Supplement to *Cosco Busan Oil Spill Final Natural Resource Damage Assessment and Restoration Plan/Environmental Assessment*, dated September, 2013

Revised Section 4.3.1.3, Large Diving Ducks, Loons

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 Wildlife (CDFW), and the California State Lands Commission (CSLC) are the designated natural resource trustees (Trustees) for the November 7, 2007, Cosco Busan oil spill in San Francisco Bay. In September 2011, the Trustees released a Draft Cosco Busan Oil Spill Natural Resource Damage Assessment and Restoration Plan/Environmental Assessment (DARP/EA) and, after consideration of public comments, released a Final DARP/EA in February, 2012.

Section 4.3.1.3 of the Final DARP/EA addressed injuries to and restoration of large diving ducks and loons. As outlined in that document, based on a lack of readily identifiable projects, the Trustees elected to release a request for proposals (RFP) for restoration concepts to address these injuries. Accordingly, the Trustees also deferred their project selection and environmental impacts analyses under the Oil Pollution Act (OPA) and the National Environmental Policy Act (NEPA), respectively, until specific projects had been identified. Based on the response to that RFP, the Trustees identified two projects, which are described in this Supplement. The Trustees invited public review and comment on the two preferred projects between June 18, 2013, and July 18, 2013. No comments were received. The Trustees have selected for implementation the two restoration projects described in this Supplement.

The Trustees incorporate by reference the Final DARP/EA, which is available at: http://www.dfg.ca.gov/ospr/Science/cosco_busan_spill.aspx.

The discussion below is intended to replace the "Restoration Alternatives" and "Other Restoration Projects Considered" discussions in Section 4.3.1.3 of the Final DARP/EA. This discussion also supplements the "No Action Alternative" and "Cumulative Impacts" sections.

Restoration Alternatives

Restoration options for the large diving ducks and loons are limited. The Trustees issued a request for proposals (RFP) from the public, soliciting restoration projects to provide tangible benefits to Surf Scoters (the species most impacted by the spill), either on their breeding grounds, wintering grounds (ideally in San Francisco Bay), or at migration stopover points. The Trustees have evaluated the proposals received and have selected the following projects to benefit Surf Scoters.

SELECTED PROJECTS	SPECIES BENEFITS
Enhancing prey availability for wintering and migrating Surf Scoters in San Francisco Bay	Scoters, large diving ducks
Removal of derelict fishing nets in the Salish Sea	Scoters, large diving ducks, loons, and large grebes

Selected Alternative

Enhancing prey availability for wintering and migrating Surf Scoters in San Francisco Bay

This project proposes to influence scoter populations by deploying two types of prey enhancement treatments in San Francisco Bay: herring eggs on kelp (HEOK) and mussel recruitment substrates. Scoter diets are dominated by the bivalves *Corbula amurensis* and *Venerupis philipinarium* (De La Cruz 2010). Isotopic studies show Pacific herring roe comprises as much as 54% of San Francisco Bay scoter diets during late winter (De La Cruz 2010). Proposed prey enhancements will improve scoter body condition and carrying capacity which in turn should lead to higher survival, earlier migration, and increased productivity.

Providing spawning substrates for herring that are easily accessible to scoters will increase availability of this prey item. While restoration of eelgrass as a spawning substrate is planned to benefit herring injured by the Cosco Busan spill, the use of a method originally used by the herring eggs on kelp (HEOK) fishery may provide unique benefits to scoters. This fishery collects herring eggs by hanging giant kelp (*Macrocystis pyrifera*) from pontoon rafts or lines attached to permanent structures. The kelp, which is commercially harvested from the outer coast, then serves as a substrate for herring spawn. The eggs attach themselves to the kelp, which are then harvested, primarily for export to Japan. Eggs on kelp are typically harvested and sold together. For this project, the eggs will be left on the kelp for scoters to consume.

