implementer and/or the Trustees. Also, Phase II of the Boardwalk at Ocean Beach Park project is not covered by this negative determination as this phase of the project is not ready for CZMA review and is not one of the restoration actions being proposed and funded as part of this RP/EA.

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

The purpose of the ESA is to conserve endangered and threatened species and the ecosystems upon which they depend. Under the ESA, the National Oceanographic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS), and the Service publish lists of endangered and threatened species. Pursuant to Section 7 of the ESA, each federal agency shall, in consultation with, and in consultation with the Secretary of the Interior/ Secretary of Commerce, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Before initiating an action, the federal action agency, or its non-federal permit applicant, may ask the Service and/or NMFS to provide a list of threatened, endangered, proposed, and candidate species and designated critical habitat that may be present in the project area. If the federal action agency determines that the action will have no effect on listed species, then the federal action agency has no further ESA obligation under Section 7 and consultation is concluded. Although not required, the federal action agency may request written concurrence from the Service and/or NMFS that the proposed action will have no effect on listed species or critical habitat.

If the federal action agency determines the project may affect a listed species or critical habitat, consultation is required. For major construction activities, a biological assessment is required to assist in the determination of whether the proposed action is likely to adversely affect listed species and critical habitat. For actions that are not major construction activities, the federal action agency must provide the Service and/or NMFS with an account of the basis for evaluating the likely effects of the action.

If the action agency determines and the Service and/or NMFS concurs that the project is not likely to adversely affect any listed species or critical habitat, then the consultation (informal to this point) is concluded and the decision is put in writing. If the federal action agency determines that a project is likely to adversely affect a listed species or designated critical habitat, formal consultation is required. There is a designated period of time in which to consult (90 days), and beyond that, another set period of time for the Service and/or NMFS to prepare a biological opinion (45 days). The determination of whether or not the proposed action would be likely to jeopardize the species or adversely modify its critical habitat is contained in the biological opinion. If a jeopardy or adverse modification determination is made, the biological opinion must identify any reasonable and prudent alternatives that could allow the project to move forward.

The Trustees do not believe any of the selected restoration actions would likely adversely affect a listed species or critical habitat. However, for each selected project, the Trustees will evaluate the potential effects of the project on listed species or designated critical habitat and will perform the appropriate level of consultation with the Service and/or NMFS pursuant to the requirements of the ESA. On May 15, 2007, the Service conducted an intra-Service Section 7 biological evaluation and concluded that the proposed restoration actions in this RP/EA would either have no effect, or not be likely to adversely affect, listed species and/or their designated critical habitat (Appendix B).

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

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended and reauthorized by the Sustainable Fisheries Act of 1996, 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 Service, on behalf of the Trustees, consulted with the NMFS regarding the Mussel Bed Restoration project (Appendix B). On February 22, 2007, the NMFS concluded that the anticipated adverse effects of this project are minimal and no EFH conservation recommendations are necessary for the protection of fish resources and EFH.

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

The Fish and Wildlife Coordination Act (FWCA) provides the basic authority for the Service involvement in the evaluation of impacts to fish and wildlife from proposed water resource development projects. The FWCA requires that federal agencies consult with the Service (and/or the NMFS as may be appropriate), 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 any of the selected actions to trigger application of the FWCA.

Marine Mammal Protection Act, 16 U.S.C. § 1361, et seq.

The Marine Mammal Protection Act (MMPA) prohibits, with certain exceptions, the take of marine mammals in U.S. waters and by U.S. citizens on the high seas, and the importation of marine mammals and marine mammal products into the U.S. The Secretary of Commerce is responsible for the conservation and management of pinnipeds (other than walruses) and cetaceans. The Secretary of Commerce delegated MMPA authority to NOAA Fisheries. The Secretary of the Interior (through the Service) is responsible for walruses, sea otters, polar bears, manatees, and dugongs. Title II of the MMPA established an independent Marine Mammal Commission (and its Advisory Committee) which provides independent oversight of the marine mammal conservation policies and programs being carried out by the federal regulatory agencies. The Commission is charged with developing, reviewing, and making recommendations on domestic and international actions and policies of all federal agencies with respect to marine mammal protection and conservation and with carrying out a research program. The MMPA provides for several exceptions to the moratorium on taking and importation of marine mammals and marine mammal products. The Secretary may issue permits for take or importation for purposes of scientific research, public display, photography for educational or commercial purposes, enhancing the survival or recovery of a species or stock, importation of certain polar bear parts taken in sports hunting in Canada, and incidental taking in the course of commercial fishing operations.

The Trustees do not believe that any of the selected actions have the potential to result in the take, injury or harassment of 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 to provide for avian protection by the federal government. The MBTA generally 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 Service. These permits include special use permits for rehabilitation, possession and salvage 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.

The Trustees do not expect that implementation of any of the selected actions would result in any action prohibited by the MBTA. Consultation with the Service will occur as appropriate.

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

The National Marine Sanctuaries Act (NMSA) authorizes the Secretary of Commerce (Secretary) to designate and manage areas of the marine environment with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or esthetic qualities as national marine sanctuaries. Day-to-day management of national marine sanctuaries has been delegated by the Secretary to the National Marine Sanctuary Program. The primary objective of the NMSA is to protect marine resources, such as coral reefs, sunken historical vessels or unique habitats.

The NMSA prohibits the destruction, loss of, or injury to any sanctuary resource. The 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 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.

The Trustees do not believe any of the selected restoration actions would adversely affect any marine sanctuary resource. If any of the selected restoration actions are implemented within a Sanctuary, they will be conducted in full compliance with the NMSA.

Information Quality Act, 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 RP/EA is an information product covered by information quality guidelines established by DOI for this purpose. The quality of the information contained herein is consistent with these guidelines, as applicable.

Executive Order 11988 – Construction in Flood Plains

The 1977 Executive Order seeks 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 federal 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 environmental impact statement prepared pursuant to NEPA. 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 11990 – Protection of Wetlands

This 1977 Executive Order seeks to avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. Pursuant to this executive order, each federal agency, to the extent permitted by law, shall avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds (1) that there is no practicable alternative to such construction, and (2) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. In making this finding the head of the agency may take into account economic, environmental and other pertinent factors. Executive Order 11990 does not apply to the issuance by federal agencies of permits, licenses, or allocations to private parties for activities involving wetlands on non-federal property.

Executive Order 13112 - Invasive Species

The 1999 Executive Order 13112 requires that all federal agencies whose actions may affect the status of invasive species shall, to the extent practicable and permitted by law, (1) identify such actions; (2) take actions specified in the Order to address the problem consistent with their authorities and budgetary resources; and (3) 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 12898 - Environmental Justice

The 1994 Executive Order 12898 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. In the memorandum to heads of departments and agencies that accompanied Executive Order 12898, the President specifically recognized the importance of procedures under NEPA for identifying and addressing environmental justice concerns. The memorandum states that "each Federal agency shall analyze the environmental effects, including human health, economic and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by [NEPA]." The memorandum particularly emphasizes the importance of NEPA's public participation process, directing that "each Federal agency shall provide opportunities for community input in the NEPA process." Agencies are further directed to "identify potential effects and mitigation measures in consultation with affected communities, and improve the accessibility of meetings, crucial documents, and notices." The Council on Environmental Quality has oversight of the federal government's compliance with Executive Order 12898 and NEPA.

The Trustees have concluded that there are no low-income or ethnic minority communities that would be adversely affected by implementation of any of the selected restoration actions. Additionally, the Trustees will make every effort to involve the affected community by providing notice to members of the public and access to related documents.

5.2.2 State Statutes

California Environmental Quality Act, California Public Resources Code § 21000-21178.1

CEQA was adopted in 1970, and its basic purposes are to inform California governmental agencies and the public about the potentially significant effects of proposed activities, identify ways that environmental damage can be avoided or significantly reduced, prevent significant avoidable damage to the environment through adoption of feasible alternatives or mitigation measures, and to disclose the reasons for agency approval of a project resulting in significant environmental effects.

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 a discretionary action that is carried out, funded or authorized by an agency and that has the potential to impact the environment. Once the lead agency for the project determines that the project is subject to CEQA, the lead agency must then determine whether the action is exempt from CEQA compliance under either a statutory or categorical exemption. Examples of categorical exemptions include actions taken by regulatory agencies for protection of natural resources and actions by regulatory agencies for protection of the environment (Title 14 CCR, Chapter 3, § 15307-15308).

If the lead agency determines that the project is not exempt, then an Initial Study is generally prepared to determine whether the project may have a potentially significant effect on the environment. Based on the results of the Initial Study, the lead agency determines whether to prepare a Negative Declaration (*i.e.*, the project will not result in significant adverse effects to the environment) or an EIR. The test for determining whether an 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 adverse effect on the environment.

CEQA encourages the use of a federal EIS or FONSI prepared pursuant to NEPA when such documents are available, or the preparation of joint state/federal documents, in lieu of preparing a separate EIR or negative declaration under CEQA. Accordingly, this RP/EA and subsequent FONSI, if issued, may be relied upon by the state Trustee agencies or other state or local agencies towards compliance with CEQA as required for discretionary projects that are authorized, funded or carried out by California state or local agencies. To this end, the state Trustees will coordinate with the federal Trustees to ensure the RP/EA and FONSI meet the provisions of CEQA Guidelines including state public review requirements.

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

The Lempert-Keene-Seastrand Oil Spill Prevention and Response Act became effective on September 24, 1990. This legislation is the key state compensatory mechanism for subsequent spills and 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 § 30000, et seq.

The California Coastal Act was enacted by the California 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 [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. New development in the Coastal Zone may require a permit from the Commission or the appropriate local government agency. The Commission also reviews and approves Local Coastal Programs, which are the basic planning tools used by local governments to guide development in the Coastal Zone.

For projects that propose new development (*i.e.*, Boardwalk at Ocean Beach Park (Phase I)), the lead agency responsible for implementing that project will seek the necessary permits and approvals including any required coastal development permit.

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

Pursuant to the California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 *et seq.*), it is the policy of the state of California that state agencies should not approve projects as proposed that 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. However, if reasonable alternatives are infeasible, individual projects may be approved if appropriate mitigation and enhancement measures are provided.

Pursuant to the CESA, the Fish and Game Commission has established a list of threatened and endangered species based on criteria recommended by the California Department of Fish and Game. Section 2080 of the California Fish and Game Code prohibits "take" of any species that the Commission determines to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The CESA allows for take incidental to otherwise lawful development projects. The CESA emphasizes early consultation to avoid potential impacts to rare, endangered, or threatened species and to develop appropriate mitigation planning to offset project-caused losses of populations of listed species and their essential habitats.

The Trustees do not believe any of the selected restoration actions would adversely affect state-listed species, but will consult with CDFG as appropriate for projects implemented in areas of state jurisdiction. The CDFG Habitat Conservation and Planning Branch (HCPB) will review the CEQA documentation filed for selected actions requiring CEQA compliance, e.g., Boardwalk at Ocean Beach Park (Phase 1) project, comment on any impacts arising from project activities, and make recommendations regarding those resources held in trust for the people of California. The CDFG HCPB is also responsible for implementing CESA and will determine if CESA permitting requirements are triggered. Also, in instances where CDFG implements or authorizes activities in areas of state jurisdiction, e.g., issues a CESA permit, CDFG may act as a lead or responsible agency under CEQA. Public Resources Code, Division 6, § 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.

5.2.3 Other Potentially Applicable Statutes, Regulations and Executive Orders

Additional statutes, implementing regulations or executive orders may be applicable to NRDA restoration planning activities. Additionally, local permits or other local requirements may apply. Following are some additional potentially applicable federal and state statutes and federal executive orders.

- National Park Act of August 19, 1916 (Organic Act), 16 U.S.C. § 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 11991 – Relating to the Protection and Enhancement of Environmental Quality
- Porter-Cologne Water Quality Control Act, California Water Code, § 13000 *et seq.*

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Torch/Platform Irene Oil Spill
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APPENDICES

APPENDIX A: Public Comments Received on Draft RP/EA and Agency Responses

APPENDIX B: Environmental Compliance Documentation

APPENDIX C: Mailing List

APPENDIX A

Public Comments Received on Draft RP/EA and Agency Responses

APPENDIX A

Comments Received On The Draft Torch Restoration Plan/Environmental Assessment And Responses To Comments

This Appendix to the Final Torch Restoration Plan/Environmental Assessment presents copies of all of the comments received on the draft Torch Restoration Plan/Environmental Assessment. The comments have been numbered and are followed by written responses. The comment letters and emails are presented in their entirety with the exception of comments that simply endorsed the La Purisima Audubon Society's (LPAS) comments. The LPAS comments had a number of endorsements that included no other comments in that case, the number of endorsees were tallied and noted in the response to LPAS's comments.

Individual comments in each comment letter/email are boxed and an alpha-numeric identification code was assigned to provide the reader with an easy way to identify which comment is being responded to. The identification code appears at the beginning of each boxed comment and is in all capitals. For example, in the letter from Point Reyes Bird Observatory Conservation Science, the first boxed comment is PRBO-1. Each comment letter/email is followed by the written response. The letters and responses are organized alphabetically.

From: "Tam Taaffe" <bima55@msn.com>
To: "Melissa Boggs-Blalack" <Mboggs@OSPR.DFG.CA.GOV>
Date: Mon, Jun 19, 2006 9:59 PM
Subject: Fw: Endorsement Letter- Hope this helps.

Dear Melissa,
I'm just ensuring that you have this (glowing!) endorsement. I hope you have your shades on!

Regards,
Tamarah Taaffe
----- Original Message -----

From: Morgan Ball<mailto:morgan.ball@comcast.net>
To: Tam Taaffe<mailto:bima55@msn.com>
Sent: Monday, June 19, 2006 9:46 PM
Subject: Endorsement Letter- Hope this helps.

La Purisima Audubon Society
Lompoc, California
19 June 2006

Regarding: Endorsement of La Purisima Audubon Society's Ocean Beach Park Public Recreation Enhancement Plan.

Dear Ms Taaffe,

BALL-1

I would like to offer my endorsement to the La Purisima Audubon Society's plan to enhance public recreation at Ocean Beach Park by constructing a low impact boardwalk extending from the public parking lot west through the coastal dunes to the beach. La Purisima Audubon Society's proposed plan has successfully struck the balance between the need for improved public access and recreation with the requirements of our county's fragile ecosystem. This coastal boardwalk plan will provide excellent interpretive education opportunities while thoughtfully diverting public traffic away from sensitive wildlife areas.

I am a wildlife biologist that has lived and worked in Santa Barbara County for the past nine years. This is one of the first plans I have seen that truly serves everybody and everything. On the other hand, I feel the alternative plan to extend a viewing platform into the Santa Ynez estuary is a misguided one. There is little to be gained in terms of recreation for the public and much to be lost by sensitive estuary wildlife. Good coastal planning requires an environmentally balanced approach. For this reason, I highly suggest the Torch Plan Mitigation Board put La Purisima Audubon Society's plan into action.

I appreciate what La Purisima Audubon Society is proposing for our local community and regional wildlife. These sorts of environmentally minded public endeavors make our county a wonderful place to live.

Sincerely, Morgan Ball, Wildlife Biologist, Lompoc, California

>>> "Charles E. Blair" <blairce@sbceo.org> 06/21/06 1:33 AM >>>
Melissa Boggs-Blalack & Tam Taaffe,

BLAIR-1 As an intermediate level botanist and twelve year resident of the Lompoc Area familiar with many of the issues and concerns surrounding Surf and Ocean Beachs, Santa Ynez River Estuary, and coastal portions of VAFB, I have reviewed this proposal; discussed it at some length with Tam and others; and visited these areas. I support the overall concept, and would like to add a few general and specific comments.

BLAIR-2 1. Enhancing the beach and fore dune habitats benefits the plant communities as well as Snowy Plover survival.
2. Control of invasive, stand-changing weeds such as European Beach Grass and Ice Plants will encourage the return of common as well as rarer native plant species. Timing of efforts can avoid Snowy Plover breeding and nesting seasons. An Integrated Weed Management plan can incorporate the judicious use of herbicides, such as an aquatic-friendly formulation of glyphosate, along with other measures.

BLAIR-3 3. Proper placement of boardwalks can improve public access while reducing damage to fragile dune and estuary areas. The recycled materials and placement used in the Elfin Forest in Los Osos along the southern edge of the Morro Bay Estuary have been very effective over a several year period.

In addition to my medical background, I have been a life-long amateur naturalist focusing on native plants for the last 15-20 years. Since my retirement, I have been studying plant science, ecology, and natural resource management at Cal Poly SLO, and have worked part-time in the VAFB Natural Resource Protection section of the Environmental Flight. I am also an active member of the California Native Plant Society and the Lompoc Valley Botanic and Horticultural Society.

Charles E. Blair, M.D.
Lt. Col. USAF, MC (ret)

From: "Mark Brown" <lawoffmarkbrown@verizon.net>
To: "'Tam Taaffe'" <BIMA55@MSN.COM>, <mboggs@ospr.dfg.ca.gov>
Date: Wed, Jun 21, 2006 5:06 PM
Subject: Dune Walk at Ocean Park

To whom it may concern:

BROWN-1 I have been an active birder since 1979 and I bird watch frequently at Ocean Park. I am in favor of a boardwalk out to the dune area. It is my opinion that in the non-Snowy Plover times of the year a boardwalk will facilitate public use of this area while limiting harassment of wildlife. I am opposed to the estuary boardwalk. Many bird species who winter in the estuary use this area especially the spartina and salicornia plants. This boardwalk may limit their uses of these resources.

Thank you

Mark Brown. Esq.

704 S. McClelland St.

Santa Maria, CA 93454

(805) 347-0078

Melissa Boggs-Blalack
Environmental Scientist
California Department of Fish and Game
Oil Spill Prevention and response
213 Beach St
Morro Bay CA 93442-2080
(805) 772-1756 Fax 7569
mboggs@ospr.dfg.ca.gov

To the Trustee Council:

CHESNUT-1 I am pleased to endorse the modified disbursement plan presented by the La Purisima Audubon Society for the Torch/Irene oil spill funds.

I have observed the beneficial effects of dune boardwalk construction active enjoyment of the foredunes by simplifying access for people of all abilities, and on natural resources protected by foot traffic being restricted to a controlled accessway. Successful boardwalks in my experience are found in Los Osos Elfin Forrest, Montaña de Oro State Park and the Sweet Springs Audubon Preserve.

I believe the LPAS is correct in expressing caution over the introduction of more human impact to the estuary wetlands. The trustee council should proceed caution on the proposal to build a boardwalk into the resting and loafing area of migratory waterfowl. The boardwalk at San Simeon Beach is arguably similar in impacts to a previous inaccessible area and can be studied as a prototype.

Thank you for your consideration of my observations.

John Chesnut.
805-528-0833

From: "rfink" <rfink@impulse.net>
To: <Mboggs@ospr.dfg.ca.gov>
Date: Mon, Jun 19, 2006 4:30 PM
Subject: Boardwalk and Viewing Platform at Ocean Beach Park Estuary

Melissa Boggs-Blalack, Environmental Scientist

California Dept of Fish and Game

Oil Spill Prevention and Response

213 Beach Street

Morro Bay, CA 93442

FINK-1 I support the funding and construction of a boardwalk viewing platform at Ocean Beach Park. I realize that the sum allotted in the draft Restoration Plan was significantly less than what it will take to build the platform, but the contribution such a project will make to preserve the estuary and the education value of this project is priceless!

Thousands of residents, students, visitors, bird watchers and scientist will use the boardwalk for decades. The recreational and educational impact will be huge and multi generational. While the Docent program was in effect at Surf Beach to help protect the western snowy plover, an annual average of 30,000 visitors made their way to this out of the way beach site. That did not include the residents of Lompoc who use the beach year-around.

Please reconsider the allocation of funds for this project, it will endure the test of time and stand as a reminder that good stewardship of the land is essential to the survival of shorebird colonies.

Ron Fink
1332 North E Court
Lompoc, CA 93436
805-735-1720

From: "rfink" <rfink@impulse.net>

To: <Mboggs@ospr.dfg.ca.gov>
Date: Mon, Apr 17, 2006 4:31 PM
Subject: Comments-Torch/Platform Irene Draft Restoration Plan

Melissa Boggs-Blalack

Environmental Scientist

California Department of Fish and Game, Oil Spill Prevention and Response

213 Beach Street

Morro Bay, California 93442

Ms. Boggs-Black;

I have read the Torch/Platform Irene Draft Restoration Plan and Environmental Assessment and I have some reservations with one element of the plan.

FINK-2 First, I support the Sandy Beach and Dune Habitat Restoration, Public Education and Boardwalk and Viewing Platform at Ocean Beach Park Estuary portions of the plan. These are essential to the preservation of shorebird habitats at Surf Beach and Ocean Park and will generally improve the beach going experience for visitors.

FINK-3 However I take issue with the Seabird Colony Enhancement Project, which is the dominate project in the plan. Its reach is to the Channel Islands, which is well beyond the area impacted by the spill.

The stated goal of this project is "to restore injured seabird resources to pre-spill or baseline conditions". It was estimated that between 635 and 815 seabirds and shorebirds were adversely impacted from the spill. The report theorizes that: "It is important to realize that following an oil spill, only a fraction of the birds injured are actually recovered." For the 635 and 815 seabirds and shorebirds that were killed or injured, this is true, but how did the spill impact the remaining birds?

FINK-4 The detailed descriptions and analyses of the injury assessments described on page 19 of the plan do not establish pre-spill bird populations, therefore the injury assessments are simply raw data associated with the number of birds collected and the number that investigators theorize were damaged. But, there is no empirical evidence presented to support the theory that any bird species was permanently impacted by the spill.

FINK-5 As stated in the plan: "At least 163 barrels (or 6,846 gallons) of petroleum products were released into the Pacific Ocean from the underwater pipeline. The Spill moved through approximately 120 feet of water column to the ocean surface. Subsequent movement of crude oil resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, impacting sandy beaches and rocky intertidal areas from Minuteman Beach to Boathouse Beach along the VAFB coastline."

All of the direct impacts of this spill were confined to the immediate area described above, none occurred elsewhere. If one were to study the impacted area today, I would suggest that the impacts of this spill have been mitigated by nature and the habitat has recovered without much help from man.

If you consult the Western Snowy Plover studies conducted by Vandenberg AFB, you would probably find that this species has actually propagated and is flourishing since the spill occurred.

If the Seabird Colony Enhancement Project were deleted, it leaves the Office of Spill Prevention and Response with a sizable fund for projects that could benefit the area damaged by the spill as Congress intended when it passed the Oil Pollution and National Environmental Policy Act's.

FINK-6 In place of the Seabird Colony Enhancement Project, I would support broadening the scope of the Public Education program, which would be of far greater benefit to both the area impacted by the spill and environmental awareness in general.

I advocate constructing an Interactive Interpretive Center near the Restrooms at Ocean Park. This project would provide a venue for local environmental advocacy groups (Sierra Club, Audubon, Etc) to teach children and beach visitors about the importance of the estuary and the seashore. I envision that this project would include a 2,500 square foot building with various alcoves and infrastructure to host interactive displays by the Cabrillo High School aquarium, Allan Hancock College biology department, Vandenberg AFB and the County of Santa Barbara.

The second expansion of the Public Education program would be to contribute grant funds to the Cabrillo High School Aquarium, a part of the Lompoc Unified School District and the Allan Hancock College biology program. Nurturing these programs will serve to educate local youth and adults on the merits of sound environmental stewardship and showcase the Surf Beach, Ocean Park and estuary areas for their educational value. The Cabrillo High School aquarium program specifically targets high school students and has received high praise from the scientific community throughout the world.

Both of these projects were considered and rejected by the cooperators in this restoration project. I would urge you to give greater weight to the impact that these two projects would ultimately have of the environment in general and the habitat at Surf Beach and the Ocean Park/Santa Ynez River estuary.

Torch Trustee Council Note To File

FIST-1 On April 21, 2006 at 8:30am I received a voice mail message from Mr. Michael Fist (805-735-5115) from Lompoc. Mr. Fist's message was that he suggests keeping Surf Beach open year round and that nesting Western snowy plovers could be protected by installing fencing.

From: "Wes & Sharon Fritz" <res0kvpn@verizon.net>
To: "Tam Taaffe" <bima55@msn.com>
Date: Wed, Jun 21, 2006 10:56 PM
Subject: Re: Please respond to Melissa and myself by midnight tonight.

FRITZ-1 I endorse all aspects of this [LPAS comments] document. And am highly opposed to the salt marsh boardwalk. It will most likely wash out during the next storm and if you look where it is proposed to be located, there are piles of large debris such as trees and logs. I think this plan is poorly thought out.

Wes Fritz
Director
La Purisima Audubon

Mark Holmgren, Biologist
P.O. Box 13862
Santa Barbara, CA 93106
maholmgren@yahoo.com

Melissa Boggs-Blalack
Environmental Scientist
California Department of Fish and Game
Oil Spill Prevention and Response
213 Beach St
Morro Bay, CA 93442-2080

21 June 2006

Dear Ms. Boggs-Blalack:

HOLMGREN-1 Thank you for the opportunity to comment on the **Torch/Platform Irene Oil Spill Draft Restoration Plan and Environmental Assessment**. I offer my comments on the proposals put forth by the Trustee Council and I offer support for the critique and alternate proposal presented to you by the La Purisima Audubon Society. Their proposal for a boardwalk over the dunes to the west of Ocean Park was previously considered and classed as Lowest Priority. I urge the council to revisit this alternative. Furthermore, I propose that the best single opportunity to correct damage caused by the spill is to prepare a recovery and restoration plan that covers the intertidal zone, beach, dunes, and estuary of the Santa Ynez River.

HOLMGREN-2 Achieving a Nexus of Remedy to Impact. The Torch/Platform Irene Oil Spill Draft Restoration Plan and Environmental Assessment relies mostly, although not exclusively, on geographical and species overlaps to establish a 'fit' between the impact and the remediation. Two additional criteria may be used to choose projects. First, is the project consistent with, or does it facilitate, one or more of the natural processes within the ecosystem damaged? Second, does the project serve as a 'keystone' action within the ecosystem? Keystone actions are those that, once completed, facilitate other actions, which together achieve a beneficial outcome for the ecosystem. Suites of actions conducted in the context of an overall plan for ecosystem restoration and recovery provide the best fit of remedy to impact.

