

Mississippi Canyon 252

ASSESSMENT PLAN: BACKGROUND DEPOSITION OF BIRD CARCASSES ON WALKABLE BEACHES AND IN MARSHES (BIRD STUDY #24)

Approval of this Assessment Plan to determine the background deposition of bird carcasses on walkable beaches and in marshes is for the purposes of obtaining data for the Natural Resource Damage Assessment. Each party reserves its right to produce its own independent interpretation and analysis of any data collected pursuant to this Assessment Plan. Each party agrees that 1) all such independent interpretations and analyses of Assessment Plan data will be clearly identified as those solely of the interpreting party and 2) they will further clearly indicate that such interpretations or analyses do not necessarily represent the interpretation or analyses of any other party to this Assessment Plan.

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

The Trustees have developed a preliminary conceptual model of the *Deepwater Horizon* release, potential pathways and routes of exposure, and potential receptors. This preliminary model has informed the Trustees' decision to pursue the studies outlined in the Assessment Plan.

Department of the Interior Trustee Representative

Date

Louisiana Trustee Representative

Date

BP Representative

Date

Mississippi Canyon 252

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1.0 INTRODUCTION

The *Deepwater Horizon* / Mississippi Canyon (MC 252) Oil Spill (“spill”) began April 20, 2010 in the Gulf of Mexico. The entities responsible for the management and protection of avian resources (e.g., the U.S. Fish and Wildlife Service (FWS); the National Park Service; and the states of Florida, Alabama, Mississippi, Louisiana, and Texas; collectively the “Trustees”) are evaluating oil spill-related injuries to birds, including but not necessarily limited to seabirds, colonial waterbirds, coastal marsh birds, and shorebirds.

One type of natural resource injury pertaining to birds is mortality due to the spill. During the *Deepwater Horizon* spill, the Trustees collected and counted dead birds found in the spill-affected area. Some carcasses were collected from shorelines that could be searched by walking (or riding in ground vehicles such as ATVs) on the shoreline (i.e., “walkable beaches”), while some carcasses were collected from along the edges of marshes accessed by boat and from open water. The information on collected carcasses will be incorporated into models to assist the Trustees in estimating the total acute avian mortality. The models will incorporate corrections, such as for searcher efficiency and carcass persistence (e.g., scavenging rate), to facilitate the estimation of mortality. The “background carcass deposition rate” is another correction factor.

Even in the absence of oil spills, dead birds beach on shorelines or in marshes; this is the “background deposition rate.” Some accounting of background deposition will likely be needed in order to estimate the avian mortality that is attributable to the *Deepwater Horizon* oil spill. This assessment study, Bird Study #24 (“Background Deposition of Bird Carcasses on Walkable Beaches and in Marshes”), will provide evidence that may help to quantify baseline/background deposition rates of bird carcasses for the northern Gulf of Mexico.

At this time, there are no existing data in the scientific literature regarding a quantified background avian carcass deposition rate specific to the northern Gulf of Mexico and relevant to the period when beached bird surveys were being conducted during the *Deepwater Horizon* spill. Data do exist for the Gulf of Mexico from SEANET¹ searches and from beached bird surveys conducted during the *Deepwater Horizon* spill (either in areas in the northern Gulf before oil arrived on shorelines or in areas on the margins of the most heavily impacted areas); however, these data are of limited use, as they do not directly pertain to the geographic area and period of when the majority of carcasses were collected during the spill, respectively. A background deposition study conducted in 2013²⁰¹⁴ could provide data more directly relevant to the period and geographic area from which the majority of carcasses were collected, so long as the study area is not affected by abnormal events such as hurricanes, accidents, and lethal epizootic diseases

¹ The Seabird Ecological Assessment Network (SEANET) is a citizen science program organized by Tufts University’s Cummings School of Veterinary Medicine. SEANET volunteers conduct year-round beached bird surveys in order to identify and record information about bird mortality along select segments of the east coast of the United States. The closest segments to the spill area occur in the vicinity of Tampa, Florida.

during the time of the study. Additionally, because *Deepwater Horizon* oil continues to be present in some areas of the Louisiana coast and because more *Deepwater Horizon* oil was discovered on Gulf of Mexico beaches after Hurricane Isaac in 2012, birds may still be encountering *Deepwater Horizon* oil and suffering adverse effects in ~~2013~~²⁰¹⁴. The potential effect of these lingering issues must be recognized when designing the study and ultimately estimating background carcass deposition for the spill area.

