NEPA Decision Document/Finding of No Significant Impact (FONSI)
For the Cosco Busan Oil Spill
Damage Assessment and Restoration Plan/ Environmental Assessment

Department of the Interior: United States Fish and Wildlife Service and National Park Service
February 10, 2012

Introduction:

On November 7, 2007, the freighter *Cosco Busan* struck the Bay Bridge as it attempted to depart San Francisco Bay. The accident created a gash in the hull of the vessel, causing it to spill approximately 53,000 gallons of oil into the Bay. Wind and currents took some of the oil outside of the Bay, where it impacted the outer coast from approximately Half Moon Bay to Point Reyes. Inside the Bay, the oil primarily impacted waters and shoreline within the central portion of the Bay, from Tiburon to San Francisco on the west side and from Richmond to Alameda on the east side.

Under the Oil Pollution Act of 1990 (OPA), the Natural Resource Trustee Agencies (the Trustees), including the United States Fish and Wildlife Service (USFWS), the National Park Service (NPS), the Bureau of Land Management (BLM), the National Oceanic and Atmospheric Administration (NOAA), the California Department of Fish and Game (CDFG), and the California State Lands Commission (CSLC) are Trustees for the natural resources injured by the spill. Each agency is authorized to act on behalf of the public under state and/or federal law to assess and recover natural resource damages and to plan and implement actions to restore, rehabilitate, replace, or acquire the equivalent of the affected natural resources injured as a result of a discharge of oil.

The Trustees estimate that at least 6,849 birds representing 65 different species were injured, an estimated 14-29% of the winter 2007-8 herring spawn was lost, and approximately 3,367 acres of shoreline habitat was impacted. In addition, approximately 1,079,900 human recreation user-days were lost, representing a wide variety of aquatic and shoreline activities.

The Trustees prepared the *Cosco Busan Oil Spill - Final Damage Assessment and Restoration Plan/Environmental Assessment (*DARP/EA*)* dated February, 2012 which describes the injuries resulting from the spill, and identifies restoration alternatives that would compensate for those natural resource injuries. This Decision Document/FONSI completes the evaluation conducted under the National Environmental Policy Act (NEPA) for the DARP/EA.

The DARP/EA is both a “programmatic” plan and implementation level plan. As such, it does not make an irreversible or irretrievable commitment of resources as to the programmatic projects. Subsequent NEPA compliance will be required prior to implementation of some of the selected restoration actions that are conceptual once development of sufficient project-level detail is available. Specifically, additional environmental review may be needed for Tule Lake Grebe Nesting Habitat, Berkeley Pier Enhancement, and Eelgrass/Rockweed/Native Oyster restorations as implementers proceed with project development and/or project locations are identified. Additional NEPA compliance will be conducted for scoter and recreational use projects, which have yet to be selected.

Restoration Alternatives:

The DARP/EA evaluated several categories of restoration alternatives (e.g., Birds, Fish, Habitats, Human Recreation) in a public process, including a "no action" alternative. The Trustees developed criteria to evaluate projects that were under consideration. These criteria included the project’s ability to restore those resources directly impacted by the release of oil and/or response actions, and compliance with the relevant federal and state law provisions governing use of recoveries for natural resources. A complete list of the evaluation criteria can be found in the DARP/EA. The Trustees considered and rejected the no-action alternative, which relied on natural processes for recovery of the injured natural resources. Natural recovery does not compensate for interim losses suffered by the public’s resources, and the OPA clearly establishes trustee authority to seek and obtain compensation for interim losses pending recovery of natural resources. Furthermore, technically feasible project alternatives for restoration exist to compensate for these losses. Thus, the Trustees reject the “no action” alternative and instead have selected the appropriately scaled restoration projects and approaches listed below as the preferred alternative:

- *Request for Proposals for Project(s) Benefiting Surf Scoters;*
- *Tule Lake Grebe Habitat;*
- *Winter Diving Duck Habitat at the South Bay Salt Ponds;*
- *Farallon Island Nest Site Improvements;*
- *Berkeley Pier Enhancements;*
- *Marbled Murrelet Restoration;*
- *Eelgrass Restoration;*
- *Muir Beach Dunes Restoration;*
- *Albany Beach Restoration;*
- *Aramburu Island Restoration;*
- *Native Oyster Restoration;*

- *Rockweed Restoration; and*
- *Recreational Use Projects.*

This decision document concludes that a FONSI is appropriate for all of the restoration actions selected for implementation by the Trustees and evaluated in the DARP/EA for the *Cosco Busan* Oil Spill as summarized here, except for Project(s) to Benefit Surf Scoters, Tule Lake Grebe Nesting Habitat, Berkeley Pier Enhancement, Eelgrass/Rockweed/Native Oyster restorations and Human Recreational Use Projects which will be subject to further environmental review and compliance.

Alternatives Considered:
Following are the project alternatives that the Trustees considered for each injury category presented in the DARP/EA. Selected projects appear in italics with a brief project description. Non-preferred projects are also listed and may be reconsidered if funds become available or if selected projects prove to be infeasible. For a complete description of all of the restoration alternatives, see the DARP/EA.

BIRDS

Benefits to scoters and other large diving ducks

- *Request for Proposals for Project(s) Benefiting Surf Scoters*

This project will seek proposals and award funding for one or more projects that will provide an appropriate level of benefits to Surf Scoters, the bird species most impacted by the spill. Additional NEPA compliance will be conducted prior to implementation of the selected restoration project(s).

The following projects are non-preferred at this time:

- Wetlands or salt pond enhancement around San Francisco Bay;
- Wintering foraging habitat enhancement;
- Removal of derelict fishing nets in Puget Sound;
- Removal of derelict fishing nets in SF Bay or elsewhere in California;
- Disturbance reduction in San Francisco Bay;
- Rehabilitation of Sick and Injured Scoters; and
- Research of Scoter Mortality.

