



United States Department of the Interior

NATIONAL PARK SERVICE

Pacific West Regional Office
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Oakland, California 94607
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IN REPLY REFER TO:

L7617 (PGSO-PP)

APR 30 2002

Memorandum

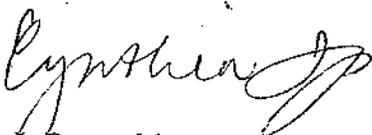
To: Cape Mohican Trustee Council
Attn: NPS Primary Representative

From: ~~ACTS~~ Regional Director, Pacific West Region

Subject: Environmental Compliance for Selected Actions in the Cape Mohican
Oil Spill Restoration Plan

The revised *Finding of No Significant Impact* for NPS participation in this phase of the overall response to the subject October 28, 1996 oil spill incident is approved.

To complete this particular compliance effort, a copy of this decision should be provided to individuals and organizations that commented on the supporting Environmental Assessment (EA). Also, all recipients of the supporting EA should be informed of the determination to prepare separate compliance documents for the shorebird habitat (cordgrass control) and Giacomini wetlands restoration projects.


for John L. Reynolds

Attachment

cc:
PORE-S
GOGA-S
SOL-Oakland
WASO-EQD
USFWS

April 11, 2002
Finding of No Significant Impact
Concerning the
Restoration Plan / Environmental Assessment
For the
SS Cape Mohican Oil Spill

On March 21, 2002, the Cape Mohican Trustee Council completed its final Restoration Plan/Environmental Assessment (RP/EA) selecting restoration projects to compensate for natural resource injuries and lost human-use caused by the October 28, 1996, *SS Cape Mohican* Oil Spill into the San Francisco Bay and along the California coast. The RP/EA was prepared jointly by the United States Department of the Interior (DOI), represented by the National Park Service (NPS), and the US Fish and Wildlife Service (USFWS); the Department of Commerce (DOC), represented by the National Oceanic and Atmospheric Administration (NOAA); and the State of California, represented by the California Department of Fish and Game's Office of Spill Prevention and Response (CDFG-OSPR) and the California Department of Parks and Recreation (CDPR). These agencies, through a Memorandum of Understanding (MOU), formed a "Cape Mohican Trustee Council" to cooperatively evaluate potential actions needed to address natural resource injuries and damage related to the October 28, 1996 oil spill.

The oil spill occurred when a valve on the *SS Cape Mohican's* hull was opened during routine maintenance at the San Francisco Dry Dock, releasing an estimated 40,000 gallons of fuel oil into the San Francisco Bay. Tides and wind dispersed the oil around the bay and out to sea, where it impacted shorelines, birds, fish and their habitats and disrupted recreational activities in the San Francisco Bay and along the California coast.

This Finding of No Significant Impact (FONSI) covers those projects and actions selected for implementation by the DOI Trustee agencies, as evaluated in the Trustee Council's *SS Cape Mohican* Oil Spill Restoration Plan/Environmental Assessment. The areas impacted by the spill include four units of the National Park Service: Golden Gate National Recreation Areas; Fort Point National Historic Site; San Francisco Maritime National Historic Park; and Point Reyes National Seashore. The affected area also includes four sub-units of the USFWS San Francisco Bay National Wildlife Refuge (NWR) Complex: Don Edwards San Francisco Bay NWR, Marin Islands NWR, San Pablo Bay NWR, and Farallon NWR.

Both federal and California statutes establish liability for natural resource damages to compensate the public for injury, destruction, and loss of such resources and their services resulting from oil spills. Natural resource trustees are authorized to act on behalf of the public under state and federal statutes to assess and recover natural resources damages and to plan and implement actions to restore natural resources and resource services injured or lost as a result of a discharge of oil. A settlement of \$8 million was concluded on May 4, 1998 between the Trustees and responsible parties, of which \$3.74 million will be used for natural resource restoration projects.

The Cape Mohican Trustee Council has followed the Oil Pollution Act (OPA) of 1990 (33 U.S.C. 2701, et seq.), Natural Resource Damage Assessment Regulations under OPA of 1990 (15 CFR Part 990), National Park System Resource Protection Act (16 U.S.C., Section 19jj), National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 CFR 300.600), Executive Order 12777 (implements Section 311 of the Water Pollution Control Act of 1972 and OPA), National Environmental Policy Act (NEPA) (42 U.S.C. 4321-4370d), and the California Environmental Quality Act (CEQA) (Public Resources Code §§21000-21178.1).

The RP/EA evaluated a range of restoration projects including an assessment of a “no action” alternative. The Trustees developed criteria to evaluate and prioritize the entire suite of projects under consideration including relevant federal and state law provisions governing use of recoveries for natural resources. In addition, the Trustees ranked potential restoration projects into three categories: (1) Highly Preferred; (2) Moderately Preferred; and (3) Non-Preferred.