HOLMGREN-3 Seabird Colony Protection Program. *This project would protect seabirds by reducing human disturbance of roosts and colonies.* Extension of the Gulf of the Farallones National Marine Sanctuary (GFNMS) and the Seabird Colony Protection Program southward is a good concept, but it is not a practicable project because the kinds of threat to seabirds on VAFB are very different from those north of the base. An analysis of threats would allow careful targeting of the problems on VAFB and it would allow one to determine whether GFNMS Seabird Colony Protection Program is a suitable fit for Vandenberg Air Force Base. Such an analysis is not presented in the Draft Restoration Plan. Although protection of seabird colonies is appropriate, if not necessary, my brief evaluation suggests that this particular proposal it is not a fit. Lacking also is a discussion of how conflicts between resource protection and the military mission may be resolved. A program that ignores exempted or pardoned military activities compromises the program objectives from the start.

The educational outreach component seems broad, but it misses an important population – the soldiers on the base who are in the most frequent proximity to nesting seabirds.

HOLMGREN-4 2. Sandy Beach and Dune Habitat Restoration. *This project would eradicate invasive plant species and replant native vegetation more conducive to the propagation and survival of indigenous species.*

This proposal in conjunction with a dune boardwalk alternate proposal provides a service to a community user group. It can highlight dune restoration as it educates the public. By focusing human transit to a single corridor through the dunes, we protect both restored vegetation and the plovers. As an elevated track, the boardwalk can provide excellent viewing opportunities of the lower portion of the estuary. Finally, by protecting the dunes through restoration and a boardwalk, we might expect benefits to not only Snowy Plovers but also to Horned Lark, a species that is declining dramatically in the region.

HOLMGREN-5 3. Mussel Bed Restoration. *This project would accelerate natural restoration along rocky intertidal areas.*

I have no familiarity with restoration that targets this animal and cannot comment on this proposal. One might ask, however, whether mussel beds in intertidal habitats on VAFB are showing signs of difficulty with regard to recruitment. Are mussels competing with other more threatened intertidal organisms? These are important questions to address as this option is considered. The Draft Restoration Plan would benefit from more background data on this proposal.

HOLMGREN-6 4. Public Education Program – Focus on Abalone and Rocky Intertidal Species.

This would seem to be a worthwhile proposal.

HOLMGREN-7 5. Boardwalk Ocean Park to Estuary. *This project would include a boardwalk from Ocean Beach Park into the estuary and an estuary viewing platform.*

This proposal overlooks and conflicts with the dynamic nature of the estuary. While the area proposed for placement of the boardwalk has not changed greatly in recent years, it brings up a question of how one should treat degraded areas within a degraded but still fragile ecosystem. Actions such as the one proposed should be undertaken only in the context of a plan for the entire ecosystem. VAFB has no such plan at this time.

Problems with the boardwalk proposal on the estuary E of Ocean Park are as follows:

1. The boardwalk provides only minor additional viewing opportunities beyond those provided at the parking area.
2. Placement of structures in the estuary interferes with estuarine processes and ecological functions.
3. The structure is at risk as soon as it is in place. It is highly likely to be damaged or destroyed by floods. Whose responsibility will it be to maintain the boardwalk, with what funds, and for how long will those funds be available?
4. The boardwalk creates an avenue for predators into Savannah Sparrow nesting and foraging habitat.

5. The urge to protect the investment in the boardwalk may shift focus away from future projects that might be more beneficial to the estuary. For example, a historical perspective of the estuary would direct our attention to those portions that need to be subjected to riverine scouring. River flow during rain and flood events, of course, both clears sediment and deposits new alluvium. Over the years, the pattern and balance of clearing versus deposition of sediment is greatly affected by structures placed in the estuary. This boardwalk will lead to greatly increased deposition in the southwest section. This is an area already heavily laden with sediment and losing its estuarine functions and, therefore, its value as each year passes.

HOLMGREN-8 Based on good evidence that structures in the estuary trap sediment (see Figure 11 in Chapter 6 of Holmgren and Collins, 1999)¹, it's easy to see that the public is better served by actions that can reverse this trend caused by structures placed in the SYRE. La Purisima Audubon has proposed removal of a defunct road that for 65 years has reduced channel meandering and obstructed the beneficial effects of a fluctuating channel through the estuary. We recommended this (see Management Recommendation #3 in Chap. 11) and other actions that offer hope for a restored estuary. It's my sense that these recommendations from 1999 can inform present proposals and that the remediation from the Torch oil spill is best directed to the creation of a management plan for the Santa Ynez River Estuary.

Again, thank you for the opportunity to comment on the Draft Restoration Plan and Environmental Assessment for the Torch/Platform Irene Oil Spill.

Sincerely yours,

Mark Holmgren

¹ Holmgren, M.A. and P.W. Collins (eds.) 1999. Distribution and Habitat Associations of Six Bird Species of Special Concern at Vandenberg Air Force Base, Santa Barbara County, California. University of California, Santa Barbara, Museum of Systematics and Ecology, Environmental Report No. 7 or Santa Barbara Museum of Natural History Monographs No. 1. Studies in Biodiversity No. 1.

From: "Tam Taaffe" <bima55@msn.com>
To: "Melissa Boggs" <mboggs@OSPR.DFG.CA.GOV>
Date: Tue, Jun 20, 2006 1:11 PM
Subject: Re: Fw: Endorsement Letter- Hope this helps.

Hi Melissa,

I was hoping to send you a final document which would list all of the endorsers, but you are welcome to have what I've sent out. Please let me know if this is sufficient. The top portion addresses the endorsers, so I'll send you a copy of the entire document, and the copy of only the LPAS proposal/reply to CDF&G is everything under the line of stars. This is our first effort at this sort of thing, and your kind assistance has been invaluable.

Warmest regards,
Tamarah Taaffe

Hello from La Purisima Audubon Society,
Please find below La Purisima Audubon Society's (LPAS) reply to the California Dept. of Fish & Game Trustee Council (CDF&G-TC) regarding their planned disbursement of funds from the oil spill off of Surf Beach in 9/97.

Our reply and endorsements are due on June 21st so please respond within the next several days. If you'd like to endorse our reply, please reply to sender and CC the CDF&G at mboggs@ospr.dfg.ca.gov<about:blank>

As an option, you may add comments. Should you prefer to endorse via fax, etc., please see the trustee council point of contact info (Melissa Boggs-Blalack).

Your endorsements are an important element in the consideration of the CDF&G-TC in the implementation of our proposals. We'd like the funds to be applied to local projects. Many migratory birds (such as those killed from the effects of the Torch/Platform Irene oil spill) roost and rest while at the Santa Ynez River Estuary (SYRE). Our aims are:

- 1) To enrich the SYRE and the dunes on Ocean Park Beach as habitats
- 2) To limit the disturbances to the SYRE at the river mouth while allowing anyone access toward the shore

CDF&G-TC proposed five projects and how to carry them out (refer to the link in our proposal) and La Purisima Audubon has replied to those proposals and have included proposals for:

- 1) A dune boardwalk enables access to the Ocean Park Beach. A boardwalk above dune vegetation & away from the river mouth will aid restoration of natural habitats.
- 2) A dune boardwalk constructed concurrently with dune habitat restoration. The safety of nesting songbirds, Western Snowy Plovers, and other wildlife will be regarded by trained wildlife biologists already in place for the dunes restoration project.

3) We request funds to train local support to limit heat loss in local oiled birds in the future. The satellite areas of the Oiled Wildlife Care Network, which are over an hour away in either direction, can be assisted by local personnel who'll address heat loss in oiled birds, minimizing avian mortality. Hypothermia is deadly to oiled birds.

4) We are against putting a small boardwalk into the estuary at Ocean Beach Park. This is the "other" (estuary) boardwalk.

5) We feel it's more important to restore the estuary to normal capacity and then evaluate how best to enjoy the resurgence of wildlife. The estuary stability is imperiled due to the misdirection of fresh water, which affects wildlife by altering their habitat.

6) We're asking for all of the unassigned funds go toward the dune boardwalk or restoration of the estuary plan. This leaves LPAS unable to support the (other) boardwalk which intrudes into a bucolic area already in distress.

If you have any questions please call or fax Tam Taaffe at 805-733-5501 (preferred) or cell 588-5175 or 588-2891 most anytime, early or late times are okay. If you'd like to share this document with other potential endorsers, please give them a courtesy call explaining what our document is prior to forwarding it.

Regards,

Tam Taaffe

TPIOSCRP Committee chair

LPAS Treasurer

Melissa Boggs-Blalack
Environmental Scientist
California Department of Fish and Game
Oil Spill Prevention and response
213 Beach St
Morro Bay CA 93442-2080
(805) 772-1756 Fax 7569
mboggs@ospr.dfg.ca.gov<mailto:mboggs@ospr.dfg.ca.gov>

Dear Trustee Council:

The La Purisima Audubon Society, a chapter of Audubon California and the National Audubon Society, appreciates the opportunity to reply to the Torch/Platform Irene Oil Spill Draft Restoration Plan and Environmental assessment.

http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/torch_rp-ea_final_final3-13-06.pdf<<http://www.dfg.ca.gov/ospr/organizational/scientific/nrda/torch>

_rp-ea_final_final3-13-06.pdf>

It's obvious that the California Department of Fish and Game has expended a great deal of effort in researching how the funds can be best used.

For purposes of clarity, the following text proposals that we regard as appropriate will be in regular type. Our proposals which differ from the restoration plan will be in bold type.

Our comments on the Compensatory Restoration Projects (pp. 4-5) touch on:

Settlement of Natural Resource Claims (1.4 p. 13)

- (1) Seabird Colony Protection (4.5.1.1)
- (2) Sandy Beach and Dune Habitat Restoration (4.5.1.2)
- (3) Mussel Bed Restoration (4.5.1.3)
- (5) Ocean Beach Park Boardwalk and Viewing Platform (4.5.1.5)

The removal of berms at 35th street/restoration of the estuary plan

Marine Mammal/Bird Rehabilitation Center (4.7.9)

Coastal Access Boardwalk from Ocean Beach Park to the Beach (4.7.14).

LPAS-1 The Sandy Beach and Dune Habitat Restoration plan is the most promising of the five plans relative to feasibility and effectiveness. The thoroughness of the plan assures the ability of Ocean Park Beach dune habitat to begin recovering from its current dismal state, particularly at the entrance to the beach. Dune vegetation is both fragile and colorful. Surely one of the ironies of beach tourism is that most visitors have never seen dune vegetation in anything approaching its natural splendor simply because the act of walking on the dunes obliterates this delicate community. There are no paths at Ocean Park Beach to welcome visitors and guide them to the shore. Therefore they do not avoid walking on the edge of the estuary and on the dune vegetation, incidentally causing disturbance to these vital foraging and habitat areas.

LPAS-2 There are many boardwalk proposals which have been discussed concurrently. As a result, those endorsing their preferred boardwalk may have been doing so in public commentary while citing the explicit boardwalk of their preference, but may have been misunderstood. Our comments will reference two boardwalk proposals. The first is our proposed boardwalk that would go from Ocean Beach Park west of the train trestle to the beach governed by Vandenberg AFB (the dune boardwalk). We feel this better meets the requirements of the threshold criteria than does the proposed estuary boardwalk in the above assessment, which would go from the northeast corner of the parking lot in the County park to a viewing platform in the estuary (the estuary boardwalk).

LPAS-2 The proposed dune boardwalk would have handrails and be at a level above high tide. This and the incorporation of the Americans with Disabilities Act requirements would provide local and out of town folk access to the beach that is not now available.

The dune boardwalk would start at the cement entry west of the trestle and head southwest over the dunes and curve toward the beach. By offering beach goers an attractive path farther from the western portion of the estuary known as the river mouth, the dune boardwalk will protect both the Santa Ynez River estuary and the dune habitat. It would allow for an intimate approach acceptable for study of the estuary inhabitants while limiting disturbance to the wide variety of roosting birds which depend on the Santa Ynez River Estuary (SYRE) for sustenance and rest.

The SYRE is the winter home of a variety of shorebirds. The dune boardwalk, with enforcement of the leash laws, will be a boon to all beach goers. Dogs running wild can ruin an otherwise pleasant beach experience, and have negative effects on eco-tourism. Studies at Coal Oil Point Reserve in Goleta show that a loose dog on the run creates a disturbance to shorebirds that is several times greater than that which a person creates. Dogs fetching sticks and balls thrown into the estuary play havoc for weary migrants. Kite flying near the estuary and shore also impedes foraging and is encouraged to be done at grassy parks instead.

A picture of the dune boardwalk, swathed in flowering sand verbena, beach primrose, beach morning-glory and more, tourists on the boardwalk snapping photos and taking in the view would certainly make an ideal poster to grace the wall of any Chamber of Commerce. The construction of the dune boardwalk should occur at the same time as the proposed dune habitat restoration, with Vandenberg AFB approved wildlife managers ensuring that both projects proceed with the least disturbance to the Western Snowy Plovers and nesting songbirds.

LPAS-3 La Purisima Audubon proposes that berms that block the natural flow and scouring of the river be removed to recover portions of formerly estuarine and palustrine habitats that have become dry upland dominated by exotic invasive plants. These areas lack the support capability for native species some of which exist only in estuaries. Recovery of these habitats which enrich the SYRE provide not only increased animal support but more opportunities for recreation, education, and study.

In 1940, a bridge was built on 35th Street; it was subsequently washed out in 1969 and left in disrepair. The remaining berm of cement, sand, and debris has resulted in the loss of the natural meander, scour, and flush typical where rivers merge with estuaries. Within the SYRE, Thomson, et al (1999, see Chapter 6)1, showed that this berm has led to increased sedimentation of large, formerly estuarine areas and that these areas show low levels of use by coastal Savannah Sparrows (*Passerculus sandwichensis alaudinus*), which are restricted to the estuary, and other animals as well. Nest placement and foraging by Savannah Sparrows tending nestlings are strongly associated with Flats and Bar, Channel, and Vegetated Shore habitats (all created by riverine scouring) in addition to Middle Salt Marsh habitat. The alluvium build-up over many years has greatly reduced persistent wetlands and has altered ecological functions within the estuary.

LPAS-3 La Purisima Audubon views removal of the 35th Street bridge remnants as the first step in a program intended to reverse this trend by reinstalling the riverine flows that may recreate and maintain wetlands and the animal support we value. The available recreational funds proposed for 4.5.1.5 will best be applied to the removal of the berms and their debris at 35th Street, land which is governed by Vandenberg Air Force Base, if the funds are not used for the proposed dune boardwalk. This proposal fully meets the threshold criteria.

LPAS-4 The estuary boardwalk, unlike the dune boardwalk, serves neither the environment nor the public. The view of the pickle weed, alkali heath, salt grass slough from the estuary boardwalk and viewing platform differs little from the view from the parking lot. At a mere 215 feet this walk may not support group activities. Moreover, this boardwalk will intrude into the estuary, allowing for greater disturbance of wildlife from visitors loitering and littering on the cul-de-sac. Cigarette butts that end up in the slough can poison wildlife.

Settlement of Natural Resource Claims (1.4 p. 13). La Purisima Audubon requests that all of the \$100,497 go to funding the coastal access boardwalk from Ocean Beach Park to the beach (4.7.14, p. 74). This exactly meets the threshold criteria!

LPAS-5 Seabird Colony Protection (4.5.1.1, pp. 31-40), La Purisima Audubon requests that all of the 1.2 million dollars go toward funding the coastal access boardwalk from Ocean Beach Park to the beach (our proposed dune boardwalk) (4.7.14, p.74). Furthermore we feel the greatest nexus to injury is a Vandenberg AFB issue and the remedy can be made at a VAFB beach. The restoration plan's primary goal (relative to comp. plan 1) is to improve the survival of roosting birds. The first week of June there were more than 450 roosting pelicans at the SYRE. Our plan meets the threshold criteria and furthermore satisfies the need to provide a recreational mitigation in the implementation of this restoration plan (3.4, p.23).

We feel the feasibility of the Seabird Colony Restoration plan as proposed is flawed. The outreach materials, presentations, signs and displays are limited in value, and would not be effective at Vandenberg AFB/Ocean Beach Park, and they waste natural resources. To better satisfy the threshold criteria, buffering the estuary from people, dogs, and kites must be supported. We feel the dune boardwalk meets the threshold criteria more effectively than the current restoration plan.

We urge collaboration with an established scientifically based restoration plan, such as the California Current Marine Bird Conservation Plan, rather than the administration of and the associated costs of initiating another.

LPAS-6 Sandy Beach and Dune Habitat Restoration (4.5.1.2, pp. 40-47) as proposed alone is wholly supported and in conjunction with the Coastal Access Boardwalk from Ocean Beach Park to the Beach (4.7.14) The dune boardwalk will divert traffic away from the Ocean Beach Park dunes and Santa Ynez River estuary areas. Construction of the dune boardwalk during sandy beach/dune habitat restoration oversight will allow for Western Snowy Plover protection.

Endangered species such as Surf Thistle, Crisp Dune Mint and Beach Spectacle-pod may flourish and help to abate blowing sand and erosion.

LPAS-7 Mussel Bed Restoration (4.5.1.3, pp. 47-51), La Purisima Audubon still has some doubts as to whether speeding up what nature will do without cost is worth \$100,000. However we do acknowledge that this project will advance restoration science, which we regard as essential.

LPAS-8 Ocean Beach Park Boardwalk and Viewing Platform (4.5.1.5, pp. 57-69), La Purisima Audubon takes issue with the claim (p. 63) that there is pedestrian traffic into the estuary east of the parking lot as none has been observed.

The estuary boardwalk differs from other cited areas such as Oso Flaco by these facts:

1. There is a fee paid to enter Oso Flaco
2. The Oso Flaco boardwalk serves a purpose by being a conduit to the dunes
3. The proposed estuary boardwalk is not a conduit, thus, traffic will differ in that more loitering will occur and littering is more likely at those times, posing a threat to wildlife.

Additionally, the photo of Oso Flaco's Boardwalk (photo 5, pg 65 re: building material display) may not have been recognized by all as a longer boardwalk than is proposed for the estuary at Ocean Beach Park.

LPAS-9 Marine Mammal/Bird Rehabilitation Center (4.7.9, p. 73), La Purisima Audubon does not support funding a complete staging center. However, we recognize that the Oiled Wildlife Care Network (OWCN), sited at least an hour away from Surf Beach, may need local assistance. Therefore we support funding the training of Vandenberg AFB wildlife or Santa Barbara Wildlife Care (which has a Lompoc office) personnel through OWCN to supply first aid by limiting heat loss until OWCN personnel arrive. LPAS is confident that this proposal is consistent with the requirements of the Threshold Criteria and may limit avian mortality.

LPAS-10 Coastal Access Boardwalk from Ocean Beach Park to the Beach (4.7.14, p. 74) The proposed dune boardwalk locale and the Elfin Forest in Los Osos have similar habitats. We propose using the same recycled materials for the dune boardwalk as were used for the Elfin Forest boardwalk, as they have proven to be ideal and durable. Controlling access during Western Snowy Plover breeding season will be done with a gate. This proposal fully satisfies the threshold criteria and is the most appropriate way to utilize the funds currently proposed in this restoration plan for the estuary boardwalk (4.5.1.5). The Lompoc Valley Botanic and Horticultural Society endorses our dune restoration/boardwalk plan.

1RECOMMENDED DOCUMENT CITATION:

Holmgren, M.A. and P.W. Collins (eds.) 1999. Distribution and Habitat

Associations of Six Bird Species of Special Concern at Vandenberg Air Force Base, Santa Barbara County, California. University of California, Santa Barbara, Museum of Systematics and Ecology, Environmental Report No. 7 or Santa Barbara Museum of Natural History Monographs No. 1. Studies in Biodiversity No. 1.



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June 14, 2006

Melissa Boggs-Black
Environmental Scientist
California Department of Fish and Game
Oil Spill Prevention and Response
213 Beach Street
Morro Bay, CA 93442

RE: Torch/Platform Irene Draft Restoration Plan and Environmental Assessment

Dear Ms. Boggs-Black,

This letter is to provide comment to the above referenced document.

Section 4.5.1.5

LUND-1 The seven projects bulleted in this section do not accurately reflect those projects discussed in Section 4.7 of the document(ie; the interpretive center and Cabrillo High School Aquarium)

LUND-2 Description under "Background"

Change last sentence to read: "Phase II of the project (to be partially funded from the Torch Trust funds) includes construction of a boardwalk into the Santa Ynez....."

LUND-3 Mitigation measure 13 requires the County to prepare a SWPPP. The County requires the construction contractor to submit this plan 15 days prior to start of work. Attached is the section from the Standard Specifications which outline these requirements.

Thank you for the opportunity to comment on this document and including the boardwalk project at Ocean Park as a high priority project. County Parks will be utilizing the RP/EA / FONSI towards compliance with CEQA for this project also.

Sincerely,

Coleen Lund, P.E..
Project Manager

Page 22

Enc. Water Pollution Control Program section from Standard Specifications for construction projects

WATER POLLUTION CONTROL

Water pollution control work shall conform to the requirements in Section 7-1.01G, "Water Pollution." of the Standard Specifications, and these Special Provisions.

Water pollution control work shall conform to the requirements in the Construction Contractor's Guide and Specifications of the Caltrans Storm Water Quality Handbooks, dated April 1997, and addenda thereto issued up to and including the date of advertisement of the project, hereafter referred to as the "Handbook." Copies of the Handbook may be obtained from the Department of Transportation, Material Operations Branch, Publication Distribution Unit, 1900 Royal Oaks Drive, Sacramento, California 95815, Telephone: (916)445-3520.

Copies of the Handbook are also available for review at the Public Works Engineering Office located at 123 East Anapamu Street Santa Barbara, Ca 93101.

The Contractor shall become fully informed of, and comply with the applicable provisions of the Handbook and Federal, State and local regulations that govern the Contractor's operations and storm water discharges from both the project site and areas of disturbance outside the project limits during construction.

Unless arrangements for disturbance of areas outside the project limits are made by the Department and made part of the contract, it is expressly agreed that the Department assumes no responsibility to the Contractor or property owner whatsoever with respect to any arrangements made between the Contractor and property owner to allow disturbance of areas outside the project limits.

The Contractor shall be responsible for the costs and for any liability imposed by law as a result of the Contractor's failure to comply with the requirements set forth in this section "Water Pollution Control" including, but not limited to, compliance with the applicable provisions of the Handbook and Federal, State and local regulations. For the purposes of this paragraph, costs and liabilities include but are not limited to fines, penalties and damages whether assessed against the State or the Contractor, including those levied under the Federal Clean Water Act and the State Porter Cologne Water Quality Act. In addition to any remedy authorized by law, so much of the money due the Contractor under the contract that shall be considered necessary by the Department may be retained by the State of California until disposition has been made of the costs and liabilities.

The retention of money due the Contractor shall be subject to the following:

1. The Department will give the Contractor 30 days notice of its intention to retain funds from any partial payment which may become due to the Contractor prior to acceptance of the contract. Retention of funds from any payment made after acceptance of the contract may be made without prior notice to the Contractor.
2. No retention of additional amounts out of partial payments will be made if the amount to be retained does not exceed the amount being withheld from partial payments pursuant to Section 9-1.06, "Partial Payments," of the Standard Specifications.
3. If the Department has retained funds and it is subsequently determined that the State is not subject to the costs and liabilities in connection with the matter for which the retention was made, the Department shall be liable for interest on the amount retained at the legal rate of interest for the period of the retention.

Conformance with the requirements of this section "Water Pollution Control," shall not relieve the Contractor from the Contractor's responsibilities, as provided in Section 7-1.11, "Preservation of Property." and Section 7-1.12, "Responsibility for Damage," of the Standard Specifications.

WATER POLLUTION CONTROL PROGRAM PREPARATION, APPROVAL AND UPDATES.—

As part of the water pollution control work, a Water Pollution Control Program, hereafter referred to as the "WPCP," is required for this contract. The WPCP shall conform to the requirements in Section 7-1.01G, "Water Pollution," of the Standard Specifications, the requirements in the Handbook, and these special provisions.

No work having potential to cause water pollution, as determined by the Project Engineer, shall be performed until the Project Engineer has approved the WPCP.

Within 15 working days of receiving the written notice of project award and in no case less than 10 working days prior to the first chargeable working day, the Contractor shall submit 3 copies of the WPCP to the Project Engineer.

The Contractor shall allow 5 working days for the Project Engineer to review the WPCP. If revisions are required, as determined by the Project Engineer, the Contractor shall revise and resubmit the WPCP within 5 working days of receipt of the Project Engineer's comments and shall allow 5 working days for the Project Engineer to review the revisions. No work having potential to cause water pollution, as determined by the Project Engineer, shall be performed until the Project Engineer has approved the WPCP. Upon the Project Engineer's approval of the WPCP, 3 additional copies of the WPCP incorporating the required changes shall be submitted to the Project Engineer. Minor changes or clarifications to the initial submittal may be made and attached as amendments to the WPCP. In order to allow construction activities to proceed, the Project Engineer may conditionally approve the WPCP while minor revisions or amendments are being completed.

The objectives of the WPCP shall be to identify pollution sources that may adversely affect the quality of storm water discharges associated with the project and to identify, construct, implement and maintain water pollution control measures, hereafter referred to as control measures, to reduce to the extent feasible pollutants in storm water discharges from the construction site during construction under this contract.

The WPCP shall incorporate control measures in the following categories:

1. Soil stabilization practices;
2. Sediment control practices;
3. Sediment tracking control practices;
4. Wind erosion control practices; and
5. Non storm water management and waste management and disposal control practices.

Specific objectives and minimum requirements for each category of control measures are contained in the Handbook.

The Contractor shall consider the objectives and minimum requirements presented in the Handbook for each of the above categories. When minimum requirements are listed for any category, the Contractor shall incorporate into the WPCP and implement on the project, one or more of the listed minimum controls required in order to meet the pollution control objectives for the category. In addition, the Contractor shall consider other control measures presented in the Handbook and shall incorporate into the WPCP and implement on the project the control measures necessary to meet the objectives of the WPCP. The Contractor shall document the selection process in accordance with the procedure specified in the Handbook. The WPCP shall include, but not be limited to, the following items as described in the Handbook:

1. Project description and Contractor's certification;
2. Project information;
3. Pollution sources, control measures, and water pollution control drawings; and
4. Amendments, if any.

The Contractor shall amend the WPCP, graphically and in narrative form, whenever there is a change in construction activities or operations which may affect the discharge of significant quantities of pollutants to surface waters, ground waters, municipal storm drain systems, or when deemed necessary by the Project Engineer. The WPCP shall also be amended if the WPCP has not achieved the objective of reducing pollutants in storm water discharges. Amendments shall show additional control measures or revised operations, including those in areas not shown in the initially approved WPCP, which are required on the project to control water pollution effectively. Amendments to the WPCP shall be submitted for review and approval by the Project Engineer in the same manner specified for the initially approved WPCP. Amendments shall be dated and attached to the on-site WPCP document.