2.0 STUDY IMPLEMENTATION PERIOD

The study will target fourteen weeks of intermittent searches in the period covering May through September in ~~2013~~²⁰¹⁴. However, the Trustees reserve the right to postpone the study in its entirety or at certain transects if, at any time immediately before the study begins or during implementation, the Trustees conclude, by joint decision of all co-Trustees, that conditions within the study area or at certain transects preclude the collection of data useful to determining background carcass deposition rates.

3.0 STUDY AREA

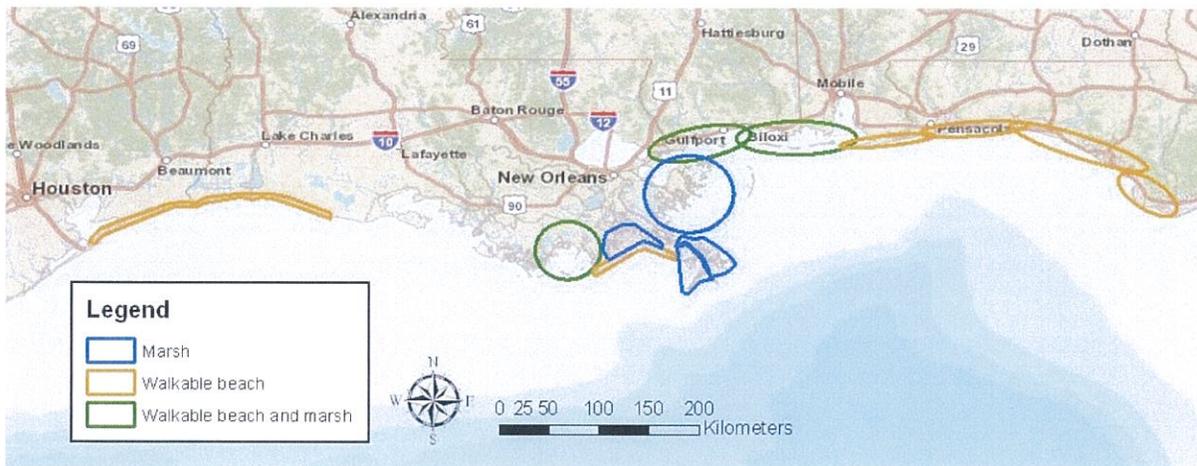
The study area includes walkable beaches and navigable marsh edges from Galveston Bay inlet, Texas, to Apalachicola, Florida. The study area is divided into 14 regions (Figure 1). Each region is assigned to one field team.

4.0 STUDY DESIGN

The study will collect information on the background deposition of bird carcasses on sandy/hard (i.e., walkable) beach and in marsh edge environments. For the purposes of this study, a “carcass” is defined as any dead bird regardless of its condition or state (e.g., whole or partial, scavenged or not scavenged, oiled or unoled, etc.). At a minimum, a carcass could consist of solitary body parts (e.g., single wing) or only a few feathers attached to skin fragments. This is consistent with the definition provided to the NRDA beached bird surveyors during the spill. (See *Deepwater Horizon* (MC 252) Oil Spill Beach Bird Protocol – Field Procedures 2010).

The objective of the field work of this assessment plan is to count the bird carcasses encountered during the field work. This assessment study does not require sampling or collecting bird carcasses. However, if fresh oil or oiled carcasses are encountered during the study, opportunistic samples may be collected.

Figure 1: Study area showing generally the 14 study regions from which data will be collected. Boundaries are not precise. Primarily data from walkable beaches will be collected from the areas in orange polygons. Green polygons will provide both walkable beach and marsh edge data. Blue polygons will provide primarily marsh edge data.