Benefits to Western/Clark's Grebes

- *Tule Lake Grebe Habitat*

This project seeks to create more suitable nesting habitat for Western and Clark's Grebes at Tule Lake National Wildlife Refuge (NWR). These species spend the winter in the Bay and along the outer coast. The project primarily involves managing water levels in

Tule Lake's Upper Sump to create over 500 acres of new freshwater marsh, in which the birds would nest. Additional NEPA compliance may be required prior to implementation, pending development of sufficient project-level detail.

The following projects are non-preferred at this time:

- Grebe colony protection at northern California lakes and
- Grebe colony protection at southern California lakes.

Benefits to small diving ducks and small grebes

- *Winter Diving Duck Habitat at the South Bay Salt Ponds*

This project complements on-going efforts to restore the South Bay Salt Ponds by maintaining and managing habitat for wintering Lesser Scaup and Eared Grebes, among other species. The same ponds would be managed for Snowy Plover nesting during the summer. This project will be a component of the larger South Bay Salt Pond Restoration Project (SBSPRP). A full discussion of the environmental consequences can be found in the EIR/EIS for the SBSPRP. The Trustees have considered the information contained in the SBSPRP EIR/EIS and incorporate by reference the analysis of environmental consequences presented there.

The following project is non-preferred at this time:

- Creation of grebe nesting habitat at Tule Lake NWR.

Benefits to Alcids and Procellarids

- *Farallon Island Nest Site Improvements*

This project seeks to increase suitable nest sites for seabirds at Southeast Farallon Island. Specifically, it will replace up to 60 Rhinoceros Auklet and 200 Cassin's Auklet nest boxes, and create nest sites for up to 60 pairs of Ashy Storm-Petrels. The project includes redesigning the existing boxes, building new ones with better insulation and more durable materials, and placing them on the island in more protected locations with more soil cover. The second component of the project entails breaking up old concrete slabs and arranging them into rock piles for crevice nesting seabirds.

The following projects are non-preferred at this time:

- Removal of derelict crab pots in the Gulf of the Farallones;
- Seabird Protection Network to protect Murre colonies;
- Fortification of the Murre Ledge;
- Bird Island habitat enhancement;
- Mouse eradication on Southeast Farallon Island; and
- Bird Blind to reduce disturbance at Devil's Slide Rock Interpretive Trail.

Benefits to pelicans, cormorants, gulls and shorebirds

- *Berkeley Pier Enhancements*

This project will enhance the dilapidated tip of the Berkeley Pier for cormorant and gull nesting and pelican roosting. It will also enhance another section nearer the base of the Pier as a high tide roost site for shorebirds. Additional NEPA compliance may be required prior to implementation, pending development of sufficient project-level detail.

The following projects are non-preferred at this time:

- Alcatraz Island human disturbance reduction project;
- Reduce impacts to pelicans and gulls from fishing waste;
- Reduce entanglement and hooking of pelicans and gulls in recreational fishing gear;
- Seabird habitat restoration on Southeast Farallon Island; and
- Habitat enhancement for nesting Brandt's Cormorants.

Benefits to Marbled Murrelets

- *Marbled Murrelet Restoration*

This project seeks to restore Marbled Murrelets through a variety of measures. Actions that would be implemented include expanding current corvid management efforts to additional areas as well as including additional corvid management measures. Current corvid management efforts include public education and "soft" enforcement of food storage regulations to reduce human food waste, improvements to garbage receptacles and food storage lockers, and removal of ravens and/or their nests. New measures include conditioned taste aversion (CTA), removal of jays and/or their nests; and installation of food waste receptacles at water spigots (grates). CTA involves training jays to avoid Marbled Murrelet eggs by exposing them to painted chicken eggs (colored to mimic murrelet eggs) that contain carbachol. Carbachol is a drug that mimics the action of the neurotransmitter acetylcholine. When ingested, it causes jays and many other species to experience temporary discomfort, nausea, and possibly vomiting. Jays that ingest carbachol-treated eggs are expected to associate the unpleasant experience with murrelet eggs such that they modify their behavior and avoid ingesting actual murrelet eggs they encounter in the future.

The following projects are non-preferred at this time:

- Corvid management at Humboldt Redwoods and Grizzly Creek State Parks and
- Breeding habitat protection via acquisition or easement.

FISH AND OTHER AQUATIC ORGANISMS

Benefits to eelgrass habitat, invertebrates, herring, and other bay fishes

- *Eelgrass Restoration*

This project will create or expand eelgrass beds at multiple locations inside the Bay. Eelgrass beds are a vital part of the Bay ecosystem, providing benefits to a variety of eelgrass-dependent organisms, as well as herring, which use eelgrass beds for spawning. There will be several project sites within and around the Central Bay. Additional NEPA compliance will be conducted prior to implementation of the selected restoration project once specific locations are identified.

The following projects are non-preferred at this time:

- Abandoned vessel removal in Richardson Bay;.
- Mooring chain replacement in Richardson Bay;
- Herring hatchery; and
- Pier piling replacement.

HABITATS

Benefits to sandy beach habitat

- *Lower Redwood Creek and Big Lagoon; Muir Beach Dunes Restoration*

This project will enhance dune vegetation and habitat within Golden Gate National Recreation Area at Muir Beach by removing non-native vegetation, planting native vegetation, and re-routing pedestrian traffic. It is part of a larger effort to restore Redwood Creek, including the creek, wetlands, lagoon and sand dunes in the Muir Beach area that were all evaluated in the Lower Redwood Creek and Big Lagoon - Environmental Impact Statement (EIS).