The Contractor shall keep a copy of the WPCP, together with updates, revisions and amendments at the project site.

WPCP IMPLEMENTATION.—Upon approval of the WPCP, the Contractor shall be responsible throughout the duration of the project for installing, constructing, inspecting and maintaining the control measures included in the WPCP and any amendments thereto and for removing and disposing of temporary control measures. Unless otherwise directed by the Project Engineer or specified in these

special provisions, the Contractor's responsibility for WPCP implementation shall continue throughout any temporary suspension of work ordered in accordance with Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications. Requirements for installation, construction, inspection, maintenance, removal and disposal of control measures are specified in the Handbook and these special provisions.

Soil stabilization practices and sediment control measures, including minimum requirements, shall be provided throughout the winter season, defined as between Nov. 1 and Mar. 15.

Implementation of soil stabilization practices and sediment control measures for soil—disturbed areas of the project site shall be completed, except as provided for below, no later than 20 days prior to the beginning of the winter season or upon start of applicable construction activities for projects which begin either during or within 20 days of the winter season.

Throughout the winter season, the active, soil-disturbed area of the project site shall be no more than 5 acres. The Project Engineer may approve, on a case-by-case basis, expansions of the active, soil-disturbed area limit. The Contractor shall demonstrate the ability and preparedness to fully deploy soil stabilization practices and sediment control measures to protect soil-disturbed areas of the project site before the onset of precipitation. The Contractor shall maintain a quantity of soil stabilization and sediment control materials on site equal to 100 percent of that sufficient to protect unprotected, soil-disturbed areas on the project site and shall maintain a detailed plan for the mobilization of sufficient labor and equipment to fully deploy control measures required to protect unprotected, soil-disturbed areas on the project site prior to the onset of precipitation. The Contractor shall include a current inventory of control measure materials and the detailed mobilization plan as part of the WPCP.

Throughout the winter season, soil-disturbed areas of the project site shall be considered to be nonactive whenever soil disturbing activities are expected to be discontinued for a period of 20 or more days and the areas are fully protected. Areas that will become nonactive either during the winter season or within 20 days thereof shall be fully protected with soil stabilization practices and sediment control measures within 10 days of the discontinuance of soil disturbing activities or prior to the onset of precipitation, whichever is first to occur.

Throughout the winter season, active soil-disturbed areas of the project site shall be fully protected at the end of each day with soil stabilization practices and sediment control measures unless fair weather is predicted through the following work day. The Contractor on a daily basis shall monitor the weather forecast. The National Weather Service forecast shall be used, or an alternative weather forecast proposed by the Contractor may be used if approved by the Project Engineer. If precipitation is predicted prior to the end of the following workday, construction scheduling shall be modified, as required, and the Contractor shall deploy functioning control measures prior to the onset of the precipitation.

The Contractor shall implement, year—round and throughout the duration of the project, control measures included in the WPCP for sediment tracking, wind erosion, non-storm water management and waste management and disposal.

The Project Engineer may order the suspension of construction operations, which create water pollution if the Contractor fails to conform to the requirements of this section "Water Pollution Control" as determined by the Project Engineer.

MAINTENANCE.—To ensure the proper implementation and functioning of control measures, the Contractor shall regularly inspect and maintain the construction site for the control measures identified in the WPCP. The Contractor shall identify corrective actions and time frames to address any deficient measures or reinstate any measures that have been discontinued.

The construction site inspection checklist provided in the Handbook shall be used to ensure that the necessary measures are being properly implemented, and to ensure that the control measures are functioning adequately. The Contractor shall submit one copy of each site inspection record to the Project Engineer.

During the winter season, inspections of the construction site shall be conducted by the Contractor to identify deficient measures, as follows:

1. Prior to a forecast storm;
2. After all precipitation, which causes runoff capable of carrying sediment from the construction site;
3. At 24 hour intervals during extended precipitation events; and
4. Routinely, at a minimum of once every 2 weeks.

If the Contractor or the Project Engineer identifies a deficiency in the deployment or functioning of an identified control measure, the deficiency shall be corrected by the Contractor immediately, or by a later date and time if requested by the Contractor and approved by the Project Engineer in writing, but not later than the onset of subsequent precipitation events. The correction of deficiencies shall be at no additional cost to the County.

From: "jon picciuolo" <redbank@lycos.com>
To: "Tam Taaffe" <bima55@msn.com>
Date: Mon, Jun 19, 2006 5:11 PM
Subject: Re: Request endorsement dune boardwalk, etc.

PICCIUOLO-1 Although I am not a member of the La Purisima Audubon Society, I generally support the good works that the organization performs. In general, I support the La Purisima Audubon Society's recommendations for disbursement of funds resulting from the oil spill off of Surf Beach in 9/97, with one caution which is my personal opinion only.

PICCIUOLO-2 The removal of restrictive berms from the lower part of the Santa Ynez River may possibly lead to unintended and undesired consequences resulting from the river's ability to move more freely through the lower Lompoc Valley, especially in time of flood. Although the berm removal proposal may have merit, it should be studied very carefully to ensure that risks to private property (including farmland, farming infrastructure, and the railroad's right of way) and public facilities (including county roads, air force installations, and public utilities) are not worsened or created.

PICCIUOLO-3 I see particular merit in using the oil spill funds to train and equip a local Lompoc Valley cadre of "first responders" to rescue and de-oil birds affected by future spills.

Jon Picciuolo...



PRBO Conservation Science
4990 Shoreline Highway
Stinson Beach, CA 94970
415-868-1221
www.prbo.org



May 24, 2006

Torch/Platform Irene Trustee Council C/o Melissa Boggs-Blalack 213 Beach Street Morro Bay, CA 93442

Dear Melissa Boggs-Blalack,

I am writing in regards to the Draft Restoration Plan and Environmental Assessment for the Torch/Platform Irene Oil Spill. First, I would like to commend you on your choice of priority projects. I agree that the area affected by the Platform Irene spill would greatly benefit from the five projects outlined in the restoration plan. With regards to the Seabird Colony Enhancement Project, I would like to submit the following comments:

PRBO-1 1) Invest in research. While decreasing disturbance to seabird roosting and breeding colonies is a noble cause, there remains a need to 1) establish a baseline for roosting and breeding populations and 2) use a scientific process in determining the efficacy of efforts to decrease disturbance. The former will ensure accurate assessment of damages in the event of another catastrophic event. The latter will help improve methods for future restoration efforts. Data on roosting and breeding populations should be collected at locations of both high and low potential disturbance and before, during, and after efforts to reduce disturbance are initiated.

PRBO-2 2) Collaborate with PRBO Conservation Science. PRBO Conservation Science has been collecting data on roosting and breeding seabird populations at Vandenberg Air Force Base annually since 1999. We have data on breeding populations of Pigeon Guillemots, Brandt's and Pelagic Cormorants, Black Oystercatchers, Western Gulls, and endangered California Least Terns. We have monthly data on coastal roost utilization by endangered California Brown Pelicans, Brandt's, Pelagic, and Double-crested Cormorants, and California, Glaucous-winged, Heerman's and Western Gulls. Additionally, we have several study sites in central and northern California, including the Farallon Islands where we have a long term data set of 30+ years. We have well-defined, standardized protocols that could be used in the restoration plan's expanded study area.

PRBO-3 3) A statewide restoration plan exists. The Torch/Platform Irene restoration plan states, "...no one plan considers all the biological factors, status, regulatory issues, conservation threats, management needs, and restoration opportunities in one statewide document" (Page 32). However, a plan does exist and it covers the entire California Current System. It is the California Current Marine Bird Conservation Plan and can be downloaded from the following web address: <http://www.prbo.org/cms/index.php?mid=66&module=browse>. This document is a great tool that should be used to further develop the Seabird Colony Enhancement Project. PRBO Conservation Science 4990 Shoreline Highway Stinson Beach, CA 94970 415-868-1221 www.prbo.org

PRBO-4 4) Conduct Beached Bird Surveys. Beached bird surveys are a proven way to establish a baseline index of natural annual seabird mortality. Examples include the Coastal Ocean Mammal and Bird Education and Research Survey (BeachCOMBERS -- <http://www.montereybay.noaa.gov/research/bchmon.html>) and the Coastal Observation and Seabird Survey Team (COASST -- <http://www.coasst.org/>). Developing such a program for the Torch/Platform Irene impact area would help better assess the impacts of future catastrophic events.

PRBO-5 5) Monitor Seabird Diet and Foraging Habits. The Torch/Platform Irene restoration plan identifies conflicts between seabirds and commercial fisheries as a primary anthropogenic threat. Commercial fisheries interactions are as important, if not more important, to seabird population and breeding success as human caused disturbance. The diet and foraging habits of breeding seabirds should be monitored where possible to better understand conflicts with commercial fisheries. Additionally, seabird diet and foraging data can help assess the impacts of catastrophic events on seabird prey species. PRBO has been studying the foraging habitats of seabirds inside and outside of the Vandenberg State Marine Reserve since 2000. This protocol can be easily expanded throughout the Torch/Platform Irene expanded study area.

PRBO-6 6) Monitor Annual Seabird Migration Rates. The Torch/Platform Irene restoration plan states that the majority of seabirds impacted by the spill were non-breeders migrating through the area. It is difficult to assess the impact on birds oiled at sea as the majority does not make it to shore. Monitoring annual seabird migration rates will offer an index of abundance for birds migrating through the area. It will help assess the impacts of future oil spills by 1) establishing a baseline of annual migration and 2) estimating the abundance of birds migrating through the area at the time of the spill. PRBO has been collecting this data at Vandenberg Air Force Base since 2000 and our protocol can be easily replicated at several observation points throughout the Torch/Platform Irene expanded study area.

Please consider these comments when finalizing the restoration plan and feel free to contact me with any questions you may have.

Sincerely,

Dan Robinette Vandenberg Seabird Program Manager PRBO Conservation Science 205 N. H St., Suite 217 Lompoc, CA 93436 (805) 735-7300 drobinette@prbo.org

From: jaruhge <mailto:jaruhge@hotmail.com>
To: JeffPhillips@fws.gov <mailto:JeffPhillips@fws.gov>
Sent: Friday, June 02, 2006 10:54 AM
Subject: Torch/Platform Irene Trustee Council

RUHGE-1 Lets not waste funds on any "education" installations at Ocean Park. Surf Beach is a much better place for this function. Many more people visit Surf and it is much easier to get into. We need to spend the money on a stairway and boardwalk down to the beach and boardwalks and overlook "education" platforms on the bluffs above. This is a much better location for that purpose. There once was a stairway and overlook at the Surf location many years ago.

Justin Ruhge, Lompoc, Ca. 93436, 805-7379536



California Regional Water Resources Control Board

Central Coast Region



Linda S. Adams
Secretary for
Environmental Protection

Internet Address: <http://www.waterboards.ca.gov/centralcoast>
895 Aerovista Place – Suite 101, San Luis Obispo, CA 93401-7906
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

June 21, 2006

Ms. Melissa Boggs-Blalack
Environmental Specialist
California Department of Fish and Game
Office of Spill Prevention and Response
213 Beach Street
Morro Bay, CA 93442

Dear Ms. Boggs-Blalack:

RE: TORCH/PLATFORM IRENE OIL SPILL DRAFT RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT

Thank you for the opportunity to comment on the March 13, 2006 "Torch/Platform Irene Oil Spill Draft Restoration Plan and Environmental Assessment". Regional Board staff is generally pleased with the mitigation options proposed in the restoration plan to mitigate for the 1997 oil spill and only have the following comments regarding this document:

RWQCB-1 1. The Draft Restoration Plan describes using glyphosphate herbicide (Roundup) to remove invasive vegetation. The Draft Restoration Plan states that harmful effects to wildlife are unexpected because application near aquatic areas and areas with flowing water will be avoided. Regional Board staff appreciates avoiding aquatic habitats and flowing water during the application of the pesticide but is concerned that there is not language in the plan to specifically address storm water runoff. Regional Board staff is concerned with the use of Roundup because recent research reveals this product is severely harmful to amphibians.

<http://www.pitt.edu/~relyea/Roundup.html>

It would be helpful to include further clarification that pesticides will not be applied to areas where they will be transported by storm water into freshwater aquatic habitat.

RWQCB-2 2. The boardwalks from Surf Beach Station and Ocean Beach Park to the beach were rejected due to possible impacts with snowy plover habitat. Although Regional Board staff is supportive of all the boardwalk proposals, we believe that a boardwalk from Ocean Beach Park to the beach would be the most preferable of the alternatives. Regional Board staff has observed that many people are already walking indiscriminately across snowy plover habitat from Ocean Beach Park to the beach. Additionally, Regional Board staff has observed vast amounts of garbage along the mouth of the Santa Ynez River Estuary. Confining foot traffic to the boardwalk with

interpretive signs regarding snowy plovers would likely provide significant improvements compared to the present situation where hikers to the beach may be inadvertently trampling on snowy plover habitat. Additionally, placing educational signs on this boardwalk regarding the problems pollutants and litter (such as plastics) cause to freshwater, estuarine, and marine environments may encourage upstream community members to become actively involved in local Storm Water programs and/or take measures to reduce pollution in this watershed. Subsequent watershed improvements could result in long-term improvements to the estuarine and marine habitats that were impacted by the oil spill. Regional Board staff is unclear whether constructing new boardwalks would allow increased levels of beach visitation to the beach, but is supportive of increased visitation if it can be accomplished without damaging natural resources.

If you have questions, please contact **Peter von Langen at 805-549-3688 or pvonlangen@waterboards.ca.gov** or John Robertson at 805-542-4630 or jrobertson@waterboards.ca.gov.

Sincerely,

Roger W. Briggs
Executive Officer

Filename and Path: S:\Reclamation\Torch Oil Spill Mitigation.doc



From: "MICHAEL TAAFFE" <mariomagician@hotmail.com>
To: "Tam Taaffe" <bima55@msn.com>
Date: Wed, Jun 21, 2006 10:49 PM
Subject: Re: Please respond to Melissa and myself by midnight tonight.

TAFFE-1 I endorse the LPAS proposal in response to your restoration plan.

TAFFE-2 If it is decided to go through with an estuary boardwalk to give visitors somewhere else to go besides the parking lot when the beach is closed please consider placing the boardwalk on the North and East perimeters of the parking lot with a turn around area at the corner of it.

Yours sincerely,

Michael Taaffe

June 9, 2006

Melissa Boggs-Blalack, Environmental Scientist
California Dept of Fish and Game
Oil Spill Prevention and Response
213 Beach Street
Morro Bay, CA 93442
Mboggs@ospr.dfg.ca.gov

Re: 4.5.1.5 Boardwalk and Viewing Platform at Ocean Beach Park
Estuary

Dear Trustee Council,

WARNSTROM-1 The Boardwalk and Viewing Platform at Ocean Beach Park Estuary needs to be the primary recipient of the Torch/Platform Irene Oil Spill Funds managed by the Council.

Platform Irene is off the Lompoc Coastline. The Torch/Nuevo processing plant is located 3 miles outside the city limits of Lompoc. The 1997 spill affected 17 miles of the Lompoc Coastline. Surf and Ocean Beach Park are the only beach access for nearly 65,000 people in and around the Lompoc Valley. The production of off shore oil is a fact of life for the residents of Lompoc.

All of the above is obvious to you, the Trustees. It is reflected within the 13-pages dedicated to the discussion of funding and building the Boardwalk at Ocean Park.

However, the \$65,520 suggested in the Draft Restoration Plan is not anywhere close to the amount required to construct the Boardwalk. The number selected for your Draft Plan was probably picked up from the 1988 Santa Barbara County Parks Department's "wish list" presented to the Board of Supervisors. The County then and now – 20 years later - does not have the funds to build the structure. To make this happen will require substantially more money from the trustee fund.

If the Trustees were to put the idea out for bid, it is assured the cost would come very close to \$500,000. This is a huge sum and would consume the majority of the available fund. If, however, you consider the use of the money for this capital improvement, the

positive impact would far outreach any of the other ideas proposed up and down the coast of California.

Thousands of residents, students, visitors, bird watchers and scientist will use the boardwalk for decades. The recreational and educational impact will be huge and multi generational. While the Docent program was in effect at Surf Beach to help protect the western snowy plover, an annual average of 30,000 visitors made their way to this out of the way beach site. That did not include the residents of Lompoc.

The other proposed projects include a lot of money and staff time for “designing and distributing educational interpretive materials, collaborating with other agencies and organizations and monitoring.” Translations, (materials) staff printing papers that will be thrown away, (collaborating) staff going to meetings and moving on to the next project and (monitoring) staff visiting the site a couple of times.

At the Boardwalk the educational and recreational work will be done by teachers, parents, volunteers and the general public for decades. A visit to Ocean Beach Park Boardwalk will be a huge recreational adventure for people of all ages. Young and old will learn from the interpretive signs (designed by students from Cabrillo High School Aquarium project and their graphic arts department) about how to protect, preserve and enhance the valuable habitat of hundreds of birds who call the estuary of the Santa Ynez River home.

I cannot state emphatically enough the need for a shift in the proposed funds. Please don't waste this one time opportunity to invest this money wisely. Thank you for considering this request.

Respectfully submitted,

SUSAN WARNSTROM
2726 Lewis Place
Lompoc CA 93436
Sue.warn@verizon.net

TORCH PLATFORM IRENE OIL SPILL NATURAL RESOURCE

RESTORATION PLANNING MEETING

APRIL 19, 2006

LOMPOC, CALIFORNIA

WEDNESDAY, APRIL 19, 2006

7:00 P.M. - 8:20 P.M.

REPORTED BY CINDY D. GRIFFITH
CSR #7281

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1 TRUSTEE AGENCY REPRESENTATIVES:

2 MARY MENCONI, CALIFORNIA STATE LANDS COMMISSION

3 ALICE MCCURDY, COUNTY OF SANTA BARBARA

4 MELISSA BOGGS, DEPARTMENT OF FISH AND GAME, OIL SPILLS
5 PREVENTION AND RESPONSE BRANCH

6 JEFF PHILLIPS, UNITED STATES FISH AND WILDLIFE SERVICE

7 LUANNE LUM, VANDENBERG AIR FORCE BASE

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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

12 SO, NEXT, ALICE WILL TAKE YOUR COMMENTS.

13 MS. MCCURDY: THANKS, LUANNE.

14 AT THIS POINT, WE ARE GOING TO OPEN IT UP TO

15 TAKE YOUR COMMENTS. WE HAVE SPEAKER SLIPS IN THE BACK

16 OF THE ROOM, AND SO IF YOU WOULD LIKE TO SPEAK, PLEASE

17 FILL OUT A SLIP. WE WANT TO MAKE THE WORKSHOP AS

18 COMFORTABLE AS POSSIBLE.

19 SO, FIRST OF ALL, YOU CAN SUBMIT WRITTEN

20 COMMENTS IF YOU'D LIKE. YOU CAN USE THE SPEAKER CARDS

21 TO SUBMIT SOMETHING BRIEF, YOU CAN SUBMIT SOMETHING IN

22 WRITING, YOU'RE WELCOME TO USE -- YOU CAN COME UP AND

23 USE A MICROPHONE OR STAND AND SPEAK AT YOUR SEAT, OR

24 STAY SEATED AT YOUR SEAT AND COMMENT. WHATEVER IS

25 COMFORTABLE FOR YOU IS FINE WITH US.

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1 SO, LET'S SEE, I THINK WE JUST NEED TO COLLECT.

2 MR. FINK, WOULD YOU LIKE TO COMMENT?

3 **4-19-06 MTG-1** MR. FINK: YES. MY NAME IS RON FINK. I WAS A
4 MEMBER OF THE SURF OCEAN BEACH COMMISSION. I WAS A
5 DOCENT OUT AT SURF BEACH FOR QUITE A WHILE. I WAS HERE
6 AT THE ORIGINAL SCOPING MEETING, AND AS YOU'LL RECALL,
7 OUR PRIMARY CONCERN WITH THE ORIGINAL PLAN WAS THE LARGE
8 AMOUNT OF MONEY THAT WAS GOING TO BE SPENT ELSEWHERE
9 OTHER THAN AT SURF BEACH.

10 I'VE LOOKED THROUGH ALL OF THE MATERIALS THAT
11 YOU HAVE IN YOUR PLAN. BASICALLY, THE DUNES RESTORATION
12 IS A REALLY GOOD IDEA THAT -- WE HAD PROPOSED THAT YOU
13 DO THAT AND GET RID OF THE EXTRA GRASSES AND WHATNOT.

14 THE PUBLIC EDUCATION IS A GOOD PROCESS.

15 THE BOARD AND REVIEWING PLATFORM AT OCEAN BEACH
16 WAS ANOTHER ONE THAT WE THOUGHT WAS A VERY GOOD PROJECT
17 THE FIRST TIME AROUND.

18 **4-19-06 MTG-2** PRIMARILY, WHAT WE OBJECTED TO WAS SUCH A LARGE
19 AMOUNT OF MONEY, IN THIS INSTANCE, ALMOST \$2 MILLION,
20 BEING SPENT IN AN AREA FROM BIG SUR NOW ALL OF THE WAY
21 TO THE CHANNEL ISLANDS, WHEN THE SPILL ACTUALLY IMPACTED
22 ONLY 17 MILES OF BEACH AT SURF BEACH.

23 AND THE AMOUNT OF THE SPILL, WHENEVER YOU
24 CONSIDER THE NUMBER OF NATURAL SEEPS THAT ARE OUT IN THE
25 CHANNEL, IS MINIMAL. THERE ARE SOME SEEPS OUT THERE

4-19-06 MTG-2 CONTINUED

1 THAT SEEP 4,000 GALLONS A DAY.

2 THIS WAS A SINGLE EVENT OF AROUND 6,000 GALLONS
3 OF OIL SPILL. AND I WOULD SUSPECT THAT IF YOU WENT TO
4 THE BEACH TODAY, IF YOU KNEW WHAT IT WAS BEFORE THE
5 SPILL, THIS WAS LIKE NINE YEARS AGO, IF YOU WENT THERE
6 TODAY, YOU WOULDN'T BE ABLE TO RECOGNIZE THAT THERE WAS
7 EVER AN OIL SPILL THERE. IT GOT CLEANED UP. THE MESS
8 GOT CLEANED UP, GOT HAULED AWAY.

9 WE DON'T KNOW WHAT WAS THERE BEFORE THE SPILL,
10 AND WE PROBABLY DON'T REALLY KNOW WHAT WAS THERE AFTER
11 THE SPILL, BUT WE DO KNOW ABOUT THE WESTERN SNOWY
12 PLOVER.

13 ON YOUR SLIDE AND IN YOUR REPORT YOU SAY THAT
14 THE HABITAT AND THE BIRD, THE WESTERN SNOWY PLOVER, WAS
15 IMPACTED. HOWEVER, THE CHART THAT YOU SHOW IN YOUR PLAN
16 OF BIRDS THAT WERE DAMAGED AND DESTROYED SHOWS NO
17 WESTERN SNOWY PLOVERS ON IT.

18 WE DO KNOW, BECAUSE OF THE MONITORING THAT
19 VANDENBERG AIR FORCE BASE HAS DONE, THAT THE WESTERN
20 SNOWY PLOVER COMMUNITY HAS ACTUALLY FLOURISHED
21 SIGNIFICANTLY SINCE THEN, HAVING HIGHS, PEAKS AND
22 VALLEYS, HIGHS AND LOWS. DEPENDS ON NATURE, I GUESS,
23 HOW THEY DO. BUT, GENERALLY, THE POPULATION HAS
24 INCREASED SINCE THIS SPILL OCCURRED.

25 SO IF THE POPULATION OF THE WESTERN SNOWY

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4-19-06 MTG-2 CONTINUED

1 PLOVERS INCREASED, SO DID THE FOOD SUPPLY, WHICH IS THE
2 SAND FLIES, THE CRABS, AND SO FORTH AND SO ON, THAT THEY
3 EAT. THEY WON'T STAY THERE IF THERE'S NO FOOD. SO, I
4 THINK -- I'M NOT A SCIENTIST, BUT I THINK THE BEACH
5 RECOVERED ITSELF.

6 OKAY, SO, WHAT WOULD I DO? WELL, FIRST OF ALL,
7 I THINK THAT THE SEABIRD COLONY ENHANCEMENT PROJECT IS A
8 LITTLE -- A LITTLE MUCH. I THINK I WOULD FOCUS THE
9 EFFORT OF SPENDING THIS MONEY HERE LOCALLY.

10 **4-19-06 MTG-3** YOU REJECTED THE CABRILLO AQUARIUM PROJECT, FOR
11 EXAMPLE. THE CABRILLO AQUARIUM PROJECT IS RECOGNIZED
12 PRETTY MUCH AROUND THE WORLD AS A VERY FINE HIGH SCHOOL
13 AQUARIUM. IT'S ONE OF THE PREMIER AQUARIUMS IN THE
14 UNITED STATES.

15 THIS IS A VERY GOOD CORE LEARNING EXPERIENCE
16 FOR PEOPLE WHO LIVE HERE, AND ESPECIALLY HIGH SCHOOLERS
17 WHO ARE VERY IMPRESSIONABLE, WHO CARRY THAT INFORMATION
18 WITH THEM INTO ADULTHOOD, AND WOULD BE GOOD STEWARDS OF
19 THE LAND. SO I THINK THIS IS A VERY GOOD PROJECT.

20 **4-19-06 MTG-4** YOU ALSO DIDN'T WANT TO DO THE INTERPRETIVE
21 CENTER DOWN AT OCEAN PARK. WELL, WHEN WE WERE OUT
22 THERE, THERE WERE SOME 30-ODD THOUSAND PEOPLE A YEAR
23 FROM ALL OVER THE WORLD THAT CAME TO SURF BEACH AND TO
24 OCEAN PARK.

25 WHAT BETTER OPPORTUNITY TO EDUCATE THEM ABOUT

4-19-06 MTG-4 CONTINUED

1 THE ENVIRONMENT AND THE NEED TO PRESERVE THE ENVIRONMENT
2 THAN TO HAVE AN INTERPRETIVE CENTER THERE WHERE WE CAN
3 GO AND THEY CAN LEARN, AND THEY CAN FIGURE OUT WHAT'S
4 GOOD AND WHAT'S BAD FOR THE ENVIRONMENT? SO WE THOUGHT
5 THAT THIS INTERPRETIVE CENTER WOULD BE AN OPPORTUNITY
6 FOR PEOPLE WHO COME TO THIS AREA TO KNOW MORE ABOUT THE
7 ENVIRONMENT.