4.1 Walkable Beaches

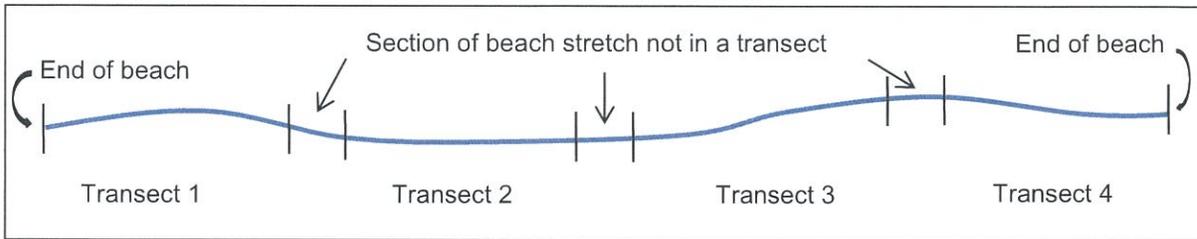
4.1.1 Transect Design

Seven of the 14 study regions will focus primarily on collecting data from walkable beaches (“Beach Regions”) (Table 1). Three additional regions will provide a combination of data from walkable beaches and from marsh edges (“Boat/Beach Regions”), but the protocols for all walkable beaches are the same.

Transects on walkable beaches will be two kilometers in length. Within each study region, the walkable beaches will be segmented into 2-km transects as near to contiguous as possible. Because it is unlikely that stretches of beach will be in lengths of exactly whole-number multiples of two (kilometers), the number of 2-km transects that will fit on a beach stretch will be determined (e.g., three transects will fit in a stretch that is seven kilometers in total length), and the transects will be equally spaced on the beach after the first and last transects on that beach stretch are situated at the ends of the stretch (Fig 2). If a beach stretch is long enough to only contain one 2-km transect, the transect will be established so that one of the ends of the transect overlap one of the ones of the beach stretch. A flip of a coin will determine at which end of the beach stretch the transect will be placed. The transects to be searched during the study (“study transects”); will be randomly distributed within the region. However, the random study transects will be screened to ensure accessibility (i.e., the effort to arrive at the transect is not unreasonable and access permits/permissions, if needed, can be acquired) and feasibility with respect to time constraints of field personnel. The proposed study transects will also be evaluated to determine whether the environmental conditions expected to be experienced during the study implementation period would generate data useful for background deposition. A transect may be deemed not useful at any time during study planning or study implementation. A transect may be deemed not useful due to factors such as, but not limited to, potential ongoing avian mortality due to the *Deepwater Horizon* oil spill or notable mortality due to hurricanes or other non-*Deepwater Horizon* oil spills. If a transect is discarded, this will be noted and explained in an End of Study Report, and a replacement transect will be randomly drawn. The

final suite of beach transects to be used in the study will be identified prior to field implementation, approved by participating Trustees and BP, if a cooperative study, and attached to this Assessment Plan. Any further adjustments to the suite of study transects found necessary during the implementation of the study and approved by Trustees and BP, if a cooperative study, will be documented in the End of Study Report.

Figure 2: Example of distributing 2-km transects within a beach stretch, where the first and last transects are situated at the ends of the stretch and the other transects are equally spaced within the stretch.



It is anticipated that each Beach Region will contain 12 to 15 study transects. The suite of transects may be refined at any time after the study begins as field crews ground-truth the feasibility and logistics of their assigned transects.

Table 1: Study Region and Field Team descriptions, arranged in geographical order from west to east. Color codes refer to Figure 1.