Mussels (*Mytilus* spp) are also heavily exploited by scoters, and scoters are known to forage on mussels grown on rafts and other structures at aquaculture farms in other wintering areas. This project will create substrates for natural mussel recruitment. This would increase availability and quality of prey, because mussels grown under these conditions are more abundant, larger, attached more weakly, and are thinner-shelled than mussels in intertidal habitat (Kirk *et al*. 2007), all of which improve their value as scoter prey. Lines would be suspended from floating rafts or buoys, creating attachment areas from which typical intertidal invertebrate predators are excluded and where mussels would be in the water column at all times (i.e., full tidal cycle), leading to higher growth rates. A pilot phase of this project will involve coordination with relevant federal, state and local agencies and landowners to obtain permits for rafts, interview HEOK fishery permittees and shellfish aquaculturists concerning the design and effectiveness of various methods, experiment with raft and substrate prototypes, evaluate placement locations and deployment methods, and conduct post-deployment monitoring. Pilot HEOK rafts will be built and tested with deployments of the most promising designs occurring in November and continuing through the end of the herring spawning season in March. Mussel rafts will be deployed in late winter (Feb-March) prior to the start of the mussel reproductive period (April-May) and left in place until the following winter to allow for mussel growth and availability to scoters the following fall. Scoter decoys also will be tested as a method of attracting scoters to prey enhancements.

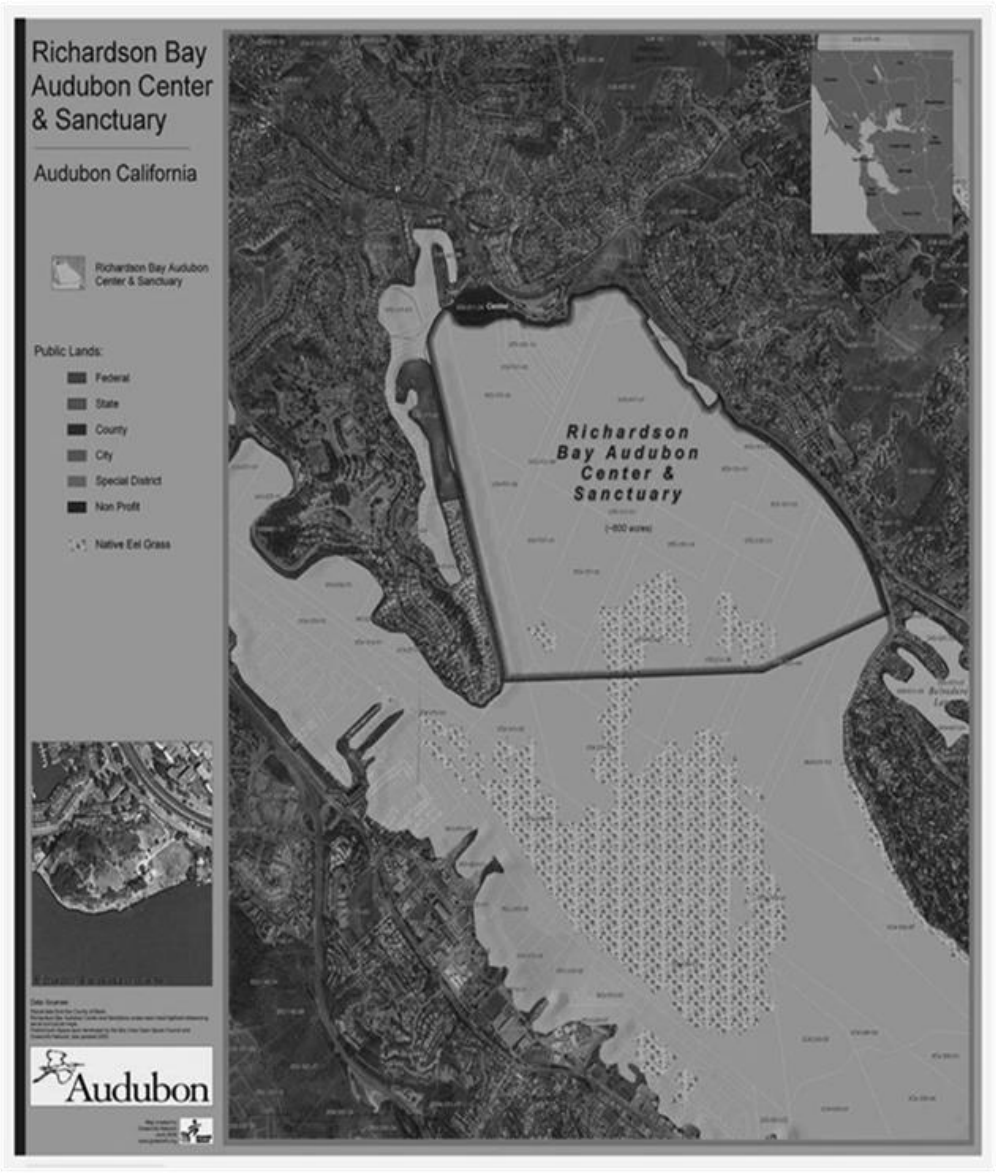
Commercial HEOK rafts are temporary, mobile structures consisting of metal, wood or plastic frames from which giant kelp is suspended. Giant kelp is grown along the Central California coast by commercial kelp growers. Regulations (CDFW) require that the total

