# Mississippi Canyon 252

**ADDENDUM: PRE-ASSESSMENT PLAN: SUPPLEMENT TO DEEPWATER HORIZON (MC252) GULF COAST BREEDING, BEACH-NESTING BIRD POPULATION SURVEYS (BIRD STUDY #8)--2011**

---

**3/22/2011**


**Prepared by:**

Margo Zdravkovic, Director

Coastal Bird Conservation/Conservian

Email: MargoZ@Coastalbird.org

Margogz1@aol.com

Phone: 561-504-4251

**AND:**

U.S. Fish and Wildlife Service:

Veronica Varela

John Warzybok

## Mississippi Canyon 252

**ADDENDUM: PRE-ASSESSMENT PLAN: SUPPLEMENT TO DEEPWATER HORIZON (MC252) GULF COAST BREEDING, BEACH-NESTING BIRD POPULATION SURVEYS (BIRD STUDY #8)--2011**

---

Approval of Approval of this *Addendum: PreAssessment Plan: Supplement to Deepwater Horizon (MC252) Gulf Coast Breeding, Beach-Nesting Bird Population Surveys (Bird Study #8)-2011* is for the purposes of obtaining data for the Natural Resource Damage Assessment. Each party reserves the right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.

This plan was implemented consistent with existing trustee regulations and policies. All applicable state and federal permits were obtained prior to conducting work.

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

Kevin D. Reynolds — 6/26/13

Department of the Interior Trustee Representative: Date

7/12/13

Louisiana Trustee Representative: Date

*Note 1*: This study was implemented in 2011. No changes to the Supplement were made at the time of signature.

*Note 2*: CBC conducted two breeding surveys in 2010. Although this Plan characterizes a set of surveys as "pre-spill" breeding surveys, the DWH Oil Spill had already made landfall in many areas, including some of the areas surveyed, prior to completion of CBC's first 2010 survey. In total, CBC was able to complete 50 of 67 beach-nesting bird sites in coastal Alabama, Mississippi and Louisiana before oil made landfall in 2010.

*Note 3*: The "Number of Visibly Oiled Bird(s)" and "Number of Not Visibly Oiled Bird(s)" was recorded for each individual or group of birds encountered.

**ADDENDUM: PRE-ASSESSMENT PLAN: SUPPLEMENT TO DEEPWATER HORIZON (MC252) GULF COAST BREEDING, BEACH-NESTING BIRD POPULATION SURVEYS (BIRD STUDY #8)--2011**

## Introduction

The Deepwater Horizon (MC 252) oil spill began on April 22, 2010 in the Gulf of Mexico. Spill-related injury to wildlife is of major concern to the Natural Resource Trustees and BP. At least 30 state wildlife refuges, National Wildlife Refuges and National Parks, occur in the area potentially threatened by the oil. Seabirds, colonial water birds, coastal marsh birds, raptors, shorebirds, and waterfowl are particularly susceptible to impacts from the oil at sea and on land. Several work plans have been developed to concurrently evaluate oil spill related injuries to these different avian guilds. This plan is a supplement to the eighth in a series of avian injury studies conducted by the Trustees and specifically seeks to address injury to breeding beach-nesting birds.

Since the early 2000's the Coastal Bird Conservation program (CBC) has documented and monitored significant shorebird populations throughout the Gulf coast and has lead statewide and region-wide breeding and nonbreeding shorebird monitoring efforts in all Gulf coast states. In recent years, the CBC has mapped and documented thousands of breeding and nonbreeding bird populations in Texas (2003-2010), Mississippi and Louisiana (2005-2010), Tamaulipas, Mexico (2006), Alabama and the Florida panhandle (2007-2010), and the Florida Keys (2008-2010). Through surveys and monitoring of important sites, impact assessment and building close partnerships with land managers, the CBC implements protective measures for coastal birds and their habitats in all five Gulf coast states. The CBC has also collected data and gained a clear understanding of human-created shorebird disturbance (pre-spill causes and impacts) that will serve as important comparison data to the current oil-related impacts occurring in shorebird habitat that formerly had little or no disturbance. In addition, the CBC conducted population surveys of beach-nesting birds on the Gulf coast in oil impacted areas of Alabama, Mississippi and Louisiana during the 2010 breeding season as part of the natural resource damage assessment.

## Objectives

Under this natural resource damage assessment activity, Coastal Bird Conservation (CBC) will re-survey beach-nesting birds in 2011 throughout the four state region impacted by the events of the 2010 BP Deepwater Horizon oil spill. These surveys will locate nesting sites and enumerate the breeding populations of beach-nesting birds in order to evaluate shorebird injuries that may have occurred since CBC pre-spill breeding surveys were conducted in 2010.

## Study Area

The survey coverage area spans all coastal beach-nesting bird habitat within the four state region of Alabama, Mississippi, Louisiana and Texas (to Galveston Island) impacted by the BP Deepwater Horizon Gulf oil spill (approximately 553 linear miles). The coverage area includes all mainland habitat, barrier islands, delta islands, and dredge spoil/restored islands which support solitary beach-nesting birds.