Region/Team Name	Letter for Carcass ID	Geographic Region	Type of Surveys	Will Use a Boat?
Texas Beach	A	Galveston Bay inlet to Sabine Pass inlet	Walkable Beach	No
Cameron Beach	B	Sabine Pass inlet to the western boundary of Vermilion Parish, LA	Walkable Beach	No, may need ATV
Terrebonne Bay Boat/Beach	C	Marshes and barrier island beaches of Terrebonne Bay	Walkable Beach and Marsh Edge	Yes
Barataria Bay Boat	D	Marshes of Barataria Bay	Marsh Edge	Yes
Grand Isle Beach	E	Belle Pass to Grand Isle State Park, and east along the barrier islands to Bay Coquette	Walkable Beach	Yes, for access
West Mississippi Delta Boat	F	Mississippi Delta wetlands, west of Mississippi River and South Pass channel, from roughly Buras to the river mouth	Marsh Edge and Walkable Beach	Yes
East Mississippi Delta Boat	G	Mississippi Delta wetlands, east of Mississippi River and South Pass channel, from roughly Buras to the river mouth	Marsh Edge	Yes
Chandeleur Sound Boat	H	Chandeleur Sound and Breton Sound wetlands, maybe a few barrier island beaches	Marsh Edge, maybe some Walkable Beach	Yes
Gulfport Boat/Beach	K	Mainland and barrier island beaches of Mississippi Sound from Half Moon Island to Biloxi and Ship Island.	Walkable Beach and Marsh Edge	Yes, will share with Pascagoula
Pascagoula Boat/Beach	L	Mainland and barrier island beaches of Mississippi Sound from Horn Island to Mobile Bay	Walkable Beach and Marsh Edge	Yes, will share with Gulfport
Bon Secour Beach	M	Mainland beach from Fort Morgan to Pensacola Bay inlet	Walkable Beach	No
Fort Walton Beach	N	Barrier beach from Pensacola Bay inlet to Choctawhatchee Bay inlet	Walkable Beach	No
Panama City Beach	P	Mainland beaches from Choctawhatchee Bay inlet to Tyndall Air Force Base	Walkable Beach	No
Port St. Joe Beach	Q	Tyndall Air Force Base to St. Vincent Island	Walkable Beach	No

4.1.2 Methods

For walkable beaches, searches for naturally deposited carcasses will be conducted using methods slightly modified from those used for the beached bird surveys implemented under Bird Study #1/1A during the spill. The detailed methods for searching beach transects are described in “Standard Operation Procedure: Field Procedures for Transects” found in Appendix A of this Assessment Plan. Seven teams of at least two persons (at least one Trustee representative and at least one BP representative) will be assigned specific beach segments to search for carcasses. The mode of search will be the same as was used during the spill for each specific segment (e.g., by foot or by all-terrain vehicle). Boat transportation may be needed to access some walkable beaches.

For purposes of this study, a “first search” of a transect is defined as a search on a transect that has not been surveyed during the 14 days prior to the search. The survey performed on the first visit to a study segment, a.k.a., “first search”, is performed to identify carcasses that were already deposited on the beaches before the study began. These carcasses theoretically have deposited onto the beaches over a potentially long but unquantifiable amount of time and are not useful to estimating a deposition rate for a certain, relatively short interval of time (e.g., daily deposition rate). Carcasses found during a “first search” will be marked so that they can be distinguished from newly deposited carcasses if encountered during subsequent surveys of the transect during this study (see Carcass Marking SOP, Appendix A). “First searches” conducted after the study begins (i.e., carcass surveys were not conducted at a transect for 14 days or more prior), identify carcasses deposited over the relatively long period when searches were not conducted, allowing the identification of carcasses newly deposited after the “first search.” All searches other than “first searches” will be called “deposition searches.” A deposition search will occur in the day immediately following the “first search” day, although delays due to weather would still produce usable data. After the first deposition search on a transect, that transect will be revisited every three to five days. To the extent possible, field teams should strive for visiting each study transect on a three-day schedule. The window of “three to five days” is to allow for delays due to weather or logistical difficulties.

Field teams will be deployed for 14-day sampling events. Two weeks will pass between sampling events. This schedule will produce 14 weeks of intermittent searches (i.e., seven sampling events) in the period covering May through September in ~~2013~~ 2014.

The data collected during this study are observational data—the number of carcasses observed during the study. Therefore, background deposition carcasses encountered during the study will not be collected. Rather, carcasses will be marked (see Carcass Marking SOP) and left in place. Photographs will document the existence of the carcass (see Digital Photodocumentation SOP). However, opportunistic sampling of oiled carcasses or fresh oil in the environment, if any are encountered, may be conducted.

