

## Shoreline Oiling Deepwater Horizon Oil Spill

**Table 2.** Comparison of the lengths of shoreline oiled for systematic surveys.

Spill Name/Date	Oil Type/Volume	Shoreline Area Oiled	Shoreline Surveyed (km)	Shoreline Oiled (km)
TV Exxon Valdez March 1989 TX	Alaska North Slope crude oil 49,000,000 barrels	Prince William Sound, Kotzeb Sound, and Kotzeb Bay, Alaska	3,439	2,100
Gulf War oil spill February-March 1991 TX	Kuwait crude oil 10,000,000 barrels	South Arabia shoreline of the western Arabian Gulf littoral but unknown area oiled in Kuwait	773	707
TV Seaboard Apr December 2004 TX	Intermediate fuel oil 180-metric-tonne 8,400 barrels	Western shoreline of Unalaska Island, Alaska	761	418
MV Citco Breeze November 2007 TX	Intermediate fuel oil 380,000 barrels	Central San Francisco Bay and outer shorelines north and south of the Golden Gate, California	378	147
Deepwater Horizon April August 2010	MC 252 Louisiana crude oil 4,900,000 barrels	northeastern Gulf of Mexico	7,007	1,771

covered extensive beach erosion and re-mobilization of oil residues, though some beaches had yet to fully erode back to their pre-spill condition. In some areas, the oil was degraded (12). Over 11 km of the most heavily oiled marshes in northern Barataria Bay were cleaned using intensive manual and

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form. These may have also chronic sources of NRIs/NRPs in the adjacent beaches, as described above.

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2 m in Alaska and 1.1 m in the Gulf of Mexico, along the Arabian Gulf, the width of the oiled band was often in the tens of meters and exceeded 1–2 km on the extensive intertidal flats with mostly 100% oil cover and deep penetration into the sediments [17] [20].

As is the case for any field data-collection project, SCAT requires adherence to standard methods of field observation and measurement by calibrated field teams. Consistency among teams over time is essential and a deliberate effort was made to maintain the same cadre of team leaders throughout the response, with frequent calibration as oiling conditions changed. The field data went through rigorous automated and visual checks to assure data quality; a large number of stakeholders relied on the quality and objectiveness of the field data to support decision-making at all levels of the response. SCAT during the *Deepwater Horizon* spill was not different from surveys conducted on other spills, except in the scope and duration.

The SCAT Program for the *Deepwater Horizon* oil spill response was understandably large, complex, and involved many stakeholders across four states and multiple jurisdictions. The traditional SCAT model was modified to fit the environmental,