8 WE KNOW THAT THERE'S SOME 170-ODD BIRDS THAT
9 COME THROUGH THAT ESTUARY EVERY YEAR, AND BIRDERS FROM
10 ALL OVER THE UNITED STATES COME HERE TO LOOK AT THESE
11 BIRDS. SO HAVING AN INTERPRETIVE CENTER FOR THEM TO GO
12 TO AND TO GET INFORMATION ABOUT THE BEACH AND THE
13 ECOSYSTEM AND SO FORTH AND SO ON, WE FELT IT WAS A VERY
14 GOOD OPPORTUNITY.

15 SO, I GUESS, IN CLOSING, WHAT I WOULD SAY, I
16 WOULD URGE YOU TO RECONSIDER THE LOCAL PROJECTS THAT
17 AFFECT THE 17 MILES OF THE BEACH THAT WERE SOILED BY THE
18 OIL, AND REDUCE THE OUTWARD SCOPE OF THIS THING, AND
19 BRING MORE OF THAT DAMAGE RESTITUTION TO THE LOCAL AREA
20 RATHER THAN SPENDING IT IN SUCH A LARGE REGION.

21 THANK YOU.

22 MS. MCCURDY: THANK YOU, MR. FINK.

23 DO YOU WANT TO RESPOND TO ANYTHING? JEFF.

24 MR. PHILLIPS: THANK YOU VERY MUCH FOR YOUR
25 COMMENTS. I CAN RESPOND TO A COUPLE OF YOUR POINTS, AND

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1 I THINK THEY'RE VERY GOOD POINTS, AND I THINK AS SOMEONE
2 CLEARLY CONNECTED TO THE COMMUNITY HERE AND INVOLVED IN
3 VARIOUS LOCAL THINGS, WE WOULD BE INTERESTED IN TALKING
4 TO YOU FURTHER ABOUT HOW TO INTEGRATE SOME OF THAT STUFF
5 INTO THE PROJECTS THAT WE HAVE SELECTED, BECAUSE THERE
6 STILL IS SOME AREAS WITHIN THESE IN THE PUBLIC
7 EDUCATIONAL FUNDS AND THINGS LIKE THAT, THAT I SEE, MAY
8 MATCH UP PRETTY WELL.

9 BUT, AS FAR AS MONEY BEING SPENT ELSEWHERE
10 OUTSIDE OF THE 17 MILES OF BEACH THAT WERE SPECIFICALLY
11 DAMAGED, OUR REQUIREMENT IS TO TRY AND FIND COMPENSATION
12 FOR THE RESOURCES DAMAGED. AND SOME OF THOSE RESOURCES
13 ARE WITHIN THAT 17-MILE AREA, AND SOME HAVE HABITATS
14 THAT EXTEND FAR BEYOND THAT.

15 AND SO, FOR THINGS LIKE COMPENSATING FOR THE
16 DAMAGED OR THE OILED BIRDS AND THE BIRDS THAT WERE
17 KILLED BY THIS, THE ONLY WAY WE KNOW OF TO COMPENSATE
18 FOR THE BIRDS KILLED IS TO TRY AND IMPROVE THE
19 REPRODUCTIVE SUCCESS OF THOSE BIRD POPULATIONS, WHICH
20 MEANS WORKING ON THE AREAS WHERE THEY ROOST AND BREED.
21 AND IN MANY CASES, THOSE AREAS ARE OUTSIDE OF THIS
22 17-MILE ZONE. SO THAT'S PART OF THE REASONING BEHIND
23 THAT.

24 AND AS FAR AS THE SNOWY PLOVERS, THEY ARE AN
25 ENDANGERED SPECIES, AND UNDER THE ENDANGERED SPECIES

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1 ACT, THE DAMAGE TO HABITAT THAT ENDANGERED SPECIES
2 DEPENDS ON IS EQUATED WITH DAMAGE TO THE SPECIES ITSELF.
3 SO THE DUNE RESTORATION IS TO COMPENSATE FOR THE DAMAGE
4 TO THE HABITAT OF THE SNOWY PLOVER AND THE FORAGING AREA
5 THAT IT LIVES IN.

6 AND THE INTERPRETIVE CENTER AT THE BEACH PARK,
7 I THINK IS A NEAT IDEA AND HOPEFULLY SOME OF THE GOALS
8 OF THAT CAN BE INCORPORATED INTO THE PROJECTS THAT ARE
9 SELECTED.

10 AND, IN A SENSE, THE PLANNED BOARDWALK IS AN
11 INTERPRETIVE CENTER AND WILL SERVE THAT FUNCTION AND THE
12 SIGNS THAT DESCRIBES THE BIRDS THAT YOU CAN SEE FROM THE
13 BOARDWALK, AND THINGS ALONG THOSE LINES.

14 SO, THAT'S NOT A COMPLETE RESPONSE TO YOUR
15 QUESTIONS, BUT IT'S A PRELIMINARY RESPONSE, AND WE LOOK
16 FORWARD TO TRYING TO WORK WITH YOU MORE ON THAT.

17 MS. MCCURDY: THANKS, JEFF.

18 AND ONE THING I WOULD ADD ABOUT THE PLOVER IS
19 THAT, REGARDING THE EXTENT TO WHICH THEY WERE AFFECTED
20 BY THE SPILL, I KNOW THAT THE LIST THAT YOU'RE REFERRING
21 TO, RON, IS -- RELATES TO BIRDS THAT WERE FOUND
22 STRANDED. I DON'T KNOW IF THEY ARE ALL ALIVE. I GUESS
23 SOME OF THEM ARE ALIVE AND SOME OF THEM ARE NOT.

24 BUT THE PLOVERS, I KNOW THAT THE COUNTY
25 BIOLOGICAL MONITOR DID GET PICTURES IN THE DAYS

1 FOLLOWING THE SPILL OF THE PLOVERS THAT WERE OILED AND
 2 OILED PLUMAGE IN THE FRONT, SO THERE WAS A PRESUMPTION
 3 OF SOME IMPACT TO THOSE BIRDS.

4 I DON'T THINK THAT THERE WAS MORTALITY,
 5 NECESSARILY, THAT WAS DOCUMENTED, BUT THERE WAS PRESUMED
 6 TO BE IMPACT.

7 SO, AGAIN, THANK YOU FOR YOUR COMMENTS.

8 AND DO WE HAVE OTHER FOLKS WHO WOULD LIKE TO
 9 COMMENT?

10 WOULD YOU LIKE A CHAIR OR A MIKE, OR ARE YOU
 11 FINE? WHATEVER IS COMFORTABLE.

12 **4-19-06 MTG-5** MS. PATA: I'M FLORENCE PATA. I'M ALSO A
 13 MEMBER OF THE SURF OCEAN BEACH COMMISSION. I SPENT FOUR
 14 YEARS AS A DOCENT DOWN AT SURF BEACH, TRYING TO EDUCATE
 15 PEOPLE ABOUT THE SNOWY PLOVER.
 16 I THINK ONE OF THE BIG PROBLEMS IS THAT YOU'RE
 17 TRYING TO COMPENSATE FOR DAMAGE THAT HAS BEEN DONE BY
 18 THIS SPILL. I THINK SPENDING MORE MONEY RIGHT HERE
 19 LOCALLY IS WHAT SHOULD BE DONE.

20 **4-19-06 MTG-6** LIKE MR. FINK SAID, IT'S VERY DIFFICULT EVEN TO
 21 GET DOWN TO THE BEACH AT SURF ANYMORE, UNLESS YOU'RE
 22 YOUNG AND CAN CLIMB BACK UP EASILY.
 23 I THINK THAT IF YOU WANT TO HAVE PEOPLE ENJOY
 24 THE BEACH, TO WHICH MAYBE THIS DOESN'T SOUND LIKE A
 25 PURPOSE REALLY ON THIS WHOLE THING, BUT OLDER PEOPLE

4-19-06 MTG-6 CONTINUED

1 SIMPLY CANNOT GET DOWN TO THE BEACH AND ENJOY WATCHING
2 BIRDS AND ALL.

3 WHEN YOU GO TO OCEAN BEACH PARK WHERE THERE
4 USED TO BE A HANDICAP ACCESS, OF COURSE THAT'S CLOSED
5 FOR SO MANY MONTHS BECAUSE OF THE PLOVER. BUT EVEN WHEN
6 THE BEACH IS OPEN, IT'S IMPOSSIBLE TO GET DOWN TO THE
7 BEACH BECAUSE SO MUCH OF THE SAND HAS WASHED AWAY AND
8 IT'S FILLED IN WITH DRIFTWOOD AND ALL. SO I THINK THERE
9 SHOULD BE SOME CONSIDERATION IN MAKING THESE BEACHES
10 MORE ACCESSIBLE TO THE PUBLIC.

11 AND I THINK THAT ALSO HAS ECONOMIC IMPACT ON
12 THE COMMUNITY, BECAUSE LIKE MR. FINK SAID, WE HAD PEOPLE
13 FROM ALL OVER THE WORLD COMING TO OUR BEACHES.

14 THERE WAS A GREAT MANY PEOPLE THAT COME DOWN
15 FROM CANADA AND SPEND THEIR TIME HERE IN OUR AREA DURING
16 THE WINTER. WE HAVE PEOPLE FROM ALL AROUND THE WORLD.
17 ONE DAY I HAD A FAMILY FROM AUSTRALIA, AND RIGHT AFTER
18 THEY LEFT WAS ANOTHER FAMILY FROM SCOTLAND. AND SO THEY
19 COME FROM EVERYWHERE.

20 MY SON-IN-LAW COMES OUT FROM THE EAST, AND THE
21 FIRST THING HE DOES IS GO DOWN TO THE OCEAN BEACH TO
22 PHOTOGRAPH THE BIRDS. HE FINDS IT DIFFICULT TO GET DOWN
23 TO THE BEACH ITSELF, AND HE'S MUCH YOUNGER THAN ME. SO
24 I THINK THAT MORE MONEY SHOULD BE ALLOCATED TO THIS
25 AREA.

1 **4-19-06 MTG-7** AND I THINK DEFINITELY THE CABRILLO AQUARIUM IS
2 SUCH AN ESSENTIAL THING. STUDENTS WHO GET INTERESTED IN
3 THAT IN HIGH SCHOOL WILL GO ON INTO MARINE SCIENCE WHEN
4 THEY GET INTO COLLEGE. AND SO I THINK IT'S A VERY
5 IMPORTANT EDUCATIONAL ASPECT.

6 THANK YOU.

7 MS. MCCURDY: THANK YOU FOR YOUR COMMENTS.

8 ANYBODY ELSE WHO WOULD LIKE TO SAY ANYTHING?

9 MS. WARNSTROM: I DO. I DON'T HAVE A CARD.

10 **4-19-06 MTG-8** MY NAME IS SUSAN WARNSTROM, AND I WORK WITH
11 BOARD OF SUPERVISOR JONI GRAY. IT WAS OUR OFFICE THAT
12 STARTED THIS SURF OCEAN BEACH COMMISSION PROBABLY ABOUT
13 NINE YEARS AGO IT SEEMS ANYWAY.

14 AND WE, TOO, HAVE REVIEWED EVERYTHING, AND FEEL
15 THAT THE 17 MILES THAT IS OWNED BY VANDENBERG AIR FORCE
16 BASE NEEDS TO HAVE MORE OF THE MONEY SPENT THERE, THAT
17 THE ENVIRONMENTAL OFFICE AT VANDENBERG SCRAMBLES EVERY
18 YEAR TO GET THEIR FUNDING TO TAKE CARE OF THE
19 INSTALLATION RESTORATION PROJECTS, AND TO DO A LOT OF
20 CLEANUP OUT THERE.

21 IT'S A FABULOUS GROUP OF PEOPLE THAT ARE DOING
22 THAT WORK. AND THEN TO HAVE THEIR COASTLINE PART OF
23 THEIR WORK, AND BE TERRIFIC, YOU KNOW, AND COME TOGETHER
24 AND JOIN, AND LET VANDENBERG HAVE A LITTLE BIT MORE OF
25 THIS TO WORK ON THE COASTLINE. I THINK THE ACCESS OUT

1 THERE IS SO CRITICAL FOR OUR VALLEY.

2 **4-19-06 MTG-9** WE HAVE MORE THAN 65,000 RESIDENTS IN THIS
 3 VALLEY. THIS IS THEIR ONLY BEACH FOR AN HOUR'S DRIVE IN
 4 ANY DIRECTION. WELL, JALAMA, BUT THAT'S RESERVATION,
 5 AND NOT ALWAYS EASY TO GET TO.
 6 MONEY NEEDS TO BE SPENT DOWN THERE TO HELP GET
 7 FOLKS DOWN SO THAT THEY CAN GET ONTO AT LEAST THE BEACH
 8 THAT'S OPEN TO THEM AT SURF.

9 **4-19-06 MTG-10** I BELIEVE, AS RON SAID, THE DUNE RESTORATION IS
 10 A GREAT IDEA BECAUSE IT WILL HELP THE HABITAT FOR THE
 11 SNOWY PLOVER. THE PUBLIC EDUCATION IS TERRIFIC. AND I
 12 REITERATE THE CABRILLO HIGH SCHOOL. IT ISN'T JUST THE
 13 STUDENTS STUDYING MARINE BIOLOGY THAT BENEFIT FROM THAT
 14 FACILITY. THEY -- ALL OF THE DISCIPLINES AT CABRILLO
 15 USE IT. THE COMPUTER KIDS, THE ENGLISH MAJORS, THE MATH
 16 MAJORS. EVERYONE HAS TO USE THE AQUARIUM IN SOME WAY
 17 TO -- AS PART OF THEIR CURRICULUM. AND SO IT ISN'T JUST
 18 SCIENCE THAT THEY ARE GETTING OUT OF THAT. SO I THINK
 19 SPENDING SOME MONEY THERE AND HELPING MORE STUDENTS
 20 UNDERSTAND OUR LOCAL BEACH IS GREAT.

21 **4-19-06 MTG-11** I'M CURIOUS ABOUT THE VIEWING PLATFORM, HOW FAR
 22 OUT IT GOES, THAT, YOU KNOW, CAN WE GET CLOSER TO THE
 23 WATER? NEEDS TO BE THERE.
 24 AND I WOULD ALSO LIKE TO REQUEST THE
 25 INTERPRETIVE CENTER, THAT WE NEED -- NEED TO HAVE A

4-19-06 MTG-11 CONTINUED

1 PLACE, I THINK, FOR THE ECONOMIC VITALITY OF THE
2 COMMUNITY TO HAVE A PLACE WHERE THE VISITORS CAN GO IN
3 AND MEET WITH THOSE, OR DIFFERENT AUDUBON AND DIFFERENT
4 THINGS TO GET THE EDUCATION.

5 THIS IS NINE YEARS. YOU KNOW, IF YOU MULTIPLY
6 THE \$65,000 THAT YOU'RE PLANNING FOR THE RESTORATION OF
7 WHATEVER OUT THERE, THAT'S \$585,000 THAT MAYBE SHOULD BE
8 SPENT AFTER, YOU KNOW, FIVE YEARS OF WAITING FOR THIS
9 INVESTMENT.

10 BUT, AGAIN, I HOPE THAT MOST OF THE MONEY WOULD
11 STAY AT VANDENBERG AND NOT GO ON UP AND DOWN THE COAST.

12 THANK YOU.

13 MS. MCCURDY: THANK YOU. OTHER COMMENTS?

14 THE WITNESS: DO I NEED TO FILL OUT A CARD?

15 MS. MCCURDY: NO. IF YOU HAVE ONE, WE'LL TAKE
16 IT. YOU NEED TO STATE YOUR NAME.

17 MS. TAAFFE: I'M TAM TAAFFE. I'M WITH THE
18 AUDUBON SOCIETY. WE HAVE ECOLOGICAL PROGRAM THAT
19 ACTUALLY PROVIDES EDUCATION.

20 MS. MANCONI: CAN YOU SPEAK UP?

21 **4-19-06 MTG-12** MS. TAAFFE: I'M TAMARA TAAFFE. I'M WITH
22 LA PURISMA AUDUBON SOCIETY. AND WE HAVE A WHOLE ECOLOGY
23 PROGRAM. WE UPDATE ALL OF OUR PEOPLE THAT WE MEET ON
24 THE BEACH. IT'S ON OUR WEB SITE. WE HAVE PHOTOS. WE
25 PROVIDE ACTUAL TEACHING MATERIALS TO THE DOCENTS WHO ARE

4-19-06 MTG-12 CONTINUED

1 NOT JUST STANDING UP THERE TELLING PEOPLE, "DON'T BRING
2 YOUR DOGS DOWN." WE'RE PROVIDING THE WHOLE ECOLOGY OF
3 THE BEACH. IT'S NOT JUST ABOUT PLOVERS. AND IT WOULD
4 BE GREAT IF SOMEHOW WE COULD COLLABORATE.

5 I KNOW THAT I'VE SPOKEN WITH ROSE DASISTY FROM
6 THE COUNTY, AND THEY DID GET A SCOPE FOR YOUR GUYS
7 THAT -- THE GROUP, AND UM, I DON'T KNOW WHAT IT IS
8 CURRENTLY BEING USED FOR. BUT WE WOULD LOVE TO HAVE A
9 COUPLE OF SCOPES, BECAUSE WE'RE RELYING ON JUST OTHERS'
10 GENEROSITY FOR EDUCATION, AND HAVING THOSE TOOLS WHICH
11 COULD BE -- IF SOMEBODY MOVES, THEY WOULD BE TAKEN AWAY
12 AND OUR PROGRAM WOULD BE FALTERING.

13 THE OCEAN PARK IS SUCH A WONDERFUL, CRITICAL
14 HABITAT, AND IT'S -- A COUPLE OF TIMES WE'VE HAD WHAT
15 WOULD HAVE BEEN COUNTY -- BIRDS THAT HAVE BEEN NEW TO
16 THIS COUNTY, BUT YOU GO TO TAKE A PICTURE AND TRY TO
17 DOCUMENT, AND THERE'S DOGS RUNNING EVERYWHERE. THAT'S A
18 REAL PROBLEM, IS THE DOGS.

19 AND I DON'T THINK ANYBODY WANTS TO SEE THE
20 BEACH CLOSED, YOU KNOW. HAVING THE CLOSED -- THE BEACH
21 CLOSED DOES NOT EQUATE TO EITHER LIKING OR NOT LIKING
22 PLOVERS. IT'S TWO SEPARATE THINGS. AND IT'S REALLY
23 POLARIZED THIS COMMUNITY, WHICH IS A SHAME BECAUSE I
24 THINK WE COULD ALL WORK TOGETHER.

25 AND SO THE INTERPRETIVE CENTER SOUNDS GREAT.

4-19-06 MTG-12 CONTINUED

1 THAT'S KIND OF BEEN A BOARDWALK, AN INTERPRETIVE CENTER
2 IS ONE OF THE THINGS WE'VE OFTEN TALKED ABOUT, IF WE HAD
3 ALL OF OUR FANTASIES FULFILLED THAT WOULD BE WHAT THEY
4 WOULD BE.

5 **4-19-06 MTG-13** AND SO, ALSO, I HAVE A QUESTION ON THE FUNDING
6 FOR THAT INTERPRETIVE CENTER. HOW LONG WILL THAT BE
7 FUNDED FOR? WHO WOULD RUN IT? WHO WOULD BE THE PEOPLE
8 OPERATING IT OR HOW DOES THAT WORK?

9 MS. BOGGS: WELL, I CAN TRY TO ADDRESS THAT.
10 CURRENTLY, WE DON'T -- THE WAY WE'VE CURRENTLY
11 RANKED THE PROJECTS, BEFORE TAKING PUBLIC INPUT TONIGHT,
12 CURRENTLY WE HAVE NOT RANKED THE INTERPRETIVE CENTER AS
13 THE MOST PREFERRED PROJECT. BUT IF WE END UP
14 REEVALUATING AND DECIDING THAT AN INTERPRETIVE CENTER
15 MEETS THE CRITERIA AND IS RERANKED AS A MOST PREFERRED
16 PROJECT, THEN WE WOULD -- YOU KNOW, BECAUSE IT HASN'T
17 GOTTEN THAT FAR YET, WE HAVE NOT WORKED WITH POTENTIAL
18 PROJECT PROPONENTS TO SEE WHO WOULD ACTUALLY FUND THE
19 PROJECT AND WHO WOULD MAINTAIN IT. BUT ALL OF THAT
20 WOULD BE DETAILED AFTER WE FINALIZED THE RESTORATION
21 PROJECT AND AFTER WE HAVE THE PROJECTS. SO, FOR THE
22 MOST PREFERRED PROJECTS, WE HAVE SOME OF THAT TYPE OF
23 DETAIL, BUT FOR THE PROJECTS THAT WE DID NOT SELECT AS
24 MOST PREFERRED, WE DIDN'T GET TO THAT LEVEL.

25 MS. TAAFFE: THAT SOUNDS REASONABLE.

1 **4-19-06 MTG-14** ONE MORE QUESTION ON THE BOARDWALK. I THINK IT
2 WOULD BE IDEAL, BECAUSE I THINK THE REASON WHY PEOPLE GO
3 ALL OVER, OR THEY DO THINGS THAT ARE INAPPROPRIATE ON
4 THE BEACH, SUCH AS -- WE DON'T WANT SIGNS EVERYWHERE
5 SAYING PUT YOUR DOG ON A LEASH, BECAUSE PEOPLE IGNORE
6 THAT, AND EVEN IF YOU GO UP TO THEM AND SAY, "THIS IS A
7 PLACE WHERE YOU CANNOT EVER HAVE YOUR DOG OFF YOUR LEASH
8 AT ANY TIME," IT'S NOT LIKE PLOVER SEASON. IT EQUATES
9 TO HAVING YOUR DOG ON A LEASH, AND WHEN IT'S NOT PLOVER
10 SEASON, THEN IT'S JUST DOGS' WILD TIME. SO I THINK A
11 BOARDWALK WOULD BE APPROPRIATE, BECAUSE IT WOULD SORT OF
12 JUST NATURALLY GUIDE PEOPLE WHERE IT'S APPROPRIATE,
13 WHERE THAT IT'S APPROPRIATE TO GO OR HOW TO GET THERE,
14 AND SO I WOULD REALLY, I THINK OUR GROUP WOULD REALLY
15 ENFORCE WHAT WE WANT TO SEE THAT HAPPEN, IF THAT'S
16 POSSIBLE. AND I THINK THAT'S IT.

17 MS. MCCURDY: IS THERE ANYONE ELSE WHO WANTS TO
18 COMMENT?

19 MR. PHILLIPS: ALICE, COULD I JUST MAKE ONE
20 QUICK COMMENT? I JUST WANTED TO POINT OUT THAT, AS --
21 AS YOU KNOW, THIS MONEY WAS ALLOCATED BASED ON THE
22 NATURAL RESOURCE DAMAGE ASSESSMENT. AND SO THE DAMAGE
23 WAS ASSESSED TO DIFFERENT CATEGORIES OF NATURAL
24 RESOURCES; SEA BIRDS, FOR INSTANCE, AND HUMAN RECREATION
25 LOSS AS ANOTHER. AND THOSE DAMAGES WERE MONETIZED, AND

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1 THEN A CONSENT DECREE OR LEGAL RANGLING WAS SIGNED THAT
2 INSTRUCTED US TO MAKE COMPENSATION FOR THOSE DAMAGES
3 LOST IN THOSE CATEGORIES.

4 AND SO, TO SOME DEGREE, WE HAVE SET BUDGETS FOR
5 EACH CATEGORY THAT WE NEED TO ASSIGN. SO, I THINK WE'RE
6 SORT OF CONSTRAINED BY THOSE CATEGORIES AND THAT CONSENT
7 DECREE.

8 MS. MCCURDY: FLORENCE, DID YOU HAVE ANOTHER
9 COMMENT OR QUESTION?

10 **4-19-06 MTG-15** MS. PATA: WELL, YOU ASSIGNED MONETARY FUNDS TO
11 CATEGORIES, BUT DON'T YOU THINK THAT OUR AREA SHOULD
12 HAVE A TOP PRIORITY SINCE THIS IS WHERE THE SPILL
13 HAPPENED?

14 MS. BOGGS: THE PRIORITY IS TO ALWAYS TRY TO
15 COMPENSATE THE TYPES OF RESOURCES THAT WERE INJURED.
16 AND THAT'S THE GOAL, AND WE WILL TAKE THAT INTO
17 CONSIDERATION. THAT IS OUR NUMBER ONE CRITERIA THAT WE
18 USE WHEN WE'RE EVALUATING ALL OF THESE PROJECTS. SO WE
19 WILL -- THAT'S PART OF THE EQUATION IN SELECTING THE
20 RESTORATION PROJECT.

21 MS. PATA: YOU ARE TALKING ABOUT AN ECONOMIC
22 IMPACT, TOO?

23 MS. BOGGS: CORRECT.

24 MS. PATA: THIS WOULD BE THE AREA --

25 MS. BOGGS: RIGHT.

1 MS. PATA: -- THAT WAS MOST IMPACTED. BUT IT
2 DOESN'T SOUND LIKE YOU REALLY -- THIS IS JUST ONE OF
3 YOUR MANY AREAS, NOT THE PRIME.

4 MS. BOGGS: THE ISSUE WITH THE -- WITH THE
5 RECREATIONAL PROJECT ASPECT OF THIS WHOLE RESTORATION
6 PLANNING PROCESS IS THAT THEY DETERMINED THAT THE VALUE
7 OF LOST RECREATIONAL SERVICES DURING THE SPILL EQUATED
8 TO APPROXIMATELY \$65,000. SO, WE ONLY HAVE
9 APPROXIMATELY \$65,000 OUT OF THE APPROXIMATE \$2 MILLION,
10 TO SPEND ON RECREATIONAL PROJECTS.

11 MS. PATA: THAT'S A VERY, VERY SMALL
12 PERCENTAGE.

13 MS. BOGGS: WE ARE CONSTRAINED BASED ON THAT.

14 MS. MCCURDY: DO YOU HAVE A QUESTION OR A
15 COMMENT?

16 **4-19-06 MTG-16** MR. KELLER: YES. FIRST OF ALL, THE QUESTION
17 FOR THE MUSSEL RESTORATION, IS THAT SOMETHING THAT
18 NATURE WILL DO ITSELF? IT'S JUST A MATTER OF PATIENCE?
19 I DON'T KNOW IF THAT'S THE CASE OR NOT FOR THE MONEY TO
20 BE BETTER SPENT ON MORE BENEFITS SUCH AS A BOARDWALK ON
21 THE BEACH.