surface area of each raft does not exceed 2,500 square feet. Additionally, kelp can be suspended from lines that are no more than 1,200 feet in overall length and suspended under a suitable permanent structure (e.g., pier or dock), or between two permanent structures (e.g., piers or docks). Each end of the line must be attached to a permanent structure. This project will construct mobile, floating raft prototypes using materials deemed most likely to recruit herring spawn and mussel attachment. Raft sizes will not exceed 2,500 square feet, and for initial pilot work are expected to be roughly half of this maximum size, or smaller. In addition to giant kelp, other natural spawning substrates such as native vegetation as well as a variety of natural mussel attachment substrates will be tested. Alternative attachment substrates will be determined and tested in close coordination with CDFW and other applicable resource agencies.

Affected Environment

Potential locations of permanent structures required for mussel and HEOK lines include abandoned piers and pilings in the Central Bay. This project will work with landowners and resource agencies to identify potential existing structures to pilot use of this technique. Subtidal regions of Audubon California's Richardson Bay property (Fig. 1) have been identified as the initial location for prey enhancement structures. Audubon California is the leasee of this property; additional permits will be obtained through State Lands Commission, which owns the subtidal lease. This area is immediately adjacent to the highest yielding spawning site in San Francisco Bay. Additionally, U.S. Geological Survey (USGS) data from radio-marked scoters indicate that scoters respond numerically to Richardson Bay spawning events (De La Cruz 2010).

Figure 1 Map of the Richardson Bay Audubon Center and Sanctuary including existing eelgrass bed locations



Environmental Consequences (Beneficial and Adverse)

This project will enhance prey availability for wintering and migrating Surf Scoters by utilizing existing artificial structures and providing artificial structures to support mussels and herring roe. Increasing herring roe availability for scoters may be particularly important in light of current efforts to remove creosote pilings in San Francisco Bay that historically provided spawning substrates and scoter foraging opportunities. Other species may benefit by foraging on mussels or roe. For example, other wintering diving ducks such as scaup may also benefit by foraging on mussels. Herring eggs are consumed by at least 20 species of birds (including several species of ducks and gulls) in addition to non-avian predators such as sturgeon, surfperch, smelt and crab. Herring may receive a small benefit from the additional spawning substrate in subtidal habitat, although normally 50 to 99 percent of herring eggs die before hatching due to predation, dessication or freezing (CDFG, 2001).

The Subtidal Habitat Goals Report (California State Coastal Conservancy, 2010), which offers guidance on opportunities for subtidal habitat restoration and protection, recommended that goals for artificial structures in San Francisco Bay "focus on protecting the habitat values of existing actively-used structures, removing and preventing structures that harm the subtidal system, and improving understanding of the role of these structures in the subtidal system." Promoting pilot projects to remove artificial structures and creosote pilings at targeted sites in combination with restoration actions to replace lost habitat structure (e.g., native oyster reefs, eelgrass plantings) was also recommended. This project is consistent with those goals and would increase valued ecosystem services by providing additional habitat for scoter prey items in association with existing artificial structures (i.e., piers, buoys). Additionally, the techniques developed in this project could be combined with potential future actions to remove creosote pilings in the Central Bay, in an adaptive manner, to provide a substrate for herring spawn if nearby eelgrass beds are not available.