- *Albany Beach Restoration*

This project will enhance and expand Albany Beach in the East Bay by removing non-native vegetation, planting native vegetation, and importing more sand, among other activities. In addition to the information in the EA, additional information provided by the project implementer has been reviewed and considered for this determination. It is expected that the U.S. Army Corps of Engineers will provide additional NEPA compliance for Section 404 permitting.

The following projects are non-preferred at this time:

- Radio Beach expansion and
- Limantour Beach dune enhancement.

Benefits to salt marsh and tidal flat habitat

- *Aramburu Island Restoration*

This project seeks to restore 17 acres of tidal marsh and shoreline habitat on Aramburu Island in Richardson Bay. The project will include expansion and rehabilitation of tidal marsh and flats; improvements to upland grassland areas; creation of roost habitat for herons and egrets; and expansion of existing sand and gravel areas for shorebird roosting and to reduce wave erosion. This will result in reduced erosion along the eastern shoreline of the Island, enhanced resilience of the Island to sea-level rise, enhanced shorebird, waterfowl, and wading bird habitat, and enhanced suitability of haul-out habitat for harbor seals.

The following projects are non-preferred at this time:

- Schoolhouse Creek day-lighting project;
- Invasive *Spartina* control project;
- Strawberry Creek enhancement;
- Quartermaster Reach wetland restoration; and
- Bolinas Lagoon restoration.

Benefits to rocky intertidal habitat

- *Native Oyster Restoration*

This project will create rocky intertidal habitat by installing hard substrates augmented with oyster shells in low intertidal areas. These provide a substrate for the attachment and development of native oyster communities. The hard surfaces will permit the establishment of algae and will create nooks and crevices to harbor small fish and crabs, creating a diverse rocky intertidal community. There will be several project sites within the Central Bay. Additional NEPA compliance will be conducted prior to implementation of the selected restoration project once specific locations are identified.

- *Rockweed Restoration*

Rockweed habitat in the Central Bay will be created at mid-intertidal elevations using two techniques: seed bags and direct transplant. Some of the proposed sites for rockweed restoration include rocky intertidal habitats heavily damaged by hot water pressure washing used to remove oil from the Cosco Busan spill. Once established, the rockweed habitat provides shelter for many invertebrates, particularly from desiccation during very low tides. There will be several project sites within the Central Bay. Additional NEPA compliance will be conducted prior to implementation of the selected restoration project once specific locations are identified.

The following project is non-preferred at this time:

- Albany Bulb Rocky Shoreline Restoration.

HUMAN RECREATIONAL USES

Benefits to human recreation

- *Recreational Use Projects*

There will be a suite of local projects to enhance recreational uses of the Bay and outer coast, and their adjoining shorelines. The projects will be located in the East Bay, San Francisco Peninsula, and Marin County, proportional to the levels of lost uses in each region. A major portion of the recreational use projects will be located on affected National Park Service lands in San Francisco within Golden Gate National Recreation Area (GGNRA) and San Francisco Maritime National Historical Park, and in Marin County within GGNRA and Point Reyes National Seashore. While this plan does not specify particular projects, it selects a process, which includes working with local governments and affected users, to select projects. Upon selection, restoration projects for lost recreational uses will be subject to further environmental analysis, including a cumulative effects analysis, and public review as appropriate.

Environmental Consequences:

The Trustees analyzed the effects of each restoration project on the quality of the human environment. As documented in the DARP/EA, the Trustees expect the proposed actions to substantially benefit the species and habitats targeted, and to be implemented without significant adverse effects to soil, air quality, water resources, floodplains, wetlands, vegetation, fisheries, wildlife, visual quality, aesthetics/recreation, wilderness, subsistence, cultural resources, park management, or the local economy. The proposed actions are designed to make the environment and the public whole for injuries to, or lost use of, natural resources and services from the Spill.

Restoration projects to be selected later to compensate for lost recreational uses and to benefit surf scoters and other large diving ducks, will be subject to further environmental analysis, and public review, as appropriate, once sufficient information is developed to provide for that analysis. Also, additional environmental review will be conducted as appropriate for the Tule Lake NWR Grebe Nesting Habitat and Berkeley Pier Enhancement Restoration projects as more site-specific information is developed.

Overall, the Trustees' selected restoration projects for the *Cosco Busan* NRDA will result in long-term net improvement in fish and wildlife habitat, restoration of ecological balance in areas where disturbances have led to adverse impacts on sensitive native species, and improvement in the natural resource services provided by fish and wildlife in the region. The cumulative impacts for the restoration projects selected are summarized below from the analysis presented in the DARP/EA.

All of the selected projects to restore ecological services to compensate for injuries from the oil spill to birds, fish, and habitats are consistent with and in some cases a part of ongoing regional environmental restoration efforts described in plans for projects such as the San Francisco Baylands Ecosystem Goals Project and the San Francisco Bay Subtidal Goals project.

In the long-term, the overall water quality effects of the selected habitat improvement projects and other past and reasonably foreseeable restoration projects is expected to be beneficial, since they are generally acknowledged to provide favorable water quality improvement and enhanced biological activity. Construction for some of the projects, including the Aramburu Island project and Albany Beach Restoration project, could cause temporary water quality impacts; however, these impacts would be limited in scope and duration, would be mitigated by use of best management practices, and are unlikely to contribute to cumulative water quality impacts in San Francisco Bay.