22 MS. MCCURDY: CAN WE GET YOUR NAME FOR THE
23 RECORD, SIR?

24 MR. KELLER: PAUL KELLER.

25 MS. MCCURDY: THANK YOU.

1 MS. BOGGS: I CAN JUST COMMENT IN THAT, AGAIN,
 2 THE MONEY IS BASED ON THE LEGAL DOCUMENTS, THE
 3 SETTLEMENT DOCUMENTS THAT, FOR THE RECREATIONAL
 4 PROJECTS, WE CAN ONLY SPEND A CERTAIN AMOUNT OF MONEY,
 5 AND WE ARE DIRECTED BASED ON THE CONSENT DECREE TO SPEND
 6 A CERTAIN AMOUNT OF MONEY TO TRY AND COMPENSATE THE
 7 ROCKY INTERTIDAL SPECIES, SUCH AS MUSSELS. AND WE NEED
 8 TO ALSO SPEND A CERTAIN AMOUNT OF DOLLARS TO TRY TO
 9 RESTORE THE IMPACT TO THE SEABIRDS.

10 MS. MCCURDY: AND BACK IN THE LAST ROW AGAIN.
 11 I SAW TWO HANDS.

12	4-19-06 MTG-17	MR. STYLER: WILL STYLER.
13	THERE'S BEEN NO CEQA STUDY OR ANYTHING LIKE	
14	THAT ON THIS? THIS IS JUST ALL BY WHAT WE THINK WE'D	
15	LIKE TO DO?	

16 MS. MCCURDY: THE RESTORATION PLAN IS DOUBLING
 17 AS A NEPA DOCUMENT. WE HAVEN'T DONE CEQA YET, BUT WE'RE
 18 ASSUMING THAT THE RESTORATION PLAN AND THE NEPA OR
 19 FEDERAL ENVIRONMENTAL DOCUMENT CAN BE USED TO COMPLY
 20 WITH CEQA FOR THE PROJECTS THAT NEED CEQA COMPLIANCE.

21 MS. BOGGS: SO I'LL JUST ADD THAT, AS WE DECIDE
 22 WHAT PROJECTS WE WILL FUND, EACH PROJECT WILL HAVE TO GO
 23 THROUGH ITS OWN ENVIRONMENTAL REVIEW. EACH PROJECT WILL
 24 OBVIOUSLY HAVE TO COMPLY WITH ALL OF THE FEDERAL AND
 25 STATE LAWS, THAT WAS ONE OF THE CRITERIA THAT WE

1 MENTIONED. SO IF A PROJECT NEEDS TO COMPLY WITH CEQA,
2 IT WILL -- WE WILL COMPLY WITH CEQA.

3 MR. KELLER: SO THAT'S YET TO BE DETERMINED?

4 MS. BOGGS: CORRECT.

5 **4-19-06 MTG-18** MR. KELLER: AND THE OTHER STUFF, I WAS
6 WONDERING, YOU SAID IN THERE FROM POINT SAL TO VENTURA.
7 WELL, I KNOW THAT THE CURRENT OUT HERE GOES SOUTH. I
8 WAS WONDERING HOW YOU FIGURE IT HAD AN EFFECT GOING
9 NORTH?

10 MS. BOGGS: REGARDING THE SEABIRD INJURIES, WE
11 COLLECTED OILED BIRDS ALL OF THE WAY UP TO MORRO BAY AND
12 SOUTH. SO, THE AREA THAT THE SEABIRDS WERE FOUND WERE
13 OVER A LARGE GEOGRAPHIC AREA. AND THE SEABIRD PROJECT
14 IS TO AGAIN TRY TO COMPENSATE FOR THE IMPACTS TO THE
15 SEABIRDS; AND REALLY THE GOAL IS TO TRY TO IMPROVE
16 SEABIRD HABITAT WHERE THEY NEST, BECAUSE WE WANT TO TRY
17 TO IMPROVE THE REPRODUCTIVE CAPACITY.

18 AND BIRDS DON'T NECESSARILY NEST RIGHT IN THE
19 AREA WHERE THEY WERE IMPACTED DURING THE SPILL, BECAUSE
20 A LOT OF THESE BIRDS ARE MIGRATORY BIRDS, AND THEY ARE
21 MIGRATING THROUGH. SO THAT'S THE REASON WHY THE SEABIRD
22 PROJECTS EXPANDED OVER A LARGE GEOGRAPHICAL AREA,
23 BECAUSE WE'RE TRYING TO IMPROVE THE NESTING HABITAT FOR
24 THESE BIRDS.

25 MS. MCCURDY: RON.

1 **4-19-06 MTG-19** MR. FINK: I'M GOING TO TRY ANOTHER SALES PITCH
2 FOR MY INTERPRETIVE CENTER HERE. TRY TO GET SOME LINK
3 BACK TO THE SEABIRD PROTECTION.

4 WHENEVER YOU DISCUSS THE SEABIRD COLONY
5 ENHANCEMENT PROJECT, YOU TALK ABOUT THE POTENTIAL HARM
6 FOR DISTURBED BREEDING SEABIRDS THAT COMES WITH VARIOUS
7 ACTIVITIES, INCLUDING BUT NOT LIMITED TO KAYAKING,
8 MOVING AND FLYING PLANES AND HELICOPTERS, FISHERY
9 OPERATIONS, AND WATER-BASED ECOTOURISM SUCH AS DIVING
10 AND KAYAKING. I'M HAVING A HARD TIME CONNECTING THIS TO
11 AN OIL SPILL. BUT SUPPOSE YOU DID THAT. THESE ARE ALL
12 ACTIVITIES THAT BEGIN ON THE LAND.

13 SO, IF YOU HAD AN INTERPRETIVE CENTER, LIKE
14 I'VE GOT IN MY HEAD, YOU WOULD BE INFORMING PEOPLE WHO
15 MAY WANT TO DO THESE SORTS OF THINGS, WHAT DISTURBANCE
16 THAT WOULD CAUSE TO THE SEABIRD POPULATION. AND THE
17 KIND OF INTERPRETIVE CENTER I'M THINKING ABOUT ISN'T
18 GOING TO COST A MILLION DOLLARS.

19 THE KIND OF INTERPRETIVE CENTER I'M THINKING
20 ABOUT WOULD PROVIDE A VENUE FOR THE AUDUBON SOCIETY AND
21 OTHER NATURE GROUPS TO PUT THEIR DISPLAYS IN, TO ACT AS
22 DOCENTS, TO ACT AS INTERPRETIVE INSTRUCTORS AND SO FORTH
23 AND SO ON.

24 I'M NOT TALKING ABOUT LIKE A WALT DISNEY TYPE
25 CENTER. I'M TALKING ABOUT A LOMPOC TYPE CENTER WHERE

4-19-06 MTG-19 CONTINUED

1 THE CITIZENS OF THE COMMUNITY CAN GO DOWN THERE AND HELP
2 OUT, AND ALL THEY NEED IS A PLACE TO PUT THEIR STUFF.

3 EARLIER, WHEN WE WERE FIRST TALKING ABOUT THIS,
4 I SPOKE WITH PEOPLE FROM VANDENBERG AIR FORCE BASE.
5 MANY OF THE COMPANIES OUT THERE WOULD BE HAPPY TO DONATE
6 RESOURCES AND TIME TO PUT THINGS DOWN THERE.

7 VANDENBERG AIR FORCE BASE WAS REALLY EXCITED
8 ABOUT IT, THEIR ENVIRONMENTAL SHOP. THAT WAS WHEN
9 NANCY FRANCINE WAS OUT THERE. THEY WERE REAL EXCITED
10 ABOUT THE OPPORTUNITY TO BE ABLE TO PUT THINGS THERE
11 THAT THE PUBLIC COULD SEE. NOW, HOW DOES THAT GO WITH
12 RESTORING THE SEABIRD COLONY?

13 I THINK IT HAS A MORE DRAMATIC IMPACT AND MORE
14 LONG LASTING IMPACT THAN TRYING TO GO OUT THERE AND
15 CATCH KAYAKERS -- AND WHATNOT THERE IN THE OCEAN, OR PUT
16 UP BUOYS, OR WHATEVER IT WAS THAT WAS IN THAT PROJECT.

17 I THINK THAT THIS PROJECT WOULD HAVE MORE
18 VISIBILITY AND MORE DIRECT CONNECTION TO THE PUBLIC AND
19 TO THE PEOPLE WHO MAY SEEM TO NOT KNOW, FOR EXAMPLE,
20 THAT THE DOGS CHASING THE BIRDS AROUND -- I CAN FIGURE
21 OUT A DOG CHASING A BIRD AROUND, THE BIRD IS GOING TO GO
22 CRAZY. HE'S GOING TO GO AWAY AND NOT COME BACK. BUT
23 OTHER PEOPLE MAY NOT UNDERSTAND THAT.

24 SO I THINK THAT THE INTERPRETIVE CENTER
25 DESERVES FAR MORE CONSIDERATION, AND PERHAPS YOU COULD

4-19-06 MTG-19 CONINUED

1 REASON YOURSELVES THAT THIS WOULD HAVE A BETTER IMPACT
2 ON THE COMMUNITY THAN THE OTHER PARTS OF YOUR SEABIRD
3 COLONY ENHANCEMENT PROJECT.

4 IN OTHER WORDS, TAKE SOME OF THE FUNDING FROM
5 THAT AND SAY, "HEY, THIS WILL HELP THE SEABIRD COLONY IF
6 WE DO THIS. THIS WILL HELP TO DO IT."

7 SO THAT'S MY SECOND SALES PITCH.

8 MR. PHILLIPS: AND ON THAT NOTE, THE SEABIRD
9 COLONY PROTECTION PROJECT FOCUSES, IN LARGE PART, ON
10 PUBLIC EDUCATION, AND ON INTERPRETIVE SIGNAGE AND THINGS
11 LIKE THAT EXPLAINING THE BIOLOGY OF THE BIRDS, THEIR
12 NESTING HABITS, AND WHY THESE COLONIES ARE SENSITIVE.

13 AND CERTAINLY -- AND THAT IS NOT INTENDED TO
14 FOCUS SOLELY AROUND THE SEABIRD COLONIES THEMSELVES, BUT
15 ALSO BACK AT OTHER PLACES WHERE, YOU KNOW, MAYBE AT THE
16 AIRPORTS WHERE PILOTS ARE, TO INFORM THEM OF THE LOW
17 FLYING HAZARDS TO THE BIRDS, YOU KNOW, BACK AT THE
18 HARBOR FOR FISHERMEN, AND, YOU KNOW, RECREATIONAL
19 STORES, OR SOMETHING FOR THE KAYAKERS. AND MOSTLY
20 IMPORTANTLY, PLACES WHERE PEOPLE ENTER THE BEACH, AND,
21 YOU KNOW, THE PRIMARY ENTRANCE POINT TO THESE HABITATS.

22 AND SO, YOUR REASONING IS VALID. AND THERE IS
23 FUNDING AVAILABLE IN THIS PROJECT FOR INTERPRETIVE
24 THINGS SUCH AS YOU'RE TALKING ABOUT.

25 WHETHER THERE'S ENOUGH MONEY TO ACTUALLY BUILD

1 AN ENCLOSED BUILDING, I DON'T KNOW. BUT CERTAINLY A
2 KIOSK WITH SIGNS, AND THINGS LIKE THAT, I THINK ARE
3 ENVISIONED IN THIS PROGRAM. SO, YOU KNOW, HOPEFULLY, WE
4 CAN TALK MORE ABOUT THAT AND --

5 MR. FINK: SURE.

6 MR. PHILLIPS: -- TRY AND MAKE THOSE VISIONS
7 MATCH UP.

8 MS. TAAFFE: DO I NEED TO OR CAN I TALK
9 LOUDER?

10 MS. MENCONI: FACE THE REPORTER WOULD PROBABLY
11 HELP.

12 **4-19-06 MTG-20** MS. TAAFFE: TWO THINGS. SIGNS HAVE A LIMITED

13 VALUE. PEOPLE -- THEY BECOME OBLIVIOUS TO PEOPLE.

14 WE HAVE A LOT OF GUESTS THAT WE CAN'T SUPPLY
15 ALL OF THE INFORMATION IN EVERY LANGUAGE, OF THE PEOPLE
16 THAT WE HAVE AS GUESTS. THEY GET DESTROYED IF YOU GO TO
17 THE PLOVERS.

18 THE PLOVER BIRDS ARE ALL BURNT OUT ON THE SIGNS
19 AT THE BEACH, AND IF YOU WATCH THE T.V. NEWS THEY ARE
20 SHOWING SANDERLINGS. THEY'RE ALL SANDERLINGS, AND
21 EVERYBODY THINKS THERE'S THOUSANDS OF PLOVERS BECAUSE
22 THEY THINK THAT'S, YOU KNOW, IT.

23 AS FAR AS SOME OF THE ACTIVITIES THAT RON
24 MENTIONED, THEY DO HAVE AN IMPACT ON THE BEACH. WE ALL
25 LOATH THE EXCESSIVE PERMITTING. PERMITTING HAS ITS

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4-19-06 MTG-20 CONTINUED

1 VALUE BECAUSE HUNTING IS GREAT. IT TELLS YOU HOW TO
2 BEHAVE APPROPRIATELY AND THINGS LIKE THAT. BUT THESE
3 ARE THINGS THAT HAVE IMPACT ON THE BEACH.

4 **4-19-06 MTG-21** BUT I THINK AN INTERPRETIVE CENTER WOULD GIVE
5 YOU A CHANCE TO ADDRESS PEOPLE WITHOUT HAVING -- PEOPLE
6 DON'T WANT TO COME TO THE BEACH AND STOP AND READ SIGNS.
7 THEY ARE AT THE BEACH. THEY'RE EXCITED. THEY ARE
8 ALREADY IN LOCOMOTION.

9 IT WOULD GIVE YOU A CHANCE TO TALK TO PEOPLE
10 THAT ARE HAVING FUN ON THE BEACH, AND IF THEY HAVE
11 QUESTIONS ABOUT THINGS, OR BEHAVIOR, OR THINGS LIKE
12 THAT, THERE COULD BE HANDOUTS OR THINGS LIKE THAT. SO
13 IT MIGHT SOLVE A LITTLE BIT OF THAT WHOLE PROBLEM THERE.

14 BUT I REALLY WOULD LIKE AN INTERPRETIVE CENTER.
15 I THINK IT WOULD BE VALUABLE. I'M REALLY VERY MUCH
16 AGAINST MORE SIGNS ON THE BEACH. AND THAT'S ALSO
17 LIMITED, THAT YOU HAVE TO KEEP REPLACING. AND I JUST
18 DON'T THINK THAT'S WHAT I WANT TO SEE ON THE BEACH. I
19 WANT TO SEE PEOPLE ON THE BEACH. I WANT THE BEACH TO BE
20 OPEN ALL OF THE TIME.

21 MS. MCCURDY: THANK YOU.

22 YES, FLORENCE AGAIN.

23 **4-19-06 MTG-22** MS. PATA: WELL, I HAVE ANOTHER QUESTION. HOW
24 MANY BIRDS ORDINARILY -- IN THE TIME OF THIS SPILL, YOU
25 SAY 700 DIED. HOW MANY DIE EVERY YEAR FROM THE NATURAL

4-19-06 MTG-22 CONTINUED

1 OIL SPILLS DURING THAT SAME TIME FRAME?

2 MS. BOGGS: I HAVE NO -- I HAVE NO IDEA. I'M
3 SORRY.

4 MS. PATA: NOBODY KNOWS WHETHER THERE ARE 50 OR
5 800?

6 MS. BOGGS: THERE ARE PROBABLY SEABIRD
7 SCIENTISTS THAT KNOW THAT ANSWER, BUT I PERSONALLY DO
8 NOT. WE COULD LOOK INTO IT.

9 MS. PATA: ALSO, HOW MUCH --

10 MS. MENCONI: BUT THIS IS IN ADDITION TO. I
11 MEAN, BASICALLY BECAUSE OF THE OIL SPILL, BIRDS DIED,
12 BUT THE BACKGROUND NUMBER OF BIRDS DIED, THESE BIRD ARE
13 STILL DYING. DO YOU KNOW WHAT I'M SAYING? THE BIRDS
14 THAT DIE NATURALLY, THEY ARE STILL DYING NATURALLY. NOW
15 THERE'S AN ADDITIONAL 700 OR WHATEVER FROM THE OIL
16 SPILL.

17 MS. PATA: YEAH, BUT THERE ARE OIL SEEPS ALL OF
18 THE TIME.

19 MS. MENCONI: SURE, AND BIRDS DIE OF NATURAL
20 CAUSES ALL THE TIME, INCLUDING OIL SPILLS.

21 **4-19-06 MTG-23** MS. PATA: ALSO, I'M WONDERING, HOW MUCH MONEY
22 ARE YOU GOING TO SPEND ON THE MUSSEL RESTORATION? WE'RE
23 GOING OUT TO OIL PLATFORMS WHEN THERE WERE NO MUSSELS
24 WHEN THE OIL PLATFORMS WERE PUT IN. I DON'T THINK
25 ANYONE WENT OUT AND PLANTED THEM.

4-19-06 MTG-23 CONTINUED

1 I THINK NATURE IS GOING TO TAKE CARE OF ITSELF,
2 AND MAYBE THAT MONEY FOR OIL RESTORATION COULD BE PUT
3 INTO AN INTERPRETIVE CENTER TO HELP EDUCATE THE PEOPLE.

4 THERE HAVE BEEN OFFERS ALSO FROM HANCOCK
5 COLLEGE WHERE THEY HAVE HAD MARINE SCIENCE CLASSES, TO
6 HELP WITH EXHIBITS AND SUCH.

7 MS. BOGGS: THANK YOU.

8 **4-19-06 MTG-24** MS. MCCURDY: ONE RESPONSE, JUST IN TERMS OF
9 THE QUESTION OF THE SEEPS ON THE SOUTH COAST AND TO WHAT
10 EXTENT BIRDS ARE OILED, AND I'M NOT SPEAKING AS AN
11 EXPERT, BUT WHAT I'VE HEARD PEOPLE SAY IS THAT BIRDS
12 PRETTY MUCH AVOID THE AREAS THAT ARE CONSISTENTLY OILED.

13 FOR INSTANCE, THERE ARE -- THERE'S A WILDLIFE
14 CARE FACILITY ON THE SOUTH COAST. AND THEY AREN'T
15 CONSISTENTLY INUNDATED WITH OIL BIRDS FROM THE COLIMA
16 POINT AREA, FOR INSTANCE. SO I DON'T HAVE ANY
17 STATISTICS, BUT THAT'S WHAT I'VE HEARD.

18 MS. PATA: OKAY. WELL, I THINK THERE SHOULD BE
19 SOME STATISTICS THAT COME OUT WITH ALL OF THIS INSTEAD
20 OF JUST 700 BIRDS WERE KILLED BECAUSE OF THIS, IN
21 COMPARISON TO OTHER TYPES. I THINK THAT WE HAVE MORE OF
22 AN IMPACT ON PEOPLE READING THE ARTICLES.

23 MS. MCCURDY: RIGHT. I HEAR YOU SAYING YOU'D
24 LIKE TO SEE A CONTEXT FOR THOSE NUMBERS.

25 MS. PATA: YEAH.

4-19-06 MTG-24 CONTINUED

1 MS. MCCURDY: AND AT THE SAME TIME, MARY WAS
2 POINTING OUT THAT THE OIL SPILL IMPACT IS IN ADDITION.
3 IT'S ABOVE AND BEYOND OTHER NORMAL FACTORS.

4 MS. PATA: UH-HUH. BUT PEOPLE -- SO MANY
5 PEOPLE DON'T EVEN SEEM TO REALIZE THAT THERE ARE NATURAL
6 OIL SEEPS, AND HAVE BEEN SINCE THE BEGINNING OF TIME.

7 MS. MCCURDY: RIGHT. THE SEEPS ON THE SOUTH
8 COAST ARE LIKE THE SECOND BIGGEST SEEPS ON THE FACE OF
9 THE EARTH, I BELIEVE.

10 ANY OTHER COMMENTS?

11 WELL, I GUESS -- I DON'T KNOW, ANYBODY ELSE
12 HAVE COMMENTS?

13 ONE THING I'D LIKE TO SAY IS THAT I JUST REALLY
14 APPRECIATE THE INPUT THAT WE'VE GOTTEN. IT'S BEEN
15 REALLY CONSISTENTLY THOUGHTFUL AND CONSTRUCTIVE, AND
16 THAT ISN'T ALWAYS THE CASE, SO I KNOW THAT WE ALL
17 APPRECIATE THAT.

18 IT'S CLEAR YOU WERE THINKING ABOUT THE ISSUES
19 AND MAKING SUGGESTIONS FOR PROJECTS THAT MAKE SENSE TO
20 YOU AND THINGS YOU'D LIKE TO SEE IN YOUR COMMUNITY. SO
21 WE'RE GRATEFUL FOR THAT.

22 ANYONE HAVE ANYTHING THEY WANT TO ADD?

23 MS. BOGGS: THANKS, EVERYONE, FOR COMING. AND
24 IF YOU WANT TO PROVIDE ANY MORE COMMENTS, TAKE MORE TIME
25 TO READ THE RESTORATION PLAN, IT'S GOOD BEDTIME READING

1 REPORTER'S CERTIFICATE

2
3 I, CINDY D. GRIFFITH, A CERTIFIED SHORTHAND
4 REPORTER IN AND FOR THE STATE OF CALIFORNIA, DO HEREBY
5 CERTIFY:

6 THAT SAID PROCEEDINGS WAS TAKEN BEFORE ME AT
7 THE TIME AND PLACE THEREIN SET FORTH AND WAS TAKEN DOWN
8 BY ME IN SHORTHAND AND THEREAFTER REDUCED TO
9 COMPUTERIZED TRANSCRIPTION.

10 I HEREBY CERTIFY THAT THE FOREGOING IS A FULL,
11 TRUE AND CORRECT TRANSCRIPT OF MY SHORTHAND NOTES SO
12 TAKEN.

13 DATED AT SAN LUIS OBISPO, CALIFORNIA, THIS 29TH
14 DAY OF APRIL, 2006.

15
16
17
18
19 CINDY D. GRIFFITH

20 CERTIFIED SHORTHAND REPORTER
21
22
23
24
25

APPENDIX A

RESPONSES TO COMMENTS ON DRAFT RP/EA

BALL-1 The Trustee Council received 24 comments in favor of constructing a boardwalk, path, and stairs from Ocean Beach Park to the beach. These comments do not include those from the April 19, 2006, public meeting because some people commented both at the meeting and later in writing; please refer to public meeting comments. In addition, we received one comment in favor of a boardwalk at Surf Beach, and we received two comments in favor of the Boardwalk and Viewing Platform at Ocean Beach Park Estuary (the tentative preferred project identified in the draft RP/EA).

In response to the public comments favoring the construction of stairs, a boardwalk and path from Ocean Beach Park to the beach, the Trustee Council researched the feasibility of this project. The Trustees consulted with Vandenberg Air Force Base (VAFB), which owns the property, and Santa Barbara County Parks Department. A number of concerns were raised including potential liability, the dynamics of the dune system, flooding of the river/estuary, meandering of the river mouth, beach closure for part of year due to nesting western snowy plovers, and probable high maintenance costs due to these issues. Because of these concerns, Santa Barbara County does not want to implement the beach boardwalk/stairs project at Ocean Park. However, Santa Barbara County has plans to implement a two-phase boardwalk project at Ocean Beach Park. Additional funds for the two-phase project are needed. Phase I is a boardwalk around the parking lot and phase II is a boardwalk over the estuary at Ocean Park. Phase I is scheduled to start in spring of 2007 and phase II is planned for 2007 or 2008.

The Trustee Council also researched the feasibility of constructing stairs or a boardwalk at Surf Beach to improve beach access. Stairs or a boardwalk to Surf Beach would require access onto a portion of rail road property. The Trustees consulted with the rail road company that owns the property. The rail road would not agree to provide access to build stairs/a boardwalk on its property at Surf Station.

After considering the public comments and feasibility concerns regarding a beach boardwalk and stairs at Ocean Beach Park or a boardwalk or stairs at Surf Beach, the Trustees have decided to allocate the funds dedicated to a recreation project toward the County of Santa Barbara's Boardwalk at Ocean Beach Park (Phase I).

BLAIR-1 Comment noted.

BLAIR-2 Comment noted. The Sandy Beach and Dune Habitat Restoration project will enhance the beach and foredune habitat and benefit western snowy plovers.

BLAIR-3 Comment noted. See response to comment BALL-1.

BROWN-1 Comment noted. See response to comment BALL-1.

CHESTNUT-1 Comment noted. See response to comment BALL-1.

FINK-1 Comment noted. See response to comment BALL-1.

FINK-2 Comment noted.

FINK-3 The commenter is correct that the draft RP/EA stated that approximately 635 to 815 seabirds and shorebirds were adversely impacted from the Spill. Dead oiled birds were recovered as far south as Honda Cove, just north of Point Pedernales, and as far north as Morro Bay. Live oiled birds were observed as far southeast as Santa Barbara Harbor and as far north as Morro Bay. It is reasonable to assume that some live oiled birds, such as endangered brown pelicans, flew well beyond the area immediately affected by the Spill. This assumption is based on other studies that have been conducted. Some studies using bird carcasses have shown dead birds drift passively beyond the spill area (Ford *et al.* 1996). Studies have also shown that during an oil spill, birds may die at sea and sink, birds may be scavenged at sea or onshore, birds may be missed by searchers, live debilitated birds may fly out of the search area, and birds may crawl into secluded spots on land before they can be collected. For these reasons, not all birds that are impacted by an oil spill can be accounted for.

If birds are not collected during and after the spill response, it is impossible to determine specifically how the spill impacted these birds. However, all oil spills impact birds in generally the same way as noted in the RP/EA; that is, exposure to oil can injure birds by three general mechanisms: 1) physical effects of oil on plumage, 2) toxic effects, and 3) impacts to bird habitat. A large proportion of the acute mortality caused by spills is due to physical oiling of birds which results in hypothermia and reduced ability to feed. Acute (short-term) mortality, as well as sublethal effects, can also result

from toxicity after birds ingest or inhale oil. Chronic (long-term) effects of oiling likely include reduced reproduction and survivability.

FINK-4 The comment that there is no empirical evidence presented to support the theory that any bird species was permanently impacted by the spill is correct. Even though populations of species impacted by oil spills are generally not impacted permanently, individuals of those species are injured, and this impact on the individual can have an impact on the local population, depending on the species and the injuries. Similarly, habitat impacts resulting from an oil spill are generally temporary in nature. Pursuant to the natural resource damage assessment regulations under OPA, the Trustees are required to consider active primary restoration actions to restore injured natural resources to baseline on an accelerated timeframe as well as compensatory restoration actions to compensate for the interim losses of natural resources and services pending recovery (15 C.F.R. § 990.53). Interim losses are an element of natural resource damages under State law as well. (Government Code §§ 8670.7 (h), 8670.56.5 and 8670.61.5). Accordingly, the Trustees must address temporary impacts to habitats and local populations.