4.2 Marsh Edges

For purposes of this study, the definition of “marsh edge” is the interface between open water and coast /estuarine marshes where walkable beaches are absent. “Marsh edges” in this study are limited to those accessible by watercraft; regardless of whether they can be accessed by land. “Marsh edges” include, but

are not limited to, *Spartina*-dominated marshes, *Phragmites*-dominated marshes, bayous, and “strandlands” (i.e., any area capable of stranding floating carcasses that are not also considered walkable beaches).

4.2.1 Transect Design

Four of the 14 study regions will focus primarily on collecting data from marsh edges using boats (“Boat Regions”). Three additional regions will provide of data from a combination of walkable beaches and from marsh edges (“Boat/Beach Regions”), but the protocols for all marsh edge searches are the same.

Transects along marsh edges will be three kilometers in length, measured along the path of the boat while traveling within 20 meters of the marsh edge. It is expected that most study transects will be curvilinear in nature given the usual rugged shape marsh edges. The 3-km length is measured along the curvilinear track the boat travels. (See Field Procedures for Transects SOP, Appendix A to the Assessment Plan, for additional details.) Study transects will be randomly located throughout the marsh edge habitat of each study region. Accurate maps of marsh edges are generally not available due to the highly dynamic nature of marsh habitat, particularly in Louisiana, so identifying exact study transects before starting field work will be difficult. Therefore, before field implementation, the marsh edge habitat will be partitioned into a grid system of 4-km x 4-km cells. Study cells will be randomly drawn. Ultimately, each study cell will contain one study transect. The study cells will be screened to ensure that each cell satisfies the following: (i) the cell likely contains marsh edge habitat; (ii) the marsh edge habitat can likely be accessed via boat; (iii) access to the area will not be restricted by seasonal restrictions to protect marsh bird breeding activity; (iv) the effort to arrive at the transect is not unreasonable; (v) access permits/permissions can be obtained, if needed; and (vi) using the cell in the study is feasible with respect to time constraints of field personnel. The proposed study cells will also be evaluated to determine whether the environmental conditions expected to be experienced during the study implementation period would be useful for determining background deposition. A study cell may be deemed not useful at any time during study planning or study implementation. A study cell may be deemed not useful due to factors such as, but not limited to, ongoing avian mortality due to the *Deepwater Horizon* oil or notable mortality due to hurricanes or non-*Deepwater Horizon* oil spills. The final location of a usable 3-km study transect within each study cell will be determined by the field teams once in the field and documented on datasheets dedicated for that purpose (Datasheet SOP in Appendix A of this Assessment Plan). To the extent possible, study transect locations should not be biased in any way, such as toward the edge of the marsh that receives the greatest fetch (i.e., is most likely to catch drifting carcasses and is likely the easiest edge to access). To aid in choosing a marsh edge orientation, each study grid will have also assigned to it a randomly drawn compass direction (i.e., north, south, east, west). The compass direction represents the general direction toward which the face of the marsh edge should be oriented. If a study cell or study transect is discarded at any time, this will be noted and explained in the End of Study Report, and a replacement grid/transect will be established. The final suite of marsh edge study transects used in the study will be identified in the End of Study Report. It is anticipated that each Boat Region will contain 12 to 15 study transects.

4.2.2 Methods

Each Boat Team will consist of at least two persons (at least one Trustee representative and at least one BP representative, in addition to the boat captain.

Marsh edge searches will also utilize the “first search” procedures described for walkable beaches. After the first deposition search on a transect, that transect will be revisited every three to five days. To the extent possible, field teams should strive for visiting each study transect on a three-day schedule. The window of “three to five days” is to allow for delays due to weather or logistical difficulties.

Boat teams will search for bird carcasses along the edge of the marsh, and as far into the marsh vegetation as can be viewed from the boat. The boat will travel along the edge of the marsh, within 20m of the edge, unless the water is too shallow to safely navigate the area without causing destruction to the benthic habitat below the boat. If notable deviations from the intended boat track are needed, these will be noted on the transect’s data sheet, and summarized in the End of Study Report.

