



Cosco Busan Oil Spill

$Environmental\ Contaminants \\ Program$

On November 7, 2007, the cargo vessel *Cosco Busan* hit the San Francisco Bay Bridge in heavy fog. The impact ruptured the hull (~100 ft x 12 ft and 4 ft deep) and spilled approximately 58,000 gallons of medium grade fuel oil. Most of the oil spread to central San Francisco Bay and outer coast (north and south of the Golden Gate Bridge). Oiled birds were found at several of the refuges in the San Francisco Bay National Wildlife Refuge Complex (NWRC).



View of the spill from a fly over.

The U.S. Fish and Wildlife Service's Role in Spill Response

Staff from the Sacramento Fish and Wildlife Office, San Francisco Bay National Wildlife Refuge Complex, Sacramento Regional Office, Portland Regional Office, Carlsbad Fish and Wildlife Office, and Burlingame Law Enforcement Office have been assisting with spill response and natural resource damage assessment at various times. Some of their efforts include:

- ◆Responding to the spill and assisting in the survey, capture and rehabilitation of oiled wildlife.
- ◆Working with the Incident Command in planning clean up actions.
- ◆Planning response actions to protect habitats and sensitive species.
- ◆Collecting samples and other evidence to assess damages to natural resources.

Known Impacts to Wildlife

◆1,081 birds recovered live and taken into rehabilitation

- ♦783 birds cleaned
- ♦389 birds released
- ♦634 birds died in facility
- ♦1,803 birds dead on arrival
- ◆1 dead harbor seal (*Phoca vitulina*)
- ◆1 northern fur seal pup (*Callorhinus* ursinus) recovered and taken into rehabilitation

Federally-Listed Endangered or Threatened Species Injured or Killed

- ◆3 dead marbled murrelets (Brachyramphus marmoratus),
- ♦2 dead and 3 oiled (in rehabilitation) brown pelicans (*Pelecanus occidentalis*),
- ◆1 dead and 15-18 oiled western snowy plovers (*Charadrius* alexandrinus)

Impacts to Listed Species Habitat

The oil impacted some beach habitat for western snowy plovers. In addition, salt marsh tidal wetland habitat for the endangered California clapper rail (*Rallus longirostris obsoletus*) and salt



Placing booms at the spill site.



Cleaning up oil from the spill.

marsh harvest mouse (*Reithrodontomys* raviventris) was impacted. Further analysis is needed to quantify the total impact.

Oiled Birds

The number of oiled birds collected during a spill is an underestimation of the true numbers impacted. Observed mortality is actually only a small percentage of true mortality as many carcasses are never recovered. In addition to direct mortality, the long-term success of bird populations can be impacted by:

- 1) the loss of small populations,
- 2) reduced reproductive success,
- 3) lowered survival rates in remaining birds,
- 4) reduced food availability, and
- 5) food source toxicity.

We cannot predict the total impacts to wildlife from the *Cosco Busan* spill. Completion of the damage assessment, as well as long-term monitoring, are necessary to answer this question.

For more information please contact:

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December 2007