The projects identified from this ranking process as highly and moderately preferred were then packaged and analyzed as the agencies’ proposed action in the draft RP/EA. The final RP/EA contains a combination of these 13 selected restoration projects (as revised) for specific locations throughout the Bay and California coast.

This finding of no significant impact (FONSI) pertains to those DOI actions selected for implementation by the Trustees as identified in table 1, except for Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay Wetlands and the Giacomini Coastal Wetlands Restoration Project; separate NEPA compliance is underway as to those projects. Except to those restoration projects noted, the DOI concludes that the selected action does not constitute a major Federal action significantly affecting the quality of the human environment.

Public Review

The public has been afforded two opportunities to comment on the proposed restoration activities. A public scoping meeting was held in San Francisco, California, on May 10, 1999; comments received were used to prepare the Draft RP/EA.

Additionally, the Draft RP/EA was made available to the public for a 45-day comment period from September 10, 2001 through October 25, 2001 in hardcopy form and electronically through federal and state government web pages. A public meeting was held on September 26, 2001, where the public was invited to submit oral or written comments on the RP/EA. Eight oral comments were made during the public meeting and eight written comments were submitted during the entire comment period. These comments are summarized with responses provided in appendix A.

The Trustees reviewed all comments submitted on the Draft RP/EA and analyzed the potential need to modify proposed restoration projects and their ranking; modify, or improve the analysis of the projects; identify new projects and make factual corrections to proposed projects. The Trustees determined that no substantive changes to the proposed restoration

projects were necessary.

Alternatives Considered

The EA evaluated two combinations of restoration projects, and an alternative of taking no-action, as required by NEPA:

(A) Proposed Action:

Shorebird Habitat Protection at Golden Gate National Recreation Area, California Least Tern Habitat Enhancement at Alameda Point, Acquisition, Enhancement, and Management of Red Rock Island, Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay Wetlands, Farallon Seabird Restoration, Pacific Herring Spawning Habitat Enhancement in San Francisco Bay, Wetland Restoration at Pier 98, India Basin, San Francisco, Steelhead Stream Habitat Enhancement at San Francisquito Creek, Giacomini Coastal Wetlands Restoration Project, Sandy Beach Habitat Restoration at Point Reyes National Seashore, Protection of Duxbury Reef Through Education, Angel Island Foot Trail Enhancement, and Crissy Field Habitat Stewardship Program at Golden Gate National Recreation Area. A brief summary of each of these projects is provided in table 1.

(B) Alternative Restoration Projects Evaluated (Non-Preferred):

Farallon Seabird Restoration Through the Removal of Concrete Slabs From Nesting Areas and Control of Exotic Mice, Restoration of Injured Bird Species Through Native Vegetation Restoration at Marin Islands National Wildlife Refuge, Wetland and Water Quality Enhancement at Pier 94, Hamilton Wetlands Restoration, Entry Triangle marsh Wetland Restoration, Bolinas Lagoon Wetland Restoration, Tubbs Island Levee Setback, Herring Stock Assessment, Eelgrass Restoration in San Francisco Bay, Creation of Artificial Herring Spawning Habitat, Treasure Island Wetland Restoration, Waterbird Conservation Project, Big Lagoon Public Access Project, Wetlands Walkway at Candlestick Point State Recreation Area, Tern Nesting Bair Island, Martin Dunes Acquisition, and Muir Beach Water Supply Project
A brief summary of each of these projects is provided in table 2.

(C) No Action Alternative:

No action would be taken to implement any of the proposed restoration activities.

Environmental Consequences

To comply with NEPA and other related state and federal requirements, the Trustee Council analyzed the effects of each restoration project on the quality of the human environment. Mitigation measures are key to the success of the overall restoration plan and therefore incorporated into each project as appropriate. Each Trustee agency is responsible for ensuring that each project for which it has "lead" responsibility under the MOU (section IX.B.), including mitigation, will be implemented as prescribed in the RP/EA and in accordance with the MOU. Table 1 contains a summary of the proposed action, environmental consequences, and any mitigation proposed at this time.

NEPA's implementing regulations direct federal agencies to evaluate the potential significance of proposed actions by considering the context, duration and intensity of the action. For most of the restoration actions considered, the appropriate context and area of potential significance of the action is local and regional, as opposed to national or worldwide. Two restoration projects included in the RP/EA are programmatic and may require additional compliance as detailed engineering design work or operational plans are developed.

As documented in the RP/EA, the Trustee Council has determined, except as to Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay Wetlands and the Giacomini Coastal Wetlands Restoration Project, that the proposed action can be implemented with no significant adverse effect to soils, air quality, water resources, floodplain, wetlands, vegetation, fisheries, wildlife, threatened/endangered species, visual quality; aesthetics/recreation, wilderness, subsistence, cultural resources, park management, and the local economy. The proposed action will make the environment and the public whole for injuries to, or lost use of, natural resources and services resulting from the *SS Cape Mohican* Oil Spill.