Encountered carcasses will be photographed, in accordance with the Digital Photodocumentation SOP (Appendix A) and left in place. GPS coordinates for the carcass’s location and other data required on the datasheet will be recorded, as per the Datasheet SOP (Appendix A). If carcasses can be accessed without destruction of benthic habitat, the field teams will mark carcasses according to the Carcass Marking SOP (Appendix A).

Field teams will be deployed for 14-day sampling events. Two weeks will pass between sampling events. This schedule will produce 14 weeks of intermittent searches (i.e., seven sampling events) in the period covering May through September in ~~2013~~ 2014.

4.3 Boat/Beach Regions

Boat/Beach Regions will have a combination of marsh edge study transects and walkable beach study transects. The procedures for identifying and surveying both types of transects are the same as for the purely Beach Regions and Boat Regions. The only difference is the number of targeted study transects of each type. The number of beach transects will depend on the available walkable beach, which is generally found on barrier islands in these regions. To be consistent with the goal of the original beached bird surveys performed during the spill, as a general rule, the cumulative length of beach study transects within a region will not cover more than 25% of the available walkable beach.²

5.0 DATA COLLECTION AND MANAGEMENT

A copy of the datasheets to be used for this study is included in Appendix A. The “Carcasses Found” datasheet will be used for all walkable beach and marsh edge surveys performed during this study, including “first searches.” One datasheet will be completed for each study transect

² Beached bird survey transects during the spill were generally spaced so that the starting points were 8 km apart. With a study transect length of two km, this resulted in approximately 25% of a beach being surveyed.

each day surveyed and will be filled out on paper, in ink. The “Marsh Transect Location Datasheet” is used by the boat teams when establishing the study transects in the field. The Datasheets SOP (Appendix A) contains detailed instructions on how to fill out the datasheets.

For any carcasses found during the study, the carcasses will be marked and left in place. If a previously marked carcass is subsequently encountered, a field team will record information for this carcass as if it were newly found (i.e., treated the same as newly found carcasses except that new markings will not be needed). Data from these re-encountered carcasses, while not the focus of this study, may provide supplemental information on carcass fate or searcher efficiency.

For each carcass encountered, including “first search” carcasses, the data requested on the datasheet will be recorded (which includes a GPS location), and photographs will be taken in accordance with the Digital Photodocumentation SOP (Appendix A). Field teams will follow the safety guidelines regarding personal protection equipment (e.g., gloves) contained in the NOAA NRDA Site Safety Plan (Appendix A) and Carcass Marking SOP (Appendix A) when handling carcasses.

At the end of each day, the data sheet will be signed by a Trustee representative and a BP/Entrix representative from the field team. Each team will download the day’s photographs to a computer as a backup to the data on the camera memory card, as per the Digital Photodocumentation SOP (Appendix A). Original data sheets and electronic files will be maintained by the designated Trustee representative on a field team.

After the field study is completed, the Trustees (or their contractor) will generate an End of Study Report that documents field activities, notes deviations (if any) from SOPs, and provides raw data generated by the study. Summary statistics and other calculations will be included as appropriate, short of data interpretation.

Sample and Data Handling

No samples are anticipated being collected pursuant to this Assessment Plan. No laboratory analyses are anticipated being conducted pursuant to this Assessment Plan. However, if fresh oil in the environment or oiled carcasses are encountered, opportunistic samples may be collected.

All materials associated with the collection or analysis of samples under these protocols or pursuant to any approved work plan, including any remains of samples and including remains of extracts created during or remaining after analytical testing, must be preserved and disposed of in accordance with the preservation and disposal requirements set forth in Pretrial Orders (“PTOs”) # 1, # 30, #35, # 37, #39 and #43 and any other applicable Court Orders governing tangible items that are or may be issued in MDL No. 2179 IN RE: Oil Spill by the Oil Rig "DEEPWATER HORIZON" (E.D. LA 2010). Destructive analytical testing of oil, dispersant or sediment samples may only be conducted in accordance with PTO # 37, paragraph 11, and PTO # 39, paragraph 11. Circumstances and procedures governing preservation and disposal of sample materials by the trustees must be set forth in a written protocol that is approved by the state or federal agency whose employees or contractors are in possession or control of such materials and must comply with the provisions of PTOs # 1, # 30, # 35, # 37, # 39 and # 43.

