and biologically different from those lost; and,

(5) In special cases, acquisition of equivalent existing resources/services under private ownership, which does not replace lost resources, but reduces potential future loss by placing acquired resources under public management and protection (e.g., the marbled murrelet habitat acquisition project).

Therefore, the Trustees concentrated their damage assessment and restoration efforts on the recovery of central California seabird populations, especially alcids, since these birds incurred the greatest losses due to the APEX HOUSTON oil spill (Siskin et al. 1993).

Alternatives considered for seabird restoration included active recolonization/restoration projects and habitat acquisition projects. Alternatives were compared based on the criteria described above, as well as the technical feasibility of the project, importance to the public interest, and monetary costs. Two projects have been selected for immediate implementation. These are the acquisition of marbled murrelet breeding habitat and the recolonization of common murres using social attraction techniques. The Trustee Council will reevaluate these two projects and consider additional restoration projects and/or supplemental methodology at least annually. The Trustee Council will reappropriate and reauthorize funds as

Recolonization/restoration efforts were considered for common murres and rhinoceros auklets, two seabird species that suffered high mortality as a result of the spill. The rhinoceros auklet project involved use of artificial nest sites to enhance breeding populations along the central California coast. This project was not chosen for immediate implementation for several reasons. A large increase in the California rhinoceros auklet population occurs during the winter months and far exceeds the summer estimated breeding population (Briggs et al. 1987). It is believed that this large increase is due to migrants moving into the area from more northern colonies (Briggs et al 1987). In addition, the rhinoceros auklet population within the area of the spill (i.e. the local population) had been increasing since the early 1980's and continued to increase after the APEX HOUSTON spill (Ainley and Boekelheide 1990, Carter et al. 1992). This suggests that many of the 1,293 rhinoceros auklets estimated to have been killed by the APEX HOUSTON spill (Siskin et al. 1993) were probably wintering birds from outside the local

breeding population. As a result, restoration of rhinoceros auklets received a lower priority.

The common murre recolonization project (describe herein) was given higher priority than rhinoceros auklet restoration because its potential benefits were linked more closely to the injuries caused by the spill. The extirpation of the Devil's Slide Rock colony and a severe reduction at the Castle and Hurricane rocks colonies were attributed to the common murre mortalities that resulted from the APEX HOUSTON oil spill (Swartzman and Carter 1991). As a result, damage to the local breeding population was demonstrated (Swartzman and Carter 1991).

An additional site (Bodega Rock in Sonoma County) for common murre recolonization was suggested during the public comment period. Bodega Rock is an active seabird colony and in 1989 it contained 558 Brandt's cormorant (*Phalacrocorax penicillatus*) nests and 12 western gull (*Larus occidentalis*) nests (Carter et al. 1992). This location was not selected for implementation of murre recolonization techniques because there are no known records of common murres breeding on this rock.

A third restoration project involving construction of a seabird breeding and rehabilitation facility was rejected because its cost was prohibitive relative to funds available, and because the California Department of Fish and Game's Office of Oil Spill Prevention and Response is already implementing a statewide oiled wildlife care network.

Four habitat acquisition projects were considered: purchase of Cape Vizcaino in northern Mendocino County to protect nesting seabirds, purchase of coastal land near Castle Rock to protect a mainland colony of common murres, purchase of lands within San Francisco Bay, and purchase of marbled murrelet nesting habitat along the central California coast. The first three projects were given lower priorities because they were outside of the area impacted by the spill (Cape Vizcaino), were too costly (mainland site near Castle Rock), or were beneficial primarily to species that were not affected by the spill (sites in San Francisco Bay). The purchase of marbled murrelet nesting habitat along the central California coast was selected for immediate implementation with settlement funds allocated specifically for that project.

## (B) Alternatives Selected

1. Acquisition of Marbled Murrelet Nesting Habitat. The acquisition of marbled murrelet nesting habitat along the central California coast was selected because acquisition would occur within the area impacted by the spill and damage to the local population could be demonstrated. In addition, this project has great importance to the public because it will provide long-term protection of a species listed under the Federal and State Endangered Species Acts. The Trustee Council believes that the \$500,000 allocated to this project will be sufficient to obtain suitable habitat to compensate for the murrelets injured in the spill, provided that it is leveraged with other resources. The Trustees regard augmentation of the budget for the marbled murrelet project as the highest priority for any funds that may become available from the murre recolonization project.

2. Recolonization of Impacted Common Murre Colonies. The second project the Trustees have selected for immediate implementation is the recolonization of common murre colonies at Devil's Slide and San Pedro rocks in San Mateo County and Castle and Hurricane Point rocks in Monterey

County

a. Devil's Slide and San Pedro Rocks Common Murre Recolonization:

Recolonize common murres at Devil's Slide and San Pedro rocks (San Mateo County, California) using social attraction methods (decoys and recorded vocalizations) and develop reference information needed to evaluate and refine restoration efforts.

Location(s): Devil's Slide and San Pedro rocks, San Mateo County, California; Point Reyes area (Point Reyes, Point Resistance, Double Point, and Miller Point rocks), Marin County, California; Farallon Islands, San Francisco County, California.

Justification: Common murres are an extremely important and visible part of the California seabird community (Carter et al. 1992). Common murres are the most abundant nesting species and have the greatest biomass of all breeding seabirds in the state (Sowls et al. 1980, Ainley and Boekelheide 1990). In addition, common murres comprise 40 percent of the breeding seabirds found in central California (Carter et al. 1992). This population sustained severe losses from commercial and subsistence egging in the 1800's and early 1900's, from chronic oil pollution and spills in the early to mid 1900's, and from chronic oil pollution and gillnetting in the 1980's and 1990's (Ainley and Lewis 1974, Takekawa et al. 1990, Carter et al.

Common murres were last recorded breeding at San Pedro Rock in 1908, when the colony was in the process of being extirpated by egg collectors (Ray 1909). During the 1980's common