Environmentally Preferred Alternative

The environmentally preferred alternative is the alternative that will promote NEPA, as expressed in Section 101 of NEPA. The identification of the environmentally preferred alternative is that which best meets the following requirements:

Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.

Ensure for all Americans a safe, healthful, productive, and aesthetically and culturally pleasing surroundings.

Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.

Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.

Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

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

Basis for Decision

The restoration projects selected for implementation ensure protection of park and wildlife refuge resources and values through compliance with applicable laws and regulations while preventing unnecessary or unanticipated effects from occurring.

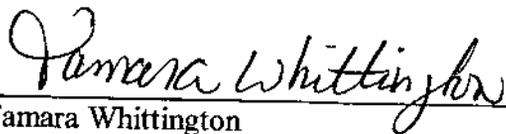
The impacts resulting from the selected action will not impair any national park resource or value necessary to fulfill specific purposes identified in the parks' enabling legislation. The impacts documented in the RP/EA will not adversely affect resources or values key to the natural or cultural integrity of the parks or alter opportunities for enjoyment of these resources and values; therefore the proposed action will not violate the NPS Organic Act.

The proposed action complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988 and 11990.

Conclusion

Based upon environmental review and evaluation of the RP/EA for the October 28, 1996 SS Cape Mohican Oil Spill, I have determined that the selected action, except as to Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay Wetlands and the Giacomini Coastal Wetlands Restoration Project, does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of Section 102 (2) (c) of the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9). Accordingly, an Environmental Impact Statement is not required for this action.

This FONSI is concurred with and recommended for approval by:



Tamara Whittington
Cape Mohican Trustee Council Primary Representative
National Park Service

April 11, 2002
Date



Donald Neubacher
Superintendent of Point Reyes National Seashore
National Park Service

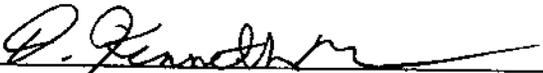
April 16, 2002
Date



acting for
Brian O'Neill
Superintendent of Golden Gate National Recreation Area
National Park Service

4/18/02
Date

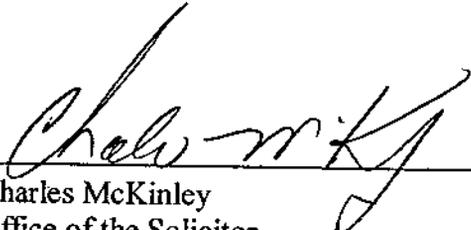
This FONSI is concurred with and recommended for approval by (continued):



Steve Thompson
Manager: California/ Nevada Operations Office
U.S. Fish & Wildlife Service

4-22-02
Date

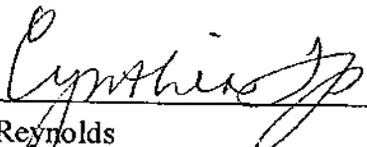
This FONSI is approved as to Form and Legal Sufficiency:



Charles McKinley
Office of the Solicitor
Department of the Interior

4/26/02
Date

This FONSI is duly approved by:

for 

John Reynolds
Director, Office Of The Regional Director (PWRD)
Pacific West Region
National Park Service