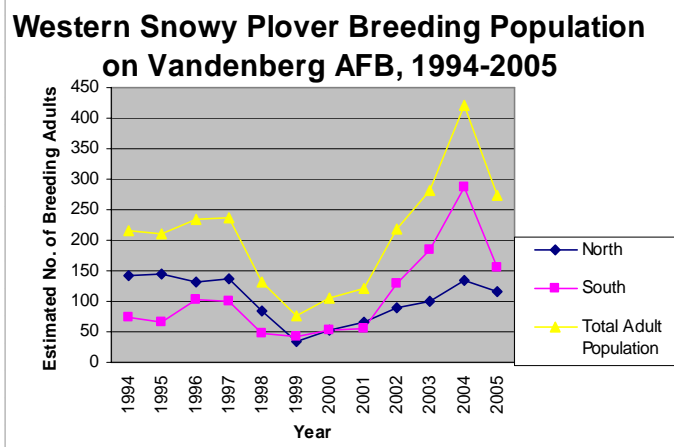
FINK-5 The purpose of restoration is to restore injured natural resources and services to baseline. Federal and state natural resource damage statutes do not limit wildlife restoration to situations where a spill has resulted in long-term population impacts. The trustees are tasked with assessing and restoring both long-term and short-term injuries to local populations and their habitat. When scaling natural resource injuries, the trustees take into consideration the temporal extent of the injuries with and without natural recovery. The Seabird Colony Enhancement project is designed to compensate for the injuries to seabirds. The seabird species primarily affected were common murre and Brandt's cormorants. In addition, nineteen other species of seabirds were affected including California brown pelicans. It is difficult to design a single project that benefits all seabird species affected by the Spill, particularly when many do not breed in the region. Birds that were impacted by the Spill that this project will likely benefit include California brown pelicans, Brandt's cormorants, double-crested cormorants, pigeon guillemots and gulls.

In addition, common murre colonies may benefit indirectly through the public educational and awareness aspects of the Seabird Colony Enhancement project, since the project expands the geographic range of an ongoing Seabird Colony Protection Program in the area of Point Reyes south to Monterey County. This latter project, which has other sources of funding, directly benefits common murre colonies that are found to the north of the Torch seabird project area by addressing key disturbance issues and educating the general public on such seabird disturbance issues. The Torch Seabird Colony Enhancement project will extend this program south into Santa Barbara County and the Channel Islands.

With regard to snowy plovers and the Sandy Beach and Dune Habitat Restoration project, sandy beach habitat was injured both by the 1997 Spill and by the heavy equipment used during cleanup operations. The injured sandy beach habitats provided important foraging habitat for snowy plovers and other shorebirds. In addition, a number of snowy plovers and other shorebirds were observed oiled following the Spill. Accordingly, a project to benefit sandy beach habitat and snowy plovers is warranted and is required by the Consent Decree associated with the Torch oil spill settlement. The comment also states that VAFB studies will probably show that the western snowy plovers have “propagated” and are “flourishing since the spill occurred.” Data from VAFB indicate a decline in the number of breeding adult western snowy plovers for several years following the Spill. This number has fluctuated over the years (see chart below). Also, see response to comment LPAS-5.



Breeding Population 1994-2005



Team Vandenberg - *HAWKS*

3

FINK-6 Regarding broadening the Public Education Project (now called the Rocky Intertidal Habitat Protection Program) in place of the Seabird Colony Enhancement Project, see response to LPAS-5 below. Additionally Santa Barbara County has informed the Trustee Council they would not support an interpretive center at Ocean Beach Park due to the remoteness and associated maintenance and vandalism concerns.

FIST-1 The option of keeping Surf Beach open year round and protecting western snowy plovers by fencing is not within the Torch Trustee Council's control. This option is dependent upon the status of the federally listed western snowy plover and is not considered by the Trustees to be a restoration project.

FRITZ-1 Comment noted. See response to comment BALL-1.

HOLMGREN-1 See response to comment BALL-1

HOLMGREN-2 Comment noted.

HOLMGREN-3 The Seabird Colony Enhancement Project is intended to improve the nesting success of some of the seabird species that were impacted during the Torch Spill, by reducing human disturbances at their breeding colony sites along the Central Coast. Additionally the project is intended to improve the survival of roosting birds, i.e., California brown pelicans, by reducing human disturbances at roosting sites. As the project is further refined during implementation, an analysis of threats will be made, as suggested, to determine which areas along VAFB and beyond, such as along the Channel Islands, are problematic due to human disturbance to nesting and/or roosting seabirds. Additionally, as suggested, the Seabird Colony Enhancement Project will include coordinating with VAFB, to the maximum extent possible, on military activities that impact or could impact nesting and/or roosting sea birds. These points have been included in the Seabird Colony Enhancement Project description in the RP/EA.

HOLMGREN-4 Comment noted; please see response to comment BALL-1.

HOLMGREN-5 According to Minerals Management Service (MMS) personnel, mussel beds along the VAFB shoreline are receding, including beds in areas impacted by the spill. Mary Elaine Helix, MMS, indicated in personal communications with the Trustee Council, that the mussel populations between Point Conception and just south of Point Sal have lower abundances when compared to other areas. At the time of the Torch Spill, there was a huge El Niño event which ripped the mussels off the rocks within a couple of weeks of the Spill. Other potential causes for reduced abundances include burial from sand or large quantities of oil; other physical disturbances from logs, rocks, and humans (trampling and/or collecting); or impacts from other pollution sources (e.g., non-point source pollution).

MMS staff believe that mussel beds off-shore from VAFB can be enhanced through seeding. More detail is provided in the RP/EA. In addition, the Consent Decree requires a portion of the Torch restoration funds to be used for projects benefiting mussels. Pursuant to the MOU between the Trustee agencies, the Trustee Council allocated approximately \$104,650 for a project to benefit mussel beds and other rocky intertidal resources.

HOLMGREN-6 Comment noted.

HOLMGREN-7 Comment noted; please see response to comment BALL-1.

HOLMGREN-8 Even though the removal of a defunct road near the Santa Ynez River Estuary would likely benefit the estuary habitat, the Trustee Council is not going to pursue this project nor use the restoration funds to create a management plan for the Santa Ynez River Estuary. The Trustees did not document injuries to estuarine habitat. The Consent Decree and MOU require restoration funds to be used on projects benefiting the injured habitats, i.e., sandy beach habitats and rocky intertidal habitats. Other projects have been identified with a stronger nexus to the injured habitats. In addition, pursuant to the MOU between the Trustee agencies, approximately \$65,500 was allocated for a project that would compensate for impacts to beach-related recreational activities. This is the basis for including a boardwalk project in the Restoration Plan. Removing a defunct road in an environmentally sensitive area that includes listed species, would require years of studying and permitting and would require significantly more funding than the \$65,500 allocated for a project to enhance recreational beach use.

The following are responses to comments from the La Purisima Audubon Society (LPAS).

A total of 23 individuals emailed or called and endorsed the LPAS positions/comments regarding the draft Torch RP/EA. Of the 23 that endorsed the LPAS comments, eight had additional comments. The eight additional comments and the Trustees' responses are separate from these LPAS comments and responses.

Endorsers via email:

Alex Abela
Lauren Brown
Betsy Cramer
Mimi Erland
Eric Erland
Jim Greaves
Richard Jacoby
Jean Jacoby
Andrea Jones
Paul Keller
Councilwoman Janice Keller
David Krause

Endorsers via phone message:

Marta Bacco
Bruce Hollingworth
Carol Nash

Endorsers of LPAS positions but had additional comments as well (comments and responses are separate from LPAS comments and responses):

Morgan Ball
Charles Blair
Mark Brown
John Chestnut
Wes Fritz
Mark Holmgren
Jon Picciuolo (endorsed LPAS positions with exception of comment regarding removing berm from Santa Ynez River estuary)
Michael Taaffe

LPAS-1 Comment noted.

LPAS-2 See response to comment BALL-1.

LPAS-3 See response to comment HOLMGREN-8.

LPAS-4 See response to comment BALL-1.

LPAS-5 The suggestion was to reallocate the \$1.2 million currently allocated to the Seabird Colony Enhancement Project, to go toward the funding of two projects: (1) a coastal access boardwalk from Ocean Beach Park to the beach and (2) removing a berm and remaining cement and debris from a bridge from the Santa Ynez River estuary to improve estuary habitat. See responses to comments BALL-1 and HOLMGREN-8.

The Seabird Colony Enhancement Project has two main goals. The first is to improve the nesting success of seabirds at breeding colonies and the second is to improve the survival of roosting birds by reducing human disturbances at nesting colonies and roost sites. While this boardwalk/estuary project may improve the survival of roosting birds such as California brown pelicans, it will do nothing to improve the nesting success of cormorants or common murres at breeding colonies. The Consent Decree requires the Trustees to fund a restoration project that will benefit cormorants and common murres. Pursuant to the MOU between the Trustee agencies, the Trustee Council allocated \$1,193,833 be used for a project(s) benefiting seabirds e.g. murres, cormorants, and pelicans. The Seabird Colony Enhancement Project will achieve this broader goal. Accordingly, the Seabird Colony Enhancement Project will be funded. However, based on public comment, the Trustee Council has decided to allocate a portion of the seabird restoration money to local organizations, such as Cabrillo High School Aquarium, to educate visitors regarding seabirds. Such educational projects could include a seabird specimen collection and/or interpretive panels. Additionally, a portion of these funds will be allocated for spotting scopes and interpretive panels for the Boardwalk at Ocean Beach Park (Phase I) project.

Regarding the effectiveness of outreach materials at Vandenberg AFB/ Ocean Beach Park: See response to comment HOLMGREN-3. With regard to signage, the Trustees will coordinate with implementing entities to ensure that any educational panels/interpretive signs are carefully designed and placed so as not to detract from the natural aesthetics of the area. Additionally, signs and structures will be constructed with durable materials and placed in open well-traveled areas to maximize sign efficacy and to reduce the risk of vandalism.

Regarding collaboration, the Trustee Council will collaborate with Point Reyes Bird Observatory (PRBO), on this project (see response to comment PRBO-2 below). Section 4.5.1.1 of the RP/EA has been modified to include PRBO as a collaborating

organization. Additionally the Trustee Council will use the California Current Marine Bird Conservation Plan as a tool to further develop the Seabird Colony Enhancement Project and the text has been modified to reflect this (see response to comment PRBO-3 below).

LPAS-6 Comment noted.

LPAS-7 Comment noted.

LPAS-8 See response to comment BALL-1. In addition, the reference to the Oso Flaco Lake boardwalk in the draft RP/EA was included simply as an example of the type of boardwalk that could be constructed.

LPAS-9 The Trustees appreciate this comment concerning the Marine Mammal/Bird Rehabilitation Center, ranked as Non-Preferred. The LPAS comment suggested the Trustees fund training by the Oiled Wildlife Care Network (OWCN), of VAFB wildlife personnel or Santa Barbara Wildlife Care Network personnel, to provide first aid by limiting heat loss until OWCN personnel arrive. The Santa Barbara Wildlife Care Network is already an OWCN member and as such they already receive wildlife care training. Separate funding is available for this purpose. The Trustees will forward this suggestion to VAFB. Interested VAFB wildlife personnel can follow up with OWCN to schedule wildlife first aid training.

LPAS-10 See response to comment BALL-1. The Trustees will provide this suggestion to Santa Barbara County personnel.

LUND-1 The section of the RP/EA describing the Boardwalk at Ocean Beach Park (Phase I) has been changed to reflect the preferred project selected by the Trustees after additional research and public comment. The text has also been clarified by deleting references to other proposed recreation projects.

LUND-2 The Trustee Council will not be providing Restoration funds for Phase II of the Boardwalk at Ocean Beach Park. The Torch Restoration funds will strictly be used to help fund Phase I of the Boardwalk at Ocean Beach Park.

LUND-3 The text has been changed per this comment.

PICCIUOLO-1 Comment noted.

PICCIUOLO-2 See response to comment HOLMGREN-8 regarding the suggestion to remove restrictive berms from the Santa Ynez River. The Trustee Council is not going to pursue this project because of limited restoration funds and because the magnitude of such a project would likely require detailed studies.

PICCIUOLO-3 Regarding the construction of an emergency response and oil spill equipment staging area in Lompoc Valley in readiness for a future spill, this Oil Spill Response Equipment Staging proposal is characterized as Non-Preferred because entities with oil spill response equipment such as Clean Seas in Carpinteria, an Oil Spill Response Organization (OSRO), are already located nearby. Most oil companies have contracts with OSROs for spill response. Regarding the Marine Mammal/Bird Rehabilitation Center proposal, this proposal is to provide a staging center with a large quantity of wildlife rehabilitation materials and supplies for marine mammal and bird rescue operations that may be needed for any future oil spills. The Trustees categorized this proposal as Non-Preferred because there are already plans for a wildlife rehabilitation facility near Santa Barbara, at U.C. Santa Barbara, which is under construction and there is another wildlife rehabilitation facility in Morro Bay (completed in May 2007). Both of these facilities will participate in the Oiled Wildlife Care Network which has wildlife rehabilitation facilities along the California coast. Additionally, please refer to the Trustee Council's response to comment LPAS-9.

PRBO-1 The Trustee Council agrees that establishing a baseline for roosting and breeding populations of seabirds can be useful for restoration planning. However, because there are a number of seabird colony studies already underway, project funds will not be used for baseline data gathering. As noted by the commenter, PRBO has been collecting data on roosting and breeding seabird populations at VAFB. Additionally, the Department of Fish and Game, Office of Spill Prevention and Response (OSPR) has been funding aerial surveys of breeding seabird colonies between Point Conception and the Mexico border and plans to continue such surveys along the entire coast. The Trustee Council also agrees that it is important to use a scientific process to determine the effectiveness of efforts to decrease disturbances to seabird nesting colonies and roost sites. Accordingly, the project will include a monitoring and surveillance component to identify protection needs and guide the Trustees in adaptive management. The details of that monitoring have yet to be specified.

PRBO-2 The Trustee Council appreciates the opportunity to collaborate with PRBO on the Seabird Colony Enhancement Project. Text has been modified to include PRBO as an organization to collaborate with on this project.

PRBO-3 The Trustee Council appreciates PRBO informing us about the California Current Marine Bird Conservation Plan. We will use this document as a tool to further

develop the Seabird Colony Enhancement Project and the text has been modified to reflect this.

PRBO-4 The Trustee Council agrees that beached bird data is helpful when assessing injuries to seabirds following a catastrophic event. However, this type of monitoring is not critical to the seabird project.

PRBO-5 The Trustee Council agrees that interactions with commercial fishing operations are a major threat to seabirds. Accordingly, the Seabird Colony Enhancement Project includes educating fishermen. While monitoring diet and foraging habitats of seabirds may assist with identifying problem areas, the Trustee Council believes that reducing human impacts to seabirds can be accomplished without expending project funds on this type of study. To the extent this type of information is helpful, the Trustees will rely upon existing data/studies.

PRBO-6 The Trustee Council agrees monitoring annual seabird migration rates would provide important information. However, we do not believe this type of data will assist with reducing human impacts to seabirds, which is the primary objective of the Seabird Colony Enhancement Project.

RUHGE-1 See response to comment BALL-1.

RWQCB-1 The text in Section 4.5.1.2 has been clarified by adding that glyphosphate herbicide (Roundup) will not be used near aquatic habitats.

RWQCB-2 See response to comment BALL-1. In addition, if interpretive panels are placed along this path, the Trustees will consider an interpretive panel that educates the public regarding the effects of trash on wildlife and the habitat.

TAAFFE-1 Comment noted.

TAAFFE-2 Per current plans, the Phase 1 Boardwalk at Ocean Beach Park is proposed to be built on the north east perimeter of the parking lot. The Trustee Council will provide this comment to Santa Barbara County since it will be designing/implementing the Ocean Beach Boardwalk projects.

WARNSTROM-1 The amount allocated for a project to compensate for impacts to beach-related recreational activities was based on the Trustees' estimate of human use losses resulting from the Spill. The Trustees' estimate is contained in the Administrative Record: "Public Beach Use Data Collection, November 18, 1997 and Trustees Estimate of Human Use Losses Resulting from Torch's Platform Irene Pipeline Spill". See responses to comment BALL-1 and LPAS-5.

Responses to comments at the public meeting held on April 19, 2006

4-19-06-MTG-1 Comment noted.

4-19-06-MTG-2 See response to comments FINK-3, FINK-4, FINK-5, FINK-6 and LPAS-5. During the Torch spill, we did not collect any oiled western snowy plovers. However, a minimum of 13 different oiled snowy plovers were observed during the spill response. Plovers were additionally impacted due to the 17-mile stretch of plover habitat that was oiled during the spill and then cleaned during the response. According to data from VAFB, the number of breeding adult western snowy plovers has fluctuated over the years. This fact however does not mean that unnatural impacts to the birds and their habitats are negligible.

Regarding natural seeps, according to Mary Elaine Helix, MMS, there are more than 2,000 active submarine natural oil seeps that have been mapped along the California coast. Marine biologists have been studying the effects of these seeps on biological communities. It is unclear whether animals living in oil seep areas adapt to the oil. One possible way for birds to adapt is through behavioral response. MMS funded a study of birds at Coal Oil Point, which is a well studied seep off-shore of Santa Barbara County. MMS found that adult gulls and pelicans were less likely to be oiled than younger birds. Additionally, shearwaters, which is another type of seabird, completely avoided the seep areas. This "avoidance" behavior may be due to experience; that is, the birds "learned" to avoid the seep areas. One hypothesis for the shearwaters' seep avoidance is that its keen sense of smell contributed to this behavior. This information has been included in Section 3.1 of the RP/EA.

Regarding the amount of funds allocated to the Seabird Colony Enhancement Project, the MOU dictates the division of the \$2,397,000 in damages for restoration projects and requires \$1,193,833 to be used for projects that benefit seabirds. For additional details regarding the MOU please see response to comment LPAS-5.

4-19-06-MTG-3 See response to comment FINK-6

4-19-06-MTG-4 See response to comments FINK-5 and FINK-6.

4-19-06-MTG-5 See response to comment 4-19-06-MTG-2 and LPAS-5.

4-19-06-MTG-6 Trustees have decided to allocate the funds dedicated to a recreation project to provide supplemental funding to the County of Santa Barbara's Boardwalk at Ocean Beach Park (Phase I) for the following reasons: 1) there are limited funds for recreation projects (the MOU allocates \$65,520 for recreation projects which includes beach access improvements), 2) because of public comments received, and 3) because of concerns regarding a beach boardwalk at Ocean Beach Park and stairs or a boardwalk at Surf Beach. See response to comment BALL-1 for more details.

- 4-19-06-MTG-7 See response to comment FINK-6.
- 4-19-06-MTG-8 See response to comments 4-19-06-MTG-2 and LPAS-5.
- 4-19-06-MTG-9 See response to comments 4-19-06-MTG-6 and FINK-6.
- 4-19-06-MTG-10 Comment noted.
- 4-19-06-MTG-11 See responses to comments 4-19-06-MTG-2, BALL-1, FINK-6, and LPAS-5.
- 4-19-06-MTG-12 Comment noted.
- 4-19-06-MTG-13 See response to comment FINK-6.
- 4-19-06-MTG-14 Comment noted.
- 4-19-06-MTG-15 See response to comment 4-19-06-MTG-2.
- 4-19-06-MTG-16 See response to comment 4-19-06-MTG-2. The MOU allocates \$104,650 for projects which benefit mussel beds and other rocky intertidal resources.
- 4-19-06-MTG-17 The California Environmental Quality Act (CEQA) and all other applicable laws will be complied with as projects become more clearly defined.
- 4-19-06-MTG-18 This comment pertains to the Seabird Colony Enhancement Project and questions the geographic extent of injuries and restoration. The Seabird Colony Enhancement Project is to compensate for injuries to seabirds, one way to do this is to improve nesting habitat which will improve reproductive capacity. See response to comments FINK-3 and FINK-4.
- 4-19-06-MTG-19 See response to comment FINK-6.
- 4-19-06-MTG-20 Comment noted. The Trustees will coordinate with implementing entities to ensure that any kiosks or interpretive signs are carefully designed and placed so as not to detract from the natural aesthetics of the area. Additionally, structures will be placed in open well-traveled areas to maximize sign efficacy and to reduce the risk of vandalism. Signs and structures will be constructed with durable materials that will reduce the amount of vandalism.
- 4-19-06-MTG-21 See response to comment FINK-6

4-19-06-MTG-22 The question was raised about how many birds die naturally every year. The Trustee Council found data from a Santa Barbara County Energy Division paper dated March 8, 2002, regarding Natural Oil Seeps and Oil Spills.

[L]ittle is known about the effects of natural seeps on bird populations; however, floating seep oil does take a toll. The Santa Barbara Wildlife Care Network recovers an average of about fifty oiled birds from the beaches of Santa Barbara and Ventura Counties each year. Some are treated and released, but the majority die. No attempt is made to determine the cause of death. Oiling may be the cause in some cases, but is probably only a contributing or incidental factor in others. Most of the birds are presumed to have encountered oil slicks from seeps. Unfortunately, there are few statistics on oiled dead birds. The BeachCOMBERS program...found 158 dead birds on nine area beaches during the first six months of beach monitoring [August 2001 to February 2002]. Eight of the carcasses showed some degree of oiling, which could have occurred either before or after death.

The BeachCOMBERS program was organized by the Otter Project, and began collecting data on dead birds and marine mammals on Santa Barbara County beaches in August, 2001. Pairs of trained volunteers walked nine beaches once per month, making careful observations of dead animals. No attempt was made to determine the cause of death, but oiling, if present, was noted. Current BeachCOMBERS information was not available, but the above quote provides some data. This information has been added to Section 3.1 of the RP/EA.

4-19-06-MTG-23 See response to comments 4-19-06-MTG-16 and FINK-6.

4-19-06-MTG-24 See response to comment 4-19-06-MTG-22.

APPENDIX B

Environmental Compliance Documentation

CALIFORNIA COASTAL COMMISSION

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June 1, 2007

Steve Henry
Assistant Field Supervisor
U.S. Fish and Wildlife Service
Ventura Fish and Wildlife Office
2493 Portola Rd., Suite B
Ventura, CA 93003

FISH AND WILDLIFE
SERVICE

JUN 06 2007

RECEIVED
VENTURA, CA

Attn: Jeff Phillips

Re: **ND-031-07**, U.S. Fish and Wildlife Service Negative Determination for
Torch/Platform Irene Oil Spill Restoration Plan, Santa Barbara County

Dear Mr. Henry:

The Commission staff has reviewed the above-referenced negative determination for a series of restoration projects that would provide public recreational opportunities and help restore seabird and marine species injured by releases of oil from a pipeline spill emanating from Platform Irene off the coast of Santa Barbara County, near Vandenberg Air Force Base (VAFB). The selected projects are proposed to be funded using oil spill restoration funds. This negative determination request was submitted on behalf of the federal trustees participating in the restoration planning process for the Torch/Platform Irene spill, with assistance from the Santa Barbara County Planning and Development Department. The trustees include the U.S. Fish and Wildlife Service (Service), VAFB, the California State Lands Commission (CSLC), and the California Department of Fish and Game (Fish and Game), collectively known as the Torch/Platform Irene Trustee Council.

The Trustees have selected five restoration projects as part of the Oil Spill Restoration Plan, all of which would occur entirely or in part within the California coastal zone (although most would be on federal land). These consist of: (1) Seabird Colony Enhancement; (2) Mussel Bed Restoration; (3) Rocky Intertidal Habitat Protection Program with a Focus on Abalone and Other Rocky Intertidal Species; (4) Boardwalk at Ocean Beach Park (Phase 1); and (5) Sandy Beach and Dune Habitat Restoration. Four of the proposed projects are recommended by the federal Trustees for inclusion in this negative determination, the remaining one of which (Sandy Beach and Dune Habitat Restoration) requires further planning and development by VAFB before it will be ready for analysis under the Coastal Zone Management Act (CZMA). Another of the proposed restoration projects (Boardwalk at Ocean Beach Park) would be split into two phases, the first phase of which is proposed as part of this negative determination while the second may

require a federal consistency determination¹. Both phases would require a Coastal Development Permit from the Coastal Commission (with Santa Barbara County the applicant). The first phase qualifies for a negative determination because it is located within an existing development footprint; the second phase may require additional permits from state and federal agencies as it would intrude into a previously undeveloped area of the coastal zone, and is to be funded by alternative sources. The Service, on behalf of the federal Trustees, has requested that the Coastal Commission staff concur with these proposed restoration projects through the negative determination process. The five projects, including those not requested for negative determination consideration, are summarized below.

(1) Seabird Colony Enhancement Project

The primary goal of this project is to restore injured seabird resources to pre-spill or baseline conditions, and to compensate for interim ecological losses pending full recovery. More specifically, the primary goal of the Seabird Colony Protection Program is to improve the survival of California's seabird species such as common murre (Uria aalge), California brown pelicans (Pelecanus occidentalis californicus), and cormorants (Phalacrocorax spp.) by reducing human disturbances at their breeding and roosting colony sites.

This Seabird Colony Enhancement Project will reduce disturbance to seabirds by implementing an educational program involving signs, buoys and outreach materials designed to educate users of the coast about the presence of nesting and roosting seabirds and ways to avoid disturbing these sensitive seabirds. No new public access or recreational activity restrictions are planned as part of this project, rather improved signage around seabird colonies and public education and outreach will improve the public's understanding and compliance with restrictions already in place and/ or will demarcate advisory exclusion zones.

The federal trustees are seeking concurrence with a negative determination for this project as outlined in the Final Restoration Plan/ Environmental Assessment (Final RP/EA). Additionally, when additional project details are available, a subsequent submittal to the CCC will include identification of the location of kiosks and signs to be installed, and further discussion of the types/ locations of advisory exclusion zones around the colonies.

The Trustees will coordinate with implementing entities to ensure that any kiosks or signs, if installed, are carefully designed and placed so as not to detract from the natural aesthetics of the area. Additionally, structures will be placed in open well-traveled areas to maximize sign efficacy and to reduce the risk of vandalism.

While the discouragement of recreational activities around sensitive areas may be perceived by some to limit the enjoyment and scope of the public's recreational experience, this restriction is expected to be minimal and will not significantly

¹ The CZMA implementing regulations provide for phased review, where appropriate (15 CFR § 930.36(d)).

affect recreational opportunities. Moreover, the Trustee Council will carefully coordinate with implementing agencies to balance the goal of minimizing the impacts to seabird colony resources with preserving quality opportunities for recreation. Similarly, any restrictions that may impact fishermen are expected to be minimal given the small number of seabird colonies in the region and the limited nesting season.

