

M/V Cosco Busan San Francisco Bay Oil Spill

N OAA's Office of Response and Restoration (OR&R) protects the public's natural resources, responds to hazardous material releases and related impacts, and restores injured and contaminated marine and coastal environments.

On November 7, 2007 the container ship M/V Cosco Busan struck the Bay Bridge in San Francisco Bay, California. The 900-foot ship was carrying over one million gallons of fuel at the time of the incident. A 100-foot gash in the hull of the vessel caused the release of an estimated



Damage to port side of the vessel. Photo courtesy of U.S. Coast Guard.

58,000 gallons of fuel oil into the water. NOAA continues to support cleanup and restoration efforts. The cause of the spill remains under investigation.

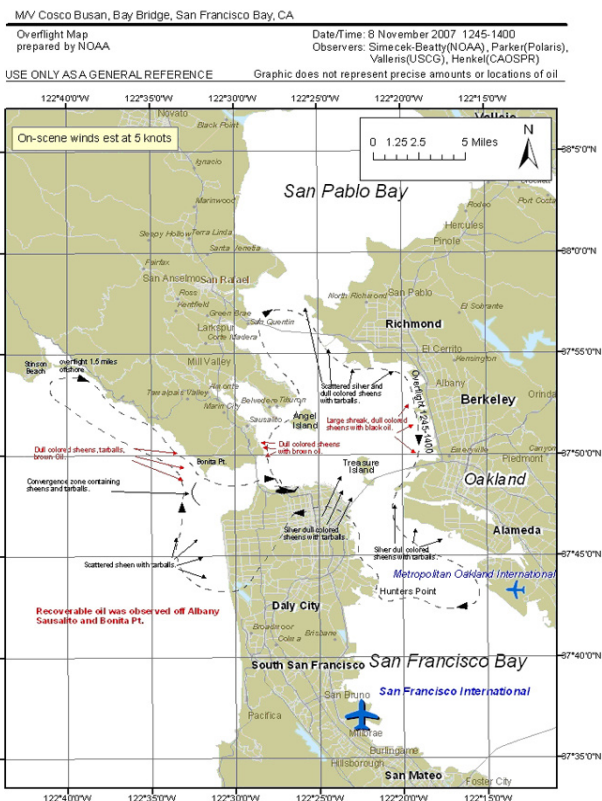
Winds and currents quickly spread the spilled oil throughout the central San Francisco Bay, and out the Golden Gate, contaminating shorelines, habitats, historical resources, and public use areas in the Bay, and the Gulf of the Farallones, and the Monterey Bay National Marine Sanctuaries.

Providing spill cleanup

During the Cosco Busan oil spill, OR&R deployed scientists to the spill site to carry out overflights, coordinate beach surveys, evaluate oil recovery options, develop cleanup standards and protocols, and otherwise support the U.S. Coast Guard. In addition, OR&R provided trajectory and oil behavior modeling, information on natural resources at risk, and toxicity assessment data from Seattle.



NOAA Scientific Support Coordinator and NOAA Corps officer LCDR Liz Jones documents her observations made during a recent overflight.



First overflight map of the spill – conducted when the weather cleared on the second day. Note the location of recoverable oil showing locations for skimmer deployment.

NOAA's response also included providing up-to-date weather information and assistance in prioritizing response efforts to maximize recovery efforts and minimize environmental damage. During the first week, NOAA delivered 14 overflight maps with photos, 12 trajectory forecasts, 14 tidal forecasts; 17 weather updates; and five special assessments or response protocols.

In 2006, a major field exercise – *NOAA Safe Seas* – was conducted with U.S. Coast Guard, State of California, the Department of the Interior, and other agencies and organizations in the San Francisco Bay area. OR&R trained hundreds of regional staff and Beach Watch volunteers in various aspects of oil spill response and to test the response protocols that would be used for a real spill. Continuous training and improvement of our capabilities ensure that the nation's response to an incident like the *Cosco Busan* is effective.

Assessing injured resources

NOAA is a natural resource trustee for coastal and marine resources, including resources within National Marine Sanctuaries. NOAA scientists and damage assessment experts are working with representatives from the state and other federal agencies to assess the ecological injuries and human use losses from the incident. Teams have been deployed to the field daily since the spill, collecting time-critical data necessary to document the ecological damage. Hundreds of environmental samples have been collected throughout the affected area. Specialized analytical chemistry is being used for "fingerprinting" to confirm the source of the contamination. With this assessment, the trustees can quantify the injuries to wildlife, habitat, and lost use of those resources.



Oil band off Pt. Diablo. Photo taken during a NOAA overflight, 11/09/07

Restoring natural resources

Once the full range of injuries is identified and quantified, NOAA will work with federal co-trustees to develop restoration alternatives to compensate for the loss. The agencies will seek public input on restoration, and citizens, non-government agencies, and others will have an opportunity to help NOAA, federal co-trustees, and the responsible party identify, select, and implement restoration projects for the injured natural resources.

NOAA's Office of Response & Restoration—Protecting our Coastal Environment

**For further information about NOAA's Office of Response and Restoration,
please call (301) 713-2989 or visit our Web site at
response.restoration.noaa.gov**