4/30/02
Date

Table 1. Proposed Action

| Project | Description |
|---|---|
| Shorebird Habitat Protection at Golden Gate National Recreation Area (GGNRA), NPS* | Provides for habitat protection of shorebirds through public outreach at Ocean Beach. Trustee analysis of injuries to wildlife indicates that approximately 4,000 birds were impacted by the Cape Mohican oil spill. The majority of the oiled birds observed were shorebirds and on Ocean Beach within GGNRA, an important site for shorebird resting and foraging activities and habitat for tens of thousands of wintering and migrating shorebirds. The project entails improving habitat protection by reducing the level of human-caused disturbances to wintering and migratory shorebirds. This project would update and replace damaged or missing interpretive and regulatory signs and use interpretive bulletins for up to 10 years informing the public of the presence of shorebirds and their vulnerability to disturbance by humans and recreational activities. This project would have minimal adverse environmental impacts. (RP/EA, p. 33) |
| California Least Tern Habitat Enhancement at Alameda Point, within proposed National Wildlife Refuge, USFWS* | The project creates new nesting habitat to accommodate approximately 150 additional pairs of terns, increasing the current 4-acre colony site to 6 to 8 acres. California least terns are listed as a federal and state endangered species, because of their special status, least tern enhancement at Alameda Point is considered as a surrogate for injuries that occurred to several species of gulls and terns. Vegetation removal and placement of pea gravel would be conducted during non-nesting season; fencing would be monitored; This project would have minimal adverse environmental impacts. (RP/EA, p. 35). |
| Acquisition, Enhancement, and Management of Red Rock Island, California Department of Fish and Game (CDFG) | This project would provide direct in-kind, on-site compensation and replacement of ecological services through the creation or enhancement of seabird nesting and roosting habitat consistent with the injuries that were claimed by the Trustees. This project proposes to accomplish several things to benefit waterbird resources of the Bay including: (1) provide funding to acquire the island to ensure protected habitat; (2) create and enhance nesting habitat for several waterbird species impacted by the spill; (3) establish a breeding bird monitoring program; (4) create protected and suitable roosting habitat for the California brown pelican; (5) provide educational materials to the public regarding the valuable natural resources on Red Rock Island; and (6) provide for enforcement and management efforts. Potential short-term adverse impacts would be limited to disturbance during construction and re-vegetation phases during the non-nesting season; (RP/EA, p. 41) |
| Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay Wetlands, USFWS* | This project involves eradication of smooth cordgrass from mudflats and tidal salt marshes in the central and southern portions of the Bay, specifically between the Bay Bridge and the Dumbarton Bridge. Exotic smooth cordgrass has invaded habitats decreasing intertidal shorebird foraging areas and increasing sedimentation, which eventually reduces tidal flow. This project is part of a multiagency baywide effort to eradicate smooth cordgrass, which is being coordinated by the California Coastal Conservancy. For this project, contractors would conduct the work focusing on areas affected by or near to the Cape Mohican spill, with project management and monitoring conducted by the Fish and Wildlife Service. While considered a "preferred project" in the RP/EA, a separate environmental analysis and Section 7 endangered species consultation will be prepared for this specific project through a Baywide EIS covering all cordgrass eradication efforts in the Bay. |
| Farallon Seabird Restoration, USFWS* | This restoration project involves control of exotic vegetation in seabird nesting habitats on the Farallon Islands, using a combination of mechanical and chemical methods. Primary species of concern are non-native New Zealand spinach and Malva spp. Efforts would continue for a period a five years and would be implemented during the non-seabird nesting season to avoid any disturbance on nesting birds. Herbicide applications would be conducted according to all regulatory requirements under the supervision of a certified pesticide applicator. Minimal adverse impacts are anticipated. (RP/EA, p.49) |

Table 1. Proposed Action Continued

| | |
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| <p>Pacific Herring Spawning Habitat Enhancement in San Francisco Bay, Port of San Francisco, CDFG</p> | <p>Pacific herring use the pier pilings and shallow rocky substrate as spawning habitat, which, as result of the spill, were coated with oil a few weeks before spawning began. This project will replace existing creosote-covered pilings at the Port's Pier 94 with chemenite-treated woodpiles, providing a non-toxic surface for encrusting organisms to attach and for spawning of herring. Potential short term impacts include increased water turbidity, disturbance of wildlife in the area, and loss of encrusting community using the pilings at the time they are removed. Permit requirements would address site-specific requirements for mitigation. Minimal adverse impacts are anticipated. (RP/EA, p. 49).</p> |
| <p>Wetland Restoration at Pier 98, India Basin, San Francisco, Port of San Francisco, CDFG</p> | <p>This project involves enhancement of a new saltmarsh with the propagation and planting of 13 less abundant transition zone native plants The project site is approximately 1 acre and involves removal of non-native species and establishment of new plantings. Labor would primarily be provided by non-profit groups and students. Permit requirements would address site-specific requirements for mitigation. Minimal adverse impacts are anticipated. (RP/EA, p. 58).</p> |
| <p>Steelhead Stream Habitat Enhancement at San Francisquito Creek, CDFG</p> | <p>This project will enhance spawning habitat used by steelhead trout, a listed endangered species under federal and state endangered species statutes. The project consists of two basic enhancement elements: fish barrier removal and native plant revegetation. These will increase the size and quality of habitat available for steelhead trout spawning in the Bay Area, and restore and provide additional habitat for several other animal species that utilize the creek and riparian corridor. Project activities would occur during the season of least impact to steelhead and other wildlife; Permit requirements would address site-specific requirements for mitigation. Minimal adverse impacts are anticipated. (RP/EA, p. 64).</p> |
| <p>Giacomini Coastal Wetlands Restoration Project, GGNRA, NPS*</p> | <p>This project will provide for wetland restoration in GGNRA at Giacomini Ranch, a former coastal salt marsh site in Tomales Bay that was diked in the 1940's to provide pasture for dairy cattle. The Cape Mohican spill oiled an estimated 99 acres of wetlands and mudflats in the Bay. This project would restore both tidal and freshwater hydrologic processes to the diked pasture and allow for replacement of some of the wetland and mudflat functions and values that were impaired by contamination from the oil spill. While considered a "preferred project" in the RP/EA, a separate environmental impact statement will be prepared for this specific action.</p> |
| <p>Sandy Beach Habitat Restoration, Point Reyes National Seashore, NPS*</p> | <p>This project will involve restoration of 20 acres of coastal dune habitat providing nesting habitat for snowy plovers as well as non-breeding and foraging habitat for plovers and a broad spectrum of other shorebirds. This restoration project will be accomplished by through the removal of non-native vegetation using manual or small equipment methods and subsequent recovery of native vegetation. Mitigation includes nest protection and exclusion of public use of the beach for a short period of time. Minimal adverse impacts are anticipated. (RP/EA, p. 76).</p> |
| <p>Protection of Duxbury Reef Marine Reserve Through Education, Gulf of the Farallones National Marine Sanctuary (GFNMS), NOAA</p> | <p>The objective of this project is to avoid further injury to and facilitate the natural recovery of intertidal rocky habitat. Partners would implement an environmental education and stewardship program aimed at increasing public awareness of this sensitive habitat thereby managing the impacts of the large number of visitors to the area. Minimal adverse impacts are anticipated. (RP/EA, p. 78).</p> |