## Survey Methodology

The 2011 surveys will duplicate CBC's 2010 beach-nesting bird census and data collection methodology. Comprehensive, standardized, breeding surveys will be conducted from May 1 through late June 2011 for beach-nesting birds (approximately eight weeks). Surveys will include all coastal habitat and potential coastal habitat which supports solitary beach-nesting birds from the Florida/Alabama border to Galveston Island, Texas. All colonial beach-nesting birds will also be counted throughout these sites during surveys for solitary nesting species. CBC will not conduct full surveys at specific sites known to support only colonial nesting birds. To avoid disturbance these sites will be surveyed from the perimeter/shoreline to check for solitary nesting species. Surveys will be conducted at each site/area once to document the estimated number of beach-nesting bird pairs active during the 2011 breeding season. Individual pair counts will be conducted for all solitary nesting species. Solitary beach-nesting birds will be classified as breeding pairs under the following descriptions: 1) Pair exhibiting courtship behavior, 2) Pair engaging in joint defense, group defense, or other territorial behavior, 3) Single bird or pair at a nest, 4) Single bird or pair with young, 5) Paired adults (birds located together as a pair), and 6) Single bird exhibiting territorial/defensive/distraction behavior in breeding/nesting habitat. Flush counts and counts of sitting birds will be conducted for colonial nesting species. The survey focal species will include the following solitary beach-nesting bird species Wilson's Plover (*Charadrius wilsonia*), Snowy Plover (*Charadrius alexandrinus*), and American Oystercatcher (*Haematopus palliates*). Migratory Piping Plovers (*Charadrius Melodus*) will also be included in the census since its relatively low population counts give the species a status of global concern. Colonial nesting species include Black Skimmer (*Rynchops niger*), Least Tern (*Sterna antillarum*), Gull-billed Tern (*Gelochelidon nilotica*), Sandwich Tern (*Sterna sandvicensis*), and Royal Tern (*Sterna maxima*). Surveys will be conducted primarily on foot by teams of two or more highly skilled CBC field staff. Sites will be accessed using utility vehicle (UTV), 4x4 pick-up truck, airboat and boat, depending on the type of terrain present and size of each survey area. For solitary nesting species (Snowy Plover, Wilson's Plover, American Oystercatcher) each breeding pair will be GPS recorded using a hand held GPS unit. For colonial species a center point for each colony will be recorded. For all solitary breeding pairs and colonies located, data will be collected on macro and microhabitats used by each species

including data on vegetation and substrate type. All survey sites will be assessed for human-created disturbance and habitat degradation. Habitat damage will be photographed and documented. All 2011 survey sites will be photographed for comparison to 2010 habitat photographs. Band combinations will also be recorded for banded focal species located.

**Deliverables**

On a monthly basis, CBC shall provide an interim progress report to the Project Officer and to the NRDA Bird Lead. This report shall summarize progress on project operations as well as any problems encountered. All original data forms, digital photographs, SD cards, GPS track logs, and electronic data shall be submitted no later than 30 September 2011 to the NRDA Field Office. If original data cannot be conveyed to the NRDA Field Office within one week of collection, CBC shall provide periodic, but not less than bi-weekly, hard or electronic copies of data sheets, and electronic copies of photographs or other electronic data, to the above office as backups. All data shall be entered in a timely manner into the DOI-ERDC DH NRDA Database, the DOI DH NRDA primary data storage site. The first half of the data is expected to be entered within 30 days of the completion of the ERDC database with the remainder to be entered 30 days later. Prior to data collection, CBC shall coordinate with Data Management (Heather Theel, ERDC, and Angela Matz, USWFS) to prepare a programming interface and relationships within the data for the database. CBC is responsible for data entry and preparation of Quality Assurance/Quality Control (QA/QC) document or documents.

CBC shall provide a draft data management QA/QC document to the Project Officer by 15 April 2011, or on a date otherwise approved by that official, for USFWS review and approval. This document shall address the process that the CBC will apply to ensure timely, accurate, and secure management of project data, in compliance with USFWS/DOI NRDAR data management requirements and DOI-ERDC Deepwater Horizon NRDAR database requirements. CBC will respond to USFWS comments on the draft document, revise as appropriate, and submit a final QA/QC document to the Project Officer by 15 May 2011, or on a date otherwise approved by that official.

The QA/QC document or documents shall identify how CBC will:

(i) Provide routine and consistence checks to ensure data integrity, correctness, and completeness;

(ii) Identify and address errors and omissions; and

(iii) Document and record all QC activities.

Upon completion of data entry and QA/QC documents, CBC will certify the data set as complete and accurate. At the completion of the study, CBC will prepare a data summary report.

## Project Budget

CBC Director, CBC assistant and 8-10 field staff salaries/benefits/overhead =$_____
Survey transportation- hiring costs for boat/airboat pilots/boats/airboats/ground support = _____
Housing x 10 crew x 8wks = _____
Field Vehicle rental- 4x4 trucks, UTVs, trailers = _____
Consumable field supplies = $_____
CBC staff travel -mileage for CBC vehicles, gasoline for rental/field vehicles = _____

**Total cost for surveys and data collection = $260,000**