Prey enhancement structures will be combined with existing artificial structures (i.e., piers, buoys) in Central San Francisco Bay. There may be small, localized, and temporary aesthetic effects due to these additional artificial structures. However, the permitted size of these structures is small, and more importantly, the majority of the structure will be hanging in the water column and therefore, not visible at the surface. Additionally, the HEOK rafts will be deployed immediately prior to herring spawning and then may be removed soon after spawning has commenced as the incubation period for herring eggs is about 10 days (CDFG, 2001). Foraging diving ducks and gulls may be attracted to the immediate vicinity when prey is available, which may increase bird-watching opportunities nearby.

Care will be taken to prevent shading of submerged aquatic vegetation (SAV) such as eelgrass (*Zostera marina*) at pilot deployment sites. SAV survey maps (Merkel et al. 2005) and local experts (K. Boyer, Romberg Tiburon Center) will be consulted to ensure that rafts are not deployed over vegetated areas. Based on preliminary designs for HEOK and mussel enhancements, additional permits will be discussed and obtained from NOAA Fisheries, the Bay Conservation and Development Commission (floating fill), and the U.S. Coast Guard (navigational hazards).

Audubon's subtidal area is closed to boat traffic from October to April to protect wintering birds; therefore, rafts and lines would not pose any navigational obstacles and birds foraging on substrates would not be disturbed. Additionally, the open water areas of the reserve are easily seen from the Audubon offices, allowing for constant observation of rafts.

Competition with the HEOK fishery is unlikely. First, due to decreasing demand for roe on kelp in Japan, there has been little to no HEOK fishing (only one permittee) in San Francisco Bay since 2010 (CDFG, 2011; 2012). Second, due to existing boat restrictions, there never has been a HEOK fishery at the project site in Richardson Bay. Third, commercial HEOK is typically harvested between 1 and 3 days after spawning starts; there is a lag time before scoters find spawning sites so there likely will be sufficient time for any commercial HEOK to harvest roe before scoters respond. Finally, because the

project does not involve the harvest of roe, the number of HEOK fishery permits will not be affected.

Effects on fish habitat will be minimal. In general, overwater structures such as rafts and buoys can affect the plant and animal assemblages at a site by altering light, wave energy, substrate, depth and water quality (Hanson et al., 2003). However, due to the small footprint of overwater structures in this project, no measurable impacts are expected. Flexible, floating anchor lines that never touch the ground and that prevent scouring will be used. These have been used by NOAA for eelgrass habitat conservation. The project will explore using the least intrusive options for anchoring, including one helix screw-in anchors with non-dragging line. Rafts will be monitored during storms by Audubon staff (present on the Sanctuary site daily) to minimize potential effects of raft drag and disturbance to the sea bed during winter storms.

Probability of Success

Because these techniques have been used commercially in San Francisco Bay (i.e., HEOK) and elsewhere (i.e., mussels), the likelihood of successfully enhancing prey availability using artificial structures is high. Scoters respond readily to herring spawning events in Richardson Bay. Enhancing prey availability in areas where scoters have been observed to forage strongly suggests that they will respond and benefit from this project.

Performance Criteria and Monitoring

To measure the impact of prey enhancements, all pilot substrates will be monitored to determine prey recruitment (i.e., mussel and herring roe densities), scoter use, estimated energy gain of scoters as a function of prey densities, and changes in scoter carrying capacity. Rafts will be inspected every two weeks to ensure hardware, lines, and buoy attachments are in good repair. HEOK rafts will be inspected to determine if fresh kelp blades are required and replaced as needed.

Evaluation

The Trustees have evaluated this project using the threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with and meets the objectives of these selection factors. They believe that this type and scale of project will provide tangible benefits to Surf Scoters injured as a result of the spill and have therefore selected this project as a preferred alternative.