Table 1. Proposed Action Continued

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| <p>Angel Island Foot Trail Enhancement, California Department of Parks and Recreation (CDPR)</p> | <p>Angel Island was on of the areas most affected by the Cape Mohican oil spill and all of the beaches on the island were closed from 10 to 43 days because of the oil deposited on them during the spill. This project includes construction of stairways, walkways and trail improvements to address current erosion problems while providing safe access to the beaches. Permit requirements would address site-specific requirements for mitigation. Minimal adverse impacts are anticipated. (RP/EA, p. 81).</p> |
| <p>Crissy Field Habitat Stewardship Program, GGNRA, NPS*</p> | <p>Consists of developing and operating a 4-year public stewardship program at Crissy Field in GGNRA, whereby participants will visually and quantitatively measure the biological and physical changes of the newly restored habitats and participate in a variety of habitat restoration activities. This is primarily a community outreach project consisting of funding for monitoring and coordinating activities; therefore impacts will be minimal. (RP/EA, p. 85)</p> |

*Department of the Interior projects.

Table 2. Alternative Restoration Projects Evaluated (Non-Preferred Projects)

| Project | Description |
|--|--|
| Farallon Seabird Restoration (b) Removal of Concrete Slabs From Nesting Areas, USFWS* | This project involves breaking up concrete in approximately 10 paved areas on the marine terrace. Due to financial constraints this project was placed in the non-preferred category. |
| Farallon Seabird Restoration (c) Control of Exotic Mice, USFWS* | The house mouse is the only non-native mammal remaining on the island. Mice control measures involving poison bait traps or similar methods would be evaluated and used to control their population. Due to financial constraints this project was placed in the non-preferred category. |
| Restoration of Injured Bird Species Through Native Vegetation Restoration at Marin Islands NWR, USFWS* | The objective of this project is to help compensate for impacts of the spill on aquatic birds by increasing the productivity and population size of herons and egrets in the Bay. This will be accomplished by enhancing the reproductive success and increasing the nesting capacity of these species through the implementation of management practices proven to be successful for these bird species. This is a "non-preferred" project based on the Evaluation Criteria because few herons and egrets were affected by the spill. |
| Wetland and Water Quality Enhancement at Pier 94, CDFG | This project consists of the restoration of a 3 to 5 acre salt marsh, of which approximately 1-acre has been filled with concrete, asphalt, and tires. The trustees evaluation of this restoration project placed it in the "non-preferred" category because it is not as cost-effective as other restoration projects considered. |
| Hamilton Wetlands Restoration, CDFG | This project will restore the wetlands that have been lost due to subsidence of a diked bayland to levels no longer suitable for supporting intertidal marsh. The Trustees placed this project in the non-preferred category because of concerns about the amount of time required to achieve benefits, the high cost of the overall project, potential liability issues delaying project implementation, and unresolved contaminant issues. |
| Entry Triangle Marsh Wetland Restoration, USFWS* | This project would restore 8 to 10 acres of tidal saltmarsh and mudflat habitat on the Don Edwards San Francisco Bay NWR by re-establishing tidal circulation to the marsh. This project was withdrawn from consideration because funding from other sources was identified. |
| Bollinas Lagoon Wetland Restoration, CDFG | Bollinas Lagoon is a 1400-acre tidal estuary located near the villages of Bollinas and Stinson Beach in western Marin County. Specifically, this project would have enhanced or replaced several culverts that pass underneath Highway 1. This project was withdrawn from consideration because funding from other sources was identified. |
| Tubbs Island Levee Setback, USFWS* | This project would restore 72 acres of tidal marsh at the north end of the Bay within the San Pablo Bay NWR. The project entails constructing a protection levee and breaching an old levee to open a 72-acre fallow field to tidal waters. This project was withdrawn from consideration because funding from other sources was identified. |
| Herring Stock Assessment, CDFG | This project would have determined and catalogued the genetic identities of different spawning schools of pacific herring collected from San Francisco, Tomales, and Bodega bays using mtDNA and microsatellite DNA markers. This project was viewed as a research project by the Trustee Council and not an appropriate use of oil spill settlement funds. |
| Eelgrass Restoration in San Francisco Bay, CDFG | This project involved planting 1-acre eelgrass beds at three locations; Candlestick Point Park, India Basin, and Central Basin-Mission Rock to increase herring spawning habitat in the Bay and possibly adult herring abundance. The project was determined as technically questionable and financially infeasible with settlement funds. |