This project would have a beneficial impact on the environment through education and limitation on certain activities. This restoration alternative does not affect public health and safety. Although part of the project will occur in ecologically sensitive areas, this project consists of educating the public and decision makers, which has no adverse effect on these areas, and restricting use in order to protect the seabird colonies, has a beneficial effect on the environment. Because this project consists of educating the public about protecting seabirds the action will not adversely affect endangered or threatened species, or its critical habitat, but instead, will have only beneficial effects on listed species. Consequently, this project will benefit and enhance the natural resources of the coastal zone.

(2) Mussel Bed Restoration

Mussel beds in northern Santa Barbara County and elsewhere in Southern California have been declining for the past several years. The value of mussel beds in the coastal region is well documented. Mussel beds are relied upon by many marine animals as an important food source. When damaged, they may take as long as 15 - 20 years to recover fully. Many organisms depend on this stable habitat for their livelihood, including the diverse assemblage found within the mussel bed itself. As the Spill impacted rocky intertidal habitats, including mussel beds, this project will seek to speed up the natural restoration process of these impacted mussel beds by seeding barren areas with adult mussels. The mussel beds will be "seeded" by laying small patches of adult mussels on the substrate. Burlap cloth, made of degradable organic materials, will be fixed to the substrate to facilitate mussel adherence.

Restoring mussel beds will provide wide-ranging benefits to a variety of individual species including barnacles, limpets, worms, snails, and varieties of algae. More importantly, the project will directly benefit a very important ecosystem. And, since mussels are the primary food of seastars, maintaining a stable source of mussels provides direct benefits to seastars. Restoring mussel beds to a healthy condition also provides collateral benefits to marine mammals such as sea otters. Additionally, valuable data will be collected with the study design, using two different techniques, to determine if the presence of some plants and animals are beneficial to mussel recruitment or if their presence increases competition for space. This information will be helpful for other restoration efforts.

Implementation of the mussel bed restoration project is not expected to result in any significant adverse effects to the human environment. Collecting the mussels

from the source locations could impact those source mussel beds. However, to ensure that the source locations are not significantly impacted, a minimum of 30 percent cover of mussels will be left at each source location. Additionally, instead of taking mussels from other healthy mussel beds along the coast, mussels will be collected from an offshore platform (a potential offshore platform source is Torch's Platform Irene).

The Trustees determined that this type and scale of project would provide appropriate compensation for the impacts to the intertidal areas and specifically, to the mussel beds injured as a result of the Spill. This project will benefit and enhance the natural resources of the coastal zone.

(3) Rocky Intertidal Habitat Protection Program - Focus on Abalone and Other Rocky Intertidal Species

The goal of this project is to provide local community outreach and education regarding the sensitivities of rocky intertidal habitats and to reduce the impacts from human disturbance on tidepools. No new access or recreation restrictions are envisioned as part of this project; rather, education will focus on information about existing restrictions and how to avoid disturbing or harming wildlife and habitat.

*The rocky intertidal habitat along the VAFB coast is characterized by a rich diversity of invertebrate species, including black abalone (*Haliotis cracherodii*), sea stars, turf alga (*Endocladia*), rockweeds (*Pelvetia*), barnacles, and mussels. The VAFB coastline contains some extensive tracts of relatively undisturbed rocky intertidal habitat, as well as some of the largest black abalone concentrations in Santa Barbara County. The nexus between the spill and this project is that approximately 85 acres of rocky intertidal habitat was exposed to oil as a result of the Spill. Considering the observations of black abalone covered with oil at Point Arguello, the pathway of oil on surface waters, the mixing of oil in the surf zone, as well as the projected slow recovery time for abalone, the Trustees estimate that black abalone resources suffered a 10 – 15 percent loss in the Spill area. Other rocky intertidal organisms likely suffered similar injuries due to exposure to oil from the Torch Spill.*

The black abalone is a candidate for listing under the federal Endangered Species Act. Once the largest and arguably most important herbivore in intertidal systems along much of the west coast of the United States, the intertidal black abalone has experienced mass mortalities along the coast of California since the mid-1980s. During the Spill, black abalone were observed to be coated with oil in several areas of the rocky intertidal habitat. As a declining species, the additional stress associated with the Spill is expected to exacerbate the decline and reduce chances for recovery.

Tidepools and other components of rocky intertidal shores represent a species-rich habitat which attracts a wide array of visitors and collectors. Human

disturbance of tidepool areas is of concern and includes trampling of the resources, turnover of rocks, displacement of both living and nonliving resources, and collecting of intertidal species or shells that can provide habitat. In addition to direct losses from trampling and collecting, secondary changes may result from changes in distribution, prey availability and competition. Under heavy use, patches of habitat become more frequently disturbed, allowing less time for recovery.

The goal of this project is to enhance public awareness of the sensitivities of tidepools and the species that inhabit the intertidal community including black abalone, to reduce the human impacts on this sensitive habitat type. The target audience will be the Santa Barbara County community and visitors to the area's beaches. This project will also include a monitoring component to evaluate visitor use patterns and resource impacts at select high use rocky intertidal locations in Santa Barbara County such as at Jalama Beach. The monitoring may also include field monitoring of intertidal organisms to evaluate species abundance, distribution patterns, and other factors at sites in an attempt to distinguish visitor impacts from other factors that may influence tidepools. This project will likely be implemented by an organization that focuses on educating the community on environmental issues. The project will include collaborating with other organizations and agencies, and researching similar efforts that are taking place in other areas, such as the MBNMS, to use as a guide.

The actions implemented by this project will increase public awareness of the issues associated with a declining black abalone population, and the importance of ecosystem integrity of intertidal species. Seaside postings, educational materials, and kiosk information will likely impact and raise the awareness level of not only the beach visitors, but is likely to extend to local residents and community organizations and agencies. Implementation of this public educational program is not expected to result in any significant adverse effects to the human environment. The Trustees will coordinate with implementing entities to ensure that any kiosks or signs will be carefully designed and placed so as not to detract from the natural aesthetics of the area.

The Trustees have determined that this type and scale of project would provide appropriate compensation for injuries to black abalone in the area. The federal trustees are seeking concurrence with a negative determination for this project as outlined in the Final Restoration Plan/ Environmental Assessment (Final RP/EA). However, as additional project details are available, a subsequent submittal to the CCC will include identification of the location of kiosks and signs to be installed.

(4) Boardwalk at Ocean Beach Park (Phase 1)

This restoration alternative focuses on improvements to Ocean Beach, which was one of the primary recreational beach areas that was most heavily impacted by

the Torch Spill. Ocean Beach Park is a 40-acre park owned and operated by Santa Barbara County. The park provides coastal access to the public, particularly the 65,000 residents of the Lompoc Valley. Ocean Beach Park was closed for four days due to the Spill. The beach was oiled and heavy equipment and cleanup activities disrupted public recreational activities at the park. In addition, negative publicity about the spill and beach conditions, and uncertainty about whether the beach had re-opened reduced usage of the beach for several weeks beyond the time period of the actual beach closure.

This boardwalk project will be implemented and managed by Santa Barbara County's Parks Department, and consists of two phases. The Phase 1 boardwalk project (to be partially funded by the Torch Trustees) will involve constructing a boardwalk along the northern and eastern perimeter of the existing parking lot. Phase 1 also includes the construction of an interpretive/educational kiosk to provide information regarding wetland habitat and seabird identification of sensitive species, such as listed plants, savannah sparrows, tidewater gobies, seabirds, and steelhead trout.

Phase 2, which will be funded from other sources, includes construction of a boardwalk into the Santa Ynez River estuary along with a platform for wildlife/habitat viewing. This boardwalk will connect with the Phase 1 boardwalk. The construction period would be restricted to a low flow, low tide period to minimize impacts to the water column. The timing of Phase 2 implementation is uncertain at this time, and depends in large part on the availability of funding.

The Torch Trustees decided to provide funding for Phase 1 of the boardwalk project. However, the environmental effects of both phases are presented because Phase 2 may be considered a foreseeable result of Phase 1. The federal Trustees therefore include Phase 1 of the County's boardwalk project in this negative determination and seek the Commission's concurrence. However, the County, in a future submittal, will provide detailed project construction information and will seek to obtain a coastal development permit pursuant to the CZMA (for both Phase 1 and Phase 2 construction).

*Both the Phase 1 and Phase 2 projects are located within Santa Barbara County Ocean Beach Park, at the mouth of the Santa Ynez River. The site is highly scenic and of high biological value. Several species of concern are known to occur, or may occur in the project area. Sensitive animal species include tidewater gobies, savannah sparrows, and steelhead trout. Tidewater gobies (*Eucylogobius newberryi*) could occur in the tidal channel over which the boardwalk would be placed. Four special status plant species occur in the general project area.*

All of the Phase 1 boardwalk, including construction access, would be located within the existing parking lot at Ocean Beach Park and would not permanently affect wildlife or habitat. Some wildlife may avoid the area during construction,

but would be expected to return upon completion of Phase 1 construction activities.

The benefits of both Phase 1 and Phase 2 will be to provide access and opportunity for viewing estuarine wildlife and habitat, to allow the public to learn first hand about the importance of maintaining this invaluable natural resource and important habitat in a pristine condition. The boardwalks would be available to approximately 45,000 park visitors per year. The projects should increase visitor appreciation and awareness of their natural resources and stress the importance of environmental stewardship. While access to the beach continues to be seasonally restricted, the boardwalks would provide an alternative, ADA-accessible high quality recreational experience to park visitors. The Phase 2 boardwalk in particular may also help prevent uncontrolled pedestrian traffic into the estuary that can disturb sensitive habitats and wildlife.

This project should result in positive benefits by enhancing the quality and amount of public use at Ocean Beach, which was heavily impacted by the Spill. The Trustees evaluated this project against all threshold and initial screening criteria developed to select restoration projects, and concluded that this project meets these criteria. The Trustees determined that this type and scale of project would provide appropriate compensation for lost or diminished beach user days as result of the spill. With the[proposed project mitigation] measures, adverse impacts to listed species and their habitat would be minimized and temporary, and would be outweighed by the beneficial impact from educating the public about this sensitive area.

(5) Sandy Beach and Dune Habitat Restoration

This project funds an area of dune restoration addressed in a broader VAFB dune restoration plan titled Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base (SRS Technologies 2005) (2005 VAFB Plan). VAFB has not yet obtained concurrence from the California Coastal Commission for the larger dune restoration project, but will do so before beginning implementation. Thus, the federal trustees are seeking preliminary concurrence with the dune restoration project as outlined in the draft Final Restoration Plan/ Environmental Assessment (Final RP/EA), but final consistency determination or negative determination for the dune restoration as a whole will be deferred to VAFB as they plan and implement their larger, overarching project. The project goals are:

- 1. Eradication of non-native European beach grass (*Ammophila arenaria*) and iceplant (*Carpobrotus* spp.) through the selective use of herbicides and hand-treatment; and*
- 2. Re-establishment of native vegetation (e.g., sand verbena, *Abronia* spp.), focusing on areas currently in non-native vegetation monoculture where native vegetation is not likely to re-establish naturally.*

The objective of this project is to compensate for injuries to sandy shoreline habitat and to the federally-threatened western snowy plover through removal of non-native vegetation in dune habitats, and replacement of native vegetation adjacent to affected beaches.

*This project will benefit the beach/dune ecosystem by eradicating non-native vegetation that presently degrades habitat quality, and will increase the capacity of the habitat to support the nesting of the federally-threatened western snowy plover. Iceplant and European beach grass invasion and expansion have rendered large areas of dune habitat in the area unsuitable for nesting by snowy plovers. This non-native vegetation also reduces available habitat for sensitive plant species such as surf thistle (*Cirsium rosthophilum*) and the federally-endangered beach layia (*Layia carnosus*). Although this vegetation is not present on the lower beach areas that were oiled, non-native vegetation eradication and re-establishment of native vegetation have the potential to benefit the overall beach/dune ecosystem as well as the western snowy plover.*

Implementation of the Sandy Beach and Dune Habitat Restoration Project is not expected to result in any significant adverse effects to the environment. The project will be implemented in compliance with the 2005 VAFB Plan, which was approved by the Service. Non-native vegetation eradication projects use varying types and concentrations of herbicides, burning, and physical removal to eradicate invasive species. This proposed project would involve use of a glyphosphate herbicide and physical removal, when practicable, to remove invasive species and restore dune contours to a condition more closely resembling natural conditions. Burning is not planned for this project.

Although invasive species eradication will be conducted outside the plover nesting season, minor short-term impacts to snowy plovers are likely to occur. Plovers may be displaced and physically disturbed in response to equipment and work crew activities. However, no long-term adverse impacts would occur because of the large area of roosting and foraging habitat available to wintering snowy plovers on Surf and Wall Beach. Additionally, short-term disturbance would be minimized by monitoring conducted by a qualified snowy plover biologist.

Glyphosate is not expected to adversely affect wildlife. The herbicide can be toxic to aquatic species; however, no adverse environmental effects are expected as chemical application near aquatic areas and areas with flowing water will be avoided. The human health risk is expected to be minimal.

Public access to Surf Beach would continue during restoration activities. Active work areas, including chemical application sites, would be fenced and signed, and only small areas of exclusion at any one time would be necessary. Revegetation sites will also be fenced and signed to minimize disturbance and enhance the probability of success.

Because of the difficulty in predicting subsequent use of the area by birds, no targets are identified for numbers of snowy plovers or other shorebirds using this habitat. However, based upon the large percentage of otherwise suitable habitat covered in beach grass, and the fact that snowy plovers presently nest on these beaches in significant numbers, use of restored habitat by western snowy plovers is anticipated. Ongoing project evaluation would be conducted in conjunction with an existing snowy plover monitoring program already underway at VAFB. This project will benefit and enhance the natural resources of the coastal zone.

Conclusion

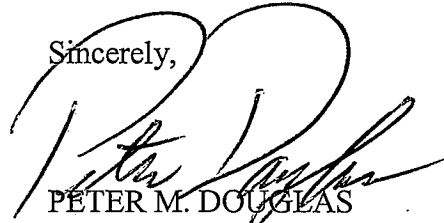
The Commission staff **agrees** with the Trustees that the four restoration projects proposed for negative determination- the Seabird Colony Enhancement Project, the Mussel Bed Restoration Project, the Rocky Intertidal Habitat Protection Project, and Phase 1 of the Boardwalk at Ocean Beach Park- will not adversely affect coastal resources and in fact are intended to benefit coastal zone resources. The Commission staff acknowledges that certain elements of the RP/EA require further planning and environmental review, which will be carried out by the implementing agencies. Because these decisions have been deferred and/or delegated, they are not covered by this Negative Determination. The implementing agencies will notify the Commission staff prior to the start of project construction and submit necessary information regarding any development within the coastal zone, such as location and design of any physical structures (e.g., signs, kiosks, buoys, etc.) for staff review, to determine whether any additional permits or consistency review may be necessary.

The Commission staff has no comments at this time regarding the fifth project, Sandy Beach and Dune Habitat Restoration, which is not included in this negative determination. Further project information should be submitted in the future by the Air Force in its consistency or negative determination. As the Commission has historically expressed concerns over the use of chemical applications in coastal areas, such as herbicides to eradicate non-native plant species, this issue will need to be carefully considered. Details of such treatments (i.e. location and size of area(s) to be covered, makeup and concentration of herbicide, etc.), as well as alternatives to use of herbicides, would need to be included in any such future submittal.

In addition, Phase II of the Boardwalk at Ocean Beach Park project is not covered by this negative determination due to additional permits that may be required by state and federal agencies following the submittal of detailed project construction information by the County of Santa Barbara. Should any future coordination with the Commission staff be required, it will be conducted by the implementing agencies.

Consequently, we **concur** with your negative determination made pursuant to 15 CFR 930.35 of the NOAA implementing regulations. Please contact Christina Cairns at (415) 396-9708 if you have any questions regarding this matter.

Sincerely,



PETER M. DOUGLAS
Executive Director

cc: South Central Coast District Office
U.S. Air Force (VAFB, Bea Kephart)



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

FEB 22 2007

Chris Dellith
Acting Assistant Field Supervisor
United States Department of the Interior
Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, California 93003

FISH AND WILDLIFE
SERVICE

FEB 23 2007

RECEIVED
VENTURA, CA

Dear Mr. Dellith:

NOAA's National Marine Fisheries Service (NMFS) has reviewed your letter dated February 16, 2007, regarding the Torch/Platform Irene Oil Trustee Council's proposed mussel bed restoration project along Vandenberg Air Force Base (VAFB). NMFS offers the following comments pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

The purpose of the proposed restoration project is to accelerate the normal recovery time of mussel beds along three separate sites of VAFB. Within the three sites, a total of 12 fixed, one-meter square plots will be established along the perimeters of the mussel beds. The plots will be "seeded" by laying small patches of adult mussels on the substrate. Burlap cloth will be bolted to the substrate to facilitate mussel adherence. The burlap should disintegrate in about three weeks, at which time the mussels would have been able to put out sufficient byssal threads to stay secured to the substrate. Instead of taking mussels from otherwise healthy beds, adult mussels will be collected from an offshore oil platform.

The proposed project occurs within essential fish habitat (EFH) for various federally managed fish species within the Pacific Groundfish and Coastal Pelagics Fishery Management Plans (FMPs). In addition, the project occurs within rocky reef habitat, which is considered a habitat area of particular concern (HAPC) for various federally managed fish species within the Pacific Groundfish FMP. HAPC are described in the regulations as subsets of EFH which are rare, particularly susceptible to human-induced degradation, especially ecologically important, or located in an environmentally stressed area. Designated HAPC are not afforded any additional regulatory protection under MSA; however, federal projects with potential adverse impacts to HAPC will be more carefully scrutinized during the consultation process.

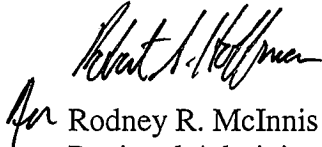
The proposed restoration project is expected to have a long-term beneficial impact on EFH by restoring impacted intertidal habitats by seeding barren mussel beds with adult mussels in the intertidal zone, which should positively benefit the local rocky intertidal



ecosystem. Direct adverse effects to EFH will be limited to the temporary disturbance of the twelve one-meter square plots. Although NMFS believes that the proposed project would adversely affect EFH, we believe the long-term benefits far outweigh the temporary impacts associated with the disturbance. The anticipated adverse effects are so minimal in nature that no EFH Conservation Recommendations are necessary to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH.

Thank you for consulting with NMFS on this matter. If you have any questions regarding these comments, please contact Bryant Chesney at 562-980-4037 or Bryant.Chesney@noaa.gov.

Sincerely,


Rodney R. McInnis
Regional Administrator

**VENTURA FISH AND WILDLIFE OFFICE
INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM**

Originating Person: Jeff Phillips and Christine Hamilton

Telephone Number: 805-644-1766, ext. 368

Date: May 14, 2007

I. Region: Region 1, Ventura Fish and Wildlife Office

II. Service Activity

Under the Oil Pollution Act of 1990 (OPA), the Natural Resource Trustee Agencies, including U.S. Fish and Wildlife Service (Service), California Department of Fish and Game, U.S. Department of Air Force Vandenberg Air Force Base (VAFB), and California State Lands Commission, with assistance from the Santa Barbara County Planning and Development Department, have prepared the Torch/Platform Irene Oil Spill Restoration Plan and Environmental Assessment (RP/EA) for natural resources injured during a September 28, 1997, crude oil spill of at least 167 barrels from a ruptured 20-inch pipeline emanating from Platform Irene off the Santa Barbara County coast near VAFB. Subsequent movement of crude oil resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, causing impacts to a variety of natural resources, including seabirds, sandy and gravel beach habitats, rocky intertidal shoreline habitats, and lost use of beaches for human recreation.

The Torch/Platform Irene Trustee Council (Trustee Council) proposes five restoration projects designed to compensate for, and restore, natural resource injuries caused by the oil spill. The Service, as a co-lead administrative trust agency, proposes to endorse the use of monies from the Torch/Platform Irene settlement account to implement the restoration actions identified in the RP/EA. The goal of this process is to 1) identify and plan restoration projects that will compensate for injuries to, or lost use of, natural resources and related services resulting from the spill, and 2) propose restoration, rehabilitation, replacement, or acquisition of equivalent natural resources and services.

III. Pertinent Species and Habitat:

A. Listed species and/or their critical habitat within the action area:

Mammals

San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E
Southern sea otter	<i>Enhydra lutris nereis</i>	T
San Miguel Island fox	<i>Urocyon littoralis littoralis</i>	E
Santa Rosa Island fox	<i>Urocyon littoralis santarosae</i>	E
Santa Cruz Island fox	<i>Urocyon littoralis santacruzae</i>	E

Birds

California least tern	<i>Sterna antillarum browni</i>	E
Brown pelican	<i>Pelecanus occidentalis</i>	E
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T, CH
Bald eagle	<i>Haliaeetus leucocephalus</i>	T
California condor	<i>Gymnogyps californianus</i>	E, CH
Light-footed clapper rail	<i>Rallus longirostris levipes</i>	E
Marbled murrelet	<i>Brachyramphus marmoratus marmoratus</i>	T*

Reptiles

Island night lizard	<i>Xantusia riversiana</i>	T
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Amphibians

California red-legged frog	<i>Rana aurora draytonii</i>	T
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Fish

Tidewater goby	<i>Eucyclogobius newberryi</i>	E
Unarmored threespine stickleback	<i>Gasterosteus aculeatus williamsoni</i>	E

Plants

Salt marsh bird's-beak	<i>Cordylanthus maritimus</i> ssp. <i>maritimus</i>	E
La Graciosa thistle	<i>Cirsium loncholepis</i>	E, CH
Hoffmann's rock-cress	<i>Arabis hoffmannii</i>	E
Santa Rosa Island manzanita	<i>Arctostaphylos confertiflora</i>	E
Island barberry	<i>Berberis pinnata</i> ssp. <i>insularis</i>	E
Soft-leaved paintbrush	<i>Castilleja mollis</i>	E
Santa Cruz Island dudleya	<i>Dudleya nesiotica</i>	T
Island bedstraw	<i>Galium buxifolium</i>	E
Hoffmann's slender-flowered gilia	<i>Gilia tenuiflora</i> ssp. <i>hoffmannii</i>	E
Island rush-rose	<i>Helianthemum greenei</i>	T
Santa Cruz Island bushmallow	<i>Malacothamnus fasciculatus</i> ssp. <i>nesioticus</i>	E
Santa Cruz Island malacothrix	<i>Malacothrix indecora</i>	E
Island malacothrix	<i>Malacothrix squalida</i>	E
Island phacelia	<i>Phacelia insularis</i> ssp. <i>insularis</i>	E
Santa Cruz Island fringe-pod	<i>Thysanocarpus conchuliferus</i>	E
Beach layia	<i>Layia carnosa</i>	E
Gaviota tarplant	<i>Deinandra increscens</i> ssp. <i>villosa</i>	E, CH
Lompoc yerba santa	<i>Eriodictyon capitatum</i>	E, CH
Gambel's watercress	<i>Rorippa gambellii</i>	E
Santa Barbara Island liveforever	<i>Dudleya traskiae</i>	E

Key:

E	Endangered
T	Threatened
CH	Critical habitat
*	Nonbreeding visitor to nearshore coastal waters

Listed species for which the National Marine Fisheries Service has responsibility that may occur in the action area:

Marine Mammals

Blue whale	<i>Balaenoptera musculus</i>	E
Fin whale	<i>Balaenoptera physalus</i>	E
Humpback whale	<i>Megaptera novaeangliae</i>	E
Sei whale	<i>Balaenoptera borealis</i>	E
Sperm whale	<i>Physeter macrocephalus</i>	E
Killer whale	<i>Orcinus orca</i>	E
Northern right whale	<i>Eubalaena glacialis</i>	E
Stellar sea lion	<i>Eumetopias jubatus</i>	T
Guadalupe fur seal	<i>Arctocephalus townsendi</i>	T

Sea Turtles

Leatherback turtle	<i>Dermochelys coriacea</i>	E
Loggerhead turtle	<i>Caretta caretta</i>	T
Olive ridley	<i>Lepidochelys olivacea</i>	T
Green turtle	<i>Chelonia mydas</i>	T

Fish

Green sturgeon, southern DPS	<i>Acipenser medirostris</i>	T
Chinook	<i>Oncorhynchus tshawytscha</i>	E
Steelhead	<i>Onchorynchus mykiss</i>	E

Marine Invertebrates

White abalone	<i>Haliotis sorenseni</i>	E
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B. Proposed species and/or proposed critical habitat within the action area:

Tidewater goby (*Eucyclogobius newberryi*), proposed critical habitat

C. Candidate species within the action area:

Xantus's murrelet (*Synthloboramphus hypoleucus*)

Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*)

Candidate species for which the National Marine Fisheries Service has responsibility that may occur in the action area:

Black abalone (*Haliotis cracherodii*)

IV. Geographic area or station name and action: South Coast Division within the Ventura Fish and Wildlife Office. All restoration projects would take place along the immediate coast from Big Sur, Monterey County, south to Santa Barbara County, and in the Channel Islands in Ventura County. Details on the actions are provided below.

V. Location:

A. County and State: San Luis Obispo, Santa Barbara, and Ventura Counties, California

B. Quad or County:

1. ***Seabird Colony Enhancement Project.*** Central California coast from Big Sur, Monterey County, south to Santa Barbara County, and the Channel Islands in Ventura County
2. ***Sandy Beach and Dune Habitat Restoration.*** USGS 7.5-min quadrangle map: Surf, California
3. ***Mussel Bed Restoration.*** USGS 7.5-min quadrangle map: Casmalia, Surf, and/or Point Arguello, California
4. ***Rocky Intertidal Protection Program.*** Santa Barbara County
5. ***Boardwalk Ocean Park to Estuary.*** USGS 7.5-min quadrangle map: Surf, California

C. Distance (miles) and direction to nearest town: Varies by project.

VI. Description of proposed action (attach additional pages as needed): The preferred project alternatives described and evaluated in the RP/EA are five restoration projects designed to compensate for, and restore, natural resource injuries caused by the oil spill. The following describes the main features and actions of the five proposed restoration projects.