All of the past and proposed wetlands and subtidal habitat enhancement efforts for this region are part of a long-term strategy to recreate a complex mosaic of wetlands and subtidal habitats in the greater San Francisco Bay area. The selected restoration projects, considered along with other restoration projects, will result in cumulatively beneficial impacts to plants and wildlife, including special-status species, will provide additional habitat to support recovery of these sensitive communities and will result in greater habitat complexity, diversity, and productivity. The project implementers for the Aramburu Island project have consulted with both NOAA and the USFWS, both of whom concurred that the project is not likely to adversely impact species listed under the Endangered Species Act. These projects will cumulatively increase the availability and quality of marsh and shallow water aquatic habitats throughout the region. The wetlands restoration project on Aramburu Island involves enhancement of existing degraded site conditions rather than conversion of uplands or diked bay lands to tidal marsh or mudflat. The eelgrass restoration project entails the gradual conversion of un-vegetated shallow subtidal habitat to vegetated habitat resulting in a shift in biological communities from those that occupy un-vegetated shallows to those that utilize vegetated shallows. Similarly, native oyster restoration entails gradual introduction and expansion of oyster beds beyond areas where they are currently located. Impacts from eelgrass restoration, even when considered along with changes anticipated as other similar projects are implemented throughout San Francisco Bay, will be minimal to soft bottom habitats of the bay and will only enhance habitat complexity at sites where eelgrass restoration will be located. Similarly, the acreage of subtidal habitat affected by the selected native oyster restoration projects, when considered along with other reasonably foreseeable oyster restoration efforts, is *de-minimis* compared to the available subtidal habitat.

Another potential cumulative impact from multiple tidal habitat restoration projects is the potential for invasion of aggressive non-native plant species, such as certain cordgrass species (*Spartina alterniflora and Spartina densiflora*). The number of restoration projects planned in the region increases the availability of suitable habitat for colonization by these species, and in the past, several restoration projects along the shores of San Francisco and San Pablo bays have been degraded because of non-native

cordgrass. Applicable restoration projects, including the Aramburu Island project require monitoring and control of exotic pest plant species within restored marsh areas, and coordination with the Invasive Spartina Project (a regional program to control non-native *Spartina* in the San Francisco estuary).

Projects to enhance public recreation in areas affected by the spill (i.e., improvements to public piers, parks, bike paths, boat ramps, fishing areas, or other infrastructure that increase the value of recreational experiences involving beach use, boating, and fishing) will have minor short-term impacts on air quality, water quality, and traffic that will be mitigated during the construction phase of such projects. The cumulative long term beneficial effects and public use trade-offs of the recreational projects to be implemented under this restoration plan, combined with similar foreseeable development projects throughout the San Francisco Bay region, which are much larger in scale than the types of recreational projects which will be subsequently selected by the Trustees, are potentially significant. However, it is anticipated that the incremental impacts from such recreational projects are less than significant.

Summary:
The Trustees believe that, overall, the alternatives selected in this restoration plan, when considered along with past and reasonably foreseeable future projects, will have long term, local and regional beneficial impacts to natural resources; and beneficial impacts to human recreation activities such as waterfowl hunting, fishing and bird watching.

Environmentally Preferred Alternative:
The environmentally preferred alternative is the alternative that will promote the policies of NEPA, as expressed in Section 101 of NEPA. The environmentally preferred alternative is the one that best meets the following:

- Fulfills the responsibility of each generation as trustee of the environment for succeeding generations;
- Ensures for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing surrounding;

• Attains the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
• Preserves important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
• Achieves a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
• Enhances the quality of renewable resources and approaches the maximum attainable recycling of depletable resources.

Based upon analyses of the proposed action when compared to the alternative projects (non-preferred) and the no action alternative, the proposed action meets the criteria above and is, therefore, also the environmentally preferred alternative.

Basis for Decision:
Implementation of the proposed actions will have local and regional long term beneficial impacts on natural, cultural, and social resources, with minimal short-term unfavorable impacts during project implementation activities. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative negative effects, or elements of precedence have been identified, and implementing the proposed and preferred alternative will not violate Federal, State, or local environmental protection laws.

Public Involvement:
The Trustees sought the public's input on a draft version of the DARP/EA. Public review of the Draft DARP/EA occurred between September 19 and October 31, 2011 and included two public meetings, a press release, an announcement in the Federal Register, an email announcement to over 900 individuals, a two-page newsletter and a 3 ½ minute YouTube video that summarized the Draft DARP/EA. Written and oral comments received on the Draft DARP/EA and Trustee responses are included as Appendices in the Final DARP/EA. After considering the public comments, the Trustees modified the DARP/EA in a number of ways (detailed in Appendix L), including the section regarding restoration for Marbled Murrelets. The Trustees then sought additional public comment on the section of the draft DARP/EA concerning Marbled Murrelet restoration, with public review occurring between December 28, 2011 and January 27, 2012. One additional supportive comment on this modified section was received.

Conclusion:
Based upon an environmental review and evaluation of the DARP/EA for the *Cosco Busan* Oil Spill as summarized above, it is determined that implementation of the

restoration plan does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). Accordingly, an environmental impact statement is not required for this action. In addition, those project(s) identified as: Benefiting Surf Scoters, Tule Lake Grebe Nesting Habitat, Berkeley Pier Enhancement, Eelgrass/Rockweed/Native Oyster restorations and Human Recreational Use Projects will be subject to further environmental review and compliance as appropriate, as the projects and/or their locations are identified.

_____ _____

Regional Director, Pacific Southwest Region
U.S. Fish and Wildlife Service

Date

_____ _____

Regional Director, Pacific West Region
National Park Service

Date

restoration plan does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). Accordingly, an environmental impact statement is not required for this action. In addition, those project(s) identified as: Benefiting Surf Scoters, Tule Lake Grebe Nesting Habitat, Berkeley Pier Enhancement, Eelgrass/Rockweed/Native Oyster restorations and Human Recreational Use Projects will be subject to further environmental review and compliance as appropriate, as the projects and/or their locations are identified.