Table 2. Alternative Restoration Projects Evaluated (Non-Preferred Projects) Continued

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|---|---|
| Creation of Artificial Herring Spawning Habitat, CDFG | This project involved creation of new herring spawning habitat using oyster shell dredged from the Bay by constructing three artificial shell beds to increase the herring population, while also benefiting other aquatic species such as mussels, anemones, sponges, barnacles, and fishes, by increasing their spawning habitat. The project was deemed as technically infeasible for permitting reasons and highly questionable as suitable habitat. |
| Treasure Island Wetland Restoration, CDFG | The project involved the creation of a freshwater and a tidal marsh on the eastern side of Treasure Island. The project also included an interpretive center, viewing overlooks, trails, and boardwalks. This project did not pass screening criteria because it involved creation of freshwater wetlands for wastewater treatment, which was not considered to be consistent with the Trustees' goal of compensating for spill-related impacts to salt marsh and mudflats. |
| Waterbird Conservation Project, CDFG | This project involved the development and implementation of a coordinated seabird conservation and management plan for the central Bay through the establishment of a committee. The Council determined that there were a sufficient number of suitable bird restoration projects that could be implemented directly, rather than indirectly through a committee. |
| Big Lagoon Public Access Project, CDFG | Big Lagoon is a fresh water wetland system located at the mouth of Redwood Creek at Muir Beach in Marin County. This project would entail removing levees, realigning Redwood Creek to its natural alignment, improving public access, and removing fill material resulting from land use practices in the watershed and former wetland. This project was dropped from consideration because a feasible project to compensate for lost human-use of GGNRA land was identified at Crissy Field, where the worst impacts to National Park Lands occurred. |
| Wetlands Walkway at Candlestick Point State Recreation Area, CDPR | The project involved the construction of an elevated walkway into the wetlands at Candlestick Point State Recreation Area. This project was dropped from consideration because a feasible project was identified at Angel Island State park where the worst impacts to State Park lands occurred. |
| Tern Nesting Bair Island, CDFG | The project involved the creation of suitable nesting substrate for Caspian and least terns by removing vegetation and placing shell and sand nesting material at the site. This project was dropped from consideration because the Alameda tern restoration project had a closer nexus to the location of the spill and was considered more technically feasible. |
| Martin Dunes Acquisition, CDFG | This project involved the acquisition of dune habitat near the mouth of the Salinas River in Monterey County to benefit western snowy plovers and other shorebirds. The project was dropped from consideration prior to settlement of the case because other potential shorebird and sandy beach restoration projects were identified that were geographically closer to the area affected by the spill. |
| Muir Beach Water Supply Project, CDFG | The Muir Beach Water Supply Project would provide an alternative water supply system for the community of Muir Beach, which currently relies on withdrawal of water for domestic use for the Redwood Creek basin. The Trustees determined that this project was financially infeasible with settlement funds and did not have a strong enough relationship to the resources injured by the spill. |

* Department of the Interior projects.

Appendix A. Public Comments and Trustee Council Responses.

The Trustees' response to each comment, or group of similar comments regarding a restoration project, is provided here.

Comment 1: Several commenters supported the proposal developed and submitted by the Port of San Francisco to restore the wetlands adjacent to Pier 98 and Pier 94.

Response 1: The Trustees acknowledge the support from the Port of San Francisco and the public regarding the Pier 98 (Herons Head Park) and Pier 94 wetland restoration projects. The Port's commitment to contributing additional funding, staff time, and project coordination are essential to the viability of these projects. The Trustees also recognize the community outreach elements of existing and proposed projects as valuable assets to the projects with many far-reaching benefits to the community.

The Trustees thank the Port for clarifying the "Wetland Enhancement Project at Pier 94." The proposal has been revised to include the information presented and re-evaluated by the Trustees. Based on the criteria used to evaluate restoration projects for the Cape Mohican oil spill, the project's ranking did not change. The Trustees, working with limited settlement funds, believe there are other projects that are more cost-effective and better meet the restoration goals of wetland, fisheries, and water-quality restoration and enhancement.

Comment 2: One commenter supported the Council highly preferred ranking of the "Pacific Herring Spawning Habitat Enhancement in San Francisco Bay" restoration project that would enhance existing habitat for herring, oyster and, crab species residing within San Francisco Bay.

Response 2: The Trustees acknowledge support for the "Pacific Herring Spawning Habitat Enhancement Project." As part of the damage assessment process after the spill, the Trustees examined injuries, and potential injuries, to many species and habitats. With regard to herring, the Trustees worked with the California Department of Fish and Game to identify spawning locations, egg biomass, and egg viability in many areas throughout the Bay following the spill. Based on this information, the Trustees evaluated several projects to benefit herring and other fish resources. These included the creation of eelgrass beds, establishing low-profile sub-tidal shell mounds at several locations in the Bay, and the replacement of creosote pier pilings. All projects have the potential to benefit herring, crabs, and other aquatic resources. Limiting criteria for the Trustees' investigations into these projects was cost, technical feasibility, and benefits to injured resources. These investigations led to the final Fisheries and Water Quality proposal presented in the Draft Restoration Plan and Environmental Assessment.

