

# Natural Recovery Was Preferred for Marshes

NOAA Technical Memorandum NOS OR&R 42



*Deepwater Horizon* Oil Spill:  
Salt Marsh Oiling Conditions, Treatment  
Testing, and Treatment History in  
Northern Barataria Bay, Louisiana  
(Interim Report October 2011)

Seattle, Washington  
April 2013

DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration

NOAA Technical Memorandum NOS OR&R 42



*Deepwater Horizon* Oil Spill:  
Salt Marsh Oiling Conditions, Treatment  
Testing, and Treatment History in  
Northern Barataria Bay, Louisiana  
(Interim Report October 2011)

Zengel, S. and J. Michel. (2013).

revisions based on continued monitoring (including the treatment test set aside). STR treatments included manual and combined mechanical/manual approaches. All manual work on the marsh was conducted from walk boards, to limit further marsh damage. All STR treatments were conducted in the presence of SCAT/agency field advisors/monitors, to maximize treatment effectiveness and minimize marsh damage. Roughly 24 km (15 miles) of marsh shorelines were identified for potential treatment; 11 km (7 miles) of marsh shorelines were ultimately treated. 6,429 cubic yards and 536 tons (1,072,000 lbs) of oil and oiled vegetation/debris were removed during cleanup operations. All marsh shorelines under the STR were inspected and met STR-specific, No Further Treatment (NFT) guidelines. A follow-on patrol and maintenance STR (STR 54-032) was developed and is still active as of the date of this report.

Recommended future actions include: 1) continued review of STR 54-032 patrol and maintenance reports from Operations and (OSD); 2) Shoreline Cleanup Completion Plan (SCCP) surveys and inspections and/or post-hurricane season SCAT surveys and field reconnaissance to be conducted in November-December 2013 for all STR 54-032 zones, segments, and adjacent areas, as appropriate, to determine the need for any further treatment; and 3) retention of set-aside sites for continued monitoring and research to evaluate oiling conditions, treatment alternatives, changing responses, habitat recovery, and restoration measures over the longer term, contributing to a better understanding of this event and enhancing response and restoration capabilities for future spills.

Priority areas for upcoming SCAT surveys and field reconnaissance would include locations that were the most heavily oiled (STR Zones B, C, H, I, K, and N), as well as any current set-aside sites that will not be retained for future monitoring and research. Any further intensive treatments (e.g., raking and cutting) should be limited to areas where such restoration, taking net environmental benefit into consideration. If areas require STR 54-032 could be modified accordingly. Treatments should require the continuation of operations under STR 54-045. It is expected until 15 December 2013, and initial months, using manual crews. Follow-up operations, including any additional...

In conclusion, it should be emphasized that Barataria Bay during the Deepwater Horizon oil spill, manual and mechanical methods were appropriate for the majority of oil spill. Further marsh damage and limit marsh recovery. Even during this spill, only the most heavily oiled salt marshes were intensively treated—a small fraction (~1%) of the nearly 750 km (465 mi) miles of marsh shorelines that were oiled across the Gulf States. **Natural recovery was the preferred and appropriate approach for the vast majority of oiled marshes.**

Note: this report was written in October 2011. NOAA published it as a NOAA Tech Memo in April 2013.

Natural recovery was the preferred and appropriate approach for the vast majority of oiled marshes.