Alexandra Pitts

Acting Regional Director, Pacific Southwest Region
U.S. Fish and Wildlife Service

2.10.2012
Date

Patricia L. Neubacher

acting Regional Director, Pacific West Region
National Park Service

2/10/12
Date

FINDING OF NO SIGNIFICANT IMPACT

Cosco Busan Oil Spill Final Damage Assessment and Restoration Plan/Environmental Assessment

Background:

Under the Oil Pollution Act of 1990 (OPA) the Natural Resource Trustee Agencies (Trustees), including the National Oceanic and Atmospheric Administration (NOAA) on behalf of the U.S. Department of Commerce, the United States Fish and Wildlife Service (USFWS), National Park Service (NPS), and Bureau of Land Management (BLM) on behalf of the U.S. Department of the Interior, and the California Department of Fish and Game (CDFG) and California State Lands Commission (CSLC) on behalf of the State of California, prepared the Final Damage Assessment and Restoration Plan and Environmental Assessment (DARP/EA) for the November 7, 2007, M/V Cosco Busan oil spill in San Francisco Bay. The DARP/EA evaluates restoration alternatives for natural resource injuries incurred as a result of this oil spill.

On November 7, 2007, the freighter Cosco Busan struck the San Francisco-Oakland Bay Bridge as it attempted to depart San Francisco Bay. The accident created a gash in the hull of the vessel, causing it to spill more than an estimated 53,000 gallons of Intermediate Fuel Oil (IFO-380) into the Bay (the "Spill"). Wind and currents quickly took some of the oil outside of the Bay, where it impacted the outer coast from approximately Half Moon Bay to Limantour Beach at Point Reyes. Inside the Bay, the oil primarily impacted waters and shoreline within the central portion of the Bay, from Tiburon to San Francisco on the west side and from Richmond to Bay Farm Island and Alameda on the east side. Following the incident, representatives of the Trustees and the vessel owners jointly conducted a Natural Resource Damage Assessment (NRDA) to determine the nature and extent of injuries resulting from the spill to natural resources.

The injuries from the oil spill can be divided into the following categories:

- **Birds**: 6,849 birds were estimated killed, representing 65 different species.
- **Mammals**: No significant injuries.
- **Fish**: An estimated 14% to 29% of the winter 2007-8 herring spawn was lost due to widespread egg mortality in some areas of the Bay.
- **Shoreline Habitats**: 3,367 acres of shoreline habitat were impacted, and recovery is expected to vary from a few months to several years, depending upon the habitat type and degree of oiling.
- **Human Uses**: Approximately 1,079,900 user-days were lost, representing a wide variety of activities (recreational fishing, general beach use, surfing, etc.).

In addition to other costs and damages, the parties responsible for the spill are liable for natural resource damages, which are used to fund environmental restoration projects to compensate the

public for the diminished ecological value of injured resources, including those previously mentioned, caused by the spill and related response activities.

Restoration Alternatives:

The Trustees cooperatively developed the Final DARP/EA. It examines and evaluates potential projects to restore natural resources in compensation for injuries resulting from the spill.

The Trustees published a draft DARP/EA in 2011 and invited the public to comment on it. It included discussion of a "no action" alternative and several alternative actions to address the injured resources. The Trustees rejected the "no action" alternative because it does not compensate the public for losses suffered by the resources. OPA clearly establishes Trustee authority to seek compensation for injuries and interim losses pending recovery of natural resources. Furthermore, technically feasible alternatives for restoration are available. For the remaining active restoration alternatives, the Trustees considered criteria to evaluate the entire suite of projects that were under consideration. These criteria included each project's ability to restore resources of the type impacted by the incident and relevant federal and state laws governing use of damages for natural resources. Based on an evaluation under these criteria, the Trustees selected several alternatives that would compensate for injuries to natural resources affected by the spill. Several non-preferred projects were also considered in the DARP/EA. These projects may be reconsidered if funds become available or if selected projects prove to be infeasible. For a complete description of all of the restoration alternatives, see the DARP/EA.

This decision document concludes that a Finding of No Significant Impact (FONSI) is appropriate for restoration actions evaluated in the DARP/EA as summarized here. For the following projects that are developed to a sufficient level of detail, and for which the DARP/EA contains a full environmental impacts analysis, the Final DARP/EA serves to satisfy NOAA's requirements under the National Environmental Policy Act (NEPA).

1. PROJECT: Winter Diving Duck Habitat at the South Bay Salt Ponds
   BENEFITS: small diving ducks and small grebes
   This project complements on-going efforts to restore the South Bay Salt Ponds in southern San Francisco Bay by maintaining and managing habitat for wintering lesser scaup and eared grebes, among other species. The same ponds would be managed for snowy plover nesting during the summer. This project will be a component of the larger South Bay Salt Pond Restoration Project (SBSPRP). A full discussion of the environmental consequences can be found in the EIR/EIS for the SBSPRP (South Bay Salt Pond Restoration Project 2007). The Trustees have considered the information contained in the SBSPRP EIR/EIS and incorporate by reference the analysis of environmental consequences contained in the SBSPRP EIS/EIR. In addition, NOAA adopted the SBSPRP EIR/EIS in 2009. Therefore, no additional NEPA review will be necessary.

2. PROJECT: Farallon Island Nest Site Improvements
   BENEFITS: Alcids and Procellarids

This project seeks to increase suitable nest sites for seabirds at Southeast Farallon Island of the coast of San Francisco. Specifically, it will replace up to 60 rhinoceros auklet and 200 Cassin's auklet nest boxes and create nest sites for up to 60 pairs of Ashy storm-petrels. This project is described in the Farallon NWR Comprehensive Conservation Plan and Environmental Assessment (2009) and is further evaluated in the DARP/EA. Therefore, no additional NEPA review will be necessary.