Comment 3: The Council received comments from the public both in favor and against the "Acquisition, Enhancement, and Management of Red Rock Island" restoration

project. Questions arose regarding adequate funding, feasibility, and alternative restoration projects.

Response 3: The Red Rock project is complex with many variables. The Trustees recognize this, but also consider this one of the projects that targets species impacted by the Cape Mohican oil spill. Cormorants and pelicans represent 20 percent of oiled birds collected. More than 80 cormorants were recovered and more than 70 were observed oiled but not captured.

The Red Rock project is one of the original projects identified during the damage assessment and settlement process and was used to value resources injured by the oil spill. The Consent Decree apportioned restoration settlement funds among suites of species and/or habitats. The Red Rock project proposal has been modified several times to reflect available funding. We recognize that settlement funding may be inadequate to fully fund the Red Rock project. This is why partnering, with other organizations, is critical to acquisition and project implementation. The cost of acquisition will be determined by independent, confidential appraisals. The funding identified in the proposal could be a contribution towards the purchase and not the total cost. The Trustees would not likely be directly involved in the acquisition. The Trustees would most likely enter into an MOU with a private non-profit organization or an agency to accomplish acquisition, restoration and management. We recognize the fact that restoration cannot begin prior to acquisition of land or easement rights. If the owner is unwilling or an equitable purchase price cannot be negotiated, the project is infeasible.

One commenter suggested mitigation efforts by Caltrans to create adequate nesting habitat on Bay area bridges would substitute for the Red Rock project. The Trustees acknowledge that cormorants currently nest on Bay bridges. It is not clear that cormorants will have long-term protection on the bridges. The Trustees did not reach agreement with Caltrans regarding double-crested cormorant restoration projects. Caltrans has likely proposed a project for mitigation of the new bridge, and it is not related to the Cape Mohican oil spill, nor would it compensate for losses incurred as a result of the spill.

The Trustees disagree with the comment about cost effectiveness and project design. The fact that other organizations will partner to provide additional funding, labor, and resources to implement this project makes it cost effective. This project was designed in cooperation with biologists associated with successful seabird re-colonization projects. The budget reflects other recent project costs for specific social attraction equipment, labor, and materials.

Red Rock Island is currently used as a nesting and roosting site for many types of birds including: snowy egrets; black-crowned night herons; gulls; Brandt's, pelagic and double-crested cormorants; brown pelican; Canada geese and black oystercatchers; terns; passerines; Historically, it was also used by harbor seals.

Human disturbance is a primary cause of reduced use or non-use of the island by many species. Part of the project proposal includes public education and minimizing human disturbance. If human disturbance can be reduced, conditions may be favorable enough for cormorants and pelicans to return. The project proposal describes additional activities to enhance cormorant nesting. While studies of pelican roosting activity at Red Rock have not been conducted, opportunistic observations by several researchers have shown the presence of, and use by, pelicans. Pelican roost sites are rare in San Francisco Bay, and those that are protected are even more rare.

By enhancing the use of Red Rock Island by cormorants and pelicans, other species may benefit. Western gull, black-crowned night heron and snowy egret populations would likely occur through protection and management efforts that would seek to minimize human disturbance on Red Rock Island. However, no direct habitat management activities will be implemented for these species.

Comment 4: One commenter said that they understood that only a few shorebirds were oiled and none had been recovered by field crews, leading them to question whether restoration projects that benefit shorebirds directly address those birds that were killed by the spill.

Response 4: Five of the 237 dead or debilitated birds collected by field crews during the Cape Mohican oil spill were shorebirds. Wildlife response teams also captured, cleaned and released nine oiled snowy plovers at Ocean Beach. Based on a model that considers the number of oiled birds found on beaches, carcass scavenging rates, search effort, and search efficiency, 593 birds including 36 shorebirds, were estimated to have died on beaches in the spill zone. In addition, wildlife reconnaissance observed hundreds of oiled willets, sanderlings, and other shorebirds along beaches between Point Reyes and Pacifica. The numbers of oiled birds observed during the spill response reached their peak on November 1, 1996. On that day, 762 oiled shorebirds were observed. Most of these shorebirds were still capable of flight and were not captured, so their exact fate is unknown. Based on this information, the Trustees concluded that a substantial proportion of the approximately 4,000 birds affected by the spill were shorebirds and restoration projects that benefit shorebirds and their habitat should be included in the Final Restoration Plan.