Seabird Colony Enhancement Project. The goal of this project is to benefit and restore seabirds injured by the spill by reducing human disturbance of seabird roosts and nesting colonies along the central California coast. Nesting and roosting seabirds are susceptible to human disturbances such as recreational boating, flying planes and helicopters, fisheries operations, and recreational activities such as diving and kayaking. These disturbances can result in lowered reproductive success, abandonment of nesting colonies, and increased energy costs associated with constant flushing from roost sites. The Gulf of the Farallones National Marine Sanctuary (GFMNS) is implementing a Seabird Colony Protection Program along the central California coast; this project would collaborate with the GFMNS program to extend the project area south into Santa Barbara County and the Channel Islands. Project objectives include 1) developing and enforcing appropriate seabird colony protection measures; 2) educating the public and specific user groups about protective measures; and 3) monitoring and evaluating program effectiveness to ensure integration into long-term statewide seabird management programs. Seabird species that were impacted by the spill that this project will likely benefit include: brown pelicans, Brandt's cormorants (*Phalacrocorax penicillatus*),

double-crested cormorants (*P. auritus*), pigeon guillemots (*Cepphus columba*), and gulls (*Larus* sp.). (Cost: \$1,200,000)

Sandy Beach and Dune Habitat Restoration. To compensate for injuries to sandy shoreline habitat and to the federally threatened western snowy plover as a result of the spill, the proposed project would restore dune habitat immediately adjacent to impacted sandy beaches on VAFB. This project would eradicate invasive plant species and replant native vegetation, which will increase the quality of habitat to support nesting of the western snowy plover. A plan to eradicate non-native vegetation along VAFB already exists; titled "Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base" (hereafter "VAFB Plan"; SRS Technologies 2005). The Service analyzed the potential impacts of the VAFB Plan on the western snowy plover in a Biological Opinion, dated March 1, 2005 (1-8-05-F-5R; Service 2005). This project would fund the invasive plant removal from one of the areas outlined in the VAFB Plan, Area D, which extends from the Santa Ynez River estuary south to Surf Station. All habitat restoration activities will be conducted outside of the western snowy plover nesting season. (Cost: \$396,000)

Mussel Bed Restoration. To compensate for injuries to rocky intertidal plants and animals found in mussel beds as a result of the spill, the proposed project would accelerate natural restoration of mussel beds along rocky intertidal areas. Three separate sites on VAFB in mussel beds are known to be receding, and study plots within these sites will be seeded with adult mussels to achieve 30 percent cover, which is the threshold that is expected to accelerate recovery rates of mussel beds. Mussel beds provide habitat for many intertidal species, and are the primary food for sea stars. Restoration of mussel beds is also expected to benefit marine mammals, such as the federally threatened southern sea otter through increased food resources. (Cost: \$100,000)

Rocky Intertidal Protection Program. To compensate for injuries to black abalone and other rocky intertidal species as a result of the spill, the proposed project would include local community outreach about rocky intertidal habitats and abalone. Project components include: 1) educational outreach to minimize human impacts on tide pools; 2) collaboration with other agencies; and 3) monitoring visitor use patterns and resource impacts by visitors at select high-use areas. Target audience would be the Santa Barbara County community and visitors to the area's beaches, particularly at high use intertidal locations such as Jamala Beach. (Cost: \$136,500)

Boardwalk Ocean Park to Estuary. To compensate for lost and diminished use of beaches for human recreation at Ocean Beach Park in Santa Barbara County, the proposed project would include partial funding of a boardwalk within the existing parking lot, and construction of an interpretive kiosk to provide information about the estuary and sensitive species in the area such as listed plants, savannah sparrows (*Passerculus sandwichensis*), tidewater goby, seabirds, and steelhead trout. (Cost: \$65,520)

VII. Determination of effects:

Sandy Beach and Dune Habitat Restoration. To compensate for injuries to sandy shoreline habitat and to the federally threatened western snowy plover as a result of the spill, the proposed project would restore dune habitat immediately adjacent to impacted sandy beaches on VAFB. This project would eradicate invasive plant species and replant native vegetation, which will increase the quality of habitat to support nesting of the western snowy plover. A plan to eradicate non-native vegetation along VAFB already exists; titled "Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base" (hereafter "VAFB Plan"; SRS Technologies 2005). The Service analyzed the potential impacts of the VAFB Plan on the western snowy plover in a Biological Opinion, dated March 1, 2005 (1-8-05-F-5R; Service 2005). This project would fund the invasive plant removal from one of the areas outlined in the VAFB Plan, Area D, which extends from the Santa Ynez River estuary south to Surf Station. All habitat restoration activities will be conducted outside of the western snowy plover nesting season. (Cost: \$396,000)

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VII. Determination of effects:

A. Explanation of effects of the action on species and critical habitats in items III, A, B, and C:

Seabird Colony Enhancement Project. This project may affect, but is not likely to adversely affect, the brown pelican. The brown pelican nests in the Channel Islands and gathers in communal roosts along the Pacific Coast. The goal of this project is to reduce human disturbances to seabird nesting and roosting colonies. Impacts to the brown pelican that could occur as a result of decreased human disturbance at nesting colonies would be beneficial through a reduction in loss of eggs and chicks, resulting in increased reproductive success. Beneficial impacts that could occur as a result of decreased human disturbance at roost sites would be reduced energy costs associated due to less frequent flushing and relocating. This project will have no effect on the other federally listed species from section III.A, or the candidate species from section III.C, that are known to occur in the action area along the coast of Santa Barbara county and in the Channel Islands.

Sandy Beach and Dune Habitat Restoration. This project may adversely affect western snowy plover and critical habitat. However, the Service already analyzed potential impacts of this project on the western snowy plover in a biological opinion, dated March 1, 2005 (1-8-05-F-5R; Service 2005).

Mussel Bed Restoration. This project may adversely affect essential fish habitat (EFH) for various fish species within the Pacific Groundfish and Coastal Pelagics Fishery Management Plans managed by National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS). However, NMFS analyzed potential impacts of this project on EFH in a letter to the Service, dated February 22, 2007 (NOAA 2007), and determined that the anticipated adverse effects are so minimal that no Conservation Recommendations were necessary to avoid, minimize, mitigate, or otherwise offset the adverse effects to EFH. This project will have no effect on any of the federally listed species from section III.A, or the candidate species from section III.C, because they are not likely to occur within the action area.

Rocky Intertidal Protection Program. This project may have a beneficial effect on black abalone in the form of reduced human impacts to intertidal zones. This project will have no effect on any of the federally listed species from section III.A, or any of the other candidate species from section III.C, because they are not likely to occur within the action area.

Boardwalk Ocean Park to Estuary. The only federally listed species listed in section III.A that occur in the action area for this project are the tidewater goby, steelhead trout, California least tern, and the western snowy plover. This project will have no effect on the tidewater goby or steelhead trout because construction of the boardwalk, including construction access, will be located entirely within the existing parking lot at Ocean Beach Park. This project may affect, but is not likely to adversely affect, the California least tern, and western snowy plover. These species may temporarily avoid the area due to noise during construction of the boardwalk, but these effects are insignificant and discountable. This project will have no effect on the other federally listed species from section III.A, or the candidate species from section III.C, because they are not likely to occur within the action area.

B. Explanation of actions to be implemented to reduce adverse effects:

Seabird Colony Enhancement Project. Implementation of this project is not expected to result in any adverse effects on any of the federally listed species listed in section III.A.

Mussel Bed Restoration. Implementation of this project is not expected to result in any adverse effects on any of the federally listed species listed in section III.A.

Sandy Beach and Dune Habitat Restoration. Actions that will be implemented to reduce adverse effects on the western snowy plover were addressed in the Biological Opinion, dated March 1, 2005 (1-8-05-F-5R; Service 2005).

Rocky Intertidal Protection Program. Implementation of this project is not expected to result in any adverse effects on any of the federally listed species listed in section III.A.

Boardwalk Ocean Park to Estuary. The following measures were proposed to minimize potential impacts to tidewater goby, steelhead trout, California least tern, western snowy plover, and other biological resources:

1. Standard procedures will be used to ensure that all equipment is maintained properly and free of leaks during operation and any necessary refueling or repairs are carried out with proper spill containment.
2. All human generated trash at the project site will be contained and removed from the work site and disposed of properly at the end of each workday. All construction debris and trash will be removed from the work area upon completion of the project.
3. All permit conditions, minimization measures, and Best Management Practices will be implemented to minimize potential adverse impacts to water and wildlife resources.
4. After its construction, Santa Barbara County Parks Department will monitor the boardwalk to insure that proper security is maintained, to avoid any impacts to sensitive resources from vandalism, littering, and other careless or unlawful activity.
5. Prior to construction, temporary exclusion fencing will be placed along the work limits to prevent entry by the public, workers, or equipment into adjacent habitat areas.

VIII. Effect determination and response requested: [* = optional]

A. Listed species/designated critical habitat:

Determination

no effect

Species and critical habitat listed in III.A.

Response requested

X *Concurrence

may affect, but is not likely to adversely affect

brown pelican

Western snowy plover

California least tern

X *Concurrence

B. Candidate species:

Determination

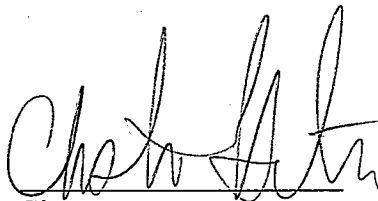
no effect

Xantus's murrelet

Parish's checkerbloom

Response requested

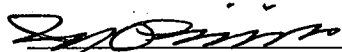
X *Concurrence



Signature

Christine Hamilton

5/15/07
Date



Signature

Jeff Phillips

5/15/07
Date

IX. Reviewing ESO Evaluation:

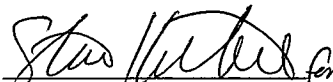
A. Concurrence ☒ Nonconcurrence ☐

B. Formal consultation required ☐

C. Conference required ☐

D. Informal conference required ☐

E. Remarks (attach additional pages as needed):



Signature

Steve Henry

Assistant Field Supervisor

5/15/07
Date

**Finding of No Significant Impact (FONSI) / National Environmental Policy Act
(NEPA) Decision Document**

**Restoration Plan and Environmental Assessment
Torch / Platform Irene Oil Spill on September 28, 1997**

Under the Oil Pollution Act of 1990 (OPA), the U.S. Fish and Wildlife Service (USFWS); the United States Air Force, Vandenberg Air Force Base (VAFB); the California Department of Fish and Game, Office of Spill Prevention and Response (CDFG); and the California State Lands Commission (CSLC) (collectively, the trustees) have prepared the *Torch / Platform Irene Oil Spill – Final Restoration Plan and Environmental Assessment* (RP/EA). The RP/EA assesses injuries to natural resources incurred during a spill off the coast of Santa Barbara County and Vandenberg Air Force Base, California, on September 28, 1997, evaluates restoration alternatives and selects restoration projects to address those injuries. The spill resulted from a ruptured transport pipeline owned or operated by Torch Operating Company, Nuevo Energy Company, and Black Hawk Oil and Gas Company. The spill released at least 163 barrels (or 6,846 gallons) of crude oil emulsion into the Pacific Ocean. Subsequent movement of the crude oil resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline, causing impacts to a variety of natural resources, including seabirds, sandy and gravel beach habitats, rocky intertidal shoreline habitats, and lost use of beaches for human recreation. The FWS is the lead federal trustee agency for NEPA compliance. The cooperating state trustee agency (and co-lead on the trustee council) is the CDFG.

The public has been afforded several opportunities to participate in the restoration planning process. The first was a public scoping process, including a comment period on the October 20, 2004, *Torch/Platform Irene Oil Spill Scoping Document for Restoration Planning*, during which the public was given an opportunity to review and comment on preliminary restoration alternatives and submit ideas of their own. After the public review and comment period on the scoping document, a public workshop was held on November 4, 2004 to further solicit public input. A draft RP/EA was prepared by the trustees to evaluate the project alternatives resulting from the scoping process and another public meeting was held on April 19, 2006. The draft RP/EA was available (in hardcopy and on the CDFG website) for public comment until June 21, 2006.

The RP/EA evaluated 19 restoration alternatives to compensate for the injuries to natural resources resulting from the oil spill. The trustees developed criteria to evaluate and prioritize the projects under consideration, and ranked potential restoration projects into four categories: 1) Most Preferred, 2) Moderately Preferred, 3) Least Preferred, and 4) Non-Preferred. The trustees also evaluated a “no action” alternative, which was not selected because it would not meet the goal of OPA to restore lost natural resources, and would be inconsistent with the federal court Consent Decree by which the trustees recovered damages to restore the injured resources. The trustees selected the following most preferred restoration alternatives:

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1. Seabird Colony Enhancement Project. This project will protect seabirds by reducing human disturbance of roosts and colonies.
2. Sandy Beach and Dune Habitat Restoration. This project will eradicate invasive plant species and replant native vegetation more conducive to the propagation and survival of indigenous species.
3. Mussel Bed Restoration. This project will accelerate natural restoration along rocky intertidal areas.
4. Rocky Intertidal Habitat Protection – Focus on Abalone and Other Rocky Intertidal Species. This project was developed by combining educational elements from other proposed restoration alternatives.
5. Boardwalk at Ocean Beach Park (Phase 1). This project will provide partial funding to Santa Barbara County for construction of a boardwalk at Ocean Beach Park including an interpretive kiosk and other educational features.

DETERMINATION:

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 selected in this final RP/EA, the appropriate context for considering significance of action is local, as opposed to national or international.

With respect to intensity of the impacts of the selected restoration actions, the NEPA regulations suggest consideration of ten factors:


- (1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
- (2) The degree to which the proposed action affects public health or safety.
- (3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
- (4) The degree to which the effects on the quality of the human environment are likely to be highly controversial.
- (5) The degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.
- (6) The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
- (7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

- (8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
- (9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
- (10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

40 C.F.R. § 1508.27. These factors, along with the federal trustees' conclusions concerning the effects of each of the selected restoration projects, are discussed in detail in the final RP/EA.

Based upon review and evaluation of the selected restoration projects and their environmental effects in the RP/EA, and consideration of the factors listed in 40 C.F.R. § 1508.27, the USFWS has determined that the implementation of the Seabird Colony Enhancement Project, the Mussel Bed Restoration, the Rocky Intertidal Habitat Protection – Focus on Abalone and Other Rocky Intertidal Species, and the Boardwalk at Ocean Beach Park (Phase 1) do not individually or collectively constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(C) of NEPA. Accordingly, an Environmental Impact Statement (EIS) is not required for these restoration projects, and a FONSI is appropriate

This decision document, however, defers a determination of significance under NEPA as to the Sandy Beach and Dune Habitat Restoration project. The RP/EA tentatively provides funding for restoration of Area D on Vandenberg Air Force Base, which is a portion of a larger dune habitat project covered by the *Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base*, dated April 2005. The Torch Trustee Council will not commit funds or begin implementation of the Dune Habitat Restoration project until VAFB has completed its separate NEPA EA analysis for that project and the federal Trustee agencies make a final NEPA determination based upon that analysis.


for Steve Thompson,
Authorized Official
U.S. Department of the Interior

Date 10-16-07

Manager
California and Nevada Operations
Fish and Wildlife Service
U.S. Department of the Interior

FINDING OF NO SIGNIFICANT IMPACT

Restoration Plan and Environmental Assessment for Torch/Platform Irene Oil Spill on September 28, 1997

Vandenberg Air Force Base, California

Pursuant to provisions of the National Environmental Policy Act (NEPA) (42 U.S.C. §§ 4321 et seq), implementing Council on Environmental Quality (CEQ) Regulations (40 C.F.R. §§ 1501.1 et seq.), and the Department of the Air Force Environmental Impact Analysis Process (32 C.F.R. Part 989), the United States Fish and Wildlife Service (USFWS) is the lead federal agency under NEPA for the Torch/Platform Irene Oil Spill Restoration Plan and Environmental Assessment. The Torch/Platform Irene Oil Spill (Spill) occurred on September 28, 1997 off the Santa Barbara County, California and Vandenberg Air Force Base (VAFB) coastline.

The USFWS and VAFB are also the designated federal trustee agencies for natural resources injured by this spill pursuant to subpart G of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR §§ 300.600 *et seq.*). The California Department of Fish and Game, Office of Spill Prevention and Response (CDFG-OSPR) and the California State Lands Commission (CSLC) are the designated California state trustee agencies for the natural resources injured by the Spill. The USFWS and CDFG-OSPR are designated as the lead administrative federal and state trustee agencies, respectively, for coordination of the damage assessment and restoration planning process (15 CFR § 990.30). The federal and state trustee agencies (“Trustees”) participated in damage assessment and restoration planning activities to address injuries to natural resources as a result of the Spill.

The Trustees have prepared the restoration plan and environmental assessment (RP/EA), entitled *Torch/Platform Irene Oil Spill, Restoration Plan and Environmental Assessment*. Based upon this RP/EA, the USFWS has issued a Finding of No Significant Impact (FONSI) document. As both a cooperating agency under NEPA and the implementing agency for certain proposed restoration actions on property within its jurisdiction, VAFB submits this FONSI based on the RP/EA. VAFB specifically incorporates by reference the RP/EA and it is attached to this FONSI.

BACKGROUND

VAFB is headquarters to the 30th Space Wing (30 SW), the Air Force Space Command unit that operates VAFB and the Western Range. VAFB operates as a missile test base and aerospace center, supporting west coast space launch activities for the Air Force, Department of Defense, National Aeronautics and Space Administration, and commercial contractors. VAFB is located on the south-central coast of California, approximately halfway between San Diego and San Francisco. The 99,579-acre base extends along approximately 37 miles of the Santa Barbara County coastline.

On September 28, 1997, a discharge of crude oil occurred from a rupture in an underwater pipeline owned and operated by Torch Operating Company, Nuevo Energy Company, and Black Hawk Oil & Gas Company (collectively, the responsible parties). The leak of crude oil-water emulsion occurred through a corroded crack in a flange connecting two pieces of the 20-inch diameter pipe. The pipeline runs along the ocean floor from the offshore oil platform, Platform Irene, to a processing facility onshore north of the City of Lompoc, on Harris Grade Road in Santa Barbara County.

At the time of the spill, oil and production water, as well as approximately 900 gallons of diesel and 800 gallons of anti-corrosion chemical compounds, were released into the ocean. The spill released at least 163 barrels (or 6,846 gallons) of petroleum product into the Pacific Ocean. Subsequent movement of the petroleum product resulted in fouling of approximately 17 miles of northern Santa Barbara County coastline along VAFB's shore, and caused impacts to numerous natural resources. The degree of oiling varied along the affected coastline; VAFB's Surf Beach was the most heavily oiled area.

The Trustees, co-led by USFWS and CDFG, prepared the RP/EA, which describes the affected environment, injured natural resources, and impacts to human recreational use, as well as plans for restoration. The restoration plan aims to compensate for injuries to, or lost use of, natural resources and services resulting from the Spill, and to propose restoration, rehabilitation, replacement, or acquisition of equivalent natural resources and services. Alternatives addressed in the RP/EA are consistent with guidance and requirements from the NEPA (42 U.S.C. §§ 4321, *et seq.*) and the Oil Pollution Act (OPA) (33 U.S.C. §§ 2701, *et seq.*).

AFFECTED ENVIRONMENT

Ocean Resources. Offshore ocean resources include benthic communities (organisms that live on or in ocean floor sediment), epifauna (organisms that live on the surface of a substrate), marine plant communities, fisheries, and sea mammal populations. At least one species of fissiped (the threatened southern Sea Otter, *Enhydra lutris*), five species of pinniped (generally seals and sea lions), and 22 species of cetacean (whales, dolphins, and porpoises) live and/or migrate in waters off the coast of VAFB. While an undetermined number of marine organisms and animal life likely suffered injuries or death as a result of the Spill, at least one marine mammal, a dead California Sea Lion, was found oiled during the spill.

Seabird Resources. It is estimated that between 635 and 815 seabirds were adversely impacted or perished from the Spill. While some species, such as the western snowy plovers, were impacted after the oil reached the shore, many of the birds were oiled at sea. The Spill directly harmed western snowy plovers, which are federally listed as a threatened species, and California brown pelicans, which are state and federally listed as an endangered species. Other impacted bird species included grebes, Brandt's cormorants, common murrelets, rhinoceros auklet, pigeon guillemot, elegant tern, long-billed curlew, loons, shearwaters, gulls, sanderling, northern phalarope, and American coot.

Sand and Gravel Beach Habitats. The oil came ashore on sandy beaches and on rocky intertidal areas from Minuteman Beach to Boathouse Beach on VAFB impacting upwards of 17

miles of Santa Barbara County coast shoreline. The estuaries at VAFB's San Antonio Creek, Honda Creek, and the Santa Ynez River were also impacted. Oiling of the sandy beaches consisted of variably sized ribbons of thick oil, as well as very large tar patties, up to three feet in diameter. Some stretches of beach had greater than 50 percent of their surface area covered with oil. After the Spill, the invertebrates on the beach, particularly the spiny sand crabs and the Pismo clams, likely suffered significant mortality due to smothering under blankets of oil and sand compression caused by heavy equipment from cleanup operations.

Rocky Intertidal Shoreline Habitats. Rocky intertidal habitat was exposed to oil in many places along the shoreline. While levels of injury greater than 10 percent were not documented, it is expected that the oil exposure caused unquantifiable low levels of injury to a variety of rocky intertidal species, including crustacea, mollusks, arthropods, and algae. Black abalone and mussel beds were observed to be coated with oil along and near the shore of VAFB.

Lost and Diminished Use of Beaches for Human Recreation. The Spill interrupted recreational services to individuals participating in beach-related activities along the Santa Barbara County coast. Specifically, the following beaches were impacted: Minuteman Beach, Purisima Point Beach, Seal Beach, Wall Beach, Ocean Park Beach, and Surf Station Beach. Physical oiling of the beaches and subsequent cleanup activities impacted beach-related recreational services including walking, jogging, swimming, surfing, wildlife and tide-pool viewing, fishing, and picnicking. Visitors also avoided other impacted beaches due to the presence of tarballs and/or oil spill cleanup activities.

RESTORATION PLAN AND ALTERNATIVES

The Restoration Plan/Environmental Assessment (RP/EA) evaluated 18 restoration alternatives (including a 'no action' alternative) to compensate for the injuries to natural resources resulting from the Spill. The public has been afforded several opportunities to participate in the restoration planning process. The first was during a public scoping process including a comment period on the October 20, 2004 *Torch/Platform Irene Oil Spill Scoping Document for Restoration Planning* during which the public was given an opportunity to review and comment on preliminary restoration alternatives and submit ideas of their own. After the public review and comment period on the scoping document, a public workshop was held on November 4, 2004. The RP/EA evaluated the project alternatives resulting from the scoping process, and the draft RP/EA was available (in hardcopy and on the DFG-OSPR website) for public comment from April 17 to June 21, 2006. A public meeting was held on April 19, 2006 to further solicit public input on the draft RP/EA.

The 'no action' alternative was not selected because it would not meet the goal set forth in the Oil Pollution Act to make the environment and public whole for injuries to natural resources and services resulting from the spill. This goal is achieved through both the return of injured natural resources and services to baseline and compensation for interim losses of such natural resources and services from the date of the incident until recovery. While natural recovery would occur over time for most of the injured resources, no compensation would be provided for the interim losses suffered. The preferred restoration alternative includes five restoration actions:

1. Seabird Colony Protection Program. This project would protect seabirds by reducing human disturbance of roosts and colonies.
2. Sandy Beach and Dune Habitat Restoration. This project would eradicate invasive plant species and replant native vegetation more conducive to the propagation and survival of indigenous species.
3. Mussel Bed Restoration. This project would accelerate natural restoration along rocky intertidal areas.
4. Rocky Intertidal Habitat Protection Program – Focus on Abalone and Rocky Intertidal Species. This project was developed by combining educational elements from other proposed restoration alternatives and will focus on educating the public about the sensitivity of rocky intertidal species to reduce human disturbance to these species.
5. Boardwalk at Ocean Beach Park (Phase 1). This project would provide partial funding to Santa Barbara County for construction of a boardwalk at Ocean Beach Park, within the existing parking lot, including an interpretive kiosk and other educational features.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental review and evaluation of the RP/EA, conducted in accordance with the provisions of NEPA, implementing CEQ Regulations, and the Department of the Air Force Environmental Impact Analysis Process, VAFB has determined that implementing the mussel bed restoration, rocky intertidal habitat protection program (focus on abalone and rocky intertidal species), and the Phase 1 boardwalk project at Ocean Beach Park, does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102(2)(C) of NEPA, as amended. Accordingly, an Environmental Impact Statement (EIS) is not required for these restoration projects.

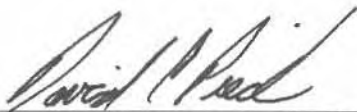
NEPA compliance for the Sandy Beach and Dune Habitat Restoration project will be completed in a separate NEPA EA analysis. The project will fund restoration of Area D on Vandenberg Air Force Base, which is a portion of the dune habitat covered by the *Final Plan for the Removal of Selected Invasive Plants from Western Snowy Plover Habitat at Vandenberg Air Force Base*, dated April 2005. The Torch trustee council will not commit funds or begin implementation of the Dune Habitat Restoration project until VAFB has completed a separate NEPA EA analysis for that project and the federal Trustee agencies make a final NEPA determination based upon that analysis. The signing of this FONSI completes the Air Force's environmental impact analysis process.

**FINDING OF NO SIGNIFICANT IMPACT
SIGNATURE PAGE**

Restoration Plan and Environmental Assessment
for Torch/Platform Irene Oil Spill on September 28, 1997
Vandenberg Air Force Base, California

The below authorized undersigned VAFB officials make a Finding of No Significant Impact.

Squadron Approval:



DAVID C. PIECH, Lt Col, USAF
Commander, 30th Civil Engineer Squadron
Vandenberg AFB, CA

SEP 07 2007

Date

Judge Advocate Approval:

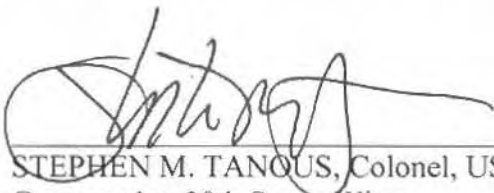


VINCENT M. BUQUICCHIO, Lt Col, USAF
Staff Judge Advocate
Vandenberg AFB, CA

12 SEP 2007

Date

Environmental, Safety, and Occupational Health Council Approval:



STEPHEN M. TANOUS, Colonel, USAF
Commander, 30th Space Wing
Chairman, Environmental, Safety, and Occupational Health Council
Vandenberg AFB, CA

20 Oct 07

Date

APPENDIX C

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Torch Mailing List of Interested Parties

Updated September 21, 2007

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Central Coast Region
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Lompoc Public Library
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Lompoc CA 93436-3406

Santa Maria Public Library
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