3. PROJECT: Marbled Murrelet Restoration
   BENEFITS: Marbled Murrelets
   This project seeks to restore marbled murrelets through a variety of measures, including corvid (predatory birds of the crow family) management. Measures may include public education and "soft" enforcement of food storage regulations to reduce human food waste, improvements to garbage receptacles and food storage lockers, removal of ravens and/or their nests, conditioned taste aversion (CTA), removal of jays and/or their nests, and installation of food waste receptacles at water spigots (grates). This project, undertaken by the USFWS and the State of California, may be implemented anywhere in California where there are opportunities that benefit marbled murrelets. This project has been evaluated in the DARP/EA; therefore, no additional NEPA review will be necessary. In addition all necessary permits under the Migratory Bird Treaty Act are in place for this project.

4. PROJECT: Muir Beach Dunes Restoration
   BENEFITS: sandy beach habitat
   This project will enhance dune vegetation and habitat at Muir Beach in Marin County by removing non-native vegetation, planting native vegetation, and re-routing pedestrian traffic. This project is part of a larger effort to restore Redwood Creek, including the creek, wetlands, lagoon and sand dunes in the Muir Beach area that were evaluated in the Lower Redwood Creek and Big Lagoon Environmental Impact Statement. It is also further evaluated in the DARP/EA. Therefore, no additional NEPA review will be necessary.

5. PROJECT: Aramburu Island Restoration
   BENEFITS: salt marsh and mud/sand flats
   This project seeks to restore tidal marsh and shoreline habitat on Aramburu Island in Richardson Bay. Project elements include rehabilitation of tidal marsh and flats, improvements to upland grassland areas, creation of roost habitat for herons and egrets, and expansion of existing sand and gravel areas for shorebird roosting and to reduce wave erosion. NEPA compliance was completed earlier by NOAA for engineering and design as documented under the National Association of Counties 2009, Explanation of Inclusion of Projects under the Community-based Restoration Program Programmatic Environmental Assessment and Supplement (PEA/SPEA) and Findings of No Significant Impact. Other aspects of the project have been evaluated in the DARP EA. Therefore, no additional NEPA review will be necessary.

6. PROJECT: Albany Beach
   BENEFITS: sandy beach habitat

This project will enhance and expand Albany Beach in the East Bay by removing non-native vegetation, planting native vegetation, and importing more sand, among other activities. This project has been evaluated in the DARP/EA. The Trustees also considered further environmental analysis conducted in compliance with the California Environmental Quality Act and have added this information to their administrative record. Therefore, no additional NEPA review will be necessary.

For the following selected actions that are at various stages of conceptual planning and for which it is not possible to conduct a full environmental analysis, NOAA (or the lead implementation Trustee agency) will either conduct further environmental analysis as the necessary detailed information becomes available or require the project implementer(s) to conduct such an analysis These actions are:

7. PROJECT: Request for Proposals for project benefiting Surf Scoters
   BENEFITS: scoters and other large diving ducks
   This project will seek proposals and award a grant to one or more projects that will provide benefits to surf scoters, the bird species most impacted by the spill. Additional NEPA compliance will be required as appropriate prior to implementation.

8. PROJECT: Tule Lake Grebe Habitat
   BENEFITS: Western/Clark's grebes
   This project seeks to create more suitable nesting habitat for Western and Clark's grebes at Tule Lake National Wildlife Refuge in northern California. These species spend the winter in the Bay and along the outer coast. The project primarily involves the management of water levels in Tule Lake's Upper Sump to create over 500 acres of new freshwater marsh, in which the birds would nest. Additional NEPA compliance will be required prior to implementation, pending development of sufficient project-level detail.

9. PROJECT: Berkeley Pier Enhancements
   BENEFITS: pelicans, cormorants, gulls, shorebirds
   This project will enhance the dilapidated tip of the Berkeley Pier for cormorant and gull nesting and pelican roosting. It will also enhance another section nearer the base as a high tide roost site for shorebirds. Additional NEPA compliance will be required prior to implementation, pending development of sufficient project-level detail.

10. PROJECT: Eelgrass Restoration
    BENEFITS: eelgrass habitat, invertebrates, herring, and other bay fishes
    This project will create or expand shallow subtidal eelgrass beds at multiple locations within the footprint of the spill. Eelgrass beds are a vital part of the Bay ecosystem, providing benefits to a variety of eelgrass-dependent organisms, as well as herring, which use eelgrass beds for spawning. Additional NEPA compliance will be required prior to implementation, pending development of sufficient project-level detail.

11. PROJECT: Native Oyster Restoration
    BENEFITS: rocky intertidal habitat

This project will create rocky intertidal habitat by installing hard substrates augmented with oyster shells in low intertidal areas. These provide a substrate for the attachment and development of native oyster communities. The hard surfaces will also permit the establishment of algae, and any nooks and crevices would harbor small fish and crabs, creating a diverse rocky intertidal community. There will be several project sites within the Central Bay. Additional NEPA compliance will be required as appropriate prior to implementation.

12. PROJECT: Rockweed Restoration
    BENEFITS: rocky intertidal habitat
    Rockweed habitat in the Central Bay will be created at mid-intertidal elevations using two techniques: seed bags and direct transplant. Some of the proposed sites for rockweed restoration include rocky intertidal habitats heavily damaged by hot water pressure washing during the oil spill response. Once established, the rockweed habitat provides shelter for many invertebrates, particularly from desiccation during very low tides. Additional NEPA compliance will be required as appropriate prior to implementation.

13. PROJECT: Recreational Use Projects
    BENEFITS: human recreational users
    There will be a suite of local projects to enhance recreational uses. The projects will be located in the East Bay, San Francisco Peninsula, and Marin County, proportional to the levels of lost uses in each region. While this plan does not specify any particular project, it proposes a process, working with local governments and affected users, to select projects. Additional NEPA compliance will be required as appropriate prior to implementation, pending selection of specific projects and locations.