Selected Alternative

Removal of derelict fishing nets in the Salish Sea

The goal of this project is to increase the annual survival of scoters, scaup, loons, and grebes by removing abandoned fishing nets that regularly kill these birds. The initial focus will take place in the Canadian waters of Puget Sound and the Strait of Georgia, an important migration stop-over location for scoters and other large divers. Derelict fishing nets (lost or abandoned commercial and recreational fishing nets, lines, pots, and traps) are known to entangle and kill Surf Scoters and other seabirds in Puget Sound, Washington (Good et al. 2009). Over 4,400 derelict nets have been identified and removed from U.S. waters in Puget Sound by the North West Straits Foundation (NWSF) and its partners and contractors. The Strait of Georgia and Canadian portions of Puget Sound contain critical marine habitats for Surf Scoters migrating from coastal wintering

grounds in the U.S. to northern breeding grounds, particularly during herring spawning in March. The likelihood of deadly entanglements of Surf Scoter in gill nets is suspected to have a significant contribution toward mortality in the Baynes Sound region.

This project will survey and identify derelict gear in the Canadian waters of Puget Sound and the Strait of Georgia for subsequent removal to help restore critical marine habitats for wintering birds and northward migrating populations of Surf Scoters from the coastal U.S. The project will focus on the Baynes Sound region near Denman and Hornby islands because it is a key area for Surf Scoters and also has a high likelihood for derelict fishing nets because of active herring and salmon fisheries and shallow reefs and underwater structures which can snag and retain nets. A 300 kHz transducer operated at a 50 to 100 meter range (100 to 200 meter swath width) will be used to identify derelict net targets as well as underwater features likely to snag nets. Targets will be identified during onshore post-survey processing that includes detailed analysis of sidescan sonar survey images. Diver verification of derelict net targets identified during sidescan sonar surveys will utilize either surface supplied air, or SCUBA dive techniques by divers who have several years of experience surveying and removing derelict nets from the Washington Salish Sea. Additionally, given the proper underwater visibility conditions, the diver may record still photos and video of derelict gear encountered. All derelict gear targets will be entered into the Washington derelict fishing gear database after completion of survey operations. The results of the derelict gear surveys will be integrated with the British Columbia Marine Bird Distribution and Abundance database to examine areas of potential overlap and risk to wintering and migrating Surf Scoters. Removal of nets located in 2013 is expected to occur in 2014, as well as additional surveys for derelict gear in other Surf Scoter habitats, depending on availability of funding.

This project would be implemented in coordination with the government of Canada and will be conducted in compliance with Canadian environmental laws and policies.

Affected Environment

The Salish Sea, a large and biologically rich inland sea, is governed by the U.S. and Canada, and includes Washington State's Puget Sound, the Strait of Juan de Fuca and the San Juan Islands, as well as British Columbia's Gulf Islands and the Strait of Georgia. Baynes Sound is the channel between Denman Island and Vancouver Island, British Columbia, Canada. The sound is a narrow western off-shoot of the Strait of Georgia that separates Vancouver Island from the mainland of British Columbia. The sound is 40 km (25 mi) long and is 3.5 km (2.2 mi) wide at its widest point, although the average width is less than 2 km (1.2 mi). The ocean bathymetry is generally shallow with many areas of submerged rock pinnacles which could cause loss of fishing nets. The area is a highly productive body of water which has attracted large aquaculture operations for shellfishes (particularly oysters, manila clams and scallops) and fisheries directed at herring and herring roe (using gill nets and seines) and salmonids (both gill nets and seines). Baynes Sound and neighboring Lambert Channel-Hornby Island have been recognized internationally as Important Bird Areas which provide wintering and spring stopover habitats for globally significant numbers of marine birds, including Surf Scoters. (http://www.ibacanada.com/conservationplans/bcbaynessoundlamberthornby.pdf). Marine mammals such as seals and sea lions are common and numerous in the region, particularly during herring spawning in the spring. The Baynes Sound area is similar to

areas in U.S. waters where the NWSF removed derelict nets from habitats with high relief rocky boulder habitats.

Environmental Consequences (Beneficial and Adverse)

Derelict fishing nets in Puget Sound can cause mortality to Surf Scoters, as well as many other diving bird species, fish, invertebrates and marine mammals which may become entangled in them (http://www.derelictgear.org/uploads/pdf/Derelict%20Gear/DGSpecies.pdf). The Trustees anticipate that this project will provide benefits to Surf Scoters, cormorants, grebes, loons, and other diving seabirds, as well as marine animals and fish. Mortality of these species from net entanglements will be reduced through the removal of derelict nets. Removal of nets will also benefit marine habitats since abandoned fishing nets can cause injury to shoreline, intertidal and subtidal habitats by smothering or crushing organisms and by abrading the ocean bottom and shoreline areas.

