

Mississippi Canyon 252

ASSESSMENT PLAN TO ANALYZE BEACH-NESTING SHOREBIRD DATA COLLECTED UNDER THE WORK PLAN FOR DEEPWATER HORIZON (MC252) GULF COAST BREEDING, BEACH-NESTING BIRD POPULATION SURVEYS (BIRD STUDY #8) AND THE SUPPLEMENT TO THAT WORK PLAN

Approval of this Assessment Plan to Analyze Beach-Nesting Shorebird Data Collected Under the Work Plan for Deepwater Horizon (MC252) Gulf Coast Breeding Beach-Nesting Bird Population Surveys (Bird Study #8) and the supplement to that work plan is for the purposes of obtaining data for the Natural Resource Damage Assessment.

The Trustees have developed a preliminary conceptual model of the DWH release, potential pathways and routes of exposure, and potential receptors. This preliminary model has informed the trustees' decision to pursue the activities outlined in the work plan.


Department of Interior Trustee Representative:


Date


Louisiana Trustee Representative:


Date

I. Introduction

Seabirds, colonial water birds, coastal marsh birds, raptors, shorebirds, and waterfowl are particularly susceptible to oil exposure at sea and on land. Following the *Deepwater Horizon/Mississippi Canyon 252 (MC 252) Oil Spill (Oil Spill)*, state and federal Trustees developed several Natural Resource Damage Assessment (NRDA) work plans to evaluate potential oil exposure and oil related injuries to various avian guilds in the Gulf of Mexico. Assessment activities were identified by the Trustees to augment ephemeral pre-assessment data collection evaluating exposure and injury to colonial waterbirds (seabirds such as gulls, terns, and pelicans; and wading birds such as egrets and herons). Abundance and distribution of solitary beach-nesting shorebirds in the spill area during the breeding seasons of 2010 and 2011 (collected under Bird Study #8: *Work Plan for Deepwater Horizon (MC 252) Gulf Coast Breeding, Beach-nesting Bird Population Surveys* and the *Supplement to that Work Plan*) provide detailed information of bird presence and behavior prior to, during and after the height of the Oil Spill.

Three solitary, beach-nesting shorebird species were targeted: Wilson's plover (*Charadrius wilsonia*), snowy plover (*Charadrius alexandrinus*), and American oystercatcher (*Haematopus palliatus*). Information on population counts, locations of breeding pairs, incidence of oil on birds, and the presence of potentially harmful oil or oil spill response activities in coastal Louisiana, Mississippi and Alabama nesting habitat were collected during the breeding seasons of both 2010 and 2011. In 2010, two surveys were performed¹. Most sites visited during the first survey in 2010 were visited prior to oil coming ashore. The second 2010 survey included areas which were exposed to oil after conclusion of the first 2010 survey. A final interim data analysis report comparing the "before and after" surveys of 2010 is in the process of being finalized.

Work conducted under this *Assessment Plan to Analyze Beach-Nesting Shorebird Data Collected Under the Work Plan for Deepwater Horizon (MC252) Gulf Coast Breeding, Beach-Nesting Bird Population Surveys (Bird Study #8) and the Supplement to that Work Plan (Work Plan)*, will incorporate data collected in 2011 and any other relevant data into the analysis, and evaluate any trends or observations potentially relevant to exposure and injury assessments for local, solitary beach-nesting shorebirds breeding on coastal Louisiana, Mississippi and Alabama beaches.

¹ Note: The first survey was not part of the Trustee-sponsored NRDA activities, as it was funded by outside parties before the Oil Spill occurred. Some of the sites surveyed as part of the first survey in 2010 were impacted by oil prior to the end of the first survey.

II. Activity Objectives

The objectives of this activity are to 1) analyze survey results for the 2011 beach-nesting bird surveys; 2) review and revise, if appropriate, 2010 data analysis (both NRDA-sponsored and non-NRDA sponsored); 3) compare results of 2010 bird surveys (using both NRDA-sponsored and non-NRDA-sponsored data, if available) with results of 2011 bird surveys; and 4) prepare a final report on the comparison.

Data on the number of breeding adults and breeding pairs in the study area, incidence of oil on target species, habitat use, and habitat quality (in terms of the presence and effect of oil and/or oil spill response activities) will be compiled and analyzed for 2010 and 2011. Population counts and oiling rates of birds will be compared by species and by state.

III. Budget for Breeding Shorebird Data Analysis

The estimated costs for this activity are \$30,000. The Parties acknowledge that this budget is an estimate, and that actual costs may prove to be higher.