Public Involvement:

Throughout the NRDA process, the Trustees have made information available to the public. The Trustees held public meetings in Oakland and Mill Valley shortly after the oil spill in January 2007 and published a series of fact sheets to keep the public up to date on the progress of the NRDA.

The Trustees also sought the public's input on a draft version of the DARP/EA. Public review of the Draft DARP/EA occurred between September 19 and October 31, 2011 and included two public meetings, a press release, an email announcement to over 900 individuals, and a two-page newsletter and a 3½ minute YouTube video that summarized the Draft DARP/EA. Public comments were received and are available in the Administrative Record. The Trustees' responses to the comments are in Appendix L of the Final DARP/EA.

After considering the public comments, the Trustees modified the DARP/EA in a number of ways (detailed in Appendix L), most significantly the section regarding restoration for marbled murrelets. The Trustees sought additional public comment on the changes for the marbled murrelet subsection, with public review occurring between December 28, 2011 and January 27, 2012.

In addition, the Trustees published a Notice of Intent (NOI) to Conduct Restoration Planning, pursuant to the Oil Pollution Act regulations at 15 CFR § 990.44, and concurrently opened an Administrative Record in compliance with 15 CFR § 990.45. The Record includes documents relied upon or considered by the Trustees during the assessment and restoration planning process.

Alternatives Considered:

The DARP/EA evaluates an array of project alternatives for restoration of the various injured resources. The evaluation criteria used by the Trustees considered the following, taken from the NRDA regulations promulgated under the Oil Pollution Act: the cost to carry out the alternative action, the extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses, the likelihood of success of each alternative, the extent to which each alternative will prevent future injury as a result of the oil spill and avoid collateral injury as a result of implementing the alternative, the extent to which each alternative benefits more than one natural resource and/or service, and the effect of each alternative on public health and safety. In addition, the Trustee considered proximity to the geographic location of the injury, the relative costs of potential projects, how quickly a project would provide benefits, the duration of benefits, benefits to multiple resources, the extent to which a project would contribute to the overall restoration plan, the potential for maintenance and oversight of projects, opportunities to collaborate with other entities involved in restoration projects, the ability to document project benefits to the public, education and research value of projects, the degree to which project benefits would duplicate each other, and compliance with applicable federal and state laws and policies. The Trustees selected the most meritorious projects based on this evaluation.

Dozens of projects underwent evaluation. The specific projects which the Trustees considered are discussed in greater detail in Section 4 of the Final DARP/EA.

Environmental Consequences:

The NEPA requires an analysis of the effects of government actions on the quality of the human environment. In addition, Council on Environmental Quality (CEQ) regulations and NOAA's implementing procedures for NEPA recommend the avoidance of repetitive discussions when more than one environmental document addresses the same action(s).

The selected restoration projects or action types were identified through various multi-party regional restoration planning efforts such as the San Francisco Bay Baylands Ecosystem Habitat Goals Project, the San Francisco Subtidal Habitat Goals Project, the San Francisco Bay South Bay Salt Pond Adaptive Management Plan, National Park Service Management Plans, and the East Bay Regional Park District Master Plan. In addition, the Trustees consulted with multiple state and federal agencies in the San Francisco Bay region and with multiple nonprofit groups dedicated to the restoration and conservation of coastal resources in the Bay and the outer coast.

NOAA's Administrative Order (NAO) 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental

Quality (CEQ) regulations at 40 C.F.R. §1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. The criteria listed below are relevant to making a Finding of No Significant Impact, and have been considered individually, as well as in combination with the others, and include:

(1) Can the proposed actions reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson Stevens Act and identified in Federal Management Plans (FMPs)?

> Response: No. As documented in the Final DARP/EA, the Trustees do not expect the selected projects to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act. Any short-term and temporary localized impacts from the restoration activities, such as those associated with wetland construction, the placement of oyster shell or the planting of eelgrass seeds and Fucus algae, will be minimized by the use of Best Management Practices. As documented in the Final DARP/EA (in section 4.3.3, and Appendix D), the Trustees expect the selected projects to substantially benefit the habitat targeted for restoration and the species associated. The planned restoration actions will have beneficial impacts by increasing and or enhancing habitats for anadromous fish, and special status fish species, migratory shorebirds, and diving ducks and salt marsh-dependent special status species such as the salt marsh harvest mouse and clapper rail. Overall, impacts to the ocean, coastal habitats, and/or essential fish habitat are expected to be beneficial.

(2) Can the proposed actions be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator prey relationships, etc.)?

> Response: No. The selected projects are not expected to have substantial adverse impacts; however, they are expected to have beneficial impacts on ecosystem function and species biodiversity. As documented in the Final DARP/EA (in sections 4.3.4 and 4.5), all of the proposed wetlands, intertidal and subtidal habitat enhancement efforts for this region are part of a long-term strategy through various Federal, State and environmental restoration groups to recreate a complex mosaic of wetlands and subtidal habitats in the greater San Francisco Bay and coastal areas. The projects described in the DARP/EA will result in beneficial impacts to plants and wildlife, including special-status species, providing additional habitat to support recovery of these sensitive communities and resulting in greater habitat complexity, diversity, and productivity. These projects will cumulatively increase the availability and quality of marsh and shallow water aquatic habitats throughout the region. As such there would be an expected increase in ecosystem function and species biodiversity. Any potential adverse impacts (such as those discussed in (1) above) are expected to be minimal, short term, localized, and are not expected to decrease function or species biodiversity.

(3) Can the proposed actions reasonably be expected to have a substantial adverse impact on public health and safety?