Probability of Success

Targeting net removal in areas where the largest flocks of Surf Scoters occur can reduce mortality risk due to net entanglement. Because these net removal techniques have been used successfully in Puget Sound, Washington, the likelihood of success is considered high. The project will be administered by the NWSF using the same highly trained and equipped consultants who have removed thousands of nets from Puget Sound.

Performance Criteria and Monitoring

Net-specific characteristics will be recorded, including location (GPS coordinates), benthic habitat type, gear type (gillnet, purse seine, etc.), net age (older or more recent construction judged on style and estimated vintage), condition (judged good or poor), length and width, maximum and minimum depth, maximum suspension in the water, and any observations on habitat impacts from the net. Marine fauna-specific information will also be recorded, including number and identity (where possible) of whole or partial organisms entangled in the net and their status (alive or dead); evidence of cumulative mortality (bone piles) near the net will also be documented. Organisms living on or associated with the derelict gear but not entangled or trapped will be noted but not counted, and living organisms immediately returned to the sea after identification.

Evaluation

The Trustees have evaluated this project using the threshold and additional screening criteria developed to select restoration projects and concluded that this project is consistent with and meets the objectives of these selection factors. They believe that this type and scale of project will effectively provide tangible benefits to Surf Scoters injured as a result of the spill and have therefore selected this project as a preferred alternative.

Other Restoration Projects Considered

The Trustees considered the following projects but did not select them as preferred. Non-preferred projects may be reconsidered if funds become available or if selected projects prove to be infeasible.

OTHER PROJECTS CONSIDERED	SPECIES BENEFITS
Develop and implement an outreach campaign to inform managers and the public about conservation of key coastal habitats and prey for scoters	Scoters, herring
Enhancing prey availability for wintering and migrating Surf Scoters in the Salish Sea	Scoters, other diving ducks
Assess the relative risk of function loss to key Pacific coast surf scoter breeding areas due to landscape changes and develop habitat conservation targets in the Western Boreal Forest	Scoters
Wetlands or salt pond enhancement around San Francisco Bay	Scoters, other waterbirds
Removal of derelict fishing nets San Francisco Bay or elsewhere in California	Scoters, large diving ducks, loons, and large grebes
Disturbance reduction in San Francisco Bay	Scoters, large diving ducks, loons, and large grebes
Rehabilitation of sick and injured scoters	Scoters
Research of scoter mortality	Scoters

Develop and implement an outreach campaign to inform managers and the public about conservation of key coastal habitats and prey for scoters
Outreach will raise awareness of scoters and their habitat needs and identify specific sites for conservation, disturbance reduction, and further study. This project is not preferred as it is not clear how the benefits of the project would be scaled and projects that provide tangible benefits to scoters are available.

Enhancing prey availability for wintering and migrating Surf Scoters in the Salish Sea
This project is similar to the Trustees' preferred project to enhance prey availability in San Francisco Bay. This project is not preferred because it is farther from the spill site than the Trustees' preferred prey enhancement project. Also, one of the trustees' preferred alternatives, net removal in the Salish Sea, is likely to provide larger benefits.

Assess the relative risk of function loss to key Pacific coast Surf Scoter breeding areas due to landscape changes and develop habitat conservation targets in the Western Boreal Forest
This project would combine scoter distribution data in conjunction with remotely-sensed land cover data to measure proximity of nesting areas to threats currently being quantified. Nesting areas of scoters wintering in San Francisco Bay and the Pacific Flyway will be ranked in terms of their potential for threat from different anthropogenic sources. This information about relative risk can then be used to inform targeted land use planning for scoters and other species. This project was not preferred as the Trustees prefer to fund projects that provide direct benefits to scoters and projects that provide tangible benefits to scoters exist.

Wetlands or salt pond enhancement around San Francisco Bay
The Trustees specifically considered whether maintained salt pond habitat (see proposed projects under Salt Pond Divers) or newly developed wetlands (specifically at Cullinan Ranch in the North Bay) would benefit scoters. Based on

extensive research of scoter wintering habits in the Bay (Takekawa et al. 2001, Warnock et al. 2002, Stralberg et al. 2009), scoters are unlikely to use salt pond habitat, including these project sites, in any significant numbers. Loons are similarly unlikely to use these habitats.