Copies of non-analytical data will be provided to BP (or Cardno/ENTRIX on behalf of BP) and the Louisiana Oil Spill Coordinator's Office (LOSCO) within a reasonable timeframe once data collection, QA analyses and data entry procedures are complete but no later than 6 months following its generation.

If opportunistic sampling occurs, each laboratory shall simultaneously deliver raw data, including all necessary metadata, generated as part of this Assessment Plan as a Laboratory Analytical Data Package (LADP) to the trustee Data Management Team (DMT), the Louisiana Oil Spill Coordinator's Office (LOSCO) on behalf of the State of Louisiana, and to BP (or Cardno/ENTRIX on behalf of BP). The electronic data deliverable (EDD) spreadsheet with pre-validated analytical results, which is a component of the complete LADP, will also be delivered to the secure FTP drop box maintained by the trustees' DMT. Any preliminary data distributed to the DMT shall also be distributed to LOSCO and to BP (or Cardno/ENTRIX on behalf of BP). Thereafter, the DMT will validate and perform quality assurance/quality control (QA/QC) procedures on the LADP consistent with the authorized Analytical Quality Assurance Plan, after which time the validated/QA/QC'd data shall be made available simultaneously to all trustees and BP (or Cardno/ENTRIX on behalf of BP). Any questions raised on the validated/QA/QC results shall be handled per the procedures in the Analytical Quality Assurance Plan and the issue and results shall be distributed to all parties. In the interest of maintaining one consistent data set for use by all parties, only the validated/QA/QC'd data set released by the DMT shall be considered the consensus data set. In order to assure reliability of the consensus data and full review by the parties, no party shall publish consensus data until 7 days after such data has been made available to the parties. Also, the LADP shall not be released by the DMT, LOSCO, BP or Cardno/ENTRIX prior to validation/QA/QC absent a showing of critical operational need. Should any party show a critical operational need for data prior to validation/QA/QC, any released data will be clearly marked "preliminary/unvalidated" and will be made available equally to all trustees and to BP (or Cardno/ENTRIX on behalf of BP).

6.0 PERMITTING

All permits and permissions required to implement the study and to access study transect locations will be obtained prior to the start of this study. When access to privately held properties is required, landowner permission will be secured. Additional information on permits and permissions is given in the Field Procedures for Transects SOP (Appendix A).

7.0 SAFETY PLAN

All safety procedures established in the National Oceanic Atmospheric Administration (NOAA) NRDA Site Safety Plan (Appendix A) shall be followed during field implementation. Such safety issues include, but are not limited to, boat safety, weather safety, minimum communication equipment, and routine check-ins with a home base. Study-specific safety guidance may be developed as necessary.

8.0 BUDGET

The estimated contract cost for this ²⁰¹⁴~~2013~~ Assessment Plan for Bird Study #24 is \$4,488,277. The Parties acknowledge that this budget is an estimate, and that actual costs may prove to be higher. BP's commitment to fund the costs of this work includes any additional reasonable costs within the scope of this approved Assessment Plan that may arise. The Trustees will make a good faith effort to notify BP in advance of any such increased costs.

**BIRD STUDY #24 - BACKGROUND CARCASS DEPOSITION ON WALKABLE
BEACHES AND IN MARSHES**

APPENDIX A

STANDARD OPERATING PROCEDURES (SOPs)

1. Datasheets
2. Field Notebooks
3. Carcass Marking
4. Digital Photodocumentation
5. Field Procedures for Transects
6. Carcass Collection Protocol, U.S. Fish and Wildlife Service, July 17, 2010
7. NOAA NRDA Site Safety Plan
8. Blank forms:
 - a. Bird Study #24 Carcasses Found Datasheet (in Datasheets SOP)
 - b. Bird Study #24 Marsh Edge Transect Location Datasheet (in Datasheets SOP)
 - c. Chain of Custody (entirely blank)
 - d. Chain of Custody (for SD digital memory cards)
 - e. Information Needs Related To Beach Surveys And Grooming