Response: No. The selected projects are not expected to have any impacts on public health and safety. The implementation of the proposed restoration projects would not present any unique physical hazards to humans. Any human use projects that are selected later under the framework outlined in the Final DARP/EA may provide benefits to public health and safety; however, any such projects would have to undergo additional review beyond this Final DARP/EA.

(4) Can the proposed actions reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: No. The selected projects are not expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species for the listed project numbers 1-6. Overall, the selected projects are expected to benefit special status species and their habitat. In addition, for each project selected in the Final DARP/EA that requires additional environmental review and has not already undergone consultation with the USFWS and/or NOAA under Section 7 of the Endangered Species Act, the Federal Trustees will complete consultation prior to and as a condition of future project implementation.

(5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No. The Trustees do not expect there to be significant adverse social or economic impacts interrelated with natural or physical environmental effects of the selected projects. On the contrary, these projects will only promote positive economic returns to San Francisco Bay and associated areas impacted by the spill. It is anticipated that any selected recreational projects will provide positive social interactions with the natural environment.

(6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No. The selected restoration projects are not controversial. The public's response during the DARP/EA public comment period was positive. Furthermore, due to the environmentally beneficial nature of the selected projects, the Trustees anticipate that the public will remain supportive.

(7) Can the proposed actions reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: No. The physical characteristics of the area in which the proposed restoration projects would be implemented do not increase the risk of significant impacts. The affected environment encompasses portions of San Francisco Bay which includes the near shore tidal flats, wetlands, rocky intertidal areas, sandy beaches, eelgrass beds and subtidal habitats. In addition, the physical environment includes the Gulf of the

Farallones National Marine Sanctuary, managed by NOAA; the Farallon Islands, Tule Lake, and Don Edwards National Wildlife Refuges, managed by the USFWS; and the Point Reyes National Seashore and Golden Gate National Recreation Area, managed by the NPS. While these and other areas do contain unique characteristics, the proposed projects are, overall, expected to be beneficial to these areas. Furthermore, no unique or rare habitat would be destroyed due to restoration of wetlands to those areas that previously supported wetlands.

(8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No. The areas in which the projects will be implemented are well known to the project implementers, and none of the project methods that are expected to be used are unique, controversial, or untried.

(9) Are the proposed actions related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No. The Trustees evaluated the restoration projects selected in the Final DARP/EA in conjunction with other known past, proposed or foreseeable closely related projects that could potentially add to or interact with the these projects within the affected area to determine whether significant cumulative impacts may occur. All of the selected projects to restore ecological services to compensate for injuries from the oil spill to birds, fish, and habitats are consistent with and in some cases a part of ongoing regional environmental restoration efforts described in plans such as the San Francisco Baylands Ecosystem Goals Project and the San Francisco Bay Subtidal Goals project.

(10) Are the proposed actions likely to 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?

Response: No. As noted in the Final DARP/EA, the Trustees have evaluated the selected projects and determined that they are not expected to impact any cultural, scientific, or historic resources. However, if potential impacts become known during project implementation, the Trustees will either conduct or require the project implementer to conduct any appropriate compliance under the National Historic Preservation Act.

(11) Can the proposed actions reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: No. While, tidal habitat restoration projects may increase the availability of suitable habitat for colonization by aggressive, non-native plant species (such as Spartina alterniflora and Spartina densiflora), the selected projects will include extensive measures to prevent such colonization. In the past, several restoration projects along the shores of San Francisco and San Pablo bays have been degraded because of non-native cordgrass

out-competing native California cordgrass. Accordingly, projects selected in the Final DARP/EA that have the potential to support non-native wetland plant species (e.g., the Aramburu Island project), will undergo continuous monitoring and control of exotic pest plant species within restored marsh areas, as described in the restoration plan. The proponents will also coordinate with the Invasive Spartina Project (a regional program to control non-native *Spartina* in the San Francisco estuary). Other projects that increase hard substrate within the tidal zone may also provide available space for the colonization of aquatic non-natives. However, the number and footprint of these types of projects, related to the size of the bay are minimal and therefore would not constitute a significant threat for the spread of invasives.

(12) Are the proposed actions likely to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

Response: No. All of the project types selected have been implemented before or have been attempted in San Francisco Bay, along the outer coast, and in other West Coast estuaries. The selected restoration projects are not expected to set precedents for future actions that would significantly affect the human environment or represent a decision in principle about a future consideration.

(13) Can the proposed actions reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No. Implementation of the selected projects (numbers 1-6) would not require any violation of federal, state or local laws designed to protect the environment. All projects prior to implementation will undergo required Federal and State review and permits if needed.

(14) Can the proposed actions reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: No. The proposed action will not result in a substantial cumulative adverse effect on target species and non-target species. The proposed restoration projects are not expected to contribute to potentially significant cumulative impacts. The reasons for this conclusion are detailed in the Final DARP/EA "Cumulative Impacts" section. Furthermore, since the proposed restoration projects are designed to achieve recovery of injured natural resources, any cumulative environmental consequences will be largely beneficial.

DETERMINATION

Based upon an environmental review and evaluation of the DARP/EA for the Cosco Busan Oil Spill as summarized above, it is determined that implementation of the restoration plan does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of Section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). Accordingly, an environmental impact statement is not required for this action. In

addition, those project(s) identified as: Benefiting Surf Scoters, Tule Lake Grebe Nesting Habitat, Berkeley Pier Enhancement, Eelgrass/Rockweed/Native Oyster restorations and Human Recreational Use Projects will be subject to further environmental review and compliance as appropriate, as the projects and/or their locations are identified.

_____ _____

Brian T. Pawlak
Acting Director, Office of Habitat Conservation
National Marine Fisheries Service Date

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Brian T. Pawlak
Acting Director, Office of Habitat Conservation
National Marine Fisheries Service

2/27/12
Date