Removal of derelict fishing nets in San Francisco Bay or elsewhere in California

Due to the nature of the fisheries in San Francisco Bay, derelict nets are not known to be a problem. Derelict fishing gear (e.g. abandoned nets and crab pots) on the outer coast of California has been known to impact wildlife, but not these species in appreciable numbers.

Disturbance reduction in San Francisco Bay

This project would set aside areas of San Francisco Bay, as is done in Richardson Bay, to prohibit boats so that the birds may forage and rest undisturbed. This project is not proposed because: (1) there is no strong evidence that disturbance is having a significant effect on scoter populations; and (2) there are feasibility concerns in excluding the public from using navigable waterways.

Rehabilitation of sick and injured scoters

This project would provide funds to existing bird rehabilitation centers to enable greater care for scoters suffering from oiling from chronic sources, gunshots, entanglement in fishing gear, and diseases. It would result in an increase in the number of individuals rehabilitated and released each year. This project would not fund rehabilitation of birds oiled from future spills—that is already a legal requirement of the responsible parties of the spills. Restoration of non-spill related birds has been implemented as a compensatory restoration project for Brown Pelicans in Florida, where hundreds of pelicans are injured each year by fishing gear. This project is not currently selected because of uncertainty over the size of the benefits and projects providing tangible benefits have been identified to compensate for the scoter injury.

Research of scoter mortality

This project would provide funds for research assessing other mortality factors (e.g. diseases, parasites, etc.) that are affecting scoters. This could begin with an examination of the 1,800 carcasses collected during the spill. The benefits could be new information on issues affecting scoters, as well as new information that would aid rehabilitation of sick and injured scoters. Because the connection between research and population benefits is indirect at best, Trustees prefer to fund projects that provide direct benefits to the birds and such projects have been identified. However, the Trustees do plan on turning over the carcasses to the scientific community for further study.

No Action Alternative

NEPA requires the Trustees to consider a "no action" alternative, and the Oil Pollution Act (OPA) regulations require consideration of a roughly equivalent "natural recovery" alternative. Under this alternative, the Trustees would take no direct action to restore

injured natural resources or to compensate for lost services. Instead, the Trustees would rely on natural processes for recovery of the injured natural resources.

The principal advantages of the natural recovery approach are the ease of implementation and the absence of monetary costs. However, while natural recovery may occur over time for many of the injured resources, the interim losses suffered by those resources would not be compensated under the "no action" alternative. OPA clearly establishes Trustee authority to seek compensation for interim losses pending recovery of natural resources. Losses were, and continue to be, suffered during the period of recovery from the spill, including the loss of an estimated 1,624 large diving ducks and loons. Furthermore, technically feasible project alternatives exist to compensate for these losses. Thus, the Trustees reject the "no action" alternative and instead have selected the appropriately scaled restoration projects described above as the preferred alternative.

Cumulative Impacts

The Trustees examined a variety of alternatives to restore resources and/or services lost as a result of the *Cosco Busan* oil spill. Anticipated environmental consequences arising from each of the selected projects are provided. As required by NEPA, this section addresses the potential overall cumulative impacts of implementing this restoration plan. Cumulative impacts are impacts that result from an action along with other past, present, and reasonably foreseeable near-term future actions taken together. Significant cumulative impacts can result from a combination of actions that do not have significant impacts individually. Taken collectively, the effects of several actions may be additive, countervailing, or synergistic. Impacts are considered regardless of the agencies or parties involved. Thus, in considering cumulative impacts, this analysis is not limited to the actions of this case but also considers other projects in the region.

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. Cumulative impact analysis is nonetheless performed to evaluate whether there are specific components of the proposed actions that, when considered in combination with other closely related past, present, and future actions in the affected area, have potentially significant cumulative adverse effects.

The Trustees evaluated the restoration projects selected 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. Cumulatively, natural resource improvement projects in the area are expected to result in similar environmental effects (beneficial and adverse) as the projects selected herein.

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