Comment 5: Several commenters expressed support for projects benefiting shorebirds and their habitat at Point Reyes National Seashore and Golden Gate National Recreational Area. One commenter expressed his support for the project titled "Restoration of Shorebird Foraging Habitat Through Control of Exotic Cordgrass in San Francisco Bay." The commenter stated that habitat intrusion by exotic cordgrass is seriously affecting the lives of shorebirds, and that it is imperative that the plant be controlled now because of its current harmful effects.

Response 5: The Trustees thank the commenters for their support and have included all three shorebird oriented projects as preferred alternatives in the Final Restoration Plan. This combination of projects will enhance shorebird populations in San Francisco Bay and along coastal beaches and will help compensate for impacts of the oil spill on sandy beach and mudflat habitats.

Comment 6: Several commenters expressed support for the "California Least Tern Habitat Enhancement at Alameda Point" restoration project. One of these commenters suggested that it would be useful to synthesize available data on tern habitat use and reproduction success at this site prior to starting on-the-ground restoration activities. This commenter also expressed concern that the cost of the monitoring component of the least tern project is severely underestimated and recommended that the monitoring budget be increased to \$70,000 to \$80,000 per year for three years.

Response 6: The Trustee's thank the commenters for their support and have included the least tern project as a preferred alternative in the Final Restoration Plan. While the Trustees recognize the value of synthesizing existing data on the Alameda least tern colony and thoroughly monitoring the success of the project, there are insufficient funds available from the settlement to increase monitoring as recommended by the commentator. The project plan includes \$20,000 for three years of monitoring, or about \$6,665 per year. The \$20,000 will cover the cost of monitoring colony size and reproductive success for three years after the implementation of the project. This level of effort should be sufficient to determine if the goal of increasing the carrying capacity of the colony has been met. A more detailed or longer-term monitoring program or synthesis of existing data will require augmentation of the project budget with funds from additional sources.

Comment 7: One commenter expressed support for the three seabird restoration projects on Southeast Farallon Island.

Response 7: The Trustees thanks the commenter and have included one of the three Farallon seabird projects as a preferred alternative in the Final Restoration Plan. The Trustees feel that all three Farallon projects would benefit several species of nesting seabirds that were injured by the spill. However, given that settlement funds are limited, the Trustees selected alternative A (Exotic Vegetation Control in Nesting Areas) over Alternative B (Removal of Concrete Slabs from Nesting Areas and Alternative C (Control of Exotic Mice). Alternative A is less costly than Alternative C and is expected to provide greater benefits than Alternative B.

Comment 8: One commenter said that no oil reached the Giacomini Ranch (a preferred wetland restoration project), that no amount of education is going to increase the size of the current Crissy Field Marsh, and suggested that funds be transferred from those two projects to the Big Lagoon Project.

Response 8: The "Crissy Field Habitat Stewardship Program" is intended to compensate for the interim loss and diminished value of human uses of Golden Gate National Recreational Area, particularly Crissy Field, as a result of the oil spill. This stewardship project is not intended to return natural resources to baseline conditions. The project met the Trustees' evaluation criteria, and is expected to achieve the objectives of increased public use, participation in environmental restoration projects, enhanced public environmental awareness, and enhanced quality of public use.

In contrast to the "Crissy Field Habitat Stewardship Program," which addresses lost human use, the "Giacomini Coastal Wetlands Restoration Project" will address injured natural resources. The "Giacomini Wetlands Restoration Project" is intended to increase habitat for wildlife species that were injured, or potentially injured, as a result of the spill. Though the Giacomini property itself was not impacted by the spill, the proposed project will benefit species populations impacted by the oil spill. Resources anticipated to benefit include shorebirds, waterfowl, and fish, as well as special-status species such as the California brown pelican, American peregrine falcon, coho salmon, steelhead, and tidewater goby.

The Trustees, as required by OPA, focused on identifying restoration actions to compensate for natural resource injuries and lost human use caused by the Cape Mohican oil spill. A Big Lagoon public access project was briefly considered by the Trustees, but was not considered further because a more feasible project was identified where the worst impacts to human uses of the resource occurred, i.e. Crissy Field. Although we were not party to any discussion regarding a Big Lagoon project involving Caltrans mitigation funds, the Trustees understand that a Big Lagoon project will be funded by other means.

Comment 9: Two commenters asked that funds be spent on expanding the Crissy Field marsh rather than on stewardship.

Response 9: See discussion above. "The Crissy Field Stewardship Program" is intended to compensate for lost human use. The Crissy Field project does not preclude the Presidia Trust and the National Park Service from exploring options for the expansion of the wetland.

Comment 10: One commenter provided strong support for the "Steelhead Habitat Enhancement at San Francisquito Creek" project as well as a commitment for a successful project, if it is funded.

Response 10: The Trustees acknowledge the strong support for the Steelhead restoration project. The support and commitment should increase the likelihood of success for the project. The Trustees consider this project, which involves the removal of fish barriers and conducting native plant revegetation, to be a cost-effective

means of benefiting several fish species as well as birds and mammals that use the riparian habitat along the creek.