Background



On November 7, 2007, the cargo vessel *Cosco Busan* struck a tower of the Bay Bridge, between Treasure Island and San Francisco. The accident released 53,000 gallons of bunker fuel. This is the heavy oil that powers the ship. The oil spread with the tides, moving around the Bay and out into the ocean, affecting the coast north and south of the Golden Gate. A wide variety of resources were impacted, including birds, fish, shoreline habitats, and human recreational activities.

Under state and federal laws, several government agencies may act as trustees for the public, assessing the injuries and making a claim for compensation. Their goal is not just to repair the injuries, but to compensate the public for injuries to wildlife, habitat, and recreational uses. In this case, the California Department of Fish and Game, the California State Lands Commission, the United States Fish and Wildlife Service, the National Park Service, the Bureau of Land Management, and the National Atmospheric and Oceanic Administration, in cooperation with the East Bay Regional Park District and the City of San Francisco, worked together to assess injuries from the spill and to determine appropriate restoration projects. These projects are intended to both speed natural recovery and to compensate for the impacts of the spill.

Injury Summary

In the two years after the spill, the trustees performed over 70 different studies. The results are summarized here.

Birds

Collected alive: 1084 Cleaned and released: 295

Collected dead: 1856

% of shorebirds oiled: 14.6%

Estimated dead	
Scoters, large divers	1624
Large grebes	1071
Small grebes, ducks	780
Brown Pelicans	22
Cormorants	507
Gulls	236
Fulmars	134
Common Murres	633
Marbled Murrelets	13
Other Alcids	137
Shorebirds	1422
Other	270
Total	6849



Fish

Impacts to fish and aquatic biota were largely limited to those near the shoreline. The primary impact was to herring eggs and embryos during the winter 2007-08 spawning season.

Herring: 14 to 29% of spawn lost in 2007-08

Salmon, tidewater goby, Dungeness crab, grunion: little to no impacts detected.

The Dungeness crab fishery was impacted because surface water, which had oil on it, is used during harvesting.

Habitat

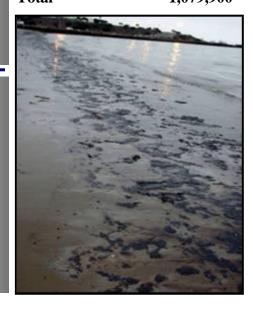
Most of the habitat was lightly oiled and has already recovered. Heavily oiled areas should recover after 5 years.

Eelgrass Beds	940
Salt Marsh/Tidal Flats	1395
Sandy Beach	648
Rocky Intertidal	384
Acres impacted or exposed to oil	

Recreation

Extensive beach closures around the central Bay and outer coast affected a wide range of activities. A fishing closure spanned eight counties and lasted thru Nov 28. Boating of all types was also affected.

Total	1.079.900
General Shoreline Use	983,800
Boating	26,600
Fishing	69,500
<u>Lost trips</u>	



Proposed Restoration

The legal settlement with Regal Stone Shipping and Fleet Management, the responsible parties in the case, involved several components. Natural resource damages totaled \$32.3 million. The trustee agencies are proposing the following: approximately \$5 million for bird restoration, \$4 million for habitat restoration, \$2.5 million for fish and eelgrass restoration, and \$18.8 million for recreational improvements. An additional \$2 million will fund administration and oversight. Any unused administrative funds will go toward more restoration. All proposed projects will be presented in a Draft Damage Assessment and Restoration Plan and subject to public comment.

Birds

Proposed projects:

- Roosting and nesting platforms on the old Berkeley Pier
- Nest site improvements on the Farallon Islands
- Water level management for wintering diving birds at the South Bay Salt Ponds
- Grebe colony enhancement at Tule Lake
- Marbled Murrelet nesting habitat protection at Humboldt Redwoods and Grizzly Creek State Parks
- Project benefiting Surf Scoters and diving ducks

Fish/Eelgrass

Proposed project:

 Eelgrass (fish spawning habitat) restoration at multiple sites in San Francisco Bay



Recreation

Proposed projects:

• \$18.8 million for a variety of recreational use projects throughout the Bay and outer coast, to be determined

Habitat

Proposed projects:

- Muir Beach dune restoration
- Albany Beach restoration
- Aramburu Island restoration
- Native oyster restoration at multiple sites in San Francisco Bay
- Rockweed restoration at multiple sites in San Francisco Bay

Cosco Busan Natural Resource Trustees

Trustees

California Department of Fish and Game
California State Lands Commission
United States Fish and Wildlife Service
National Park Service
Bureau of Land Management
National Oceanic and Atmospheric Administration

Websites

The Draft Damage Assessment and Restoration Plan will be available at these websites:

www.dfg.ca.gov/ospr/Science/cosco_busan_spill.aspx darrp.noaa.gov/southwest/cosco/index.html www.fws.gov/contaminants/Issues/OilSpill.cfm



